

## N18 Gort to Crusheen Road Scheme



Site Name: Rathwilladoon 2 & 3

Ministerial Direction No.: 044  
Excavation Registration No.: E3656

Prehistoric Settlement

Final Report

On behalf of Galway County Council

Report Author: Ed Lyne  
December 2009

**IAC** Irish Archaeological  
Consultancy



## PROJECT DETAILS

<b>Project Reference No.</b>	A044
<b>Project</b>	N18 Gort to Crusheen Road Scheme
<b>Ministerial Direction Reference No.</b>	A044
<b>NMS Registration Number</b>	E3656
<b>Excavation Director</b>	Ed Lyne
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<b>Consultant</b>	Irish Archaeological Consultancy Ltd, 120b Greenpark Road, Bray, Co. Wicklow
<b>Client</b>	Galway County Council
<b>Site Name</b>	Rathwilladoon 2 and 3
<b>Site Type</b>	Neolithic, Bronze Age and possible Iron Age settlement
<b>Townland</b>	Rathwilladoon
<b>Parish</b>	Beagh
<b>County</b>	Galway
<b>NGR (Easting)</b>	141360 and 141275
<b>NGR (Northing)</b>	194246 and 194125
<b>Chainage</b>	11,500 and 11,650
<b>Height m OD</b>	28 m OD and 31 m OD
<b>RMP No.</b>	N/A
<b>Excavation Dates</b>	1 October to 9 November 2007
<b>Excavation Duration</b>	40 Days
<b>Report Type</b>	Final
<b>Report Date</b>	December 2009
<b>Report By</b>	Ed Lyne and IAC Ltd

## **ACKNOWLEDGEMENTS**

The excavation was carried out in accordance with the Directions issued to Galway County Council by the Minister for Environment, Heritage and Local Government under Section 14A (2) of the National Monuments Acts 1930–2004 and the terms of the Contract between Galway County Council and Irish Archaeological Consultancy Ltd.

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## ABSTRACT

Irish Archaeological Consultancy Ltd (IAC), funded by Galway County Council and the National Roads Authority (NRA), undertook the excavation of a prehistoric settlement site under Ministerial Directions at the site of Rathwilladoon 2 and 3 along the N18 Gort to Crusheen road scheme (Figure 1). The following report describes the results of archaeological fieldwork at that site. The area was fully excavated by Ed Lyne (MA, MIAI) under Ministerial Directions A044 and Registration Number E3656 issued by the Department of Environment, Heritage and Local Government (DEHLG) in consultation with the National Museum of Ireland. The fieldwork took place between 1 October 2007 and 9 November 2007.

Rathwilladoon 2 was divided into three main areas of archaeology: Areas 1–3. Rathwilladoon 2/Area 1 was located centrally in the site, and consisted of a small area of activity in the form of three small pits and a series of small postholes and stakeholes which may have defined a structure. Some of the pits produced significant quantities of pottery fragments and lithic material in the form of chert flakes and convex scrapers. Based on specialist examination of finds recovered and on AMS dating (2280–2042 BC [3753 ±26 BP: UBA 12736]), it appears that the activity in this area dates to the early Bronze Age, that period often referred to as the 'Beaker period'.

Rathwilladoon 2/Area 2 was located at the northeastern end of the site and consisted of a probable rectangular structure and associated features, including a central hearth, suggesting domestic activity. Further features were found in the environs of the structure, in the form of dispersed stakeholes and postholes and a series of pits, all of which are likely to have been associated with the structure, either as waste or storage pits. Based on specialist examination of finds recovered and on AMS dating (913–807 BC [2710±32 BP: UBA 12733], 928–825 BC [2740±23 BP: UBA 12734] and 898–807 BC [2695±25 BP: UBA 12732]), it appears that the activity in this area dates to the late Bronze Age.

Rathwilladoon 2/Area 3 consisted of four pits and a posthole, clustered together at the edge of the site some 20 m southeast of the structure in Area 2. The key feature seemed to be the largest pit, Pit M, which contained a large quantity of lithic material and some pottery. Based on specialist examination of the finds recovered it appears that the activity in this area dates to the early part of the Neolithic period, and consequently is the first evidence we have for human activity at Rathwilladoon.

Rathwilladoon 3 consisted of a single isolated archaeological feature. This was a shallow curvilinear cut and its charcoal-rich fill which may have been an element of a footing trench for a lightly built circular structure. Based on AMS dating of charcoal recovered from this feature (186–52 BC [2103±22 BP: UBA 12731]), it appears that this structure was Iron Age in date. Rathwilladoon 3 was located some 150 m southwest of Rathwilladoon 2.

Rathwilladoon is an interesting example of a landscape reused by people at different times in prehistory. The site was situated on a well-drained south-facing slope, overlooking a lake that, in time, became a bog and would always have been a suitable location for settlement.

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# 1 INTRODUCTION

## 1.1 General

This report describes the excavation of Rathwilladoon 2 and 3 (Figures 1–2, Plates 1–2), in the townland of Rathwilladoon undertaken by Ed Lyne for IAC Ltd, on behalf of Galway County Council and the NRA. It was carried out as part of the archaeological mitigation programme of the N18 Gort to Crusheen road scheme. The excavation was undertaken to offset the adverse impact of road construction on known and potential subsoil archaeological remains in order to preserve the site by record.

The site was not a Recorded Monument but was first identified during testing carried out by Ed Lyne in summer 2007 (Ministerial Direction No. A044, NMS Reg. No. 07E0456). All features identified during the assessment phase were subsequently re-identified and excavated during the full excavation phase of the site which took place between 1 October and 9 November 2007 with a team of one director, three supervisors and twenty-four assistant archaeologists.

The site was located approximately 0.5 km to the southeast of Tubber crossroad, and c. 6.5 km NNE of Crusheen (Galway OS sheet 128).

The site was assigned the following identification data:

Site Name: Rathwilladoon 2 & 3; Ministerial Direction No.: A044; NMS Registration No.: E3656; Route Chainage (Ch): 11,500 and 11,650; NGR: 141360/194246 and 141275/194125.

## 1.2 The Development

The N18 Gort to Crusheen scheme involves the construction of a total of 44 km of road to include mainline roadworks (22 km), associated side roads (10 km) and access tracks (12 km). The road will have twin 7 m carriageways, 2.5 m hard shoulders adjacent to the verges and a median with a minimum width of 2.6 m which includes two 1 m hard strips. The selected route bypasses the town of Gort to the west and also the village of Crusheen to the west.

## 1.3 Archaeological Requirements

The archaeological requirements for the N18 Gort to Crusheen road scheme were defined in the Ministerial Directions issued to Galway County Council by the Minister for Environment, Heritage and Local Government under Section 14A (2) of the National Monuments Acts 1930–2004 and in the terms of the contract between Galway County Council and Irish Archaeological Consultancy Ltd. These instructions formed the basis of all archaeological works undertaken for this development. The archaeological excavation works under this contract were located between the townlands of Glenbrack, Co. Galway, and Carrowdotia, Co. Clare.

The proposed N18 was subjected to an Environmental Impact Assessment, the archaeology and cultural history section of which was carried out by Babbie Pettit Ltd in 2006. The Record of Monuments and Places, the Sites and Monuments Record, Topographical files of the National Museum of Ireland, aerial photography, and documentary sources were all consulted. Two phases of geophysical survey were conducted. The main phase was by RSKENSR (Bartlett 2004) during the preparation of the EIA (Babbie Pettit Ltd 2006). A supplementary survey was carried out in Ballyboy by Target Geophysics Ltd (Target Geophysics Ltd 2007). As a result of the paper survey, field inspections, geophysical survey, archaeological testing and archaeological monitoring, a total of 22 fully recorded manual excavations were

carried out on this section of the overall route alignment. In some cases where a number of sites of similar type were located together in a single townland, the sites were excavated under one excavation number.

Phase 1 archaeological testing was completed by IAC Ltd and Phase 2 excavation of the sites identified during testing was conducted by IAC Ltd on behalf of Galway County Council and the NRA. The presence of archaeological remains at Rathwilladoon 2 and 3 was confirmed by machine-cut test trenches.

#### **1.4 Test Pits**

Before excavations began a series of 1 m by 1 m test pits were dug across the site. These were set out in a rigid grid formation at 5 m intervals initially, which across a 50 m x 50 m area totalled 121 pits (Plate 12). These pits were dug until natural geology was reached, or the surface of archaeological features. The topsoil which was removed was then dry sieved on site and a record was made of all the finds recovered by pit.

Based on some possible concentrations of finds, 26 extra pits were dug in some locations. Only in one area did these possibly suggest a genuine concentration of prehistoric finds: this was centred around Test Pit 86. This was found to be about 5 m to the south of the main area of archaeology on site. In total 147 hand-dug pits were excavated and sieved across the site, totalling approximately 6% of the topsoil on site.

A total of eighty possible prehistoric artefacts were recovered from test pits, including 70 pieces of chert, 9 pieces of flint, and 1 piece of possible prehistoric pottery. 7 scrapers were identified in the assemblage, all of chert. A bias towards chert was apparent. This is not surprising given the scarcity of flint in the area. In total, 159 post-medieval artefacts were recovered, mainly ceramics, glass and iron objects such as corroded nails. As the majority of lithics recovered were waste or debitage items and the majority of finds were post-medieval in nature it was decided that a sufficient sample of the topsoil covering the site had been manually excavated.

#### **1.5 Methodology**

Following the excavation of the hand dug test pits it was decided to machine strip the topsoil to the interface between topsoil and natural subsoil using a 20 tonne mechanical excavator equipped with a flat toothless bucket under strict archaeological supervision. The remaining topsoil was removed by the archaeological team with the use of shovels, hoes and trowels in order to expose and identify the archaeological remains. A site grid was set up at 10m intervals and was subsequently calibrated to the national grid using GPS survey equipment.

All features were subsequently fully excavated by hand and recorded using the single context recording system with plans and sections being produced at a scale of 1:50, 1:20 or 1:10 as appropriate.

A complete photographic record was maintained throughout the excavation. Digital photographs were taken of all features and of work in progress.

An environmental strategy was devised at the beginning of the excavation. Features exhibiting large amounts of carbonised material were targeted. Animal bone, unburnt wood and stone samples were all retrieved through both hand and bulk collection and retained for specialist analysis wherever they were encountered during the excavations.

In the instances where artefacts were uncovered on site they were dealt with in accordance with guidelines issued by the National Museum of Ireland (NMI) and where warranted in consultation with the relevant specialists. All artefacts, ecofacts and paper archive are currently stored in IAC offices, Lismore, Co Waterford and will ultimately be deposited with the National Museum of Ireland.

Radiocarbon dating of the site was carried out by means of AMS (Accelerator Mass Spectrometry) dating of identified and recommended charcoal samples. All calibrated AMS dates in this report are quoted to 2 Sigma.

All excavation and post-excavation works were carried out in consultation and agreement with the Project Archaeologist, the National Monuments Section of the DEHLG and the National Museum of Ireland.

## 2 EXCAVATION RESULTS

The archaeological activity recorded at Rathwilladoon 2 and 3 appears to consist of multiple discrete periods of settlement activity dating from the Neolithic, early Bronze Age, late Bronze Age and Iron Age periods, reflecting the repeated reselection of this area for human settlement throughout prehistory, presumably based on the suitability of the site for habitation - on the southeast facing slopes of a hill overlooking a shallow lake (now wetland), and sheltered from the prevailing winds by the ridge rising behind the site.

Detailed descriptions of all excavated features and deposits are listed in Appendix 1.

### 2.1 Phase 1 Natural Geology

The natural geology on this site (C2) consisted of orange-brown, mostly silty clay, with some stone inclusions, particularly limestone. It was cut by or sealed by all subsequent archaeological activity.

### 2.2 Phase 2 Neolithic Activity at Rathwilladoon 2/Area 3, Various Features

#### 2.2.1 Pits

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
74	N/A	0.63	0.33	0.33	SW-NE oval cut, Irregular moderate sides	Cut of possible pit
75	C74	0.63	0.33	0.14	Grey brown sandy clay, stones, pebbles	Top fill of C74
76	C77	0.3	0.89	0.48	Dark grey black sandy clay, stones, charcoal	Middle fill of C77
77	N/A	3.06	1.32	0.58	E-W linear cut, gentle sloping sides	Cut of waste pit
82	N/A	0.5	0.42	0.1	E-W oval cut, steep sides	Cut of possible pit
83	C82	0.5	0.42	0.1	Yellow brown silty sand, charcoal	Single fill of C82
198	N/A	0.26	0.2	0.26	Oval cut, steep sides	Cut of a possible pit
199	C198	0.26	0.2	0.26	Brown sandy clay, stones	Single fill of cut 198
200	C74	0.47	0.25	0.22	Brown sandy clay, stones	Bottom fill of C74
267	C77	0.49-0.69		0.16-0.19	Mid brown sand, stones	Fill of C77
398	C77	0.8		0.18	Dark brown sandy clay, stones	Fill of a C77

#### Finds

Context	Find No	Material	Period	Description
76	E3656:76:1	Chert	Neolithic	Flake
76	E3656:76:2-4	Chert	Neolithic	Debitage
76	E3656:76:6	Flint	Neolithic	Blade
76	E3656:76:7-12	Flint	Neolithic	Debitage
76	E3656:76:13	Chert	Neolithic	Debitage
76	E3656:76:14-15	Flint	Neolithic	Debitage
76	E3656:76:16	Flint	Neolithic	Blade
76	E3656:76:17	Flint	Neolithic	Debitage
76	E3656:76:18	Chert	Neolithic	Debitage
76	E3656:76:19a	Flint	Neolithic	Flake
76	E3656:76:19b	Flint	Neolithic	Debitage
76	E3656:76:20	Chert	Neolithic	Chunk
76	E3656:76:21-22	Chert	Neolithic	Debitage
76	E3656:76:23	Chert	Neolithic	Flake
76	E3656:76:24	Chert	Neolithic	Chunk
76	E3656:76:25	Flint	Neolithic	Debitage
76	E3656:26:46-29	Chert	Neolithic	Debitage
76	E3656:76:30	Flint	Neolithic	Flake



76	E3656:76:31	Flint	Neolithic	Retouched artefact
76	E3656:76:32	Chert	Neolithic	Flake
76	E3656:76:33	Flint	Neolithic	Flake
76	E3656:76:34	Flint	Neolithic	Debitage
76	E3656:76:35	Quartz crystal	Neolithic	Tool
76	E3656:76:36	Pottery	Neolithic	Sherds
76	E3656:76:38	Chert	Neolithic	Debitage
76	E3656:76:39	Chert	Neolithic	Flake
76	E3656:76:40	Chert	Neolithic	Chunk
76	E3656:76:41	Flint	Neolithic	Flake
76	E3656:76:42	Chert	Neolithic	Debitage
76	E3656:76:43	Chert	Neolithic	Blade
76	E3656:76:44	Chert	Neolithic	Flake
76	E3656:76:45-49	Chert	Neolithic	Debitage
76	E3656:76:50	Siltstone?	Neolithic	Debitage
76	E3656:76:51-56	Chert	Neolithic	Debitage
76	E3656:76:57	Siltstone?	Neolithic	Debitage
76	E3656:76:58-61	Chert	Neolithic	Debitage
76	E3656:76:62-66	Chert	Neolithic	Flake
76	E3656:76:67-69	Chert	Neolithic	Debitage
76	E3656:76:70-71	Chert	Neolithic	Core
76	E3656:76:72	Chert	Neolithic	Chunk
76	E3656:76:73-74	Chert	Neolithic	Flake
76	E3656:76:75	Chert	Neolithic	Blade
76	E3656:76:76-77	Chert	Neolithic	Flake
76	E3656:76:78	Chert	Neolithic	Blade
76	E3656:76:79-82	Chert	Neolithic	Flake
76	E3656:76:83	Chert	Neolithic	Debitage
76	E3656:76:84	Chert	Neolithic	Blade
76	E3656:76:85-86	Chert	Neolithic	Flake
76	E3656:76:87	Mudstone	Neolithic	Axe fragment
76	E3656:76:88	Mudstone	Neolithic	Axe fragment
76	E3656:76:89	Mudstone	Neolithic	Axe fragment
76	E3656:76:90	Quartz crystal	Neolithic	Debitage
76	E3656:76:91	Quartz crystal	Neolithic	Flake
76	E3656:76:92	Quartz crystal	Neolithic	Blade
76	E3656:76:93-95	Quartz crystal	Neolithic	Debitage
76	E3656:76:96-108	Ceramic	Neolithic	Sherds
83	E3656:83:1-2	Chert	Neolithic	Chunk
83	E3656:83:3	Chert	Neolithic	Flake

### Interpretation

Pit L, C74, was a small, oval cut located in Area 3, some 20 m southeast of the structure in Area 2 (Figure 11). This pit produced no finds and nothing to indicate its original function. It was located close to Pits M–O.

Pit M, C77, was a large pit found close to the edge of the site, some 20 m southeast of the structure and close to Pits L, N and O (Figure 11). This pit produced a large amount of artefacts, mainly lithics. These chert and flint pieces included some finished pieces, such as scrapers and blades, but were largely made up of waste pieces such as flakes anddebitage. It seems likely that this pit was used for the deliberate disposal of waste, perhaps from a working area where stone tools were being produced. A few sizeable pieces of prehistoric pottery were also recovered.

Analysis of both the lithics and the pottery suggests that this pit dates to the early part of the Neolithic period.

Pit N, C82, was a small pit located 1 m to the northeast of Pit M in Area 3. Three chert flakes were recovered from its fill. It is likely that this pit was associated with the same activity as Pit M.

Pit O, C198, was a small oval cut located immediately adjacent to Pit L in Area 3. This pit produced no finds and nothing to indicate its original function. It was located close to Pits M–O, and may be associated with the same phase of activity.

### 2.2.2 Posthole

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
154	N/A	0.25	0.18	0.08	N-S oval cut, moderate sides	Cut of a posthole
155	C154	0.25	0.18	0.08	Grey brown silty sand, stones	Single fill of C154

**Finds:** None

### Interpretation

This posthole C154 was located adjacent to Pit N. It is likely to have been associated with this pit in some way. It contained no finds and nothing to indicate its original function.

### 2.2.3 Discussion of Neolithic Activity at Rathwilladoon 2/Area 3, Various Features

This group of pits and posthole were clustered together at the edge of the site, some 20 m southeast of the structure in Area 2 (Figure 11; Plate 11). The principal feature appeared to be the largest pit, Pit M, which contained a quantity of lithic material and some pottery. It seems likely that this pit was used for the disposal of waste, perhaps from a working area where stone tools were being produced. Its somewhat uneven shape may suggest that it was disturbed to a degree at some point in the past, perhaps by tree roots. The other features in Area 3 are likely to be associated with the same phase of activity.

Analysis by Dr Farina Sternke (Appendix 2.4) of the lithic material from Pit M and by Dr Eoin Grogan and Helen Roche (Appendix 2.7) of the pottery from Pit M suggests that the material in question dates to the early part of the Neolithic period. Sternke states that the lithic assemblage belongs primarily within the first half of the Neolithic (Appendix 2.4).

Regarding the pottery assemblage from Pit M, Grogan and Roche felt that the pottery was well preserved, though it had a reddish, iron-rich deposit on the surfaces and edge breaks. Grogan and Roche felt that the pottery had been in a layer, probably on the subsoil surface and subject to percolating iron-rich water, for some considerable time prior to deposition in the pit (Appendix 2.7). An alternative to this may be that it was exposed to this iron-rich deposit within the pit, and had (based on the somewhat uneven form of the pit) subsequently been disturbed, perhaps by tree-root activity, hence the iron-rich layer was no longer in evidence within the pit.

Grogan and Roche describe the pottery from Pit M as probably representing a single pot in the form of a large early Neolithic carinated bowl (Appendix 2.7). This form of pottery is generally dated to c. 4000–3600 BC, and so we can suggest a similar date range for the pit within which the pottery was found. Grogan and Roche refer to blackened accretions adhering to some of the pottery, and state that it appears to be

indicative of cooking; again suggesting that an early Neolithic domestic site was present in the environs of the excavated area at Rathwilladoon 2.

## 2.3 Phase 3 Early Bronze Age Activity at Rathwilladoon 2/Area 1

### 2.3.1 Pit A C9

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
9	N/A	0.68	0.52	0.28	N-S oval cut, vertical sides	Cut of possible pit
10	C9	0.7	0.6	0.4	Dark brown, charcoal	Pit fill
37	C9	0.5	0.5	0.2	Yellow brown soil, charcoal	Fill of cut 9, a pit

### Finds

Context	Find No	Material	Period	Description
10	E3656:10:1-26	Pottery	Final Neolithic/early BA/Beaker	Body sherds
10	E3656:10:27	Pottery	Beaker	Decorated sherd
10	E3656:10:28	Pottery	Final Neolithic/early BA/Beaker	Body sherd
10	E3656:10:29-46	Chert	Prehistoric	Flakes/debitage
10	E3656:10:47	Chert	Prehistoric	Retouched artefact
10	E3656:10:48-55	Chert	Prehistoric	Flakes/debitage
10	E3656:10:56	Chert	Prehistoric	Retouched artefact
10	E3656:10:57	Chert	Prehistoric	Flakes/debitage
10	E3656:10:58	Chert	Prehistoric	Blade
10	E3656:10:59-61	Chert	Prehistoric	Flakes/debitage
10	E3656:10:62	Chert	Prehistoric	Blade
10	E3656:10:63-64	Chert	Prehistoric	Flakes/debitage
37	E3656:37:1-30	Pottery	Final Neolithic/early BA/Beaker	Sherds
37	E3656:37:31	Chert	Prehistoric	Retouched artefact

### Interpretation

Pit A (C9), while a small pit, produced significant quantities of pottery fragments and lithic material in the form of chert flakes, blades and two chert convex scrapers. A large number of charred hazelnut shells were also recovered from this pit, suggesting that hazelnuts were being collected and used as a dietary supplement by the inhabitants (Appendix 2.2). This pit was located at the eastern edge of a cluster of small pits and postholes/stakeholes in Area 1 of Rathwilladoon 2. While no clear structural form is apparent, it is likely that these features represent activity associated with a lightly built structure, the form of which can no longer be definitively identified (see below) (Figures 4–6; Plate 4).

Grogan and Roche have identified the majority of the pottery from this feature as being Beaker ware, suggesting a very early Bronze Age date. Some pieces of possible early Neolithic pottery were also identified from this pit, though these pieces were fragmentary and the identification is probable rather than certain (Appendix 2.7). If these pieces are Neolithic, they must be residual within this feature. While we know that early Neolithic activity was going on nearby, it is not clear how this pottery would have found its way into this early Bronze Age pit. Sternke felt that the majority of the lithics from Pit A would not be out of place in a Neolithic assemblage (Appendix 2.4). This may reflect the fact that many of the pieces are not particularly diagnostic, or indeed may indicate the recycling of abandoned Neolithic tools at a later time.

It is interesting to note that this pit had two distinct fills, C10 (secondary) and C37 (primary). These appear to reflect two distinct episodes of use or dumping, and a

clear division is noticeable in the finds recovered from both. C37 produced a single lithic in the form of a chert scraper, while 30 sherds of pottery were recovered from this fill. C10 however produced 36 pieces of chert (flakes, debitage, blades and scrapers) and also 28 sherds of pottery. The first layer then appears to reflect domestic waste only, while the second layer seems to contain material consistent with an episode or episodes of lithic production as well as domestic type material. An AMS date was retrieved from a charred hazelnut shell taken from fill C10 of Pit A. This returned a 2 Sigma calibrated date of 2280–2042 BC (3753±26 BP: UBA 12736), placing the feature in the early Bronze Age period.

### 2.3.2 Pit B C7

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
7	N/A	1.05	0.6	0.1	SSE-NNW oval cut, gradual sides	Cut of shallow pit
8	C7	1.03	0.6	0.07	Brown silty sand, stones, pebbles	Top fill of shallow pit
33	C7	1.03	0.6	0.05	Black charcoal rich silty sand, stones	Basal fill of shallow pit

**Finds:** None

#### Interpretation

Pit B (C7) was a small shallow sub-rectangular pit located in close proximity to Pit A and probably associated with similar activity, although unlike Pit A it contained no finds (Figures 4–6; Plate 5). The pit contained two fills of silty sand C33 (primary) and C8. The primary fill C33 was very rich in charcoal and this pit may represent the remains of a hearth.

### 2.3.3 Pit C C5

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
5	N/A	0.65	0.6	0.32	N-S circular cut, irregular sides	Cut of circular pit
6	C5	0.65	0.6	0.32	Light brown sandy silt, charcoal, stones	Single fill of cut 5

#### Finds

Context	Find No	Material	Period	Description
6	E3656:6:1	Flint	Prehistoric	Bipolar core
6	E3656:6:2	Chert	Prehistoric	Flake

#### Interpretation

Pit C (C5) was a small, sub-circular pit, located close to Pits A and B in the central area of Rathwilladoon 2 (Area 1). Two lithics were recovered from this pit, a chert flake (E3656:6:2) and a small flint bipolar core (E3656:6:1) which was produced on a pebble. Sternke felt that the latter dated to the late Neolithic/Early Bronze Age (Appendix 2.4). This is a good indication that Pits A and C are of similar date, and suggests that the cluster of features in Area 1 are all likely to date to the same phase of activity. A single carbonised grain of wheat was also recovered from Pit C, again suggesting that wheat formed part of the diet of the inhabitants (Appendix 2.2).

### 2.3.4 Postholes

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
11	N/A	0.25	0.24	0.2	Circular cut, vertical sides	Cut of posthole
12	C11	0.25	0.24	0.2	Dark brown silty clay, charcoal, stones	Single fill of C11
13	N/A	0.28	0.3	0.1	E-W orientated sub circular cut, vertical sides	Cut of posthole
14	C13	0.28	0.3	0.1	Brown silty clay, charcoal	Single fill of C13

15	N/A	0.45	0.29	0.34	Irregular oval in plan. NE-SW cut.	Possible posthole
16	C15	0.45	0.29	0.34	Firm light greyish brown sandy clay loam.	Fill of possible posthole
17	N/A	0.39	0.37	0.14	E-W sub circular cut, almost vertical sides	Very irregular cut
18	C17	0.34	0.34	0.07	Light grey sandy clay, charcoal, stones	Single fill of cut 17
21	N/A	0.19	0.19	0.07	Circular cut, steep sides	Cut of pit/posthole
22	C21	0.19	0.19	0.07	Dark brown sandy silt, charcoal	Single fill of C22.
23	N/A	0.18	0.3	0.18	E-W oval cut, gradual sides	Cut of possible feature
24	C23	0.18	0.3	0.18	Mid brown sandy silt, charcoal, stones	Single fill of cut 23
27	N/A	0.35	0.3	0.2	E-W oval cut, vertical sides	Probable cut
28	C27	0.35	0.3	0.2	Dark brown clay, charcoal	Single fill of C27
36	N/A	0.25	0.24	0.12	NW-SE sub circular cut, vertical sides	Cut of possible feature
42	C36	0.25	0.24	0.12	Light grey yellow sandy clay, stones	Single fill of cut 36
196	N/A	0.26	0.23	0.39	NNW-SSE sub circular cut, vertical sides	Cut of posthole
197	C196	0.26	0.23	0.39	Light yellow brown sandy clay, stones	Single fill of 196

## Finds

Context	Find No	Material	Period	Description
12	E3656:12:1-2	Pottery	Final Neolithic/early BA/Beaker	Sherds
12	E3656:12:3	Chert	Prehistoric	Flake
22	E3656:22:1-4	Pottery	Final Neolithic/early BA/Beaker	Sherds
28	E3656:28:1	Pottery	Final Neolithic/early BA/Beaker	Sherd
28	E3656:28:2	Chert	Prehistoric	Flake
28	E3656:28:3-4	Chert	Prehistoric	Chunks (burnt)

## Interpretation

The contexts above consisted of nine possible postholes (C11, C13, C15, C17, C21, C23, C27, C36, C196) located in the central area of Rathwilladoon 2 (Area 1). Some of these postholes contained artefactual material including lithics and pottery in their fills. These postholes did not make up any obviously recognisable structure (Figures 4–6), though it could be tentatively suggested that a north-south orientated incomplete oval or sub-rectangular form is most likely (this is based on the presumption that the north-western post did not leave any trace). If these posts do represent such a structure, then all the pits were located outside the structure on its eastern side. This possible structure measures c. 3.2 m in width and 4.9 m in length.

The lithics consisted of two fairly undiagnostic chert flakes and two burnt chert chunks (Appendix 2.4), while the pottery recovered from the postholes was again Beaker pottery (Appendix 2.7). Again, this helps to confirm that these features are all of a similar date and should be viewed as a unit. Furthermore, it may suggest that the postholes listed above represent the remains of a lightly built Beaker period structure, an unusual discovery in its self. C15 had a rather irregular shape, and it is possible that this may have represented a small pit rather than a posthole. A single grain of charred wheat and a charred hazelnut shell were recovered from its fill C16, further evidence that these formed part of the diet of the inhabitants.

### 2.3.5 Stakeholes

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
19	N/A	0.12	0.1	0.22	E-W Sub circular cut, vertical sides	Cut of stakehole
20	C19	0.12	0.1	0.22	Mid brown sandy silt, charcoal	Fill of a stakehole C19
25	N/A	0.17	0.17	0.11	E-W Sub circular cut, gradual sides	Cut of stakehole
26	C25	0.17	0.17	0.11	Dark brown silty clay, charcoal	Fill of C25
29	N/A	0.1	0.1	0.06	Circular cut, gradual sides	Possible stakehole cut
30	C29	0.1	0.1	0.06	Dark brown silty clay	Single fill of C29

31	N/A	0.19	0.13	0.34	NNE-SSW Irregular oval cut, vertical sides	Possible stakehole cut
32	C31	0.19	0.13	0.34	Light grey brown sandy clay, charcoal, stones	Single fill of cut 31
38	C39	0.09	0.08	0.04	Mid brown sandy silt, charcoal	Single fill of C39
39	N/A	0.09	0.08	0.04	Circular cut, gradual to steep sides	Possible stakehole cut
40	C41	0.18	0.14	0.2	Mid brown sandy silt, charcoal	Fill of C41
41	N/A	0.18	0.14	0.2	E-W oval cut, vertical sides	Possible stakehole cut
43	N/A	0.16	0.16	0.15	Circular cut, steep/vertical sides	Possible stakehole cut
44	C43	0.16	0.16	0.15	Mid brown silty clay, stones, charcoal	Fill of C43
45	N/A	0.15	0.15	0.14	Circular cut, vertical sides	Possible stakehole cut
46	C45	0.15	0.15	0.14	Brown clay, charcoal flecks	Single fill of C45
47	N/A	0.12	0.11	0.27	N-S sub circular cut, vertical sides	Possible stakehole cut
48	C47	0.12	0.11	0.27	Mid brown sandy silt, charcoal, stones	Fill of C47
98	N/A	0.1	0.1	0.24	SE-NW circular cut, vertical sides	Possible stakehole cut
99	C98	0.1	0.1	0.24	Mid brown sandy silt, charcoal	Fill of C98
243	N/A	0.1	0.1	0.23	N-S circular cut, vertical sides	Cut of a stakehole
244	C243	0.1	0.1	0.23	Grey brown sandy clay, charcoal, stones	Fill of a stakehole

## Finds

Context	Find No	Material	Period	Description
20	E3656:20:1-22	Pottery	Final Neolithic/early BA/Beaker	Sherds
20	E3656:20:23	Chert	Prehistoric	Flake
244	E3656:244:1	Pottery	Early Neolithic pottery	Sherd

## Interpretation

The above contexts consisted of a series of 11 stakeholes and possible stakeholes, C19, C25, C29, C31, C39, C41, C43, C45, C47, C98, and C243 located in the central area of Rathwilladoon 2 (Area 1). The fill of one of these stakeholes contained artefactual material, mostly pottery sherds. These stakeholes did not appear to form any discernable pattern or alignment (Figures 4–6).

The chert flake from C20 was undiagnostic, but the pottery from the same feature was, with the possible exception of a single sherd (E3656:20:1), early Bronze Age Beaker, and again helps to date the cluster of features in this area to that period. Sherd (E3656:20:1) was possibly early Neolithic in date, and may be intrusive. Alternatively, given its fragmentary condition it was difficult to positively identify, and it is possible that it may be contemporary with the other pottery from this feature.

### 2.3.6 Discussion of Early Bronze Age Activity at Rathwilladoon 2/Area 1

Rathwilladoon 2/Area 1 was located centrally in the site and consisted of a small area of activity in the form of three small pits and a series of eight small postholes and 11 stakeholes (Figures 5–6; Plate 4). The postholes and stakeholes, while reflecting human activity, did not appear to make up any obviously recognisable structure. It is possible of course that some postholes or stakeholes were more shallow and did not survive as a result. For this reason the possibility remains that a structure did once stand in this area, and it can be tentatively suggested that a north-south oriented oval or sub-rectangular form is most likely (this is based on the presumption that the north-western post did not leave any trace).

If the postholes do represent such a structure, then all the pits in Area 1 were located outside the structure on its eastern side. This possible structure would have measured c. 3.2 m in width and c. 4.9 m in length. Where artefactual material was recovered from the postholes it is consistent with an early Bronze Age date (see below), and suggests that they may represent the remains of a lightly built Beaker period structure, an unusual discovery in itself.

