Moredun Top, Moncreiffe Hill, Perth and Kinross:
Archaeological Evaluation Phase 2
Data Structure Report

AOC 23223

OASIS No.

AOC Archaeology Group

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Moredun Top, Moncreiffe Hill, Perth and Kinross:

Archaeological Evaluation Phase 2

Data Structure Report

On Behalf of: **Tay Landscape Partnership**
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ABSTRACT

An archaeological excavation was undertaken by the Tay Landscape Partnership, with local volunteers, Perth and Kinross Heritage Trust and AOC Archaeology Group at Moredun Top hillfort. The works follow on from and complement the earlier excavation of Moredun Top in 2015 as well as evaluation works completed at the adjacent site of Moncreiffe Hill, itself an Iron Age fort. The 2016 works formed the second season of an intended three year programme of excavations at the hillfort.

The 2016 works comprised four trenches, which investigated structures identified during topographic survey and partially investigated in 2015. These structures aimed to assess the nature and construction of various structures across the hillfort including circular structures, potentially roundhouses, a monumental structure partially investigated in 2015 and a pond feature.

Excavations focused on four key areas across the hillfort: the upper area with two trenches focusing on three curvilinear features identified in the topographic survey (Trench A and B); the monumental stone structure discovered in 2015 located in the lower area (Trench C); a pond feature, located to the south of the large stone structure (Trench D).

Although relationships between the two curvilinear features in Trench A could not be demonstrated, an underlying rampart, with inner and outer facing stones and a core of material was identified. After investigation of the smaller curvilinear structure in Trench B, A further curved structure was also identified with at least two courses and utilising the natural bedrock in construction. Similarly, the monumental structure made use of this natural bedrock in its construction, and excavations revealed an entrance to this structure and a large amount of evidence for burning within this structure, particularly the entranceway.

The 2016 excavations of Moredun hillfort have enabled a further understanding of the purpose and chronology of the hillfort, with a varied artefactual assemblage including prehistoric ceramic, evidence for shale working and bracelet fragments, as well as cupmarked stones, possible quern fragments and a coarse stone tool assemblage.

1 INTRODUCTION

A community archaeology project, comprising the excavation of three trenches, was carried out at Moredun Top, Moncreiffe Hill, Perth and Kinross by Perth and Kinross Heritage Trust with AOC Archaeology Group as part of the Tay Landscape Partnership scheme *Hillforts of the Tay*. The project followed on from a phase of excavation at Moredun Top completed in 2015 (Humble et al 2016) and two phases of evaluation completed at the adjacent Moncreiffe Hill in 2014 and 2015 (Cook et al 2014; Humble et al 2015). This second phase aimed to: investigate the nature and date of the ramparts, to assess potential internal buildings. The works were conducted according to the terms of a *Project Design* (Strachan 2015). The project was undertaken with the kind permission of the landowner, Lord Moncreiffe to whom thanks are due. Tay Landscape Partnership and AOC Archaeology Group would like to thank all of the volunteers who made the excavation a success.

2 HISTORICAL BACKGROUND

Moredun Top Hillfort (NGR: NO 1355 1995; NMRS: NO11NW23; PKHER: MPK5232; Scheduled Monument: 9440) is the larger of two hillforts on Moncreiffe Hill, to the SE of Perth (Figure 1). The hill itself is a key geographical feature in the landscape, located at the meeting of the Rivers Tay and Earn and so dominating the lower straths of both rivers. The monument itself comprises a clearly multi-period site with the remains of at least two forts of late Iron Age and/or Early Historic date, as well as traces of other buildings. The monument lies between 190-225m O.D. and crowns the summit of Moredun Top, the highest part of Moncreiffe Hill. Its location exploits the naturally defensive cliffs on the south face of the hill, and affords extensive views of the surrounding landscape in all directions, truly dominating the landscape at the tryst of these important river systems.

Both Moredun Top, and its neighbour Moncreiffe Fort (NGR: NO 131 198), sit on exposed bedrock of the Ochil Volcanic Formation, being pyroxene – andesite, with the drift geology of the surrounding area consists of Glaciofluvial till, gravels, sands and silts (British Geological Survey 1:50000 digital data).

All of the currently identified earthworks relating to the site are included in the scheduled area. The Scheduled Monument designation documentation from March 2001 includes the following summary:

> *The monument comprises the remains of a hillfort with evidence for use dating from both the late Iron Age and the Early Historic period. The monument lies between 190-225m O.D. and crowns the summit of Moredun Top, the highest part of Moncreiffe Hill. From this point, it commands extensive views of the surrounding landscape and exploits the naturally defensive cliffs on the S face of the hill. The fort appears to show two main phases of construction and use. The first phase is a large roughly oval enclosure, measuring approximately 175m E-W by 100m N-S, defined by a stone and earth rampart. A second, inner, rampart may also date from this phase. The summit of the hill is enclosed by a double set of stone ramparts or walls. These define another roughly oval area approximately 50m NW-SE by 35m transversely. A further rampart following the natural contours of the hill on the N side encloses a large semi-circular "court" or annex, reminiscent of Early Historic sites throughout Scotland. Traces of possible footings for circular buildings have been recorded on the hill summit, but it is not clear if these relate to one or both of the phases of defensive activity. In addition to the physical remains, the site may also have historic associations. In AD728 a significant battle in the struggle for control of the Pictish Kingdom was fought at Monad Croib, also known as Monad Craebi. The modern "Moncreiffe" may derive from these earlier place names. The area proposed for scheduling comprises the remains described and an area around them within which related material may be expected to survive. It is an irregular area, measuring a maximum of 260m N-S by 250m E-W, as marked in red on the accompanying map extract*

Previous archaeological work

While there is no mention of either hillfort in the Old and New Statistical Accounts (1791-99 and 1834-45 respectively), the author of the Old Statistical Account notes that:

> *The view from the top of Moredun is extensive, various, and grand. The ingenious Mr Pennant, on account of the richness and variety of this prospect, calls it "The Glory of Scotland".*

The site appears annotated as 'Carnac fort (Remains of)' on the OS 1st edition 6" map. Christison notes relatively little about Moredun, noting that the 'remains are so dilapidated and overgrown that it is difficult to plan them' (1900, 81). He identifies only the central 'nuclear' fort, however he does note the existence of some external features and 'several small, round, saucer-shaped hollows' (ibid). The fort is subsequently described by Wainwright (1955) and Feachem (1963), the latter noting the multi-phased occupation with a 'dun-like structure' within a larger fort, and suggesting that the later could be post-Roman in date, and also noting that the roundhouses identified by Christison appeared to post-date both of these features.

A programme of archaeological works were undertaken at the adjacent hillfort of Moncreiffe Hill in September 2014 and April 2015 as an earlier phase part of the Tay Landscape Partnership scheme *Hillforts of the Tay*. These works comprised a detailed topographic survey of all visible features on site and the excavation archaeological trenches. In summary the results of these excavations are the confirmation of the presence of a hillfort defined by several enclosing ramparts of middle Iron Age date. In addition artefacts and radiocarbon dates demonstrate some form of activity in the middle Neolithic period.

In 2015, six trenches were excavated across Moredun Hillfort . The excavation of the ramparts demonstrated that there was a complex sequence of enclosure at the hillfort. The trench excavated across the two main enclosing banks demonstrated that both of these had at least two separate phases of construction with primary earth banks being overlain by stone ramparts. A similarly long sequence of occupation deposits internal to the upper of the main rampart lines was recorded. Across all the lines of enclosure the massive and monumental nature of the dry-stone ramparts was revealed.

Excavations within the interior of the hillfort focussed on a flat topped mound. Here another large dry-stone wall was exposed probably the outer wall of a monumental roundhouse. In the interior of this structure were a series of in-situ burnt deposits probably derived from the burning of structural elements of the roundhouse. Limited excavation was also undertaken at a double ring hut circle within the interior. A series of radiocarbon dates from across the site were obtained all of which dated to the 2nd half of the 1st millennium BC

3 OBJECTIVES

The overarching objective of the excavations was to 'establish a chronology for the development of this complex of sites'. The specific targets through which to achieve this objective are the mound, ramparts of the enclosures, and interior of the enclosures (Strachan 2016). To this end, the four trenches excavated in 2016 aimed to:

- Trench A: excavate in plan the round houses in order to assess their relationship to one another and to the main enclosure in which they are located;
- Trench B: assess and date the proposed roundhouse;

- Trench C: open up the structure identified in 2015 in plan in order to identify nature and date of construction;
- Trench D: assess nature and date of the pond

4 METHODOLOGY

The archaeological evaluation comprised the hand excavation of four trenches in locations agreed in advance with Historic Scotland, as a condition of the Scheduled Monument Consent. These trenches were placed to assess potential features identified in the RCAHMS survey (Figure 2).

The trenches were excavated by hand and all features and structures revealed were cleaned by hand before being recorded by digital photography, drawn to an appropriate scale and a written record produced using AOC *pro forma* context sheets. The archaeological works were undertaken in agreement with the project design (Strachan 2016).

5 RESULTS

The excavations were carried out between the 6th September and the 1st of October 2016. Weather conditions were variable but generally clear and dry through the course of the excavations and archaeological visibility remained good. The following presents a summary of the excavation results and full details can be found in the appendices.

5.1 Trench A

Trench A was located over a prominent mound to the south of the interior of the hillfort. This 20m N-S x 10m E-W trench was set out over two possible adjoining or abutting hut circle structures, previously identified in the topographic survey. The aim of Trench A was to explore the date, nature and relationship between these two structures, and further explore the findings of Trench 6 from the previous season of excavation (a 6m x 1m trench aiming to assess any relationship between the structures).

Across Trench A was a layer of mid to dark brown loamy topsoil (A001) which yielded a variety of finds including a possible cobble tool (ΔA001) and worked quartz (ΔA005) along with associated modern finds.

Removal of topsoil revealed two circular arcs of stone, one to the north of the trench [A003] and one to the south [A004]. As well as tumble and associated deposits, further excavation also revealed a rampart structure [A025] which underlies the northern circular structure [A003].

5.1.1 N hut circle [A003] with internal partition [A014]

Plate 1: Mix-excavation shot of northern hut circle [A003] interior.

The northernmost circular arc [A003] consisted of angular stones (A006), mostly of which were fine- grained and matched the local outcropping stone. This may have been quarried from the vicinity of the hilltop, however occasional erratic glacial boulders, water smoothes cobbles and red sandstone blocks were present. Animal bone (ΔA052), some of which was burnt (ΔA033) was recorded within the angular stone (A006) however no artefacts indicative of any chronology were found within the material of the wall itself. An ephemeral compact deposit of dark brown rich silty sand (A012) was excavated within the east-northeat quadrant of the circular structure [A003]. Recovered from this possible occupational surface were a variety of artefacts: an assemblage of coarse stone tools (ΔA024, ΔA027, ΔA048, ΔA063) including a possible whetstone (ΔA029); a fragment of shale roughout (ΔA012) representing the early stages of shale bangle production; one piece of slag waste (ΔA043).

Plate 2: Mid-excavation shot of northern hut circle [A003] and (A006)

Underlying this possible occupation layer (A012) was a deposit of small angular cobbles between the inner face of the arc of the wall (A006) and oblique stone partition [A014] within interior of the circular structure [A003]. Due to the nature of the deposit, and the overlying context, this may be interpreted as a late floor surface within the northern circular structure [A003]. Underneath this surface was a deposit of loose to medium compacted small shattered stone with a loose dark brown silty soil matrix (A017) with numerous animal bone finds (ΔA054; ΔA057; ΔA061; ΔA069; ΔA071) and possible quern fragment (ΔA072) found within. After excavation of slot A1, this was interpreted to be the same context as core material (A032) of an underlying rampart [A025], as discussed below.

A linear arrangement of stones 2.8m in length, with a diameter of 1m was excavated in the interior of [A003]. This was unknown in depth, and made up of large slabs of stone up to 0.4m x 0.6m in size. Although surrounded by the possible surviving occupational layer (A012), this internal partition likely post dates the deposit.

To the exterior of this northern circular structure [A003] was a deposit of small to medium angular stone (A015), underlying the topsoil (A001). This deposition incorporates, and could not be differentiated from, tumbled core material from the underlying rampart [A025]. The soil matrix encasing and enclosing this deposition consisted of possible degraded turf amongst collapsed stone of the northern circular structure [A033] and collapsed core material of rampart [A025].

Excavation revealed the northern circular structure [A003], interpreted as a possible roundhouse, to be very ephemeral, built on top of collapsed rampart [A025] using stones from the collapsed rampart core.

5.1.2 S hut circle [A004]

The circular structure in the south of Trench A [A004] was defined by an arc of angular stones (A007). These angular stones (A007) that encompass the arc of the wall of this structure [A004] were mostly angular, fine-grained stone which match the local outcropping rock. There were also occasional erratic glacial boulders and watersmoothed cobbles within this deposition. Excavation revealed the structure to be very ephemeral, with the walls surviving only as a couple of courses of loose blocks built over tumble from the collapsed rampart [A025]. This structure, interpreted as a poorly defined stone built roundhouse or hut circle, was far less well-defined than [A003].

Plate 3: Mid-excavation shot of southern hut circle [A004] and interior.

5.1.3 Relationship between two circular structures [A003] and [A004] (Slot A2)

One of the aims of Trench A was to further understand the relationship between the circular structures [A003] and [A004] visible pre-excavation in the topographic survey. The area of abutting walls between these two structures (A011) was investigated in a second sondage, however the walls found upon excavation were found to be ephemeral and poorly defined Only two loosely consolidated layers of stone were found to encompass the walls and the relationship between [A003] and [A004] was not demonstrated by excavation.

Underlying the abutting walls (A011), further evidence for an underlying rampart [A025] was revealed. A row of insitu large angular facing stones of the rampart (A031) was revealed which upon excavation of both Slot A1 and A2 were revealed to likely be of the same context as the facing stones identified in Slot A1 (A022). Large angular stone blocks underlying (A011) with no clear configuration or alignment were identified as collapse of facing stones and core from the rampart [A025] with a dark brown, moist, crumbly soil matrix (A018) at a depth of 0.8m from the turf. This matrix (A018) was revealed across the extent of the excavated slot. In the southwest corner of Slot A2 was a deposit of large sub-square/square rectangular slabs and blocks of stone, interpreted as further collapsed facing stones from inner face of the rampart [A025].

Plate 4: Mid-excavation of Slot A2 through (A007) (A006) (A011)

This material overlay a lense of bright orange and black burning (A029) which likely pre-dates the collapse of the rampart [A025], and represents an occupational trample or debris. In addition, the sondage reached natural bedrock (A035), sloping gently in a southerly direction with occasional abrupt steps. This bedrock showed no sign of quarrying, however an oval hollow [A039] was cut into the bedrock (A035), extending into the western trench edge.

Plate 5: Rock cut hollow [A039] into the bedrock (A035) in Slot A2

The sides of this cut were steeply sloping with an uneven base, filled by mid-brown silty soil (A038) with occasional charcoal inclusions and patches of orange-brown burnt soil. This was not fully investigated, but the exposed dimensions of the cut were 0.62m north to south by 0.59cm (of what was exposed) east to west. This continues into the western trench edge with a maximum depth of 9.5cm.

5.1.4 Rampart structure [A025] (Slot A1)

An underlying rampart [A025] was discovered and further investigated through the excavation of a sondage (Slot A1). This rampart underlies the northern circular structure [A003], with the internal tumble from the collapsed rampart underlying the southern circular structure [A004].The inner facing stones (A022), (A031) are large angular blocks of stone, below the interior space of the northern circular structure [A003]. The stones are oriented north-west to south- east and underlie the possible flooring surface of the structure (A013) and interior partition [A014]. The outer facing stones (A023) are an alignment of large rectangular closely fitting slabs, which survive as at least two insitu courses however there is a significant void of at least 1 metre long running south-west under the exposed stones within the slot. The inner and outer facing stones are separated by a distance of 5 metres.

