

# Caherconnell Cashel, Co. Clare

## Preliminary Archaeological Excavation Report for 2019 season



Licence No: 10E0087

by

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**Caherconnell Archaeology Field School**



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Table 1. Radiocarbon dates from the cashel  
 (after Reimer, P.J. et al. 2009 Radiocarbon 51, 1111-1150 and Reimer, P.J. et al. 2013 Radiocarbon 55, no.4).



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## Introduction

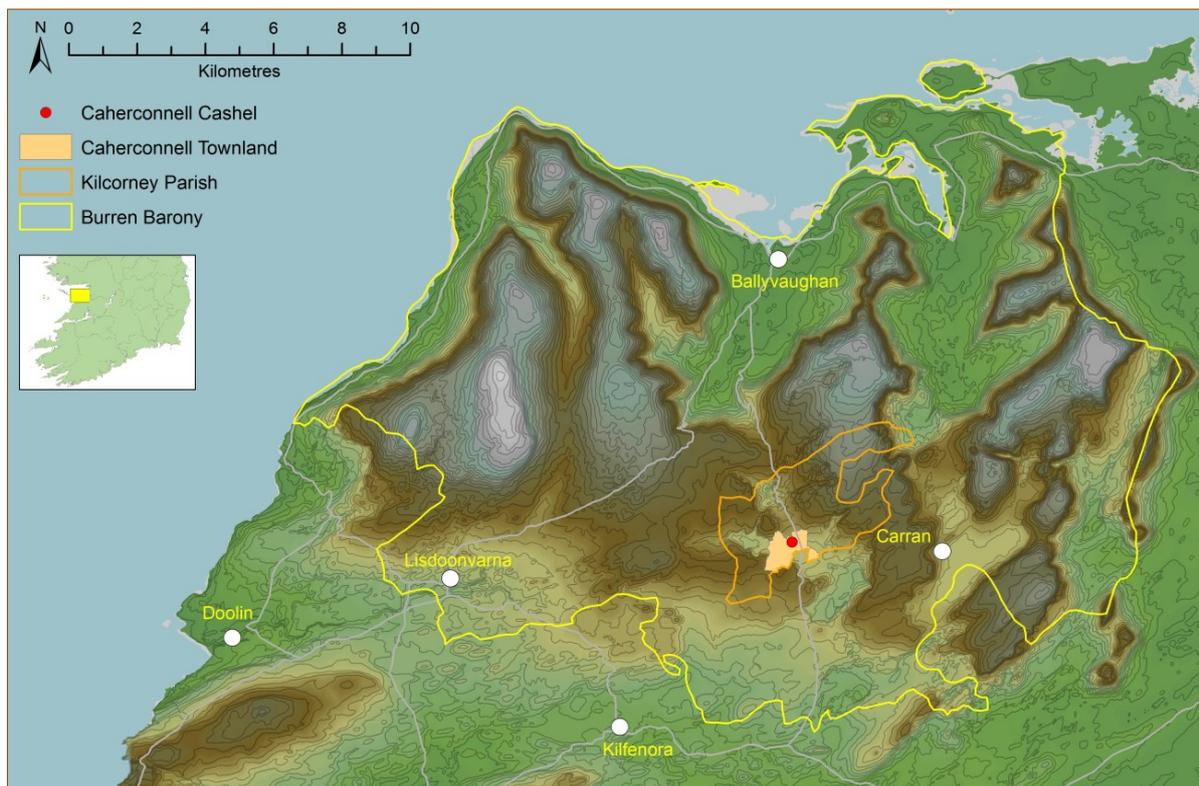
This report documents the preliminary results of the 2019 season of archaeological excavation at Caherconnell Cashel, Co. Clare (NGR 123622 199486, SMR CL009-03010) (Figs 1 and 2). Test excavation in 2007 demonstrated the archaeological potential of this site to address questions of native settlement in medieval Ireland. An international field school, the Caherconnell Archaeological Field School, was established in 2010 to provide a secure source of funding and quality control for research excavation at Caherconnell.



*Fig. 1 Caherconnell (circled), with preserved enclosures and field walls to southwest.*

## Location

Caherconnell Cashel is located in the townland of Caherconnell, Kilcorney parish, Burren barony, Co. Clare (Fig. 2). The landscape in the immediate vicinity is part of the 'High Burren' and is karst limestone. The land is currently used as pasture. The cashel lies at approximately 130m above Ordnance Datum, on the northern slopes of the shallow, but fertile, Kilcorney valley. The valley is ringed by archaeological monuments of various age. Settlement enclosures of probable Early Medieval date (mostly cashels) are situated on the valley slopes, while prehistoric sites (mostly megalithic tombs) can be found on the highest points in the area (including Poul nabrone to the north, and Poulawack to the south). Caherconnell cashel is one of four drystone enclosures in the townland of that name, and is located to the immediate west of the R480 road that links Leamaneh and Ballyvaughan, a natural routeway through the Burren uplands.



*Fig. 2 Location of Caherconnell.*

### **The Cashel (Fig. 3)**

The enclosure at Caherconnell is a circular, drystone ringfort or ‘cashel’. It measures 42m in external diameter, with walls up to 3m wide at the base and up to 3.6m high.



*Fig. 3 Caherconnell cashel, from northwest.*

The quantity of stone tumbled from the walls suggests at least another metre in original height. The walls are composed of rough horizontal courses of local limestone blocks and slabs, with smaller stones used to fill the gaps between them. Occasional vertical seams are visible along the external face of the wall. The inner face of the wall has been rebuilt in several places – evident in the vertical and angled setting of the replaced stones. Although Westropp noted the lack of any internal wall terraces or steps, it appears that some of the rebuilding and tumble simply masked such features. A narrow ledge does run along the inner face of the wall to the south (and was also identified in some excavation cuttings). This is

approximately 0.3m – 0.5m wide. In addition, a short flight of steps was discovered just inside the entrance during excavations in 2010. The entrance gap is situated on the east of the site, with Westropp recording vertical jamb-stones defining its external edges at the end of the 19<sup>th</sup> century. A modern timber access stairs filled this gap prior to the 2010 excavation and few, if any, traces of the original entrance could be discerned.

The modern interior of the cashel is clearly raised above that of the external ground surface, an average of 0.7m in the difference. Excavation has proven that this is due to a build-up of occupation material within the enclosure. The interior surface is now somewhat uneven, marked by relatively frequent grassed-over stones and other features. The partially grassed-over wall tumble around the circumference of the interior gives it a somewhat ‘dished’ appearance. Before excavation, a number of features were visible above the surface.

#### *Internal Features (Fig. 4 below)*

##### *Dividing Wall*

The interior was divided in two by the remains of a partly grassed-over drystone wall running roughly east–west across the site in a slightly curving fashion. Though the edges of this wall were masked by collapse, it was possible to identify a double-faced wall with a rubble core, approximately 1–1.3m wide where the original width was visible. A maximum of four courses was discernible, though the tumble on both sides suggested a greater original height. This wall is quite late in date, contemporary with Structure A (the subject of the 2007 and 2015 excavations).

##### *Structure A*

One of two visible internal structures, Structure A is situated just inside the north wall of the cashel, and was the subject of the 2007 and 2015 excavations. Rectangular in plan (with its long axis running east–west), it was defined before excavation by a partly grassed-over drystone wall visible to the west and south, but hidden by cashel tumble to the north, and almost completely denuded to the east. Stretches of original, *in situ*, walling were visible amongst the collapse, particularly along the south side wall. Here, the wall had an internal and external facing of contiguous limestone slabs set on edge. The grassed-over nature of the area between the faces prevented the positive identification of a rubble core or horizontal coursing. The original width of the wall reached a maximum of 1.2m, and 0.25m in surviving height. Internally it measured roughly 10m by 5m. Prior to excavation its relationship with the cashel wall was uncertain. The small 2007 excavation showed that Structure A was free-standing rather than keyed into the cashel wall, had opposed doorways near the eastern end of the structure, had a limestone mortar floor and was likely to have been constructed and occupied between the early 15<sup>th</sup> and early 17<sup>th</sup> centuries (Comber and Hull 2010).

##### *Structure B*

Structure B is built up against the west wall of the cashel and was excavated in 2017. It is sub-triangular in plan, with its interior divided in two by a rather flimsy drystone wall. It measures approximately 8m by 6.5m. Its north wall forms part of the dividing wall running across the site (C.48) and, prior to excavation, was partially covered with vegetation. Up to six

horizontal courses are extant on this side. The remaining eastern wall is not very substantial. The walls were much collapsed and partly overgrown, perhaps explaining the difficulty in positively identifying an entrance or entrances. The most likely position of such was along the eastern length of wall. Before excavation, the entire structure appeared rather late in date.

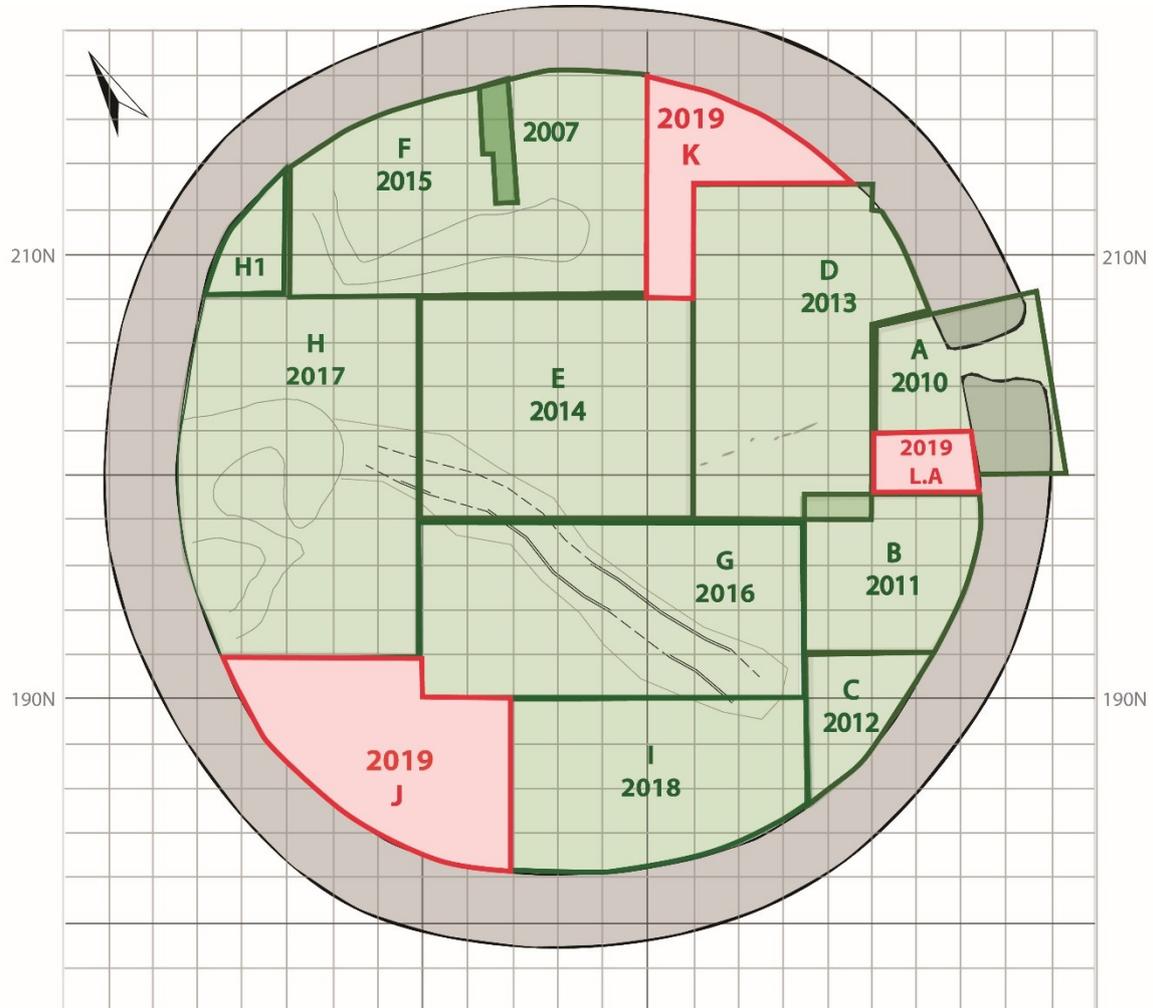


Fig. 4 Survey of Caherconnell, with excavation cuttings marked.

#### *External Features, Caherconnell townland*

A number of non-modern features can be seen in the immediate vicinity of Caherconnell cashel, particularly to its south and southeast. Closest to the cashel (just east of its entrance) is a small, partially grassed-over cairn of large stones. This measures approximately 2.5m in diameter and 1m in height. The possibility of a prehistoric burial mound or covered well cannot be ruled out. To the north of the cashel lies a small, sub-circular barrow, 11m by 14m in diameter, of probable Late Bronze Age or Iron Age date.

The 2008/9 focus of test excavation (08E0535) was a doline (Fig. 5), a natural sink-hole, located approximately 20m southeast of Caherconnell Cashel. Attention was drawn to this geological feature by limited visible remains of a partially collapsed stone chamber. Excavation, however, unearthed a much greater range of evidence.



*Fig. 5 Backfilled doline – modern posts mark prehistoric post-holes on left, medieval structure on right.*

The earliest activity within the sheltered doline was associated with a rectangular house defined by post-holes, with an internal stone-lined hearth. The house is of Early Bronze Age date. Prehistoric artefacts from the excavation included a fragment of a possible saddle quern, polished stone balls/marbles, a sherd of Neolithic pottery, and thousands of pieces of worked chert (the local substitute for flint) of both Neolithic and Bronze Age type. Also recovered, though possibly reflecting slightly later activity, was a small assemblage of Middle Bronze Age pottery. Anna Brindley has suggested that this may represent the remains of Middle Bronze Age/Late Bronze Age flat cemetery that once existed in the vicinity of the doline, though she does not rule out the possibility of the pottery having served a domestic function (pers. Comm.).

The stone structure partly visible prior to excavation was revealed as a circular chamber built against two walls of the doline. The chamber's walls (at least 1m thick) probably originally rose into a corbelled stone roof, judging by the quantity of collapsed stone found in the interior of the structure. A wide entrance gap led into a 2m-diameter chamber that contained a pit filled with semi-articulated animal bones, and some scattered preserved grain. The discovery of a medieval bedding mortar at the base of the wall, in conjunction with a small assemblage of medieval artefacts and some radiocarbon dates, suggest a medieval date for the, as yet unique, structure. It may have been built by the adjacent cashel dwellers, perhaps as a store (explaining the wide entrance, bone and grain remains, and lack of occupation evidence or hearth within the chamber).

The final event revealed by excavation within the doline was the placing of human remains within the partly silted up entrance of the medieval structure (Fig. 6). The remains comprised



disarticulated bones of at least three individuals, largely those of an adolescent though missing most of the long bones.

*Fig. 6 Human remains from doline.*

The bones were radiocarbon dated to the 15<sup>th</sup>/16<sup>th</sup> century AD, a time when a branch of the ruling Gaelic O’Loughlin family was living in the adjacent Caherconnell cashel. It seems likely that the remains were accidentally disturbed

elsewhere, sometime after the 15<sup>th</sup>/16<sup>th</sup> century, and redeposited in the doline. Perhaps part of an ancestral cemetery of the O’Loughlins was uncovered by farm or building works at a time when it was no longer marked or known as a burial place. The now missing long-bones could have been wrongly identified and discarded as animal bones. However, once a human skull was encountered, the remaining disturbed bones could have been gathered together and simply placed in what was then a convenient hole in the ground.

Caherconnell cashel is one of four drystone enclosures in the townland. Lisnandrom is the westernmost of the four, measuring 28m in diameter. It sits on top of a low inland cliff, with conjoined structural foundations located at the foot of that cliff. Situated between Lisnandrom and Caherconnell are two possible boulder burials and miscellaneous other features. Due south of the main cashel are more extensive remains, comprising a circular cashel, a sub-square drystone enclosure, ancient field walls, routeways, and smaller house-like enclosures scattered about the area (Fig. 7). An old route-way also skirts Caherconnell and runs off to the south-southwest.



*Fig. 7 Circular and square enclosures south of Caherconnell cashel.*

The sub-square enclosure was the focus of a Royal Irish Academy-funded research excavation, directed by the author (10E119). Excavation occurred during the summers of 2010, 2011, and 2012, the final report since submitted (it is hoped that the excavation results will be published in a volume with the results of the 10E0087 excavation). Three definite structures, lengths of yard wall, and the original entrance were all investigated. Finds included quantities of animal bone, hazelnut and sea shells, metalworking slag, chert and flint lithics, stone axes, iron tools, bronze dress-pins, glass beads, bone artefacts, stone tools, quernstone fragments etc. Initial radiocarbon dates have provided a 7<sup>th</sup> to 9<sup>th</sup>-century AD date for much of the activity, with 10<sup>th</sup>-century dumping around its entrance. Questions remain over the site's shape, size, entrance orientation and prehistoric artefact assemblage, with answers suggesting a specific social role for this site.

### **Research framework**

The excavation at Caherconnell was designed to reveal information on the site itself, to integrate the monument into a wider study of the archaeological landscape currently being undertaken by the author and colleagues in the Department of Archaeology, NUI, Galway, and to provide students with hands-on training in archaeological excavation.

The study of archaeological landscapes is becoming increasingly popular in Ireland and elsewhere. Recent work by Billy O'Brien, Liam Hickey and Nick Hogan on the Beara peninsula, Co. Cork, has revealed the potential of such work in an Irish context (O'Brien 2009). The Beara studies (at the Barrees Valley, Cloontreem and Ardgroom) mapped extensive archaeological landscapes that survived in the valleys and along the lower slopes of an upland region. These surveys, and some excavation at Barrees, revealed much about past human activity in these areas, and suggested what the landscape may have looked like in other areas where such remains have not been preserved. The Burren, with its extensive preserved remains, should, at the very least, provide similar information for the west of Ireland.

Some landscape survey has been undertaken in the Burren. The first attempt at landscape mapping was completed by Blair Gibson as part of his doctoral thesis studying the chiefdom of *Tulach Commain* and the archaeological remains in the area of Cahercommaun, to the southeast of Caherconnell. Gibson's survey, however, was not an electronic one and did not record the same density or detail of surviving remains (Gibson 1990). A more recent digital survey in the area was carried out by Carleton Jones of NUI Galway, at Roughan Hill to the southeast. This work had a prehistoric focus, but did incorporate archaeological remains of all periods in its survey (pers. comm.). Initial excavations by Jones are now being continued by Ros O Maolduin. Christine Grant, with the aid of the Burren Beo Volunteer Trust, is currently mapping remains in the townland of Kilcorney, to the southwest of Caherconnell.

Elizabeth Fitzpatrick of NUI, Galway has recently commenced a study of the later medieval estates, residences and schools of the Gaelic professional classes, including those of the Burren. One of the main foci of her work is the Cahermacnaghten estate of the O'Davorens, a minor gentry family who were keepers of legal manuscripts and teachers of law in the

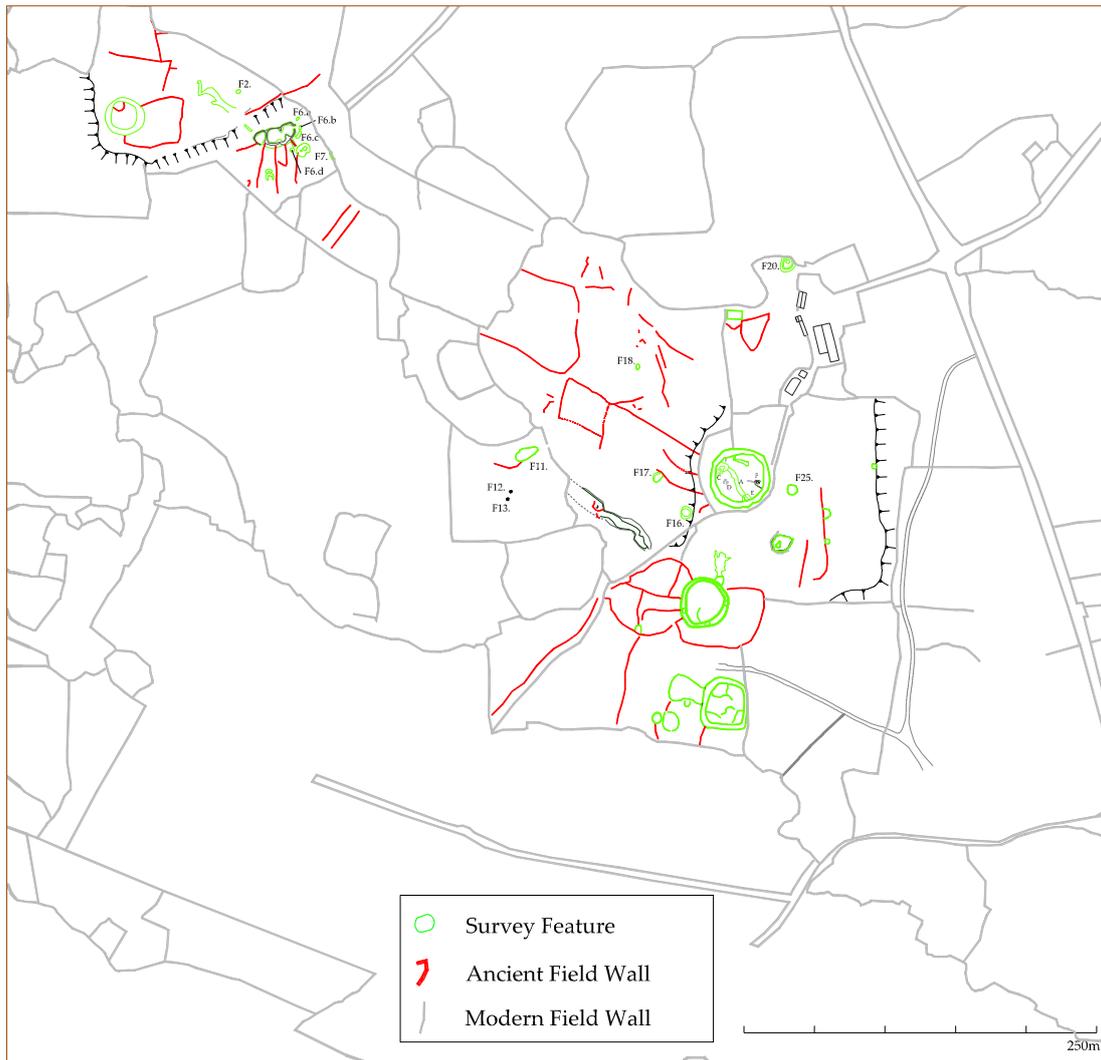
lordship of Burren. In addition to mapping the archaeological remains in the area, the project has undertaken three seasons of excavation in the vicinity of Caherconnell in a search for chronological and functional evidence (funded by the Royal Irish Academy). Excavation targeted a well-preserved stone building called *Cabhail Tighe Breac* (that may have served as a medieval school building), a possible outhouse structure, and a small possible dwelling house (pers. comm.).