One of the pits adjacent to the possible structure, Pit A, produced significant quantities of pottery fragments and lithic material in the form of chert flakes, blades, debitage and three convex scrapers, as well as a large amount of charred hazelnut shells. Similar material in smaller quantities was found in Pit C (as well as in three of the postholes and one of the stakeholes). The primary fill of Pit B was very rich in charcoal and this pit may represent the remains of an outdoor hearth.

The artefactual assemblage from Rathwilladoon 2 Area 1 appears to reflect domestic waste as well as material consistent with an episode or episodes of lithic production. Assessing the environmental remains from the features in Area 1, Cobain states that 'the charcoal and plant macrofossil material deposited... is indicative of rake-out from a domestic hearth which has been disposed of in the pits' (Appendix 2.2). Evidence was also recovered suggesting that wheat and hazelnuts formed part of the diet of the inhabitants.

An AMS date was retrieved from a charred hazelnut shell taken from fill C10 of Pit A. This returned a 2 Sigma calibrated date of 2280 – 2042 BC (3753  $\pm$  26 BP: UBA 12736), placing the feature in the early Bronze Age period and tying in well with the pottery assemblage. In conclusion then, Rathwilladoon 2 Area 1 appears to represent a small scale early Bronze Age habitation site, and as such it has no direct connection with the other areas of activity on site.

## 2.4 Phase 4 Late Bronze Age Activity at Rathwilladoon 2/Area 2

### The Structure

#### 2.4.1 External Structural Postholes

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
53	N/A	0.6	0.3	0.27	NNE-SSW semi circular cut, irregular sides	Cut of posthole
54	C53	0.6	0.3	0.27	Dark grey silty sand, stones, charcoal	Single fill of C53
57	N/A	0.59	0.54	0.59	N-S sub circular cut, steep to vertical sides	Cut of posthole/pit
58	C57	0.59	0.54	0.32	Dark grey brown silty sand, charcoal, bone	Top fill of C57
63	N/A	0.45	0.23	0.35	N-S oval cut, vertical sides	Cut of posthole
64	C63	0.45	0.23	0.35	Charcoal-rich clay	Single fill of C63
126	N/A	0.32	0.29	0.48	N-S circular cut, sharp to gradual sides	Cut of posthole
127	C126	0.32	0.29	0.48	Mid brown silty clay, stones, bone, charcoal	Top fill of C126
132	N/A	0.22	0.28	0.36	N-S sub-oval, vertical sides	Cut of posthole
133	C132	unknown	0.25	0.15	Light yellow brown sandy clay	Single fill of C132
146	N/A	0.5	0.41	0.28	E-W Irregular oval cut, vertical sides	Cut of pit/posthole
147	C146	0.49	0.4	0.27	Greyish brown sandy clay, stones, charcoal	Fill of C146
150	N/A	0.25	0.22	0.48	N- S sub circular cut, vertical sides	Cut of posthole
151	C150	0.25	0.22	0.48	Light greyish brown sandy clay, charcoal	Fill of C150
188	N/A	0.44	0.44	0.35	N-S circular cut, vertical sides	Cut of posthole
189	C188	0.44	0.44	0.35	Greyish silty sand, stones, charcoal	Single fill of C188
251	C57	0.5	0.49	0.27	Light grey silty sand, charcoal	Base fill of C57
351	C126	0.32	0.29	0.48	Dark brown silty clay, charcoal, bone	Top fill of post
352	C126	0.32	0.29	0.48	Light brown sandy clay, stone	Mid fill of post
353	C126	0.32	0.29	0.48	Mid brown silty clay, stones	Basal fill of post

## Finds

Context	Find No	Material	Period	Description
189	E3656:189:1	Chert	Prehistoric	Debitage

## Description

This group of eight postholes (C53, C57, C63, C126, C132, C146, C150, C188) made up the external defining posts of a probable rectangular structure orientated southwest to northeast (Figures 4, 8–9; Plate 5). Post-holes were classed as such based on their form, shape and size and on this site were relatively deep and vertical or near-vertical sided with a flat or near flat base. The structure measured approximately 5.5 m northeast–southwest x 3.5 m. It must be borne in mind that the post-holes could all have been internal with perhaps an external wall of mud which of course would not survive. In this case the structure could originally have been somewhat larger, and might have been circular or oval in plan as would be more typical at this time. However, as insufficient evidence remains for this, we must base our interpretation on the post-holes identified on site, and therefore a rectangular plan remains the most likely. As a site with a rectangular Bronze Age structure Rathwilladoon 2 is unusual, but not unique; circular houses dominate this period with 87% of Bronze Age houses recorded in Ireland to date identified as round (Doody, 2000).

The two posts that made up the southwest and southeast corners (C57 and C188, respectively), thereby defining the southwest wall, were the most substantial (Figure 7). This may be due to the need for greater structural strength at this end where the prevailing southwest wind would have affected the structure. The single artefact retrieved, a piece of chertdebitage, suggests that some chert working was carried out in or near the structure. Two AMS dates were obtained from charcoal from postholes C188 and C126. These returned 2 Sigma calibrated dates of 913–807 BC (2710±32 BP: UBA 12733) and 928–825 BC (2740±23 BP: UBA 12734) respectively. This places the structure in the early part of the late Bronze Age.

A mixture of wood species was identified in the charcoal assemblage from the postholes (oak, wayfaring tree, Maloideae species [hawthorn, rowan, crab apple], wild/bird cherry, yew and elm, alder/hazel, spindle tree, ash and Scot's pine), but two postholes produced just one species each, suggesting that these posts may have burnt *in situ*. Fill C351 in posthole C126 contained 100% ash charcoal and fill C139 from posthole C138 contained 100% oak charcoal (Appendix 2.2). This suggests that the structure was built primarily of ash and oak. These species were both popular for construction material being strong, tough timbers that would form sturdy structures with considerable life spans. Posthole fill C54 produced two charred grains of barley, while posthole fill C58 contained a bird cherry pip and a charred hazelnut shell, which suggests that barley formed part of the diet with cherries and nuts perhaps being collected as a seasonal dietary supplement (Appendix 2.2).

### 2.4.2 Internal Postholes

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
67	N/A	0.3	0.36	0.32	N-S sub circular cut, steep sides	Cut of pit/posthole
68	C67	0.3	0.36	0.32	Mid grey brown sandy silt, stones, charcoal	Fill of C67
80	N/A	0.18	0.22	0.44	Circular cut, steep sides	Cut of posthole
81	C80	0.55	0.18	0.5	Grey white, light brown sandy clay, charcoal	Fill of cuts C80 C404
194	N/A	0.42	0.3	0.28	E-W oval cut, moderate sides	Cut of posthole
195	C194	0.42	0.3	0.28	Grey brown silty sand, charcoal	Packing fill of C194
202	C327	0.39	0.18	0.33	Light grey sandy loam, charcoal	Single fill of C327



203	N/A	0.17	0.13	0.23	E-W oval cut, vertical/steep sides	Cut of posthole
204	C203	0.17	0.13	0.23	Grey brown sandy clay, charcoal, stones	Single fill of C203
268	C194	0.35	0.29	0.13	Dark brown silty sand, charcoal	Fill of a posthole
304	N/A	0.3	0.16	0.2	SSW-NNE sub oval cut, sharp sides	Cut of a posthole
305	C304	0.3	0.16	0.2	Grey mid brown silty clay, charcoal, stones	Fill of a posthole
316	N/A	0.24	0.24	0.25	Circular cut, steep sides	Cut of a posthole
317	C316	0.24	0.24	0.25	Mid grey brown sandy silt, charcoal	Fill of a posthole
327	N/A	0.39	0.18	0.33	Irregular cut, vertical/concave sides	Cut of posthole
337	N/A	0.24	0.18	0.24	Irregular cut, vertical sides	Cut of posthole
338	C337	0.24	0.18	0.24	Grey brown sandy clay, charcoal, stones	Fill of posthole
383	C316	0.24	0.24	0.18	Mid grey sandy silt, stones	Fill of a posthole
384	C304	0.2	0.15	0.17	Dark brown silty sand, charcoal	Fill of a posthole

## Finds

Context	Find No	Material	Period	Description
268	E3656:268:1-2	Chert	Prehistoric	Debitage

## Interpretation

This group of eight postholes, C67, C80, C194, C203, C304, C316, C327, C337, were found within the structure, and may have functioned as internal roof supports or as part of some internal features (Figures 4, 7–9). Two artefacts were retrieved, both were pieces of chertdebitage, again suggesting that some chert working was carried out in or near the structure. A similar range of charcoal species were identified in the internal postholes as the external postholes, and again, where only a single species was identified from a posthole it was either oak or ash, suggesting that these species were used for constructing the house (Appendix 2.2).

### 2.4.3 Structural Stakeholes

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
61	N/A	0.07	0.05	0.13	Oval cut, vertical sides	Cut of stakehole
62	C61	0.07	0.05	0.13	Mid brown sandy silt	Single fill of C61
71	N/A	0.12	0.09	0.1	Circular cut, vertical sides	Cut of stakehole
72	C71	0.12	0.09	0.1	Mid brown sandy silt, charcoal	Single fill of C71
78	N/A	0.16	0.07	0.09	Sub circular cut, vertical sides	Cut of stakehole
79	C78	0.16	0.07	0.04	Grey brown sandy silt, bone, charcoal	Single fill of C78
80	N/A	0.18	0.22	0.44	Circular cut Steep sides, tapered base	Cut of stakehole
81	C80	0.18	0.22	0.5	Grey-light brown sandy clay, charcoal	Fill of C80 and C404
100	N/A	0.06	0.06	0.08	Circular cut, vertical sides	Cut of stakehole
101	C100	0.06	0.06	0.08	Mid brown sandy silt, charcoal	Fill of a stakehole
102	N/A	0.07	0.05	0.1	Oval cut, vertical sides	Cut of stakehole
103	C102	0.07	0.05	0.1	Mid brown sandy silt	Fill of a stakehole
104	N/A	0.07	0.07	0.16	Circular cut, vertical sides	Cut of stakehole
105	C104	0.07	0.07	0.16	Mid brown sandy silt	Fill of a stakehole
106	N/A	0.07	0.07	0.09	Circular cut, vertical sides	Cut of stakehole
107	C106	0.07	0.07	0.09	Mid brown sandy silt	Fill of a stakehole
108	N/A	0.07	0.07	0.11	Circular cut, vertical sides	Cut of stakehole
109	C108	0.07	0.07	0.11	Mid brown sandy silt	Fill of a stakehole
110	N/A	0.08	0.08	0.09	Circular cut, vertical sides	Cut of stakehole
111	C110	0.08	0.08	0.09	Mid brown sandy silt	Fill of a stakehole
112	N/A	0.12	0.1	0.15	Circular cut, vertical sides	Cut of stakehole
113	C112	0.12	0.1	0.15	Mid brown silty sand	Fill of a stakehole
114	N/A	0.09	0.08	0.14	Circular cut, vertical sides	Cut of stakehole
115	C114	0.09	0.08	0.14	Mid brown silty sand/clay, charcoal	Fill of a stakehole

116	N/A	0.15	0.15	0.1	Circular cut, vertical sides	Cut of stakehole
117	C116	0.15	0.15	0.1	Mid brown silt clay, charcoal	Fill of a stakehole
118	N/A	0.08	0.05	0.1	Circular cut, rounded sides	Cut of stakehole
119	C118	0.07	0.05	0.1	Mid brown silty sand, charcoal	Fill of a stakehole
120	N/A	0.09	0.08	0.19	Circular cut, vertical sides	Cut of stakehole
121	C120	0.09	0.08	0.19	Mid brown silty sand, charcoal	Fill of a stakehole
122	N/A	0.05	0.05	0.09	Circular cut, vertical sides	Cut of stakehole
123	C122	0.05	0.05	0.09	Mid brown silty clay	Fill of a stakehole
124	N/A	0.08	0.08	0.08	Circular cut, vertical sides	Cut of stakehole
125	C124	0.08	0.08	0.08	Mid brown silty clay	Fill of a stakehole
148	N/A	0.1	0.1	0.2	Circular cut, vertical sides	Cut of stakehole
149	C148	0.1	0.1	0.2	Grey brown sandy silt, stones, pebbles	Fill of a stakehole
172	N/A	0.13	0.07	0.08	Oval cut, smooth sides	Cut of stakehole
173	C172	0.13	0.07	0.08	Mid brown sandy silt	Single fill of C172
205	N/A	0.1	0.1	0.14	Circular cut, vertical sides	Cut of stakehole
206	C205	0.1	0.1	0.14	Mid brown sandy silt	Single fill C205
207	N/A	0.1	0.1	0.14	Circular cut, vertical sides	Cut of stakehole
208	C207	0.1	0.1	0.14	Mid brown sandy silt	Single fill of cut 207
209	N/A	0.07	0.06	0.13	Circular cut, vertical sides	Cut of stakehole
210	C209	0.07	0.06	0.13	Grey brown silty sand	Single fill of cut 209
211	N/A	0.07	0.08	0.18	Circular cut, vertical sides	Cut of stakehole
212	C211	0.07	0.08	0.17	Grey black silty clay	Single fill of cut 211
213	N/A	0.08	0.07	0.22	Circular cut, vertical sides	Cut of a stakehole
214	C213	0.08	0.07	0.22	Medium brown sandy silt	Fill of a stakehole
215	N/A	0.07	0.06	0.1	Circular cut, steep/vertical sides	Cut of a stakehole
216	C215	0.07	0.06	0.1	Light grey brown sandy silt	Fill of a stakehole
217	N/A	0.06	0.06	0.14	Circular cut, vertical sides	Cut of a stakehole
218	C217	0.06	0.06	0.14	Brown grey sandy silt, stones	Fill of a stakehole
219	N/A	0.08	0.08	0.19	Circular cut, vertical sides	Cut of a stakehole
220	C219	0.08	0.08	0.19	Brown grey sandy silt, stones	Fill of a stakehole
221	N/A	0.07	0.07	0.16	Circular cut, vertical sides	Cut of a stakehole
222	C221	0.07	0.07	0.16	Brown grey sandy silt, stones	Fill of a stakehole
226	N/A	0.09	0.09	0.14	Circular cut, moderate sides	Cut of a stakehole
227	C397	0.06	0.05	0.14	Grey brown sandy silt	Fill of a stakehole
228	N/A	0.07	0.06	0.12	Circular cut, steep/vertical sides	Cut of a stakehole
229	C228	0.07	0.06	0.12	Grey brown sandy silt	Fill of a stakehole
230	N/A	0.08	0.08	0.28	Circular cut, vertical sides	Cut of a stakehole
233	C230	0.08	0.08	0.28	Light yellow brown silty sand, stones	Fill of a stakehole
234	N/A	0.08	0.07	0.14	Circular cut, steep/vertical sides	Cut of a stakehole
235	C234	0.08	0.07	0.14	Light grey brown silty sand, stones	Fill of a stakehole
241	N/A	0.07	0.06	0.21	Sub circular cut, vertical sides	Cut of a stakehole
242	C241	0.07	0.06	0.21	Mid brown sandy silt	Fill of a stakehole
245	N/A	0.07	0.07	0.09	Circular cut, vertical sides	Cut of a stakehole
246	C245	0.07	0.07	0.09	Brown grey sandy silt, stones	Fill of a stakehole
247	N/A	0.07	0.06	0.05	Circular cut, steep/vertical side	Cut of a stakehole
248	C247	0.07	0.06	0.05	Light grey brown sandy silt	Fill of a stakehole
249	N/A	0.07	0.07	0.09	Circular cut, vertical sides	Cut of a stakehole
250	C249	0.07	0.07	0.09	Brown grey sandy silt, stones	Fill of a stakehole
253	N/A	0.06	0.06	0.16	Oval cut, vertical sides	Cut of a stakehole
254	C253	0.06	0.06	0.16	Mid brown silty clay, charcoal	Fill of a stakehole
257	N/A	0.07	0.06	0.08	Circular cut, vertical sides	Cut of a stakehole
258	C257	0.07	0.06	0.08	Orange yellow light brown sandy clay	Fill of a stakehole
259	N/A	0.1	0.1	0.11	Circular cut, gradual to vertical sides	Cut of a stakehole
260	C259	0.1	0.1	0.11	Orange grey light brown silty sand	Fill of a stakehole

261	N/A	0.05	0.05	0.06	Circular cut, vertical sides	Cut of a stakehole
262	C261	0.05	0.05	0.06	Mid brown sandy silt, charcoal	Fill of a stakehole
263	N/A	0.06	0.06	0.14	Circular cut, steep/vertical sides	Cut of a stakehole
264	C263	0.06	0.06	0.14	Orange grey sandy clay	Fill of a stakehole
265	N/A	0.6	0.6	0.15	Circular cut, vertical sides	Cut of a stakehole
266	C265	0.6	0.6	0.15	Light brown orange sandy clay	Fill of a stakehole
269	N/A	0.07	0.06	0.15	Sub circular cut, vertical sides	Cut of a stakehole
270	C269	0.07	0.06	0.15	Grey brown sandy silt	Fill of a stakehole
271	N/A	0.1	0.08	0.18	Sub circular cut, vertical sides	Cut of a stakehole
272	C271	0.1	0.08	0.18	Grey brown sandy silt	Fill of a stakehole
273	N/A	0.06	0.05	0.09	Circular cut, vertical sides	Cut of a stakehole
274	C273	0.06	0.05	0.09	Medium brown sandy silt	Fill of a stakehole
275	N/A	0.07	0.07	0.14	Circular cut, steep/vertical sides	Cut of a stakehole
276	C275	0.07	0.07	0.14	Grey brown sandy silt, charcoal	Fill of a stakehole
277	N/A	0.09	0.11	0.18	Circular cut, steep sides	Cut of a stakehole
278	C277	0.09	0.11	0.18	Mid brown sandy silt	Fill of a stakehole
279	N/A	0.07	0.07	0.16	Circular cut, steep/vertical sides	Cut of a stakehole
280	C279	0.07	0.07	0.16	Light brown grey silty sand, stones	Fill of a stakehole
281	N/A	0.09	0.08	0.15	Circular cut, steep sides	Cut of a stakehole
282	C281	0.09	0.08	0.15	Mid brown sandy silt	Fill of a stakehole
283	N/A	0.07	0.09	0.14	Circular cut, steep sides	Cut of a stakehole
284	C283	0.07	0.09	0.14	Fill of a stakehole	Mid brown sandy silt
285	N/A	0.09	0.09	0.03	Circular cut, vertical sides	Cut of a stakehole
286	C285	0.09	0.09	0.03	Black sandy silt, charcoal	Fill of a stakehole
287	N/A	0.22	0.17	0.3	Irregular oval cut, vertical sides	Cut of 2 stakeholes
288	C287	0.22	0.17	0.3	Grey orange light brown silty sand	Fill of 2 stakeholes
289	N/A	0.08	0.08	0.1	Circular cut, vertical sides	Cut of a stakehole
290	C289	0.08	0.08	0.1	Brown grey sandy silt, stones	Fill of a stakehole
291	N/A	0.1	0.1	0.19	Circular cut, vertical sides	Cut of a stakehole
292	C291	0.1	0.1	0.19	Brown grey sandy silt, stones	Fill of a stakehole
293	N/A	0.09	0.09	0.11	Circular cut, vertical sides	Cut of a stakehole
294	C293	0.09	0.09	0.11	Brown grey sandy silt, stones	Fill of a stakehole
295	N/A	0.08	0.06	0.13	Oval cut, vertical sides	Cut of a stakehole
296	C295	0.08	0.06	0.13	Mid brown sandy silt	Fill of a stakehole
302	N/A	0.09	0.09	0.17	Circular cut, vertical sides	Cut of a stakehole.
303	C302	0.09	0.09	0.17	Brown grey sandy silt, stones	Fill of a stakehole
306	N/A	0.05	0.05	0.16	Circular cut, vertical sides	Cut of a stakehole
307	C306	0.05	0.05	0.16	Brown grey sandy silt, stones	Fill of a stakehole
308	N/A	0.04	0.04	0.11	Circular cut, vertical sides	Cut of a stakehole
309	C308	0.04	0.04	0.11	Brown grey sandy silt, stones	Fill of a stakehole
312	N/A	0.82	0.34	0.05	Spread from c140 or disturbance	Spread
313	C312	0.82	0.34	0.14	Mid brown sandy silt, charcoal	Spread from C140
314	N/A	0.16	0.11	0.21	Sub oval cut, vertical sides	Cut of a stakehole
315	N/A	0.07	0.06	0.14	Circular cut, vertical sides	Cut of a stakehole
318	N/A	0.09	0.08	0.14	Sub circular cut, vertical sides	Cut of a stakehole
319	C318	0.09	0.08	0.14	Grey brown sandy silt	Fill of a stakehole
320	N/A	0.11	0.09	0.18	Sub circular cut, steep sides	Cut of a stakehole
321	C320	0.11	0.09	0.18	Light grey brown silty clay	Fill of a stakehole
322	N/A	0.09	0.08	0.19	Circular cut, vertical sides	Cut of a stakehole
323	C322	0.09	0.08	0.19	Mid brown silty clay, Chert, charcoal	Fill of a stakehole
324	C314	0.16	0.11	0.21	Mid grey brown sandy soil	Fill of a posthole
333	N/A	0.07	0.07	0.11	Circular cut, vertical sides	Cut of a stakehole
334	C333	0.07	0.07	0.11	Mid brown sandy silt	Fill of a stakehole
341	N/A	0.05	0.04	0.09	Circular cut, steep/vertical sides	Cut of a stakehole

342	C341	0.05	0.04	0.09	Medium grey brown sandy silt	Fill of a stakehole
354	N/A	0.09	0.08	0.25	Circular cut, concave/vertical sides	Cut of a stakehole
355	C354	0.09	0.08	0.25	Mid brown silty clay, charcoal	Fill of a stakehole
358	N/A	0.08	0.08	0.11	Circular cut, steep sides	Cut of a stakehole
359	C358	0.08	0.08	0.11	Brown grey silty sand	Fill of a stakehole
360	C361	0.05	0.05	0.09	Grey orange light brown silty sand	Fill of a stakehole
361	N/A	0.05	0.05	0.09	Circular cut, vertical sides	Cut of a stakehole
362	C363	0.06	0.04	0.06	Grey orange light brown silty sand	Fill of a stakehole
363	N/A	0.06	0.04	0.06	Circular cut, vertical sides	Cut of a stakehole
364	C365	0.05	0.05	0.1	Grey orange light brown silty sand	Fill of a stakehole
365	N/A	0.05	0.05	0.1	Circular cut, gradual/vertical sides	Cut of a stakehole
368	C370	0.06	0.05	0.06	Grey light brown silty sand, stones	Fill of a stakehole
370	N/A	0.06	0.05	0.06	Circular cut, vertical sides	Cut of a stakehole
377	N/A	0.07	0.06	0.14	Circular cut, steep/vertical sides	Cut of a stakehole
378	C377	0.07	0.06	0.14	Light grey brown silty sand, stones	Fill of a stakehole
382	C315	0.07	0.06	0.14	Mid brown sandy silt	Fill of a stakehole
385	N/A	0.05	0.05	0.05	Circular cut, angular sides	Cut of a stakehole
386	C385	0.05	0.05	0.05	Mid brown silty sand	Fill of a stakehole
392	N/A	0.09	0.09	0.15	Circular cut, vertical sides	Cut of a stakehole
393	C392	0.09	0.09	0.15	Grey brown sandy clay, charcoal	Fill of a stakehole
397	N/A	0.06	0.05	0.14	Circular cut, steep/vertical sides	Cut of a stakehole
402	N/A	0.06	0.04	0.06	Circular cut, vertical sides	Cut of a stakehole
403	C402	0.06	0.04	0.06	Medium brown silty sand	Fill of a stakehole
404	N/A	0.15	0.15	0.32	Circular cut, vertical sides	Cut of a stakehole
405	N/A	0.07	0.06	0.09	Circular cut, vertical sides	Cut of a stakehole
406	C405	0.07	0.06	0.09	Grey brown silty sand	Fill of a stakehole

## Finds

Context	Find No	Material	Period	Description
323	E3656:323:1	Chert	Prehistoric	Flake

## Interpretation

A total of 78 stakeholes were located within the rectangular structure (Figures 7-9; Plate 6). Some of these stakeholes may have been part of the wall structure between the posts. Some of the other stakeholes may represent support for some kind of internal structures or divisions, perhaps even forming raised platforms for sleeping. They are mostly located inside the northwest, northeast and southeast walls, with a notable absence inside the southwest wall. Only one, C322, contained any artefacts. This was a single chert flake. Where the charcoal from the stakeholes was examined it suggested a preference for ash, oak and alder/hazel (Appendix 2.2).

### 2.4.4 Internal Hearth

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
78	N/A	0.16	0.07	0.09	SW-NE sub circular cut, vertical sides	Cut of stakehole
79	C78	0.16	0.07	0.04	Grey brown sandy silt, bone, charcoal	Single fill of C78
140	N/A	1.25	0.6	0.4	E-W oval cut, vertical/moderate sides	Cut of pit/hearth
141	C140	1.25	0.6	0.1	Dark grey sandy clay, bone, charcoal, stones	Fill of C140
285	N/A	0.09	0.09	0.03	SW-NE circular cut, vertical sides	Cut of a stakehole
286	C285	0.09	0.09	0.03	Black sandy silt, charcoal	Fill of a stakehole
371	C140	0.91		0.23	Mid brown black sandy silt, burnt bone	Fill of a hearth
372	C140	0.48		0.12	Light grey sandy silt, stones	Top fill of hearth
373	C140	0.28		0.03	Yellow red burnt clay	Burnt base of hearth

**Finds:** None

### Interpretation

The above contexts formed the central hearth (C140) within the structure on site (Figures 7, 10). As well as charcoal-rich fills, there was also clear evidence for burning *in situ* in the form of a burnt clay base, C373, to the feature (Plate 7). The hearth would have been used for both cooking and warmth and would have been at the centre of social occasions within the house. The hearth was deeper to the east and it is possible that this deep end was used for the positioning of pots within the fire, either to fire the clay or for cooking purposes. Analysis of charcoal taken from the hearth suggests that alder/hazel, oak, ash, Maloideae species (hawthorn, rowan, crab apple) and elm were all used as fuel at various times (Appendix 2.2).

A total of 1135 burnt animal bone fragments (383.95 g) were found at Rathwilladoon 2. Only 88 fragments (107.03 g) could be identified to species, dominated by cattle (81 fragments; 79.08 g) and followed by caprovine (Sheep/goat) (6 fragments; 27.95 g) and pig (1 fragment; 1.03 g). The majority of the bones were found in the fills of the various postholes and stakeholes (264.04 g), followed by pits (78.34 g) and the hearth (41.57 g). The condition of the bone recovered suggests that the animal bone represents burnt food waste. The bone recovered from the hearth (C140) where identified represented caprovine, but the majority could not be identified.

### 2.4.5 Internal Pits

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
69	N/A	0.32	0.3	0.1	N-S circular cut, gradual to steep sides	Shallow cut of a pit
70	C69	0.32	0.3	0.1	Mid brown sandy silt, charcoal	Single fill of C69
142	N/A	0.16	0.34	0.14	SW-NE irregular cut, vertical/gradual sides	Cut of small pit
143	C142	0.16	0.34	0.11	Grey black silty sand, stones, charcoal	Fill of C142
144	N/A	0.6	0.46	0.3	NE-SW irregular cut, sharp/gradual sides	Cut of pit
145	C144	0.48	0.48	0.18	Grey brown silty sand, stones	Fill of C144
192	N/A	0.35	0.2	0.1	Sub oval cut, steep sides	Cut of pit
193	C192	0.35	0.2	0.1	Mid brown silty sand	Single fill of C192
325	N/A	0.76	0.58	0.09	N-S oval cut, moderate sides	Cut of a shallow pit
326	C325	0.76	0.58	0.09	Mixed grey yellow brown sandy silt, stones	Fill of a shallow pit

### Finds

Context	Find No	Material	Period	Description
145	E3656:145:1	Sandstone	Prehistoric	Grinding stone/mano
326	E3656:326:1	Chert	Prehistoric	Debitage

### Interpretation

Pit D, C69, was a shallow pit located towards the southwest end of the structure. It produced no artefactual evidence and there was no clear indication as to its original function. The shallow Pit E, C325, was located at the northeast end of the structure, close to the hearth. Its single fill, C326, contained a single piece of chertdebitage (Appendix 2.4). Pit E may have been used as a storage or waste pit or was perhaps used in association with some domestic activities.

Pits F (C144) and G (C142) were two inter-cutting pits located immediately to the south of the hearth within the structure (Figures 7, 10). Pit G was the later of the two, though it may have been a re-cut into Pit F rather than a completely new pit. A single find was recovered from the fill of Pit F. This was a rubbing stone (E3656:145:1) (Appendix 2.4) and appeared to have been deliberately placed, face-down, in the pit (Plate 8). This would be the top stone used to grind grain on a saddle quern. It is

possible that this stone was kept next to the hearth and that grain was being ground into flour within the structure. It may have been deliberately left behind when the house was abandoned, perhaps symbolising the end of the life-cycle of the structure. No saddle quern was found on site, though it is worth mentioning that one was found in the nearby townland of Monreagh during archaeological work carried out there as part of the same scheme (Monreagh 1 and 2, E3712) (Plate 14). This saddle quern had been dumped, presumably deliberately, in a wetland environment (MacNamara 2009). A sample of charcoal from fill C145 of Pit F returned a 2 Sigma calibrated date of 898–807 BC (2695±25 BP: UBA 12732), a date complimentary with those retrieved from the structural postholes and confirming Area 2 as a late Bronze Age site.

Pit H, C192, was located just inside the southwest wall of structure. It contained no finds and nothing to indicate its original function. The charcoal count within these pits was generally quite low, perhaps indicating that these features were used for storage rather than waste. The charcoal might then have silted into the pits following the abandonment of the site.

#### 2.4.6 Possible Structural Postholes and Stakeholes

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
51	N/A	0.24	0.19	0.31	N-S sub circular cut, steep sides	Cut of posthole
52	C51	0.24	0.19	0.31	Mid brown silty sand, charcoal	Single fill of cut 51
59	N/A	0.25	0.2	0.25	SE-NW sub circular cut, gradual sides	Cut of posthole
60	C59	0.15	0.15	0.2	Firm grey brown sandy silt, charcoal	Single fill of C59
190	N/A	0.12	0.14	0.06	E-W circular cut, gradual sides	Cut of stakehole
191	C190	0.12	0.14	0.06	Grey brown sandy silt, charcoal	Single fill of cut 190
298	N/A	0.08	0.08	0.13	Circular cut, vertical sides	Cut of a stakehole
299	C298	0.08	0.08	0.13	Brown grey sandy silt, stones	Fill of a stakehole 288
300	N/A	0.17	0.17	0.23	Circular cut, vertical sides	Cut of a posthole
301	C300	0.17	0.17	0.23	Mid grey brown sandy silt	Fill of a posthole
343	N/A	0.15	0.12	0.5	Circular cut, gentle sloping sides	Cut of a posthole
344	C343	0.15	0.12	0.5	Grey brown silty sand	Fill of a posthole
375	N/A	0.07	0.06	0.1	Circular cut, steep/vertical sides	Cut of a stakehole
376	C375	0.07	0.06	0.1	Light grey brown sandy silt	Fill of a stakehole
379	N/A	0.4	0.33	0.45	Sub circular cut, moderate/steep sides	Cut of a posthole
380	C379	0.4	0.2	0.25	Red brown silty sand, charcoal, stones	Fill of a posthole
381	C379	0.4	0.3	0.32	Grey brown clay sand, charcoal	Fill of posthole
390	N/A	0.17	0.17	0.38	N-S sub circular cut, vertical sides	Cut of a posthole
391	C390	0.17	0.17	0.38	Light grey brown sandy clay loam, stones	Fill of a posthole
396	C379	0.22	0.16	0.06	Blue brown sandy clay, charcoal, grave	Fill of a posthole

**Finds:** None

#### Interpretation

These six postholes, C51, C59, C300, C343, C379, C390, and three stakeholes, C190, C298, C375, were located in close proximity to the rectangular structure on site (Figure 7). It seems possible that they may have functioned as external supports for the structure, and were perhaps added during the lifetime of the structure to strengthen it against the elements. A further possibility might be that these posts formed part of a windbreak, or part of an external superstructure ancillary to the main central building. Unfortunately, insufficient evidence remained to be certain of this.

Charcoal retrieved from these features included oak, ash, yew, alder/hazel, hazel, and Maloideae species (hawthorn, rowan, crab apple) (Appendix 2.2), and is consistent with charcoal from the site generally, but does not clearly indicate what timber might have been used as posts within these postholes.

#### 2.4.7 Discussion of structure at Rathwilladoon 2/Area 2

The probable rectangular structure on Rathwilladoon 2 consisted of the external structural postholes that defined the structure, interior postholes, which may have been roof supports, all stakeholes contained within the feature, and all the remaining internal features, such as pits and the hearth. This structure measured approximately 5.5 m northeast–southwest x 3.5 m.

The central feature of the house was a hearth, presumably at the social as well as the spatial centre of the structure. It would have been used for both cooking and warmth. Of the pits within the structure, the most significant was Pit F which was located adjacent to the hearth. This contained a possibly deliberately deposited grinding stone or 'mano', perhaps suggesting that grain was being ground into flour within the structure. It may have been deliberately left behind when the house was abandoned, perhaps symbolising the end of the life-cycle of the structure.

A small number of lithics—chert flakes and debitage—were recovered from the structure, suggesting that some chert working was carried out within or nearby. Two AMS dates were obtained from charcoal from postholes C188 and C126. These returned 2 Sigma calibrated dates of 913–807 BC (2710±32 BP: UBA 12733) and 928–825 BC (2740±23 BP: UBA 12734) respectively. This places the structure in the early part of the late Bronze Age.