Plate 6: Innerfacing stones (A022), (A031) of rampart [A025]

Between these inner (A022; A031) and outer (A023) faces is a core of material consisting of medium to small shattered angular rocks (A032) with a loose dark brown silty soil matrix (A036). There was no configuration to the orientation or placement of stones within this core; however this context did reveal occasional charcoal and animal bone fragments as well as a rubbing stone (ΔA074) and two pieces of slag (ΔA075).

Two cupmarked stones (A009; A010) were excavated outwith slot A1. The former (A009) was a large rectangular red sandstone slab with two possible cupmarks on its upper surface found to the southeast of the eastern arc of (A007). The latter was found within stones of arc of the southern circular structure [A004] and was not fully exposed; however two very clear adjoining cupmarks were present as a figure of eight (one measuring 50mm in diameter, the second 75mm). The larger of the two is a secondary, deeper cupmark, and both cupmarks are encircled by a shallow curvilinear groove. A further two possible peckmarked hollows were visible on the edges but not fully exposed. These have been interpreted as early prehistoric cup marked rocks, which were probably originally incorporated within the underlying rampart [A025], and have since tumbled out of position.

Plate 7: Cupmarked stone (A009) with two possible cupmarks on surface

Plate 8: Cupmarked Stone (A010) with two adjoining cupmarks and shallow curvilinear groove

5.1.5 Slot A3

Slot A3 enabled the further investigation of the underlying rampart structure [A025]. In the western end of Slot A3 was a deposit of shattered stone and soil (A019), with evidence of possible shale working (ΔA058), a weathered stone deposit in the upper layers of the overburden. This deposit encloses a tumble of angular rocks (A020) to the east of the outer face of [A004], interpreted as a mixture of tumble from (A007) and the core of the rampart [A025]. The upper deposit (A019) also encloses an external stone tumble (A021)-tumbled core material from the collapsed rampart [A025] to the northeast of the outer facing stones (A023). In the eastern half of Slot A3, large tumbled sub-rectangular and sub-square blocks, surrounded by medium-sized angular stone blocks and stone shatter (A026) with a mid-brown loose soil matrix (A027) showed the extent of the collapsed rampart core [A025] and facing stones.

Plate 9: Mid-excavation of Slot A3 through (A006) (A007) (A011)

5.2.2 Trench B

Trench B was excavated across a small circular structure identified during topographic survey of Moredun hillfort. It lies to the north of the two identified circular structures within Trench A, outside of the boundary of the upper hillfort area as indicated on the topographic survey. Trench B aimed to investigate the nature, construction and chronology of this circular structure which appears to be comparatively smaller to the structures investigated by Trench A. It measured 5m x 5m.

A layer of mid brown sandy soil topsoil (B001) was removed from the trench, which revealed a curvilinear line of mixed stone [B003] running NE-SW across the whole trench area. The topsoil was relatively rich in finds, including chert flakes (ΔB001), a worked lithic core (ΔB002), two pieces of prehistoric pottery (ΔB003, ΔB004) and a piece of slag waste (ΔB005).

A possible feature was revealed in the NW corner of the trench, measuring approximately 1.3m x 1m. This overlay an interior soil deposit (B006) of the circular structure [B003], and the soil matrix within this feature was identical to (B006); there were no obvious cuts into this lower context. Upon excavation this feature appeared to be ephemeral, and may have been a result of random collapse and tumble activity.

5.2.1 Circular Structure [B003]

The main feature identified within Trench B was the aforementioned curvilinear feature running through the trench. This aligns with the smaller circular feature shown on the topographic survey and measured between 1.5 x 2m in diameter. The stones of the structure were a variety of sizes, but predominately medium sub-angular stone of mixed lithography, including occasional red sandstone. The exterior collapse of the structure (B005) consisted of various small-medium sub-angular stones with a dark brown sandy soil matrix, which had occasional charcoal and bone inclusions. Within this collapse (B005) was a ceramic sherd (ΔB010) and a circular worked disc of Old Red sandstone (ΔB011).

Plate 10: Curvilinear structure in Trench B [B003] post clean, with an interior soil deposit within the arc (B006) and tumble and collapse to the exterior (B005).

The upper most interior soil deposit (B006) consisted of a dark brown sandy soil with frequent small sub angular stone inclusions (likely from the collapse of the structure) and occasional charcoal inclusions. This layer was consistent across the west of the trench, but no finds were uncovered in this deposit.

5.2.2 Slot B1

A 2m wide sondage was placed across the northern edge of Trench B to further understand the stratigraphy and potential construction of the structure. Loose rubble was removed from (B004) and the external (B005) and internal (B006) collapse and deposits were removed. In the interior a very dark brown, charcoal stained compact silty clay soil (B008) underlay the higher interior soil deposit (B008), and was again sterile of any archaeological finds. A lens of distinctly darker charcoal stained compact soil (B011) underlay this deposit to the west of the trench, with frequent charcoal inclusions. This covered an area of 1.75m N-S x 0.6m E-w at a depth of 5cm. This was a sterile layer before reaching the natural bedrock (B012). Underneath the stones of the structure (B004) was a dark brown silty soil with bone and charcoal inclusions (B009). This was excavated to a, undulating depth of 0.4m-0.5m, uncovering a fragment of a shale bracelet (ΔB022) before reaching natural bedrock (B012).

5.2.3 Exterior deposits within Slot B1

Amongst the lowest layers, and below, the exterior collapse and rubble (B005) was a dark, brown friable soil which was charcoal stained. A total of ten finds were uncovered within this context (just under half of the finds for the whole of Trench B). Various pieces of bone (ΔB017, ΔB019) and ceramic sherds (ΔB012, ΔB013, ΔB016, ΔB021) were uncovered as well as a fragment of unidentified vitrified material (ΔB020). Also within this context was a copper object, in two pieces as a decorative pin (ΔB015) and head (ΔB014).

Plate 11: Structure [B010] revealed in east side of Slot B1

Removal of (B005) and (B007) also revealed a structure [B010] in the east side of sondage B1. This consisted of large faced stones c.0.5m x 0.2m in shape, at least two courses high in places and it appears to have utilised the natural bedrock (B012) in its construction. The inner face was not exposed during excavation, and is hidden behind a rubble core which consists of small to medium sub angular stone with a soil matrix which was not excavated during this season.

5.3 Trench C

Trench C aimed to build on the results from the 2015 season, and explore the nature, construction and associated chronologies of the stone structure. Identified as a possible 'broch' structure by previous surveys, the notable stone mound was investigated through the excavation of a 15 m by 15 m trench, across a depression in the mound, to the immediate west of the 2015 trench (Figure 5).

The trench was comprised of two main but distinctive areas; the northern area, which overlay the actual stone structure and the southern area which lay in front of the structure. On excavation, the structure was revealed as being constructed of two main walls; the eastern wall [C010], a western wall [C003], which enclosed a south-west facing entrance [C008].

5.3.1 W of structure [C003]

Although two separate features, it is clear that walls [C003] and [C010] form the entrance [C008] to a larger round stone built structure. Although more substantial to the east this is perhaps due to preservation. The walls are built of a combination or dressed red sandstone blocks and granite, with smaller key stones wedged between them (Figure 5). The sandstone is not present naturally on the hill and would have to have been exported from the valley floor, or perhaps further? The walls are both generally low, rising to only three of four courses. Although not fully exposed, the walls appear to have been constructed of an inner and outer wall, with a central core of smaller rubble, which was presumably a combination of in situ material and collapsed and eroded upper wall.

Plate 12: South Facing section of wall [C003] and bedrock

Measuring 3.2m in width and up to 1.2m in depth, the walls are built directly on the bedrock, which itself appears to have been manipulated in places to increase the scale, size and appearance of the wall (Plate 12, Figure 5).

Plate 13: Detail of wall [C010] plus cupmarked stones

The re-use of a cup and ring marked stone (Plate 13), demonstrates the reuse and curation of earlier monuments, which is of course common in the Iron Age in Fife and Angus (Hingley 1992), for example at Carlungie souterrain.

5.3.2 Entrance [C008]

The entrance [C008], was relatively large, measuring up to 2 m in width and built across undulating bedrock between the two walls, aligned south-west. The entrance itself comprised a corridor through the structure, measuring at least 8.5m in length. The feature appeared to have been compromised at some point, with the two corner points appearing to have been rebuilt (Plate 14, 15). Similarly, the corridor appears to comprise two phases (Plate 14, 15), with the existing wall being abutted by a later addition. This is also present in wall [C008], where the stone foundation is aligned differently from the overlying stones. The obvious explanation is that the structure was modified and comprises at least two phases of use.

Plate 14: Close up of entrance corner [C003] showing later abutting stone facing

Plate 15: East Terminal of Entrance [C008]

Generally, the proposed entrance [C008] was generally larger than would have been expected in a prehistoric structure, and this may again reflect the re-use of the feature. Alternatively, the structure may simply be much later.

5.3.3 Burnt Deposit [C018]

The entire entrance was covered in a deep deposit of heat affected and /or burnt in situ material (C018). Measuring up to 0.40 m in depth, the deposit was predominantly located within the entrance, and was similar to the deposit identified within the proposed interior of the stone structure in the 2015 season (Humble et al 2016).

The possibility remains that the deposit represents a much later phase of activity. For example, local hearsay suggest that the hill was the site of a beacon during the Victorian period, perhaps during the coronation celebrations. However, the recovery of cannel coal debris, overlying the deposit suggests an earlier origin. Alternatively, the burnt deposit may represent the remnants of some sort of industrial process post-dating the structure.

5.4 Trench D

Trench D aimed to understand the nature and associated chronologies of the pond structure to the south west of Trench C. A layer of dark black/brown loose topsoil covered the whole of the trench, at an undulating depth of 0.1m – 0.3m thick, with deposits deepening at the east end of the trench. Flecks of burnt bone inclusions were visible in places as well as some angular stone between 0.1x0.1m – 0.2x0.2m in size. All of the finds from Trench D were discovered in this topsoil context, including a worked, possibly pecked, stone (ΔD002), rubbing stone (ΔD003) and possible struck agate flake (ΔD004), as well as a modern small steel pistol or toy gun (ΔD001).

A dark black/brown peaty waterlogged layer (D002) was excavated at the west end of Trench D in a waterlogged, boggy hollow. This was very rooty, with rare small stone inclusions and flecks of burnt bone, running through the width of the trench. A section line was placed through Trench D running E-W, and half was fully excavated to a depth of 0.25m. Underneath this layer was a further waterlogged layer (D003), with dark black brown clay rich soil and occasional burnt bone inclusions throughout. Occasional large angular stones within this context were likely tumble into this hollow.

5.4.1 Palisade Slot [D008]

A spread of angular tumbled stone (D005) was excavated across the middle of Trench D. These ranged in size from approximately 0.6m x 0.5m – 0.1m x 0.1m, and were a mixture of red sandstone and more local stone types. This layer was thin, only 1 or 2 stones deep in parts, spread in a downward slope towards the pond feature. This possible tumble overlay the cut of a linear slot running north to south across the trench [D008]. This possible palisade slot consisted of steeply sloping sides towards a flat base. The fill (D007) was a greyish brown clayey silt with frequent angular stones, and frequent charcoal and burnt bone inclusions. This angular stone was interpreted as remnants of packing that may have been packed, or tumbled, into the palisade slot [D008].

Plate 16: Spread of tumbled stone (005) at west end of Trench D

To the east of the slot was a very compact orange reddish brown clay with small angular stones (D006). This was cut into by the palisade slot [D008] and was a sterile layer, possibly the subsoil.

Plate 17: Spread of tumbled stone (D005) and palisade slot [D008] in Trench D

5.4.2 Stone Spread [D004]

A spread of large flat sub angular stones [D004] was set in to the east end of the trench. The topsoil (D001) was both over and amongst the stones of the feature. The stones measured approximately 0.4m – 0.3m and

were set flat, which led to the interpretation of being remains of the base of wall or paved area (which would have been rough). This may have been a small part of a structure on a flat terrace by an outer rampart.

Plate 18: Stone structure [D004] at east of Trench D

5.2.6 Artefact Assessment

Dawn McLaren

Introduction

A total of one hundred and ninety-two hand-retrieved finds were recovered from trenches A, B, C and D during the 2016 season of excavation. These finds comprise worked stones, struck lithics, vitrified material including vitrified stone and possible ferrous metalworking waste, ceramic pot sherds, burnt and unburnt animal bone, charcoal and a small number of metal artefacts. The majority of the artefacts are consistent with those found during the previous season's excavations, enhancing the evidence for later prehistoric occupation, domestic and craft activities as well as items of personal ornamentation. Several notable and significant items stand out however and merit detailed future study to fully understand their role within the wider site context and beyond. These include a substantially complete but broken copper alloy decorated ring headed pin - a rare and significant dress fitting which is of early Iron Age date -, a suite of shale or cannel coal bangle fragments and a range of roughouts, blocks and working debris that demonstrate that bangles were being produced on site.

The assemblage has been assessed by material type and a summary of the results of this initial examination and recommendations for full analysis are outlined below.

Copper alloy

With the exception of a single item, the ferrous and non-ferrous metal objects found during the 2016 season of excavation are modern consisting of an iron bracket, a fragmentary butter knife, a toy pistol and a copper alloy binding strip from a wooden object.

The most significant item, and the most important artefact from the site to date, is a substantially complete decorated ring-headed pin of Early Iron Age date (SF B014 & B015). It was recovered in proximity to the hut circle and other stone built features in Trench B. The pin, which is still partially encased in soil from excavation, survives in three fragments. It is a composite object, consisting of a robust cast pin and head with a separate disc shaped mount below the head which has been attached by means of a short peg into the pin shank. This place of fixture is the weakest part of the whole pin and the shank has broken in this position as a result; the break appears to be clean and from initial examination it likely broke as the result of pressure from overlying soils. The very tip of the pin has also become detached but the break here appears less fresh; the condition of this break should be investigated during conservation to determine whether this could be an old, and potentially deliberate break prior to deposition. The pin is a type known as a decorated ring-headed pin which has a sub-circular, openwork, scroll-like head that appears to incorporate zoomorphic elements (Simpson & Simpson 1968). The obverse 'face' of the pin head has a series of symmetrical cast lobate-shaped hollows that may have been intended to mimic eyes of a beast or bird. These hollows have originally contained enamel or coral inlays; no obvious trace of inlays survive based on preliminary macroscopic examination and initial x-radiography but conservation work to remove residual soils will be required to confirm this. The form of the terminal of the 'scroll' of the head is bird-

like, a motif commonly seen on Iron Age decorative metalwork, such as the Torr's pony cap (Hunter 2016, 99, fig 86). The head elegantly tapers into a robust elbowed pin of circular section. Masking the elbow of the pin is a flanged ?sheet metal or cast disc, also of copper alloy, attached by a short peg or rivet. The interior of this disc has a series of incised concentric circles for decoration or as keying for the application of a mount; the flanged edges are, unfortunately, damaged on two edges. This disc is likely to have originally held an enamel, or more likely, coral mount or boss, which may have been lost in antiquity.