Also relevant to this excavation at Caherconnell, is the survey work of the author; a study of the cashels and associated remains in a study area extending south from Caherconnell as far as Kilfenora, east to Carran and Cahercommaun, and southeast to Leamaneh. This project, *Ringforts and the Settlement Landscape of the Burren in the First Millennium AD*, commenced in 2005 and was funded by the Heritage Council of Ireland. It marked the start of a study of the settlement landscape of the first millennium AD in a chosen study area within the Burren, Co. Clare. The area in question incorporated the shifting political boundaries of *Corcomruad* territory. The first year saw the analysis of data from all relevant monuments within the study area, numbering approximately three hundred extant sites (mostly cashels, raths, enclosures and ecclesiastical remains). This analysis revealed that many of these settlements were deliberately sited to best exploit the most fertile farmland in the area, a not uncommon tendency in this period (Comber 2005). It also suggested, however, that some settlement may have been strategically positioned with regard to communication strategies and territorial politics. Caherconnell is one such site, positioned as it is at one end of a major north-south pass through the Burren mountains (still used today by the two modern roads, the N67 and R480).

More recent work has seen the detailed digital survey and mapping of a preserved archaeological landscape located between the large cashel of Ballykinvarga to the south of Caherconnell, and Leamaneh castle to the southeast (Comber 2006). Extensive field systems and enclosures were recorded in this area, with the area of study expanded through the examination of vertical aerial photographs. Elements from various periods of the past were identified, reflecting the continued use of this zone throughout prehistory, the Early Medieval period, and the medieval periods. These included at least ten different forms of field wall, individual fields, small enclosures, larger settlement enclosures, tracks and roads, cairns, tombs and castle remains. Most of the extant material, however, *appears* to date from the Early Medieval period.

The next, logical step in this study was the acquisition of scientific dating evidence from as many parts of this landscape as possible, from cashels, small enclosures, ancient field walls etc. When the opportunity to excavate at Caherconnell arose, a third phase of survey was undertaken in advance of excavation (Comber 2008). This mapped, in 2d (Fig. 8) and 3d, multi-period archaeological remains in the townland of Caherconnell, including three circular cashels, a sub-square enclosure, field walls, a barrow, boulder burials, house sites etc. These features are now the focus of the Caherconnell Archaeological Project, a project that involved test excavation undertaken by volunteer archaeologists (07E0820 and 08E0535, see summary above), full-scale research excavation funded by the Royal Irish Academy (10E119, see

summary above) and the Caherconnell Archaeological Field School (10E087, subject of this report and previous reports on 2010-18 excavations).



*Fig. 8 Survey of Caherconnell townland.*

### **Excavation aims and methodology**

The 2010 to 2019 excavation seasons are part of a programme of excavation that was intended to examine as much of the cashel interior as possible. This programme is being funded by the Caherconnell Archaeological Field School, led by a team of highly-qualified professional archaeologists (directed by the author), and accredited by NUI, Galway. The field school was established in response to the potential revealed by the initial test excavation in 2007. This demonstrated the wealth of preserved archaeological material and its importance for the study of continuous native Gaelic settlement throughout the Early Medieval and Medieval periods. The only way to ensure ongoing funding and consistent high quality for such a significant undertaking was the establishment of an international field school. These excavations have identified the archaeology of the native Irish in the medieval period, a period largely dominated by Anglo-Norman archaeology. In addition, they have revealed much of the native way of life in a changing world.

Following submission of a method statement and licence application, a licence to excavate was granted to Graham Hull by the National Monuments Service of the Department of the Environment, Heritage and Local Government, in consultation with the National Museum of Ireland in 2010. The licence was transferred to Michelle Comber in 2012 and renewed for 2013, 2014, 2015, 2016, 2017, 2018 and 2019. The licence number is 10E0087.

The 2010 (Cutting A) and 2011 (Cutting B) excavations were focused on the cashel entrance and the internal area to the immediate southwest (Fig. 4). The entrance was targeted first, to facilitate the removal of wooden steps that provided recent visitor access to the cashel interior (the site having its own visitor centre). This improved access for the excavation team and less mobile visitors to the site. The 2012 excavation (Cutting C) was situated immediately south, and adjacent to, cutting B from 2011. It measured 7m by 5m (maximum), being defined by the cashel wall on two ‘sides’. Grassed-over possible structural remains were visible in this area prior to excavation. The eastern end of the wall dividing the cashel interior did not run cleanly up to the cashel wall. Rather, roughly 5m from the cashel wall there was a gap followed by the apparent splitting of the wall into two raised ‘banks’ with a sunken area between (see Figs. 4 and 9). It was uncertain which, if either, of these might represent a continuation of the dividing wall. The hollow between them measured roughly 4m by 1.5m, and up to 0.5m deep. It contained partially grassed-over large stones and slabs, some of which were in a horizontal position with voids visible beneath them – all caused by a relatively modern animal burial. Writing at the end of the nineteenth century, Westropp (1899, 375) described this area:

*The garth is divided by a long wall running north-west and south-east; at its northern end are two house sites, one 30 feet long, and at its southern an enclosed hollow, possibly a hut or souterrain.*

It was impossible to determine, prior to the excavation of Cutting C, whether or not this part of the site represented a souterrain or some other feature.



*Fig. 9 Cutting C before excavation.*

Excavation in 2013 comprised a cutting (Cutting D) measuring 14m by 8m (with a 5m by 3m extension on the northeast and a 1m-wide extension along the north, Cuttings D1 and D2, respectively) located immediately west of Cutting A from 2010 (the entrance cutting). It was designed to target the continuation of the slab pathway (context 10) first identified in 2010, the path running between the entrance and centre of the enclosure, and a flat open area to the north with no features visible above the modern ground surface. Several pathways, post-holes and other features were uncovered.

Cutting E was excavated in 2014, located closer to the centre of the cashel, immediately west of Cutting D from 2013. It measured 10m x 12m. It uncovered the continuation of the slab pathway leading to/from the entrance, the continuation of path Context 66, a length of the wall dividing the cashel interior in two, and two structures – an early circular one, and a later rectangular example.

2015's Cutting F targeted the house first investigated in 2007, situated just inside the north wall of the cashel. It confirmed and extended the 2007 findings, and located the footprint of the return wall of the rectangular house identified in 2014. The 15<sup>th</sup>/16<sup>th</sup>-century house was sub-rectangular in plan with opposed doorways in the long side walls. It had an internal subdivision at its east end, a central hearth, a lime-mortar floor, and a stone-built oven. Its eastern end was clearly rebuilt at some point during the use of the house, being of different, more stable, construction, and overlying part of the original floor that, elsewhere, abutted the house wall. The compressed pre-15<sup>th</sup> century layers beneath the house contained the remains of a metalworking furnace or hearth, represented by crushed pieces of fired clay, slag fragments, small crucible and mould sherds.

Cutting G in 2016 was located next to cuttings E and B from 2014 and 2011, just south of the centre of the cashel. Features uncovered included part of the original circular house of the cashel (continued from Cutting E to the north), a contemporary metal workshop area complete with furnace base and rock-cur hearth, a slightly later ancillary structure with internal hearth and pit, and a continuation of the late wall (15<sup>th</sup>/16<sup>th</sup> century) that divides the cashel interior.

2017 saw the excavation of Cutting H (16m x 10m maximum), a cutting located immediately west of cuttings E and G, and its extension Cutting H1 (5.5m x 6.5m maximum) that completed the excavation of the space between Cutting H, Cutting F, and the cashel wall (Fig. 4). These targeted a stone-walled structure built up against the cashel wall in this area (Structure B above), and explored its relationship with earlier, contemporary and later features. The chance of recovering evidence from the earlier occupation layers of the cashel was strong here, due to an apparent depth of stratigraphy trapped beneath stone tumbled from the cashel wall. This part of the interior, due to its sheltered nature, might also have seen early activity. The western wall of the rectangular house uncovered in Cuttings E and F also fell within this cutting.

Cutting I was excavated in 2018, situated between Cutting G and the cashel wall to the southwest, completing excavation of most of the cashel interior. It measured 13m in length,

with a maximum width of 7m, depending on the curve of the cashel wall. The southern end of 2016's small annexe-like structure fell within this area, and proved to be much larger than previously thought. Other features uncovered included an early midden, a pit, and several outdoor hearths.

The initial excavation of 2019, Cutting J, was located in the south-west quadrant of the cashel interior. The roughly quadrant-shaped cutting covered approximately 80m<sup>2</sup>, the exact area depending on the curvature of the cashel wall. It measured a maximum of 12m long by a maximum of 9m wide. Prior to excavation, the chance of recovering evidence from the earlier occupation layers of the cashel was thought to be strong here, due to the apparent depth of stratigraphy trapped beneath stone tumbled from the cashel wall. This part of the interior, due to its sheltered nature from prevailing south-westerly winds, might also have seen early activity though, before excavation, no features were visible. A secondary target, Cutting K, was located inside the north-east wall of the cashel, to complete excavation of this part of the enclosure interior. This 'L'-shaped cutting covered approximately 50m<sup>2</sup>, with maximum dimensions of 10m by 10m. The final part of the cashel interior to be excavated was Cutting L.A – a return to an unfinished part of Cutting A from 2010, and its extension to meet the northern edge of Cutting B from 2011. This measured 5m east-west by 3m north-south. In addition, two previously un-excavated slabs from the entrance path located in Cutting D were raised and excavation of the area completed. The 2019 season completes the excavation of the cashel interior.

Tumble, topsoil and archaeological features and deposits within the cuttings were hand-excavated sequentially. The excavation concluded at the surface of the underlying bedrock. A full written, drawn and photographic record was made in accordance with the Caherconnell Archaeological Field School Excavation Guidelines (2019) and the NMI Advice Notes for Excavators (2010).

Fieldwork took place over three months in June, July and August 2019. The excavations were directed by Michelle Comber, assisted by Noel McCarthy (licence eligible), and supervised by Pat Cronin. The excavation teams were composed of students from the field school (Fig. 10 etc.) – Susan Frank, Sara Best, Jenny Sacher, Owen Brady, Becky Kropp, Maddy Decker, Katherine Perdue, Wilson Simmons, Kaitlyn O'Malley, Sophie Tate, Neasa Conroy, Elora Kuhn, Hannah Dunaway, Nikki Wilcox, Carolyn Smith, Sue Raybin, Cian O'Daly, Connor Buelow, Rebecca Garber, Erin Wood-Cattell, Karly Baker, Garrett Peek, Melanie Enciso, Francesca Verdugo, Joseph Malinsky, Jo Ottaway, Angie Grove, Stephanie Clark, Katharine Olive, Lydia Kiernicki, Mason Barnett, Cara Reeves; and Roisin Nic Cnaimhin from UCC.



*Fig. 10 Some of the 2019 team.*

Archaeologically significant contexts (feature fills, occupation layers etc.) were wet-sieved on site to recover small artefacts and ecofacts (principally small bone fragments, Fig. 11). A number of bulk samples were also taken for more controlled processing during post-excavation work. Due to the training nature of the field school, a metal detector was also employed (under licence) to check the spoil. This exercise revealed very little, demonstrating the effectiveness of on-site supervision and sieving.



Fig. 11 Wet-sieving in the field next to the cashel.

### Artefact strategy

All artefacts from the current season were retained. These have been numbered and recorded in accordance with current National Museum of Ireland guidelines. All artefacts (excluding those from this season, though work is underway) have now been fully catalogued (in publishable form, and using the NMI artefact database). All finds will be treated, stored and



Fig. 12 BurrenBeo volunteer learning to draw artefacts.

conserved in accordance with *Advice Notes for Excavators* (NMI 2010). Post-fieldwork conservation services are provided by a recognised IPCRA conservator (Susannah Kelly, UCD). The artefacts will be temporarily stored in NUI, Galway and the Caherconnell Archaeological Field School, and will be deposited with the National Museum of Ireland in due course.

In addition, an artefact project was launched in 2015 to train local BurrenBeo Conservation Volunteers in the methods of artefact recording (Fig. 12). It is hoped that these volunteers will assist with future artefact processing.

### Excavation results

Thirty-four new context numbers were allocated in 2019, bringing the total number of contexts recorded thus far to 300. These include numbers for the cashel (01), cashel tumble (02, 05, 06, 22, 24), the sod and topsoil (03, 04), and the bedrock (00).

A total of eight archaeological phases have been identified to date, six of which were clearly evident in 2019. These are described below in stratigraphic/chronological order. It can be stated with a high degree of confidence that these phases date to the early-medieval, medieval and post-medieval periods. It is hoped that further relative dating (artefact typology) and absolute dating (radiocarbon) will facilitate refinement of this stratigraphic sequence.

Within **Cutting J**, the limestone bedrock (00) was karstified and rather uneven (Fig. 13). It did have a relatively smooth surface, having been exposed 100 – 200 years ago when the area was cleared to house cattle, but was distinctly higher nearer the cashel wall. The raised area stepped down vertically 0.38m on its east side, and 0.30m on its north side, dropping more gradually in between. The surface of the bedrock displayed many hollows and solution holes, at least some of which appear to have been used during early occupation of the cashel when the bedrock was exposed (see below). One larger gryke ran roughly north-south through the cutting, measuring 0.12m to 0.20m in width.



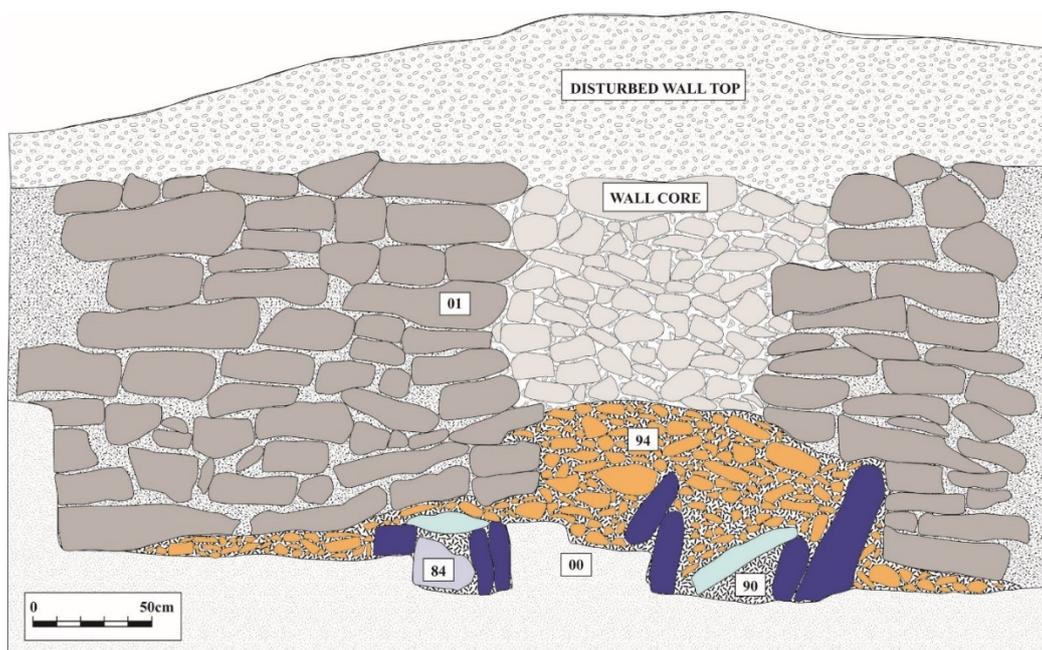
*Fig. 13 Bedrock in Cutting J. Scales 2m.*

The karstified bedrock in **Cutting K** was cut by several grykes, all running roughly north-south. Part of one large example (up to 0.5m wide, and 0.45m deep) traversed the western edge of the southern extension of the cutting, running into the section. This was a continuation of the gryke previously excavated in the adjacent Cutting E. Generally, the bedrock surface was relatively level in Cutting K, with an area of broken bedrock on its surface in the northwest part of the cutting, beneath the later kiln (see below).

In **Cutting L.A** the bedrock comprised a relatively level surface, with a low step (0.2m high) located approximately 0.5m from its western section. The top of this step was uneven and broken. A narrow fissure (averaging 0.05m wide) ran roughly east-west through the cutting. Occupation material found directly on the bedrock throughout the cashel suggests the bedrock was exposed when habitation began.

#### Phase 1: Early Medieval Pre-cashel Activity

Evidence of this phase was uncovered in Cutting D1 in 2013. It comprised a low burial mound covering two cists containing the remains of two infants and an elderly woman, all dating from the late 6<sup>th</sup> / early 7<sup>th</sup> century AD (Fig. 14). No features of this date were identified in **Cuttings J, K or L.A.**



*Fig. 14 Section of burial mound and cashel-wall elevation.*

#### Phase 2: Early Medieval pre-cashel Activity

So far, this phase is represented by a rock-cut fire-pit excavated in 2011 (Cutting B). Bone from the pit was radiocarbon-dated to the second half of the 7<sup>th</sup> century AD. No features of this date were identified in **Cuttings J, K or L.A.**

### Phase 3: Levelling and Construction

Cuttings A – C, F, H/H1, and I showed that the cashel wall (01) was built directly on the limestone bedrock (00) in most places. The only deviation from this occurred along the top of a small number of shallow grykes that appear to have had small stones used to fill them (56/37) – before the cashel wall was built over their tops. In Cutting D1 the cashel was built partly on bedrock and partly up over the top of the Phase 1 burial mound. The base of the cashel wall was fully exposed throughout **Cutting J** where, with the exception of an approximately 3m-long stretch, it was constructed directly on bedrock. The three metres between the wall steps (see below) and the northwest corner of the cutting saw now-broken bedrock directly beneath the cashel wall. This may be the result of this length of cashel wall being built on the edge of a north-south gryke, with that edge eventually suffering from the weight of stone on top of it. In **Cuttings K** and **Cutting L.A** the wall was built directly on the limestone bedrock.

In the relevant cuttings, the inner face of the cashel wall generally showed two distinct styles of construction. The bottom metre comprised relatively thin rectangular slabs (0.5m average length, 0.2m average thickness) of limestone laid in fairly regular horizontal courses, a well-built wall with few gaps between the slabs. This lowest metre was mostly below the modern ground surface and, therefore, somewhat protected. Above this the stones are generally shorter and thicker, with only the occasional large slab used. There are also more gaps between the stones. The different nature of the upper stones may relate to the difficulties encountered in raising large slabs as the height of the wall increased, and the gaps between stones are perhaps due to exposure to early modern human and animal activity. There is also evidence of modern rebuilding or patching in the upper levels of the inner face. This construction pattern was a little different in **Cutting K** (Fig. 15). Here, the smallest stones and slabs occurred beneath the ledge (see below), averaging just 0.3m in length and 0.1m thick. The largest stones occurred in a band approximately 1m wide above this. These ranged from 0.7m to 1.28m in length and 0.10m to 0.19m thick. Above this were smaller slabs and blocks, averaging 0.6m long and 0.12m thick.

In Cuttings B, F, I, **J**, **K** and **L.A** a 0.2m – 0.5m-wide ledge originally ran along the inner face of the cashel wall, approximately 1m to 1.5m above ground level. Part of its length was masked by early-modern rebuilding of the wall in Cutting F, where the rebuilt upper section of the wall sat flush with the inner face of the lower portion of the wall – effectively ‘filling’ the ledge for a length of approximately 5m. This was also identified in Cutting I. At roughly 2m below the current top of the wall, this ledge did not provide a view out over the wall. No trace of an upper ledge was identified. The function of the existing ledge may have been related to the construction of the wall. The ‘filling’/concealing of the ledge in Cutting I may have occurred during a phase of use when the ledge was no longer required, but occupation continued within the cashel. The added skin was well built, merging almost seamlessly with the lower, existing inner face of the cashel wall. Although not definite, this alteration in Cutting I may have occurred in the 15<sup>th</sup>/16<sup>th</sup> century when this part of the cashel interior was used to house animals. Early modern/modern alterations to the cashel wall are much more casual in construction, with stones roughly thrown/shoved into place, often at irregular angles.

The cashel wall defined the south-western edge of **Cutting J**, the north-eastern edge of **Cutting K**, and the east side of **Cutting L.A**. Now uneven along its top, the wall survived to a maximum height of 3m within **Cutting J**, 3.5m in **Cutting K**, and 2.5m in **Cutting L.A**, and ranged in width from 2.8m to 3.4m.



*Fig. 15 Cashel wall in Cutting K, with top of ledge highlighted. Scales 1m and 2m.*

Two large steps provided access to the wall ledge in **Cutting J** (270) (Fig. 16). These two large limestone slabs projected straight out from the inner face of the cashel wall, the lower one extending approximately 0.5m into the cashel interior, and the upper stone approximately 0.3m. Directly in line with one another, they measured 1.02m in length, while the upper stone was 0.36m thick and the lower stone 0.47m thick. The remaining 0.3m – 0.4m to the ledge top (two or three horizontal courses flush with the rest of the inner face of the cashel wall) could easily be taken as a third step.

In **Cutting L.A** a different form of steps (282) provided access between the wall ledge and its upper levels, levels now unfortunately absent from this part of the cashel wall (Fig. 16). The surviving lower part of these steps represent two opposing flights leading from a common point (a single slab 0.42m wide and 0.4m deep), rising along the line of the cashel wall, in line with its inner face. These steps (two on either side, the treads just 0.2m deep) may have provided access to an upper ledge or even the wall top, and may comprise just one of several such sets now masked by later rebuilding of the upper levels of the inner face of the wall.



Fig. 16 Lower steps in Cutting J (top), Upper steps in Cutting L.A (bottom).

#### Phase 4: Early occupation

Overlying the bedrock (00) in **Cutting J** were the patchy remains of an early occupation layer (36). This material was found in the tops of a few solution holes, some hollows and grykes, and in two thicker deposits in the southeast and northwest corners of the cutting where the bedrock fell away (up to 0.30m thick in these locations). These deposits survived as they levelled off the otherwise uneven bedrock surface when the area was cleared in early/modern times. A grey-brown, compact silty clay with frequent small to medium stones (0.03-0.12m maximum dimension), it contained some charcoal, marine-shell fragments, regular animal bone, and a few artefacts.

In **Cutting K**, this occupation material comprised a grey-brown silty clay, quite sticky in wet conditions. Very frequent stone inclusions comprised 99% limestone and 1% sandstone, measuring 0.03m to 0.12m maximum dimension. It contained regular charcoal, artefacts, and animal-bone fragments. The richness of the layer in this cutting relates to the protection offered by later features including the slab surface (33), structure (291), and tumble (22). This occupation layer occurred across the cutting, averaging 0.20m thick. The early occupation layer in **Cutting L.A** was a little more compressed at 0.15m thick, being so close to the cashel entrance and its centuries of traffic. The same colour as elsewhere, it was a little sandier in this cutting, and quite compact – especially towards its base. Its frequent limestone inclusions averaged 0.05m to 0.10m maximum dimension, and it contained some charcoal and regular bone fragments.