Fill C351 in posthole C126 contained 100% ash charcoal and fill C139 from posthole C138 contained 100% oak charcoal (Appendix 2.2). This suggests that the structure was built primarily of ash and oak. These species were both popular for construction material being strong, tough timbers that would form sturdy structures with considerable life spans. Posthole fill C54 produced two charred grains of barley, while posthole fill C58 contained a bird cherry pip and a charred hazelnut shell, which suggests that barley formed part of the diet with cherries and nuts perhaps being collected as a seasonal dietary supplement (Appendix 2.2).

### Various features in the environs of the structure in Area 2

#### 2.4.8 Other Postholes and Stakeholes

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
84	N/A	0.5	0.25	0.1	E-W sub oval cut, irregular sides	Cut of stakehole
85	C84	0.5	0.3	0.15	Mid brown silty clay, stones, charcoal	Fill of stakehole
94	N/A	0.13	0.1	0.2	Sub oval cut, vertical sides	Cut of stakehole
95	C94	0.13	0.1	0.2	Mid brown sediment, pebbles	Fill of a stakehole
136	N/A	0.5	0.3	0.36	SE-NW sub oval cut, vertical sides	Cut of a posthole
137	C136	0.25	0.2	0.42	Mid brown silty clay, charcoal, pebbles	Fill of C136
138	N/A	0.5	0.29	0.25	N-S oval cut, vertical sides	Cut of a posthole
139	C138	0.5	0.29	0.25	Mid brown silty clay, stones, charcoal	Single fill of C138
152	N/A	0.26	0.14	0.2	E-W sub oval cut, moderate/steep sides	Cut of posthole
153	C152	0.26	0.14	0.2	Light brown silty sand, stones, charcoal	Single fill of C152
158	N/A	0.2	0.14	0.33	E-W oval cut, vertical sides	Cut of posthole
159	C158	0.2	0.14	0.33	Dark grey brown sandy silt, stones	Single fill of C158
164	N/A	0.33	0.2	0.24	ESE-WNW oval cut, steep sides	Cut of stakehole

165	C164	0.33	0.2	0.24	Mid brown silty clay	Fill of C164
166	N/A	0.3	0.24	0.3	N-S oval cut, sharp/steep sides	Cut of posthole
167	C166	0.13	0.28	0.13	Orange brown soil, stones, charcoal	Top fill of C166
174	N/A	0.16	0.19	0.11	N- S oval cut, vertical sides	Cut of poss. stakehole
175	C174	0.16	0.18	0.11	Dark brown sandy clay	Single fill of cut 174
176	N/A	0.32	0.32	0.37	SE-NW circular cut, vertical sides	Cut of posthole
177	C176	0.15	0.16	0.19	Dark brown sandy silt, charcoal	Top fill of C176
201	C356	0.16	0.16	0.3	Yellow brown silty sand, charcoal, stones	Possible packing fill
223	N/A	0.08	0.08	0.18	Circular cut, vertical sides	Cut of a stakehole
224	C223	0.08	0.08	0.18	Grey brown silty clay	Fill of a stakehole
225	C176	0.32	0.32	0.37	Grey brown silty clay	Fill of a posthole
239	C136	0.18	0.15	0.1	Light brown grey silty clay, charcoal, stones	Fill of a posthole
240	C136	0.3	0.2	0.3	Silty clay, charcoal, stones	Fill of a posthole
332	C166	0.2	0.22	0.2	Red brown silty sand, charcoal	Base fill of a posthole
345	N/A	0.08	0.06	0.1	SW-NE sub circular cut, steep sides	Cut of a stakehole
346	C345	0.08	0.06	0.1	Orange brown silty sand	Fill of a stakehole
347	N/A	0.1	0.09	0.19	SW-NE oval cut, steep sides	Cut of a stakehole
348	C347	0.1	0.09	0.19	Red brown silty sand	Fill of a stakehole
349	N/A	0.1	0.09	0.12	Sub circular cut, steep sides	Cut of a stakehole
350	C349	0.1	0.09	0.12	Orange brown silty sand, charcoal	Fill of a stakehole
356	N/A	0.2	0.18	0.3	SSW-NNE oval cut, steep sides	Cut of a posthole
357	C356	0.1	0.1	0.15	Dark brown silty sand, charcoal, stones	Fill of a posthole
366	C367	0.06	0.05	0.14	Orange grey mid brown silty sand	Fill of a stakehole
367	N/A	0.06	0.05	0.14	Circular cut, vertical sides	Cut of a stakehole
374	C164	0.1	0.06	0.1	Mid brown silty clay	Fill of a stakehole

**Finds:** None

### Interpretation

These possible postholes, C136, C138, C152, C158, C166, C176, C356, and stakeholes, C84, C94, C164, C174, C223, C345, C347, C349, C367, in Area 2 did not appear to have any direct association with the structure (Figure 7). Their precise function is unclear.

### 2.4.9 Pits

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
130	N/A	2.8	0.88	0.35	E-W irregular sub oval cut, steep sides	Cut of possible pit
131	C130	0.7	0.5	0.16	Mid brown silty clay, stones	Middle fill of C130
170	N/A	2.4	1.85	0.25	N-S sub oval cut, steep sides	Cut of large pit
171	C170	2.4	1.85	0.25	Dark brown silt, charcoal, stones	Bottom fill of C170
186	N/A	2.32	1.85	0.4	N-S sub oval cut, steep sides	Cut of pit
187	C186	2.32	1.85	0.15	Light brown sandy silt, charcoal, stones	Top fill of C186
237	C130	2.8	0.87	0.25	Yellow brown silty sand, stones	Basal fill of a pit
238	C130	0.18	0.15	0.1	Dark brown silty clay, charcoal, bones	Top fill of c130
252	C186	2	1.5	0.3	Dark brown silty sand, charcoal, stone	Basal fill of a pit
369	C170	2	1.1	0.12	Mid brown silty clay, charcoal, bone, stones	Top layer of a pit
389	C170	1	0.35	0.06	Greyish brown sandy clay, charcoal	Top fill of pit 170

### Finds

Context	Find No	Material	Period	Description
171	E3656:171:1-2	Pottery	Final Neolithic/early BA/Beaker	Sherds
171	E3656:171:3	Copper alloy	Unknown	Piece of copper
171	E3656:171:4	Chert	Prehistoric	Flake



187	E3656:187:1	Chert	Prehistoric	Flake
252	E3656:252:1-5	Clay	Bronze Age	Mould fragments
369	E3656:369:1	Chert	Prehistoric	Flake

### Interpretation

Pit I, C130, was a shallow, linear pit that was located directly adjacent to the northeast wall of the structure (Figures 7, 10), indeed its western end seemed to cut the line of this wall, but as there was no posthole at this point it is unclear how these features related stratigraphically. It may be that this pit is later than the structure, but this is not certain. Pit I contained no finds or any indication of its function.

Pit J, C170, was located a few metres east of the structure (Figures 7, 10; Plate 9). Its base was somewhat uneven, with limestone protruding from the natural clay beneath (Plate 10). A number of sizeable pieces of limestone had also been dumped into the pit in prehistory and were mixed in to its fills. As well as prehistoric pottery and chert flakes it also produced a small fragment of copper. This was too small to retrieve any useful information from (Appendix 2.6), but as a number of possible clay mould fragments were recovered in pit K (see below) it would suggest that copper or bronze items were being cast on site.

The pottery recovered in Pit J was described by Grogan and Roche as possibly Beaker, but a positive identification was not possible from the fragments recovered, so it may actually date to the late Bronze Age (Appendix 2.7). It is possible that Pit J was a waste pit associated with metal-working activities carried out in the environs of the structure, while the charcoal rich fills may indicate that it could also have been used as a waste pit for rake-out material from the hearth (Appendix 2.2).

Pit K, C186, was located close to the edge of the site, some 10 m east of the structure (Figure 7, 10). Its base was somewhat uneven, with limestone protruding from the natural clay beneath. This pit produced five clay mould fragments (Appendix 2.7) and one chert flake. It is likely that Pit K was a waste pit associated with the structure, or with metal working activities carried out in the environs of the structure. The casting of copper alloy artefacts in moulds began in Ireland in a limited way in the latter part of the middle Bronze Age but was widespread by the late Bronze Age when Rathwilladoon 2 Area 2 was inhabited.

### 2.4.10 Small Pits

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
49	N/A	0.94	0.52	0.32	N-S irregular oval cut, vertical sides	Possible pit/posthole
50	C49	unknown	0.6	0.16	Mid yellow/brown sandy silt, stones	Top fill of C49
65	N/A	0.3	0.3	0.08	Triangular cut, gradual sides	Cut of possible pit
66	C65	0.3	0.3	0.08	Mid-brown clay silt with charcoal	Single fill of C65
73	C49	unknown	0.67	0.15	Orange white silty clay, stone	Lower fill of C49
92	N/A	0.77	0.57	0.08	SW-NE Irregular cut, steep irregular sides	Cut of shallow pit
93	C92	0.77	0.57	0.08	Grey brown sandy clay, bone, stones	Single fill of C92
128	C232	0.7	0.45	0.13	Greyish brown sandy clay, charcoal	Fill of C232
129	C232	0.72	0.45	0.08	Yellow brown sandy clay, charcoal	Basal fill of C232
134	N/A	0.26	0.16	0.2	E-W sub oval cut, steep sides	Cut of possible pit
135	C134	0.26	0.16	0.2	Mid grey brown sandy silt, charcoal	Fill of C134
156	N/A	0.41	0.33	0.35	E-W sub oval cut, steep sides	Cut of pit/posthole
157	C156	0.41	0.33	0.35	Light brown silty clay, stones	Single fill of C156
160	N/A	0.28	0.24	0.05	E-W sub circular cut, moderate sides	Cut of shallow pit

161	C160	0.28	0.24	0.05	Grey brown sandy silt, small stones	Single fill of C160
168	N/A	2.4	1.15	0.26	Irregular cut, vertical/gradual sides	Cut of shallow pit
169	C168	2.4	1.15	0.26	Dark brown sandy clay, charcoal, stones	Single fill of C168
231	C236	0.46	0.34	0.18	Mid brown sandy silt	Sole fill of C236
232	N/A	0.72	0.45	0.18	N-S irregular cut, vertical sides	Cut of a refuse pit
236	N/A	0.46	0.34	0.18	N-S irregular cut, gradual sides	Cut of a shallow pit
312	N/A	0.82	0.34	0.05	N-S sub oval cut, gentle/steep sides	Spread from C140
313	C312	0.82	0.34	0.14	Mid brown sandy silt, charcoal	Spread from C140
328	N/A	0.37	0.37	0.28	N-S sub oval cut, imperceptible sides	Cut of a possible pit
329	C328	0.3	0.25	0.15	Black charcoal rich silty clay, bone	Fill of a possible pit
330	C328	0.5	0.25	0.1	Light brown clay silt, stones, charcoal	Fill of a possible pit
387	N/A	0.15	0.14	0.12	E-W sub oval cut, undercut/steep sides	Cut of pit
388	C387	0.15	0.14	0.12	Mid brown sandy silt	Fill of pit C387
394	N/A	0.54	0.48	0.23	N-S sub oval cut, vertical sides	Cut of a pit
395	C394	0.54	0.48	0.23	Mid brown sandy silt	Sole fill of a pit
407	N/A	0.42	0.2	0.2	NE-SW oval cut, gradual/vertical sides	Cut of a small pit
408	C407	0.42	0.2	0.2	Grey brown silty sand, charcoal, stones	Fill of a small pit

## Finds

Context	Find No	Material	Period	Description
135	E3656:135:1-2	Clay	Bronze Age	Mould fragments?

## Interpretation

These 13 small dispersed pits, C49, C65, C92, C134, C156, C160, C168, C232, C236, C328, C387, C394, C407, were found in Area 2 (Figure 9). Only one pit C134 contained any artefacts in its fill: two possible clay mould fragments (Appendix 2.7). It is likely that all the pits above are waste or storage pits associated with the daily activities carried on within and in the environs of the structure on site. Bone fragments were recovered from the fill of the triangular pit (C65).

### 2.4.11 Discussion of features in the environs of the structure in Area 2

The features listed above consisted of dispersed stakeholes and postholes and a series of three large and thirteen small pits, all of which are likely to have been associated with the structure or with activities carried out in the environs of the structure, either as waste or storage pits. Where artefactual evidence was recovered it was consistently prehistoric. The recovery of a combination of a copper or bronze fragment (Appendix 2.6) and a number of clay mould fragments (Appendix 2.7) suggests that bronze objects were being cast on site, though the mould fragments were not large enough to suggest what kind of objects.

## 2.5 Phase 5 Iron Age Activity at Rathwilladoon 3

### 2.5.1 Curvilinear feature

Rathwilladoon 3 consisted of an area of 20 m x 20 m, located some 100 m southwest of Rathwilladoon 2. The archaeological activity uncovered there consisted of a narrow, shallow curvilinear feature, which based on its form, is likely to have been an element of a lightly built circular structure.

Context	Fill of	L (m)	W (m)	D (m)	Basic Description	Interpretation
3	N/A	5.7	0.3	0.09	E-W curvilinear cut, steep/vertical sides	Curvilinear cut
4	C3	5.65	0.24	0.09	Mid-dark yellow brown, charcoal	Fill of C3

**Finds:** None

### Interpretation

The archaeological activity at Rathwilladoon 3 consisted of a shallow curvilinear cut, C3, and its charcoal-rich fill, C4. Given the smooth curve of the cut, it may have been an element of a footing trench for a lightly built circular structure (Figures 3; Plate 3). Despite cleaning the area around this feature carefully and testing extensively, no more of it, or any other features was identified. The area around Rathwilladoon 3 had been subject to intensive reclamation agricultural activity in the recent past; it seems likely that the feature recorded on site was most likely part of a larger structure, the rest of which was obliterated by this agricultural activity. Based on the curve of the remaining element, this structure would have had a diameter of at least 10 m.

As no artefacts were recovered at Rathwilladoon 3 and circular structures were in use at various times in the past, it was unclear at the time of excavation as to what period the site belonged to. Charcoal was retrieved from the fill of the curvilinear feature C4, and was found to consist of hazel, alder/hazel, ash and Maloideae species (hawthorn/rowan/crab apple) (Cobain, Appendix 2.2). Given the variety of species in evidence, this assemblage most likely represented rake-out from a domestic hearth which was disposed of and silted into the foundation trench of the structure. A charcoal sample from C4 returned a 2 Sigma calibrated date of 186–52 BC (2103±22 BP: UBA 12731), placing this structure in the *La Tène* Iron Age.

## 2.6 Phase 6 Post-medieval/Modern Activity

### 2.6.1 Agricultural Activity

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
255	N/A	>32.5	0.49	0.14	NW-SE linear cut, moderate sides	Cut of a furrow
256	C255	>32.5	0.49	0.14	Mid grey brown clay silt, stones	Fill of a furrow

**Finds:** None

### Interpretation

A furrow, C255, ran northwest–southeast and lay immediately to the southwest and somewhat upslope of the prehistoric activity in Area 1 of Rathwilladoon 2. The fill, C256, was very similar to topsoil (C1) and the furrow was post-medieval or modern in date. The landowner at Rathwilladoon confirmed that the field had been used for tillage on a number of occasions during his lifetime (Finbar Gantley, pers. comm.). Further downslope the topsoil was much deeper, which probably explains why furrows did not generally survive (they did not penetrate to the depth of the natural geology) and consequently why the archaeological activity survived as well as it did.

## 2.7 Phase 7 Topsoil

### 2.7.1 Topsoil

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
1	N/A			<0.6	Layer of mid to dark brown silty clay	Topsoil

## Finds

Context	Find No	Material	Period	Description
1	E3656:1:1	Pottery	Neolithic	Sherd
1	E3656:1:2	Pottery	Modern	Base sherd from test pit
1	E3656:1:3-86	Pottery	Post medieval / modern	Sherd from test pits
1	E3656:1:87-117	Clay pipe	Modern	Fragment from test pits
1	E3656:1:118-119	Iron	Modern	Corroded nail from test pits
1	E3656:1:120	Iron	Modern	Horse shoe from test pit
1	E3656:1:121-154	Iron	Modern	Corroded piece from test pits
1	E3656:1:155	Cu alloy	Modern	Button. Inscription 'o colo. (frag) from test pit
1	E3656:1:156	Cu alloy	Modern	Button from test pit
1	E3656:1:157	Cu alloy	Modern	Bullet casing from test pit
1	E3656:1:158-173	Glass	Modern	Sherds from test pits
1	E3656:1:174	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:175	Chert	Prehistoric	Flake from test pit
1	E3656:1:176-180	Chert	Prehistoric	Natural chunk from test pits
1	E3656:1:181	Chert	Prehistoric	Debitage from test pit
1	E3656:1:182-184	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:185	Chert	Prehistoric	Retouched artefact from test pit
1	E3656:1:186-187	Chert	Prehistoric	Natural chunk from test pits
1	E3656:1:188	Chert	Prehistoric	Debitage from test pit
1	E3656:1:189-190	Chert	Prehistoric	Flake from test pit
1	E3656:1:191-192	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:193	Chert	Prehistoric	Debitage from test pit
1	E3656:1:194-197	Chert	Prehistoric	Natural Chunk from test pits
1	E3656:1:198	Chert	Prehistoric	Flake from test pit
1	E3656:1:199	Chert	Prehistoric	Retouched artefact from test pit
1	E3656:1:200	Chert	Prehistoric	Flake from test pit
1	E3656:1:201	Chert	Prehistoric	Blade from test pit
1	E3656:1:202	Chert	Prehistoric	Flake from test pit
1	E3656:1:203	Chert	Prehistoric	Retouched artefact from test pit
1	E3656:1:204	Chert	Prehistoric	Flake from test pit
1	E3656:1:205	Chert	Prehistoric	Retouched artefact from test pit
1	E3656:1:206-207	Chert	Prehistoric	Flake from test pit
1	E3656:1:208	Chert	Prehistoric	Retouched artefact from test pit
1	E3656:1:209-213	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:214	Chert	Prehistoric	Debitage from test pit
1	E3656:1:215	Chert	Prehistoric	Retouched artefact from test pit
1	E3656:1:216	Chert	Prehistoric	Flake from test pit
1	E3656:1:217-218	Chert	Prehistoric	Natural chunk from test pits
1	E3656:1:219	Chert	Prehistoric	Flake from test pit
1	E3656:1:220	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:221	Chert	Prehistoric	Flake from test pit
1	E3656:1:222	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:223	Chert	Prehistoric	Flake from test pit
1	E3656:1:224	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:225	Chert	Prehistoric	Flake from test pit
1	E3656:1:226	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:227	Chert	Prehistoric	Flake from test pit
1	E3656:1:228-231	Chert	Prehistoric	Natural chunk from test pits
1	E3656:1:232	Chert	Prehistoric	Flake from test pit
1	E3656:1:233	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:234	Chert	Prehistoric	Debitage from test pit

1	E3656:1:235	Chert	Prehistoric	Flake from test pit
1	E3656:1:236	Chert	Prehistoric	Retouched artefact from test pit
1	E3656:1:237-238	Chert	Prehistoric	Natural chunk from test pit
1	E3656:1:239	Chert	Prehistoric	Retouched artefact from test pit
1	E3656:1:240	Chert	Prehistoric	Retouched artefact from test pit
1	E3656:1:241-243	Chert	Prehistoric	Natural chunk from test pits
1	E3656:1:244-246	Chert	Prehistoric	Flake
1	E3656:1:247	Chert	Prehistoric	Debitage
1	E3656:1:248	Chert	Prehistoric	Core
1	E3656:1:249	Chert	Prehistoric	Natural Chunk
1	E3656:1:250-251	Chert	Prehistoric	Flake
1	E3656:1:252	Chert	Prehistoric	Retouched artefact
1	E3656:1:253	Chert	Prehistoric	Natural Chunk
1	E3656:1:254	Chert	Prehistoric	Flake
1	E3656:1:255-256	Chert	Prehistoric	Natural Chunk
1	E3656:1:257	Chert	Prehistoric	Debitage
1	E3656:1:258-261	Chert	Prehistoric	Natural Chunk
1	E3656:1:262-263	Chert	Prehistoric	Flake
1	E3656:1:264	Chert	Prehistoric	Debitage
1	E3656:1:265	Chert	Prehistoric	Core
1	E3656:1:266	Chert	Prehistoric	Flake
1	E3656:1:267	Chert	Prehistoric	Retouched flake
1	E3656:1:268	Chert	Prehistoric	Natural chunk
1	E3656:1:269-272	Chert	Prehistoric	Flake
1	E3656:1:273	Chert	Prehistoric	Natural chunk
1	E3656:1:274	Chert	Prehistoric	Core from test pit
1	E3656:1:275	Flint	Prehistoric	Flake from test pit
1	E3656:1:276-277	Flint	Prehistoric	Natural chunk from test pits
1	E3656:1:278-279	Flint	Prehistoric	Debitage from test pits
1	E3656:1:280	Flint	Prehistoric	Retouched artefact from test pit
1	E3656:1:281	Flint	Prehistoric	Flake from test pit
1	E3656:1:282	Flint	Prehistoric	Debitage from test pit
1	E3656:1:283	Flint	Prehistoric	Flake
1	E3656:1:284	Flint	Prehistoric	Debitage
1	E3656:1:285	Flint	Prehistoric	Blade
1	E3656:1:286-287	Flint	Prehistoric	Flake
1	E3656:1:288	Flint	Prehistoric	Debitage
1	E3656:1:289	Flint	Prehistoric	Natural chunk
1	E3656:1:290	Flint	Prehistoric	Core
1	E3656:1:291	Sandstone	Prehistoric	Hammer-stone

## Interpretation

All of the archaeological features and the natural subsoil layers were sealed by topsoil. The topsoil on site consisted of a layer of mid to dark brown silty loam. Topsoil depth varied greatly across the site, from about 0.1 m on the western uphill side of the site to about 0.6 m at the eastern downhill side of the site. This difference was probably due to a combination of ploughing activity and soil creep. The topsoil was removed by mechanical excavator in advance of the hand excavation of archaeological features. This was following the excavation by hand of a series of 1 m x 1 m test pits across the site.

## Test Pits

These were set out in a rigid grid formation at 5 m intervals initially, which across a 50 m x 50 m area totalled 121 pits. These pits were dug until natural geology was

reached, or the surface of archaeological features. The topsoil which was removed was then dry sieved on site, and a record was made of all the finds recovered by pit.

Based on some possible concentrations of finds, 26 extra pits were dug in some locations. Only in one area did these possibly suggest a genuine concentration of prehistoric finds, this was centred on pit 86. This was found to be about 5 m to the south of Area 2. In total 147 hand-dug pits were excavated and sieved across the site, totalling approximately 6% of the topsoil on site.

80 possible prehistoric artefacts were recovered from test pits, including 70 pieces of chert, 9 pieces of flint, and 1 piece of possible prehistoric pottery. 7 scrapers were identified in the assemblage, all of chert. 159 post-med artefacts were recovered, mainly ceramics, glass and iron objects such as corroded nails.

A bias towards chert was also reflected in the finds recovered from features, though not to as great an extent as in the test pits. The numbers from features were 91 chert artefacts as compared to 24 flint artefacts, a ratio of almost 4-1. Nonetheless it suggests a reliance on chert; this is not surprising giving the scarcity of flint in the area (Appendix 2.4).

Archaeological features such as pits and postholes would originally have been cut through topsoil, and as a result of activities such as ploughing the upper part of such features generally does not survive, leaving us only the part of the feature that was cut into the natural subsoil to excavate and interpret. As a direct result of this, any artefacts that were originally contained in the upper part of these features (or any lost or dumped on the surface in prehistory) will have become mixed into the topsoil layer. Apart from any items that may have been removed from the surface following ploughing episodes down the years, these artefacts (depending on their durability), may well survive in the topsoil to the present day. It is in this light that the artefacts recovered from the test pits on site should be seen, and therefore they are a general indicator of prehistoric activity in the vicinity.

### 3 SYNTHESIS AND DISCUSSION

#### 3.1 Landscape Setting

Most of the low-lying areas along the route were associated with poorly drained bog and wet marshland which have developed within glacially formed depressions and seasonal lakes known as turloughs. The higher ground generally comprised well-drained, gently undulating pastureland with some uneven hummocky ridges, formed either of limestone epikarst or glacial features such as drumlins. The two dominant rock types of the region were Carboniferous Limestone, which underlay the entire length of the N18 Gort to Crusheen scheme, and the Devonian Old Red Sandstone, which formed the Slieve Aughty Mountains to the east of the project. The road alignment was predominantly underlain by either limestone and sand derived till deposited during the last glaciation or organic peat which has generally formed since then in the low-lying, poorly drained areas where standing water and slow percolation caused thin layers of peaty soil to accumulate.

The prehistoric activity on site was found in two main areas: Rathwilladoon 2 and Rathwilladoon 3, which were excavated under one Registration Number. The sites were located in Rathwilladoon townland, Co. Galway. The sites were located at NGR 141360/194246 (28 m OD) and 141275/194125 (31 m OD) respectively. Both of these sites were located on the southeast-facing slopes of a hill overlooking a sizeable area of wetland, though it should be stated that Rathwilladoon 2 was sitting on a near-level shelf on the hillside. A graveyard (GA0128-069) is located c. 100 m west southwest of Rathwilladoon 3 and c. 250 m southwest of Rathwilladoon 2. Furthermore a ringfort (GA0128-070) and associated souterrain (GA128-07001) are located c. 180 m west southwest of Rathwilladoon 3 and c. 300 m southwest of Rathwilladoon 2.

It is likely that the wetland area adjacent to these sites was a shallow lake in the prehistoric period, and indeed quite possibly until the relatively recent past. Certainly it is recorded that during the establishment of the Limerick to Galway railway line (which runs through the wetland c. 100 m from the site) drainage work greatly reduced the water-table in the region. This is backed up by an examination of the 1<sup>st</sup> and 2<sup>nd</sup> edition Ordnance Survey maps, between the making of which the railway line was established. It is clear from the map evidence that a number of areas of open water to the east of the sites at Rathwilladoon had disappeared following the building of the railway line. For that reason it may be appropriate to think of these sites as lakeside settlements.

#### 3.2 Archaeological Landscape (Neolithic)

The transition from the Mesolithic to the Neolithic period brought with it many changes to society. In county Clare and particularly in the northwest of the county in the Burren, where there is a highly visible prehistoric landscape due to the exposed bare rock nature of the terrain a large number of prehistoric sites including c. 80 wedge tombs (Jones 2004, 65) indicates a well organised prehistoric landscape. The majority of these monuments are early Bronze Age however, with just thirty-six probable Neolithic tombs recorded ([www.archaeology.ie](http://www.archaeology.ie)). Of these, the closest to Rathwilladoon are the court tomb and possible passage tomb at Parknabinnia located c. 15 km to the WSW. Here a court tomb was excavated by Carleton Jones and Alex Gilmer in 1998 (98E0230), and this is perhaps the closest significant Neolithic site to have been investigated to date in the area ([www.excavations.ie](http://www.excavations.ie)). In County Galway fifty-one probable Neolithic tombs are recorded, but the vast majority of these are clustered together to the northwest of the county close to Clifden ([www.archaeology.ie](http://www.archaeology.ie)). The closest relevant site to Rathwilladoon is the portal tomb at Crannagh, which is located some 11 km to the north. The area in the environs of the

N18 road scheme has produced little evidence for Neolithic activity, and as a result the excavation at Rathwilladoon has yielded valuable information.

A polished stone axe (Museum Files P1948:97) recovered from a bog in Gortavoher townland in 1948 provides some possible evidence for Neolithic activity within the study area, while a second axe was recovered from this bog at Monreagh during test excavations carried out in advance of the N18 road scheme. While this may point to ritual deposition as opposed to settlement, it is nonetheless evidence for human activity in the general area. Neolithic stone axes were also recovered from the sites at Sranagalloon 1, Caheraphuca 1 and Caheraphuca 8.

### **Neolithic Rathwilladoon 2**

Rathwilladoon 2, Area 3, consisted of four pits and a posthole. The key feature seemed to be the largest pit, Pit M, which contained a large quantity of lithic material and some pottery. Based on specialist examination of the finds recovered it appears that the activity in this area dates to the early part of the Neolithic period (c. 4000–3600 BC), and consequently is the first evidence we have for human activity at Rathwilladoon. The type of finds recovered suggests the presence of an early Neolithic settlement in the environs of these pits, and consequently this site makes a significant contribution to our knowledge of this period in the Clare/Galway region. No further Neolithic habitation sites were identified on this section of the N18 road scheme; however, as discussed earlier, stray axes were recovered in Monreagh, Sranagalloon and Caheraphuca.

### **3.3 Archaeological Landscape (Bronze Age)**

Following the test excavation phase of the project it was apparent that most of the archaeological sites identified were located at the south end of the scheme in County Clare. This trend appears to have resulted from landscape management in the recent past where the better drained lands to the north have been improved and the fields enlarged, which would have had a negative effect on any buried archaeological sites. However, the area to the south, which coincides with crossing the county border, was of more marginal land prone to flooding and in this area the route of the new road tended to follow wet valley floors and steep valley slopes. The landscape encountered in County Clare was much the same as it was depicted on the first edition Ordnance Survey maps (1842).

The transition from the Neolithic to the Bronze Age period reflects a continued and somewhat intensified population in north and east Clare. It is during this period that megalithic monuments were replaced in favour of individual cist or pit burials, either located in isolation or in small cemeteries. Different forms of barrow monuments were also being constructed during the period, as well as ceremonial monuments such as circular henges, standing stones, stone rows and stone circles. A current research project in the Burren has also recorded middle and late Bronze Age ritual funerary deposition in Glencurran Cave, Co. Clare (Dowd 2007).

In recent years Bronze Age habitation sites have come more to the fore as they have been uncovered as part of development-led or infrastructural projects. They are well documented elsewhere but two interesting recently excavated sites include a Bronze Age roundhouses at Tober 1, County Offaly (Walsh 2009) and Barnhill, Dromoland, Co. Clare (Moore Group 2009). In south County Clare, a probable habitation site of middle Bronze Age date (1447–1318 cal. BC [UB-6138, 3118±31 BP) was discovered at Ballaghfadda West in advance of the Gas Pipeline to the West project. This was defined by a circular U-shaped ditch between 11 m and 15 m in diameter, and numerous pits, postholes and stakeholes indicated a domestic function (Halpin 2007, 169). Unfortunately, as it had a middle Bronze Age date, no comparisons can



be made with the activity at Rathwilladoon which dated to the early and late Bronze Age.

An important academic study of the spatial organisation of Bronze Age society and landscape has been undertaken of the north Munster area. In County Clare this is defined by the work undertaken by Grogan on the Bronze Age trivallate hillfort at Mooghaun (Grogan 2005). This study identified and mapped a Bronze Age landscape dominated by the hillfort which may have influenced a catchment area of up to 450 km sq (Grogan 2005, 95). Identified within the area of influence were ceremonial monuments, house sites, burnt mound sites and other features such as fish traps and trackways in the Fergus estuary (O'Sullivan and Dillon 2005). The Mooghaun study area is outside the sphere of influence of sites identified on the Gort to Crusheen scheme but indicates nonetheless that a similar societal organisation of the landscape may have existed for them too. A hoard of gold objects discovered at Mooghaun during the construction of the Limerick – Ennis railway in 1854 is one of the largest single discoveries of Bronze Age gold in Europe (Grogan 2005, 70). Another significant gold find from the north of the county was the Gleninsheen gorget, a large collar of hammered gold discovered by a farmer in 1932 (Jones 2004, 74).

The most widespread sites from the Bronze Age are burnt mounds (also known as *fulacht fiadh*). They survive as low mounds of charcoal-rich soil mixed with heat-shattered stones. They are usually horseshoe shaped, located in low-lying areas near a water source and are often found in clusters. While it is generally thought that they were probably used as cooking places (Ó Drisceóil 1988), finds from excavated examples where there is a noteworthy absence of animal bone does not easily support this theory. Lucas (1965) suggested that burnt mounds might have been used for processes such as bulk washing, dying and leather working while Barfield and Hodder (1987) have suggested that such sites were covered by light structures and used as sweat houses. Radiocarbon dates for this monument type have generally placed them in the Bronze Age (Brindley et al. 1990, 55) though evidence from early Irish texts (Ó Drisceóil 1988) suggests use of this type of site up until the 16<sup>th</sup> century AD.

Burnt mounds make up a significant number of the Recorded Monuments within the immediate vicinity of the Gort to Crusheen road scheme and following examination of a 1 km wide corridor, using the road as the centreline, of the scheme, the distribution of these classic elements of the Bronze Age landscape became apparent. Within this defined corridor there were no recorded burnt mounds in south County Galway, whereas north County Clare was rich in the monument-type: RMP sites CL018-069, CL018-071, CL018-072, CL018-077, CL018-084, CL018-082, CL018-083, CL018-086, CL026-143, CL026-130, CL026-131, CL026-136, CL026-138, CL026-137, CL026-134, CL026-135, 02E1284 partly excavated as part of the Bord Gáis Éireann pipeline to the west at Bearnafunshin (Dennehy 2002a), 02E0342 excavated as part of the Bord Gáis Éireann pipeline to the west at Bearnafunshin (Halpin 2002), CL026-149, CL026-150, CL026-151, CL026-156, CL026-157, CL026-158, CL026-165, CL026-164, and Site AR25 Carrowdotia (Taylor 2006a). There appeared to be a tendency in the sites identified for clustering, often within 100 m or less of each other.