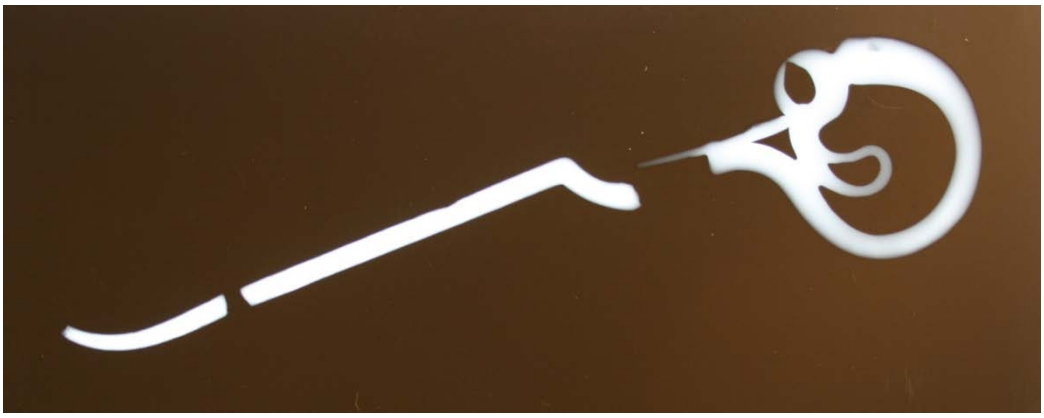

Plate 19: Preliminary x-radiography of the decorated ring-headed pin

Decorated ring-headed pins are a rare type and their distribution concentrates around Co. Antrim in Northern Ireland and across Scotland including a simple iron example from Abernethy, Perth & Kinross, although examples are known from Yorkshire and south-east England (Simpson & Simpson 1968). Pins of this form are fit comfortably within the repertoire of La Tene 1 metalwork dating broadly to the 4th and 3rd centuries BC (Ballin Smith 1998, 222). It is currently thought that these decorated ring-headed pins are an Irish type but, if so, it is unclear whether those found in Scotland are imports from Ireland or native copies of Irish examples (*ibid*, 222). The find from Moredun represents an important discovery in terms of the rarity of the type and requires full study after conservation to clean and stabilise the surfaces.

Recommendations: This is a significant and important find and requires full conservation and study. Conservation is required to clean the surfaces of residual soil, particularly around the head where soil still masks the form. After cleaning, the surfaces should be stabilised for long term curation. Further x-rays may be necessary prior to any work to clarify whether any trace of inlays remain within the hollows that are currently masked by soil. Examination of the cleaned surfaces will determine whether it is possible and appropriate to rejoin the separate fragments of the pin; this will be undertaken if deemed to be feasible. Scientific analysis of the copper alloy by ED-XRF is recommended to clarify the composition of the material. This process is non-intrusive. It is recommended that the pin is studied and reported on by Dr Fraser Hunter (NMS) who specialises in Iron Age metalwork. This will involve detailed visual examination in conjunction with x-rays after conservation and ED-XRF analysis of the metal. A catalogue will be produced with measurements and a discussion of the object in its wider context with reference to pertinent parallels. The object should be illustrated, preferably by line drawing and by photograph, for publication. NMS have offered to photograph the object alongside reporting; it should be noted that official permission will be required to reproduce the photograph in publication by means of an image license.

Lithics

A total of 13 bags of lithic material, comprising approximately 32 individual pieces (SF A005, A022, A030, A031, A037, A046, A059, B001, B002, C002, C013, C062, D004), were recovered including both stratified and unstratified material (Contexts A001, A007, A011, A012, B001, C001, C028, D001). Many of these, particularly those from trenches A and B, were found as the result of on-site sieving of the contexts under excavation. These lithics comprise items of quartz, flint, chert and possibly pitchstone.

With the exception of the pitchstone which has a single known source in the Isle of Arran, the remainder of the material is considered of local derivation. The flint ranged from grey brown to red in colour with small size and surviving cortex suggesting an origin in the gravel deposits of Eastern Scotland. The quartz would also appear to be derived from the same glacial gravels.

Many of the pieces, particularly the collected quartz, are considered to be of natural origin upon further examination. Many of the angular quartz chips collected appear to be frost-shattered rather than deliberately worked.

The flint, comprising both dark grey and red flakes consistent with Buchan flint, show signs of working including debris in the form of chips and small flakes. At least one item of red flint from Trench A shows signs of retouch at one end, perhaps functioning as a small scraper or other tool. The worked lithics are consistent with a early prehistoric date. From their context of recovery in association with later prehistoric structures indicates that the use The association of these items in proximity to later prehistoric structures may be the result of the use of turves as a building material particularly for the hut circles investigated in trenches A and B.

Recommendations: It is possible that further lithic material may be recovered as the result of soil sample processing and it is recommended that full analysis of the hand-retrieved finds is conducted once the full extent of the assemblage is known. The lithics merit examination and identification by a lithic specialist (Rob Engl, AOC); cataloguing will consist of identification, description and measurements of each piece for archive purposes with a summary report for publication which will only be undertaken once the full excavated assemblage is complete. At least one item amongst the 2016 group would merit illustration to accompany publication. Worked pieces will be retained; any unworked pieces will be discarded after recording as there is no merit in retaining for future study.

Stone

A large number of possible worked stones were recovered on site, dominated by water-rounded cobbles and slabs, consisting of a range of cobble tools, fragmentary querns (saddle and rotary) and fire-cracked stones. The most significant component of the stone assemblage is the small but comprehensive suite of shale/cannel coal bangle fragments, roughouts and working waste attesting to the production of bangles on-site in later prehistory.

With the exception of the shale/cannel coal which requires specialist cleaning by conservators, the stone was washed after excavation with clean water to remove residual soil. Examination after cleaning revealed that 14 of the stones collected on site as tools are natural.

Shale

A small but important assemblage of bangle fragments and working debris made of black organic rich stone (SF A010, A015, A016, A020, A026, A058, A060, A062, A073, A096, B022, C012, C030, C040, C057) was recovered from Trenches A, B and C (contexts A001, A002, A011, A012, A019, B009, C002, C025).

The black stone used is probably a shale, cannel coal or a lignite and is almost certainly from a Scottish source although the provenance of the raw material is currently unclear as there are no known sources in the surrounding area of the hillfort. Initial macroscopic examination suggests that more than one type of stone is present: some are coarser with a laminar structure suggestive of a shale whilst others are much denser with conchoidal fracturing implying a cannel coil or lignite. X-radiography and non-intrusive scientific analysis would be required to distinguish the materials more closely.

The discovery of shale bangle fragments on Moredun Hilltop is not unsurprising as a small fractured spall from one was discovered in 2015 from Trench 1 and a jet or shale bracelet fragment from the site, now in the collections of Perth Museum (Mark Hall, pers comm.; Perth Museum Accession Number 1998.106) was known about before excavation. What makes this assemblage significant is that in addition to fragments of bangles which have been used, worn and in some instances repaired and modified, there is also a suite of working waste and off-cuts which derive from Trench A. These finds include a squared block of shale, rough-outs in various stages of production as well as small flakes which may be debris produced during shaping. These hand-retrieved finds from Trench A were all from deposits closely underlying topsoil and appear to concentrate around the extremely ephemeral remains of hut circle [A003]. In addition to the presence of bangles and bangle roughouts there is also a fragmentary ring pendant and a small sub-circular disc that may be a roughout for a similar ornament.

It is very likely that further small fragments of working waste will be recovered from the soil samples taken on site and care must be exercised during sorting to ensure that all of this material is recovered for analysis as it provides important information on the process of shaping and working.

Detailed analysis of shale working waste at other later prehistoric sites, such as that at Braehead, Glasgow (Hunter 2007) demonstrates the importance of full analysis of this material in determining the technologies of production and the possible sources for the raw material.

Although the discovery of shale bangle fragments on Iron Age sites in Scotland is not unexpected, the recovery of evidence of shale bangle production in the Perth & Kinross area is extremely rare and significant, meriting full study.

Recommendations: As noted, the shale/cannel coal assemblage represents rare and significant evidence of shale working during the Iron Age and merits full study and publication. It is recommended that the material is studied following the standard NMS methodology of non-intrusive X-ray fluorescence (ED-XRF), X-radiography and visual inspection (Hunter et al 1993; Davis 1993) to determine the raw material(s) being used. This in turn will aid identification of potential sources of the raw material. It is recommended that detailed analysis and reporting on this material is undertaken by Dr Fraser Hunter (NMS) who is a specialist

in Later Prehistoric shale, cannel coal and jet bangle production and has published widely on the subject. A number of these items are recommended for illustration to accompany publication: 3 bangles, 1 block, 1 ring pendant, 3 roughouts and 3 items of working waste.

Worked

The quantity of worked stone from the 2016 season of excavation (40) represents an unexpected increase from the number found in 2015. These items of worked stone (SF A001, A006, A007, A008, A009, A014, A018, A019, A021, A024, A027, A032, A034, A036, A039, A055, A063, A074, A086, B007, B008, B011, B021, C003, C005, C006, C010, C014, C015, C016, C018, C019, C020, C032, C042, C046, C049, C052, D002, D003) were recovered from 16 contexts across Trenches A, B, C and D. They include a broad range of tool types used for various domestic and craft activities, a small number of personal or leisure items including a possible gaming piece, rock-art in the form of cup-marked slabs, a substantial pivot stone and several hollowed stones.

A range of tools have been recognised amongst the assemblage, many of which have been produced on water-rounded river or beach pebbles/cobbles. It is unlikely that these were sourced from Moncreiffe Hill and may well have been collected from a nearby stream or river, if not from the Tay. Glacial erratic cobbles and boulders were also noted across the site, in every excavated area. These rounded pebbles, cobbles and boulders stood out due to their rounded and smooth surfaces amongst the majority of rocks on site which were angular and often frost-shattered.

These cobble tools comprise many general or multipurpose cobble tools which demonstrate a range of functions based on the different types of wear recognised on the surfaces. In many instances (such as those with evidence of abrasion or pitting) it is not possible to be precise about the tasks being undertaken and a range of functions are possible including processing foodstuffs, preparing clay for potting, crushing pigments or ore etc. These include pounders (e.g SF A021), grinders (e.g. SF A006) and hammerstones (e.g. A009). Other tools such as a whetstone (SF A007) and strike-a-light (SF B007) were also recognised. Multifunction tools, those that show evidence of different types of wear on the same stone, are rare amongst the assemblage but a few examples are recognised (e.g. grinder/smoother SF 019).

An interesting cluster of smoothers/polishers came from Trench A. Further examination of the traces of wear on these stones will be necessary to classify them more closely as some have areas of dark red-brown staining associated with a light sheen and abrasion which are consistent with smoothers used in hide processing (Lane & Campbell 2000) whist others have the light sheen and abrasion but lack the staining/residue perhaps seeing similar use to buff and burnish but in association with a different material that produces no staining. Interestingly a number of these stones came from the same areas as the shale working debris, including a few tools from near the centre of the interior of the ephemeral northern hut circle [A003] (e.g. SF A027, context A012).

Saddle querns and rubbing stones were also recognised amoungst the assemblage (e.g. SF C005 & SF A074). These tools were used to grind grain into flour. The 2016 excavation revealed the first example from the site of a rotary quern stone fragment. The quern fragment (SF A018) was found during the initial clean of Trench A within the interior area of the northern hut-circle [A003].

Two, small, flat stone discs, produced from old red sandstone (SF B007 and B008) came from Trench B. Both discs are subcircular in shape with ground, facetted edges, similar to an example found in 2015 from

Trench 3. Like that found previously, the discs display an uneven level of grinding around the circumference making it unclear on initial inspection whether the stones were in the process of manufacture (e.g. spindle whorl roughout). The smaller of the two discs is too small to have been used as such but could have functioned as a gaming piece. Similar stone discs to those found at Moredun come from other later prehistoric sites such as those from Hurly Hawkin, Angus (Henshall 1982, 233-5, fig 9).

A total of four cupmarked slabs were recorded on site, two of which (SF A039, SF C019) have been retained for further study. The other two examples were recorded on site and left in situ as one had been built into the curving outer wall face of the structure in trench C and the other was located within a mass of tumbled stones in Trench A outside the targeted areas for detailed excavation. SF A039 is a simple flat rectangular slab of Old Red Sandstone with a single cup-mark towards one squared end. SF C019 is far more complex; it is a substantial sub-rectangular slab which appears to have been roughly detached from a larger outcrop. On the originally exposed smooth face of the slab, a series of small to large circular cupmarks have been made in association with curvilinear peckmarked lines. The fragment clearly represents a portion of what must have been a much larger piece of rock art on an exposed outcrop of stone but where this outcrop was situated is unknown. These cupmarked slabs are all early prehistoric in date but have been incorporated into the later structures as building stones.

A pivot stone (SF C014) of substantial size and with unusual wear patterns was recovered from the vicinity of the entrance of the structure in Trench C. It has two very well worn hollows on one face towards one end of the flat rectangular slab suggesting that the position of the post of the door that the stone supported had been shifted on at least one occasion. A bevelled facet of abrasion is also noted along one edge of the slab, probably produced by the timber door rubbing against the stone on opening and closing. There is also an unusual concave smooth area at one end of the opposing vertical edge. It is unclear from initial examination whether this is natural or the result of some kind of wear; this will require further examination and study.

The other finds of note from 2016 excavations are three hollowed stones (SF A032, A039 and C020). Two (A032 & A039) appear to be small mortars whilst SF C020 is likely to be a stone lamp due to the presence of a ring of sooting around the rim of the interior of the hollow.

Recommendations: Full cataloguing with dimensions of each object and discussion of significant individual items and the composition of the stone assemblage with reference to local comparanda; further research to find parallels for the wear noted on the pivot stone would be beneficial. Several items are considered to be good candidates for illustration for publication (e.g. the pivot stone, cupmarked slab, at least one of the hollowed stones and at least one cobble tool). Recommendations for illustration of the shale are given separately above.

Fire-cracked stone

There are four small finds of fire-cracked stone comprising seven individual angular pieces (SF A044, C007, C009, C048) from three contexts in Trenches A and C (contexts A011, C001, C002). These pieces of stone are angular broken fragments of water-rounded cobbles that have fractured as the result of heat damage, perhaps from use as pot-boilers where stones were heated on an open hearth and then added to liquid to heat it. The resulting change in temperature can cause the stones to crack and break apart. These stones are otherwise unmodified.

Recommendations: These fire-cracked stones should be described and recorded for archive purposes. Analysis of the context of discovery may shed light on whether they have been discarded with other food or hearth waste that might relate to the use of the associated structures. The stones can be discarded after archive recording, prior to reporting to TTU, as they have no potential for further future study.

Natural

At least 14 stones collected on site as tools have been proven to be natural after surface cleaning to remove residual soil (SF A012, A023, A028, A029, A040, A047, A048, A072, A093, C001, C011, C045, C053, D005).

Recommendations: *no further work.* discard of all unmodified stones is recommended prior to submission to TTU for archiving.

Ceramic

In contrast to 2015 when only a single body sherd of a ceramic vessel was found, the 2016 excavations recovered 17 finds comprising 33 sherds (SF A045, A047, A067, A070, A082, A094, A095, B003, B004, B011, B006, B009, B010, B012, B013, B016, C040) from nine contexts (contexts A011, A018, A029, A030, B001, B004, B005, B007, C004). All of these sherds derive from thick-walled, handmade, coil-constructed, low-fired ceramic vessels; the presence of sooting on some sherds suggests they were used as cooking pots. No 'diagnostic' sherds (e.g. rim, base, decorated) are present making it impossible to be more precise about the date of the vessels other than to say that they are consistent with a later prehistoric, Iron Age, date. Subtle differences in fabric suggest that at least four separate vessels may be present.

Recommendations: full catalogue with dimensions; a summary report will be produced for publication but publication of full catalogue not recommended. None of the sherds merit illustration. Scientific analysis of the residues noted on a small number of sherds is unlikely at this stage to produce any valuable results due to the condition of the sherds but care should be taken to preserve these for future study. All of the sherds should be retained for long-term curation as part of the site archive.

Vitrified material

In contrast to the 2015 season of excavation, large quantities of vitrified material were recovered, particularly from Trench C. This will be discussed in a little more detail below. The vitrified material recovered from across the site as a whole this year comprises four main categories of material: vitrified stone, vitrified ceramic, possible ferrous metalworking slags and fuel ash slag.