In **Cutting J**, early activity (Fig. 18) was represented by this general layer, a well-defined pit, a shallow pit, and three re-used solution hollows. These solution holes (Fig. 17) occurred close together (0.32m between the middle and western example, and 0.49m between the middle and eastern example) in a line at the base of the cashel wall in the southern part of the cutting. The easternmost of the three was irregular in shape with a rounded base, measuring



0.30m north-south by 0.33m east-west, and 0.18m deep (275). It was filled with a moderately compact mid-brown sandy silt containing regular small stones (0.01m – 0.06m maximum dimension) (274). It also contained three larger stones placed around the edge of the hole, each measuring 0.07m – 0.10m maximum dimension. These appear to have functioned as packing stones for the base of a post of roughly 0.20m diameter. The middle solution hole was relatively shallow with a faintly rounded base (277). It measured 0.24m north-south, 0.35m east-west, and 0.14m deep. It contained a mid-brown sandy silt, moderately compact, with occasional stones of 0.01m – 0.07m maximum dimension (276).

*Fig. 17 Solution holes before excavation. Scale 1m.*

The westernmost of the three solution holes was also sub-circular with gently rounded sides and base, measuring 0.34m north-south, 0.29m east-west, and 0.20m deep (279). It contained a brown sandy silt with regular small stones (0.01m – 0.05m maximum dimension), and two vertical packing stones (0.08m – 0.11m maximum dimension) (278). All three fills had small bone fragments on their surface, but none below that. The packing stones present in two, and their position in a line inside the cashel wall might suggest their use as structural supports.

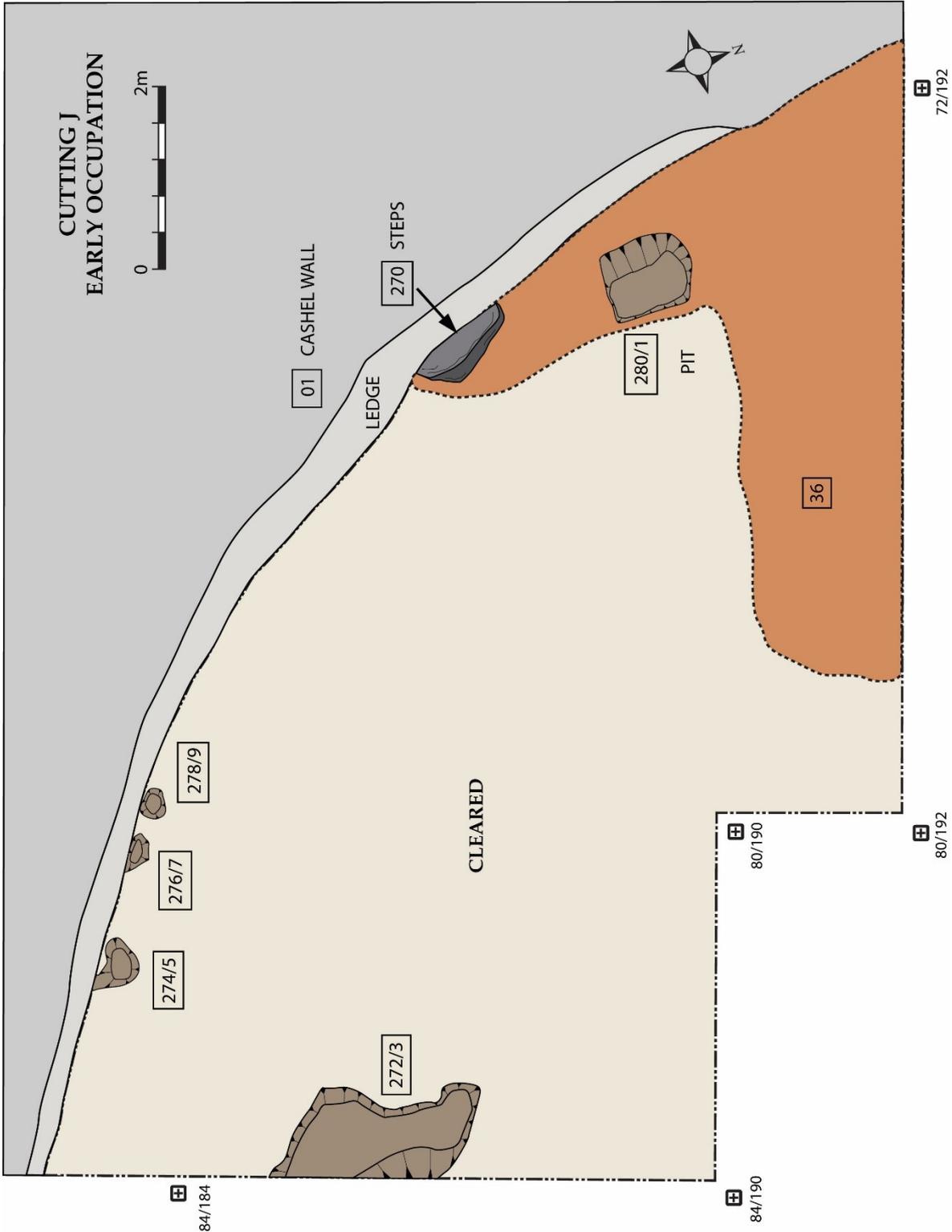


Fig. 18 Select contexts from Phase 4: Early occupation in Cutting J.

A shallow rock-cut pit (273) was located in the eastern part of **Cutting J** (Fig. 18). Sub-rectangular in shape, it was formed by prising up a couple of large limestone slabs along the line of a gryke (the bottom of which is visible running north-south along the base of the feature). The pit ran into the cutting section on the east, had almost vertical sides on the south and west, and a more gradual slope on the north. It measured 1.78m north-south, 0.99m east-west, and 0.30m deep (maximum). Its fill (272) comprised a grey-brown silty clay with regular small stones (0.01m – 0.05m maximum dimension) and animal-bone fragments – very reminiscent of the general early occupation material (36). This suggests an early date for this feature, but does not identify its function.

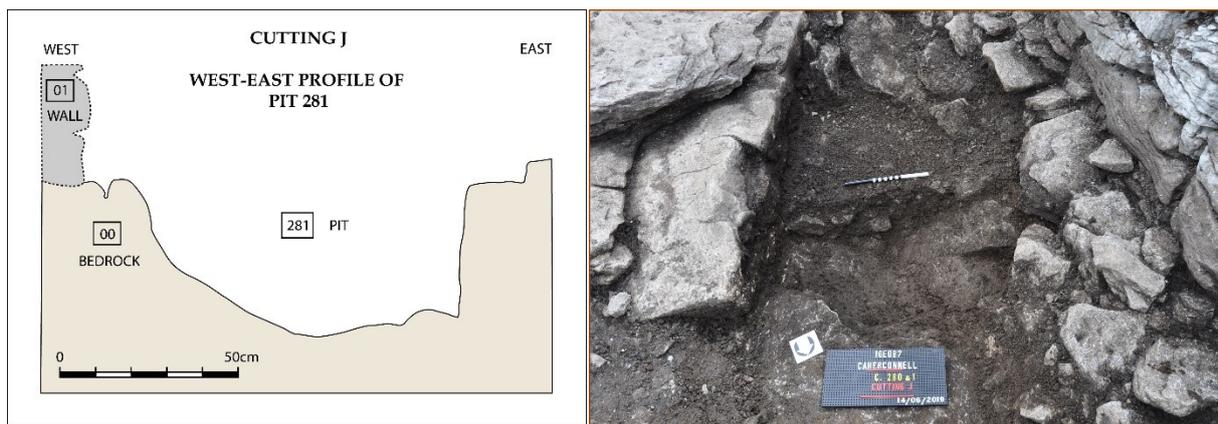


Fig. 19 Rock-cut pit (281): profile (left) and half-section photo (right). Photo scale 30cm.

A better defined pit was discovered in the western part of **Cutting J**, cut into bedrock and – once again – taking advantage of a gryke (along its east side) in its formation. The rectangular cut (281) had a fairly level, flat base but with a slight slope on the west (Fig. 19). Vertical bedrock sides formed the northern, eastern and southern limits of the pit. In a very sheltered location at the foot of the cashel wall, it measured 1.03m north-south, 0.76m east-west, and 0.48m deep. Its compact fill (280) comprised a mid-brown silty clay containing frequent small and medium limestone pieces (0.01m – 0.12m maximum dimension), regular charcoal flecking and occasional small pieces, and frequent animal bone. This material appears to be domestic refuse, not unlike that of the early occupation phase, and covered by the general occupation layer (36).

No Phase 4 bedrock features were identified in **Cutting K**, however a cereal-drying kiln was constructed during this general phase (Fig. 20). The remains comprised the lower courses of a stone-built sub-circular chamber, with a stone-contained fire-box on its south side (298) (Figs. 20 and 21). Measuring 2.0m north-south by 1.65m east-west internally (2.7m north-south by 2.4m east-west externally), the chamber was defined by limestone slabs and stones averaging 0.2m to 0.5m maximum dimension. Most of these were angled, but may possibly have been set in a vertical position originally. The chamber fill (299) was a mid-brown orange-tinged silty clay, moderately sticky and compact, averaging 0.08m thick. With the exception of a few large stones clearly fallen into the chamber at a later date, the fill was largely stone free and relatively free of occupation debris. A small (0.37m north-south, 0.35m east-west, 0.05m thick) charcoal-rich deposit (300) occurred in the northeast part of the chamber interior.

The fire-box on the south side of the chamber was defined by slabs and stones set on edge on its east and west side, helping to funnel hot air into the chamber. It measured 1.4m north-south by 0.9m east-west, with the heat-fractured kerb stones on the east measuring 0.43m and 0.68m in length, and 0.09m and 0.13m in width. The setting contained hearth/burning (297), a highly-fired 0.15m-thick deposit of pale-cream/white ash with charcoal above and below. The entire structure was constructed partly on bedrock and partly on/within occupation layer (36). Radiocarbon dating of a few small animal-bone fragments from the fire-box should confirm the date/phase of kiln use.

No early features were identified in **Cutting L.A.**

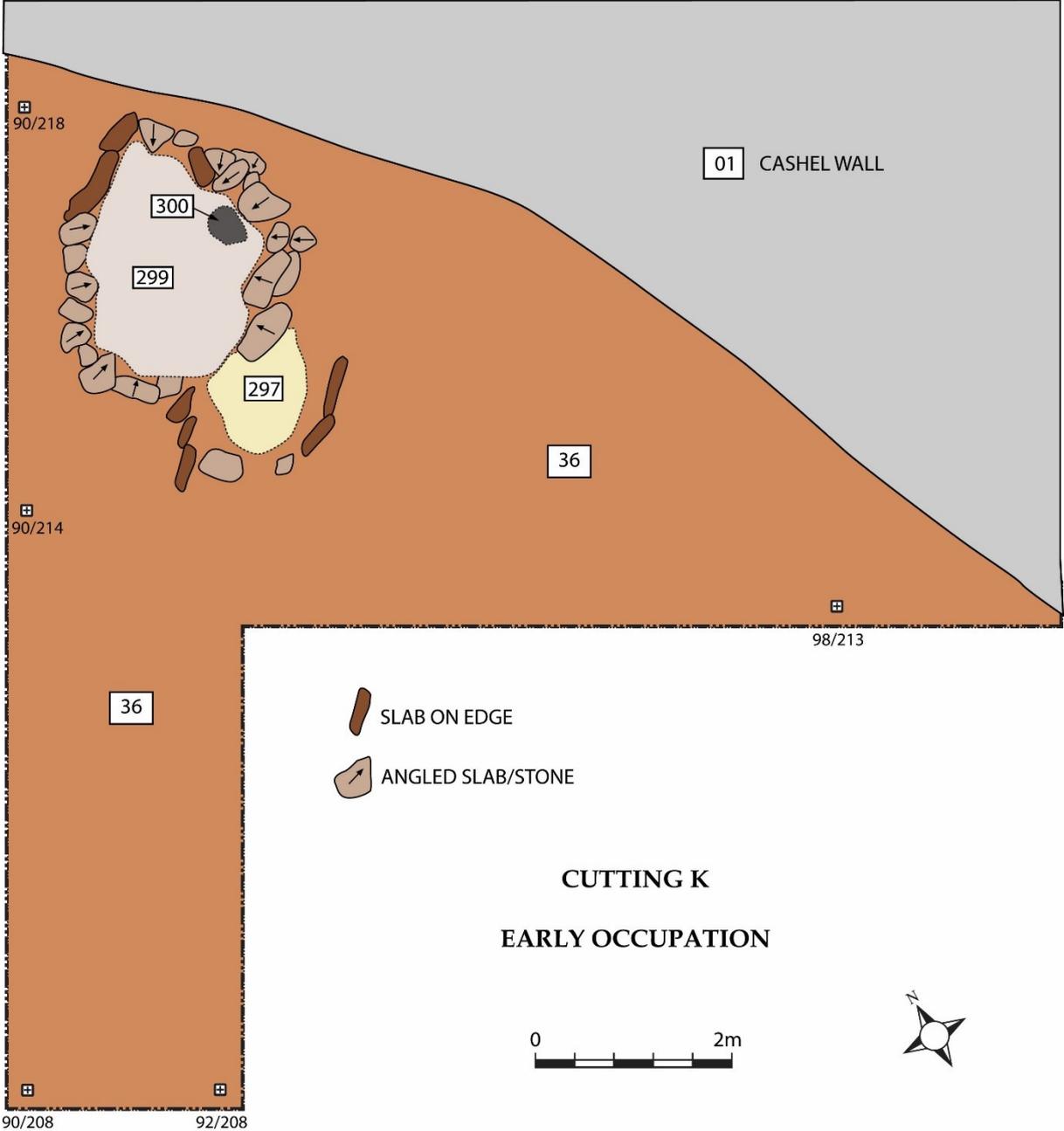


Fig. 20 Phase 4: Early activity / kiln in Cutting K.



*Fig. 21 Base of kiln in Cutting K (outlined by yellow markers). Scales 1m and 2m.*

### Phase 5: Middle occupation

The start of the next phase of occupation is marked by the deliberate laying of a slab surface across parts of the cashel interior. This, lower, slab surface (33) was originally relatively well constructed from irregularly shaped limestone slabs, measuring up to 1.2m in maximum dimension. Later subsidence of organic material beneath it, and pressure from heavy stone-laden contexts above caused the shifting of some of the slabs from their original flat, level positions. In places of high bedrock, the slabs often run up to it, forming a level surface with the bedrock. No slabs survived in **Cutting J**, having been cleared away and re-used to build an animal pen (in Cutting H) sometime in the last century or two.

The slabs survived best in the southern part of **Cutting K** (Fig. 22), where they were well laid and quite level. Larger slabs (averaging 1m maximum dimension and 0.10m thick) were located here, and formed part of the best preserved section of (33) in any part of the cashel, extending into Cutting D to the east. Elsewhere within the cutting, the slabs were often disturbed by later activity, or may not have been present originally (Fig. 23). A surviving line of several well-placed slabs located approximately 0.35m from the cashel wall suggests that a gap may have been deliberately left between this surface and the wall, to act as a drainage feature.



Fig. 22 Well-preserved section of (33) slab surface in Cutting K.



Fig. 23 Phase 5: Middle occupation in Cutting K, showing slab surface (33) and top of earlier kiln fire (297) and associated slabs on edge (in dark green).

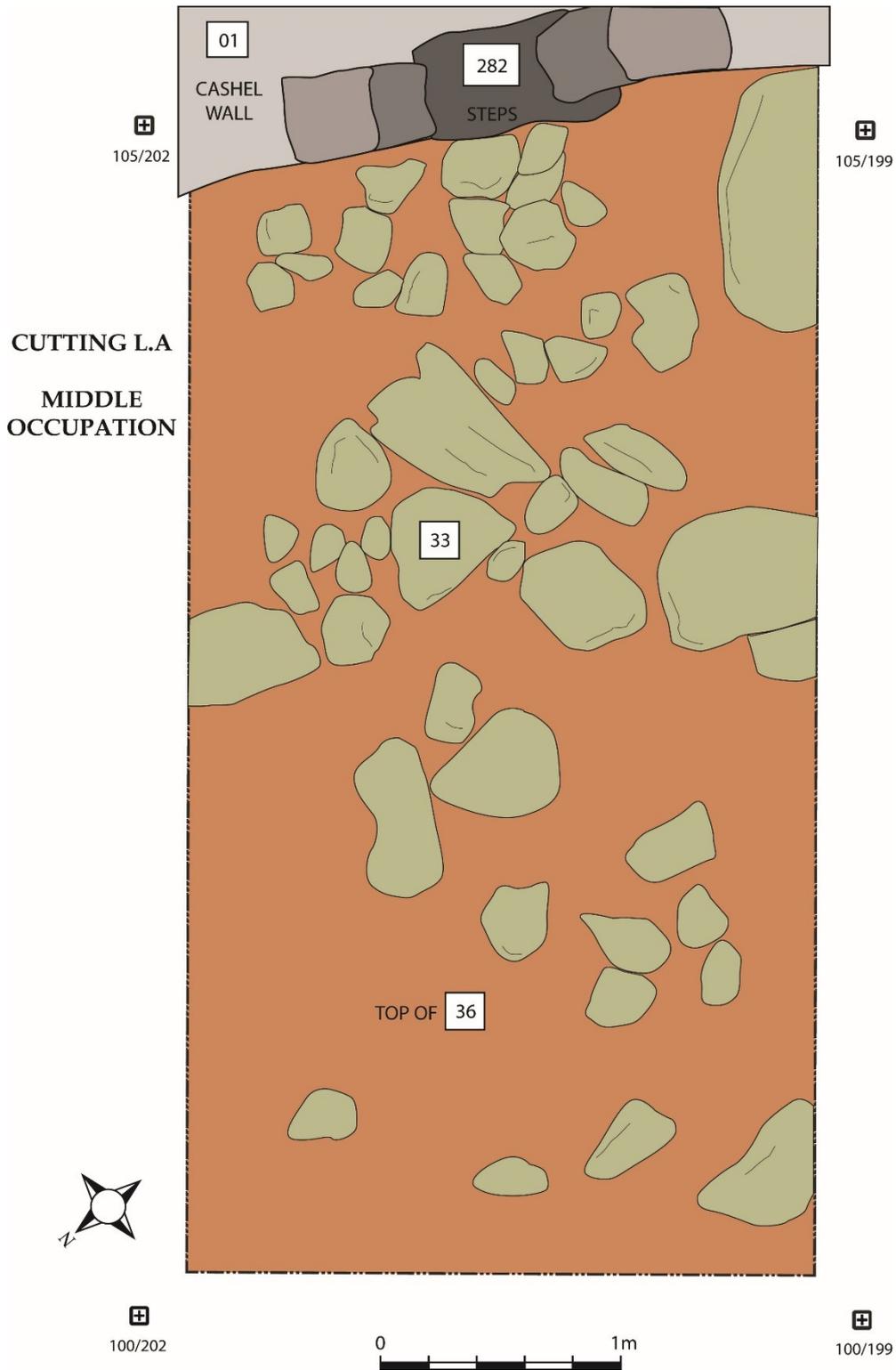


Fig. 24 Phase 5: Middle occupation in Cutting L.A, showing remnants of slab surface (33) set into the top of earlier occupation material (36).

Patchy remains of the lower slab surface occurred in **Cutting L.A** (Fig. 24), best preserved in the southern half of the cutting, adjacent to Cutting B. Entrance-related activity may be responsible for the irregular scatter elsewhere in the small cutting. The slabs averaged 0.6m maximum dimension.

No new features were associated with this slab-surface level in any of the three cuttings from 2019. This occupation layer (16), was up to 0.11m thick in **cuttings K** and **L.A**. This mid-brown clayey silt occurred across these two cuttings, but only a relatively small strip survived in **Cutting J**, located at the base of the cashel wall in the north-western part of the cutting – between the wall steps (270) and the northern5 edge of the cutting. Approximately 6m long and 1m wide, it reached a maximum thickness of 0.10m, and comprised a mid- to dark-brown clayey silt of moderate compaction. It contained regular stone inclusions (0.05m – 0.20m maximum dimension), occasional charcoal, rare marine shell, some animal bone, and a couple of artefacts. In **Cutting K**, the Phase 5 occupation layer was also moderately compact, and contained frequent small and medium (0.03m – 0.10m maximum dimension) limestone (99%) and heat-fractured sandstone (1%) pieces. Animal bone and charcoal were regular, with hazelnut, coprolite and marine shell also present. Somewhat similar material was excavated in **Cutting L.A**, though without the coprolite and shell inclusions.

### Phase 6: Late occupation

Sometime after this a second slab surface (28) was laid down on top of occupation layer (16). This, too, consisted of local limestone slabs (0.2m to 0.7m maximum dimension, 0.1m thick), but it appeared rougher in construction than its predecessor, and only survived in **Cuttings K** (Fig. 27) and **L.A** (Fig. 26). Originally, these slabs formed a very flat, stable surface, and was best preserved in the southern parts of both cuttings. Elsewhere, most of the slabs were moved slightly by later activity. They were completely absent from the cleared **Cutting J**. Associated with the slab surface in **Cutting K** was a stone-built drain (Fig. 25). This linear feature (295) was oriented roughly southwest-northeast and comprised stones and slabs on edge forming parallel sides, flat stones forming a base, and (28) slabs providing a cover. It measured 2.6m in length, 0.47m internal width, and 0.25m in depth. Its fill (296) consisted of a sterile mid-brown sticky clay.



*Fig. 25 Drain (295). Scale 2m.*

Built up atop the slabs, or earlier contexts where the slabs were absent, was an occupation layer (25), continuing the stratigraphic sequence identified in previous cuttings. This layer, absent from the cleared **Cutting J**, comprised in **Cuttings K** and **L.A** a loosely to moderately compact stone (0.12m maximum dimension) and gravel deposit in a brown silty matrix. It contained animal bone, slag, charcoal, and marine shell, and reached a maximum thickness of 0.1m. Located near the surface of (25) in **Cutting K** was an irregular deposit of charcoal-rich burnt material (292). A moderately compact dark-brown silty clay, it was very rich in charcoal, with occasional flecks of bright orange burnt soil. Probably the cleanings from a hearth, it measured 1m north-south, 1.4m east-west, and was 0.08m thick.