Single upright standing stones are a common feature of the Irish landscape and, though they may date to different periods and serve different functions, excavation has shown that some may mark prehistoric burials, while some may signify a route-way, a boundary, or serve a commemorative role. Generally speaking, it is likely that a large number date to the Bronze Age. The orientation of a stone may have had significance, with their long axes aligned to another stone or toward a cairn on a

mountain top, although the latter is difficult to prove. A standing stone (RMP CL026-035) has been identified c. 150 m southeast of the southern end of the route.

Ring barrows consist of a low, usually circular mound or level area enclosed by a fosse and external bank, the diameter of the earthwork usually ranging between 4 m and 12 m and rarely exceeding 1 m in height or depth. Excavation has demonstrated that they usually sealed a burial deposit, often a cremation. Such forms of burial have a long tradition and individual examples have been assigned to the Neolithic, Bronze and Iron Ages. A ring barrow (Dennehy 2002b) was identified during monitoring of the Bord Gáis Éireann's pipeline at Cloonagowan, Co. Clare. The archaeological remains represented a cremation pit with a ring ditch. Pits, stakeholes and a slot trench were identified within the ring ditch, with some pits indicating a probable domestic function. A second cremation pit was identified c. 75 m to the northeast, with an isolated posthole, which may have acted as a marker for the cremation pits, located further to the northeast. A single thumbnail scraper was recovered from the site, enabling the rough dating to the late Neolithic/early Bronze Age period (Dennehy 2002c). A single possibly Bronze Age cremation pit and industrial pits were identified during the monitoring of the Bord Gáis Éireann's pipeline in Gortaficka (Dennehy and Sutton 2002). A wedge tomb (CL026-015) is located less than 500 m northeast of a concentration of burnt mounds and spreads which surround a peat bog, and were excavated as part of the N18 Gort to Crusheen road scheme, in Caheraphuca townland. The wedge tomb is also likely to date to the late Neolithic or early Bronze Age.

Our appreciation of the wider Bronze Age landscape in counties Clare and Galway is continuously being expanded as more sites are being uncovered during research, development led and infrastructural projects such as the N18 road scheme. Excavations connected with construction of the N18 to the north (Gort to Oranmore) which is entirely within county Galway has also recently produced evidence for the Bronze Age landscape with eight burnt mound sites identified: one at Ballyglass West, a cluster in Caherweelder townland and further examples in Moyveela and Coldwood (Eachtra 2009).

Excavations undertaken by TVAS (Ireland) Ltd in 2003 in advance of construction of the N18 Ennis Bypass and N85 Western Relief Road, which terminated at the southern end of the N18 Gort to Crusheen road scheme revealed similar archaeological sites. This area was generally better drained and the variety of Bronze Age sites encountered during that project reflects the change in terrain. The marginal lands and areas closest to wetlands, rivers and streams produced evidence for burnt mounds such as the four burnt mound sites identified at Clare Abbey (Hull 2006a and b, Taylor 2006c and d) close to the Ardsollus river (a tributary of the Fergus). Burnt mound sites were also excavated at Killow (Taylor 2006b), Cahircalla More (Taylor 2006c) and Carrowdotia (Taylor 2006a) just to the very south of the Gort to Crusheen project. Apart from the burnt mound sites a number of funerary sites were also identified on that scheme. Two cremation cemetery sites were identified in Manusmore townland (Hull 2006a and 2006b) both were located on slightly elevated free-draining gravel ridges. A third site with cremation pits was identified at Killow (Taylor 2006b) in close proximity to a burnt mound; it was located on a low but well-drained gravel drumlin.

The landscape of County Clare is rich in sites dating to the Bronze Age, indicating that the area was widely inhabited during that period. Burnt mounds are the most frequent site of Bronze Age date encountered in this area of Clare, with twenty-seven identified within the immediate area of the road scheme. There are no burnt mounds recorded within the tight constraints of the study area for Co. Galway but there are

examples in the wider surrounding area and they were also located in the excavations on the N18 contract further to the north. The archaeological evidence to date indicates that the study area and indeed its wider landscape were inhabited throughout the entire Bronze Age period.

### **Bronze Age Rathwilladoon 2**

Rathwilladoon 2, Areas 1 and 2, dated from the early and late Bronze Age respectively, and the archaeology appeared to represent areas of former habitation with a probable structure identified in both instances. Charcoal from these areas returned 2 sigma dates of 2280–2042 BC (3753±26 BP: UBA 12736) in Area 1, and 913–807 BC (2710±32 BP: UBA 12733), 928–825 BC (2740±23 BP: UBA 12734) and 898–807 BC (2695±25 BP: UBA 12732) in Area 2. No further Bronze Age structures were recorded across the project.

As a site with rectangular Bronze Age structures Rathwilladoon is unusual, but not unique; some 87% of Bronze Age houses recorded in Ireland to date were round (Doody 2000). Doody has also noted that, as at Rathwilladoon 2/Area 1, 87% of Bronze Age houses display no evidence for an internal hearth. Rathwilladoon 2/Area 1 is a rare example of a probable house site associated with early Bronze Age Beaker pottery, and within this region comparisons must be made with Ross Island Co. Kerry, Lough Gur Co. Limerick and of course Parknabinnia, Co. Clare. The latter produced sherds of a fine vessel which was very similar to No. 3 from Rathwilladoon (Appendix 2.7). The site at Parknabinnia consisted of a field system, wedge tombs and at least one (possibly four) Beaker period farmstead (Jones and Gilmer 2000), and allows us to imagine the early Bronze Age landscape beyond the confines of the defined excavation area. The complex at Parknabinnia is located c. 15 km west southwest of the site at Rathwilladoon.

As known early Bronze Age habitation sites are scarce in the region, it is perhaps appropriate to look at other means of assessing the population density of the region at the time. One way of doing this is to examine the known upstanding monuments from that period, and there is perhaps no more visible marker of this period than wedge tombs. Generally dated to the early Bronze Age, some 500 of these are recorded across the Republic of Ireland. Of that number, 149 are found in Clare, and 27 from Galway—mostly from the south of the county ([www.archaeology.ie](http://www.archaeology.ie)). This group represents one of the three main concentrations across the country, the others occurring in Sligo and west Cork, and it suggests that the population may have been at its most dense in these regions during that period (of course we must be aware that other factors such as monument survival levels and local cultural differences at the time may be skewing this picture).

The Clare/south Galway concentration is again concentrated into two areas, the busiest of which is located in the area of the Burren, with the other concentration located to the east of county Clare ([www.archaeology.ie](http://www.archaeology.ie)). Rathwilladoon actually lies outside of these dense zones, lying to the east of the Burren group and northwest of the eastern concentration. Nonetheless a less dense scatter of wedge tombs are to be found in between, the closest of which are located at Knockmael East (CL018-026) c. 4.7 km south southeast of Rathwilladoon, Derrycallan North (GA129-011) c. 7 km east northeast of Rathwilladoon and Ballaghaglash (CL011-005) located c. 7 km northwest of Rathwilladoon. Based on this evidence we can tentatively suggest that during the early Bronze Age, the inhabitants of Rathwilladoon were living in between two areas of high population density, in a relatively busy area by comparison with the rest of the country.

The evidence for the later Bronze Age period paints a somewhat different picture. Several clusters of burnt mounds were excavated along the N18 Gort to Crusheen road scheme, producing dates throughout the Bronze Age period. While burnt mounds were not habitation sites, they can be used in a general way as an indicator of where people were living in the broad sense (allowing for the fact that their precise location will be reflective of the local topography and environment). A total of 111 known burnt mounds/*fulacht fiadh* are recorded across county Galway, and the majority of these are found in the southern part of the county, in the area between Galway City and Gort. A massive 539 examples are recorded in County Clare, and these are mainly found in a broad band that runs north to south down the middle of the county ([www.archaeology.ie](http://www.archaeology.ie)). Taking the burnt mound evidence as an indicator, it seems that in the middle and later Bronze Age period, the area around Rathwilladoon was indeed well populated, albeit that few habitation sites have been discovered to date.

### 3.4 Archaeological Landscape (Iron Age)

In comparison with the Bronze Age, evidence for Iron Age activity in Ireland as a whole is somewhat scarce. The later first millennium BC and the early centuries AD are amongst the most obscure in Irish prehistoric archaeology (Waddell 1998, 279). Waddell states that 'domestic occupation sites remain virtually unknown and our understanding of settlement, economy and social structure in the period from 600 BC to the early centuries AD is meagre in the extreme' (Ibid. 319).

This road scheme joins a number of recent large-scale infrastructural projects in the region which have included archaeological excavations, most notably the gas pipeline to the west (Grogan et al. 2007) which runs mostly parallel a short distance to the west of the N18, and the N18 road contracts to the north and south. Unfortunately despite these projects evidence for Iron Age settlement and activity remains relatively minor in this region.

One potential Iron Age site close to the N18 is the possible hilltop enclosure (GA122-078) located in the townland of Drumminacloghaun, Co. Galway, located towards the northern end of the route (it is also possible however that this enclosure may simply have been an early medieval ringfort). The site appears on the 1<sup>st</sup> and 2<sup>nd</sup> edition Ordnance Survey mapping apparently located on the edge of a ridge. It was subsequently destroyed and no trace of it was identified in the walkover survey conducted as part of the EIS for the scheme. Excavations at hilltop enclosures have produced evidence for occupation in the late Bronze Age and early Iron Age (Raftery, 1994, 58-62) and it is possible that some were only occupied sporadically in times of strife. They may have been used principally as meeting places on ceremonial, ritual or political occasions. Large resources would have been required to build these earthworks, indicating a movement perhaps towards larger population tribal groups.

The Iron Age is noted for its lack of native pottery and also the scant evidence for burials and settlements when compared to both the Bronze Age and early medieval periods. A concentration of funerary barrows is known to the north of the scheme (to the east and northeast of Ardahan) and may well date to the Iron Age period. One example at Grannagh (east of Ardahan) was completely excavated (Waddell 1998, 367). The excavation revealed a 15 m diameter ringditch which contained pockets of cremated bone, and a variety of finds including glass beads, dumbbell shaped beads and pins. It has been dated to the 1<sup>st</sup> century AD. Another ringditch was excavated at Oran Beg (Rynne 1970), near Oranmore. It was 11 m in diameter and there were cremation deposits within the ditch fill. Over 80 glass beads, mainly blue but also yellow, were recovered during the excavation and some of these appeared to have

been fused in the cremation pyre. The finds of both the Grannagh and Oran Beg sites indicate an Iron Age date.

Moving south of the Gort to Crusheen road scheme there was evidence for Iron Age funerary activity recovered from the N18 Ennis Bypass and N85 Western Relief Road archaeological excavations. A site at Manusmore identified as containing twenty-seven burial pits returned a date range from the Neolithic to the Iron Age periods (Hull 2006a), the later dated pits contained burnt animal bone and may not specifically be related to the cremations. Approximately 900 m to the northeast another pit burial site was located which too produced evidence for an Iron Age date (Hull 2006b).

At Killow, a site was identified which contained evidence for late Bronze Age and Iron Age activity, apart from a burnt mound this was mainly in the form of pits (one of the probable cremation pits was dated to the very early Iron Age. A wooden bowl found in peat close to the site also returned a similar Iron Age date (04E0191:50:1). A ringditch with a diameter of 6 m was also excavated as part of that scheme and produced an Iron Age date. The site had been heavily truncated but produced cremated bone deposits and finds including yellow glass beads and fragments of quartz (Hull 2006c). Two ringditches have also been excavated as part of the N18 Gort to Crusheen scheme in Ballyboy townland and based on the artefact and bead types recovered from them they appear to date to the Iron Age period.

Most Iron Age sites identified within close proximity to the N18 Gort to Crusheen road scheme relate to the funerary deposition of cremated bone at the sites, either in ringditches or in pits. At most of these sites the cremated remains did not represent complete individuals and this may indicate that at times only token deposits were placed in the monuments. We know very little of the everyday activities of domestic life during this period as very little evidence of their houses or artefacts have been identified within the archaeological record. The site at Rathwilladoon 5 (Lyne 2009) produced evidence for a charcoal clamp and small furnace pit approximately 300 m to the south. This may be associated with the activity at Rathwilladoon 3. It dates to 155 BC–AD 67 (2018±37 BP: UBA 12739), a date range which overlaps with that of Rathwilladoon 3.

Other sites excavated along the Gort to Crusheen road scheme with Iron Age period dates include Derrygarraff 2. This site, which appeared to also contain a charcoal production kiln (however dating of the feature returned a modern date and cannot be trusted), was found in marginal land adjacent to a low-lying wetland area. Its location was probably influenced by the presence of suitable timber for charcoal. The kiln was found alongside a metalworking furnace which returned a 2 Sigma calibration date of 350–100 BC (2144±21 BP:UBA12716). Perhaps this poor quality land may have been used for the deliberate coppicing of certain types of tree for the purpose of making charcoal. A second possibility, given the discovery of the metal-working feature, could be that the metal was being sourced nearby from the wetland area in the form of bog iron and was smelted close to the source for convenience.

### ***Iron Age Rathwilladoon 3***

Rathwilladoon 3 consisted of a single isolated archaeological feature. This was a shallow curvilinear cut and its charcoal-rich fill which may have been an element of a footing trench for a lightly built circular structure. AMS dating of charcoal recovered dated this feature to 186–52 BC (2103±22 BP: UBA 12731).

It is possible to suggest that the majority of Iron Age structures were circular, with some six known from enclosed settlements (generally post-built), and a further eight known from unenclosed sites (generally with foundation trenches) – in both cases the structures varying from c. 3.3 m up to 14.5 m in diameter (Becker et. al. 2008). While the numbers of known Iron Age structures are still relatively low, it seems that circular structures were the norm, and in that respect and in terms of its scale, the structure recorded at Rathwilladoon 3 can be described as typical.

In total just 16 sites of Iron Age date are recorded from County Clare, with just seven from County Galway (Becker et. al. 2008). With the possible exception of the hillforts at Mooghaun and Rahally and the cliff fort at Dun Aonghasa, none of these could be described as definite habitation sites as they have no evidence for structures. This emphasises the importance of the evidence from Rathwilladoon 3.

### **3.5 Prehistoric Habitation Typology**

The archaeological activity recorded at Rathwilladoon 2 and 3 consisted of multiple discrete periods of settlement activity dating from the Neolithic, early Bronze Age, late Bronze Age and Iron Age periods, reflecting the repeated reselection of this area for human settlement throughout prehistory, presumably based on the suitability of the site for habitation - on the southeast facing slope of a hill overlooking a shallow lake (now wetland), and sheltered from the prevailing winds by the ridge rising behind the site. As a multi-phase site of such duration, Rathwilladoon 2 and 3 is unique in this part of the country, and based on current knowledge no good parallels exist in the region.

## **3.6 Discussion**

### **3.6.1 Phase 1: Natural Geology**

This phase represents the natural subsoil, which was cut or sealed by all subsequent archaeological features. The natural geology on this site (C2) consisted of orange brown, mostly silty clay, with some stone inclusions, particularly limestone. It was cut by or sealed by all subsequent archaeological activity. Both areas were located on the southeast facing slopes of a hill overlooking a sizeable area of wetland, though it should be stated that Rathwilladoon 2 was sitting on a near-level shelf on the hillside.

### **3.6.2 Phase 2: Neolithic Activity**

Rathwilladoon 2, Area 3, consisted of four pits and a posthole, clustered together at the edge of the site some 20 m southeast of the structure in Area 2. The principal feature seemed to be the largest pit, Pit M, which contained a large quantity of lithic material and some pottery. Analysis by Dr Farina Sternke of the lithic material and by Dr Eoin Grogan and Helen Roche of the pottery suggests that the material in question dates to the early part of the Neolithic period.

What is particularly interesting with regard to the lithic assemblage is that the majority of the diagnostic pieces recovered from the sieved topsoil in the test-pits were also from the first half of the Neolithic (Appendix 2.4). This would suggest that the later inhabitants of Rathwilladoon used relatively little lithic material, or perhaps were disposing of it more carefully. Alternatively, perhaps they were picking up and re-using the Neolithic tools that they sometimes came across in the environs of their settlement. Such re-use would be very hard to detect unless the pieces were being altered or re-worked (Sternke, pers. comm.).

The large amount of debitage as well as the broken axe fragments (O'Keeffe, Appendix 2.5) recovered in Pit M, suggest that this pit was used for the dumping of waste material from a lithic-working area somewhere close by. Indeed according to

Sternke the stone axe fragments reflect not only accidental damage to the polished stone axe, but also a possible failed attempt to recycle the damaged tool (Appendix 2.4). All of this suggests the presence of a Neolithic settlement in the environs of these pits. Sternke suggests that the lithics are 'probably associated with domestic tasks carried out in and around the environs of a prehistoric house'. As this settlement was not found within the limits of the excavation at Rathwilladoon 2, it is likely that it may be located outside of the CPO to the southeast, closer to the edge of the lake/wetland area. As regards the raw material used during this phase, chert dominates while flint and quartz are also represented. This reflects the greater availability of chert, which Sternke states is available locally in riverbeds and in the local limestone, while the flint used on site would have been sourced as pebbles or nodules along the coast (Appendix 2.4).

Grogan and Roche describe the pottery from Pit M as probably representing a single pot in the form of a large early Neolithic carinated bowl (Appendix 2.7). This form of pottery is generally dated to c. 4000–3600 BC, and so suggests a similar date range for the pit within which the pottery was found. Grogan and Roche refer to blackened accretions adhering to some of the pottery, and state that it appears to be indicative of cooking; again suggesting that an early Neolithic domestic site was present in the environs of the excavated area at Rathwilladoon 2. The location of this early Neolithic activity close to the edge of the site/CPO, and the fact that just a narrow strip of land separates these features from the edge of the wetland, raises the possibility that further early Neolithic features may exist closer to the wetland. Given the regional significance of this site, the potential of this area to yield further information – perhaps as part of a research project – is very real.

### **3.6.3 Phase 3: Early Bronze Age Activity**

Rathwilladoon 2 Area 1 was located centrally in the site and consisted of a small area of activity in the form of three small pits and a series of eight small postholes and 11 stakeholes (Figures 5–6; Plate 4). The postholes and stakeholes, while reflecting human activity, did not appear to make up any obviously recognisable structure, though it can be tentatively suggested that a north-south oriented oval or sub-rectangular structure may be discernible.

This possible structure would have measured c. 3.2 m in width and c. 4.9 m in length. Where artefactual material was recovered from the postholes it is consistent with an early Bronze Age date (see below), and suggests that they may represent the remains of a lightly built Beaker period structure, an unusual discovery in its self. If the postholes do represent such a structure, then all the pits in Area 1 were located outside the structure on its eastern side.

One of these pits, Pit A, produced significant quantities of pottery fragments and lithic material in the form of chert flakes, blades, debitage and three convex scrapers, as well as a large amount of charred hazelnut shells. Similar material in smaller quantities was found in Pit C (as well as in three of the postholes and one of the stakeholes). The primary fill of Pit B was very rich in charcoal and this pit may represent the remains of an outdoor hearth.

Grogan and Roche have identified the majority of the pottery from Area 1 as being Beaker ware, suggesting a very early Bronze Age date. Some pieces of possible early Neolithic pottery were also identified, though these pieces were fragmentary and the identification is probable rather than certain (Appendix 2.7). If these pieces are Neolithic, they must be intrusive, and while we know that early Neolithic activity was going on nearby, it is not clear how this pottery would have found its way into this early Bronze Age pit. Sternke felt that the majority of the lithics from Area 1

would not be out of place in a Neolithic assemblage (Appendix 2.4). This may reflect the fact that many of the pieces are not particularly diagnostic, or indeed may indicate the recycling of abandoned Neolithic tools at a later time. Nonetheless, a number of late Neolithic/early Bronze Age pieces were also identified from Area 1.

The artefactual assemblage from Rathwilladoon 2 Area 1 appears to reflect domestic waste as well as material consistent with an episode or episodes of lithic production. Assessing the environmental remains from the features in Area 1, Cobain states that 'the charcoal and plant macrofossil material deposited... is indicative of rake out from a domestic hearth which has been disposed of into the pits' (Appendix 2.2). Evidence was also recovered suggesting that wheat and hazelnuts formed part of the diet of the inhabitants.

An AMS date was retrieved from a charred hazelnut shell taken from fill C10 of Pit A. This returned a 2 Sigma calibrated date of 2280–2042 BC (3753±26 BP: UBA 12736), placing the feature in the early Bronze Age period and tying in well with the pottery assemblage. In conclusion then, Rathwilladoon 2 Area 1 appears to represent a small scale early Bronze Age habitation site.

Lab code	Context / sample	Sample material	Years BP	1 sigma	2 sigma
UBA 12736	C10 / S12	Charred Hazelnut	3753±26	Cal 2204–2064 BC	Cal 2280–2042 BC

### 3.6.4 Phase 4: Late Bronze Age Activity

Rathwilladoon 2 Area 2 consisted of a probable post-defined rectangular structure and associated pits. The structure consisted of the external structural postholes that defined the structure, interior postholes, which may have been roof supports, stakeholes contained within the feature, and all the remaining internal features, such as pits and the hearth. This structure measured approximately 5.5 m northeast–southwest x 3.5 m.

The central feature of the house was a hearth, presumably at the social as well as the spatial centre of the structure. It would have been used for both cooking and warmth. Of the pits within the structure, the most significant was Pit F which was located adjacent to the hearth. This contained a possibly deliberately deposited grinding stone or mano, suggesting that grain was being ground into flour within the structure. It may have been deliberately left behind when the house was abandoned, perhaps symbolising the end of the life-cycle of the structure.

A small number of lithics - chert flakes and debitage - were recovered from the structure, suggesting that some chert working may have been carried out within or nearby. Two AMS dates were obtained from charcoal from postholes C188 and C126. These returned 2 Sigma calibrated dates of 913–807 BC (2710±32 BP: UBA 12733) and 928–825 BC (2740±23 BP: UBA 12734) respectively. This places the structure in the early part of the late Bronze Age.

Lab code	Context / sample	Sample material	Years BP	1 sigma	2 sigma
UBA 12732	C145 / S45	Charcoal Ash	2695±25	Cal 893–810 BC	Cal 898–807 BC
UBA 12733	C189 / S71	Charcoal Alder	2710±32	Cal 895–823 BC	Cal 913–807 BC
UBA 12734	C351 / S146	Charcoal Ash	2740±23	Cal 904–842 BC	Cal 928–825 BC

Fill C351 in posthole C126 contained 100% ash charcoal and fill C139 from posthole C138 contained 100% oak charcoal (Appendix 2.2). This suggests that the structure was built primarily of ash and oak. These species were both popular for construction



material being strong, tough timbers that would form sturdy structures with considerable life spans. Posthole fill C54 produced two charred grains of barley, while posthole fill C58 contained a bird cherry pip and a charred hazelnut shell, which suggests that barley formed part of the diet with cherries and nuts perhaps being collected as a seasonal dietary supplement (Appendix 2.2).

The features adjacent to the structure consisted of dispersed stakeholes and postholes and a series of three large and thirteen small pits, all of which are likely to have been associated with the structure or with activities carried out in the environs of the structure, either as waste or storage pits. Where artefactual evidence was recovered it was consistently prehistoric. The recovery of a combination of a copper or bronze fragment (Appendix 2.6) and a number of clay mould fragments (Appendix 2.7) suggests that bronze objects were being produced on site, though the mould fragments were not large enough to suggest the type of objects. Bronze casting in clay moulds was widespread by the late Bronze Age, a period when much high quality metalwork of bronze and gold was being produced across Ireland. This period is sometimes referred to as the Dowris Phase, a phase named after the Dowris hoard from Co. Offaly; a period characterised by the production, dispersal and deposition, sometimes in hoards, of high quality metalwork.

### 3.6.5 Phase 5: Iron Age Activity

The archaeological activity at Rathwilladoon 3 consisted of a shallow curvilinear cut, C3, and its charcoal-rich fill, C4. Given the smooth curve of the cut, it is likely to have been an element of a footing trench for a lightly built circular structure (Figures 3; Plate 3). Despite cleaning the area around this feature carefully and testing extensively, no more of it, or any other features could be found. The area around Rathwilladoon 3 had been subject to intensive reclamation work in the past; it seems likely that the feature recorded on site was most likely part of a larger structure, the rest of which was obliterated by this reclamation. Based on the curve of the remaining element, this structure would have had a diameter of at least 10 m.

As no artefacts were recovered at Rathwilladoon 3 and circular structures were in use at various times in the past, it was unclear at the time of excavation as to what period the site belonged to. Charcoal was retrieved from the fill of the curvilinear feature C4, and was found to consist of hazel, alder/hazel, ash and *Maloideae* species (hawthorn/rowan/crab apple) (Appendix 2.2). Given the variety of species in evidence, this assemblage most likely represented rake-out waste from a domestic hearth which was disposed of and silted into the foundation trench of the structure. A charcoal sample from C4 returned a 2 Sigma calibrated date of 186–52 BC (2103±22 BP: UBA 12731), placing this structure in the La Tène Iron Age.

Lab code	Context / sample	Sample material	Years BP	1 sigma	2 sigma
UBA 12731	C4 / S1	Charcoal Hazel	2103±22	Cal 171–93 BC	Cal 186–52 BC

Little is known of Iron Age structures in Ireland, though a clearer picture is emerging thanks to the increasing level of development led excavations in recent decades. Raftery suggested that they were likely to have been circular and timber-built, and points to the hut structure at *Dún Áilinne* Phase 3, the 9 m wide timber hut at Raffin, Co. Meath, and to the large building of Phase 4 at Navan Fort as indicators as to how a domestic house from the period might have looked – though he felt that each of these examples were in fact more likely to be non-domestic in nature (Raftery, 1994 p. 113). Of course given the scant evidence at Rathwilladoon 3, it is unclear if this structure is in fact domestic or ritual, but its location and charcoal assemblage may indicate a domestic function (Appendix 2.2).

The recent UCD and Heritage Council backed publication *Iron Age Ireland: Finding an Invisible People* (Becker et. al. 2008) has made an invaluable contribution to our knowledge of this period, compiling all of the known Iron Age dated sites and offering some interpretation of the results. Based on this publication (and with the caveat that some sites will have been excavated too recently to have been included), it is possible to suggest that the majority of Iron Age structures were circular, with some six known from enclosed settlements (generally post-built), and a further eight known from unenclosed sites (generally with foundation trenches) – in both cases the structures varying from c. 3.3 m up to 14.5 m in diameter (Becker, O'Neill and O'Flynn 2008). While the numbers of known Iron Age structures are still relatively low it is clear that circular structures seem to be the norm, and in that respect and in terms of its scale, the structure recorded at Rathwilladoon 3 can be described as typical.

Limited though the archaeological evidence is at Rathwilladoon 3, it is nonetheless an important piece of evidence for Iron Age activity in this region, and along with the sites at Rathwilladoon 5 (155 BC–AD 67 [2018±37 BP: UBA 12739]) and Derrygarraiff 2 (350–100 BC [2144±21:UBA12716]) it helps to reveal something of the 'invisible people' of the Irish Iron Age (Raftery 1994, 112).

### **3.6.6 Phase 6: Post-medieval Activity**

A single furrow, C255, ran northwest–southeast and lay immediately to the southwest and somewhat upslope of the prehistoric activity in Area 1 of Rathwilladoon 2. The fill, C256, was very similar to topsoil (C1) and the furrow was almost certainly post-medieval or modern in date. While under pasture at the time of excavation, the landowner at Rathwilladoon confirmed that the field had been used for tillage on a number of occasions during his lifetime. Further downslope the topsoil was much deeper, which probably explains why furrows did not generally survive (they did not penetrate to the depth of the natural geology) and consequently why the archaeological activity survived as well as it did.

### **3.6.7 Phase 7: Topsoil**

All of the archaeological features and the natural subsoil layers were sealed by topsoil. The topsoil on site consisted of a layer of mid- to dark-brown silty loam. Topsoil depth varied greatly across the site, from about 0.1 m on the western up-hill side of the site to about 0.6 m at the eastern down-hill side of the site. This difference was probably due to a combination of ploughing activity and soil creep.

The topsoil was removed by mechanical excavator in advance of the hand excavation of archaeological features. This was following the excavation by hand of a series of 1 m x 1 m test pits across the site. These pits were dug until natural geology was reached, or the surface of archaeological features. The topsoil which was removed was then dry sieved on site, and a record was made of all the finds recovered by pit. The purpose of this procedure was to assess the quantity of artefacts contained within the topsoil horizon.

#### 4 CONCLUSIONS

The prehistoric activity on site was found in two main areas: Rathwilladoon 2 and Rathwilladoon 3, which were excavated under one Registration Number (E3656). The sites were located in Rathwilladoon townland, Co. Galway. The sites were located at NGR 141360/194246 (28 m OD) and 141275/194125 (31 m OD) respectively.

The archaeological activity recorded at Rathwilladoon 2 and 3 appears to consist of multiple discreet periods of settlement activity dating from the Neolithic, Early Bronze Age, Late Bronze Age and Iron Age periods, reflecting the repeated reselection of this area for human settlement throughout prehistory, presumably based on the suitability of the site for habitation - on the southeast facing slope of a hill overlooking a shallow lake (now wetland), and sheltered from the prevailing winds by the ridge rising behind the site - Rathwilladoon 2 was sitting on a near-level shelf on the hillside.

Rathwilladoon 2 was divided into three main areas of archaeology: Areas 1–3. These will be discussed in chronological order.

**Rathwilladoon 2/Area 3** consisted of four pits and a posthole, clustered together at the west edge of the site some 20 m southeast of the structure in Area 2. The key feature seemed to be the largest pit, Pit M, which contained a large quantity of lithic material and some pottery. Based on specialist examination of the finds recovered it appears that the activity in this area dates to the early part of the Neolithic period, and consequently is the first evidence we have for human activity at Rathwilladoon.

The large amount of debitage as well as the broken axe fragments (Appendix 2.5) recovered in Pit M, suggest that this pit was used for the dumping of waste material from a lithic-working area somewhere close by. This suggests the presence of a Neolithic settlement in the environs of these pits. Sternke suggests that the lithics are 'probably associated with domestic tasks carried out in and around the environs of a prehistoric house'. As this settlement was not found within the limits of the excavation at Rathwilladoon 2, it is likely that it may be located outside of the CPO to the southeast, closer to the edge of the lake/wetland area.

Grogan and Roche describe the pottery from Pit M as probably representing a single pot in the form of a large early Neolithic carinated bowl (Appendix 2.7). This form of pottery is generally dated to c. 4000–3600 BC. Grogan and Roche refer to blackened accretions adhering to some of the pottery, and state that it appears to be indicative of cooking; again suggesting that an early Neolithic domestic site was present in the environs of the excavated area at Rathwilladoon 2. The area in the environs of the N18 road scheme has produced little evidence for Neolithic activity, and as a result this site makes a significant contribution to our knowledge of this period in the Clare/Galway region. No further Neolithic habitation sites were identified on this section of the N18 road scheme.

What is particularly interesting with regard to the lithic assemblage is that the majority of the diagnostic pieces recovered from the sieved topsoil in the test-pits were also from the first half of the Neolithic. This would suggest that the later inhabitants of Rathwilladoon used relatively little lithic material, or perhaps were disposing of it more carefully. Alternatively, perhaps they were picking up and re-using the Neolithic tools that they sometimes came across in the environs of their settlement.

The location of the early Neolithic activity in Area 3 close to the east edge of the site/CPO, and the fact that just a narrow strip of land separates these features from

the edge of the wetland, raises the possibility that further early Neolithic features may exist closer to the wetland. Given the regional significance of this site, the potential for this area to yield further information – perhaps as part of a research project – is very real and warrants consideration.

**Rathwilladoon 2/Area 1** was located centrally in the site, and consisted of a small area of activity in the form of three small pits and a series of small postholes and stakeholes which may have defined a structure. Based on specialist examination of finds recovered and on AMS dates retrieved (2280–2042 BC [3753±26 BP: UBA 12736]), it appears that the activity in this area dates to the early Bronze Age, that period often referred to as the 'Beaker period'.

One of the pits - Pit A - produced significant quantities of pottery fragments and lithic material in the form of chert flakes, blades, debitage and three convex scrapers, as well as a large amount of charred hazelnut shells. Similar material in smaller quantities was found in some of the other features. The primary fill of one of the pits was very rich in charcoal and this pit may represent the remains of an outdoor hearth.

Grogan and Roche have identified the majority of the pottery from this feature as being Beaker ware, suggesting a very early Bronze Age date (Appendix 2.7). Sternke felt that the majority of the lithics from Pit A would not be out of place in a Neolithic assemblage (Appendix 2.4). This may reflect the fact that many of the pieces are not particularly diagnostic, or indeed may indicate the recycling of abandoned Neolithic tools at a later time.

It is interesting to note that Pit A had two distinct fills that appeared to reflect two distinct episodes of use or dumping, and a clear division was noticeable in the finds recovered from each. The primary fill produced a single lithic in the form of a chert scraper, while 30 sherds of pottery were recovered from this fill. The secondary fill however produced 36 pieces of chert (flakes, debitage, blades and scrapers) and also 28 sherds of pottery. The first layer then appears to reflect domestic waste only, while the second layer seems to contain material consistent with an episode or episodes of lithic production as well as domestic type material.

Assessing the environmental remains from the features in Area 1, Cobain states that 'the charcoal and plant macrofossil material deposited... is indicative of rake out from a domestic hearth which has been disposed of into the pits' (Appendix 2.2). Evidence was also recovered suggesting that wheat and hazelnuts formed part of the diet of the inhabitants.