Vitrified amalgam

Large quantities of a vitrified amalgam consisting of vitrified stone, low-density vesicular silicaceous material and burnt soil were recovered from Trench C. Initial macroscopic examination of these fused lumps of mixed material suggests that they are amalgams of stones, soil, charcoal fuel, plant ash and organic matter; none of the pieces is magnetic. They lack any recognisable form or shape but tend to survive as thick, fractured pieces which appear to have formed as a single thick layer. The upper surfaces tend to be quite smooth with glassy, molten-looking patches, occasionally incorporating charcoal

impressions whilst the 'core' is glassy, vesicular, low-density vitrified material with homogenous medium-sized air bubbles; the lower surfaces are consistently coated in burnt loamy soil. Each of the pieces is very light in contrast to the large size of many of the fragments, hence its description as low-density. From this initial examination, there is no evidence that this vitrified material is associated with metalworking activities and it seems likely that was the accidental or incidental product of a large conflagration. These were recorded on site as eleven small finds (SF C004, C024, C027, C028, C029, C031, C036, C037, C054, C056) from six contexts (context C001, C002, C009, C013, C018 and C022) but many bags contain multiple large fragments comprising 4 boxes in total. The majority of this material derived from context C022, concentrating in an area of intense burning overlying soils within the modified entrance passage to the Dun structure. The loamy fine soil surrounding and underlying this material was discoloured to a bright orange-red as the result of heat damage.

The process that this burning represents is not entirely clear, nor is the chronological relationship between the burning event and the use of the Dun understood. Stratigraphically, the vitrified amalgam appears to post-date the use of the structure; it may be the remains of an undated but much later (?post-medieval) beacon which is unrelated to the archaeological features below it.

Recommendations: It is recommended that this material is treated as a bulk find and examined by bag/context rather than individual pieces; mass by bag will be recorded and pertinent dimensions taken but pieces will not be measured or weighed individually. Material from each context should be examined in more detail and a basic catalogue compiled which provides *a description of the material focusing on* recording its morphology, colour, texture and level of vitrification as well as describing any pertinent inclusions or impressions (e.g. evidence of fuel). As the process by which this material was produced is still ambiguous, further macroscopic examination may help to refine interpretation of the event or process but it is unlikely to provide a definitive answer. More detailed intrusive chemical and microstructural analysis (ED-XRF and SEM analysis) of a sample or samples could enable more precise identification of the inorganic chemical components of the material and may provide information on aspects of technological process (e.g. rate of heating and cooling) leading to its formation but in this instance there is limited scope that this scientific analysis will add significantly to our understanding of the process or event that took place that cannot be determined from macroscopic work. It is recommended that samples of this material are retained for long-term curation as part of the wider site archive but there is no merit in retaining all of it.

Other vitrified material

The remaining vitrified material from the site comprises small quantities of possible metalworking waste, vitrified ceramic and fuel ash slag (SF A038, A041, A043, A051, A053, A064, A075, A076, A080, A085, A089, A090, A091, B005, B020) from 11 contexts (contexts A002, A003, A006, A007, A012, A021, A029, A032, A034, B001, B007) confined to Trenches A & B. A very limited quantity of ferrous metalworking slag (SF A038, A043, A051, B005) is present, complimenting the small suite of waste found in 2015. These pieces comprise dense, dark red-brown or grey magnetic fractured fragments. None of these fragments were found in association with any metalworking feature such as a furnace or a hearth and the provenance of metalworking activity that produced this waste is not clear. Two pieces came from contexts immediately under topsoil and are not considered to be secure but two came from well stratified levels in Trench A indicating a date contemporary with the features under investigation. Two fragments (SF A075 and B005) are vitrified ceramic; this material is not diagnostic of metalworking and could be the heat-affected clay

lining of any feature involving high temperature pyrotechnic processes. The remaining vitrified material comprises small amorphous globules and blebs of low-density fuel ash slag, an amalgam of earth, silicaceous material, plant fuel, plant ashes and possible organic material that have partially melted and fused together as the result of intense heat, such as that in a domestic hearth.

Recommendations: The ferrous metalworking waste, vitrified ceramic and fuel ash slag merit full examination and cataloguing for archive purposes (description, mass, dimensions, magnetic level) but only a summary of the material is recommended for publication. All of this material should be retained as part of the site archive. None of this waste merits illustration.

Animal bone

Forty-six bags of hand-retrieved animal bones/teeth are present amongst the assemblage (SF A025, A033, A035, A042, A049, A050, A052, A054, A056, A057, A061, A057, A061, A065, A066, A068, A069, A071, A066, A068, A069, A071, A077, A078, A079, A081, A083, A084, A087, A088, A092, B017, B019, C017, C021, C022, C025, C033, C034, C035, C038, C043, C047, C050, C051, C055, C058, C061, C063, C064, C065). These fragments were recovered from 20 contexts across the site (contexts A002, A006, A011, A012, A017, A018, A021, A022, A025, A033, A034, A037, B007, C002, C004, C009, C017, C019, C025, C027, C029) and were found during hand-trowelling as well as on-site sieving of spoil; there will undoubtedly be more fragments found during soil sample processing. These bone fragments comprise both unburnt and burnt bone which are likely to represent food debris relating the occupation of the structures under excavation. Notable individual finds include a concentration of animal bones from immediately outside the stone-built curvilinear structure in Trench C and a long bone from a small mammal retrieved from about a metre inside the void of the rampart's outer facing stones in Trench A. Frequent unburnt animal bones and teeth fragments came from amongst the core of the rampart in Trench A as well as amongst tumble on the interior of the inner rampart wall face.

Recommendations; The animal bone and teeth (unburnt and burnt) should be examined by an environmental specialist to identify the species and bone element present as well as determining whether any cut marks from butchery survive. This should be undertaken once soil sample processing has been completed and the full assemblage of bone is present. In conjunction with visual (macroscopic) examination after cleaning, a catalogue will be produced that records pertinent information on each 'find' recording species and bone element, where possible. No human bone was observed on site but should any be identified during analysis, such bone will be extracted from the animal bone assemblage and should be examined by an osteologist. It is recommended that unstratified animal bone is discarded prior to final archiving and reporting to TTU.

Charcoal

Five bags of hand-retrieved charcoal were collected on site (SF C023, C026, C039, C054, C059) from four contexts (context C002, C009, C019, C028); further fragments of charcoal will undoubtedly be recovered during soil sample processing. Further discrete quantities of charcoal from Trench C were recorded as samples.

Recommendations: the hand-retrieved charcoal should be examined by an environmental specialist alongside any charcoal fragments recovered as the result of soil sample processing. Initial macroscopic analysis will determine whether species identification is possible based on the size of the pieces and condition of preservation. Species identifications will be undertaken on an appropriate sample and recommendations will be made for pieces suitable for radiocarbon dating.

Modern

Several modern artefacts are present amongst the assemblage (SF A002, A003, A004, A011, A013, C008, C060, D001) the majority of which derive from topsoil. These finds include a cast iron bracket, the tang of a butter knife with wooden handle plates surviving, a copper alloy binding and rivet from the rim of a wooden object, a possible toy pistol, clay pipe stem fragments, green glass bottle sherds and a variety of frost-shattered earthenware shards including pieces of spongeware of Victorian date.

Recommendations: basic details of these items should be recorded for archive purposes only (e.g. basic description of each find, number of sherds and mass). The majority will be discarded after archive recording.

Conservation

The priority for conservation is the cleaning and stabilisation of the copper alloy decorated ring-headed pin (SF B014 & B015). Conservation required includes cleaning the surfaces of residual soil, particularly around the head where soil still masks the form. After cleaning, the surfaces should be stabilised for long term curation. Further x-rays may be necessary prior to any work to clarify whether any trace of inlays remain within the hollows that are currently masked by soil. Examination of the cleaned surfaces will determine whether it is possible and appropriate to rejoin the separate fragments of the pin; this will be undertaken if deemed to be feasible. The object should be stored, prior to and after conservation in a sealable Tupperware container with silica gel and a visible humidity indicator strip. Photographs will be taken of the object prior to cleaning and after completion of conservation and a report written to record the work undertaken for archive purposes.

Careful surface cleaning and x-radiography of the shale/cannel coal objects (Q=16) from the 2016 excavation are recommended to aid identification. One bangle fragment, broken in the course of excavation in Trench C, should be rejoined if possible. Photographs will be taken of the condition of the piece prior to and after conservation and a short report compiled to record the work undertaken.

6 DISCUSSION

The excavations at the hillfort of Moredun have produced a great deal of evidence for the use, construction and occupation of the hillfort. Due to the excavations described in this report, there is now further understanding of the use and structures of Moredun Hillfort, building on the 2015 excavations.

Although some of the structures identified in topographic survey and intended for investigation appeared ephemeral after excavation, namely the circular structures in Trench A, further structures were discovered which were not evident in previous surveys. The rampart which underlies the roundhouse structures in Trench A was able to be thoroughly explored the sondages in Trench A. This enabled a further understanding of the construction, with inner and outer facing stones visible, an identifiable core and a possible source for other substantial stone blocks and slabs used elsewhere in the trench. Similarly the chronology and nature of the pond feature in Trench D proved difficult to assess through excavation alone, yet excavations revealed a palisade slot running throughout this trench, adding further complexity to the use and nature of Moredun Hillfort.

General excavation and the northern sondage in Trench B helped to understand the composition of the curvilinear structure previously identified in the topographic survey. In addition, excavation of this sondage also revealed a copper object, characteristically Iron Age in appearance, decoration and material, lying infront of a previously unknown curved stone structure which may form a section of a larger curvilinear structure, perhaps a roundhouse. This structure utilises the bedrock in its construction and would benefit from further excavation. Similarly, the monumental structure in Trench C utilises the bedrock in construction, and excavation revealed a clear, well constructed entrance with evidence for intense burning activity within the entrance and structure itself.

The artefactual assemblage is characteristically prehistoric. The amount of ceramic sherds has increased on the 2015 assemblage, and although no diagnostic features were recovered they are all part of characteristically late prehistoric, or Iron Age, vessels. Similarly, the worked stone assemblage recovered from Moredun Hillfort has increased, notably including items such as quern stones, stone tools, cupmarked stones and a stone lamp being recovered. Diagnostically, the copper item discovered in Trench B (although in the early stages of conservation), provides a narrower scope for date and this may provide a further understanding of those using Moredun Hillfort.

Another notable discovery was the reuse of multiple cupmarked stones in the excavated structures. Although this may have been simple reuse of a suitable stone for building such structures, the use of such significant stones may also represent a permeation of ritual beliefs into practical everyday life of the people using these structures (Hingley 1992). Hingley (1992: 29) in his discussion of souterrains in southern and eastern Scotland suggests that the reuse of cupmarked stones are significant to the construction and may represent the importance of agricultural production, control and surplus. This may also be a concept to consider when interpreting the reuse of the cupmarked stones in the entranceway of the large monumental structure in Trench C at Moredun, as well as the displaced cupmarked stones which may likely have formed part of the rampart underlying the hut circle structures in Trench A.

Early historic occupation is still absent in the artefactual record, and the structures and associated artefacts appear prehistoric in character. Although the absence of early historic evidence may not indicate a lack of activity, this absence was also recognised in the archaeological evidence of the previous 2015 excavations.

This DSR report is both preliminary and provisional, with many issues raised by the excavation data still to be addressed. In ascertaining a fuller knowledge of the excavation results, a post-excavation research design will be produced that will describe all necessary and appropriate assessment processes and consequent post-excavation analyses together with publication proposals for the final report. This report will integrate the stratigraphic, contextual and descriptive data from the excavation with specialist post-excavation analyses covering dating, palaeoenvironmental and economic issues. These will then be included with the findings from the previous phases of work culminating in an article fit for academic publication.

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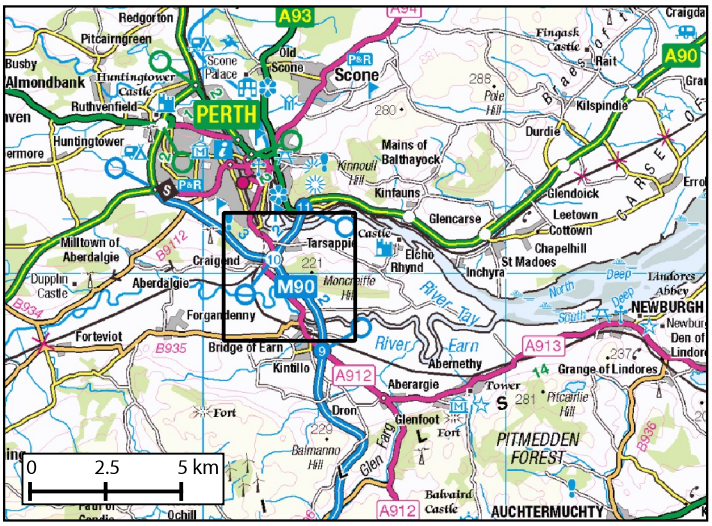