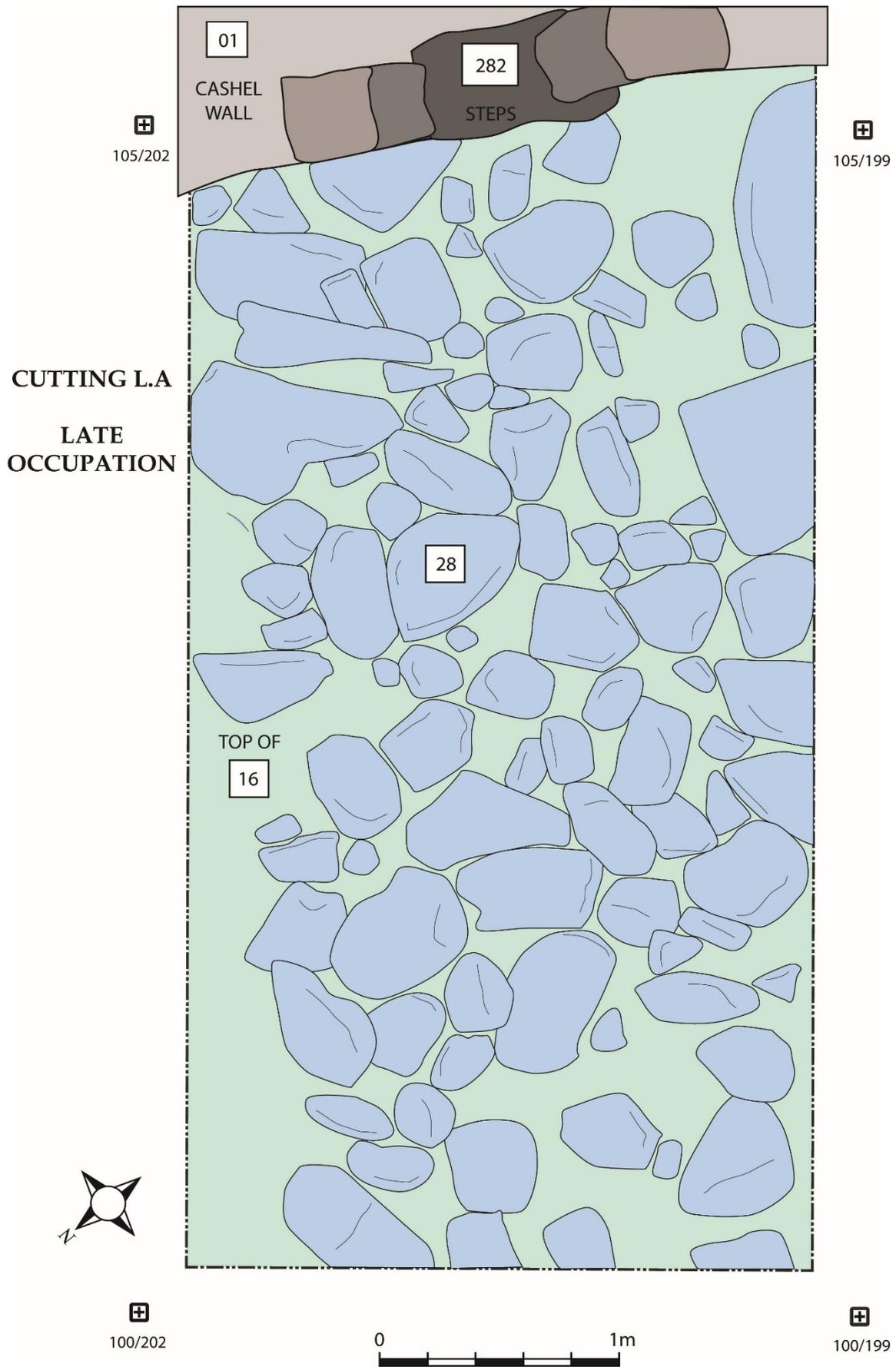


Fig. 26 Phase 6: Late occupation in Cutting L.A, showing disturbed upper slabs (28).



*Fig. 27 Upper slab surface (28) in Cutting K. Scale 2m.*

Constructed on top of (25) in **Cutting K**, but beneath the Phase 7 features, was a rectangular drystone structure (291), only the northern end of which survived beneath the tumble from the adjacent cashel wall (Fig. 28). Built of limestone, its horizontally laid stones averaged 0.3m maximum dimension. The wall comprised two or three courses in width, with a maximum of only two courses in surviving height. The intact north gable wall measured 5.5m east-west externally, and had an average width of 0.7m. The right-angled side walls were more poorly preserved, their original lines difficult to trace after approximately 1.5m. South of this, later overlying cashel-wall tumble did not protect them from modern disturbance/recycling of stone. A linear stone setting (293) occurred just off centre within the surviving end of this structure (Fig. 29). Following the same alignment as the structure, the west side of the setting was defined by three angled (approximately 45-degree) stones, and the east side by three flat stones. Flat stones also marked both ends. The stones cut down into underlying (25) occupation material. The setting contained a dark-brown, moderately compact and sterile clayey silt (294), and may have functioned as a post support or the base of some internal fixture.



Fig. 28 Surviving north-eastern end of structure (291).

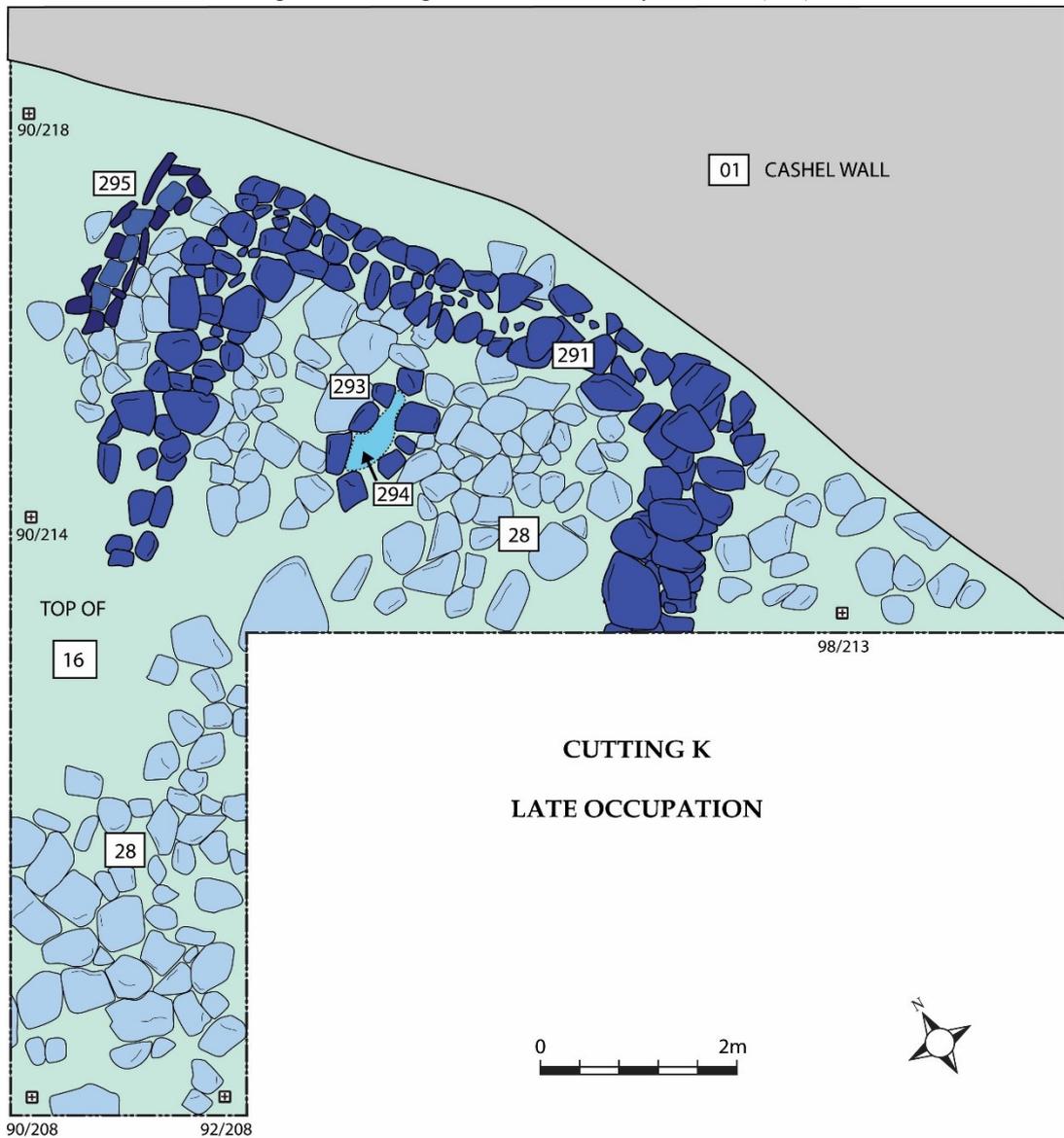


Fig. 29 Phase 6: Late occupation in Cutting K, showing slabs, rectangular structure, and drain.

A trampled stony deposit of occupation material averaging 0.1m thick accumulated over the top of the (25) occupation layer, contemporary with the use of structure (291) in **Cutting K**, in both **Cutting K** and **Cutting L.A**. In the former, it spread across most of the northern part of the cutting (approximately 8m east-west), preserved beneath later activity. Quite compact, it (290) comprised 99% limestone pieces ranging from 0.05m to 0.12m maximum dimension, in a brown silty clay matrix. It was given a separate context number (288) where it occurred beneath a later, Phase 7 structure. In **Cutting L.A** the rough surface (285) consisted of limestone pieces averaging 0.15m maximum dimension in a brown silty clay matrix. These contexts constitute the upper layers of the Phase 6 occupation material, compacted into a surface by Phase 7 activity. The material contained within these contexts belongs to Phase 6, yet the compaction may relate to Phase 7 activity (see below).

#### Phase 7 Final occupation

The final human occupation of the cashel is marked by the reconstruction of the cashel entrance (2010 Cutting A), construction of a rectangular house (120) (trial excavation 2007, and 2015 Cutting F), and a drystone wall (Cuttings C, E, G, H, and I) dividing the cashel interior in two. It is also possible that it was during this phase that a second skin was added to part of the internal face of the cashel wall (01). Collapse of stones from the upper reaches of the wall in Cutting I revealed the addition of a second internal skin, just one course wide, on top of the original internal ledge identified elsewhere in the cashel, effectively masking this feature. Presumably this was done in parts of the cashel where, and when, access to the wall top was no longer required or desired. Patches of modern repair or rebuild are readily identifiable, comprising areas where stones have been roughly and loosely placed back on/in the wall, usually at irregular angles. This second skin, however, is well built of horizontal courses, very similar to the original inner face. Access to the wall top would probably not have been required in the area of Cutting I in the 15<sup>th</sup>/16<sup>th</sup>-century when animals were housed south of cross-wall (48). In **Cutting J**, however, also on this side of the cross-wall, the wall ledge was not masked – unless such masking has since tumbled away, leaving the original ledge visible once again. In **Cuttings K and L.A**, the ledge is also visible, though somewhat disturbed in the former where the inner face of the cashel wall bulges slightly into the interior of the cashel.

No features of 15<sup>th</sup>/16<sup>th</sup>-century date survived in **Cutting J**, though the extensive clearance identified does explain the straight edge cut through the lime-mortar surface uncovered in the adjacent part of Cutting I in 2018. In **Cutting K**, a small (2.1m internal diameter) semi-circular structure was defined by an extended arc of ten to twenty limestone slabs and stones laid horizontally on top of contexts (290/288) (Figs. 30 and 31). The stones ranged from 0.3m to 0.56m maximum dimension, and were up to 0.17m thick. The arc was open to the south, but it is uncertain whether this represents the original form of the structure/shelter, or if this was a result of the extent of the overlying protective cashel-wall tumble. Located within was a small area of burning surrounded by a thin (0.01m – 0.04m thick) surviving patch of occupation material. The burning (289) comprised a localised deposit of intensely burnt ashy

material, bright orange in colour. It measured 0.65m north-south and 0.9m east-west, 0.06m thick. A minimum of five lenses consisting of ash and charcoal suggests repeated use of this fire. The surrounding deposit of use-related material (287) comprised a mid- to dark-brown silty clay with regular inclusions of tiny burnt-bone fragments, charcoal, ash, and spots of cream-coloured mortar like that used in the construction of the 15<sup>th</sup>/16<sup>th</sup>-century house in Cutting F to the west. A small bronze looped dress-fastener of similar date was also recovered from this deposit, a deposit measuring just 1.6m north-south by 1.35m east-west.



*Fig. 30 Semi-circular structure in Cutting K, orange area of burning visible just off-centre. Scales 1m.*

A small deposit of cream-coloured mortar-like material (283) was discovered in the south-eastern corner of **Cutting L.A.** Contained within the general occupation material (23), it comprised a very friable, gritty material found in three adjacent concentrations over an area of 0.40m. The concentrations measured 0.10m by 0.12m, 0.05m by 0.05m, and 0.08m by 0.10m, all with a maximum thickness of 0.04m. Probable waste associated with the construction of the 15<sup>th</sup>/16<sup>th</sup>-century house in Cutting F or the deliberate surface in Cutting I.

An occupation layer built up on top of these features and the earlier habitation material/surface (285 in **Cutting L.A.** and 290/288 in **Cutting K**) but once again, not present in the cleared **Cutting J.** In **Cutting K**, this new occupation layer (23) comprised a mid-brown stony (0.05m – 0.1m maximum dimension), silty clay that only survived beneath the cover of the later cashel-wall tumble (see Phase 8 below). Some larger stones from this tumble (0.11m – 0.2m maximum dimension) were pressed into its upper surface. The layer contained both bone and charcoal, and measured 3.8m north-south, 10.5m east-west, and up to 0.2m thick.

The Phase 7 occupation layer was also present in **Cutting L.A**, comprising a mid-brown silty clay with very frequent limestone pieces (0.06m – 0.15m maximum dimension). Moderately compact, it covered the entire cutting to a maximum thickness of 0.2m, and contained a small amount of animal bone. Its location so close to the surface in such a well-trafficked area inside the cashel entrance suggests the possibility of disturbance, and lack of context reliability of any bone contained within.

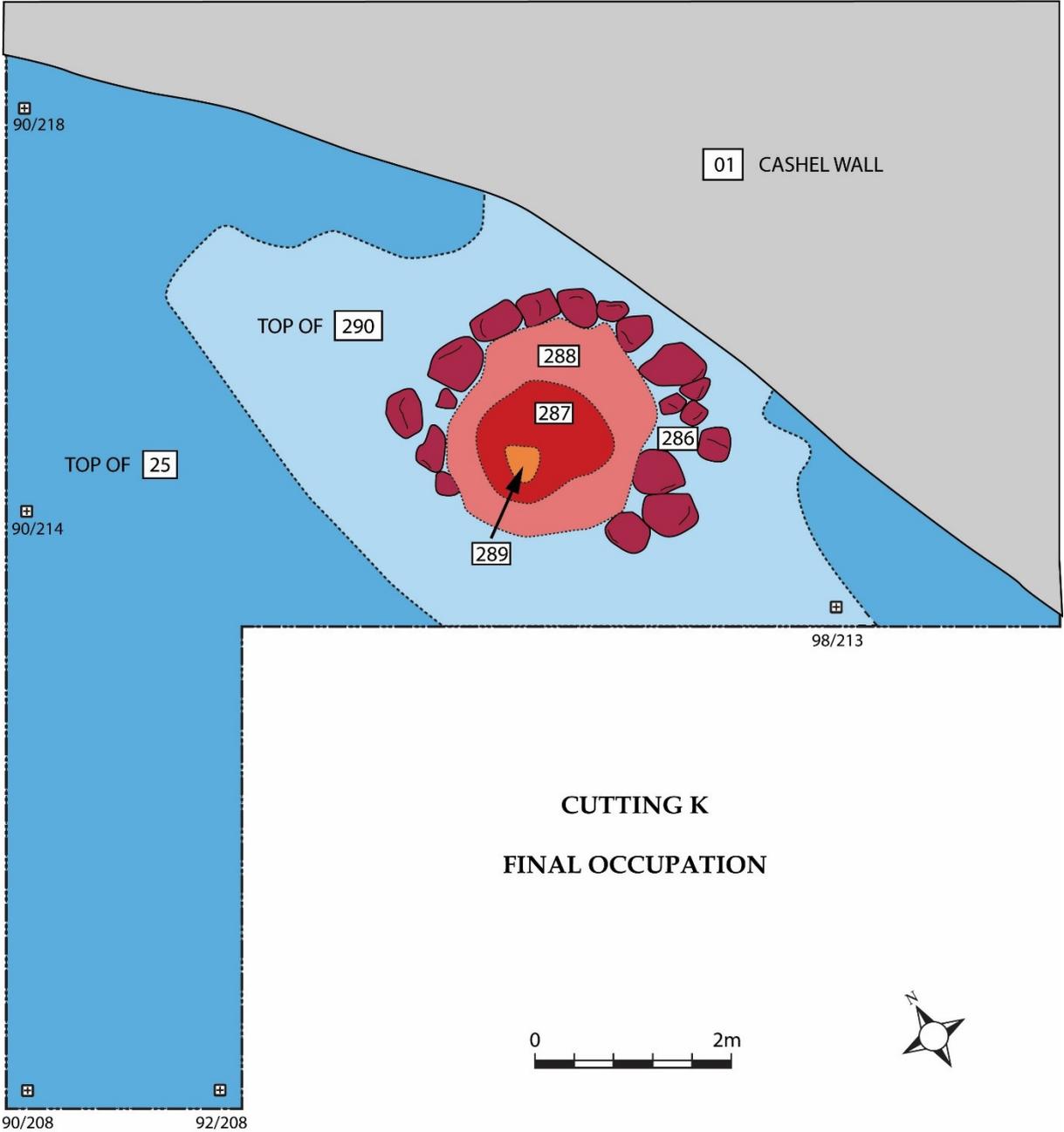


Fig. 31 Phase 7: Final occupation in Cutting K, showing remains of circular/semi-circular structure.

### Phase 8 Post human-occupation

The final layers present in the cashel represent structural collapse, deliberate digging, demolition and/or accidental knocking, all related to the use of the site as a stock enclosure right up into the 20<sup>th</sup> century.

**Cutting J** reflects much of this activity (Figs. 32 and 33). This part of the cashel interior appears to have been deliberately cleared to bedrock level at least 100 years ago, when an animal pen was built in the adjacent Cutting H (excavated 2017). Pockets of the lowest occupation material (already outlined) survived only where it conveniently levelled off steps and hollows in the bedrock. A few finds of modern date, such as a metal button of approximately 1916 date, from directly on the bedrock suggest this chronology. Used as a stock enclosure, organic material (269) quickly accumulated atop the bedrock. This dark-brown humic clay containing frequent stones and slabs (0.10m – 0.45m maximum dimension), occasional modern rubbish, snail shells and rodent bones, survived to a thickness of 0.25m beneath two large areas of cashel-wall tumble in the south and west of the cutting. Found within the organic layer was a large stone perforated by a solution hole (271). A small, sub-rectangular, boulder of limestone, it contained an off-centre naturally formed hole, clearly brought into the cashel for some purpose. Too irregular to be used as a wall stone, it seems likely that the natural hole was re-used in a structural context, forming an ideal support for a fence or wall post, roof-support, or door. It measured 0.74m by 0.48m, and 0.30m thick, with the hole measuring 0.27m by 0.17m at the surface of the stone. Heavy, and difficult to move, it may not have travelled too far from the site of its original use, but may have come from any of the earlier occupation phases (being close to both the line of Phase 4 solution-hole post-supports and the Phase 5/6 rectangular structure in Cuttings G and I) or the post-occupation phase in which material it was found. Unprotected by cashel-wall tumble in the rest of the cutting, the organic matter (269) formed humus (04) and a grassy sod (03) averaging 0.25m thick.

At some point after this activity, the inner face of the cashel wall collapsed in two locations within **Cutting J**, sealing the organic material (269) beneath. The collapsed stone (22) formed a 0.87m-high band of loosely jumbled limestone pieces, with concentrations to the south and west extending up to 3.40m from the cashel wall, corresponding with the main areas of wall collapse. The limestone slabs and stones measured 0.10m to 0.65m in maximum dimension. Modern rubbish and voids were frequent.

In **Cutting K**, later activity was represented by a sequence of two collapses of stone from the cashel wall (Fig. 34). The earliest of these (284) comprised a compact mass of stone blocks and slabs of limestone, 0.3m – 0.6m maximum dimension, most likely fallen from the upper reaches of the cashel wall. Some of the stones on the surface of this deposit had weathered/broken down into smaller pieces, suggesting some antiquity to the collapse. It measured 2.7m north-south, 3.9m east-west, and 0.4m thick. Partially overlying this context in the western half of the cutting was a more recent deposit of tumbled stone (22). This was very loosely compacted with frequent voids and plentiful evidence of modern disturbance in

the form of sun-bleached farm-animal carcasses. This relatively modern episode of collapse spread 3.8m north-south, 4.8m east-west, and was 0.6m thick.