In conclusion then, Rathwilladoon 2/Area 1 is a rare example of a probable house or hut site associated with early Bronze Age Beaker pottery, and within this region comparisons can be made with Ross Island Co. Kerry, Lough Gur Co. Limerick and particularly Parknabinnia Co. Clare c. 15 km WSW of the site at Rathwilladoon. The latter produced sherds of a fine vessel which was very similar to No. 3 from Rathwilladoon (Appendix 2.7), and the site consisted of a field system, wedge tombs and at least one (possibly four) Beaker period farmstead (Jones and Gilmer 2000) and allows us to imagine the early Bronze Age landscape beyond the confines of the defined excavation area.

**Rathwilladoon 2/Area 2** was located at the northeastern end of the site and consisted of a probable rectangular structure (5.5 m x 3.5 m) and associated features, including a central hearth, suggesting domestic activity. Further features were found in the environs of the structure, in the form of dispersed stakeholes,

postholes and a series of pits which are likely to have been used for waste or storage. Based on specialist examination of finds recovered and on AMS dates retrieved (913–807 BC [2710±32 BP: UBA 12733], 928–825 BC [2740±23 BP: UBA 12734] and 898–807 BC [2695±25 BP: UBA 12732]), it appears that the activity in this area dates to the late Bronze Age.

One of the pits within the structure contained a possibly deliberately deposited rubbing stone or *mano* (as would be used with a saddle quern) suggesting that food (grain, seed or nuts) were processed at the site. This may have been deliberately left behind when the house was abandoned, perhaps symbolising the end of the life-cycle of the structure. It may be significant that the rubbing stone was placed with its working face down. This is a trend noticed at a number of other sites, including a Late Bronze Age enclosure at Stamullin, Co. Meath. Here, of four saddle querns recovered, three appeared to have been deliberately deposited face down (Ní Lionáin 2007). This suggests that this was an accepted and widespread way of decommissioning grinding stones.

A mixture of wood species were identified in the charcoal assemblage from the postholes (oak, wayfaring tree, *Maloideae* species (hawthorn, rowan, crab apple), wild/bird cherry, yew and elm, alder/hazel, spindle tree, ash and Scot's pine), but two postholes produced just one species each (ash and oak), suggesting that these posts may have burnt in situ (Appendix 2.2). Furthermore this suggests that the structure may have been built primarily of ash and oak. These species were both popular for construction material in prehistory, being strong, tough timbers that would form sturdy structures with considerable life spans. Two charred grains of barley, a bird cherry pip and a charred hazelnut shell were recovered from postholes, suggesting that barley formed part of the diet with cherries and nuts perhaps being collected as a seasonal dietary supplement (Appendix 2.2).

The recovery of a combination of a copper or bronze fragment (Appendix 2.6) and a number of clay mould fragments (Appendix 2.7) suggests that bronze objects were being cast on site, though the mould fragments were not large enough to suggest what kind of objects. Bronze casting in clay moulds was widespread by the late Bronze Age, a period when much high quality metalwork of bronze and gold was being produced across Ireland. This period is sometimes referred to as the Dowris Phase, a phase named after the Dowris hoard from Co. Offaly. The Dowris Phase was characterised by the production, dispersal and deposition, sometimes in hoards, of high quality metalwork. Rathwilladoon 2/Area 2 may have been a typical site at the time then, involved in the production of bronze artefacts which were then traded or in some cases perhaps deliberately deposited at an appropriate time, perhaps even in the lake/wetland area adjacent to the site.

**Rathwilladoon 3** consisted of a single isolated archaeological feature located some 150 m southwest of Rathwilladoon 2. This was a shallow curvilinear cut and its charcoal-rich fill, which may have been an element of a footing trench of a lightly built circular structure. It seems likely that the rest of this structure was obliterated by reclamation. Based on the curve of the remaining element, this structure would have had a diameter of at least 10 m.

Charcoal was retrieved from the fill of the curvilinear feature, and was found to consist of hazel, alder/hazel, ash and *Maloideae* species (hawthorn/rowan/crab apple) (Appendix 2.2). Given the variety of species in evidence, this assemblage most likely represented rake-out waste from a domestic hearth which was disposed of and silted into the foundation trench of the structure. A charcoal sample from C4

returned a 2 Sigma calibrated date of 186–52 BC (2103±22 BP: UBA 12731), placing this structure in the *La Tène* Iron Age.

Little is known of Iron Age structures in Ireland, though a clearer picture is emerging thanks to the increasing level of development led excavations in recent decades. In total just 16 sites of Iron Age date are recorded from County Clare, with just seven from County Galway (Becker, O'Neill and O'Flynn, 2008). With the possible exception of the hillforts at Mooghaun and Rahally and the cliff fort at Dun Aonghasa, none of these could be described as definite habitation sites as they have no evidence for structures. This emphasises the importance of the evidence from Rathwilladoon 3.

We know very little of the everyday activities of domestic life during this period as very little evidence of their houses or artefacts have been identified within the archaeological record. The site at Rathwilladoon 5 (Lyne 2009) produced evidence for a charcoal clamp and small furnace pit approximately 300 m to the south. This may be associated with the activity at Rathwilladoon 3. It dates to 155 BC–AD 67 (2018±37 BP: UBA 12739), a date range which overlaps with that of Rathwilladoon 3. The archaeological features from these sites, limited as they are, nonetheless give us important evidence for Iron Age activity in this region, and along with the site at Derrygarraff 2 (350–100 BC [2144±21:UBA12716]) they help to reveal something of the 'invisible people' of the Irish Iron Age (Raftery 1994, 112).

### **Rathwilladoon through the ages**

Taking the phases of Rathwilladoon individually, each of them contributes a significant amount of knowledge to our understanding of the prehistory of this region, where to date relatively few prehistoric habitation sites are known. Taken collectively, the real significance of these four separate phases of activity becomes clear.

With evidence for habitation spanning from the early Neolithic through to the Iron Age, this site is a rare example of a single location being re-inhabited over a period of some 4,000 years, presumably as it continued to be a suitable location for habitation over the millennia. If one takes into account the ringfort and cemetery located just outside the landtake to the southwest of the site, that span stretches to some 5000 years. Indeed, those people currently living in the former Tubber railway station just to the east of Rathwilladoon 2, are the latest people to live in this location in a line that stretches back intermittently for close to 6000 years.

As a multi-phase site of such duration, Rathwilladoon 2 and 3 is unique in this part of the country, and based on current knowledge no good parallels exist in the region.

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## PLATES



Plate 1      General view of Rathwilladoon 2, facing southeast



Plate 2      General view of Rathwilladoon 3, facing east



Plate 3 Rathwilladoon 2/Area 3, Post-excavation



Plate 4 Rathwilladoon 2/Area 1, Post-excavation, facing north



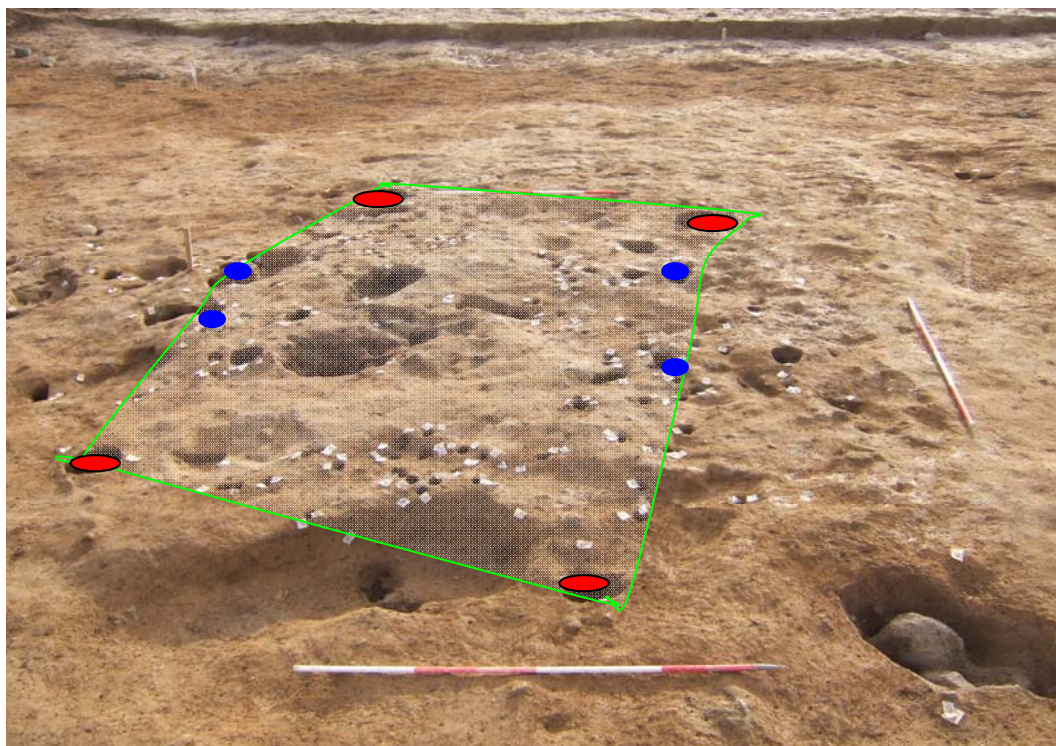


Plate 5 Probable outline of rectangular structure on Rathwilladoon 2



Plate 6 Stakeholes within the structure





Plate 7      Section of hearth C140, facing south



Plate 8      Grinding stone, face-down within Pit F





Plate 9      Section of Pit J, facing north



Plate 10      Pit J, post-excavation, facing north





Plate 11 Curvilinear feature C3 on Rathwilladoon 3, Post-excavation



Plate 12 Test pits being hand excavated across Rathwilladoon 2 (wetland area beyond)





Plate 13 The nearest edge of the wetland area to Rathwilladoon 2



Plate 14 The saddle quern recovered in the nearby townland of Monreagh



## APPENDIX 1 CATALOGUE OF PRIMARY DATA

### Appendix 1.1 Context Register

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
1	N/A				Topsoil	Layer of mid to dark brown silty loam	86 Pottery sherds (1 PH, 85 PM), 30 clay pipe sherds, 36 iron pieces, 3 pieces of cu alloy, 15 glass sherds, 100 Chert, 15 flint, 1 sandstone.		
2	N/A				Natural subsoil	Orangey brown sandy to silty clay			
3	N/A	5.7	0.3	0.09	Cut of semi-linear trench.	E-W orientated linear cut. Rounded corners. Steep break of slope at top. Steep/vertical sides. Gradual steep break of slope at base. Concave/flat base.		C4	C2
4	C3	5.65	0.24	0.09	Heterogeneous backfill of cut 3	Soft mid-dark yellow/brown. Small and medium sized charcoal inclusions.		C1	C3
5	N/A	0.65	0.6	0.32	Cut of possible circular pit	Truncated circular in plan. N-S cut. Rounded corners. Sharp break of slope at top. Irregular sides. Gradual concave break of slope at base.		C6	C2
6	C5	0.65	0.6	0.32	Single fill of cut 5.	Loosely compacted light-brown soft sandy silt. Occasional charcoal, pebbles and small stones inclusions.	1 flint, 1 Chert.	C1	C5
7	N/A	1.05	0.6	0.1	Cut of probable shallow pit	Oval in plan. SSE-NNW cut. Rounded corners. Gradual break of slope at top. Irregular gradual sides. Rounded break of slope at base. Flat base.		C33	C2
8	C7	1.03	0.6	0.07	Top fill of probable shallow pit	Soft brown silty sand. Occasional small stones/pebbles.		C1	C33
9	N/A	0.68	0.52	0.28	Cut of possible pit	Oval in plan. N-S cut. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Irregular base.		C37	C2
10	C9	0.7	0.6	0.4	Pit fill.	Soft dark-brown silty clay. Moderate amount of charcoal flecks. Occasional pieces of pottery and Chert flakes.	28 PH pottery sherds, 35 Chert.	C1	C37
11	N/A	0.25	0.24	0.2	Regular plan and profile with presence of artefacts indicates human activity	Circular cut in plan. No corners. Vertical break of slope at top. Vertical sides. Sharp break of slope at base. Rounded base		C12	C2

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
12	C11	0.25	0.24	0.2	Single fill of cut 11, a possible pit/posthole	Soft dark-brown silty clay. Pottery, Chert charcoal and a moderate amount of small stone inclusions,	2 PH pottery sherds, 1 Chert.	C1	C11
13	N/A	0.28	0.3	0.1	Possible cut	E-W Sub-circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Vertical sharp break of slope at base. Irregular base.		C14	C2
14	C13	0.28	0.3	0.1	Single fill of cut 13.	Moderately compacted brown silty clay. Occasional charcoal flecks.		C1	C13
15	N/A	0.45	0.29	0.34	Highly irregular cut	Irregular oval in plan. NE-SW cut. No corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base to NE, imperceptible break of slope at the base on other sides. Very irregular base.		C16	C2
16	C15	0.45	0.29	0.34	Single fill of cut 15	Firm light greyish brown sandy clay loam. Abundant small and medium stones.		C1	C15
17	N/A	0.39	0.37	0.14	Very irregular cut	Sub-circular in plan. W-E cut. No corners. Sharp break of slope at top. Almost vertical sides. Irregular gradual break of slope at base. Irregular concave base.		C18	C2
18	C17	0.34	0.34	0.07	Single fill of cut 17	Firm light-grey sandy clay. Occasional charcoal flecks. Small sub-angular stones.		C1	C17
19	N/A	0.12	0.1	0.22	Cut of possible stakehole	Sub-circular in plan. E-W cut. Rounded corners. Sharp break of slope at top. Vertical sides. Tapered base.		C20	C2
20	C19	0.12	0.1	0.22	Fill of a possible stakehole.	Soft mid-brown sandy silt. Pottery, Chert and charcoal inclusions.	22 PH pottery sherds, 1 Chert.	C1	C19
21	N/A	0.19	0.19	0.07	Cut of possible pit/posthole	Oval cut in plan. No corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Flat base		C22	C2
22	C21	0.19	0.19	0.07	Single fill of cut 22, a possible pit/posthole	Moderate firm dark brown sandy silt. Pottery inclusions. Charcoal flecks.	4 PH pottery sherds.	C1	C21
23	N/A	0.18	0.3	0.18	Cut of possible feature	Circular cut in plan E-W. No corners. Sharp break of slope at top. Gradual sides. Gradual break of slope at base. Rounded base.		C24	C2
24	C23	0.18	0.3	0.18	Single fill of cut 23	Loose mid-brown soft sandy clay. Moderate amount of stones. Charcoal flecks.		C1	C23

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
25	N/A	0.17	0.17	0.11	Cut of possible feature	E-W Sub-circular cut in plan. Rounded corners. Sharp break of slope at top. Gradual sides. Gradual break of slope at base. Rounded base.		C26	C2
26	C25	0.17	0.17	0.11		Loose dark brown silty clay. Occasional charcoal flecks.		C1	C25
27	N/A	0.35	0.3	0.2	Probable cut	E-W Oval cut in plan. No corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Regular base.		C28	C2
28	C27	0.35	0.3	0.2	Single fill of cut 27	Moderate firm dark brown clay. Pottery, flint/Chert and charcoal inclusions.	1 PH pottery sherd, 1 flint, 2 Chert.	C1	C27
29	N/A	0.1	0.1	0.06	Possible cut	Circular cut in plan. No corners. Sharp break of slope at top. Gradual sides. Gradual break of slope at base. Rounded base.		C30	C2
30	C29	0.1	0.1	0.06	Single fill of cut 29	Soft dark brown silty clay.		C1	C29
31	N/A	0.19	0.13	0.34	Cut of possible feature	Irregular oval in plan. NNE-SSW cut. No corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base to N and E. Sharp break of slope at base to S and W. Rounded pointed base.		C32	C2
32	C31	0.19	0.13	0.34	Single fill of cut 31	Soft light greyish brown sandy clay. Small occasional stones. Rare charcoal flecks.		C1	C31
33	C7	1.03	0.6	0.05	Bottom fill of cut 7, a probable pit	Soft black silty sand. Frequent charcoal inclusions. Occasional small stones.		C8	C7
34	N/A	0.06	0.06	0.07	Cut of possible stakehole	Circular cut in plan. Rounded corners. Steep/vertical sides. Concave base.		C35	C2
35	C34	0.06	0.06	0.07	Fill of a possible stakehole.	Loose light-grey brown sandy silt.		C1	C34
36	N/A	0.25	0.24	0.12	Cut of possible feature	Irregular sub-circular in plan. NW-SE cut. Rounded corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Break of slope at base to NE gradual. Irregular flat base.		C42	C2
37	C9	0.5	0.5	0.2	Fill of cut 9, a pit.	Compact yellow-brown clay. Charcoal flecks.	30 PH pottery sherds, 1 Chert.	C10	C9
38	C39	0.09	0.08	0.04	Single fill of cut 39	Firm mid-brown sandy silt. Charcoal flecks.		C1	C39

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
39	N/A	0.09	0.08	0.04	Cut of possible stakehole.	Circular cut in plan. No corners. Gradual break of slope at top. Gradual to steep sides. Gradual break of slope at base. Concave base.		C38	C2
40	C41	0.18	0.14	0.2	Fill of a possible stakehole.	Soft mid-brown sandy silt. Charcoal inclusions.		C1	C41
41	N/A	0.18	0.14	0.2	Cut of possible stakehole	E-W Oval cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base to N. Not perceptible break of slope at base to S. Rounded base.		C40	C2
42	C36	0.25	0.24	0.12	Single fill of cut 36	Soft light-grey yellow sandy clay. Moderate amounts of small sub-angular stones. Occasional charcoal flecks.		C1	C36
43	N/A	0.16	0.16	0.15	Cut of possible stakehole	Circular cut in plan. No corners. Sharp break of slope at top. Steep/vertical sides. Gradual break of slope at base to N. Sharp break of slope at base to S. Concave base.		C44	C2
44	C43	0.16	0.16	0.15	Fill of a possible stakehole.	Loose mid-brown silty clay. Occasional small stone inclusions. Charcoal flecks.		C1	C43
45	N/A	0.15	0.15	0.14	Possible Cut	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Rounded base.		C46	C2
46	C45	0.15	0.15	0.14	Single fill of cut 45	Moderate firm brown clay. Charcoal flecks.		C1	C45
47	N/A	0.12	0.11	0.27	Cut of possible stakehole	Sub-circular in plan. N-S cut. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Circular base.		C48	C2
48	C47	0.12	0.11	0.27	Fill of a possible stakehole.	Soft mid-brown sandy silt. Occasional charcoal and pebble inclusions.		C1	C47
49	N/A	0.94	0.52	0.32	Possible posthole	Irregular oval in plan. N-S cut. No corners. Sharp break of slope at top to N,E and S. Slightly gradual break of slope at top to W. Vertical sides. Sharp break of slope at base. Irregular shape of base.		C73	C2
50	C49	unknown	0.6	0.16	Top fill of cut 49, a possible posthole	Loose mid yellow/brown sandy silt. Occasional medium sized sub-angular stone inclusions.		C1	C73
51	N/A	0.24	0.19	0.31	Cut of possible feature	Sub-circular in plan. N-S cut. No Corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Concave base to W side. Two depressions to the E.		C52	C2

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
52	C51	0.24	0.19	0.31	Single fill of cut 51	Softly compacted mid-brown silty sand with moderate charcoal inclusions.		C1	C51
53	N/A	0.6	0.3	0.27	Cut of possible feature	Semi-circular in plan. NNE-SSE cut. Rounded corners. Sharp break of slope at top. Irregular sharp sides. Rounded gradual break of slope at base. Irregular concave base.		C54	C2
54	C53	0.6	0.3	0.27	Single fill of cut 53	Soft dark grey silty sand. 3 moderate sized stones and occasional charcoal inclusions.		C1	C53
55	N/A	unknown	0.26	0.2	Cut of possible posthole	Irregular in plan. NE-SW cut. No corners. Gradual break of slope at top. Steep sides. Gradual to imperceptible break of slope at base. Concave base.		C56	C2
56	C55	unknown	0.26	0.2	Single fill of cut 55	Loose yellow-brown sand. Moderate amount of medium sized stones.		C1	C55
57	N/A	0.59	0.54	0.59	Cut of probable posthole/pit	Sub circular in plan. N-S cut. No corners. Sharp break of slope at top. Steep to vertical sides. Gradual break of slope at base. Concave base.		C251	C2
58	C57	0.59	0.54	0.32	Top fill of cut 57, a probable posthole/pit	Soft dark grey/brown silty sand. Occasional burnt bone and frequent charcoal inclusions.		C1	C251
59	N/A	0.25	0.2	0.25	Cut of possible feature?	SE-NW Sub-circular cut in plan. Rounded corners. Gradual to sharp break of slope at the top. Vertical side on the N. Vertical and undercut sides on the E and S. Gradual-steeply sloping side on the W. Sharp break of slope at the base. Irregular base.		C60	C2
60	C59	0.15	0.15	0.2	Single fill of cut 59, a possible stakehole	Moderate firm grey-brown sandy silt. Charcoal flecks.		C1	C59
61	N/A	0.07	0.05	0.13	Cut of possible stakehole	Oval cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Tapered break of slope at the base. Tapered point base.		C62	C2
62	C61	0.07	0.05	0.13	Single fill of cut 61, a possible stakehole	Soft mid-brown sandy silt.		C1	C61
63	N/A	0.45	0.23	0.35	Cut of possible posthole	Oval in plan. N-S cut. Rounded corners. Gradual break of slope at top to N. Vertical break of slope at top to rest. Vertical sides. Steep break of slope at base. Rounded base.		C64	C2
64	C63	0.45	0.23	0.35	Single fill of cut 63	No Description		C1	C63

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
65	N/A	0.3	0.3	0.08	Cut of possible pit	Triangular cut in plan. Rounded corners. Gradual break of slope at top. Gradual sloping sides. Gradual break of slope at base. Triangular base.		C66	C2
66	C65	0.3	0.3	0.08	Single fill of cut 65	Soft/firm mid-brown clay silt. Possible burnt bones, charcoal and occasional small angular pebble inclusions.		C1	C65
67	N/A	0.3	0.36	0.32	Cut of possible pit/posthole	Sub-circular in plan. N-S cut. No corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Irregular base.		C68	C2
68	C67	0.3	0.36	0.32	Single fill of cut 67, a possible pit/posthole	Soft mid-grey brown sandy silt. Moderate amounts of small angular stones and occasional charcoal inclusions.		C1	C67
69	N/A	0.32	0.3	0.1	Shallow cut of a possible feature	N-S Circular cut in plan. No corners. Gradual break of slope at top. Steep sides on the N and E. Gradual sides on the S and W. Gradual break of slope at base. Irregular concave base		C70	C2
70	C69	0.32	0.3	0.1	Single fill of cut 69, a possible pit	Firm mid-brown sandy silt. Occasional charcoal inclusions.		C1	C69
71	N/A	0.12	0.09	0.1	Cut of possible stakehole	Circular cut in plan. Rounded corners. Sharp break of slope at top. Smooth, vertical sides. Gradual break of slope at base. Irregular base		C72	C2
72	C71	0.12	0.09	0.1	Single fill of cut 71, a possible stakehole	Loose mid-brown sandy silt. Charcoal flecks.		C1	C71
73	C49	unknown	0.67	0.15	Lower fill of cut 49	Loose orange-white well sorted silty clay. Small angular and rounded stone inclusions.		C50	C49
74	N/A	0.63	0.33	0.33	Cut of possible pit	Oval in plan. SW-NE cut. Irregular corners. Gradual break of slope at top. Irregular, moderately sloping sides. Gradual break of slope at base. Concave base.		C200	C2
75	C74	0.63	0.33	0.14	Top fill of cut 74, a possible pit	Firm grey-brown sandy clay. Occasional small stones and a moderate amount of pebbles.		C1	C200
76	C77	0.3	0.89	0.48	Middle fill of cut 77, a possible pit	Loose dark grey-black sandy clay. Occasional medium sized stones. Moderate amount of charcoal inclusions.	12 PH pottery sherds, 6 quartz crystal fragments, 3 stone tools, 43 Chert, 43 flints	C267	C298

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
77	N/A	3.06	1.32	0.58	Cut of possible pit	Linear in plan. E- W cut. No corners. Moderate break of slope at top. Smooth, gently sloping sides. Gradual break of slope at base. Concave base		C398	C2
78	N/A	0.16	0.07	0.09	Cut of possible stakehole under cut 140	SW-NE Sub-circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base. Flat base		C79	C2
79	C78	0.16	0.07	0.04	Single fill of cut, 78, a possible stakehole under cut 140	Firm grey-brown sandy silt. Bone and charcoal inclusions.		C140	C78
80	N/A	0.18	0.22	0.44		Circular cut in plan. No corners. Sharp break of slope at top to N. Gradual break of slope at top to S. Steep sides. Sharp break of slope at base. Tapered base.		C81	C2
81	C80	unknown	unknown	0.5	Single fill of adjacent cuts 80 and 404	Loose grey white and light brown sandy clay. Frequent charcoal inclusions.		C1	C80
82	N/A	0.5	0.42	0.1	Cut of possible pit	Oval in plan. E-W cut. No corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Rounded base		C83	C2
83	C82	0.5	0.42	0.1	Single fill of cut 82, a possible pit	Soft yellow-brown soft silty sand. Frequent charcoal flecks. Occasional large pieces of charcoal. Three Chert flakes.	3 Chert.	C1	C82
84	N/A	0.5	0.25	0.1	Cut of possible feature	E-W Sub-oval cut in plan. Irregular corners. Imperceptible break of slope at top. Irregular sides. Irregular break of slope at base. Irregular base. Possibly cutting c328.		C85	C2
85	C84	0.5	0.3	0.15		Soft mid-brown silty clay. Occasional charcoal and pebbles inclusions.		C1	C84
86	N/A	0.35	0.3	0.06	Possibly non-archaeological.	Sub-oval in plan. N-S cut. Rounded corners. Gradual break of slope at top. Gentle sides. Gradual break of slope at base. Sub oval base.		C87	C2
87	C86	0.35	0.3	0.06	Single fill of cut 86	Soft mid-brown silty clay.		C1	C86
88	N/A	0.15	0.1	0.12	Cut of possible feature	Circular in plan. NE-SW cut. Rounded corners. Sharp break of slope at top. Vertical sides. Rounded break of slope at base. Irregular, mostly flat base.		C89	C2
89	C88	0.15	0.1	0.1	Single fill of cut 88	Soft brown silty sand. Occasional small stones.		C1	C88
90	N/A	1.65	0.31	0.22	Cut of possible pit. N/A	Irregular in plan. NW-SE cut. N/A		C91	C2

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
91	C90	1.65	0.31	0.22	Single fill of cut 90.	Moderate firm mid-brown silty clay.		C1	C90
92	N/A	0.77	0.57	0.08	Cut of possible shallow pit	Irregular in plan. SW-NE cut. No corners. Gradual break of slope at top. Steep irregular sides. Gradual, irregular break of slope at base. Irregular base.		C93	C2
93	C92	0.77	0.57	0.08	Single fill of cut 92, a possible pit	Firm grey-brown sandy clay. Small pieces of bone, occasional medium sized stones and a moderate amount of pebble.		C1	C92
94	N/A	0.13	0.1	0.2	Cut of possible stakehole	Sub-oval in plan. N-S cut. Rounded corners, except to the S where they are square. Sharp break of slope at top. Vertical sides. Concave base.		C95	C2
95	C94	0.13	0.1	0.2	Fill of a possible stakehole.	Firm mid-brown silty clay. Well sorted pebble inclusions.		C1	C94
96	N/A				Non-archaeological	Non-archaeological			
97	N/A				Non-archaeological	Non-archaeological			
98	N/A	0.1	0.1	0.24	Cut of possible stakehole	SE-NW Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Circular base.		C99	C2
99	C98	0.1	0.1	0.24	Fill of a possible stakehole.	Soft mid-brown sandy silt. Charcoal inclusions.		C1	C98
100	N/A	0.06	0.06	0.08	Cut of possible stakehole	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical, smooth sides. Gradual break of slope at base. Pointed base.		C101	C2
101	C100	0.06	0.06	0.08	Fill of a possible stakehole.	Loose mid-brown sandy silt. Very occasional charcoal flecks.		C1	C100
102	N/A	0.07	0.05	0.1	Cut of possible stakehole	Oval cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Oval base.		C103	C2
103	C102	0.07	0.05	0.1	Fill of a possible stakehole.	Soft mid-brown sandy silt.		C1	C102
104	N/A	0.07	0.07	0.16	Cut of possible stakehole	Circular cut in plan. Rounded corners. Sharp break of slope at top. Smooth, vertical sides. Gradual break of slope at base. Pointed base.		C105	C2
105	C104	0.07	0.07	0.16	Fill of a possible stakehole.	Loose mid-brown sandy silt.		C1	C104
106	N/A	0.07	0.07	0.09	Cut of possible stakehole	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Tapered break of slope at base. Concave base		C107	C2



Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Findings	Context Above	Context Below
107	C106	0.07	0.07	0.09	Fill of a possible stakehole.	Soft mid-brown sandy silt.		C1	C106
108	N/A	0.07	0.07	0.11	Cut of possible stakehole	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Circular base.		C109	C2
109	C108	0.07	0.07	0.11	Fill of a possible stakehole.	Soft mid-brown sandy silt.		C1	C108
110	N/A	0.08	0.08	0.09	Cut of possible stakehole	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Circular base.		C111	C2
111	C110	0.08	0.08	0.09	Fill of a possible stakehole.	Soft mid-brown sandy silt.		C1	C110
112	N/A	0.12	0.1	0.15	Cut of possible stakehole	Circular cut. No corners. Vertical break of slope at top. Vertical sides. Vertical break of slope at base. Round base.		C113	C2
113	C112	0.12	0.1	0.15	Fill of a possible stakehole.	Soft mid-brown silty sand.		C1	C112
114	N/A	0.09	0.08	0.14	Cut of possible stakehole	Circular cut in plan. Rounded corners. Vertical break of slope at top. Vertical sides. Sharp break of slope at base. Rounded base		C115	C2
115	C114	0.09	0.08	0.14	Fill of a possible stakehole.	Soft mid-brown silty sand/clay. Occasional charcoal flecks.		C1	C114
116	N/A	0.15	0.15	0.1	Cut of possible stakehole	Circular cut in plan. No corners. Gradual break of slope at top. Vertical sides. Vertical break of slope at base. Pointed base.		C117	C2
117	C116	0.15	0.15	0.1	Fill of a possible stakehole.	Moderate firm mid-brown silty clay. Occasional charcoal flecks.		C1	C116
118	N/A	0.08	0.05	0.1	Cut of possible stakehole	Circular cut in plan. Rounded corners. Vertical break of slope at top. Rounded sides. Steep break of slope at base. Rounded base.		C119	C2
119	C118	0.07	0.05	0.1	Fill of a possible stakehole.	Soft mid-brown silty sand. Occasional charcoal flecks.		C1	C118
120	N/A	0.09	0.08	0.19	Cut of possible stakehole	Circular cut in plan. No corners. Vertical break of slope at top. Vertical sides. Steep break of slope at base. Rounded base.		C121	C2
121	C120	0.09	0.08	0.19	Fill of a possible stakehole.	Soft mid-brown silty sand. Occasional charcoal flecks.		C1	C120
122	N/A	0.05	0.05	0.09	Cut of possible stakehole	Circular cut in plan. No corners. Vertical break of slope at top. Vertical sides. Steep break of slope at base. Concave base		C123	C2

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
123	C122	0.05	0.05	0.09	Fill of a possible stakehole.	Soft mid-brown silty clay.		C1	C122
124	N/A	0.08	0.08	0.08	Cut of possible stakehole	Circular cut in plan. No corners. Vertical break of slope at top. Vertical sides. Steep break of slope at base. Rounded base.		C125	c2
125	C124	0.08	0.08	0.08	Fill of a possible stakehole.	Loose mid-brown silty clay.		C1	C124
126	N/A	0.32	0.29	0.48	Cut of possible posthole	N-S Circular cut in plan. No corners. Gradual break of slope at top. Sharp sides to E. Gradual to sharp sides to the W. Sharp to gradual break of slope at base. Concave base.		C352	C2
127	C126	0.32	0.29	0.48	Top fill of cut 126, a possible posthole	Loose mid-brown silty clay. Small amounts of stone and bone inclusions. Charcoal flecks.		C1	C351
128	C232	0.7	0.45	0.13	Fill of cut 232, possibly cut by 146	Firm Light greyish brown sandy clay loam. Occasional small and medium stone and burnt sandstone inclusions. Flecks of charcoal.		C146	C129
129	C232	0.72	0.45	0.08	Bottom fill of cut 232, a possible pit/posthole	Soft to firm Light yellowish brown sandy clay loam. Occasional small and medium stone inclusions. Charcoal flecks.		C128	c232
130	N/A	2.8	0.88	0.35	Cut of possible pit	Irregular sub oval pit. E-W cut. No corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Rounded base.		C237	c2
131	C130	0.7	0.5	0.16	Middle fill of cut 130, a possible pit	Soft mid-brown silty clay. Occasional stone inclusions.		C238	c237
132	N/A	0.22	0.28	0.36	Cut of possible posthole	Irregular in plan. N-S cut. No corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base to E, N and S. Gradual break of slope at base to S. Concave, possibly tapered base.		C133	c2
133	C132	unknown	0.25	0.15	Single fill of cut 132, a possible posthole	Loose light yellow-brown sandy clay.		C1	c132
134	N/A	0.26	0.16	0.2	Cut of possible pit	Sub-oval in plan. E-W cut. No corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Concave base. Cutting c399, c400. Cut by c387.		C135	C388
135	C134	0.26	0.16	0.2	Fill of cut 134, a possible pit	Soft mid-grey brown sandy silt. Moderate charcoal inclusions.	2 clay mould fragments	C1	C134