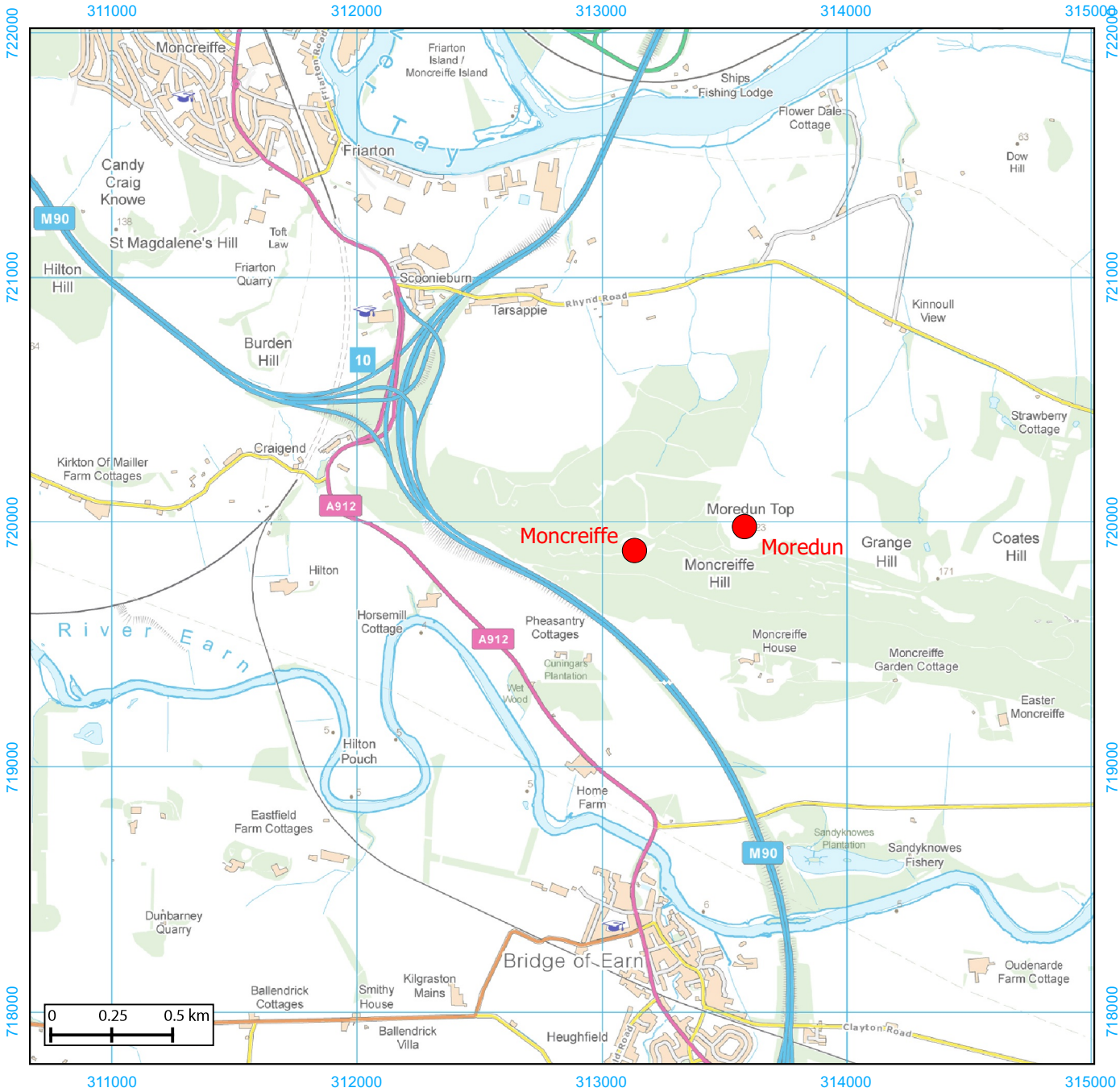

Figure 1: Site Location

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313500 313600 313700 313800

720100 720000

Trench Locations, based on RCAHMS survey of Moredun Hillfort

2015

2016

curling pond

track

T3

T2

T1

TRENCH C

TRENCH B

TRENCH D

pond

T4

T6

TRENCH A

wall core | wall-face | bank | ditch | scarp | spoil-heap | track

natural slope | slope with outcrop and cliff | quarry | dyke | modern path

N

0 40m

1:1000 at A3

Figure 2: Trench location plan

01/REP16/23223/01/01

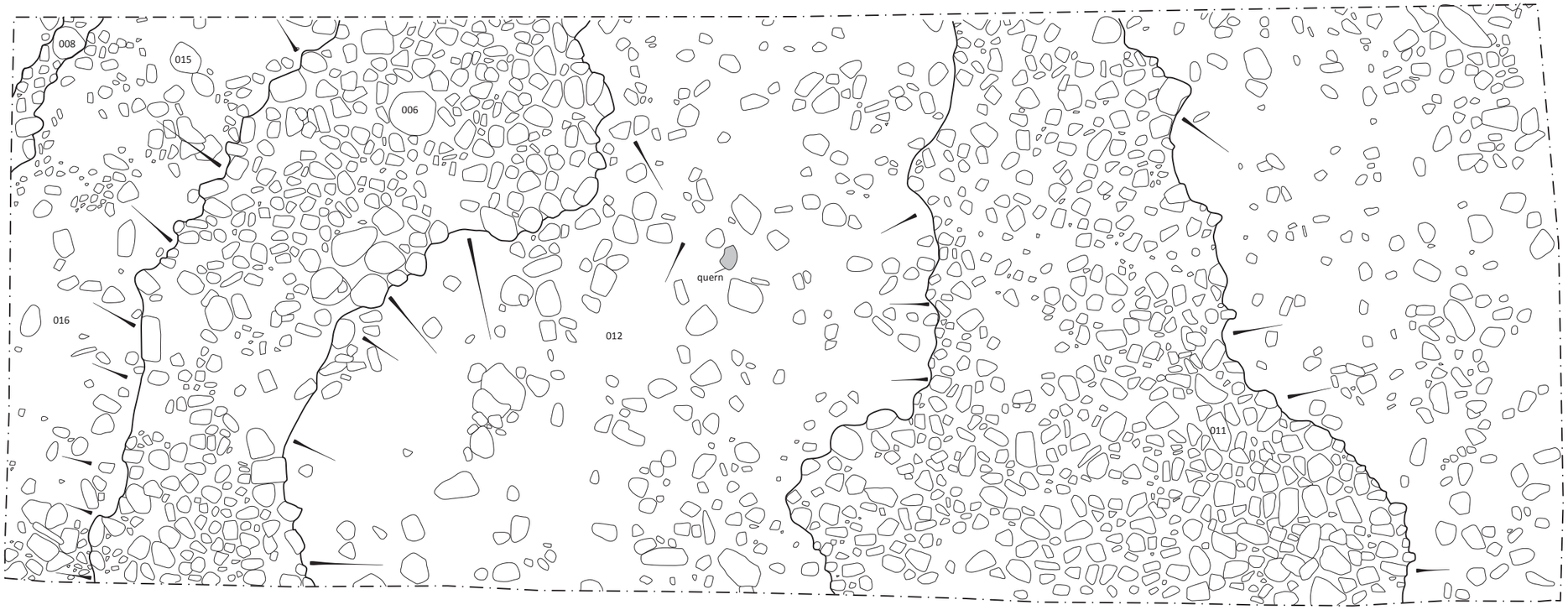
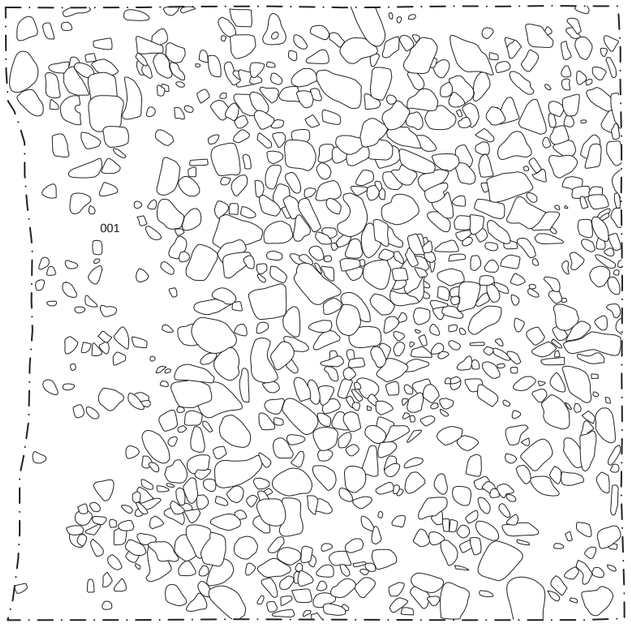
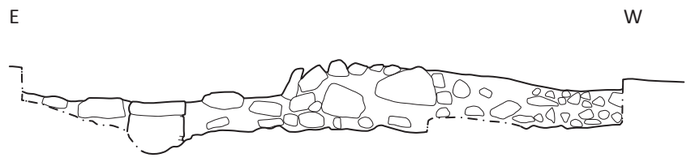


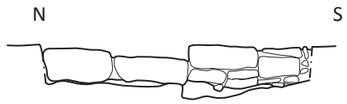
Figure 3: Trench A plan



Pre-ex plan



North facing section



West facing section

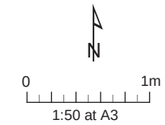
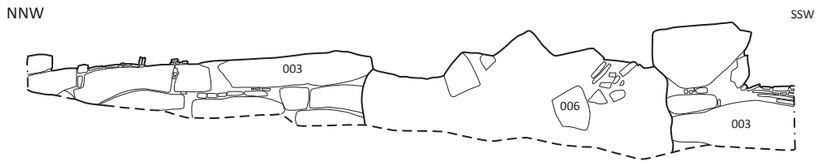


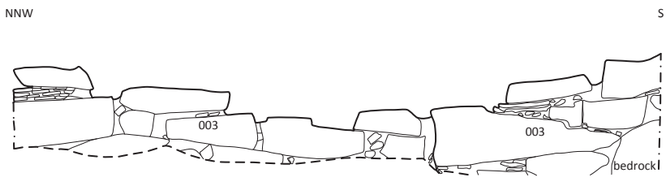
Figure 4: Trench B plan and sections

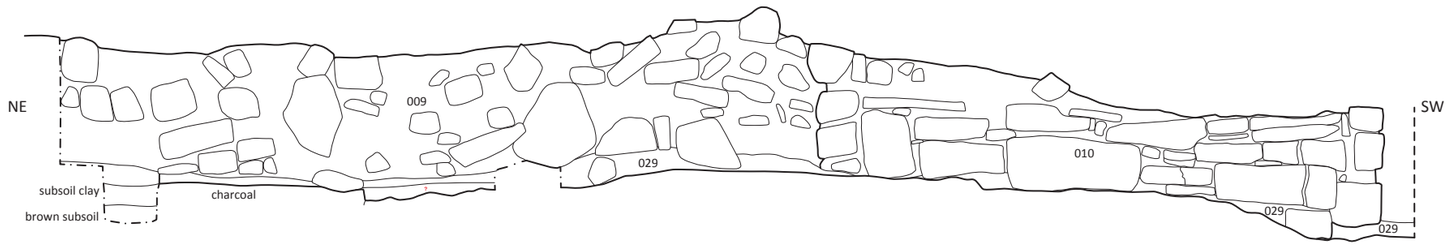
01/REP16/23223/04/01

Figure 5: Trench C orthographic plan view of photgrammetric textured mesh

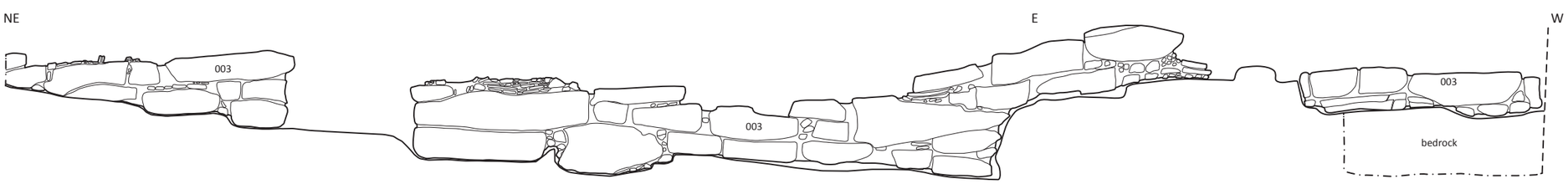


South-west elevation of wall [003]





North-east facing section of trench C



South-west elevation of wall [003]

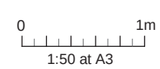
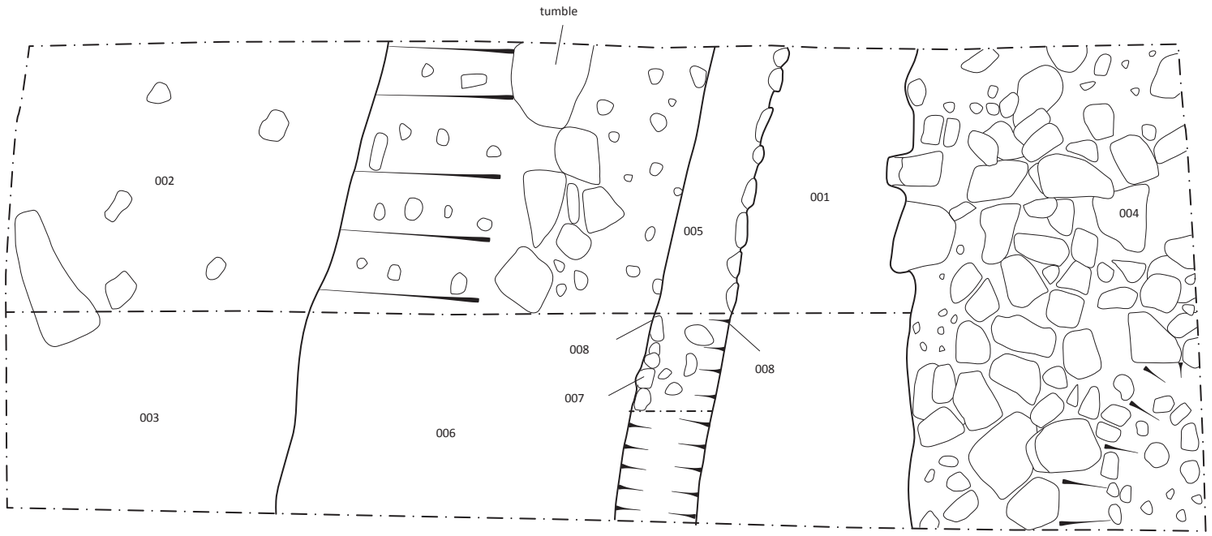
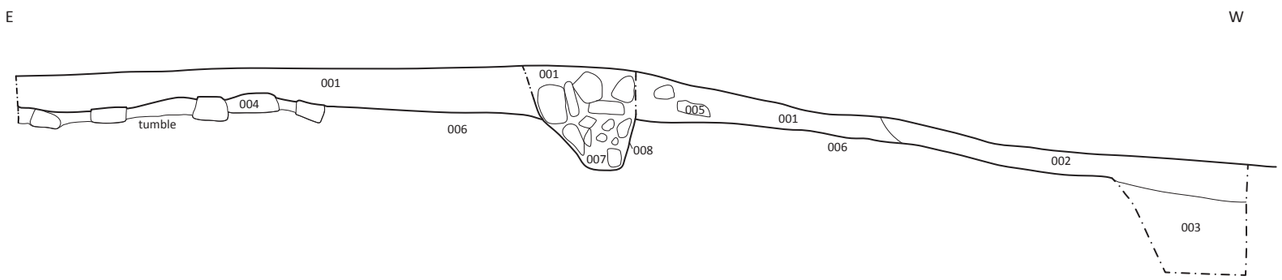


Figure 6: Trench C sections and elevations

01/REP16/23223/06/01



Post-ex plan



North facing section

N

0 1m

1:50 at A3

Figure 7: Trench D plan and section

01/REP16/23223/07/01

Moredun Top, Moncreiffe Hillfort, Perth and Kinross:

Archaeological Evaluation Phase 1

Data Structure Report

Section 2: Appendices

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APPENDIX 1: CONTEXT REGISTER

Trench A

Context No.	Description
(A001)	Mid to dark brown loamy soil, loose in texture; frequent root with patches of turf. Frequent angular stone. **Turf and topsoil**
(A002)	Deposit of small angular stones amongst larger angular cobles of arc off wall of hut circle [A003] and to immediate east. See also A019 in slot 3. Under (A001), equals (A019) and within (A006). **Weathered stone deposit in upper layers of overburden.**
[A003]	Hut circle 'N' in north of trench; defined by an arc of angular stones (A006) with possible entrance exposed which is SE facing. Excavation revealed structure to be very ephemeral, built on top of collapsed rampart A025, using stones from collapsed A025 core. Under (A001), over [A025] and encloses (A012). **Sub-circular roundhouse/hut circle**
[A004]	Hut circle 'S' in south of trench A; defined by an arc of angular stones (A007). Excavation revealed the structure to be very ephemeral, the walls surviving only as a couple of courses of loose blocks built over tumble from the collapsed rampart [A025]. Far less well defined than A003.Overlying (A024)- the core of the rampart [A025]/ **Poorly defined stone built roundhouse/hut circle**
(A005)	Curving bank, stone-rich, flanking NE arc of [A003]; possible enclosing bank surrounding hut circle complex. Excavation revealed no clear bank as suggested by topographic survey. Curvilinear mound of angular stone appears to be the result of differential erosion over collapsed rampart [A025] **Differential erosion of tumble over collapsed rampart [A025] forming ephemeral, poorly defined curvilinear mound; not bank as suggested pre-excavation.**
(A006)	Angular stones that encompass arc of wall of hut circle [A003].Most of the stones are angular, fine-grained, matching the local outcropping stone; possibly quarried from the vicinity of hilltop, but also occasional glacial erratic boulders, water smoothed cobbles etc. and red sandstone blocks. Excavation revealed wall to be ephemeral, poorly defined and constructed; probably reused collapsed core material of [A025] which roundhouse had been built over. **Ephemeral remains of stone built core of wall of hut circle [A003].**
(A007)	Angular stones that encompass the arc of wall of hut circle [A004]. Most of the stones are angular, fine grained siltstone- matches local outcropping rock- possibly quarried. Also included occasional glacial erratic boulders and watersmoothed cobles. Tumble (A020) incorporates at least two cup marked stone slabs. Structure found through excavation to be very poorly defined and not well understood. **Ephemeral 'wall' of possible sub-circular structure; poorly defined and not well understood.**
(A008)	Angular stone that encompasses the arc of possible curvilinear bank that flanks hut circle A003. Overall number assigned to bank structure in [A005]. Excavation found no evidence to suggest this was a built feature but appeared to be differentially weathered tumble from collapsed rampart [A025] overlying outer facing stones (A023) **Differentially weathered tumble from [A025]; not a built bank as suggested by topographic survey pre-excavation**.