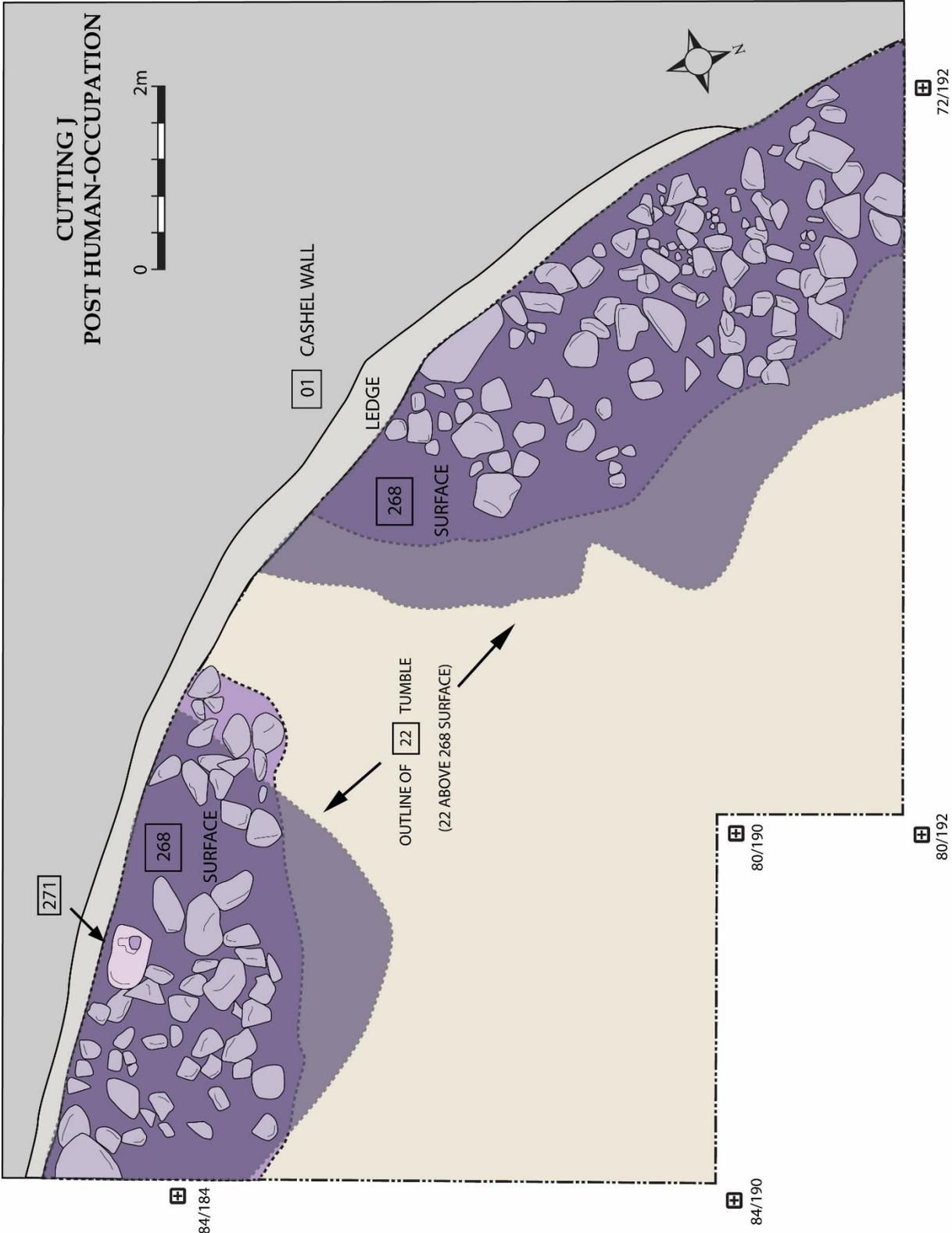
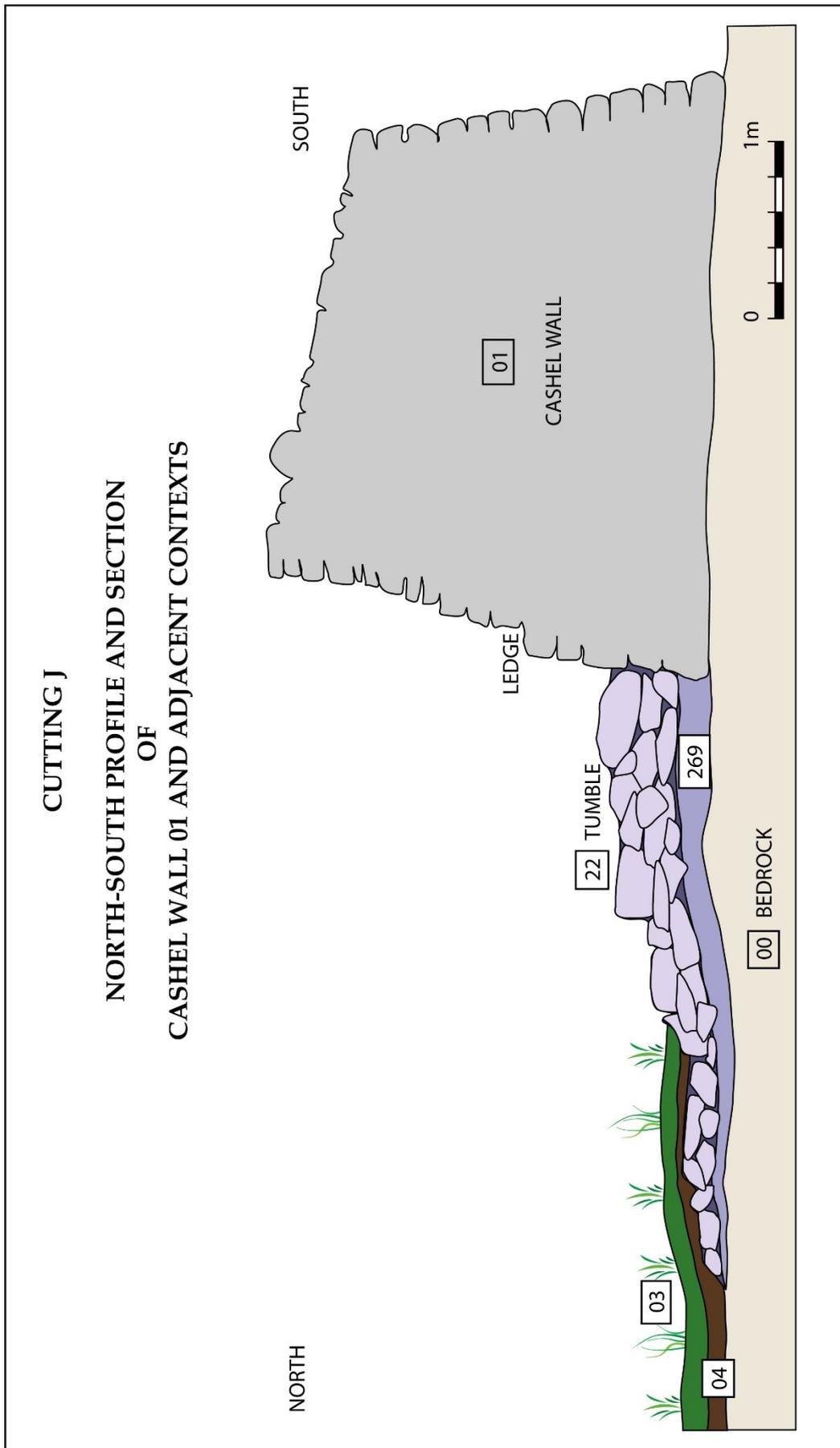


Fig. 32 Select contexts from Phase 8: Post human-occupation in Cutting J.



*Fig. 33 West-facing section through cashel wall and adjacent Phase 8 contexts.*

With the exception of the exposed part of tumble (22), all were overlain by humus (04) and sod/moss (03) that was up to 0.22m thick in places, reflecting the churning, exposing, and manuring of the upper levels of the interior during early modern and modern use as a stock enclosure.

**Cutting L.A**, being located just inside the cashel entrance, has seen much modern farm and tourist traffic. As a result, this area has been kept largely clear of tumbled stone from the cashel wall, and free from the burial of animal carcasses or related activity. A linear deposit of clean gravelly material (08) occurred along the inside of the cashel entrance in Cutting A and extended south into Cutting L.A. It comprised frequent water-rolled pebbles (0.01m – 0.04m maximum dimension) in a light-brown silty sand. Within Cutting L.A it measured 0.65m north-south, 0.70m east-west, and 0.12m thick, and may represent a deliberate attempt to provide a drier, stable surface in this high-traffic area. When this occurred is unknown, but some time prior to the collapse of the cashel entrance, as it was found beneath the stones tumbled into the entrance passage (02) and adjacent areas (05). A relatively thin sod (03), averaging 0.07m thick, developed in Cutting L.A.



*Fig. 34 Stone tumbled from the cashel wall (22 left) and (284 right) in Cutting K.*

### **Backfilling**

All three cuttings were backfilled and re-sodded, bringing the surface back level with the rest of the cashel interior. As this site is the focus of a visitor centre, an attempt is made to leave certain features visible or marked on the surface – this was discussed with Ann Lynch of the National Monuments Service during a site visit in 2015. In **Cutting J**, the tumbled stones

from the cashel wall (22) were not replaced, leaving the inner face of the wall – and its steps – more visible (Fig. 35). The wall steps in **Cutting L.A** were also cleaned and left exposed. In **Cutting K**, the cashel-wall tumble was not replaced, leaving the inner face of the wall visible (Fig. 36). Explanation of such features is provided in the booklet provided to all visitors, to aid visitor understanding of the site and its phases of activity.



*Fig. 35 Cutting J back-filled.*



*Fig. 36 Cutting K back-filled.*

### **Finds (Figs. 37 – 59 etc.)**

A list of finds is given as Appendix 3 (A, B, and C). The detailed catalogue of 2019 artefacts has commenced, but is not yet completed. 134 artefacts were recovered, each attributed to one of the phases identified above. Items of stone, clay, bone, antler, iron, bronze, amber, and glass were discovered.

Stone artefacts include 2 fragments of rotary querns from **Cuttings J** and **L.A** (Fig. 37), 8 whetstones from **Cutting K** (Fig. 38), 3 rubbing/polishing or food-preparation stones from **Cutting K** (Fig. 39), 2 hammer-stones (Fig. 40) and 2 anvil/work stones from **Cutting K** (Fig. 41), a small quartz pebble/gaming piece from **Cutting J** (Fig. 66), 15 chert lithics from all cuttings - including scrapers and a fine point/broken arrowhead (Fig. 42), 5 pieces of worked flint from **Cuttings J** and **K** (Fig. 43), a shale flake from **Cutting J** (Fig. 44), a shale core from **Cutting K**, 2 small stone spheres from **Cutting K** (Fig. 45), and a flat stone bearing an incised grid from **Cutting K** (Fig. 46). Bone was used in the manufacture of several composite bone combs, with fragments found in all cuttings. Three more complete combs were found, one in **Cutting J** (approximately 60% represented) and another in **Cutting K** (only missing some teeth) (Figs. 48, 49, 50). Other bone and antler items included a few partly worked/cut pieces from **Cuttings J** and **L.A** (Fig. 61), three probable handles for tanged implements from **Cuttings J** and **K** (Fig. 50), the body of a writing implement/pen from **Cutting K** (Fig. 62), and a small decorated buckle tongue also from **Cutting K** (Fig. 67). Evidence of on-site bone-working comprised a roughly shaped fragment from **Cutting J**, a chopped section of long bone ideal for making comb tooth plates from **Cutting L.A**, and a cut antler tine also from **Cutting L.A** (Fig. 61).

The iron remains vary in form and degree of preservation. They include 13 nails from all cuttings (Fig. 51), 5 miscellaneous objects from **Cuttings J** and **K**, part of an iron horse-bit from **Cutting K** (Fig. 52), a small iron linked piece from **Cutting K** (Fig. 53), 9 knives/blades from **Cuttings K** and **L.A** (Fig. 54), the lower part of a pointed shaft from **Cutting K**, and a long spike-like socketed arrowhead from **Cutting K** (Fig. 55). Bronze items include a pin with relatively large looped head from **Cutting L.A**, the top half of a stick-pin from **Cutting J**, 6 stick-pins from **Cutting K**, and the pin of a ringed pin from beneath one of the path slabs in **Cutting D** (Fig. 56). The decoration on one side of one of the **Cutting K** stick pins is very similar to that on the silver finger ring found in Cutting F in 2015. Other items of bronze included a small staple-like fitting from **Cutting K**, a 20<sup>th</sup>-century button from **Cutting J** (Fig. 70), a grooved point/pen nib from **Cutting K** (Fig. 62), and a small looped clothes fastener from **Cutting K** (Fig. 69). **Cutting K** also produced part of a larger metal object made of iron and decorated with bronze fittings, its exact form currently masked by corrosion of the iron (Fig. 68). The bone/antler shaft or barrel and bronze nib from **Cutting K** form a composite pen/writing implement (Fig. 62). Other materials represented include a fragment of clay pipe from **Cutting J** (Fig. 70), a small clay ball from **Cutting L.A** (Fig. 57), a small amber stud from **Cutting L.A** (Fig. 63), a blue glass bead from **Cutting K** (Fig. 58), and lead shot from **Cutting K** (Fig. 59).