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
136	N/A	0.5	0.3	0.36	Cut of a possible posthole	Sub-oval in plan. SE-NW cut. Rounded corners. Sharp break of slope at top. Vertical/moderate sides. Gradual break slope at base. oval base.		C137	C2
137	C136	0.25	0.2	0.42	Fill of cut 136	Soft mid brown with a greyish hue silty clay. Charcoal and pebble inclusions.		C1	C136
138	N/A	0.5	0.29	0.25	Cut of a possible pit	Oval in plan. N-S cut. Rounded corners. Gradual break of slope at top at N. Sharp break of slope at top to other sides. Vertical moderate sides. Gradual break of slope at base. Sub oval irregular base.		C139	C2
139	C138	0.5	0.29	0.25	Single fill of cut 138, a possible pit	Soft mid-brown silty clay. Moderate amounts of possible heat affected small stones, pebbles and charcoal inclusions.		C1	C138
140	N/A	1.25	0.6	0.4	Cut of possible pit/hearth	Oval in plan. E-W cut. No corners. Sharp break of slope at top to E. Gradual break of slope at top to W. Vertical sides to E. Moderate sides to W. Sharp break of slope at base to E. Not perceptible break of slope at base to W. Irregular base.		C373	C79, C286
141	C140	1.25	0.6	0.1	Fill of cut 140, a possible hearth	Firm dark grey sandy clay. Bone, charcoal and frequent pebbly inclusions.		C372	C371
142	N/A	0.16	0.34	0.14	Cut of possible pit	Irregular in plan. SW-NE cut. Rounded corners. Rounded break of slope at top. Vertical sides to E. Gradual sides to W. Rounded break of slope at base. Irregular base.		C143	C145
143	C142	0.16	0.34	0.11	Fill of cut 142, a possible pit	Soft grey-black silty sand. Occasional small stones and frequent charcoal inclusions.		C1	C142
144	N/A	0.6	0.46	0.3	Cut of possible feature, apparently re-cut by 142	Irregular in plan. NE-SW cut. Rounded corners. Irregular break of slope at top. Sharp sides to S. Gradual sides to N. Rounded break of slope at base. Irregular base.		C145	C2
145	C144	0.48	0.48	0.18	Fill of possible pit 144, cut by 142	Soft grey-brown silty sand. Occasional small/medium sized stones.	1 grinding stone.	C142	C144
146	N/A	0.5	0.41	0.28	Cut of possible pit/posthole	Irregular oval in plan. E-W cut. Irregular rounded corners. Sharp break of slope at top. Gradual sides to N. Vertical sides to S. Gradual break of slope at base to N. Sharp break of slope at base to S. Irregular flat base.		C147	C128

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
147	C146	0.49	0.4	0.27	Fill of cut 146, a possible pit/posthole	Soft to firm mid greyish brown sandy clay loam. Abundant sub angular stones. Occasional burnt sandstone. Flecks of charcoal and burnt bone.		C1	C146
148	N/A	0.1	0.1	0.2	Cut of possible stakehole	Circular in plan. E-W cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Flat base.		C149	C2
149	C148	0.1	0.1	0.2	Fill of a possible stakehole.	Soft grey-brown sandy silt. Occasional small stones/pebbles.		C1	C148
150	N/A	0.25	0.22	0.48	Cut of possible posthole, cut by 327	Sub circular in plan. N-S cut. Rounded corners. Sharp break of slope at top. Vertical sides, E side has one step. Gradual break of slope at base, except E which is sharp. Rounded pointed base.		C151	C2
151	C150	0.25	0.22	0.48	Fill of cut 150, a possible posthole, cut by 327	Soft to firm Light greyish brown sandy clay with silt patches. Charcoal flecks.		C1	C150
152	N/A	0.26	0.14	0.2	Cut of possible posthole	Sub oval in plan. E-W cut. Circular corners at E, Square corners at W. Circular corners to E. Square corners to W. Gradual break of slope at top to E. Sharp break of slope at top to other sides. Moderate sides to E. Steep sides for the rest. Gradual break of slope at base. Flat base.		C153	C2
153	C152	0.26	0.14	0.2	Single fill of cut 152, a possible posthole	Loose light-brown silty sand. Small stone inclusions. Charcoal flecks.		C1	C152
154	N/A	0.25	0.18	0.08	Cut of a possible posthole.	Oval in plan. N-S cut. Rounded corners. Gradual break of slope at top. Moderate sides. Gradual break of slope at base. Concave base.		C155	C2
155	C154	0.25	0.18	0.08	Single fill of cut 154, a possible posthole	Soft grey-brown silty sand. Occasional small/medium sized stones.		C1	C154
156	N/A	0.41	0.33	0.35	Cut of possible pit/posthole	E-W oval cut in plan. No corners. Gradual break of slope at top. Sharp sides. Sharp break of slope at base. Concave, pointed base.		C157	C2
157	C156	0.41	0.33	0.35	Single fill of cut 156, a possible pit/posthole	Loose light-brown silty clay. Moderate small and medium sized stones inclusions.		C1	C156
158	N/A	0.2	0.14	0.33	Cut of possible posthole	Oval in plan. E-W cut. No corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Flat oval base.		C159	C2

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
159	C158	0.2	0.14	0.33	Single fill of cut 158	Firm dark grey/brown sandy silt. Moderate small stones.		C1	C158
160	N/A	0.28	0.24	0.05	Cut of possible very shallow pit	Sub circular in plan. E-W cut. No corners. Gradual irregular break of slope at top. Steep sides to W. Moderate sides to E. Irregular break of slope at base. Irregular base.		C161	C2
161	C160	0.28	0.24	0.05	Single fill of cut 160	Firm grey-brown sandy silt. Frequent pebbles and occasional small stone inclusions.		C1	C160
162	N/A	0.37	0.12	0.02	Probable non-archaeological?	Irregular shallow cut. E-W.		C163	C2
163	C162	0.37	0.12	0.02	Single fill of cut 162	Firm mottled brownish yellow sandy silt. Moderate stone inclusions.		C1	C162
164	N/A	0.33	0.2	0.24	Cut of possible feature	Oval in plan. ESE-WNW cut. No corners. Gradual break of slope at top. Steep sides. Vertical break of slope at base to E, N and S. Steep break of slope at base to W. Irregular base.		C165	C2
165	C164	0.33	0.2	0.24	Latest fill of cut 164	Moderately firm mid-brown silty clay.		C1	C164
166	N/A	0.3	0.24	0.3	Cut of possible posthole	N-S Oval cut in plan. No corners. Gradual break of slope at top. Sharp steep sides. Gradual break of slope at base. Tapered rounded point base.		C332	C2
167	C166	0.13	0.28	0.13	Top fill of cut 166, a possible posthole	Loose orange brown soil. 40% medium stones. Occasional charcoal pieces.		C1	C332
168	N/A	2.4	1.15	0.26	Cut of possible shallow pit	Irregular cut in plan. No corners. Gradual break of slope at top. Gradual sides to S. Vertical sides to N. Gradual break of slope at base to S. Sharp break of slope at base to N. oval base.		C169	C2
169	C168	2.4	1.15	0.26	Single fill of cut 168	Loose dark brown sandy clay. Charcoal and stone inclusions.		C1	C168
170	N/A	2.4	1.85	0.25	Cut of probable pit	Sub oval in plan. N-S cut. No corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Flat irregular base.		C171	C2
171	C170	2.4	1.85	0.25	Bottom fill of cut 170, a probable pit	Loose dark brown silt. Frequent charcoal. Large stone inclusions.	2 PH pottery sherds, 1 piece of copper, 1 Chert.	C369, c1	C170
172	N/A	0.13	0.07	0.08	Cut of possible stakehole	Oval cut in plan. Rounded corners. Gradual break of slope at top. Smooth sides. Gradual break of slope at base. Concave base.		C173	C2

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
173	C172	0.13	0.07	0.08	Single fill of cut 172	Loose mid-brown sandy silt.		C1	C172
174	N/A	0.16	0.19	0.11	Cut of possible pit	Oval in plan. N-S cut. Rounded corners. Sharp break of slope at top. Vertical smooth sides. Sharp break of slope at base, gradual break on S side. Concave base.		C175	C2
175	C174	0.16	0.18	0.11	Single fill of cut 174	Firm dark brown sandy clay.		C1	C174
176	N/A	0.32	0.32	0.37	Cut of possible posthole	SE-NW Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Circular base.		C225	C2
177	C176	0.15	0.16	0.19	Top fill of cut 176, a possible posthole	Soft dark brown sandy silt. Occasional charcoal flecks/small pieces of charcoal.		C1	C225
178	N/A	0.1	0.09	0.2	Possible cut	Oval in plan. N-S cut. Rounded corners. Gradual to sharp break of slope at top. Concave sides. Gradual to sharp break of slope at base. Oval base.		C179	C2
179	C178	0.1	0.09	0.2	Single fill of cut 178	Soft mid-brown silty clay.		C1	C178
180	N/A				Non-archaeological	Non-archaeological			
181	N/A				Non-archaeological	Non-archaeological			
182	N/A				Non-archaeological	Non-archaeological			
183	N/A				Non-archaeological	Non-archaeological			
184	N/A	0.17	0.15	0.13	Non-archaeological /possible cut	Sub circular in plan. N-S cut. Rounded corners. Sharp break of slope at top. Vertical smooth sides. Clear break of slope at base. Irregular base.		C185	C2
185	C184	0.1	0.05	0.13	Fill of possible cut 184	Loose orange-brown clay sand.		C297	C184
186	N/A	2.32	1.85	0.4	Cut of possible pit	Oval in plan. N-S cut. No corners. Gradual break of slope at top. Steep sides. Gradual break of slope at base. Undulating, flat base.		C252	C2
187	c186	2.32	1.85	0.15	Top fill of cut 186, a possible pit	Firm light-brown sandy silt. Occasional small stone inclusions. Charcoal flecks.	1 Chert.	C1	C252
188	N/A	0.44	0.44	0.35	Cut of posthole.	Circular in plan. N-S cut. Rounded corners. Rounded break of slope at top. Vertical sides. Gradual break of slope at base. Flat base.		C189	C2
189	C189	0.44	0.44	0.35	Single fill of cut 188, a possible pit	Soft greyish silty sand. Moderate stones inclusions. Frequent charcoal.	1 Chert.	C1	C188

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
190	N/A	0.12	0.14	0.06	Cut of possible stakehole	Circular in plan. E-W cut. Rounded corners. Gradual break of slope at top. Gradual sides. Gradual break of slope at base. Concave base.		C191	C2
191	C190	0.12	0.14	0.06	Single fill of cut 190	Soft grey-brown sandy silt. Occasional charcoal inclusions.		C1	C190
192	N/A	0.35	0.2	0.1	Cut of possible feature	Sub oval in plan. NE-SW cut. Rounded corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Oval base.		C193	C2
193	C192	0.35	0.2	0.1	Single fill of cut 192	Firm mid-brown silty sand.		C1	C192
194	N/A	0.42	0.3	0.28	Cut of possible posthole	Oval in plan. E-W cut. Rounded corners. Gradual break of slope at top. Moderate sides. Gradual break of slope at base. Concave base.		C195	C2
195	C194	0.42	0.3	0.28	Poss.packing fill of 194	Soft grey-brown silty sand. Charcoal		C268	C194
196	N/A	0.26	0.23	0.39	Cut of possible posthole	Sub circular in plan. NNW-SSE Cut. No corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base to NW. Sharp break of slope at base to SE. Rounded pointed base.		C197	C2
197	C196	0.26	0.23	0.39	Single fill of 196	Soft with firm patches, light yellowish brown sandy clay. Small occasional stones. Charcoal flecks.		C1	C196
198	N/A	0.26	0.2	0.26	Cut of a possible pit	Oval in plan. NE-SW cut. Irregular corners. Gradual break of slope at top. Steep sides. Gradual break of slope at base. Concave base.		C199	C2
199	C198	0.26	0.2	0.26	Single fill of cut 198	Soft to firm brown sandy clay. 40% pebbles.		C1	C198
200	C74	0.47	0.25	0.22	Bottom fill of cut 74, a possible pit	Firm brown sandy clay. 25% pebbles.		C75	C74
201	C356	0.16	0.16	0.3	Possible packing fill of cut 356, a possible posthole	Loose light yellow brown silty sand. Packing stone inclusions. Charcoal flecks.		C357	C356
202	C327	0.39	0.18	0.33	Single fill of cut 327	Loose light grey sandy loam. Charcoal flecks.		C1	C327
203	N/A	0.17	0.13	0.23	Cut of possible posthole	E-W Oval cut in plan. No corners. Sharp break of slope at top. Stepped sides to E, vertical sides to N and S, steep sides to W. Sharp break of slope at base. Irregular uneven base.		C204	C2
204	C203	0.17	0.13	0.23	Single fill of cut 203, a possible posthole	Loose light grey-brown sandy clay. Occasional small stones/pebble inclusions.		C1	C203

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
205	N/A	0.1	0.1	0.14	Cut of possible stakehole	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Circular base.		C206	C2
206	C205	0.1	0.1	0.14	Single fill of cut 205, a possible stakehole	Soft mid-brown sandy silt.		C1	C205
207	N/A	0.1	0.1	0.14	Cut of possible stakehole	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Circular base.		C208	C2
208	C207	0.1	0.1	0.14	Single fill of cut 207, a possible stakehole	Soft mid-brown sandy silt.		C1	C207
209	N/A	0.07	0.06	0.13	Cut of possible stakehole	Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Rounded base.		C210	C2
210	C209	0.07	0.06	0.13	Single fill of cut 209, a possible stakehole	Loose grey-brown silty sand.		C1	C209
211	N/A	0.07	0.08	0.18	Cut of possible stakehole	Circular cut in plan. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Tapered base.		C212	C2
212	C211	0.07	0.08	0.17	Single fill of cut 211, a possible stakehole	Loose grey-black silty clay.		C1	C211
213	N/A	0.08	0.07	0.22	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Smooth, vertical sides. Gradual break of slope at base. Pointed base.		C214	C2
214	C213	0.08	0.07	0.22	Fill of a possible stakehole.	Loose medium brown sandy silt.		C1	C213
215	N/A	0.07	0.06	0.1	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Steep to vertical sides. Rounded concave base.		C216	C2
216	C215	0.07	0.06	0.1	Fill of a possible stakehole.	Loose light grey brown sandy silt.		C1	C215
217	N/A	0.06	0.06	0.14	Cut of a possible stakehole.	Circular in plan. E-W cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Flat base.		C218	C2
218	C217	0.06	0.06	0.14	Fill of a possible stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C217
219	N/A	0.08	0.08	0.19	Cut of a possible stakehole.	Circular in plan. E-W cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Concave base.		C220	C2



Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
220	C219	0.08	0.08	0.19	Fill of a possible stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C219
221	N/A	0.07	0.07	0.16	Cut of a possible stakehole.	Oval in plan. E-W cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Flat base.		C222	C2
222	C221	0.07	0.07	0.16	Fill of a possible stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C221
223	N/A	0.08	0.08	0.18	Cut of a possible stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Smooth vertical sides. Gradual break of slope at the base. Tapered point/concave base.		C224	C2
224	C223	0.08	0.08	0.18	Fill of a possible stakehole.	Soft grey with a brown hue silty clay.		C1	C223
225	C176	0.32	0.32	0.37	Fill of a posthole.	Soft grey brown silty clay.		C177	C176
226	N/A	0.09	0.09	0.14	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top to E, gradual break of slope at top to W. Moderate sides. Gradual break of slope at the base. Concave base.		C313	C312
227	C397	0.06	0.05	0.14	Fill of a possible stakehole.	Loose grey brown sandy silt.		C1	C397
228	N/A	0.07	0.06	0.12	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical/steep sides. Gradual break of slope at base. Rounded concave base.		C229	C2
229	C228	0.07	0.06	0.12	Fill of a possible stakehole.	Loose grey brown sandy silt.		C1	C228
230	N/A	0.08	0.08	0.28	Cut of a stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Rounded base.		C233	C2
231	C236	0.46	0.34	0.18	Sole fill of pit 236	Soft mid brown sandy silt.		C1	C236
232	N/A	0.72	0.45	0.18	Cut of a possible hearth or refuse pit.	N-S rectangular cut in plan. Rounded irregular corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base. Irregular concave base.		C129	c393, c391.
233	C230	0.08	0.08	0.28	Fill of a stakehole.	Soft light yellow brown silty sand. Few stone inclusions.		C1	C230

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
234	N/A	0.08	0.07	0.14	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical steep sides. Gradual break of slope at base. Rounded concave base.		C235	C2
235	C234	0.08	0.07	0.14	Fill of a possible stakehole.	Loose light grey brown silty sand. Occasional small stone inclusions.		C1	C234
236	N/A	0.46	0.34	0.18	Cut of a shallow pit.	Irregular in plan. N-S cut. Rounded corners. Sharp break of slope at top. Gradual sides. Moderate break of slope at base.		C231	C2
237	C130	2.8	0.87	0.25	Fill of a pit.	Moderate compaction yellow brown silty sand. Few small stone inclusions.		C131	C130
238	C130	0.18	0.15	0.1	Top fill of c130.	Soft compaction dark brown silty clay. Charcoal flecks. Pieces of bone inclusions.		C1	C131
239	C136	0.18	0.15	0.1	This fill is possibly the surrounding fill of a post pipe.	Firm light brown grey silty clay. Small amounts of charcoal and some sub-angular pebble inclusions.		C1	C240
240	C136	0.3	0.2	0.3	This fill is possibly the surrounding fill of a post pipe.	Firm compaction silty clay with some fine sand. Small amount of charcoal and small pebble inclusions.		C239	C136
241	N/A	0.07	0.06	0.21	Cut of a stakehole.	Sub circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical smooth sides. Imperceptible break of slope at base. Irregular base.		C242	C2
242	C241	0.07	0.06	0.21	Fill of a stakehole.	Firm mid brown sandy silt.		C1	C241
243	N/A	0.1	0.1	0.23	Cut of a stakehole.	Circular in plan. N-S cut. No corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at top, gradual break at N. Rounded pointed base.		C244	C2
244	C243	0.1	0.1	0.23	Fill of a stakehole.	Soft light grey brown slightly stony sandy clay loam. Rare charcoal, rare small sub angular stones and occasional small pieces of pottery inclusions.	1 PH pottery sherd.	C1	C243
245	N/A	0.07	0.07	0.09	Cut of a stakehole.	Circular in plan. E-W cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Flat base.		C246	C2
246	C245	0.07	0.07	0.09	Fill of a stakehole.	Soft brown grey sandy silt. Occasional small stone inclusions.		C1	C245

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
247	N/A	0.07	0.06	0.05	Cut of a stakehole.	Circular cut in plan. Sharp break of slope at top. Steep vertical sides. Gradual break of slope at base. Rounded/concave base.		C248	C2
248	C247	0.07	0.06	0.05	Fill of a stakehole.	Loose light grey brown sandy silt.		C1	C247
249	N/A	0.07	0.07	0.09	Cut of a stakehole.	Circular in plan. N-S cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Flat base.		C250	C2
250	C249	0.07	0.07	0.09	Fill of a stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C249
251	C57	0.5	0.49	0.27	Base fill of a pit.	Soft light grey silty sand. 5% charcoal.		C58	C57
252	C186	2	1.5	0.3	Base fill of a pit.	Loose to firm dark brown silty sand. Flecks of charcoal. Occasional stone inclusions.	5 clay mould fragments.	C187	C186
253	N/A	0.06	0.06	0.16	Cut of a stakehole.	Oval cut in plan. No corners. Gradual break of slope at top. Vertical sides. Vertical break of slope at base. Pointed base.		C254	C2
254	C253	0.06	0.06	0.16	Fill of a stakehole.	Moderate compaction mid brown silty clay. Charcoal flecks.		C1	C253
255	N/A	32.5	0.49	0.14	Cut of a furrow.	Linear in plan. NW-SE cut. Rounded corners. Sharp break of slope at top. Moderate sides. Gradual break of slope at base. Concave base.		C256	C2
256	C255	32.5	0.49	0.14	Fill of a furrow.	Soft mid grey brown clay silt. Well sorted pebble inclusions.		C1	C255
257	N/A	0.07	0.06	0.08	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Concave round base.		C258	C2
258	C257	0.07	0.06	0.08	Fill of a stakehole.	Loose orange yellow light brown sandy clay.		C1	C257
259	N/A	0.1	0.1	0.11	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides to N, E and W. Slightly gradual to S. Sharp break of slope at base to N, E and W. Slightly gradual to S. Tapered concave base.		C260	C2
260	C259	0.1	0.1	0.11	Fill of a stakehole.	Loose orange grey light brown silty sand.		C1	C259
261	N/A	0.05	0.05	0.06	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Gradual break of slope at top. Smooth vertical sides. Gradual break of slope at base. Pointed base.		C262	C2
262	C261	0.05	0.05	0.06	Fill of a possible stakehole.	Loose mid brown sandy silt. 1% charcoal flecks.		C1	C261

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
263	N/A	0.06	0.06	0.14	Cut of a stakehole.	Circular cut in plan. No corners. Moderately sharp break of slope at top to the N. Sharp break of slope at top to E, S and W. Steep sides to SW and vertical to others. Sharp break of slope at base. Tapered round base.		C264	C2
264	C263	0.06	0.06	0.14	Fill of a stakehole	Loose orange grey sandy clay.		C1	C263
265	N/A	0.6	0.6	0.15	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Tapered rounded base.		C266	C2
266	C265	0.6	0.6	0.15	Fill of a stakehole.	Loose light brown orange sandy clay.		C1	C265
267	C77	0.49-0.69		0.16-0.19	Fill of a possible stone workshop.	Stiff mid brown sandy soil. 5% stones.		C1	C76
268	C194	0.35	0.29	0.13	Fill of a posthole.	Soft dark brown silty sand. Frequent charcoal.	2 Chert.	C1	C195
269	N/A	0.07	0.06	0.15	Cut of a stakehole.	Sub circular in plan. E-W cut. Rounded corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base. Rounded base.		C270	C2
270	C269	0.07	0.06	0.15	Fill of a stakehole.	Loose grey brown sandy silt.		C1	C269
271	N/A	0.1	0.08	0.18	Cut of a stakehole.	Sub circular in plan. E-W cut. Rounded corners. Sharp break of slope at top. Vertical sides. Gradual tapered break of slope at base. Rounded base.		C272	C2
272	C271	0.1	0.08	0.18	Fill of a stakehole.	Loose grey brown sandy silt.		C1	C271
273	N/A	0.06	0.05	0.09	Cut of a stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Smooth, vertical sides. Gradual break of slope at base. Pointed base.		C274	C2
274	C273	0.06	0.05	0.09	Fill of a stakehole.	Loose medium brown sandy silt.		C1	C273
275	N/A	0.07	0.07	0.14	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical steep sides. Gradual break of slope at base. Rounded concave base.		C276	C2
276	C275	0.07	0.07	0.14	Fill of a stakehole.	Loose grey brown sandy silt. 5% charcoal flecks.		C1	C275
277	N/A	0.09	0.11	0.18	Cut of a stakehole.	Circular in plan. E-W cut. No corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Concave base.		C278	C2
278	C277	0.09	0.11	0.18	Fill of a stakehole.	Soft mid brown sandy silt.		C1	C277

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
279	N/A	0.07	0.07	0.16	Cut of a stakehole.	Circular in plan. No corners. Sharp break of slope at top. Vertical, steep sides. Sharp break of slope at base. Tapered pointed base.		C280	C2
280	C279	0.07	0.07	0.16	Fill of a stakehole.	Loose light brown grey silty sand. Very small stone inclusions.		C1	C279
281	N/A	0.09	0.08	0.15	Cut of a stakehole.	Circular in plan. N-S cut. No corners. Sharp break of slope at top. Steep 80° sides. Gradual break of slope at base. Concave base.		C282	C2
282	C281	0.09	0.08	0.15	Fill of a stakehole.	Soft mid brown sandy silt.		C1	C281
283	N/A	0.07	0.09	0.14	Cut of a stakehole.	Circular in plan. E-W cut. No corners. Sharp break of slope at top. Steep 80° sides. Gradual break of slope at base. Concave base.		C284	C2
284	C283	0.07	0.09	0.14	Fill of a stakehole.	Soft mid brown sandy silt.		C1	C283
285	N/A	0.09	0.09	0.03	Cut of a stakehole.	SW-NE Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base. Concave sides.		C286	C2
286	C285	0.09	0.09	0.03	Fill of a stakehole.	Firm black sandy silt. Charcoal inclusions.		C141	C285
287	N/A	0.22	0.17	0.13-0.3	Cut of what appears to be two stakeholes which have been merged.	Irregular oval cut in plan. No corners. Sharp break of slope to N and W. Slightly undercut break of slope to S and moderately gradual to E. Vertical sides, stepped to S. Sharp tapered break of slope at base. Concave tapered base.		C288	C2
288	C287	0.22	0.17	0.13-0.3	Fill of what appears to be two stakeholes which have been merged.	Loose grey orange light brown silty sand.		C1	C287
289	N/A	0.08	0.08	0.1	Cut of a stakehole.	Circular in plan. N-S cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Concave base.		C290	C2
290	C289	0.08	0.08	0.1	Fill of a stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C289
291	N/A	0.1	0.1	0.19	Cut of a stakehole.	Circular in plan. E-W cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Concave base.		C292	C2
292	C291	0.1	0.1	0.19	Fill of a stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C291

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
293	N/A	0.09	0.09	0.11	Cut of a stakehole.	Circular in plan. E-W cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Concave base.		C294	C2
294	C293	0.09	0.09	0.11	Fill of a stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C293
295	N/A	0.08	0.06	0.13	Cut of a stakehole.	Oval in plan. N-S cut. Rounded corners. Sharp break of slope at top. Vertical sides. Concave break of slope at base. Oval base.		C296	C2
296	C295	0.08	0.06	0.13	Fill of a stakehole.	Soft mid brown sandy silt.		C1	C295
297	C184	0.07	0.05	0.1	Fill of a possible posthole.	Loose mid grey clay.		C1	C185
298	N/A	0.08	0.08	0.13	Cut of a stakehole.	Circular in plan. E-W cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Flat base.		C299	C2
299	C298	0.08	0.08	0.13	Fill of a stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C298
300	N/A	0.17	0.17	0.23	Cut of a possible posthole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Sub circular base.		C301	C2
301	C300	0.17	0.17	0.23	Fill of a possible posthole.	Soft mid grey brown sandy silt.		C1	C300
302	N/A	0.09	0.09	0.17	Cut of a stakehole.	Circular in plan. N-S cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Concave base.		C303	C2
303	C302	0.09	0.09	0.17	Fill of a stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C302
304	N/A	0.3	0.16	0.2	Cut of a posthole	SSW-NNE Sub oval cut in plan. No corners. Sharp break of slope at top. Sharp sides. Gradual break of slope at base. Rounded base.		C305	C2
305	C304	0.3	0.16	0.2	Fill of a posthole	Soft grey mid brown silty clay. Stone inclusions. Charcoal flecks.		C384	C304
306	N/A	0.05	0.05	0.16	Cut of a stakehole.	Circular in plan. NE-SW cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Concave base.		C307	C2
307	C306	0.05	0.05	0.16	Fill of a stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C306

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
308	N/A	0.04	0.04	0.11	Cut of a stakehole.	Circular in plan. NE-SW cut. Rounded corners. Gradual break of slope at top. Vertical sides. Gradual break of slope at base. Concave base.		C309	C2
309	C308	0.04	0.04	0.11	Fill of a stakehole.	Soft brown grey sandy silt. Occasional very small stone inclusions.		C1	C308
310	N/A				Non-archaeological	Non-archaeological			
311	N/A				Non-archaeological	Non-archaeological			
312	N/A	0.82	0.34	0.05	Spread from c140 or disturbance.	Sub oval in plan. N-S. No corners. Gradual break of slope at top. Gentle sides to N. Steep sides to S. Imperceptible break of slope at base. Flat base. Context is cut by c226.		C313	C2
313	C312	0.82	0.34	0.14	Spread from c140 or disturbance.	Soft mid brown sandy silt. 1-5% charcoal.		C1	C226, C312
314	N/A	0.16	0.11	0.21	Cut of a possible posthole.	Sub oval in plan. N-S cut. Rounded corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base to N, E and W. Gradual break of slope at base to S. Sub oval base.		C324	C2
315	N/A	0.07	0.06	0.14	Cut of a stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Tapered break of slope at base. Tapered point base.		C382	C2
316	N/A	0.24	0.24	0.25	Cut of a posthole.	Circular cut in plan. No corners. Sharp break of slope at top. Steep 80° sides. Gradual break of slope at base. Concave base.		C383	C2
317	C316	0.24	0.24	0.25	Fill of a posthole.	Soft mid grey brown sandy silt. 25% charcoal.		C1	C383
318	N/A	0.09	0.08	0.14	Cut of a stakehole.	Sub circular in plan. E-W cut. Rounded corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base. Rounded base.		C319	C2
319	C318	0.09	0.08	0.14	Fill of a stakehole.	Loose grey brown sandy silt.		C1	C318
320	N/A	0.11	0.09	0.18	Cut of a possible stakehole.	Sub circular cut in plan. Rounded corners. Sharp break of slope at top. Steep sides. Rounded concave break of slope at base.		C321	C2
321	C320	0.11	0.09	0.18	Fill of a possible stakehole.	Loose light grey brown silty clay.		C1	C320
322	N/A	0.09	0.08	0.19	Cut of a possible stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Rounded break of slope at base. Rounded base.		C323	C2

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
323	C322	0.09	0.08	0.19	Fill of a possible stakehole.	Moderate compaction mid brown silty clay. Chert inclusions. Charcoal flecks.	1 Chert.	C1	C322
324	C314	0.16	0.11	0.21	Fill of a posthole.	Soft medium grey brown sandy soil.		C1	C314
325	N/A	0.76	0.58	0.09	Cut of a shallow spread.	Oval in plan. N-S cut. No corners. Not perceptible break of slope at the top. Moderate sides. Not perceptible break of slope at base. Concave base.		C326	C2
326	C325	0.76	0.58	0.09	Fill of a shallow spread.	Hard compaction mixed grey yellow brown sandy silt. 5% pebbles.	1 Chert.	C1	C325
327	N/A	0.39	0.18	0.33	Cut of a possible posthole, or a natural cut.	Irregular in plan. N-S cut. No corners. Sharp break of slope at top. Vertical sides to N. Concave sides to S. Gradual break of slope at base. Base slopes to the N.		C202	c338, c151
328	N/A	0.37	0.37	0.28	Cut of a possible pit.	Sub oval in plan. E-W cut. Irregular corners. Not perceptible break of slope at top. Imperceptible sides. Not perceptible break of slope at the base. Irregular base with hollows.		C330	C2
329	C328	0.3	0.25	0.15	Fill of a possible pit.	Soft black silty clay. High % of charcoal. Possible bone inclusions.		C1	C330
330	C328	0.5	0.25	0.1	Fill of a possible pit.	Soft to firm light brown clay silt. Small amounts of small sub angular stones and charcoal inclusions.		C329	C328
331	C180	0.56	0.34	0.26	Probably a non-archaeological fill.	Loose dark brown silty sand.		C1	C181
332	C166	0.2	0.22	0.2	Base fill of a posthole.	Loose fill of red brown silty sand. Occasional charcoal flecks.		C167	C166
333	N/A	0.07	0.07	0.11	Cut of a stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Flat circular base.		C334	C2
334	C333	0.07	0.07	0.11	Fill of a stakehole.	Soft medium brown sandy silt.		C1	C333
335	N/A				Not used	Not used			
336	N/A				Not used	Not used			
337	N/A	0.24	0.18	0.24	Cut of a possible posthole.	Irregular in plan. N-S cut. Irregular rounded corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base. Very irregular base.		C338	C2



Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
338	C337	0.24	0.18	0.24	Fill of a possible posthole.	Soft to firm light grey brown slightly stony sandy clay loam. Occasional charcoal flecks.		C327	C337
339	N/A				Non-archaeological	Non-archaeological			
340	N/A				Non-archaeological	Non-archaeological			
341	N/A	0.05	0.04	0.09	Cut of a stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Steep vertical sides. Gradual break of slope at base. Tapered rounded base.		C342	C2
342	C341	0.05	0.04	0.09	Fill of a stakehole.	Loose medium grey brown sandy silt.		C1	C341
343	N/A	0.15	0.12	0.5	Cut of a possible posthole.	Circular in plan. NW-SE cut. No corners. Gradual break of slope at base. Gentle sloping sides. Sharp break of slope at base. Tapered point base.		C344	C2
344	C343	0.15	0.12	0.5	Fill of a possible posthole.	Grey brown silty sand. Charcoal and small pebble inclusions.		C343	C379
345	N/A	0.08	0.06	0.1	Cut of a stakehole.	Sub circular in plan. SW-NE cut. No corners. Sharp break of slope at top. Steep sides. Sharp break of slope at base. Tapered point base.		C346	C2
346	C345	0.08	0.06	0.1	Fill of a stakehole.	Loose orange brown silty sand.		C1	C345
347	N/A	0.1	0.09	0.19	Cut of a stakehole.	SW-NE Oval cut in plan. No corners. Sharp break of slope at top. Steep sides. Sharp break of slope at base. Tapered rounded point base.		C348	C2
348	C347	0.1	0.09	0.19	Fill of a stakehole.	Loose red brown silty sand.		C1	C347
349	N/A	0.1	0.09	0.12	Cut of a stakehole.	Sub circular cut. No corners. Gradual break of slope at top to W. Steep break of slope at top to other sides. Steep sides. Gradual break of slope at base. Tapered rounded point base.		C350	C2
350	C349	0.1	0.09	0.12	Fill of a stakehole.	Loose orange brown silty sand. Charcoal flecks.		C1	C349
351	C126	0.32	0.29	0.48	Fill possibly caused by post-pipe configuration.	Loose dark brown silty clay. Charcoal flecks. Bone and some stone inclusions.		C127	C353
352	C126	0.32	0.29	0.48	Fill possibly caused by post-pipe configuration.	Loose light brown sandy clay. Some stone inclusions.		C353	C126
353	C126	0.32	0.29	0.48	Fill possibly caused by post-pipe configuration.	Loose mid brown silty clay. Some stone inclusions.		C351	C352

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
354	N/A	0.09	0.08	0.25	Cut of a possible stakehole.	Circular cut in plan. No corners. Gradual break of slope at top to E. Steep break of slope at top to W. Concave sides to W. Vertical sides to E. Concave break of slope at base to E and vertical to the W. Round base.		c355	C2
355	C354	0.09	0.08	0.25	Fill of a possible stakehole.	Moderate compaction mid brown silty clay. Charcoal flecks.		C1	C354
356	N/A	0.2	0.18	0.3	Cut of a posthole.	SSW-NNE Oval cut in plan. Rounded corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Concave base.		C201	C2
357	C356	0.1	0.1	0.15	Fill of a posthole.	Loose dark brown silty sand. Charcoal flecks. Small stone inclusions.		C1	C201
358	N/A	0.08	0.08	0.11	Cut of a stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Steep sides. Gradual break of slope at base. Tapered rounded point base.		C359	C2
359	C358	0.08	0.08	0.11	Fill of a stakehole.	Soft brown grey silty sand.		C1	C358
360	C361	0.05	0.05	0.09	Fill of a stakehole.	Loose grey orange light brown silty sand.		C1	C361
361	N/A	0.05	0.05	0.09	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Tapered blunt pointed base.		C360	C2
362	C363	0.06	0.04	0.06	Fill of a stakehole.	Loose grey orange light brown silty sand.		C1	C363
363	N/A	0.06	0.04	0.06	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Tapered round base.		C362	C2
364	C365	0.05	0.05	0.1	Fill of a stakehole.	Loose grey orange light brown silty sand.		C1	C365
365	N/A	0.05	0.05	0.1	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Vertical to slightly gradual sides. Sharp break of slope at the base to the SW. Not perceptible break of slope at base to NE. Concave uneven base.		C364	C2
366	C367	0.06	0.05	0.14	Fill of a stakehole.	Loose orange grey mid brown silty sand.		C1	C367
367	N/A	0.06	0.05	0.14	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Round tapered base.		C366	C2

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
368	C370	0.06	0.05	0.06	Fill of a stakehole.	Loose grey light brown silty sand. Occasional small stone inclusions.		C1	C370
369	C171	2	1.1	0.12	Top layer of a pit.	Firm mid brown silty clay. Pieces of charcoal, animal bone and large stones inclusions.	1 Chert.	C389	C171
370	N/A	0.06	0.05	0.06	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top to S. Slightly gradual break of slope at top to N. Vertical sides. Sharp break of slope at base. Tapered round base.		c368	C2
371	C140	0.91		0.23	Fill of a hearth.	Soft mid brown black sandy silt. Burnt bone inclusions.		C141	C373
372	C140	0.48		0.12	Top fill of possible hearth.	Firm light grey sandy silt. Small stone inclusions.		C1	C141
373	C140	0.28		0.03	Burnt clay on the base of possible hearth.	Firm yellow red burnt clay.		C371	C140
374	C164	0.1	0.06	0.1	Fill of a possible posthole.	Moderate compaction mid brown silty clay.		C1	C164
375	N/A	0.07	0.06	0.1	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Steep vertical sides. Gradual break of slope at base. Rounded concave base.		C376	C2
376	C375	0.07	0.06	0.1	Fill of a possible stakehole.	Loose light grey brown sandy silt. Rare inclusions.		C1	C375
377	N/A	0.07	0.06	0.14	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Steep vertical sides. Gradual break of slope at base. Tapered to form a rounded base.		C378	C2
378	C377	0.07	0.06	0.14	Fill of a possible stakehole.	Loose light grey brown silty sand. Occasional small stone inclusions.		C1	C377
379	N/A	0.4	0.33	0.27-0.45	Cut of a posthole.	Sub circular cut in plan. No corners. Gradual break of slope at top to NW and W. Sharp break of slope at top to other sides. Moderate sides to NW and W. Steep sides to others. Sharp break of slope at base. Flat base. Cuts c344.		C396	C344
380	C379		0.2	0.25	Redeposited natural for a post.	Loose red brown silty sand. Charcoal flecks. Packing stones.		C381	C396
381	C379		0.3	0.32	Fill of posthole.	Loose grey brown clay sand. Charcoal inclusions.		C1	C380
382	C315	0.07	0.06	0.14	Fill of a stakehole.	Soft mid brown sandy silt.		C1	C315

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
383	C316	0.24	0.24	0.18	Packing fill of a posthole.	Soft mid grey sandy silt. 25% angular stone inclusions.		C317	C316
384	C304	0.2	0.15	0.17	Fill of a posthole.	Soft dark brown silty sand. Frequent charcoal flecks.		C1	C305
385	N/A	0.05	0.05	0.05	Cut of a stakehole.	Circular cut in plan. Rounded corners. Gradual break of slope at top to N. Sharp break of slope at top to S. Smooth angular sides. Gradual break of slope at base. Pointed base.		C386	C2
386	C385	0.05	0.05	0.05	Fill of a stakehole.	Loose mid brown silty sand.		C1	C385
387	N/A	0.15	0.14	0.12	Cut of pit.	Sub oval in plan. W-E cut. No corners. Sharp break of slope at top. Undercut sides to NW. Steep sides to W. Sharp break of slope at base. Flat base.		C388	C400
388	C387	0.15	0.14	0.12	Fill of pit 387.	Soft mid brown sandy silt.		C134	C387
389	C170	1	0.35	0.06	Partial top fill of pit 170.	Firm greyish brown sandy clay. Charcoal flecks.		C1	C369
390	N/A	0.17	0.17	0.38	Cut of a posthole.	Sub circular in plan. N-S cut. Irregular rounded corners. Sharp break of slope at top. Vertical sides with a step to SE. Gradual break of slope at base. Rounded pointed base.		C391	C2
391	C390	0.17	0.17	0.38	Fill of a posthole.	Soft to firm light grey brown slightly stony sandy clay loam. Occasional small charcoal flecks.		C232	C390
392	N/A	0.09	0.09	0.15	Cut of a stakehole.	Circular in plan. E-W cut. No corners. Sharp break of slope at top. Vertical sides. Gradual break of slope at base. Rounded pointed base.		C393	C2
393	C392	0.09	0.09	0.15	Fill of a stakehole.	Soft light grey brown sandy clay. Stone inclusions. Rare charcoal flecks.		C232	C392
394	N/A	0.54	0.48	0.23	Cut of a pit.	Sub oval in plan. N-S cut. Rounded corners. Sharp break of slope at top. Vertical sides. Sharp break of slope at base. Sub oval base.		C395	C2
395	C394	0.54	0.48	0.23	Sole fill of a pit.	Soft mid brown sandy silt.		C1	C394
396	C379	0.22	0.16	0.06	Bottom deposit of a posthole.	Loose blue brown sandy clay. Charcoal and gravel inclusions.		C380	C379
397	N/A	0.06	0.05	0.14	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Vertical steep sides. Gradual break of slope at base. Rounded base.		C227	C2

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description	Finds	Context Above	Context Below
398	C77	0.8		0.18	Fill of a possible production waste pit.	Firm dark brown sandy clay. 2% stones.		C76	C77
399	N/A				Non-archaeological	Non-archaeological			
400	N/A				Non-archaeological	Non-archaeological			
401	N/A				Non-archaeological	Non-archaeological			
402	N/A	0.06	0.04	0.06	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top to N. Gradual break of slope at top to other sides. Smooth vertical sides, angled slightly E. Gradual break of slope at base. Pointed base.		C403	C2
403	C402	0.06	0.04	0.06	Fill of a possible stakehole.	Loose medium brown silty sand.		C1	C402
404	N/A	0.15	0.15	0.32	Cut of a stakehole.	Circular cut in plan. No corners. Sharp break of slope at top. Vertical sides, slightly stepped to S. Sharp break of slope at base. Concave round base.		C81	C2
405	N/A	0.07	0.06	0.09	Cut of a possible stakehole.	Circular cut in plan. Rounded corners. Sharp break of slope at top. Smooth vertical sides. Gradual break of slope at base. Pointed base.		C406	C2
406	C405	0.07	0.06	0.09	Fill of a possible stakehole.	Loose grey brown silty sand.		C1	C405
407	N/A	0.42	0.2	0.2	Cut of a small pit.	Oval in plan. NE-SW cut. Rounded corners. Gradual break of slope at top. Gradual sides to NE. Vertical sides to rest. Irregular, mostly rounded break of slope at base. Irregular base.		C408	C2
408	C407	0.42	0.2	0.2	Fill of a small pit.	Soft grey brown silty sand. Occasional charcoal and some very small stone inclusions.		C1	C407

## Appendix 1.2 Catalogue of Artefacts

Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
E3656:1:1	1	1	Pottery	Neolithic	Pottery	1	Sherd
E3656:1:2	1	2	Pottery	Modern pottery	Pottery	1	Base sherd
E3656:1:3-73	1	3-73	Pottery	Modern pottery	Pottery	1	Sherd
E3656:1:74	1	74	Pottery	Modern pottery	Pottery	1	Handle fragment
E3656:1:75-86	1	75-86	Pottery	Modern pottery	Pottery	1	Sherd
E3656:1:87-96	1	87-96	Clay pipe	Modern	Clay pipe	1	Stem fragment
E3656:1:97-98	1	97-98	Clay pipe	Modern	Clay pipe	1	Bowl fragment
E3656:1:99	1	99	Clay pipe	Modern	Clay pipe	1	Stem fragment
E3656:1:100	1	100	Clay pipe	Modern	Clay pipe	1	Bowl fragment
E3656:1:101-102	1	101-102	Clay pipe	Modern	Clay pipe	1	Stem fragment
E3656:1:103	1	103	Clay pipe	Modern	Clay pipe	1	Bowl fragment
E3656:1:104	1	104	Clay pipe	Modern	Clay pipe	1	Stem fragment
E3656:1:105	1	105	Clay pipe	Modern	Clay pipe	1	Stem fragment. GOW on one side. Possibly invd on the other.
E3656:1:106	1	106	Clay pipe	Modern	Clay pipe	1	Bowl fragment
E3656:1:107-108	1	107-108	Clay pipe	Modern	Clay pipe	1	Stem fragment
E3656:1:109	1	109	Clay pipe	Modern	Clay pipe	1	Bowl fragment
E3656:1:110	1	110	Clay pipe	Modern	Clay pipe	1	Stem fragment
E3656:1:111	1	111	Clay pipe	Modern	Clay pipe	1	Bowl fragment
E3656:1:112-117	1	112-117	Clay pipe	Modern	Clay pipe	1	Stem fragment
E3656:1:118-119	1	118-119	Iron	Modern	Iron	1	Corroded nail
E3656:1:120	1	120	Iron	Modern	Iron	1	Horse shoe
E3656:1:121	1	121	Iron	Modern	Iron	1	Corroded nail
E3656:1:122	1	122	Iron	Modern	Iron	1	Corroded piece
E3656:1:123	1	123	Iron	Modern	Iron	1	Corroded nail
E3656:1:124	1	124	Iron	Modern	Iron	1	Corroded lump
E3656:1:125-127	1	125-127	Iron	Modern	Iron	1	Corroded piece
E3656:1:128-129	1	128-129	Iron	Modern	Iron	1	Corroded nail
E3656:1:130-131	1	130-131	Iron	Modern	Iron	1	Corroded lump
E3656:1:132	1	132	Iron	Modern	Iron	1	Corroded nail

Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
E3656:1:133-134	1	133-134	Iron	Modern	Iron	1	Corroded lump
E3656:1:135	1	135	Iron	Modern	Iron	1	Chain link?
E3656:1:136	1	136	Iron	Modern	Iron	1	Corroded nail
E3656:1:137	1	137	Iron	Modern	Iron	1	Corroded piece
E3656:1:138-140	1	138-140	Iron	Modern	Iron	1	Corroded nail
E3656:1:141	1	141	Iron	Modern	Iron	1	Corroded washer
E3656:1:142-148	1	142-148	Iron	Modern	Iron	1	Corroded piece
E3656:1:149	1	149	Iron	Modern	Iron	1	Corroded nail
E3656:1:150-154	1	150-154	Iron	Modern	Iron	1	Corroded piece
E3656:1:155	1	155	Cu alloy	Modern	Cu alloy	1	Coin/button. Inscription 'o colo.
E3656:1:156	1	156	Cu alloy	Modern	Cu alloy	1	Button
E3656:1:157	1	157	Cu alloy	Modern	Cu alloy	1	Bullet casing
E3656:1:158-166	1	158-166	Glass	Modern	Glass	1	Bottle sherd
E3656:1:167	1	167	Glass	Modern	Glass	1	Window sherd
E3656:1:168	1	168	Glass	Modern	Glass	1	Bottle sherd
E3656:1:169	1	169	Glass	Modern	Glass	1	Small bottle
E3656:1:170-173	1	170-173	Glass	Modern	Glass	1	Bottle sherd
E3656:1:174	1	174	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:175	1	175	Chert	Flake	Chert	1	Flake
E3656:1:176-180	1	176-180	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:181	1	181	Chert	Debitage	Chert	1	Debitage
E3656:1:182-184	1	182-184	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:185	1	185	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:186-187	1	186-187	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:188	1	188	Chert	Debitage	Chert	1	Debitage
E3656:1:189-190	1	189-190	Chert	Flake	Chert	1	Flake
E3656:1:191-192	1	191-192	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:193	1	1933	Chert	Debitage	Chert	1	Debitage
E3656:1:194-197	1	194-197	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:198	1	198	Chert	Flake	Chert	1	Flake
E3656:1:199	1	199	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:200	1	200	Chert	Flake	Chert	1	Flake

Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
E3656:1:201	1	201	Chert	Blade	Chert	1	Blade
E3656:1:202	1	202	Chert	Flake	Chert	1	Flake
E3656:1:203	1	203	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:204	1	204	Chert	Flake	Chert	1	Flake
E3656:1:205	1	205	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:206-207	1	206-207	Chert	Flake	Chert	1	Flake
E3656:1:208	1	208	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:209-213	1	209-213	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:214	1	214	Chert	Debitage	Chert	1	Debitage
E3656:1:215	1	215	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:216	1	216	Chert	Flake	Chert	1	Flake
E3656:1:217-218	1	217-218	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:219	1	219	Chert	Flake	Chert	1	Flake
E3656:1:220	1	220	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:221	1	221	Chert	Flake	Chert	1	Flake
E3656:1:222	1	222	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:224	1	224	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:225	1	225	Chert	Flake	Chert	1	Flake
E3656:1:226	1	226	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:227	1	227	Chert	Flake	Chert	1	Flake
E3656:1:228-231	1	228-231	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:232	1	232	Chert	Flake	Chert	1	Flake
E3656:1:233	1	233	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:234	1	234	Chert	Debitage	Chert	1	Debitage
E3656:1:235	1	235	Chert	Flake	Chert	1	Flake
E3656:1:236	1	236	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:237-238	1	237-238	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:239	1	239	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:240	1	240	Chert	Retouched artefact		1	Retouched artefact
E3656:1:241-243	1	241-243	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:244-246	1	244-246	Chert	Flake	Chert	1	Flake
E3656:1:247	1	247	Chert	Debitage	Chert	1	Debitage



Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
E3656:1:248	1	248	Chert	Core	Chert	1	Core
E3656:1:249	1	249	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:250-251	1	250-151	Chert	Flake	Chert	1	Flake
E3656:1:252	1	252	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:253	1	253	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:254	1	254	Chert	Flake	Chert	1	Flake
E3656:1:255-256	1	255-256	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:257	1	257	Chert	Debitage	Chert	1	Debitage
E3656:1:258-261	1	258-261	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:262-263	1	262-263	Chert	Flake	Chert	1	Flake
E3656:1:264	1	264	Chert	Debitage	Chert	1	Debitage
E3656:1:265	1	265	Chert	Core	Chert	1	Core
E3656:1:266	1	266	Chert	Flake	Chert	1	Flake
E3656:1:267	1	267	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:1:268	1	268	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:269-272	1	269-272	Chert	Flake	Chert	1	Flake
E3656:1:273	1	273	Chert	Natural chunk	Chert	1	Natural chunk
E3656:1:274	1	274	Chert	Core	Chert	1	Core
E3656:1:275	1	275	Flint	Flake	Flint	1	Flake
E3656:1:276-277	1	276-277	Flint	Natural chunk	Flint	1	Natural chunk
E3656:1:278-279	1	278-279	Flint	Debitage	Flint	1	Debitage
E3656:1:280	1	280	Flint	Retouched artefact	Flint	1	Retouched artefact
E3656:1:281	1	281	Flint	Flake	Flint	1	Flake
E3656:1:282	1	282	Flint	Debitage	Flint	1	Debitage
E3656:1:283	1	283	Flint	Flake	Flint	1	Flake
E3656:1:284	1	284	Flint	Debitage	Flint	1	Debitage
E3656:1:285	1	285	Flint	Blade	Flint	1	Blade
E3656:1:286	1	286	Flint	Flake	Flint	1	Flake
E3656:1:287	1	287	Flint	Flake	Flint	1	Flake
E3656:1:288	1	288	Flint	Debitage	Flint	1	Debitage
E3656:1:289	1	289	Flint	Natural chunk	Flint	1	Natural chunk
E3656:1:290	1	290	Flint	Core	Flint	1	Core

Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
E3656:1:291	1	291	Sandstone	Hammerstone	Sandstone	1	Hammerstone
E3656:6:1	6	1	Flint	Burnt core	Flint	1	Burnt core
E3656:6:2	6	2	Chert	Flake	Chert	1	Flake
E3656:10:1-11	10	1-11	Pottery	Sherd	Pottery	1	Sherd
E3656:10:12	10	12	Pottery	Sherd. Lines indicate possible decoration.	Pottery	1	Sherd. Lines indicate possible decoration.
E3656:10:13-26	10	13-26	Pottery	Sherd	Pottery	1	Sherd
E3656:10:27	10	27	Pottery	Decorated sherd	Pottery	1	Decorated sherd
E3656:10:28	10	28	Pottery	Sherd	Pottery	1	Sherd
E3656:10:29	10	29	Chert	Flake	Chert	1	Flake
E3656:10:30-32	10	30-32	Chert	Debitage	Chert	1	Debitage
E3656:10:33	10	33	Chert	Flake	Chert	1	Flake
E3656:10:34	10	34	Chert	Chunk	Chert	1	Chunk
E3656:10:35-37	10	35-37	Chert	Flake	Chert	1	Flake
E3656:10:38	10	38	Chert	Natural chunk	Chert	1	Natural chunk
E3656:10:39-41	10	39-41	Chert	Debitage	Chert	1	Debitage
E3656:10:42-43	10	42-43	Chert	Flake	Chert	1	Flake
E3656:10:44	10	44	Chert	Chunk	Chert	1	Chunk
E3656:10:45-46	10	45-46	Chert	Flake	Chert	1	Flake
E3656:10:47	10	47	Chert	Retouched artefact	Chert	1	Retouched artefact
E3656:10:48-49	10	48-49	Chert	Flake	Chert	1	Flake
E3656:10:50-53	10	50-53	Chert	Debitage	Chert	1	Debitage
E3656:10:54	10	54	Chert	Natural chunk	Chert	1	Natural chunk
E3656:10:55	10	55	Chert	Debitage	Chert	1	Debitage
E3656:10:56	10	56	Chert	Convex scraper	Chert	1	Convex scraper
E3656:10:57	10	57	Chert	Debitage	Chert	1	Debitage
E3656:10:58	10	58	Chert	Blade	Chert	1	Blade
E3656:10:59	10	59	Chert	Flake	Chert	1	Flake
E3656:10:60	10	60	Chert	Chunk	Chert	1	Chunk
E3656:10:61	10	61	Chert	Flake	Chert	1	Flake
E3656:10:62	10	62	Chert	Blade	Chert	1	Blade
E3656:10:63	10	63	Chert	Chunk	Chert	1	Chunk

Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
E3656:10:64	10	64	Chert	Flake	Chert	1	Flake
E3656:12:1-2	12	1-2	Pottery	Sherd	Pottery	1	Sherd
E3656:12:3	12	3	Chert	Flake	Chert	1	Flake
E3656:20:1-22	20	1-22	Pottery	Sherds	Pottery	1	Sherds
E3656:20:23	20	23	Chert	Flake	Chert	1	Flake
E3656:22:1-4	22	1-4	Pottery	Sherd	Pottery	1	Sherd
E3656:28:1	28	1	Pottery	Sherd	Pottery	1	Sherd
E3656:28:2	28	2	Flint	Flake	Flint	1	Flake
E3656:28:3-4	28	3-4	Chert	Chunk	Chert	1	Chunk
E3656:37:1-30	37	1-30	Pottery	Sherd	Pottery	1	Sherd
E3656:37:31	37	31	Chert	Scraper	Chert	1	Scraper
E3656:76:1	76	1	Chert	Flake	Chert	1	Flake
E3656:76:2	76	2	Chert	Debitage	Chert	1	Debitage
E3656:76:3	76	3	Void		Void	1	
E3656:76:4	76	4	Chert	Debitage	Chert	1	Debitage
E3656:76:5	76	5	void		void	1	
E3656:76:6	76	6	Flint	Blade	Flint	1	Blade
E3656:76:7-15	76	7-15	Flint	Debitage	Flint	1	Debitage
E3656:76:16	76	16	Flint	Blade	Flint	1	Blade
E3656:76:17-18	76	17-18	Flint	Debitage	Flint	1	Debitage
E3656:76:19a+b	76	19a+19b	Flint	Flake/debitage	Flint	2	Flake/debitage
E3656:76:20	76	20	Chert	Natural chunk	Chert	1	Natural chunk
E3656:76:21-22	76	21-22	Chert	Debitage	Chert	1	Debitage
E3656:76:23	76	23	Chert	Flake	Chert	1	Flake
E3656:76:24	76	24	Chert	Chunk	Chert	1	Chunk
E3656:76:25-29	76	25-29	Flint/chert	Debitage	Flint/chert	1	Debitage
E3656:76:30	76	30	Flint	Flake	Flint	1	Flake
E3656:76:31	76	31	Flint	Retouched artifact	Flint	1	Retouched artifact
E3656:76:32	76	32	Flint	Flake	Flint	1	Flake
E3656:76:33	76	33	Flint	Flake	Flint	1	Flake
E3656:76:34	76	34	Flint	Debitage	Flint	1	Debitage
E3656:76:35	76	35	Flint	Flake	Flint	1	Flake

Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
E3656:76:36	76	36	Flint	Blade	Flint	1	Blade
E3656:76:37	76	37	void		void	1	
E3656:76:38	76	38	Chert	Debitage	Chert	1	Debitage
E3656:76:39	76	39	Chert	Flake	Chert	1	Flake
E3656:76:40	76	40	Chert	Chunk	Chert	1	Chunk
E3656:76:41	76	41	Flint	Flake	Flint	1	Flake
E3656:76:42	76	42	Chert	Debitage	Chert	1	Debitage
E3656:76:43	76	43	Chert	Blade	Chert	1	Blade
E3656:76:44	76	44	Chert	Flake	Chert	1	Flake
E3656:76:45-49	76	45-49	Chert	Debitage	Chert	1	Debitage
E3656:76:50	76	50	Mudstone	Debitage	Mudstone	1	Debitage
E3656:76:51-54	76	51-54	Chert	Debitage	Chert	1	Debitage
E3656:76:55	76	55	Chert	Natural chunk	Chert	1	Natural chunk
E3656:76:56	76	56	Chert	Debitage	Chert	1	Debitage
E3656:76:57	76	57	Mudstone	Debitage	Mudstone	1	Debitage
E3656:76:58-60	76	58-60	Chert	Debitage	Chert	1	Debitage
E3656:76:61	76	61	Chert	Natural chunk	Chert	1	Natural chunk
E3656:76:62-66	76	62-66	Chert	Flake	Chert	1	Flake
E3656:76:67	76	67	Chert	Natural chunk	Chert	1	Natural chunk
E3656:76:68-69	76	68-69	Chert	Debitage	Chert	1	Debitage
E3656:76:70-71	76	70-71	Chert	Core	Chert	1	Core
E3656:76:72	76	72	Chert	Chunk	Chert	1	Chunk
E3656:76:73-74	76	73-74	Chert	Flake	Chert	1	Flake
E3656:76:75	76	75	Chert	Blade	Chert	1	Blade
E3656:76:76-77	76	76-77	Chert	Flake	Chert	1	Flake
E3656:76:78	76	78	Chert	Blade	Chert	1	Blade
E3656:76:79-82	76	79-82	Chert	Flake	Chert	1	Flake
E3656:76:83	76	83	Chert	Debitage	Chert	1	Debitage
E3656:76:84	76	84	Chert	Blade	Chert	1	Blade
E3656:76:85-86	76	85-86	Chert	Flake	Chert	1	Flake
E3656:76:87-89	76	87-89	Mudstone	Flake	Mudstone	1	Flake
E3656:76:90	76	90	Quartz crystal	Debitage	Quartz crystal	1	Debitage

Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
E3656:76:91-92	76	91-92	Quartz crystal	Flake/blade	Quartz crystal	1	Flake/blade
E3656:76:93-94	76	93-94	Quartz crystal	Debitage	Quartz crystal	1	Debitage
E3656:76:95	76	95	Quartz crystal	Debitage	Quartz crystal	1	Debitage
E3656:76:96	76	96	Pottery	Rim sherd ENCB	Pottery	1	Rim sherd ENCB
E3656:76:97-98	76	97-98	Pottery	Sherd ENCB	Pottery	1	Sherd ENCB
E3656:76:99	76	99	Pottery	Rim sherd ENCB	Pottery	1	Rim sherd ENCB
E3656:76:100-108	76	100-108	Pottery	Sherd ENCB	Pottery	1	Sherd ENCB
E3656:83:1-3	83	1-3	Chert	Natural chunk/Flake	Chert	1	Natural chunk/Flake
E3656:135:1-2	135	1-2	Fired clay	Mould fragments	Fired clay	1	Mould fragments
E3656:145:1	145	1	Sandstone	Grinding stone/mano	Sandstone	1	Grinding stone/mano
E3656:171:1-2	171	1-2	Pottery	Neck sherd Beaker	Pottery	1	Neck sherd Beaker
E3656:171:3	171	3	Copper	Piece of copper	Copper	1	Piece of copper
E3656:171:4	171	4	Chert	Flake	Chert	1	Flake
E3656:187:1	187	1	Chert	Flake	Chert	1	Flake
E3656:189:1	189	1	Chert	Debitage	Chert	1	Debitage
E3656:244:1	244	1	Pottery	Sherd (possible EN)	Pottery	1	Sherd (possible EN)
E3656:252:1-5	252	1-5	Fired clay	Mould fragments	Fired clay	1	Mould fragments
E3656:268:1-2	268	1-2	Chert	Debitage	Chert	1	Debitage
E3656:323:1	323	1	Chert	Flake	Chert	1	Flake
E3656:326:1	326	1	Chert	Debitage	Chert	1	Debitage
E3656:369:1	369	1	Chert	Flake	Chert	1	Flake



## Appendix 1.3 Catalogue of Ecofacts

The results relate to the processed samples that were taken during the excavation. A full list of these samples was supplied with the preliminary report lodged with Galway NRDO. A total of 216 bulk soil samples were taken during the course of excavation at this site. These were processed by means of flotation and sieving through a 250/300µm mesh.

### 1.3.1 Animal bone/burnt bone

Context number	Sample number	Feature	Sample weight (g)
371-373	183	Hearth	24.3g
01	48		0.4g
01	61		0.8g
10	12	Pit/Posthole	6.8g
58	58	Pit/Posthole	18.3g
58	65	Pit	28.5
58	82	Pit/Posthole	132.0g
64	29	Posthole	0.6g
66	36	Pit	0.4g
141	176	Hearth	5.2g
147	159	Pit	0.7g
206	94	Stakehole	5.2g
238	51	Pit	1.1g
238	52	Pit	1.1g
286	219	Posthole	5.2g

### 1.3.2 Charcoal

89 charcoal samples were recovered following flotation.

Context number	Sample number	Feature	Sample weight (g)
371-373	183	Hearth	28.5g
4	1	Curvilinear feature	7.7g
6	2	Pit	2.2g
8	3	Pit	3.4g
10	12	Pit/Posthole	36.5g
16	32	Pit	2.3g
24	14	Posthole	0.7g
37	13	Pit/Posthole	1.9g
38	18	Stakehole	<1g
52	22	Posthole	8.1g
54	33	Posthole	1.0g
58	58	Pit	15.1g
58	65	Pit	41.2g
60	62	Posthole	3.6g
64	29	Posthole	3.0g
70	31	Pit	3.0g
72	122	Stakehole	<1.0g
75	39	Pit	4.0g
76	83	Pit	9.9g
76	209	Working Pit	45.2g
81	213	Stakehole	0.3g
91	223	Pit	12.3g
93	38	Pit	1.5g
101	134	Stakehole	<1.0g

Context number	Sample number	Feature	Sample weight (g)
105	133	Stakehole	<1.0g
107	131	Stakehole	<1.0g
111	132	Stakehole	<1.0g
123	67	Stakehole	1.0g
125	66	Stakehole	<1.0g
128	150	Posthole	3.6g
129	169	Stakehole	1.0g
130	54	Posthole	2.1g
135	195	Pit	0.5g
139	156	Pit	23.8g
139	164	Pit	<1.0g
141	176	Hearth	35.6g
143	44	Pit	3.8g
145	45	Pit	11.3g
147	159	Pit	4.2g
153	220	Posthole	<1.0g
159	72	Posthole	6.3g
165	163	Posthole	0.1g
167	117	Posthole	0.3g
169	73	Pit	111.9g
169	89	Pit	0.2g
171	173	Posthole	11.2g
173	123	Stakehole	<1.0g
187	43	Pit	45.7g
187	70	Pit	0.5g
189	71	Pit/Posthole	62.0g
204	155	Posthole	1.6g
206	94	Stakehole	<1.0g
214	124	Stakehole	1.0g
220	97	Stakehole	<1.0g
225	174	Posthole	1.0g
229	107	Stakehole	0.1g
237	50	Pit	1.1g
238	51	Pit	0.6g
248	204	Stakehole	<1.0g
251	74	Pit/Posthole	12.5g
254	69	Stakehole	1.0g
270	115	Stakehole	1.0g
274	172	Stakehole	<1.0g
276	158	Posthole	0.4g
278	85	Stakehole	<1.0g
282	98	Stakehole	<1.0g
286	219	Posthole	19.2g
288	84	Stakehole	<1.0g
290	106	Stakehole	<1.0g
305	216	Posthole	2.0g
307	109	Stakehole	2.1g
321	87	Stakehole	3.0g
326	234	Pit	0.2g
329	78	Pit	1.2g
330	80	Pit	0.2g
338	231	Posthole	0.7g
344	197	Posthole	<1.0g
351	146	Posthole	5.0g




353	149	Posthole	0.8g
357	228	Posthole	0.5g
369	181	Stakehole	2.3g
376	185	Stakehole	1.0g
380	199	Posthole	0.7g
381	198	Posthole	1.2g
383	222	Posthole	1.5g
384	215	Posthole	2.4g
391	202	Posthole	0.6g
395	212	Pit	0.1g
406	217	Stakehole	<1.0g

### 1.3.3 Charred seeds

Two samples produced charred seeds.