(A009)	Large rectangular sandstone slab with two possible cupmarks on upper surface; within angular stone tumble (A020) to SE of eastern arc of A007, to N of S trench edge. See trench drawing 1 (pre-ex). **Early prehistoric cupmarked sandstone slab; incorporated within [A025], now tumbled out of position**
(A010)	Cupmarked stone within stones of arc of hut circle A004- not fully exposed. Two very clear adjoining cupmarks appears as figure of 8- one 50mm diameter, one 75mm diameter, and larger one is secondary and deeper. These two cupmarks encircled by a shallow curvilinear groove, a further two possible peckmarked hollows visible on edges but not fully exposed **Early prehistoric cup-marked rock, probably incorporated within [A025] now tumbled out of position amongst (A020)**
(A011)	Abutting walls of [A003] and [A004]; investigated within slot 2. Upon excavation, walls found to be very ephemeral and poorly defined. Only loosely consolidated layers of stone found to encompass the walls and the relationship between [A003], [A004] was not demonstrated by excavation. **Abutting walls of [A003] and [A004], poorly defined. Relationship was not well understood**
(A012)	Dark brown rich silty sand. Compact deposit with inclusions of burnt bone. Inside the E/NE quadrant of structure [A003]. Overlying deposit of stones (A010). Underlying topsoil and abutting stone with (A006) **Ephemeral surviving occupation deposit within [A003]**
(A013)	Small angular cobbles between inner face of arc of wall (A006) and oblique stone partition (A014) within interior of [A003] hut circle. Underlying (A012) **Possible late floor surface within interior of [A003]**
[A014]	Linear arrangement of stones 2.8m long, 1m wide and unknown depth. Made up of large slabs of stone up to 0.4x0.6m. (A012) surrounds this context but likely post-dates it. Possible internal partition within [A003] **Possible internal partition with [A003], re-uses collapsed facing slabs from [A025]**
(A015)	Small to medium angular stones underlying (A001) topsoil to the exterior of arc of stones (A006) that make up the wall of N hut circle [A003]. Incorporates and cannot be differentiated from tumbled core material from [A025] **Tumbled stones from wall (A006) to exterior of A003; incorporated tumbled core material from [A025]**
(A016)	Mid-brown loose soil encasing/ enclosing angular stones (A015) to the exterior of (A006). **Possible degraded turf amongst collapsed stone of wall of hut circle A003 and collapsed core material of rampart [A025]**
(A017)	Deposit of loose to medium compacted small shattered stone and loose dark brown silty soil. Up to 0.06mm thick abutting wall (A006). Up to and underlying (A014) stones within [A003]; same as (A032). **Core material of rampart [A025], underlying [A003]**
(A018)	Dark brown moist, crumbly soil found in pockets of angular stone comprising (A024) at a point of 0.8m deep from turf. Occasional charcoal inclusion. Revealed in slot 2, across extent of excavated slot. **Soil matrix of collapsed rampart core and facing stones in slot 2.**

(A019)	Deposit of shattered stone and soil in the frequent roots. Covers the western upper end of slot 3 in Trench A. Same as (A002) and encloses (A026). **Weathered stone deposit in upper layers of overburden**
(A020)	Tumble/collapsed angular rocks to east of outer face of [A004], exposed in trench A, slot 3. On excavation, walls of hut circle A004 were so slight as to be questionable; a lot of the tumbled rocks first thought to be collapsed core material from [A025]- exposed in slot 3 **Mixture of tumble from (A007) and [A025]**
(A021)	External stone tumble from encircling bank [A005]; collapsed stone thought originally to derive from A005 and therefore same as A008, but excavation within slot revealed that there was no 'bank'. This tumble derives from the collapsed rampart [A025]. **Tumbled core material from collapsed rampart [A025] to NE of outerfacing stones (A023)**
(A022)	Alignment of large rectangular slabs to E of (A006), surrounded by angular stone blocks (tumble). Originally thought to be related to entrance to hut circle [A003] but orientated parallel to coursed stone (A023) in NE corner of trench (slot 1). Continues under (A006) within interior area of [A003] as (A031) **Innerfacing stones to rampart [A025]; see also (A031)= inner facing stones**
(A023)	Alignment of large rectangular slabs, closely fitting, NW/SE aligned. Underlying A008. Possible facing stones surviving as at least two in situ courses, but with significant void (at least 1m long) running SW under exposed stones within slot 1b. These slabs form a gently curvilinear alignment, 5m N from parallel alignment (A022) **Outer facing stones of rampart [A025]. See (A022) and (A031) from inner stones**
(A024)	Large angular stone blocks in slot 2. Underlying (A011) (soil matrix A018) No clear configuration or alignment. Set within A030 (at lowest level) and overlying A029. Individual blocks average 0.3/0.4 x 0.3/0.4m an up to 0.8mx0.6m; incorporating angular quarried block and glacial erratic boulders. **Internal collapse of facing stones and core from rampart [A025]; underlying hut circle [A004] and (A011)**
[A025]	Rampart [A025]: consisting of inner facing stones (A022) and (A031); outer facing stones (A023); in situ stone core (A013) (A032). 5m wide between inner and outer facing stones. Underlying [A003]; internal tumble from collapsed rampart underlying [A004] **Rampart structure: pre-dates [A003] and [A004]**
(A026)	Large tumbled sub-rectangular and sub-square stones blocks in E half of slot 3. Surrounded by medium-sized angular stone blocks and stone shatters (collapsed rampart core material). With mid-brown loose soil matrix (A027) and smaller angular rocks (collapsed core material A020) **Collapsed inner facing stones of [A025]**
(A027)	Mid-brown loose soil matrix of A020 and A026 (tumbled facing stones from inner face of [A025]) **Soil matrix of collapsed rampart core and facing stones (interior of rampart enclosure)**

(A028)	Large sub-square/sub-rectangular slabs and blocks in SW corner of slot 2 with (A030) **Collapsed facing stones from inner face of rampart [A025]**
(A029)	Lens of bright-orange/black burning under (A030); (A024) **Predates collapse of rampert [A025] within enclosure; occupation debris or trample.**
(A030)	Light to mid-brown dense silty soil with frequent small charcoal inclusions. Occasional pottery sherds. Lowest level of large angular stone collapse from rampart embedded within this soil. Overlies a lens of orange/black burnt soil (A029)
(A031)	Large angular blocks of stone below interior space of hut circle [A003], walls (A006). Overlaid by (A013) and (A014); orientated NW/SE inline with facing slabs (A022); 5m to the W of (A023). Exposed with slot 1. In situ core material of rampart to the N of (A021) and collapsed core material (A033) and facing stones (A024) and (A028) to the SW. Within slot 1 and 2 **In situ-inner facing stone of rampart [A025] same as (A022)**
(A032)	Medium to small shattered angular rocks with loose dark brown humic rich soil (A036). No configuration to the orientation of placement of stones. Contained within the area defined by A031 and A023. Underlies (A006), (A012), (A013), (A017). Occasional charcoal fragments and animal bones. Enclosed by (A031) and (A023) **In situ block core of [A025]**
(A033)	Medium to small angular stone blocks, randomly arranged amongst A026 in slot 2. Same as (A024) **Collapsed rampart core material within slot 2**
(A034)	Degraded brown silty deposit above bedrock (A035) below (A030) **Degraded brown silty deposit above bedrock, below (A030)**
(A035)	Bedrock: craggy appearance, flat in areas sloping gently in a southerly direction occasional abrupt steps but no sign of quarrying. Feature [A039] cut into bedrock **Bedrock**
(A036)	Dark brown silty loose soil matrix of (A032) **Soil matrix of insitu stone core (A032) of rampart [A025]**
(A037)	Mid-brown silty loose soil matrix of tumble (A021) from outer face of [A025] in NE corner of slot 1 **Matrix of external from rampart [A025] in slot 1**
(A038)	Mid-brown silty soil infill of (A039); occasional charcoal inclusions and patches of orange brown burnt soil similar to (A029) **Fill of rock cut hollow [A039]**
[A039]	Oval hollow cut into bedrock (A035) with slot 2, extends into W trench edge- not fully investigated. Sides are steeply sloping with an uneven base filled by A038. 0.62m N/S x 0.59 E/w (exposed). Continues into W trench edge. Max depth 9.5 cm. **Oval rock cut hollow in the bedrock**
(B001)	Brown sandy silt with root inclusions. Extends across whole of trench **Topsoil**

(B002)	Formation of flat sub-angular stones in NW corner of trench. Extending c. 1x1m. Excavation showed no associated finds or deposits **Possible platform or paving**
[B003]	Circular structure running throughout trench. Consisting of med-large sub-angular mixed stone (B003). 1.5m x 2m in width. **Possible collapsed wall of circular structure: a roundhouse or hut circle**
(B004)	Med-large sub angular stone blocks of [B003] and associated infill. Infill consists of med-brown loose soil with some turf inclusions and occasional small stone inclusions **Stones and infill of roundhouse structure [B003]**
(B005)	Small-medium sub angular stone, with associated dark brown loam, with infrequent charcoal and bone inclusions. **Exterior collapse and tumble of structure [B003].**
(B006)	Dark brown sandy silt with occasional charcoal inclusions. Frequent small sub angular stone inclusions. **Interior soil deposit of [B003]**
(B007)	Dark brown friable soil, charcoal stained. Underneath and amongst collapse **Soil layer underneath and amongst rubble collapse of [B003]**
(B008)	Very dark brown, charcoal stained deposit. Silty clay soil with bone inclusions. Underlying soil deposit (B006) **Occupation layer within and under [B003]**
(B009)	Dark brown rich loam silty clay with bone and charcoal inclusions at depth of 0.4-0.5m **Soil deposit underlying [B003]**
[B010]	Structure in E side of slot, consisting of at least two courses of large stones c.0.5m x 0.2m. Exposed through excavation of slot 1 **Possible wall of larger circular structure (roundhouse) extending through E end of trench**
(B011)	Dark brown/black charcoal stained compact soil with frequent charcoal inclusions. Distinct from (B008) as darker and much more compact. 1.75m x 0.6 to a depth of 5cm **Sterile layer of charcoal stained soil underneath possible occupation layer within [B003]**
(B012)	Natural layer of bedrock exposed through excavation of Slot 1 **Bedrock**
(B013)	Orange/brown sandy soil underlying (B007) **Soil layer underlying (B007) and the circular structure [B003].**
(C001)	Turf and topsoil. Matted roots and turf up to 0.12m. Thick deposit of light grey brown fine silt, inclusions of occasional to frequent small to large sub angular sub angular stone **Turf and topsoil**
(C002)	Deposit consisting of small to large sub angular stones. Sizes range from 0.05m x 0.02m to 0.3m x 0.4m. **Tumble/collapse deposit**
[C003]	Western wall of structure, built of red sandstone. Entrance built of stone possibly quarried, plus brought up from valley floor. Lots of cracked stones- poorly distributed. **Wall, external of structure**
(C004)	Series of flat stones, abutting wall [C003]. Depth 0.6m x width 1.7m x length 1.2m **Collapse of wall [C003]**
(C006)	Series of collapsed stone forward of [C003]. Depth 0.6m x width 1.6m x length 0.5m **Forward collapse of [C003]**

(C007)	In-fill behind wall [C003]. Mid-brown silty loam behind wall [C003]. Lightly compacted, small angular stones throughout. **Infill behind wall**
[C008]	General number assigned to entrance of structure. Pivot stone ΔC014 found immediately to the W of this. 2.5m wide x 2.5m high **Entrance of structure [C003]**
(C009)	Rubble fill within entrance [C008]. Large angular stones blocking entrance. 0.25m x 0.33m x 0.28m on average **Rubble within entrance**
[C010]	Eastern wall of structure (western wall [C003]). Built of large stones, a mixture of stones from hilltop plus red sandstone from valley floor. Built on bedrock (which is at an undulating depth). Red sandstone at entrance with cup-marked stones within walls. **Eastern wall of structure, separated by [C003] by entrance [C008]**
(C011)	Bedrock across site **Bedrock**
[C012]	Line of red sand stone running from entrance [C008] to left side of trench. Angular stone averaging 0.2m x 0.15m x 0.1m **Purpose unknown**
[C013]	East part of wall [C010] which consists of cup mark stones **Wall consisting of cupmarked stones**
(C014)	Cup marked stone in wall [C010] **Cupmarked stone**
(C015)	Cup marked stone in wall [C010] **Cupmarked stone**
(C016)	Large stones up to 0.46cm across with a mixture of round and flat shapes. This runs from face of wall to rear of excavated area, extending approximately 1.3m abutting entrance wall [C010]. **Possible wall collapse of entrance from south side of entrance**
(C017)	Area abutting wall [C003] and directly underlying (C004). Not present anywhere else in the trench **Original ground surface**
[C018]	Possible structure: furnace/pyre **Possible furnace/pyre**
(C019)	**Fill of possible structure**
[C020]	**Deposit under (C004) (C017) (C005)**
(C021)	Line of red sandstone, right hand side of [C008]
(C022)	Burnt' stone abutting C018
(C023)	Deposit under C020
(C024)	**Surface (possible original ground surface?) adjacent to (C023)**
(C025)	Deposit behind [C018] and [C022]
(C026)	Burnt insitu timber in fill (C019)
(C027)	Lowest deposit above bed rock, east end south of entrance wall
(C028)	Rubble in front of entrance (possibly same as C006) **Rubble infront of entrance**
(C029)	Black soil in sondage B, under (C025)
(C030)	Burnt timber across entrance 1.58m x 0.78m **Burnt Timber**
[C031]	Possible stone wall/tumble consisting of sub-angular stone blocks at S extent of Slot 2. Measuring 1.8m x 1.1m (width of sondage) x 0.4m **Tumble of possible wall**
[C032]	Single stone at S extent of slot 2. Possible part of a retaining wall for (C034). Slight curve from SE to W. Only 1 course high.).17m x 1.1m (width of sondage) x 0.35m **Possible retaining wall**