*Fig. 37 Fragments of rotary querns.*



*Fig. 38 Whetstones.*



*Fig. 39 Rubbing stones.*



*Fig. 40 Hammer stones.*



*Fig. 41 Fragments of anvil stones.*



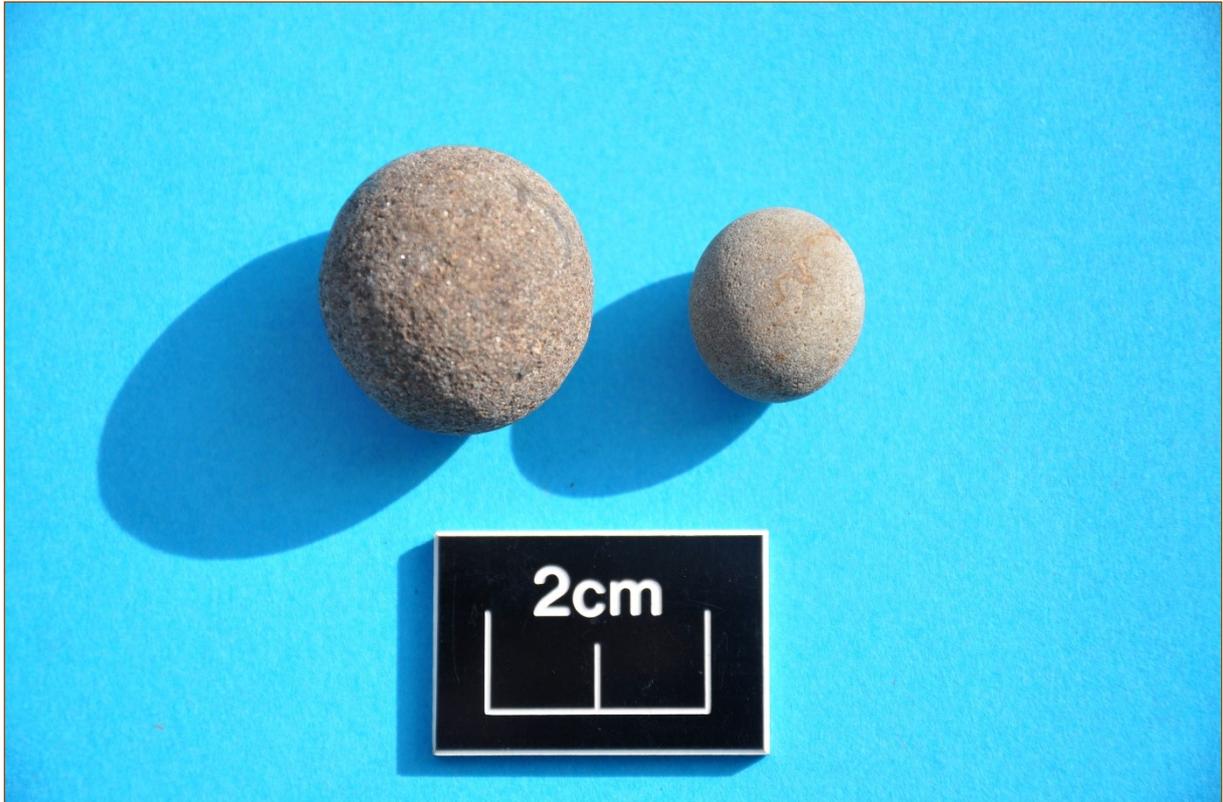
*Fig. 42 Chert lithics.*



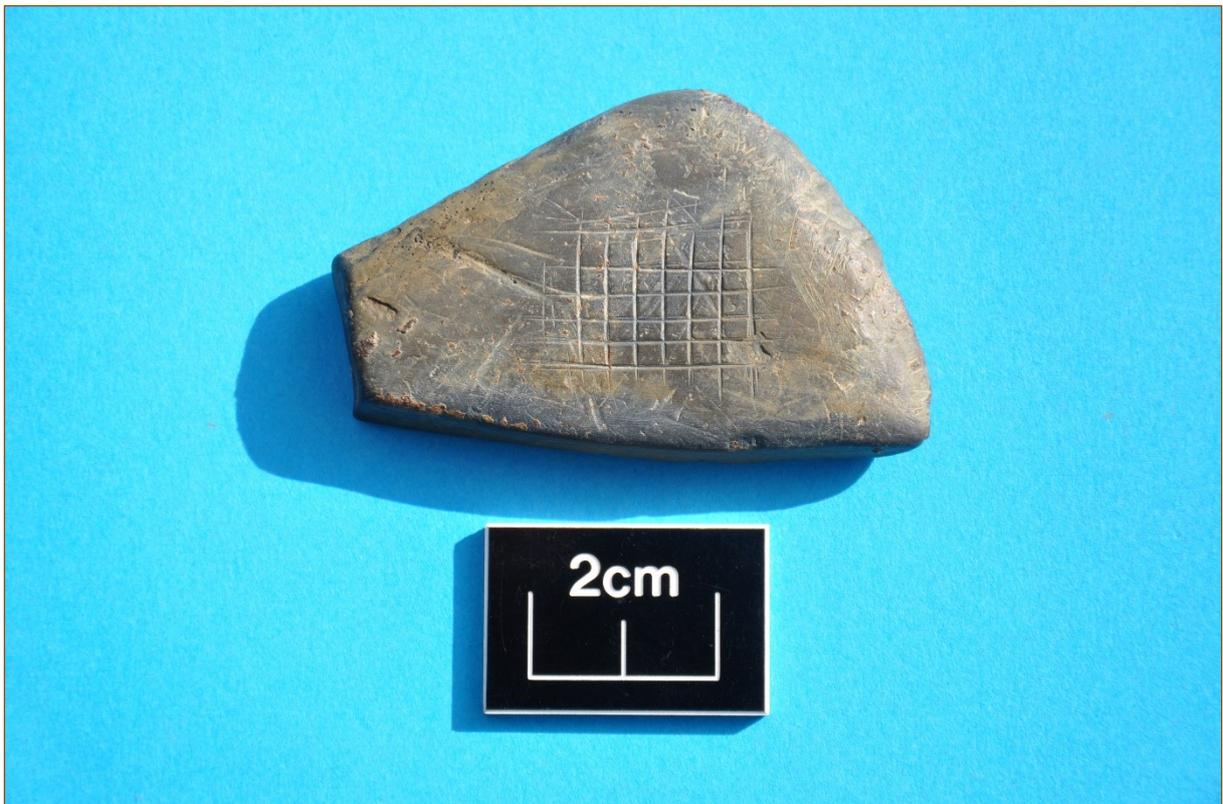
*Fig. 43 Flint.*



*Fig. 44 Shale flake.*



*Fig. 45 Small stone balls.*



*Fig. 46 Grid-incised stone.*



*Fig. 47 Fragments of bone-comb side plates.*



*Fig. 48 Bone comb.*



*Fig. 49 Bone comb.*



*Fig. 50 Bone handles.*



*Fig. 51 Iron nails.*



*Fig. 52 Iron horse-bit link.*



*Fig. 53 Iron link fitting.*



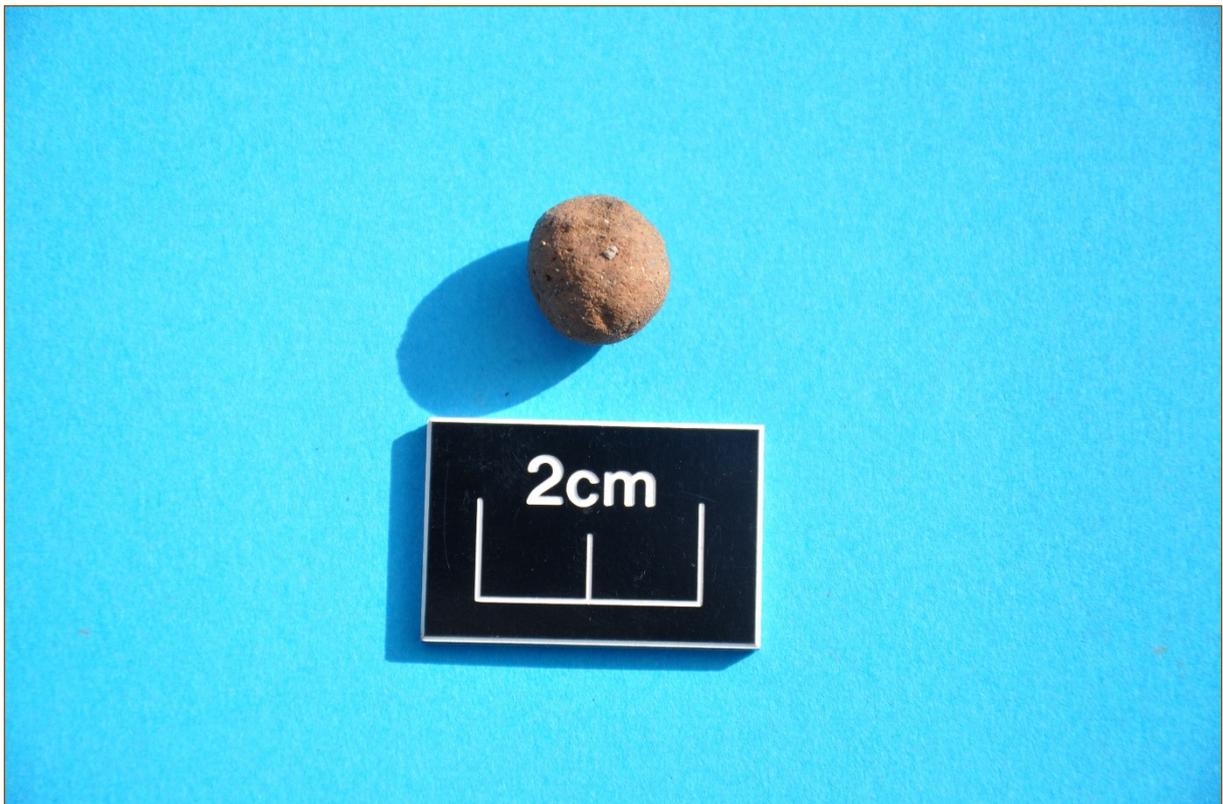
*Fig. 54 Iron blades.*



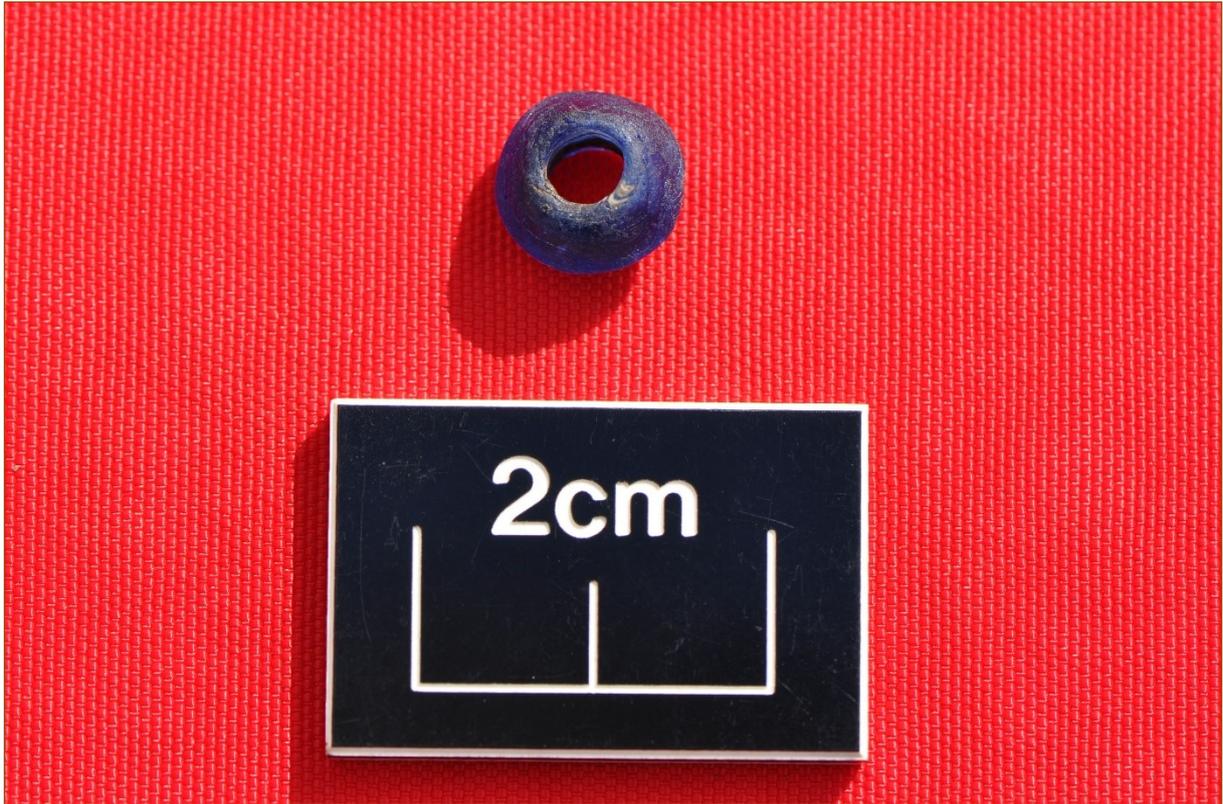
*Fig. 55 Socketed iron arrowhead.*



*Fig. 56 Bronze dress pins.*



*Fig. 57 Clay ball.*

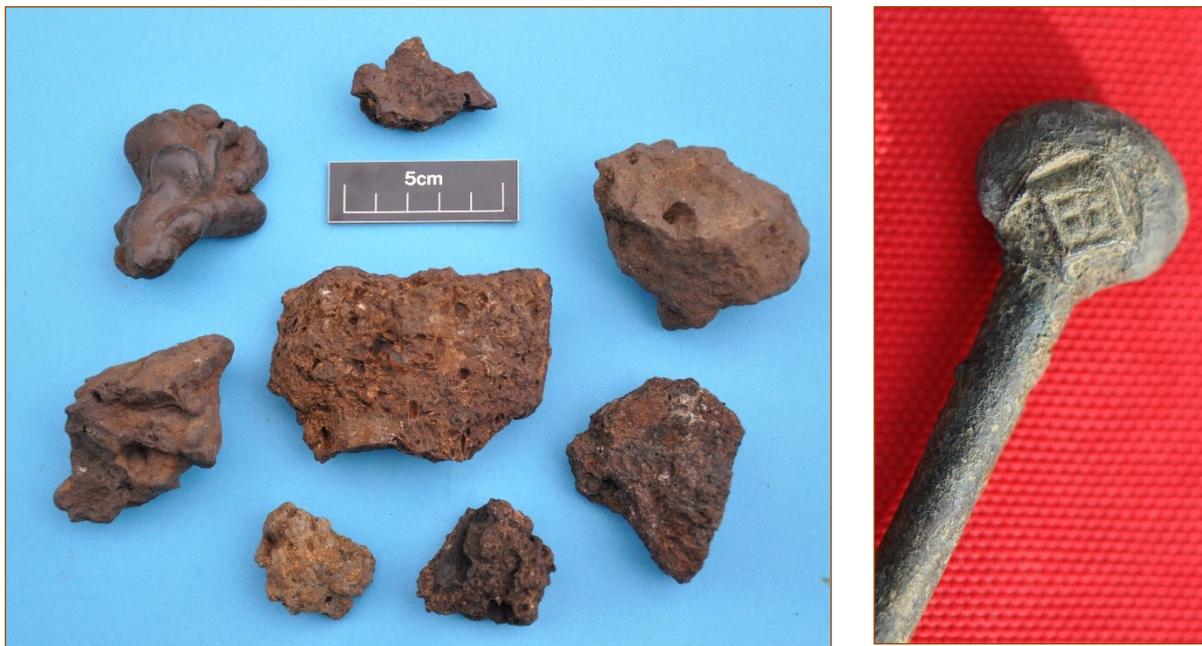


*Fig. 58 Blue glass bead.*



*Fig. 59 Lead shot.*

These artefacts reflect something of the activities that took place within the cashel, and the status of its occupants. An assemblage of slag weighing 1030g (Fig. 60), two small fragments of probable furnace lining, the whetstones, hammerstones and anvil stones reflect metalworking in the eastern half of the cashel. This is supported by the excavation of an iron-working area in the east end of Cutting G in 2016. It is possible, if not probable, that the metal artefacts recovered during excavation were manufactured at Caherconnell. The pinhead of one of the **Cutting K** stick-pins (Fig. 60) bears very similar decoration to the silver finger ring found in Cutting F, suggesting that they were made by the same person or workshop. Non-ferrous metalworking did occur on site, so they may have been made at Caherconnell. The range of miscellaneous metal and bone tools were undoubtedly employed in a number of craft activities taking place within the enclosure.



*Fig. 60 Metalworking slag, and decorated head of bronze pin.*

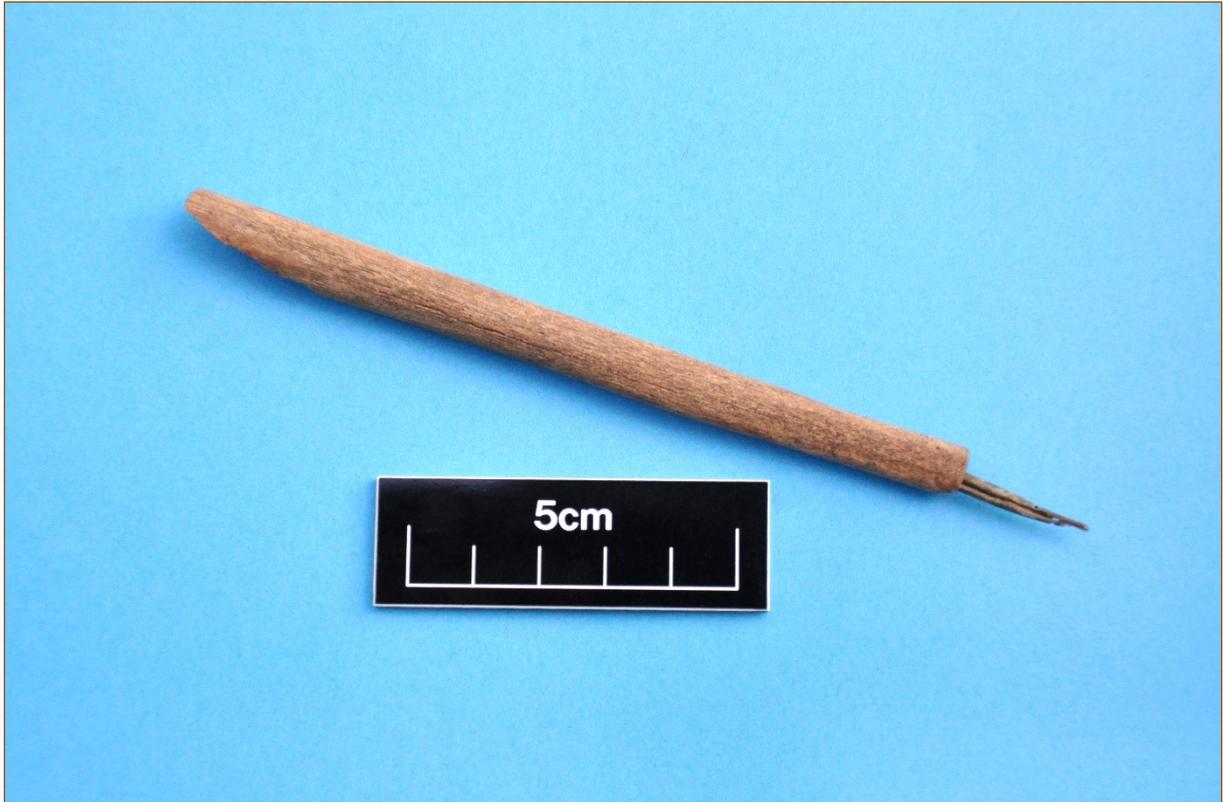
Woodworking is suggested by the presence of iron nails and other tools. Many, if not all, of the stone objects were probably made locally, though (with the exception of possible lithic debitage) there is not much definite proof of this. A circular shale core from **Cutting K**, however, may represent waste from lathe-turned production of shale bracelets, fragments of which have been found at Caherconnell. The plentiful supply of raw material, a few partially-worked fragments (from 2011, 2016, 2017, 2018, and 2019), and a range of tools and finished items (combs, pins, spindle-whorls, beads, gaming-pieces, points and needles) suggest that bone-working occurred at Caherconnell (Fig. 61). In addition, a deliberately sawn/cut section of deer antler (comprising two tines) was uncovered in cutting E, and a single cut tine in **Cutting L.A.**



*Fig. 61 Evidence of on-site bone- and antler-working.*

The bone and stone spindle-whorls from cuttings B, D, E, F, G and I, the probable weaving sword from Cutting B, the bone points/awls and the sewing needles from Cuttings C, D, F, G, H and I, the stone needle punch from Cutting G, the drawknives from Cutting I, and the plentiful raw material reflect textile and leather-working, while the quern fragments, sickle, smaller curved blades, and charred grains reflect food harvesting and processing.

Less 'domestic', high-status activities are represented by bodkin/armour-piercing arrowheads from Cuttings D, E, H and I, the barbed arrowheads from Cuttings F and I, the long spike-like arrowhead from Cutting K (Fig. 55), the harp-pegs from Cuttings A and H (and perhaps the shaft/peg from Cutting E), the gaming pieces from Cuttings D1 and J (Fig. 66) and fragment of another possible gaming piece from Cutting E, the slate pencil from Cutting G, and the bone/antler-and-bronze pen from **Cutting K** (Fig. 62). Trade is evident in the presence of coins, bronze, silver, glass and amber at the site, and possibly in the representation of a ship on the whetstone discovered in 2014. The red, white and blue glass bead from 2016 clearly represents trade, having originated in Venice in the late 15<sup>th</sup> or 16<sup>th</sup> century, as does the 10<sup>th</sup>-century Baltic amber bead. The clear melon bead discovered in 2017 and the amber stud from **Cutting L.A** (Fig. 63) probably also have Scandinavian origins.



*Fig. 62 Ink pen of bone/antler and bronze.*



*Fig. 63 Small amber stud.*

### Samples (Appendix 4)

Bulk soil samples were taken from nine deposits, including a pit, kiln and hearth fills. These will be 100% sieved and floated for charred plant remains and wet sieved for small artefacts and ecofacts. A small collection (four samples) of charred seeds/grains and hazelnut-shell fragments was recovered during excavation.



*Fig. 64 Samples of marine shell.*

Seven small samples of marine shells (Fig. 64), twenty-three (mostly large) samples of animal bone, three samples of coprolite, and twelve samples of charcoal were recovered (Fig. 65). 1030g of metallurgical slag (approximately twenty-three individual samples) and two small pieces of highly-fired and vitrified possible furnace lining were recovered in 2019 (Fig. 60). The slag, animal bone and shell will be examined as single (large) assemblages now that the cashel excavations have concluded. Charcoal samples are retained for species identification.



*Fig. 65 Samples of coprolite and charcoal.*

## Discussion

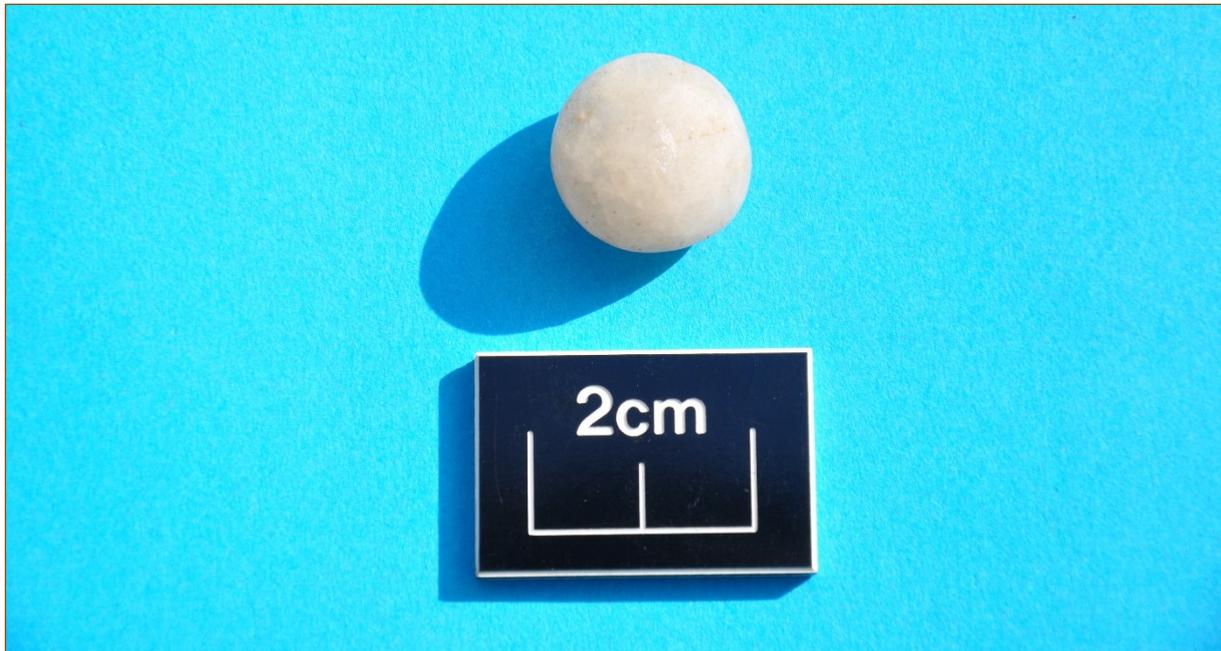
### *Phasing*

Thus far, Phase 1 is represented only in Cutting D1 (2013), by the pre-cashel burial mound, the cists within it, and the human remains preserved inside the cists. No grave goods were recovered. Radiocarbon dating places these burials in the late 6<sup>th</sup> to early 7<sup>th</sup> century AD.

Phase 2 dates to the second half of the 7<sup>th</sup> century so there is only a slight chance of an overlap between phases 1 and 2. It comprises the remains of a fire-pit found in Cutting B. No Phase 2 features were identified in 2019.

Phase 3 levelling and construction was represented in all three cuttings by the construction of the cashel wall directly on bedrock. This included the building of wall steps in **Cuttings J** and **L.A.**

Phase 4 activity, the earliest occupation phase, is marked by the construction and use of the 10m-diameter central circular house (115), a smithy in Cutting G, non-ferrous metalworking in Cutting F/H1, a large midden in Cutting I, post-settings and a pit in **Cutting J**, and a cereal-drying kiln in **Cutting K**. Definite Phase 4 artefacts in 2019, derived from context (36) etc., include iron knives and nails, bronze dress pins, stone quern fragment, rubbing/polishing stone, quartz gaming piece (Fig. 66), shale flake, small ball or sphere, and chert and flint lithics, bone handle and comb fragments, and a small flat-backed amber stud.



*Fig. 66 Quartz gaming piece.*

Features from Phase 5, the middle occupation, include the remnants of the slab surface (33), and the possible continued use of the cereal-drying kiln in **Cutting K**, all covered/surrounded by occupation layer (16). The slab surface, where surviving, appears to have been used to create a more level living surface inside the cashel, levelling off areas of high bedrock,

especially in the open space inside the cashel entrance on the east. Artefacts from the occupation layers include two anvil/work stones, a hammerstone, rubbing stone and polishing stone, whetstones, small stone ball or sphere, grid-incised stone, chert and flint lithics, bone-comb fragments, partly worked bone, bone handles, decorated buckle tongue (Fig. 67), iron nails and shaft, bronze pins, and a writing implement/pen of bone/antler and bronze (Fig. 62).



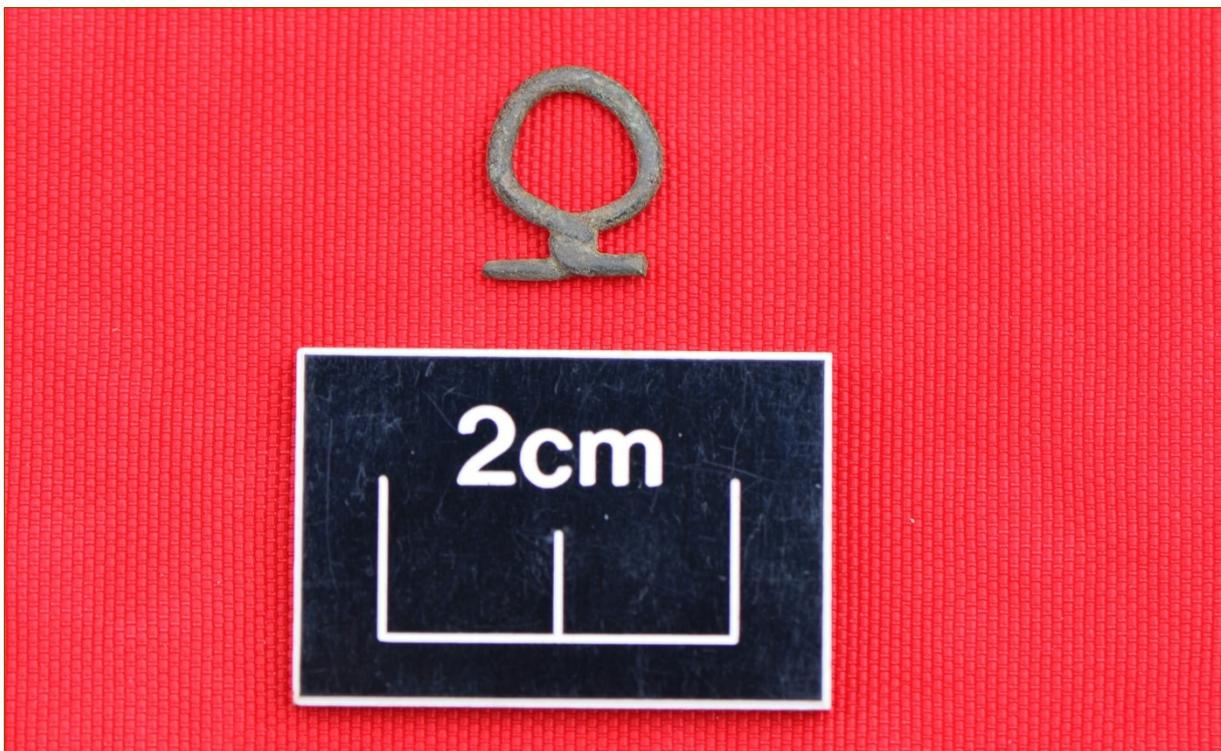
*Fig. 67 Decorated bone buckle tongue.*

Phase 6 activity includes laying of slabs (28) in **Cuttings K and L.A.** The slab surface suggests a yard surface that had become muddy and required covering/stabilising in places. Also relevant are the burnt deposit and remains of a rectangular structure in **Cutting K.** Finds from Phase 6, the late occupation – occupation layer (25) etc. – include whetstones, shale core, chert and flint lithics, cut-bone piece and bone-comb fragments, iron nails, knives, unidentified objects, arrowhead and horse-bit fragment, iron and bronze fragment (Fig. 68), small fired clay ball, bronze pins, and blue glass bead.



*Fig. 68 Corroded iron and bronze object/fragment.*

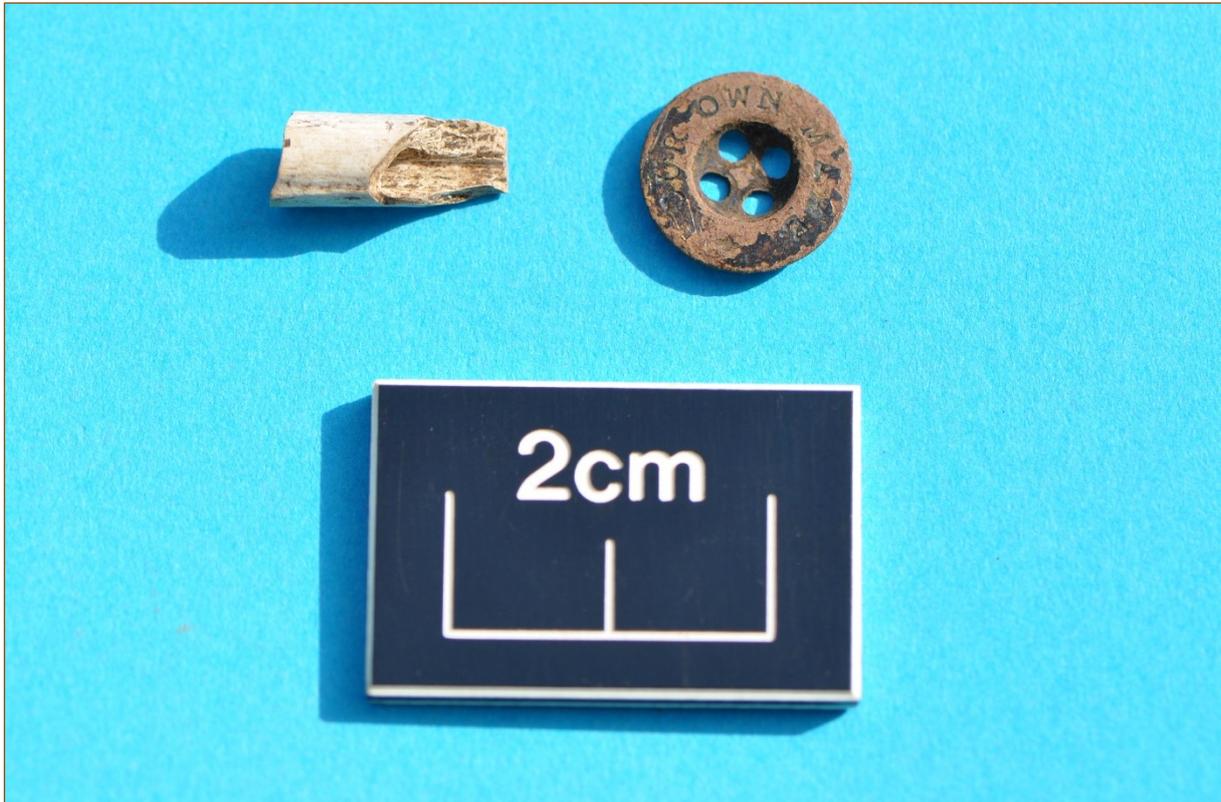
The final occupation, Phase 7, is represented by the construction and use of the wall crossing the interior of the cashel (48), and the wall (247) linking it to the cashel wall. Also occurring at this time was the semi-circular structure in **Cutting K**. The occupation material from this phase (23 etc.) contained a quern fragment, whetstone, chert and flint, an iron nail and small linked fitting, two bronze pins, a small bronze dress loop (Fig. 69), and lead shot.



*Fig. 69 Bronze dress loop.*

Phase 8 is marked by the collapse of stone from the upper reaches of the cashel wall (22 etc.), and the clearance that occurred in **Cutting J** (and adjacent parts of cuttings G, H and I) to

provide building stone for structure (195) in Cutting H. This phase marks a change in cashel use, from human habitation to animal enclosure. Finds from post human-occupation Phase 8 layers in **Cutting J** include a fragment of a clay pipe, and a metal button dated *c.* 1916 (Fig. 70).



*Fig. 70 Fragment of clay pipe and brass button.*

### *Chronology*

With a growing number of radiocarbon dates obtained so far, a tentative chronology is proposed for the various phases identified above (Table 1). Future radiocarbon dates will, no doubt, help refine this scheme. Phase 1, late 6<sup>th</sup>/early 7<sup>th</sup> century AD, probably represents the earliest evidence so far excavated though, stratigraphically, it is constructed on bedrock, similar to the fire-pits from Phase 2 (Cutting B) and Phase 4 (Cutting G). Phase 2, represented by the fire-pit excavated in 2011, has produced a radiocarbon date in the 7<sup>th</sup> century AD. This feature is cut into bedrock and pre-dates the construction of the cashel by several hundred years. The square enclosure located 100m south of the main cashel was in use between the 7<sup>th</sup> and 9<sup>th</sup> century AD (10E119), its occupants possibly responsible for this early activity. A 7<sup>th</sup>/8<sup>th</sup> century date from an animal-bone fragment recovered from beneath the cashel wall in 2015 may also reflect such activity.

## 10E087 C14 dates

### Phase 1

6<sup>th</sup>/7<sup>th</sup> century AD

- c.(92) from 2013, Cutting D1 – Adult female  
UBA-24260 **cal AD 541-645** (2 sigma, 1.000)  
c.(86) from 2013, Cutting D1 – Infant  
UBA-24261 **cal AD 535-649** (2 sigma, 0.972)

### Phase 2

7<sup>th</sup> century AD

- c.(42) from 2011, Cutting B – lower fill of fire-pit  
UBA-18915 **cal AD 641-689** (2 sigma, 0.986)  
c.(37) from 2015, Cutting F – under cashel wall  
UBA-30797 **cal AD 666-778** (2 sigma, 0.901)

### Phases 3/4

10<sup>th</sup>/11<sup>th</sup> century AD

- c.(65) from 2007, trial cutting – deposit on bedrock  
UBA-8564 **cal AD 967-1046** (2 sigma, 0.903)  
c.(37) from 2012, Cutting C – levelling/occupation layer  
UBA-24259 **cal AD 950-1053** (2 sigma, 0.761)  
c.(115) from 2014, Cutting E – hazelnut immediately beneath circular-house wall  
UBA-27545 **cal AD 971-1047** (2 sigma, 0.914)  
c.(144) from 2015, Cutting F – lowest fill of rock-cut pit  
UBA-30795 **cal AD 798-972** (2 sigma, 0.915)  
c.(171) from 2016, Cutting G – metalworking hearth  
UBA-33277 **cal AD 876-1015** (2 sigma, 0.994)  
c.(225) from 2017, Cutting H – small circular structure  
UBA-36020 **cal AD 941-1017** (2 sigma, 0.749)  
c.(245) from 2017, Cutting H1 – gryke/drain  
UBA-36023 **cal AD 864-992** (2 sigma, 0.971)

### Phase 5

10<sup>th</sup>/11<sup>th</sup> century AD

- c.(16) from 2011, Cutting B – occupation layer  
UBA-18914 **cal AD 981-1045** (2 sigma, 0.939)  
c.(102) from 2015, Cutting E – immediately beneath rectangular-house wall  
UBA-27544 **cal AD 983-1049** (2 sigma, 0.820)

### Phase 6

11<sup>th</sup> – 14<sup>th</sup> century AD

- c.(55) from 2007, trial cutting – pre-house occupation layer  
UBA-9068 **cal AD 1044-1099** (2 sigma, 0.452) and **1147-1210** (2 sigma, 0.401)  
c.(18) from 2010, Cutting A – under Phase 6 entrance slabs  
UBA-18913 **cal AD 1285-1326** (2 sigma, 0.419) and **1344-1395** (2 sigma, 0.581)  
c.(25) from 2011, Cutting B – occupation layer  
UBA-18916 **cal AD 1075-1155** (2 sigma, 0.673)  
c.(190) from 2016, Cutting G – hearth in annexe  
UBA-33278 **cal AD 1063-1154** (2 sigma, 0.676)  
c.(25) from 2016, Cutting G – occupation layer  
UBA-32902 **cal AD 1150-1225** (2 sigma, 0.869)  
c.(222) from 2017, Cutting H – burnt spread  
UBA-36019 **cal AD 1147-1224** (2 sigma, 0.770)

### Phase 7

15<sup>th</sup> – 17<sup>th</sup> century AD

- c.(57) from 2007, trial cutting – structure A occupation  
UBA-8562 **cal AD 1442-1525** (2 sigma, 0.653) and **1556-1632** (2 sigma, 0.347)

Table 1. Radiocarbon dates from the cashel

(after Reimer, P.J. et al. 2009 *Radiocarbon* 51, 1111-1150 and Reimer, P.J. et al. 2013 *Radiocarbon* 55, no.4).

Phases 3 and 4 saw the construction and initial use of the cashel, with a date of the 10<sup>th</sup>/11<sup>th</sup> century now suggested by four radiocarbon dates, and possibly a fifth whose range extends well into the 10<sup>th</sup> century (from the base of the rock-cut pit excavated in 2015). The finds do not disagree with this date, and the identification of two Congals in the records of the late 10<sup>th</sup> century support it (see below). The middle occupation of Phase 5 was also radiocarbon dated to the 10<sup>th</sup>/11<sup>th</sup> century, while the late occupation of Phase 6 produced radiocarbon dates of 11<sup>th</sup> to 14<sup>th</sup> century, and two silver coins of 13<sup>th</sup>/14<sup>th</sup>-century AD date. No gaps in use have been identified during excavation, with no sod layers or buried ground surfaces present in the stratigraphy. In addition, continuity of use is reflected in the close positioning of outdoor hearths inside the northwest wall of the cashel through phases 4, 5 and 6 (as excavated in Cutting H1, 2017).

The final occupation layers of Phase 7 have yet to be radiocarbon dated in cuttings A–L.A. However, the dressed entrance stones, jetton and coins from 2015, and Venetian bead from 2016, all suggest a 15<sup>th</sup>/16<sup>th</sup>-century date for this phase, making it roughly contemporary with the 2007 radiocarbon dates for Structure A. All of this suggests a relatively tight sequence for phases 3 through 7, from the late 10<sup>th</sup> to the late 16<sup>th</sup>/early 17<sup>th</sup> century AD, with no obvious gaps yet visible in the dating evidence (or stratigraphy).

Phase 8 post-dates all of these, dating from the 17<sup>th</sup> century to modern times. Radiocarbon dates have not been obtained for these upper layers, though a late 17<sup>th</sup>-century coin was recovered in 2017 and an early 20<sup>th</sup>-century coin in 2019.

This working chronology can be tied to known historical/political events in the area. A 10<sup>th</sup>/11<sup>th</sup>-century date might suggest construction of the cashel by a branch of the Dál Cais (Uí Thoirdelbaig) who were asserting control over the native Corcomruad at that time. Two ‘Congals’ (*Cathair Congal* possibly = Caherconnell) are present in the historical records from this time – one recorded as lord of the native Corcomruad ruling family, the other a brother of one of the imposed Dál Cais kings (though these may actually be the same person). Surviving medieval documents indicate that Caherconnell was held by descendants of Uí Thoirdelbaig, the O’Loughlins, right up to the start of the 17<sup>th</sup> century (1607). It was then briefly held by the O’Briens, before being taken from them by the English in 1641 and given to the Comyns, ‘transplanted papists’ from Limerick (Comber and Hull 2010, 135–7). The end of O’Loughlin (most likely) or O’Brien ownership probably marked the start of Phase 8, the movement away from human occupation of the cashel.

## **Conclusion**

Excavations to date clearly demonstrate the significance of this site, and its potential to provide much-needed information on native settlement in medieval Ireland. The recovered evidence points to continuity of native tradition – the incorporation of ancestral burials into the settlement, the deliberate use of a centuries-old native settlement form, the continuation of long-established processes such as metalworking, textile-production and grain processing, and the use of traditional artefact types such as the bone comb, bronze pin, and rotary quern. The

curious lack of pottery from the cashel excavations reinforces this idea of native tradition. That this may have been a deliberate choice might be implied by evidence that the occupants did have access to non-traditional/‘intrusive’ items, such as the lead shot found in the cashel in 2010 and 2017, the German jetton and the English coins (13<sup>th</sup>, 14<sup>th</sup> and 16<sup>th</sup> century) found in the doline outside the cashel in 2008, within the 15<sup>th</sup>/16<sup>th</sup>-century house in 2015 and inside the rock-cut pit and structure (180) in 2018, and the Venetian bead found in 2016. Other items of Anglo-Norman/English/Continental origin could surely have found their way to the cashel if desired by its occupants. The pottery absence has been confirmed in the final excavations of the site this season, reinforcing the idea that the O’Loughlins of Caherconnell made a deliberate effort to assert their native tradition in the face of increasing political pressure from beyond their territory.

### **Further work**

Artefacts in need of conservation will be x-rayed, cleaned and conserved by a recognised conservator (Susannah Kelly UCD). This process has already commenced, with all metal artefacts excavated to the start of 2019 having been x-rayed and examined by the conservator. With the exception of the nails and a few miscellaneous pieces, all have been conserved, and some of the unconserved pieces have been deemed unworthy of conservation by Susannah Kelly.

The artefact catalogue and NMI database will be completed, and all artefacts physically numbered and packaged to museum standards for eventual transfer to the NMI.

In the coming year, the slag and related material will be examined by an archaeometallurgist (possibly Dr. Gerry McDonnell who has examined the material from the square enclosure 10E119 or Dr Paul Rondelez). The considerable animal-bone assemblage is currently the subject of a PhD thesis at UCC. Marine and hazelnut shells will be sent for specialist analysis. The flint and chert artefacts will also be catalogued and reported (by Dr. Noel McCarthy or Dr. Killian Driscoll who has examined the material from the square enclosure 10E119). A specialist will also be sought for the coprolite samples. The soil samples and resulting materials will also be processed and reported on by specialists.

The author will commence general post-excavation research, artefact research, artefact photography and illustration as time permits during the academic year. All of this and the specialist reports will be compiled into a final site report, though this may take longer than the normal one year. A post-excavation update report will, however, be submitted to the NMS in due course.

Samples (all animal bone) for radiocarbon dating will be selected from the following contexts and submitted to Queen’s University Belfast for AMS radiocarbon dating.

Context 280, fill of pit (281) in **Cutting J** [sample 795]

Context 288/9, directly under burning in semi-circ. structure **Cutting K** [sample 829]

Context 36, base of primary occupation material in **Cutting L.A** [sample 832]

Context 297, kiln fire-box in **Cutting K** [sample 859]

? Context 23, context-reliability uncertain, **Cutting K** [sample 807]

Preparation of the final archaeological report, suitable for editing for publication, has now commenced. Due to the number and large size of the specialist reports, artefact illustrations etc. required at post-excavation stage, the final report may not be completed within the normal one-year timeframe. Interim reports/articles will be published, and public talks delivered, during the post-excavation phase of the project. Annual excavation reports are available online via the Caherconnell Archaeological Field School website ([www.caherconnell.com](http://www.caherconnell.com)).

A summary of the findings of the excavation is being submitted/uploaded to *Excavations 2019*.

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Caherconnell Archaeological Field School  
August 2019



## References

- Comber, M, (ed.), 1999 *Archaeology of the Burren, T.J. Westropp. Prehistoric Forts and Dolmens in North Clare*. Ennis, Clasp Press
- Comber, M. 2005, 2006, 2008 *Ringforts and the settlement landscape of the Burren in the first millennium AD*. 3 volumes. Reports submitted to the Heritage Council of Ireland.
- Comber, M. 2011 ‘Caherconnell, Co. Clare – a cashel of continuous use?’ *The Other Clare* 35, 20–5.
- Comber, M. 2011 ‘Archaeological excavations at Caherconnell.’ *Burren Insight* 3, 25–6.
- Comber, M. and Hull, G. 2010 ‘Excavations at Caherconnell, Burren, Co. Clare. Implications for cashel chronology and Gaelic settlement.’ *Proceedings of the Royal Irish Academy*, 110C, 133–71.
- DAHGI, 1999a, *Framework and Principles for the Protection of the Archaeological Heritage*, Department of Arts, Heritage, Gaeltacht and the Islands, Govt. of Ireland, Stationary Office, Dublin
- DAHGI, 1999b, *Policy and Guidelines on Archaeological Excavation*, Department of Arts, Heritage, Gaeltacht and the Islands, Govt. of Ireland, Stationary Office, Dublin
- Gibson, B, 1990, *Tulach Commáin: A View of an Irish Chieftdom*. UCLA, unpublished PhD thesis. UMI Dissertation Services
- Hencken, H. O' N, 1938, ‘Cahercommaun, a stone fort in County Clare’, *Journal of the Royal Society of Antiquarians of Ireland* 68, 1-82. Dublin
- Hull, G. 2011 ‘A Bronze Age house on the Burren.’ *Archaeology Ireland* 25 no. 3, 11–13.
- Hull, G. and Comber, M. 2008 ‘Caherconnell, Co. Clare, and cashel chronology.’ *Archaeology Ireland* 22, no. 4, 30–33.
- National Museum of Ireland, 2010, Advice Notes for Excavators, unpublished guidelines, National Museum of Ireland, Dublin
- O’Brien, W. 2009 *Local Worlds. Early Settlement Landscapes and Upland Farming in South-west Ireland*. Cork, Collins Press.
- Westropp, T.J. 1899 ‘Prehistoric remains in the Burren, Co. Clare.’ *Journal of the Royal Society of Antiquaries* 9, no. 4, 367–84.

## Appendix 1A: List of Cutting J Contexts

No.	Description	Cutting	Grid square	Sample	Date assigned
0	Bedrock	ALL	ALL	-	2010
3	Sod	ALL	ALL	41, 75	2010
4	Humus	ALL	ALL	Multiple	2010
16	Occupation layer, 11 <sup>th</sup> century	ALL	ALL	Multiple	2010
22	Stones tumbled from cashel wall	Multiple	Multiple	-	2010
36	Occupation layer, 10 <sup>th</sup> century	ALL	ALL	Multiple	2011
267	Disturbed late stony material	J	71-6/184-190	783	30/05/19
268	Surface beneath tumble (22)	J	70-82/182-90	-	05/06/19
269	Modern organic layer	J	70-82/182-90	-	06/06/19
270	Steps in cashel wall	J	74/186	-	06/06/19
271	Perforated stone	J	80/182	-	06/06/19
272	Fill of shallow pit	J	82/186	791	12/06/19
273	Cut of shallow pit	J	82/186	-	12/06/19
274	Fill of solution hole (east)	J	80/182	-	13/06/19
275	Solution hole (east)	J	80/182	-	13/06/19
276	Fill of solution hole (middle)	J	80/182	-	13/06/19
277	Solution hole (middle)	J	80/182	-	13/06/19
278	Fill of solution hole (west)	J	80/182	-	13/06/19
279	Solution hole (west)	J	80/182	-	13/06/19
280	Fill of pit (281)	J	72/188	792-4	14/06/19
281	Rock-cut pit	J	72/188	-	14/06/19

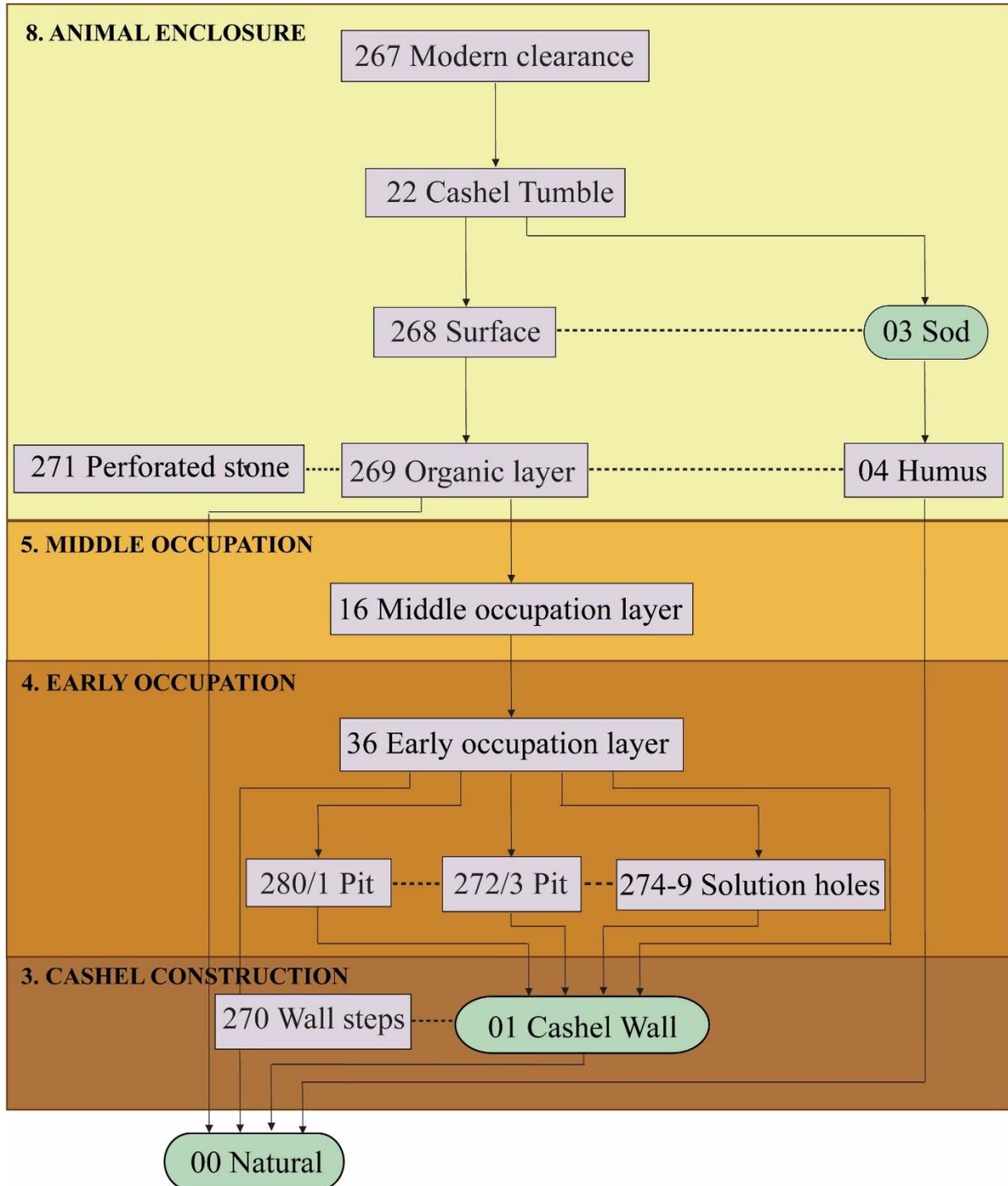
## Appendix 1B: List of Cutting K Contexts

No.	Description	Cutting	Grid square	Sample	Date assigned
0	Bedrock	ALL	ALL	-	2010
3	Sod	ALL	ALL	41, 75	2010
4	Humus	ALL	ALL	Multiple	2010
16	Occupation layer, 11 <sup>th</sup> century	ALL	ALL	Multiple	2010
22	Stones tumbled from cashel wall	Multiple	Multiple	-	2010
23	Stony occupation material, 15 <sup>th</sup> /16 <sup>th</sup> century	ALL	ALL	Multiple	2011
25	Gravelly occupation layer, 11 <sup>th</sup> – 14 <sup>th</sup> century	ALL	ALL	Multiple	2011
28	Upper slab surface	ALL	ALL	36	2011
33	Lower slab surface	ALL	ALL	-	2011
36	Occupation layer, 10 <sup>th</sup> century	ALL	ALL	Multiple	2011
284	Compact tumble from cashel wall	K	92-8/212-14	-	9/7/19
286	Semi-circular structure	K	94-6/212-16	-	12/7/19
287	Use layer inside (286)	K	94/214	814	12/7/19
288	Stony surface beneath (286) and (287)	K	94/212-14	817, 818	12/7/19
289	Burning inside (286)	K	94/214	815	12/7/19
290	Stony surface under (23)	K	90-98/212-16	819-822	12/7/19
291	Rectangular structure	K	90-96/212-16	-	18/7/19
292	Deposit of burnt material	K	94/216	843	18/7/19
293	Stone setting inside structure (291)	K	92/214	-	19/7/19
294	Fill of (293)	K	92/214	-	19/7/19
295	Stone-built drain	K	90/214-16	-	24/7/19
296	Fill of drain (295)	K	90/214-16	-	25/7/19
297	Kiln fire	K	92/214	856	25/7/19
298	Kiln wall	K	90-92/214-16	-	29/7/19
299	Kiln fill	K	90/214-16	862	29/7/19
300	Localised burnt deposit inside kiln chamber	K	90/216	863	29/7/19