(C033)	Deposit of light brown sandy silt between (C031) and (C032). Lightly compacted with no inclusions.
(C034)	Heavily compacted mid-grey/ dark brown silty clay with small angular stones throughout. Not excavated **Possible surface**
(D001)	Dark black brown loose soil. Dry and crumbly in non-waterlogged areas. Some angular stone (0.1x0.1m to 0.2x0.2m). Flecks of burnt bone in places. c. 0.1-0.3m thick, deeper at east end of trench. **Topsoil**
(D002)	Dark black brown waterlogged clay rich topsoil. Concentrated at west end of trench in waterlogged boggy hollow. Very rooty. Rare small angular stone (c. 0.1x0.1m max). Flecks of burnt bone c. 0.25m thick. **Peaty waterlogged layer at west end of trench.**
(D003)	A dark black brown waterlogged clay rich soil with occasional large angular stone (likely tumbled into hollow) which is concentrated at west end of trench in hollow. Very rooty. Occasional flecks of burnt bone throughout. c.0.4m deep, not bottomed. **Peaty waterlogged layer under (D002) with angular stone at west end of trench.**
[D004]	A spread of band of large flat sub angular stones set in at east end of trench. Small part of a structure on flat terrace by outer rampart. Stones c0.4x0.3m, set flat. Remains of a base of wall or paved area. Very rough if paving surface. Topsoil (D001) over and between stones. **Flat 'placed' stones at east end of trench: surface or wall.**
(D005)	A spread of angular tumbled stone across the middle of Trench D. Ranging in size from c.0.6x0.5 to 0.1x0.1m. Some sub angular stones throughout- mixture of red stone and more local. Thin layer: only one or two stones deep across middle of trench down slope towards pond. Tumble overlying palisade, perhaps from small bank associated with palisade? **Shallow spread of mixed angular stone at middle and west of trench.**
(D006)	A very compact orange reddish brown clay with small angular stones. Cut into by palisade slot. Sterile layer- possible subsoil, sloping towards pond. **Orange reddish clay rich later under (D005)**
(D007)	A greyish brown clayey silt with frequent angular stones. Filling palisade slot cut [D008]. Frequent charcoal flecks and burnt bone throughout. Angular stone remnants of packing that have been packed/tumbled into slot. **Grey brown clay rich soil mixed with small medium angular stone in linear cut north to south across trench**.
[D008]	Cut of palisade slot. Linear slot running N-S across trench steeply sloping sides to flat shaped base. Packed with (D007) soil and stones. **Palisade slot.**

APPENDIX 2: PHOTOGRAPHIC REGISTER

Digital Photographs

Photo No.	Trench Area	Description	Direction
1-2	C	Working shot of wall [003]	SW
3-21	C	Working shot of wall [003]	VAR
22-151	C	Photogrammetry shots cupmarked stone	VAR
152-159	A	Post cleaning record shots: photos taken from west-east starting at the N edge of trench	VAR
160	A	Oblique view of North end of trench A	E
161	A	Oblique view of South end of trench A	E
162-163	A	Overview of possible entrance	W
164	A	Entrance and overburden [002]	W
165	A	Larger faced entrance stones	W
166	A	possible entrance and rubble [002]	
167-168	C	Detail of rubble/collapse [004] infront of [003]	W
169-170	C	Detail of (004) as more revealed	W
171-172	C	Detail of [005]	W
173-174	C	Working shot of [003]	W
175-176	C	Entrance [C006]	N
177-178	C	Rubble fill of C[006]	W
179-188	C	General working shots	VAR
189-190	A	Mid-ex shot of hut circle (N) interior	W
191-196	A	Mid-ex shot of hut circle (N) interior	S
197-198	A	Mid-ex shot of hut circle (N) interior	S
199-204	A	Mid-ex shot of hut circle (N) interior	N
205-208	A	Mid-ex shot of hut circle (N) interior	E
209-212	A	Working shots	VAR
213-215	A	Interface between walls of N and S hut circles	S
216-222	A	Mid-ex shot hut circle (S) interior	W
223-226	A	Mid-ex shot hut circle (S) interior	N
227-230	A	Mid-ex shot hut circle (S) interior	E
231-236	A	Mid-ex shot hut circle (S) interior	S
237-238	A	Mid-ex shot hut circle (S) interior	SW
239-241	A	Working shots	SW
242-243	C	Detail of [C008] and (C009)	S
244-245	C	Detail of western entrance C[008]	S

246-495	C	Photogrammetry of broch entrance	VAR
496-499	A	Quern Stone ΔA018	VAR
500-503	A	Pre-ex shot of A	E
504	A	Cup Marked Stone (A009)	
505	A	Cup marked stone (A010)	E
506	A	Pre-ex of trench A, south end	W
516-526	C	Detail of wall [C010] plus cup marked stones	VAR
527-530	C	Working shots of trench C	W
531-533	C	Working shots of trench C from trench A	
534-538	A	Working shots	
539-540	C	Possible entrance to wall	SW
541	C	Possible entrance to wall	NE
542	C	Possible entrance to wall E Side	W
543	C	Possible entrance to wall W Side	E
544	C	Possible entrance to wall E Side	NE
545-546	C	West facing section sondage A	W
547-548	C	East facing section sondage B	E
549-550	C	South facing section of wall [C003]	S
551-552	C	Overhead shot of sondage A showing bedrock (C011)	S
553-554	C	Overhead shot of sondage A showing bedrock (C011)	N
555-556	A	Mid-ex photo of tumble from (A006) NW Corner	E
557-558	A	Mid-ex photo of tumble from (A006) NW Corner	N
559-560	A	Mid-ex photo of tumble from (A006) NW Corner	W
561-562	A	Mid-ex photo of tumble from (A006) NW Corner	N
563-564	A	Mid-ex photo of tumble from (A006) NW Corner	
565-568	C	Collapse (C016) in entrance [C008]	W
569-649	C	Photogrammetry of collapse above entranceway	VAR
650-653	A	Pre-ex trench A showing stone alignment within collapse wall of A003 A004	E
654-655	A	Pre-ex trench A showing stone alignment within collapse wall of A003 A004	SE
656-661	A	Pre-ex trench A showing stone alignment within collapse wall of A003 A004	N
662-669	C	Detail of entrance under excavation	

670-677	C	Detail of animal bone cluster west entrance	VAR
671-672	C	Detail of (C015)	
673-674	C	Detail of (C014)	
675-676	C	Detail of (C014)	
677	C	Detail of (C015)	
678-679	C	Detail of (C015)	
680-688	C	Wall [C010]collapse	
694-695	C	Metal working?	
	A	Pre-ex shot of (A013)	
707	A	Stone mortar in situ ΔA032	
708-709	C	Detail of wall [C010]	S
710-711	C	Detail of wall [C010] - next line	S
712-713	C	Detail of wall [C010] - next line	S
714-715	C	Detail of wall [C010] - next line	S
716-717	C	Detail of wall [C010] - next line	S
718-719	C	Entrance [C010]	S
720	C	Detail of E Entrance	E
721	C	Detail of W Entrance	W
722-730	C	Detail of [C018]structure	W
731-733	A	Mid-ex of slot through (A007) (A006) (A011)	W
734-735	A	Mid-ex of slot through (A007) (A006) (A011)	S
736-740	A	Mid-ex [A003]	VAR
741-742	A	ΔA047 in situ	W
743-748	A	JESS	
748-749	C	Detail of OGS [C017] and entrance	SW
750-757	C	General shot of [C017] and (C002)	SW
758-759	C	Possible burnt mound [C018]	NW
760-761	C	Possible burnt mound [C018]	NW
762-763	C	Possible burnt mound [C018]	NE
764-766	A	Mid ex of slot through (A006) (A007) (A011)	W + N
767-770	A	Mid ex of clot 3 through (A007) and hollow	E
777	C	Deposit (C020)	W
778	C	Deposit (C021)	N
779	B	Record shot pre sondage	W
780	B	Record shot pre sondage	S
781-784	A + C	Working shots	
785	B	(B002) before slot: post-clean	W
786-787	C	Working shots of stone below [C018]	E
788-789	C	Working shots of stone below	S

		[C018]	
790-791	C	Working shots of stone below [C018]	W
792	C	Collapsed wall 3m outside wall	N
793	C	Collapsed wall 3m outside wall	PLAN
794-797	A	Mid-ex collapse of rampart stones (A011) (A018) in slot 2	S
798-805	A	Mid-ex collapse of rampart stones (A011) (A018) in slot 2	N
806-807	A	Mid-ex of (A023) outer facing stons of rampart [A025] with external stone tumble	NE
808-809	A	Mid ex detail of (A023) in slot 1	NE
810-813	A	mid ex shot of (A024) tumble from [A025] in slot 2	S
814-815	A	Mid ex shot of (A024) tumble and (A028) in slot 2	S
816-821	A	Mid ex shot (A024) and (A028) in slot 2	S
822-825	A	Mid ex shot (A028) in SW corner slot 2	S
826-829	A	Mid ex shot slot 2 (A024) (A028)	N
830-831	A	Mid ex shot N end slot 2 (A024) (A018)	W
832-833	A	Mid ex shot N end slot 2 (A024) (A018)	W
834-835	A	Mid ex shot middle slot 2 (A024) (A018)	W
836-837	A	Mid ex shot S/middle slot 2 (A024) (A018)	W
838-839	A	Mid ex shot S end slot 2 (A024) (A018)	W
840-845	A	Working shots	VAR
846-847	C	Detail of wall [C012]	E
848-849	C	Detail of wall [C021]	W
850-851	C	General shot of [C018] S edge	S
852-901	C	General shot of {C018]/(C022) [C012]/[C021]	VAR
902-904	C	Working shot of [C010]	S
905-910	C	Close up of entrance corner [C003]	W
911-913	C	Close up of entrance corner [C003]	S
914-915	C	Working shot of (C024)	S
916-920	B	Post clean mid-ex B003 B004 B005 B006- West to East of slot	E
921	B	Oblique show Trench B post clean of slot	E
922-923	A	Detail of rubble at W end of slot 3	W

924-929	A	post-ex shot of slot 3	NE
930-937	A	Detail of external face of rampart	NE
938-941	A	external face of rampart, external rubble collapse	NE
942-943	C	Sondage B	E
944-945	C	Sondage B	W
946-957	A	Relationships between (A023) and (A022)	NE
958-974	B	ΔB014 in situ	VAR
975-992	B	ΔB015 in situ	VAR
993-995	C	Right hand entrance outer wall [C010] on bedrock	S
996	C	Sondage B	N
997	C	Sondage B	E
998-999	C	Sondage B	W
1000	C	Sondage B	S
1001-1009	C	Selection of smooth rounded stones	VAR
1010-1014	A	Pre-ex shot of slot through possible bank	VAR
1015	C	In situ timber (C026)	S
1018	C	Within fill (C019)	VAR
1019	C	In situ burnt timber (C026)	S
1020	C	Within fill (C019)	N
1021	C	Within fill (C019)	W
1022-1023	B	Mid ex (B008) (B011)	S
1024-27	A	In situ burning (A029) (A035)	W, S, N
1028-1029	A	SW corner of Trench A mid-ex	W,N
1030-1031	A	In situ burning (A029) (A035)	W
1032-1035	C	Rubble in N end of entrance sondage mid-ex	N, W
1036-1040	C	Examples of fused/vitrified material entranceway	E, S
1041-1059	A	Outerfacing stones (A023) of [A025] showing relationship of core and tumble + inner facing slab [A022]	NE
1060-1286	A	photogrammetry of slot 3	VAR
1287-1291	A	East facing section of slot 2	E
1292-1296	A	West facing section of slot 2	W
1297-1298	A	Post-ex of slot 2	S
1299-1300	A	Post-ex of slot 2	N
1301-1302	A	Rock cut/hollow in slot 2 (A038)	VAR
1303-1306	A	Wall at end of slot 2	VAR
1307-1308	C	Entrance E terminal, mid-ex and charcoal	W, SW
1309	C	Entrance E terminal, mid-ex and	SW

		charcoal	
1310-1311	C	Entrance E terminal, mid-ex and charcoal	E
1312-1314	C	Entrance E terminal, mid-ex and charcoal	NW
1315	C	Linear feature end of charcoal	SE
1316-1317	A	Inner facing stones of [A025] in slot 1 with tumble and insitu core material	SE
1318-1321	A	Inner facing stones of [A025] in slot 1 with tumble and insitu core material	NW
1322-1324	A	Inner facing stones of [A025] in slot 1 with tumble and insitu core material	S
1325-1330	A	Inner facing stones of [A025] tumble, core and bank of hut circle [A003]	S
1331-1334	A	Inner facing stones of [A025], core and relationship to (A006)	S
1335-1338	A	Inner facing stone of [A025] core and (A023)	SW
1339-1345	A	Extent of slot 1a in slot 1, trench A	SW
1346-1347	A	Core of rampart in slot 1a, trench A	SW
1348	A	Core of rampart in slot 1a and inner facing stones	NE
1350	A	Inner facing stones of [A025] and core	E
1352	A	Inner facing stones of [A025] and core and (A006)	E
1354-1355	A	Core of rampart and outer facing stone (A022)	SW
1356-1361	B	Wall with tumble	W
1362	B	Wall with tumble	NW
1363-1364	B	Section of tumble	N
1365-1368	C	Entrance sondage? Boundary feature?	VAR
1369-1372	C	Entrance sondage? Boundary feature? Mid-ex	VAR
1373-135	C	Entrance sondage? Boundary feature? Charcoal, roundwood	VAR
1376	C	Entrance sondage? Boundary feature? N end of trench	SW
1377	C	Entrance sondage? Boundary feature? Furnace feature	SE
1378-1379	C	Burnt timber across entrance	W
1380-1381	C	(C029) above bedrock?	SW
1382-1386	C	N facing section sondage NE to SW	N

1387-1388	C	General view of sondage	NE
1389-1391	C	N facing section sondage entrance SW to NE	N
13920 1398	C	S facing section sondage SW to NE	S
1399	C	General view sondage	SW
1400-1402	B	Returfing chain against stormy sky	
1403-1404	C	E facing entrance of [C003]	E
1405-1406	C	W facing entrance of [C003]	W
1407-1408	C	Possible wall (C031) in slot 2	N
1409-1410	C	Possible wall (C032) in slot 2	N
1411-1412	C	Trial pit to bedrock (A)	W
1413-1414	C	Trial pit to bedrock (B)	W
1415-1416	C	Trial pit to bedrock (C)	W
1417-1418	C	Post-ex shot of slot 2	N
1419-1420	C	Post-ex shot of slot 2	N
1421-1422	C	Post-ex shot of slot 2	W
1508	D	Pre-ex record after deturfing and some top soil removal	W
1509	D	Pre-ex record after deturfing and some top soil removal	W
1510	D	Close up of 'pool and stone tumble	W
1511	D	Close up of 'pool and stone tumble	W
1512	D	Working shot	
1513-1515	D	Spread of tumbled stone at west end of trench	W
1516	D	Spread of tumbled stone at west end of trench	SW
1517	D	Spread of tumbled stone at west end of trench	SW
1518	D	Spread of tumbled stone at west end of trench	E
1519	D	Spread of flat stone at east end of trench	E
1520	D	Mid-ex: Spread of flat stone at east end of trench	N
1521	D	Mid-ex: Spread of flat stone at east end of trench	S
1522	D	Mid-ex: Spread of flat stone at east end of trench	SW
1523-1524	D	Stone in situ (prob delete)	
1525-1527	D	Possible palisade slot under stone	S

1528	D	Possible palisade slot under stone	W
1529	D	Stone at east end of trench post excavation	E
1530-1533	D	Stone at east end of trench post excavation	S
1534-1535	D	Stone and palisade slot	W
1536-1537	D	Stone structure at east end of trench	S
1538	D	Stone structure at east end of trench	S
1539	D	Stone structure at east end of trench	E
1540-1541	D	Stone structure at east end of trench	N
1542	D	Stone structure at east end of trench	W
1543	D	View of [004] and [008] within (005) tumble	W
1544-1548	D	Palisade slot running across trench	N
1549-1554	D	General view of [004] structure	SW

APPENDIX 3: DRAWING REGISTER

Drawing No.	Location	Feature No.	Details	Sheet	Scale	Drawn By
A01	A		Pre-ex plan of Trench A: 4 sheets		1:20	JN/DM
A02	A	(A006) (A012) (A013) (A014)	Mid-ex slot 1 within Trench A showing A012, A013, A014 in relation to A006		1:20	JL
A03	A	[A023] [A025]	NE facing elevation of A023, rampart A025, outer face		1:20	ED
A04	A		Post-ex section (E facing) of slot 2, Trench A		1:20	CM
A05	A		Post-ex NW facing section. Slot 1 and 1A		1:20	CM
A06	A	[A025]	Post-ex plan slot 1 and 1a showing extent of [A025]		1:20	DM
B01	B		Overview plan after topsoil removal, prior to slot.		1:20	KR
C01	C	[C003]	NW facing elevation of outer wall [C003]	1	1:10	JR TS
C02	C	[C003]	W facing elevation of outer wall [C003]	1	1:10	GJS JS
C03	C		East facing section of sondage A	2	1:10	RN SW
C04	C	[C003]	Elevation of [C003] including bedrock level	3	1:10	SW
C05	C		Plan of possible feature	4	1:20	SW
C06	C	[C017]	Plan of (C017) original floor surface	4	1:20	SW
C07	C	[C026]	Plan of in situ timber [C026]	4	1:20	SW
C08	C		W facing section of slot 2 through entrance	5	1:10	SW
C09	C		W facing section of slot 2 through entrance	5	1:20	SW
C010	C		E facing section of slot 2 through entrance	6+7	1:20	CM