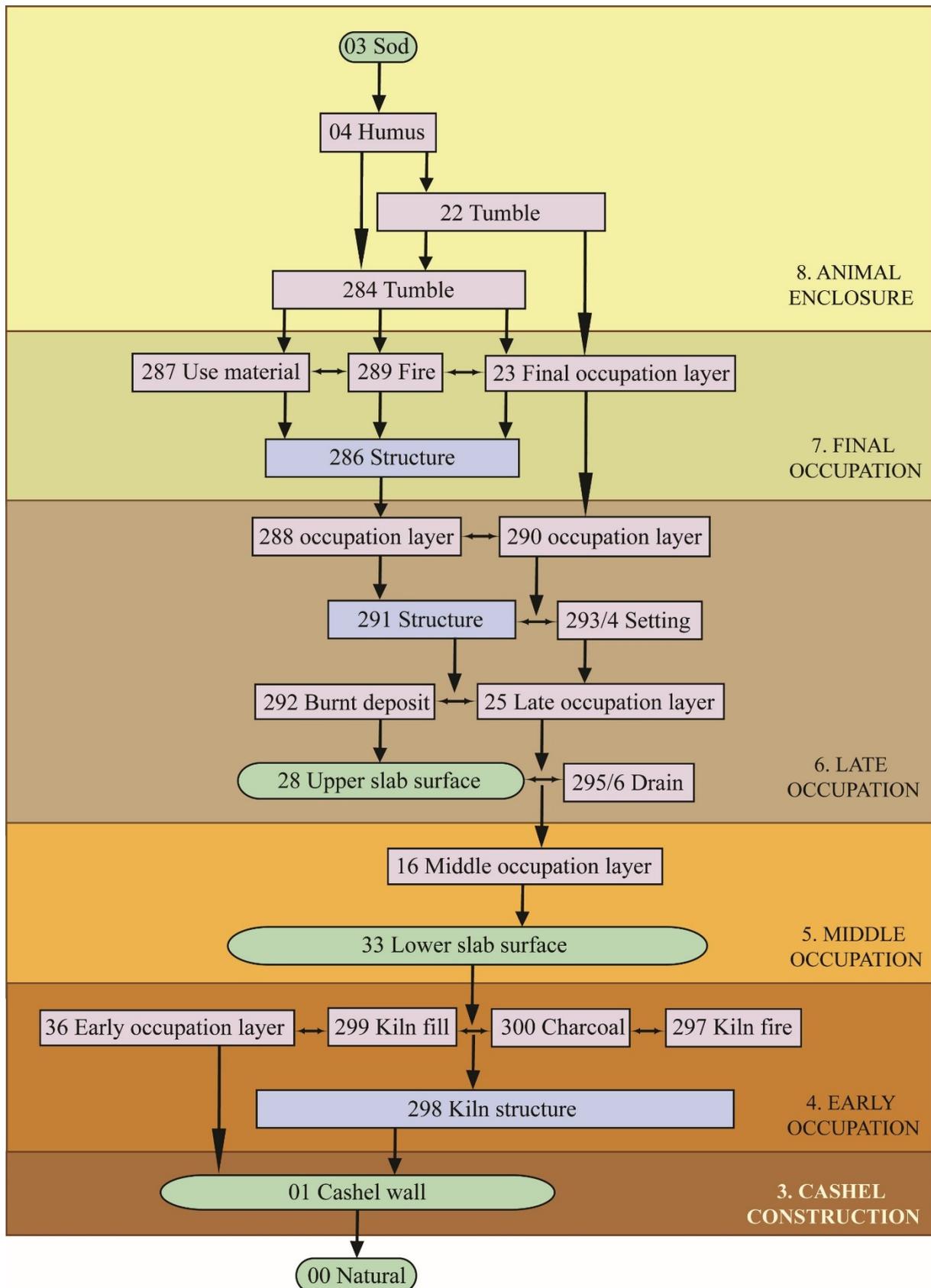
## Appendix 1C: List of Cutting L.A Contexts

No.	Description	Cutting	Grid square	Sample	Date assigned
0	Bedrock	ALL	ALL	-	2010
3	Sod	ALL	ALL	41, 75	2010
4	Humus	ALL	ALL	Multiple	2010
16	Occupation layer, 11 <sup>th</sup> century	ALL	ALL	Multiple	2010
23	Stony occupation material, 15 <sup>th</sup> /16 <sup>th</sup> century	ALL	ALL	Multiple	2011
25	Gravelly occupation layer, 11 <sup>th</sup> – 14 <sup>th</sup> century	ALL	ALL	Multiple	2011
28	Upper slab surface	ALL	ALL	36	2011
33	Lower slab surface	ALL	ALL	-	2011
36	Occupation layer, 10 <sup>th</sup> century	ALL	ALL	Multiple	2011
37	Levelling material, 10 <sup>th</sup> century	ALL	Multiple	Multiple	2011
282	Steps in cashel wall	L.A	104/200	-	19/06/19
283	Small deposit of mortar	L.A	104/198	802	21/06/19
285	Stony surface	L.A	100-104/198-200	-	10/07/19

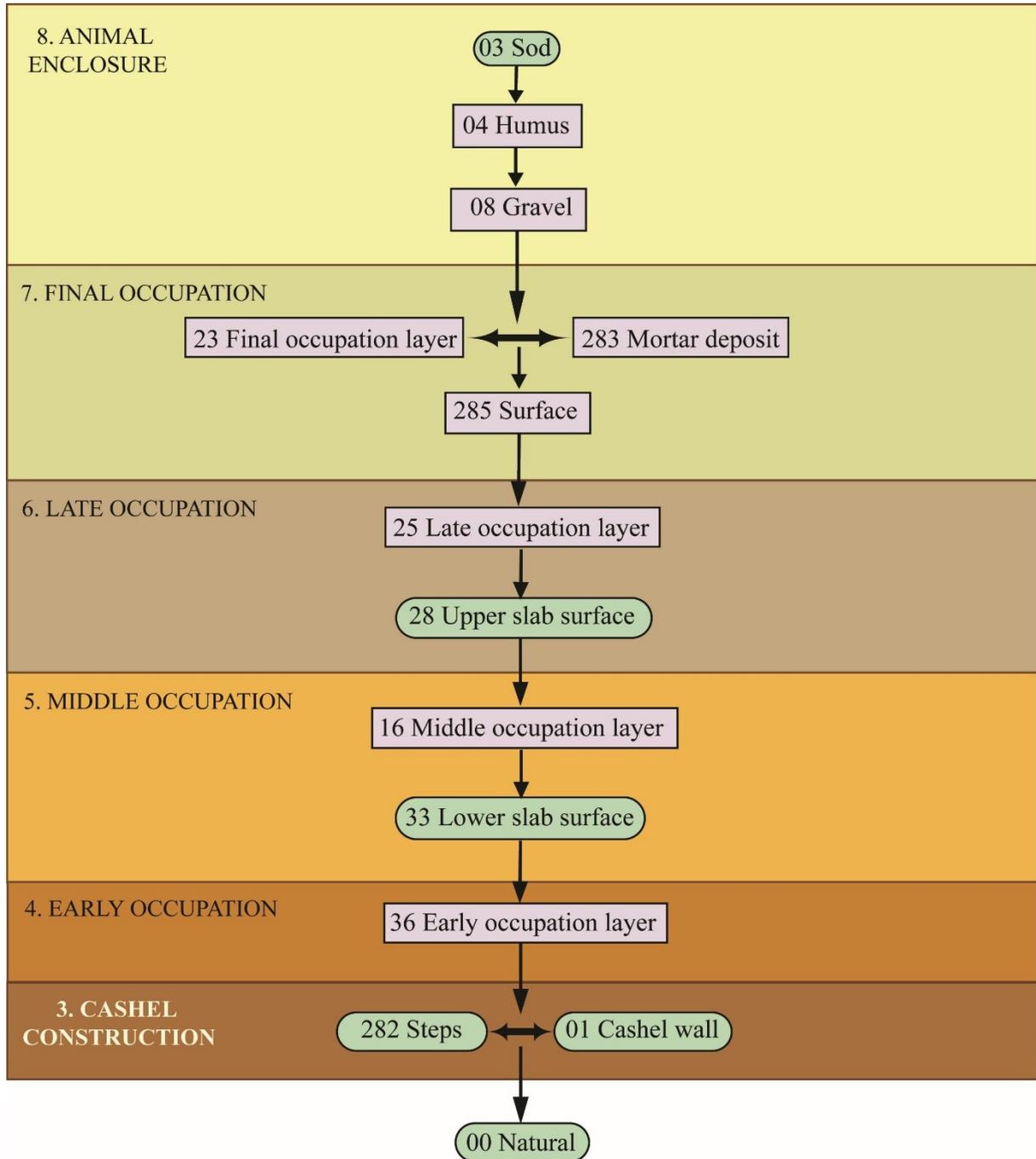
## Appendix 2A: Harris Matrix Cutting J



## Appendix 2B: Harris Matrix Cutting K



## Appendix 2C: Harris Matrix Cutting L.A



## Appendix 3A: List of Cutting J Artefacts

No.	Description	Cutting	Easting	Northing	Context	Date
1654	Clay-pipe fragment	J	73.32	188.89	268	6/6/19
1655	Metal button	J	79.81	184.15	269	6/6/19
1656	Iron nail	J	73.95	188.39	16	7/6/19
1657	Worked-bone fragment	J	74.18	188.30	16	7/6/19
1658	Looped iron fragment	J	73.46	189.74	36	11/6/19
1659	Chert core	J	73.61	190.20	36	11/6/19
1660	Shale flake	J	76.30	190.53	36	11/6/19
1661	Quartz gaming piece	J	82.85	185.49	36	11/6/19
1662	Limestone 'egg'	J	81.72	189.00	36	11/6/19
1663	Chert flake	J	83.16	184.91	36	11/6/19
1664	Comb fragment	J	74.03	189.39	36	12/6/19
1665	Iron nail	J	79.32	187.25	36	12/6/19
1666	Comb fragments	J	74.44	188.64	36	13/6/19
1667	Bronze stick-pin	J	76.80	188.90	36?	13/6/19
1668	Iron nail	J	76.93	188.72	25	13/6/19
1669	Iron object	J	75.84	190.40	36	13/6/19
1670	Possible bone handle	J	75.00	190.99	36	13/6/19
1671	Iron nail	J	76.42	188.31	36	13/6/19
1672	Flint	J	73.55	189.26	280	13/6/19
1673	Quern fragment	J	72.26	191.57	36	13/6/19

## Appendix 3B: List of Cutting K Artefacts

No.	Description	Cutting	Easting	Northing	Context	Date
1682	Iron link from horse-bit	K	90.56	208.99	25	9/7/19
1683	Iron nail	K	91.14	209.06	25	9/7/19
1687	Iron link fitting	K	94.35	214.46	23	10/07/19
1688	Chert flake	K	93.59	213.50	23	10/7/19
1689	Iron knife	K	97.83	213.47	25	11/7/19
1690	Whetstone	K	97.53	214.38	23	11/7/19
1691	Flint	K	Sieve	Sieve	23	11/7/19
1692	Bronze pin	K	97.94	213.63	23	11/7/19
1695	Bronze loop fastener	K	94.42	215.03	287	12/7/19
1697	Iron and bronze fragment	K	92.08	217.70	290	15/7/19
1699	Whetstone	K	93.86	213.54	25	16/7/19
1700	Iron arrowhead	K	96.79	214.60	290	16/7/19
1701	Whetstone	K	91.86	216.66	290	16/7/19
1702	Iron knife	K	91.86	216.66	290	16/7/19
1703	Tapering iron object	K	96.35	213.45	290	16/7/19
1704	Shale core?	K	96.40	214.54	290	16/7/19
1705	Iron nail	K	90.25	216.47	23	16/7/19
1706	Comb fragment	K	Sieve	Sieve	290	16/7/19
1707	Iron nail	K	90.11	208.35	25	17/7/19
1708	Iron object	K	89.49	211.88	25	17/7/19
1709	Comb fragment	K	Sieve	Sieve	290	17/7/19
1710	Iron knife	K	93.92	214.32	25	17/7/19
1712	Blue glass bead	K	90.20	211.66	25	17/7/19
1713	Comb fragment	K	Sieve	Sieve	25	17/7/19
1714	Comb fragment	K	Sieve	Sieve	25	17/7/19
1715	Bronze point/nib	K	97.56	214.61	16	17/7/19
1716	Comb fragment	K	90.26	211.50	25	17/7/19
1717	Iron knife	K	93.48	215.05	25	17/7/19
1718	Iron nail	K	89.81	213.20	25	17/7/19
1719	Iron knife	K	92.19	213.25	25	17/7/19
1720	Flint	K	Sieve	Sieve	25	17/7/19
1721	Iron object	K	93.00	214.41	25	17/7/19
1722	Comb fragment	K	Sieve	Sieve	25	17/7/19
1723	Comb fragment	K	93.38	215.64	25	18/7/19
1724	Comb fragment	K	Sieve	Sieve	25	18/7/19
1726	Bronze pin	K	91.32	212.25	25	18/7/19
1731	Flint	K	90.13	207.98	25	18/7/19

1732	Bronze pin	K	96.85	214.80	25	18/7/19
1733	Whetstone	K	93.86	213.10	25	18/7/19
1734	Comb fragment	K	Sieve	Sieve	25	18/7/19
1735	Bronze fitting	K	Sieve	Sieve	25	18/7/19
1736	Whetstone	K	90.46	215.73	16	22/7/19
1737	Possible whetstone	K	90.49	208.78	16	22/7/19
1738	Stone ball	K	89.96	210.39	16	22/7/19
1739	Iron nail	K	91.80	210.05	16	22/7/19
1740	Bronze pin	K	90.38	211.55	16	22/7/19
1741	Grid-incised stone	K	91.81	209.52	16	22/7/19
1742	Whetstone	K	91.52	213.38	16	22/7/19
1743	Lead shot	K	Sieve	Sieve	23	22/7/19
1744	Comb fragment	K	92.66	215.62	36	23/7/19
1745	Flint	K	93.26	213.32	16	23/7/19
1746	Hammerstone	K	94.26	213.06	16	23/7/19
1747	Polishing stone	K	93.60	212.93	16	23/7/19
1748	Pointed iron shaft	K	97.13	214.52	16	23/7/19
1749	Bone buckle tongue	K	97.56	214.31	16	23/7/19
1750	Comb fragment	K	97.98	213.71	16	23/7/19
1751	Comb fragment	K	95.41	214.30	16	23/7/19
1752	Chert core	K	93.24	216.86	16	24/7/19
1753	Rubbing stone	K	99.82	212.96	16	24/7/19
1754	Comb fragments	K	95.12	213.02	16	24/7/19
1755	Anvil stone	K	92.88	216.92	16	24/7/19
1756	Chert	K	91.07	208.15	36	24/7/19
1757	Comb fragment	K	Sieve	Sieve	16	24/7/19
1758	Comb fragment	K	Sieve	Sieve	16	24/7/19
1759	Pen shaft - bone/antler	K	97.56	214.61	16	24/7/19
1760	Bone handle	K	95.62	213.87	16	24/7/19
1761	Bone handle	K	92.76	215.16	16	24/7/19
1762	Comb fragment	K	Sieve	Sieve	36	25/7/19
1763	Chert scraper	K	91.62	209.50	36	25/7/19
1764	Iron nail	K	91.59	211.68	36	25/7/19
1765	Chert scraper	K	92.90	215.45	36	25/7/19
1766	Anvil stone	K	92.65	213.94	33	25/7/19
1767	Iron object	K	91.82	217.01	36	26/7/19
1768	Comb fragment	K	91.64	216.45	299/36	29/7/19
1769	Comb fragment	K	93.62	216.54	36	29/7/19
1770	Hammerstone	K	90.97	215.95	299/36	29/7/19
1771	Iron knife	K	97.02	215.46	36	29/7/19
1772	Comb fragment	K	95.71	216.29	36	29/7/19

1773	Iron knife	K	94.56	214.99	36	29/7/19
1774	Bronze pin	K	91.08	214.96	36	29/7/19
1775	Iron nail	K	90.02	217.96	36	29/7/19
1776	Comb	K	90.84	215.01	36	29/7/19
1777	Comb fragment	K	90.73	214.63	36	30/7/19
1778	Stone ball	K	94.45	216.76	36	30/7/19
1779	Rubbing stone	K	93.92	216.32	36	30/7/19
1780	Comb fragment	K	92.43	214.00	36	30/7/19
1781	Comb (almost complete)	K	91.44	216.54	36	30/7/19
1782	Chert point/arrowhead	K	95.76	213.56	36	30/7/19
1783	Comb fragment	K	Sieve	Sieve	36	31/7/19
1784	Comb fragment	K	Sieve	Sieve	36	31/7/19

### Appendix 3C: List of Cutting D and L.A Artefacts

No.	Description	Cutting	Easting	Northing	Context	Date
1674	Quern fragment	L.A	101.52	199.51	23	19/6/19
1675	Chert	L.A	105.23	199.53	25	19/6/19
1676	Chert scraper	L.A	104.92	200.30	25	20/6/19
1677	Iron blade fragment	L.A	104.21	200.84	25	20/6/19
1678	Bronze pin	L.A	103.00	200.49	25	20/6/19
1679	Clay ball	L.A	100.70	199.67	25	21/6/19
1680	Iron nail	L.A	100.46	200.87	25	21/6/19
1681	Iron nail	L.A	101.22	199.41	25	21/6/19
1684	Chert scraper	L.A	104.72	199.82	25	10/7/19
1685	Chert core	L.A	104.62	200.36	25	10/7/19
1686	Worked bone	L.A	103.16	200.48	25	10/7/19
1693	Comb fragment	L.A	104.24	199.95	16	12/7/19
1694	Bronze pin	L.A	102.34	200.80	16	12/7/19
1696	Chert scraper	L.A	101.73	199.62	16	15/7/19
1698	Comb fragment	L.A	Sieve	Sieve	16	15/7/19
1711	Amber?	L.A	102.69	200.11	36	17/7/19
1725	Chert	L.A	101.71	199.93	36	18/7/19
1727	Comb fragment	L.A	101.51	200.01	36	18/7/19
1728	Amber stud	L.A	103.36	200.49	36	18/7/19
1729	Chert blade	L.A	101.34	200.26	36	18/7/19
1730	Comb fragment	L.A	Sieve	Sieve	36	18/7/19
1785	Bronze pin	D	95.45	102.36	36	31/7/19
1786	Iron knife	D	95.31	102.25	36	31/7/19
1787	Cut antler tine	L.A	102.66	200.28	25	31/7/19

## Appendix 4A: List of Cutting J Samples

Sample no.	Description	Cutting	Easting	Northing	Context	Date
783	Slag	J	74.76	187.54	267	30/5/19
784	Marine shell	J	72-76	188-190	16	7/6/19
785	Charcoal	J	72-76	188-190	16	7/6/19
786	Animal bone	J	72-76	188-190	16	7/6/19
787	Animal bone	J	70-82	182-190	36	11/6/19
788	Charcoal	J	70-82	182-190	36	11/6/19
789	Marine shell	J	70-82	182-190	36	11/6/19
790	Slag	J	83.40	183.25	36	12/6/19
791	Animal bone	J	82	186	272	13/6/19
792	Bulk soil sample	J	72	188	280	14/6/19
793	Animal bone	J	72	188	280	14/6/19
794	Charcoal	J	72	188	280	14/6/19
795	Bone for C14, base of pit	J	72	188	280	14/6/19

## Appendix 4B: List of Cutting K Samples

Sample no.	Description	Cutting	Easting	Northing	Context	Date
807	Animal bone	K	90-100	212-218	23	11/07/19
808	Animal bone	K	90-100	212-218	23	12/07/19
809	Charcoal	K	90-100	212-218	23	12/07/19
813	Slag	K	94.30	213.62	25	12/07/19
814	Bulk sample	K	94	214	287	15/07/19
815	Bulk sample	K	94	214	289	15/07/19
816	Marine shell	K	90-100	212-218	23	15/07/19
817	Slag	K	95.36	214.71	288	15/07/19
818	Slag	K	95.08	214.28	288	15/07/19
819	Animal bone	K	90-98	212-216	290	15/07/19
820	Charcoal	K	90-98	212-216	290	15/07/19
821	Animal bone	K	90-98	212-216	290	16/07/19
822	Slag	K	95.79	214.07	290	16/07/19
826	Animal bone	K	88-100	206-218	25	16/07/19
827	Charcoal	K	88-100	206-218	25	16/07/19
828	Animal bone	K	88-100	206-218	25	17/07/19
829	Bone for C14, directly under (289)	K	94	214	(289)	17/07/19
830	Slag	K	90.50	211.10	25	17/07/19
834	Coprolite	K	88-100	206-218	25	17/07/19
835	Slag	K	90.32	210.46	25	17/07/19
836	Slag	K	92.16	208.28	25	18/07/19
837	Slag	K	92.18	212.45	25	18/07/19
838	Slag	K	Sieve	Sieve	25	18/08/19
842	Hazelnut	K	88-100	296-218	25	18/07/19
843	Bulk sample	K	94	216	292	19/07/19
845	Animal bone	K	88-100	206-218	16	22/07/19
846	Animal bone	K	88-100	206-218	16	22/07/19
847	Slag	K	91.70	211.70	16	22/07/19
848	Charcoal	K	88-100	206-218	16	22/07/19
849	Marine shell	K	88-100	206-218	16	22/07/19
850	Coprolite	K	88-100	206-218	16	22/07/19
851	Slag	K	91.34	212.85	16	22/07/19
852	Hazelnut	K	88-100	206-218	16	22/07/19
853	Slag	K	96.34	214.42	16	24/07/19
854	Animal bone	K	88-100	206-218	36	24/07/19
855	Charcoal	K	88-100	206-218	36	24/07/19
856	Bulk sample	K	92	214	297	25/07/19
857	Hazelnut	K	88-100	206-218	36	25/07/19

858	Coprolite	K	88-100	206-218	36	25/07/19
859	Bone for C14	K	92	214	297	29/07/19
860	Charcoal	K	92	214	297	29/07/19
861	Bulk sample, solid fragments of ash	K	92	214	297	29/07/19
862	Bulk sample	K	90	214-216	299	29/07/19
863	Bulk sample	K	90	216	300	29/07/19
864	Marine shell	K	88-100	206-218	36	29/07/19

### Appendix 4C: List of Cutting L.A Samples

Sample no.	Description	Cutting	Easting	Northing	Context	Date
796	Slag	LA	103.32	199.33	25	19/6/19
797	Slag droplets	LA	101.84	199.69	25	19/6/19
798	Animal bone	LA	100-104	198-200	23	19/6/19
799	Marine shell	LA	100-104	198-200	25	20/6/19
800	Animal bone	LA	100-104	198-200	25	20/6/19
801	Charcoal	LA	100-104	198-200	25	21/6/19
802	Bulk sample	LA	104	198	283	21/6/19
803	Slag	LA	101.02	200.60	25	21/6/19
804	Possible slag	LA	103.57	201.04	25	10/07/19
805	Slag	LA	103.57	201.04	25	10/07/19
806	Slag	LA	Sieve	Sieve	25	10/07/19
810	Animal bone	LA	100-104	198-200	16	12/07/19
811	Animal bone	LA	100-104	198-200	16	12/07/19
812	Charcoal	LA	100-104	198-200	16	12/07/19
823	Seeds/grains	LA	100-104	198-200	16	16/07/19
824	Animal bone	LA	100-104	198-200	36	16/07/19
825	Charcoal	LA	100-104	198-200	36	16/07/19
831	Animal bone	LA	100-104	198-200	36	17/07/19
832	Bone for C14, base of (36)	LA	102	198	36	17/07/19
833	Slag	LA	101.44	200.43	36	17/07/19
839	Furnace-lining fragments	LA	101.93	200.94	36	18/07/19
840	Slag	LA	100.42	201.31	36	18/07/19
841	Marine shell	LA	100-104	198-200	36	18/07/19
844	Possible slag	LA	101.35	199.72	36	19/07/19

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