APPENDIX 4: FINDS REGISTER

Find No.	Trench	Context No.	Material	Interpretation/description
A001	A	A001	ST	Possible Cobble Tool
A002	A	A001	FE	Modern Iron Bracelet
A003	A	A001	FE	Iron knife handle with wooden plate in situ
A004	A	A001	CE	Clay pipe stem fragment
A005	A	A001	ST	Possible worked quartz
A006	A	A001	ST	Quartz cobble tool
A007	A	A001	ST	Possibel whetstone
A008	A	A001	ST	Pounder
A009	A	A001	ST	Possible hammerstone
A010	A	A002	ST	Shale bracelet roughout fragment
A011	A	A001	CE	Fragment of clay pipe
A012	A	A001	ST	Possible worked stone
A013	A	A001	MX	Mixed modern material from topsoil
A014	A	A001	ST	Pounder
A015	A	A001	ST	Shale working waste?
A016	A	A001	ST	Shale
A017	A	A001	ST	Shale ring fragment
A018	A	A001	ST	2 x rotary quern fragments
A019	A	A001 / FROM A003 INTERIOR	ST	Grinding stone from interior of [A003]
A020	A	A011	ST	Shale bracelet roughout fragment
A021	A	A009	ST	Possible coarse stone tool
A022	A	A012	ST	Worked flint
A023	A	A007	ST	Coarse stone tool?
A024	A	A012	ST	Cobble tool- possible polisher
A025	A	A012	BO	Animal teeth fragment
A026	A	A012	ST	Fragment of shale roughout
A027	A	A012	ST	Possible polisher
A028	A	A012	ST	Spherical quartz
A029	A	A012	ST	Interior A003 posible whetstone
A030	A	A001	ST	Smooth stone, exterior of A003

A031	A	A001	ST	Mixed stones found in topsoil within the boundry of A004 (round structure)
A032	A	A006	ST	Stone Mortar
A033	A	A011	BO	Fragment of burnt bone
A034	A	A010	ST	Cupmarked slab
A035	A	A006	BO	Bone fragment
A036	A	A013	ST	Possible stone polisher
A037	A	A007	ST	Worked lithic (from sieving)
A038	A	A007	IND	Vitrified material, possible metalworking debris (from sieving)
A039	A	A011	ST	Stone Mortar
A040	A	A007	CE	Daub
A041	A	A003	IND	Vitrified material from within wall A003
A042	A	A012	BO	Burnt Bone
A043	A	A012	IND	Slag
A044	A	A011	ST	Smoothed/abraded stone?
A045	A	A011	CE	Ceramic body sherds x 4
A046	A	A011	ST	Unworked red flint/chert
A047	A	A012	ST	Spherical quartz pebble
A047	A	A011	CE	Pottery fragments
A048	A	A012	ST	Possible stone tool with wear on one end, triangular shaped
A049	A	A006	BO	Sheep/goat teeth
A050	A	A011	BO	Animal Bone
A051	A	A002	IND	Fragment of possible metal working waste
A052	A	A006	BO	Animal Bone
A053	A	A006	IND	Slag
A054	A	A017	BO	Animal teeth and bone fragments
A055	A	A007	ST	Working Surface
A056	A	A002	BO	Burnt Bone
A057	A	A017	BO	Burnt Bone
A058	A	A019	ST	Possible shale working waste
A059	A	A001 (FROM INSIDE A003)	ST	Qyartz and chert/lithic from interior of [A003]
A060	A	A001 (FROM INSIDE A003)	ST	Shale working? From inside [A003]
A061	A	A017	BO	Burnt Bone

A062	A	A001	ST	Shale working ftom A001 over A005
A063	A	A012	ST	Smoothing stone- pecked ends
A064	A	A021	IND	Fragment of vitrified material
A065	A	A021	BO	Unburnt bone- 2 fragment
A066	A	A018	BO	Animal Teeth
A066	A	A018	BO	Animal Teeth
A067	A	A018	CE	Pottery
A068	A	A027	BO	Animal tooth fragments
A069	A	A017	BO	Animal bone teeth
A070	A	A030	CE	Ceramic Sherds
A071	A	A017	BO	Bone fragments and teeth
A072	A	A017	ST	Fragment of Quern stone?
A073	A	SPOIL NE HEAP	ST	Block of shale
A074	A	A032	ST	Rubbing Stone
A075	A	A032	IND	Slag x 2
A076	A	A034	IND	Slag
A077	A	A034	BO	Fragment of burnt bone
A078	A	A029	BO	Animal tooth
A079	A	A029	BO	Animal teeth
A080	A	A029	IND	Slag
A081	A	A029	BO	Animal bone
A082	A	A029	CE	Pottery
A083	A	A029	BO	Animal Bone
A084	A	A029	BO	Burnt Bone
A085	A	A029		
A086	A	A024		
A087	A	A037/A023	BO	Animal bone under void of A023
A088	A	A034	BO	Bone fragments
A089	A	A034	IND	Slag
A090	A	A034	IND	Slag from sieving
A091	A	A029	IND	Numerous pieces of slag
A092	A	A029	BO	Animal Bone
A093	A	A034	ST	Possible cobble tool
A094	A	A030	CE	Small ceramic sherd (at N end of slot 2)
A095	A	SPOIL (SE HEAP) PROB (A030)	CE	Ceramic Sherd

A096	A	SPOIL (NE HEAP) = A017	ST	Shale bracelet fragmet
B001	B	B001	ST	Chert Flake
B002	B	B001	ST	Lithic core
B003	B	B001	CE	Ceramic sherd
B004	B	B001	CE	Ceramic sherd
B005	B	B001	IND	Slag
B006	B	B001	CE	Ceramic sherd
B007	B	B001	ST	Stone tool (quartz)
B008	B	B001	ST	Possible shaped stone
B009	B	B004	CE	Ceramic sherd
B010	B	B005	CE	Ceramic sherd
B011	B	B005	ST	Possible shaped stone
B012	B	B007	CE	Ceramic sherd
B013	B	B007	CE	Ceramic sherd
B014	B	B007	CU	
B015	B	B007	CU	
B016	B	B007	CE	Ceramic sherd
B017	B	B007	BO	Bone Fragment Tooth
B018	B	B007	FE	
B019	B	B007	BO	Burnt Bone
B020	B	B007	IND	Slag
B021	B	B007	ST	Stone polisher?
B022	B	B009	ST	Shale Bracelet Fragment
C001	C	C001	ST	Possible whetstone
C002	C	C001	ST	Quartz worked (?)
C003	C	C001	ST	Possible stone cobble tool
C004	C	C001	ST	Vitrified stone x
C005	C	C002	ST	Saddle quern fragment
C006	C	C002	ST	Ground stone, possible quern
C007	C	C001	ST	Possible stone tools
C008	C	C001	ST	Clay pipe stem
C009	C	C001	ST	Heat affected stone
C010	C	C002	ST	Notched/ perforated stone
C011	C	C002	ST	Heat affected stone
C012	C	C002	ST	Shale Bracelet Fragment
C013	C	C002	ST	Worked agate
C014	C	C002	ST	Pivot Stone
C015	C	C002	ST	Sharpening stone
C016	C	C002	ST	Quern Stone
C017	C	C002	BO	Animal tooth
C018	C	C002	ST	Polishing stone

C019	C	C002	ST	Cup and ring marked stone
C020	C	C002	ST	Stone Lamp
C021	C	C002	BO	Bone: 1m below surface inside rock tumble overburden. 1.1m outside wall
C022	C	C002	BO	Bone: 0.9 m below surface by outside face of wall in rock tumble overburden.
C023	C	C002	CH	Charcoal: 1m below surface against outside face of wall in rock tumble overburden
C024	C	C002	ST	Vitrified material 15cm above highest bedrock on east end of wall
C025	C	C002	BO	Animal bone from just above bedrock
C026	C	C002	CH	Charcoal from base of (002) above bedrock
C027	C	C013	ST	Vitrified stone
C028	C	C009	IND/ST	Slag/stone heat affected
C029	C	C002	ST	Vitrified stone
C030	C	C002	ST	Reworked shale bangle fragment
C031	C	C002/ C0018	ST	Vitrified stone (multiple fragments)
C032	C	C002	ST	Possible smoother
C033	C	C009	BO	Bone
C034	C	C009	BO	Fragments of bone
C035	C	C004	BO	Animal bone and teeth
C036	C	C002	ST	Vitrified stone
C037	C	C002	ST	Vitrified stone fragments
C037	C	C018	ST	Vitrified stone x 3. Within structure 018, in (002)- within rubble file of doorway
C038	C	C017	BO	Extensive cluster of animal bone/charcoal above bedrock immediately outside wall face to west of entrance
C039	C	C009	CH	Roundwood charcoal
C040	C	C004	CE	Ceramic in entrance collapse

C041	C	C004	CE	Ceramic? (in collapse in front of entrance)
C042	C	C002	ST	Single use pounder stone
C043	C	C004	BO	Animal Teeth
C044	C	C002	ST	Fragment of shale bracelet
C045	C	C002	ST	Stone (fractured) possibly rubbing stone
C046	C	C002	ST	Game piece?
C047	C	C017	BO	Bone?
C048	C	C002	ST	heart shaped stone shard. 12 x 13 cm. 2 circular (pecked?) indentations to top surface with central ridge
C049	C	C002	ST	Abraded Stone Fragment
C050	C	C017	BO	Bone fragments and tooth from same context as sample C017
C051	C	C017	BO	Bone fragment (further fragment from sample area C050)
C052	C	C002	ST	Cobble stone with blackened/polished face
C053	C	C020	ST	Saddle quern fragment
C054	C	C002		Molten?
C054	C	C019	CH	Charcoal/ post fragments?
C055	C	C019	BO	Animal bone fragment
C056	C	C022	IND	Slag?
C057	C	C025	ST	Possible centre of shale roughout
C058	C	C025	BO	Bone fragment (located .c. 2m east of red soil (019))
C059	C	C028	CH	Charcoal: trench other side of red material (towards banking) N side
C060	C	C028	CU	Copper object- north side of trench sondage behind red material
C061	C	C025	BO	Animal tooth, approx 3m east of red soil within (018)
C062	C	C028	ST	Struck lithic?
C063	C	C027	BO	Animal tooth x 2
C064	C	C029	BO	Bone and fragments of bone
C065	C	C029	BO	Bone fragments
D001	D	Topsoil	FE	Metal Fe

D002	D	Topsoil	ST	Possible pecked stone
D003	D	D001	ST	Rubbing Stone
D004	D	D001	ST	Agate? Flake
D005	D	D001	ST	Quern fragment? Possible

APPENDIX 5: SAMPLES REGISTER

Context No.	Trench	Volume L/g
A002	A	1 X 10L
A012	A	1 x 10L
A017	A	1 X 10L
A018	A	1 X 10L
A030	A	2 X 10L
A036	A	1 X 10L
A034	A	2 X 10L
A037	A	2 X 10L
A029	A	2 X 10L
A038	A	1 X 10L
B004	B	1 X 10L
B005	B	1 X 10L
B006	B	1 X 10L
B008	B	1 X 10L
B007	B	1 X 10L
B009	B	1 X 10L
B011	B	1 X 10L
B013	B	1 X 10L
B013	B	1 X 5L
C007	C	1 X 10L

C017	C	1 X 10L
C017	C	1 X 10L
C002	C	1 X 10L
C026	C	1 X 10L
C019	C	1 X 10L
C027	C	1 X 10L
C030	C	1 X 10L
C029	C	1 X 10L
C029	C	1 X 10L
D007	D	1 X 10L
D007	D	1 X 10L
D003	D	1 X 10L
D001	D	1 X 10L
D001	D	1 X 10L
D002	D	1 X 10L
D001	D	1 X 10L
D001	D	1 X 10L
D007	D	1 X 10L

APPENDIX 6: *'DISCOVERY AND EXCAVATION IN SCOTLAND'* REPORT

LOCAL AUTHORITY:	Perth and Kinross
PROJECT TITLE/SITE NAME:	Moredun Hillfort, Moncreiffe Hill Phase 2
PROJECT CODE:	23042
PARISH:	Dunbarney
NAME OF CONTRIBUTOR:	David Strachan, Martin Cook, Sophie Nicol and Katie Roper
NAME OF ORGANISATION:	Perth and Kinross Heritage Trust; Tay Landscape Partnership; AOC Archaeology
TYPE(S) OF PROJECT:	Excavation
NMRS NO(S):	NO11NW 23
SITE/MONUMENT TYPE(S):	Fort,
SIGNIFICANT FINDS:	Fragments of shale bracelets, prehistoric pottery,
NGR (2 letters, 6 figures)	NO 1362 1999
START DATE (this season)	6st September 2016
END DATE (this season)	1st October 2016
PREVIOUS WORK (inc DES)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological excavation was undertaken by Tay Landscape Partnership, led by Perth and Kinross Heritage Trust and delivered by AOC Archaeology Group and local volunteers at the hillfort of Moredun Top. Four trenches were excavated, located over potential features within the hillfort which were identified via topographic survey of the hillfort itself. Areas for investigation were selected based on previous work. Two adjacent circular features in the upper citadel area and one smaller slightly out with this area were target for investigation, as well as a larger circular stone feature uncovered during test-pitting in 2015 and a pond area to determine nature and construction of the pond feature. In the three excavation trenches evidence of the structure and use of the hillfort was revealed. In the upper area of the hillfort two curvilinear structures were identified, along with rubble and collapse material. A potential rampart with two defined courses was also exposed via excavation of a sondage, which may have formed a boundary to the upper area. The relationship between these two features are still poorly understood. Associated artefacts recovered consisted of shale bracelet fragments and rough-outs, prehistoric pottery and course-stone tools. The smaller circular feature comprised an alignment of rough stone rubble and collapse material with associated prehistoric pottery and slag material within the stone. A small area of wall with two defined courses was uncovered in a sondage across the northern edge of the trench. Within the largest trench was a monumental circular stone feature built into the bedrock lying within a larger lower enclosure. A defined entranceway of 2.5m wide was revealed with large amounts of burnt material enclosed within. The artefact assemblage associated with this feature consisted of a stone lamp, lintel stone with possible pivot hole, cup marked stones, shale bracelet

	fragments and prehistoric pottery. A pond feature was also investigated. Little artefactual or structural evidence was discovered to help understand the construction or chronology of this feature, however a palisade slot was discovered running through the trench. The artefact assemblage of course stone tools, pottery and metal objects, matched with the nature of the features investigated supports activity spanning from the Iron Age to early historic period.
PROPOSED FUTURE WORK:	Programme of Post-Excavation analyses
CAPTION(S) FOR ILLUSTRATIONS:	N/A
SPONSOR OR FUNDING BODY:	Tay Landscape Partnership
ADDRESS OF MAIN CONTRIBUTOR:	Perth and Kinross Heritage Trust 4 York Place PERTH PH2 8EP
EMAIL ADDRESS:	admin@aocarchaeology.com
ARCHIVE LOCATION	Archive to be deposited in NMRS

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