Context number	Sample number	Feature	Sample weight (g)
10	12	Pit/Posthole	3.6g
159	72	Posthole	0.2

## Appendix 1.4 Archive Checklist

<b>Project:</b>	<b>N18 Gort to Crusheen</b>	<b>Irish Archaeological Consultancy Ltd</b>	
<b>Site Name:</b>	<b>Rathwilladoon 2 and 3</b>		
<b>NMS Number:</b>	<b>E3656</b>		
<b>Site director:</b>	<b>Ed Lyne</b>		
<b>Date:</b>	<b>15-03-2008</b>		
<b>Field Records</b>		<b>Items (quantity)</b>	<b>Comments</b>
Site drawings (plans)		13	R3 = 3 R2 = 10
Site sections, profiles, elevations		154	13 Sheets
Other plans, sketches, etc.		0	0
Timber drawings		0	0
Stone structural drawings		0	0
Site diary/note books		1	
Site registers (folders)		2	1 x reg. 1 x contexts
Survey/levels data (origin information)		On drawings + disc	
Context sheets		408	
Wood Sheets		0	
Skeleton Sheets		0	
Worked stone sheets		0	
Digital photographs		714	(+ elevated shots)
Photographs (print)		0	
Photographs (slide)		0	
<b>Finds and Environ. Archive</b>			
Flint/chert		263	62 flint 195 chert 6 quartz
Stone artefacts		5	Includes 1 saddle quern fragment
Pottery (specify periods/typology)		196 sherds	86 PM 110 PH
Ceramic Building Material (specify types eg daub, tile)		0	
Metal <input type="checkbox"/> artefacts (specify types – bronze, iron)		37 Fe, 2 Cu, 1 bullet casing (topsoil)	1 possible Cu fragment from a pit
Glass		16 sherds	Topsoil
Other find types or special finds (specify)		Clay pipe 31 fragments	Topsoil
Human bone (specify type eg cremated, skeleton, disarticulated)		0	0
Animal bone		14	8 burnt 6 unburnt
Metallurgical waste		0	
Enviro bulk soil (specify no. of samples)		216	
Enviro monolith (specify number of samples and number of tins per sample)		0	
Security copy of archive		Yes	IAC Digital

## **APPENDIX 2 SPECIALIST REPORTS**

Appendix 2.1 Radiocarbon Dating Results – QUB Laboratory

Appendix 2.2 Charcoal and Plant Remains – Sarah Cobain

Appendix 2.3 Animal Bone – Jonny Geber

Appendix 2.4 Lithics Report – Dr Farina Sternke

Appendix 2.5 Stone Axe– Irish Stone Axe Project

Appendix 2.6 Metal Small Finds– Jacqueline Mac Dermott

Appendix 2.7 Prehistoric Pottery – Eoin Grogan

Appendix 2.8 Medieval and Post-Medieval Pottery – Clare McCutcheon

Appendix 2.9 Catalogue of Clay Pipe and unconserved Metal – Maeve Tobin



RADIOCARBON DATING RESULTS  
RATHWILLADOON 2 & 3, CO. GALWAY, E3656  
CHRONO LABORATORY, QUEENS UNIVERSITY BELFAST

Colette Rynhart  
Irish Archaeological  
Consultancy Ltd  
120b Greenpark Road  
Bray  
Co. Wicklow, Ireland  
Rep. of Ireland  
VAT No. IE8288812U



<sup>14</sup>CHRONO Centre  
Queens University  
Belfast  
42 Fitzwilliam Street  
Belfast BT9 6AX  
Northern Ireland

## Radiocarbon Date Certificate

Laboratory Identification: UBA-12731  
Date of Measurement: 2009-10-19  
Site: E3656 Rathwilladoon 2 & 3  
Sample ID: C4S1  
Material Dated: charcoal  
Pretreatment: AAA  
Submitted by: IAC

<sup>14</sup>C Date: 2103±22

AMS δ<sup>13</sup>C: -27.2

### Information about radiocarbon calibration

RADIOCARBON CALIBRATION PROGRAM\*  
CALIB REV5.0.2

Copyright 1986-2005 M Stuiver and PJ Reimer

\*To be used in conjunction with:

Stuiver, M., and Reimer, P.J., 1993, Radiocarbon, 35, 215-230.

Annotated results (text) - -

Export file - cl4res.csv

C4S1		
UBA-12731		
Radiocarbon Age BP	2103 +/- 22	
Calibration data set: intcal04.14c		# Reimer et al. 2004
% area enclosed	cal AD age ranges	relative area under probability distribution
68.3 (1 sigma)	cal BC 171- 93	1.000
95.4 (2 sigma)	cal BC 186- 52	1.000

#### References for calibration datasets:

PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1029-1058.

#### Comments:

\* This standard deviation (error) includes a lab error multiplier.  
 \*\* 1 sigma = square root of (sample std. dev.^2 + curve std. dev.^2)  
 \*\* 2 sigma = 2 x square root of (sample std. dev.^2 + curve std. dev.^2)  
 where ^2 = quantity squared.  
 [ ] = calibrated range impinges on end of calibration data set  
 0\* represents a "negative" age BP  
 1955\* or 1960\* denote influence of nuclear testing C-14

NOTE: Cal ages and ranges are rounded to the nearest year which may be too precise in many instances. Users are advised to round results to the nearest 10 yr for samples with standard deviation in the radiocarbon age greater than 50 yr.

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Northern Ireland

## Radiocarbon Date Certificate

Laboratory Identification: UBA-12732  
Date of Measurement: 2009-10-19  
Site: E3656 Rathwilladoon 2 & 3  
Sample ID: C145S45  
Material Dated: charcoal  
Pretreatment: AAA  
Submitted by: IAC

<sup>14</sup>C Date: 2695±25  
AMS δ<sup>13</sup>C: -26.8

### Information about radiocarbon calibration

RADIOCARBON CALIBRATION PROGRAM\*  
CALIB REV5.0.2

Copyright 1986-2005 M Stuiver and PJ Reimer

\*To be used in conjunction with:

Stuiver, M., and Reimer, P.J., 1993, Radiocarbon, 35, 215-230.

Annotated results (text) - -

Export file - cl4res.csv

C145S45

UBA-12732

Radiocarbon Age BP 2695 +/- 25

Calibration data set: intcal04.14c

% area enclosed cal AD age ranges

# Reimer et al. 2004

relative area under

probability distribution

68.3 (1 sigma) cal BC 893- 876

0.240

846- 810

0.760

95.4 (2 sigma) cal BC 898- 807

1.000

References for calibration datasets:

PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1029-1058.

Comments:

\* This standard deviation (error) includes a lab error multiplier.

\*\* 1 sigma = square root of (sample std. dev.^2 + curve std. dev.^2)

\*\* 2 sigma = 2 x square root of (sample std. dev.^2 + curve std. dev.^2)

where ^2 = quantity squared.

[ ] = calibrated range impinges on end of calibration data set

0\* represents a "negative" age BP

1955\* or 1960\* denote influence of nuclear testing C-14

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Northern Ireland

## Radiocarbon Date Certificate

Laboratory Identification: UBA-12733  
Date of Measurement: 2009-10-19  
Site: E3656 Rathwilladoon 2 & 3  
Sample ID: C189S71  
Material Dated: charcoal  
Pretreatment: AAA  
Submitted by: IAC

<sup>14</sup>C Date: 2710±32

AMS δ<sup>13</sup>C: -30.1

### Information about radiocarbon calibration

RADIOCARBON CALIBRATION PROGRAM\*  
CALIB REV5.0.2  
Copyright 1986-2005 M Stuiver and PJ Reimer  
\*To be used in conjunction with:  
Stuiver, M., and Reimer, P.J., 1993, Radiocarbon, 35, 215-230.  
Annotated results (text) - -  
Export file - cl4res.csv

C189S71		
UBA-12733		
Radiocarbon Age BP	2710 +/-	32
Calibration data set: intcal04.14c		
% area enclosed	cal AD age ranges	# Reimer et al. 2004 relative area under probability distribution
68.3 (1 sigma)	cal BC 895- 867	0.444
	859- 823	0.556
95.4 (2 sigma)	cal BC 913- 807	1.000

References for calibration datasets:  
PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell,  
CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich,  
TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey,  
RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor,  
J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1029-1058.

#### Comments:

\* This standard deviation (error) includes a lab error multiplier.  
\*\* 1 sigma = square root of (sample std. dev.^2 + curve std. dev.^2)  
\*\* 2 sigma = 2 x square root of (sample std. dev.^2 + curve std. dev.^2)  
where ^2 = quantity squared.  
[ ] = calibrated range impinges on end of calibration data set  
0\* represents a "negative" age BP  
1955\* or 1960\* denote influence of nuclear testing C-14

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## Radiocarbon Date Certificate

Laboratory Identification: UBA-12734  
Date of Measurement: 2009-10-19  
Site: E3656 Rathwilladoon 2 & 3  
Sample ID: C351S146  
Material Dated: charcoal  
Pretreatment: AAA  
Submitted by: IAC

<sup>14</sup>C Date: 2740±23  
AMS δ<sup>13</sup>C: -24.9

### Information about radiocarbon calibration

RADIOCARBON CALIBRATION PROGRAM\*  
CALIB REV5.0.2  
Copyright 1986-2005 M Stuiver and PJ Reimer  
\*To be used in conjunction with:  
Stuiver, M., and Reimer, P.J., 1993, Radiocarbon, 35, 215-230.  
Annotated results (text) - -  
Export file - cl4res.csv

C351S146		
UBA-12734		
Radiocarbon Age BP	2740 +/- 23	
Calibration data set: intcal04.14c		
% area enclosed	cal AD age ranges	# Reimer et al. 2004 relative area under probability distribution
68.3 (1 sigma)	cal BC 904- 888	0.291
	882- 842	0.709
95.4 (2 sigma)	cal BC 928- 825	1.000

References for calibration datasets:  
PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell,  
CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich,  
TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey,  
RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor,  
J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1029-1058.

#### Comments:

\* This standard deviation (error) includes a lab error multiplier.  
\*\* 1 sigma = square root of (sample std. dev.^2 + curve std. dev.^2)  
\*\* 2 sigma = 2 x square root of (sample std. dev.^2 + curve std. dev.^2)  
where ^2 = quantity squared.  
[ ] = calibrated range impinges on end of calibration data set  
0\* represents a "negative" age BP  
1955\* or 1960\* denote influence of nuclear testing C-14

NOTE: Cal ages and ranges are rounded to the nearest year which  
may be too precise in many instances. Users are advised to  
round results to the nearest 10 yr for samples with standard  
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## Radiocarbon Date Certificate

Laboratory Identification: UBA-12736  
Date of Measurement: 2009-10-19  
Site: E3656 Rathwilladoon 2 & 3  
Sample ID: C10S12  
Material Dated: charred seed or nutshell  
Pretreatment: Acid Only  
Submitted by: IAC

<sup>14</sup>C Date: 3753±26  
AMS δ<sup>13</sup>C: -28.6

### Information about radiocarbon calibration

RADIOCARBON CALIBRATION PROGRAM\*  
CALIB REV5.0.2

Copyright 1986-2005 M Stuiver and PJ Reimer

\*To be used in conjunction with:

Stuiver, M., and Reimer, P.J., 1993, Radiocarbon, 35, 215-230.

Annotated results (text) - -

Export file - cl4res.csv

C10S12  
UBA-12736  
Radiocarbon Age BP 3753 +/- 26  
Calibration data set: intcal04.14c # Reimer et al. 2004  
% area enclosed cal AD age ranges relative area under  
probability distribution

68.3 (1 sigma)	cal BC 2204- 2135	0.967
	2069- 2064	0.033
95.4 (2 sigma)	cal BC 2280- 2250	0.081
	2230- 2220	0.017
	2212- 2122	0.736
	2093- 2042	0.166

#### References for calibration datasets:

PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell,  
CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich,  
TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey,  
RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor,  
J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1029-1058.

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\*\* 2 sigma = 2 x square root of (sample std. dev.^2 + curve std. dev.^2)

where ^2 = quantity squared.

[ ] = calibrated range impinges on end of calibration data set

0\* represents a "negative" age BP

1955\* or 1960\* denote influence of nuclear testing C-14

NOTE: Cal ages and ranges are rounded to the nearest year which  
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THE CHARCOAL AND PLANT MACROFOSSIL REMAINS  
RATHWILLADOON 2 & 3, CO. GALWAY, E3656  
SARAH COBAIN

*De Faoite Archaeology,  
Unit 10 Riverside Business Centre,  
Tinahely, Co Wicklow*

## Introduction

The survival of plant macrofossils from dryland archaeology sites is usually dependant on the water table being high enough to keep the archaeological features in damp/wet and anoxic conditions. This does not usually occur on archaeological sites in Ireland, unless they are located on riverine flood plains or close to lakes. Seeds and wood are however preserved abundantly in the form of charcoal and carbonised plant remains as a result of burning activities in features such as hearths, kilns, furnaces, burnt structures and as waste material disposed in ditches and pits.

The site at Rathwilladoon 2 and 3 consisted of a prehistoric settlement site which was split into four concentrations of archaeology. Prehistoric activity at Rathwilladoon 2 Area 1 was represented by three pits and a sequence of postholes and stakeholes. Rathwilladoon 2 Area 2 contained a rectangular structure with central hearth and associated pits. The archaeology at Rathwilladoon 2 Area 3 consisted of four pits and a single posthole. Rathwilladoon 3 contained a curvilinear feature which has been interpreted as a footing trench for a circular structure. Evidence from the finds recovered from this site suggests that the prehistoric activity at Rathwilladoon 2 and 3 is Neolithic in date, although this is being confirmed with radiometric dating (Lyne, 2009iii, 19-20). Plant macrofossil and charcoal remains provide valuable information to determine socio-economic activity on archaeology sites. It is the aim of this report to identify the seed and charcoal species recovered from this and to use this information to:

- 1) provide additional information regarding the function of features sampled
- 2) interpret the diet and living conditions of the occupants of the site
- 3) interpret socio-economic and industrial activities on the site
- 4) infer the composition of the local flora and woodland

## Methodology

There were fifty one samples to be analysed for charcoal remains and six samples to be analysed for plant macrofossils from Rathwilladoon 2 and 3. The following methodology was used to identify the charcoal and plant macrofossil species.

### Charcoal

The number of charcoal fragments to be identified is dependent on the diversity of the flora. A study by Keepax (1988:120–124) has indicated that depending on the location of the archaeology site, 100–400 fragments of charcoal would need to be identified in order to obtain a full range of species diversity. As Britain and Ireland have a narrow flora diversity in comparison to that of mainland Europe, an identification limit of 100 fragments has been deemed sufficient for samples from either of these two countries (Keepax, 1988; cited in Austin, 2005:1). As the majority of the samples contained more than 100 fragments, in accordance with Keepax (1998), a maximum of 100 fragments were identified. Of the samples which contained greater than 100 fragments these were sieved through a 10 mm, 4 mm and 2mm sieve and an equal proportion of each sieve were identified. This was to prevent any bias that might have occurred if only larger pieces were identified (thereby ensuring any potential smaller species are equally represented).

Each charcoal fragment was fractured by hand to reveal the wood anatomy on radial, tangential and transverse planes. The pieces were then supported in a sand bath and identified under an epi-illuminating microscope (Brunel SP400) at magnifications from x40 to x400. The sand bath allowed the charcoal pieces to be manipulated into the flattest possible position to aid identification. As fragments less than 2 mm in size cannot be accurately identified (it is not possible to get a wide enough field of vision

to encompass the necessary anatomical features for identification) only fragments above this size were examined.

During identification, any notable growth-ring characteristics, evidence of thermal and biological degradation and any other unusual microscopic features were recorded. Identifications were carried out with reference to images and descriptions by Cutler and Gale (2000) and Heller et al. (2004) and Wheeler et al. (1989). Nomenclature of species follows Stace (1997).

#### Plant macrofossils

Plant macrofossil remains were retrieved by standard flotation procedures by IAC Ltd using 1 mm and 300 micron sieves. The floated material was sorted and seeds identified using a low power stereo-microscope (Brunel MX1) at magnifications of x4 to x40. Identifications were made with reference to Cappers et al. (2006), Berggren (1981) and Anderberg (1994). Nomenclature follows Stace (1997).

### Results

The charcoal and plant macrofossil identifications are fully tabulated in Figures 1-52 in the appendix at the end of the report.

#### Charcoal identification notes

The anatomical similarities between (a) alder/hazel; (b) sessile/pedunculate oak and (c) the Maloideae species (hawthorn/rowan/crab apple (e) wild/bird cherry mean that these taxa cannot be identified to species level (Cutler and Gale, 2000).

### Phase 2 – Neolithic Activity

#### Rathwilladoon 2/Area 1

##### *Pits, C5, C7 and C9*

Pit, C5, contained a single fill C6 (sample 2) which contained fragment of oak, ash, yew and elm charcoal. Sample 3 (C8) was the upper fill of pit C7 and contained elder, alder/hazel, alder, oak and ash charcoal inclusions. Sample 12 (C10) was retrieved from the basal fill of pit C9 and contained hazel, yew, oak and ash charcoal inclusions.

#### Rathwilladoon 2/Area 2

##### *External structure postholes -*

##### *Postholes C53, C57, C63, C126, C146, C188*

Sample 33 was retrieved from the primary and only fill (C54) of posthole C53. This fill contained a single oak charcoal fragment. Three samples were retrieved from posthole C57. Sample 74 was retrieved from the basal fill (C251) and contained wayfaring tree, oak, Maloideae species (hawthorn, rowan, crab apple), wild/bird cherry, yew and elm charcoal fragments. The upper fill (C58) (samples 58 and 65) contained alder/hazel, spindle tree, hazel, oak, ash, Maloideae species (hawthorn, rowan, crab apple), wild/bird cherry, yew and elm charcoal inclusions.

Sample 29 was retrieved from the primary and only fill (C64) of posthole C63 and contained alder/hazel, oak and ash charcoal fragments. The mid fill (postpipe fill, C351) (sample 146) of posthole C126 contained oak charcoal fragments. Fill (C147) was the primary and only fill of posthole C146. This fill was retrieved as sample 159 and contained alder, oak, ash and Maloideae species (hawthorn, rowan, crab apple) charcoal inclusions. Posthole C188 contained a single fill, C189, which was retrieved as sample 71. This fill contained alder, oak, ash, Scot's pine and Maloideae species (hawthorn, rowan, crab apple) charcoal fragments.

*Internal postholes, C80, C304, C337*

Sample 213 was retrieved from primary and only fill (C81) of posthole C80 and contained alder/hazel, ash and yew charcoal inclusions. Two samples were retrieved from posthole C304. The basal fill (C384 – sample 215) contained oak, ash and yew charcoal inclusions. Sample 216 was retrieved from the upper fill (C305) and contained ash charcoal fragments. Posthole C337 contained a single fill (C338). The sample (sample 231) from this fill contained ash charcoal fragments.

*Structural stakeholes, C110, C122, C172, C247, C281, C285, C306, C320*

Sample 132 (C111) was the primary and only fill of stakehole C110. This fill contained a single fragment of ash charcoal. Stakehole C122 contained a single fill (C123). The sample from this fill (sample 67) contained alder/hazel charcoal inclusions. Fill C173 was the primary and only fill of stakehole, C172. This fill was retrieved as sample 123 and contained ash charcoal inclusions. Sample 204 was retrieved from the primary and only fill (C248) of stakehole C247 and contained oak and ash charcoal inclusions.

Fill C282 was the primary and only fill retrieved from stakehole C281. The sample (sample 98) from this fill contained a single oak charcoal fragment. Stakehole C285 contained a single fill (C286). This fill was sampled (sample 219) and included alder/hazel, oak and ash charcoal fragments. Sample 109 (C307) was retrieved from the primary and only fill of stakehole C306 and contained oak, ash and Maloideae species (hawthorn, rowan, crab apple) charcoal inclusions. Stakehole, C320 contained the single and only fill C321 (sample 87). This fill included alder/hazel, oak and ash charcoal inclusions.

*Internal hearth, C140*

Two samples were retrieved from hearth C140. Sample 176 was taken from the tertiary fill (C141) of the hearth and contained oak charcoal inclusions. Sample 183 consisted of combination of basal fill C373, secondary fill C371 and upper fill C372. This sample contained alder/hazel, hazel, oak, ash, Maloideae species (hawthorn, rowan, crab apple) and elm charcoal inclusions.

*Internal pits, C69, C142, C144, C325*

Fill C70 was the primary and only fill of pit C69. This fill was sampled as sample 31 and contained oak and yew charcoal inclusions.

*Pits C142, C144, C325*

Sample 44 was retrieved from the primary and only fill (C143) of pit C142 and contained hazel, oak, and ash charcoal fragments. Pit C144 contained the primary and only fill, C145. This fill was sampled as sample 45 and contained oak and ash charcoal inclusions. Fill C326 (sample 234) was the primary and only fill of pit C325 and contained alder/hazel and ash charcoal inclusions.

*Various features – possibly structural post and stakeholes, C51, C59, C343, C379*

Sample 22 (C52) was retrieved from the primary and only fill (C52) of posthole C51 and contained oak, ash and yew charcoal inclusions. The primary and only fill (C60-sample 62) from posthole C59, contained hazel, oak, ash, yew and Maloideae species (hawthorn, rowan, crab apple) charcoal fragments. Posthole C343 contained a single fill (C344). This fill was sampled as sample 197 and contained ash and Maloideae species (hawthorn, rowan, crab apple) charcoal fragments. Sample 198 was retrieved from the secondary fill (C381) of posthole, C379 and contained alder/hazel and ash charcoal inclusions.

*Other postholes and stakeholes, C136, C138, C158*

Sample 54 was taken from the primary and only fill (C137) of posthole C136 and contained *Maloideae* species (hawthorn, rowan, crab apple), hazel and ash charcoal inclusions. Posthole C138 contained the single fill C139. This fill was sampled as sample 156 and contained oak charcoal inclusions. Sample 72 was retrieved from the primary and only fill (C159) of posthole C158 and contained alder/hazel, oak, ash and *Maloideae* species (hawthorn, rowan, crab apple) charcoal fragments.

*Pits, C130, C170, C186*

Two fills were sampled for palaeobotanical analysis from pit C130. Sample 50 was retrieved from the basal fill (C237) and contained ash and *Maloideae* species (hawthorn, rowan, crab apple). The upper fill (C238-sample 51) contained alder/hazel, oak, ash and yew charcoal fragments. The basal fill (C171) was sampled (sample 173) from the basal fill of posthole C170. This fill contained oak charcoal inclusions. Samples 43 and 70 were both retrieved from the upper fill (C187) of pit C186 and contained oak, ash and *Maloideae* species (hawthorn, rowan, crab apple) charcoal inclusions.

*Small pits, C168, C328, C394*

Samples 73 and 89 were both retrieved from the primary and only fill (C169) of posthole C168 and contained oak, alder, alder/hazel and ash charcoal fragments. The upper fill (C329) of pit, C328, was sampled as sample 78. This fill contained alder/hazel, oak, ash and *Maloideae* species (hawthorn, rowan, crab apple) charcoal inclusions. Pit C394 contained the primary and only fill, C395. This fill was sampled as sample 212 and contained oak, ash, *Maloideae* species (hawthorn, rowan, crab apple) and blackthorn/sloe charcoal fragments.

## Rathwilladoon 2/Area 3

*Pits C74, C77*

Sample 39 was retrieved from the upper fill, (C75) of pit C74 and contained hazel, oak, ash and elm charcoal fragments. The mid fill (C76) of pit C77 was sampled (samples 83 and 209) and contained elder, alder/hazel, hazel, oak, ash, wild/bird cherry, blackthorn/sloe, elm and yew charcoal inclusions.

## Indeterminate phase

*Irregular cut C15 and possible pit C90*

Sample 32 was retrieved from the primary and only fill (C16) of irregular cut, C15. This fill contained alder/hazel, ash, *Maloideae* species (hawthorn, rowan, crab apple) and yew charcoal inclusions. Fill C91 was the primary and only fill of possible pit C90. This fill was retrieved as sample 223 and contained alder/hazel, hazel, oak, ash and *Maloideae* species (hawthorn, rowan, crab apple).

## Rathwilladoon 3

*Curvilinear ditch, C3*

Sample 1 (C4) was retrieved from the primary and only fill of curvilinear cut C3. This fill contained hazel, alder/hazel, ash and *Maloideae* species (hawthorn/rowan/crab apple) charcoal inclusions.

**Discussion****Function of features excavated****Rathwilladoon 2/ Area 1**

The archaeology in this area was made up of a series of stake and postholes and pits containing pottery and lithic material. The function of pits C5, C7 and C9 is

currently unclear, however the charcoal and plant macrofossil material deposited in these pits is indicative of rake out waste from a domestic hearth which has been disposed of into the pits.

### **Rathwilladoon 2/Area 2**

The charcoal and plant macrofossil material obtained from the series of post and stakeholes (External structure postholes - C53, C57, C63, C126, C146, C188; Internal posthole - C80, C304, C337; Structural stakeholes - C110, C122, C172, C247, C281, C285, C306, C320; Various features – possibly structural post and stakeholes - C5, C59, C343, C379 and Other postholes and stakeholes - C136, C138, C158) associated with activity at Rathwilladoon 2 – Area 2 all appear to be deposited through a combination of natural siltation and deliberate backfill of material into the posthole/stakehole cuts after the posts/stakes had been removed. It is uncertain where this material originated, however the combination of charcoal in all features and carbonised plant macrofossil material in postholes C53, C57, C158 indicates that this material originated from burnt waste and most likely accumulated within the postholes from hearth (C140) and other burning activity on the site which may have since been truncated away.

There were two postholes of which the charcoal recovered was from a single species. Fill C351 in posthole C126 contained 100% ash charcoal and fill C139 from posthole C138 contained 100% oak charcoal. As a single species was identified in each of these postholes it is possible that these posts that were burnt *in situ*.

There was only one feature on the site at Rathwilladoon 2 that was interpreted as a hearth. The feature was located centrally within the structure and the scorched clay together with a charcoal rich fill consisting of a main fuel (oak and ash) and several minor species as possibly kindling material (hazel, Maloideae species-hawthorn/rowan/crab apple and yew), indicates a hearth function.

There were several pits located within the structure – C69, C142, C144, and C325, all of which contained less than 35 fragments of charcoal each. The low charcoal count within each pit indicates that these features could have been storage pits, which were subsequently backfilled when the structure went out of use. The charcoal would have become accumulated/silted into the pits during backfilling from residual charcoal within the structure.

The remaining pits, C130, C170, C186, C168, C328, and C394 were located outside the structure. The charcoal rich fills associated with pits C170 and C168 indicate they could be waste pits for rake-out material from hearths. The remaining pits do not appear to have contained waste from hearths other than small quantities charcoal which was most likely residual and naturally silted into the features. These features may be storage pits or waste pits from other industrial activities.

### **Rathwilladoon 2/ Area 3**

Pits C74 and C77 both contained relatively charcoal rich fills which indicate that the fills were formed by hearth rake-out material which was deliberately discarded into waste pits.

#### **Indeterminate phase**

Pits C15 contained only occasional charcoal inclusions; however it did contain a carbonised wheat grain and hazelnut shell. These plant macrofossils are indicative of domestic waste material, which suggests this pit was used as a waste pit for rake-out material from a hearth. Pit C90 contained moderate charcoal inclusions which are indicative of waste material from a domestic hearth. It is therefore possible this



feature was used as waste pit for material cleaned out of a hearth, possibly from inside the structure at Rathwilladoon.

### **Rathwilladoon 3**

The charcoal from curvilinear ditch C3 consists of hazel, alder/hazel, ash and Maloideae species (hawthorn/rowan/crab apple). This charcoal assemblage consists of a dominant fuel and probably kindling material (discussed further below) and most likely represents rake-out waste from a domestic hearth which has been disposed into the foundation trench/curvilinear ditch of the possible circular structure.

## **Diet, Socio-Economic and Industrial Activities**

### **Diet**

Wheat and barley were commonly cultivated cereals from the Neolithic period onwards and have continued to be farmed through to modern times. Both crops were a staple part of the prehistoric diet, providing additional fibre, protein, vitamins and minerals. Grain, once harvested goes through several stages of processing before it is ready to be used. If harvested damp or wet, it is initially dried in a cereal drying kiln. The cereal then undergoes several sorting techniques.

- 1) Threshing – to break the ears of grain from the straw
- 2) Winnowing – throwing grain into the air to allow the breeze to blow away lighter chaff (paleas, lemmas, awns)
- 3) Coarse, medium, fine sieving and final hand picking of the grain (Stevens and Wilkinson 2003, 196-7).

There were only two carbonised barley grains and one carbonised wheat grain recovered from the site at Rathwilladoon 2. As there were no kilns recorded on the site, this together with the small cereal assemblage recovered from the features means that it is most likely the cereal processing (drying, threshing, winnowing and sorting) was taking place elsewhere (possibly outside CPO limits). As a result it cannot be confirmed how the cereal grains recovered from Rathwilladoon 2 became carbonised. The saddle quern find in pit C144 does however suggest that food production was taking place on the site, and it is possible that the cereal grains became accidentally carbonised, perhaps whilst processing the grain to prepare food. The small cereal assemblage may not necessarily be a negative result, as it may represent the care taken by occupants of the site at Rathwilladoon to prevent accidental losses of precious grain into the fire.

For example wheat and barley would have been used to make flat breads, porridges and for thickeners in stews (Renfrew 1985, 26-27). Barley was also used to produce beer, a process which was thought to have been established by the end of the Neolithic period (Renfrew 1985, 16). Beer would also have been consumed for social aspects and would also have been an added source of vitamins and calories (Galloway 1991, 87). Barley would also have been used as animal fodder and the by-products of grains (eg straw) were also put to use. For example wheat straw was often used for thatching on structures and barley straw was used as a winter feed, bedding material for humans and livestock and building materials (thatch, daub, flooring and insulation) (Pearson 1992, 3).

There is also evidence of fruit seeds and nut shells – hazelnut shells, wild cherry pips and bird cherry pips, all of which would have provided additional vitamins and minerals to the diet, as well as making food more palatable. Hazelnuts were harvested and eaten raw, or they may have been chopped up and put into salads or porridges (Mabey 2007, 44). Cherries would also have been eaten raw and may also

have been boiled down to make jams/jellies or used as accompaniment to various meat dishes/stews (Pearson 1997, 12, 14).

### Fuel

Although there was only one hearth identified on the sites at Rathwilladoon 2 and 3, the volume of charcoal, together with the wide variety of species identified suggests there must have been several hearths present on both sites over time. These may have since been truncated away though modern agriculture, with the only evidence of burning activities remaining within the silted up/backfilled fills of deeper postholes and pits.

The dominant fuels used on the sites at Rathwilladoon 2 and 3, appear to be oak and ash due to their relative dominance within the fragment counts and also because a higher proportion of the oak and ash charcoal (compared to other species) did not show any obvious curved growth rings. It is therefore likely the wood was derived from larger branches or stem (trunk) wood as well as smaller lateral branches (this would result in some charcoal with curved growth rings) which would have been deliberately cut with the intention of burning, rather than opportunistic gathering of brushwood. Ash and Oak would have been chosen as they both have dense heartwood and if dried properly are long lasting fuels, which would be ideal for hearths used for preparing food and providing warmth (Cutler and Gale 2000, 205).

The remaining charcoal recorded from the sites at Rathwilladoon 2 and 3 consisted of alder, hazel, wayfaring tree, birch, Scot's pine, Maloideae species (hawthorn, rowan, crab apple), wild/bird cherry, blackthorn/sloe, yew, elder and elm. Most of the charcoal from these species exhibited curved growth rings, which suggests they derived from round wood lateral branches rather than stem/trunk wood. It is therefore most likely that these branches were collected as deadwood and used within brushwood bundles as kindling for the fire.

Alder, elder and birch are all anatomically less dense than for example oak and burn quickly at relatively high temperatures (Grogan et al. 2007, 29-31). This property makes them good to use as kindling, as the high temperatures produced by all these species would encourage the oak and ash to start to burn. The Maloideae species (rowan and crab apple), the Prunus species (wild/bird cherry and blackthorn/sloe), hazel, wayfaring tree, Scot's pine (in the form of charcoal), yew and elm are also documented as excellent firewood (Stuijts 2005, 139-142; Cutler and Gale 2000, 80, 391, 264, 274), however as the majority of charcoal from these species originated from small twigs, this indicates that rather than being the dominant fuels, these were kindling used to ignite the oak and ash.

### Building materials

There were two posts that appeared to have been burnt in situ. Fill C351 in posthole C126 contained 100% ash charcoal and fill C139 from posthole C138 contained 100% oak charcoal. This suggests that the timber used in post C126 was ash and in post C138 was oak. These timbers were both readily sought after for construction material. Ash and oak are both anatomically dense woods with a fine grain, making them strong, tough timbers that would form sturdy structures. Oak in particular resists decay and rotting due to tyloses (anatomical fibre) within the trunk vessels which link together form an impermeable layer which inhibits water from filtering into the wood (Cutler and Gale 2000, 120, 204). This increases the life span of any structure built using oak timbers and mean less structural maintenance would be required.

## Composition of local woodlands

### Site location and present day ecological setting

The archaeological sites at Rathwilladoon 2 and 3 were located on a flat area on the southeast facing slope of a hill which overlooks a relatively large expanse of wetland and marsh.

### Composition of local flora – evidence from plant macrofossil material

#### *Woodland species*

The hazelnut shells, wild cherry and bird cherry pips all indicate the growth of hazel, wild cherry and bird cherry trees within the woodlands close to the site. All of these species grow in marginal areas or clearings within oak-ash woodlands which allows the trees sufficient light for flowers and maturation of fruits in the summer season (Cutler and Gale 2000, 88-89, Stuijts 2005, 141-2)

#### *Opportunistic/ruderal species*

The nodding smartweed is an opportunistic dryland species which grow well on cleared/waste ground (Rose 2006, 168). This suggests that the area surrounding the site at Rathwilladoon 2 was cleared of any established woodland vegetation, which would allow opportunistic weed species space, nutrients and light to quickly colonise.

### Composition of local woodlands - evidence from charcoal material

As asserted by Scholtz (1986) cited in Prins and Shackleton (1992, 632), the “Principle of Least Effort” suggests that communities of the past collected firewood from the closest possible available wooded area. If this theory were to be used it would assume that the woodland surrounding the site would consist of an oak-ash climax community consisting of hazel, birch, oak, ash, wayfaring tree, Scot's pine, *Maloideae* species (hawthorn/rowan/crab apple), wild/bird cherry, blackthorn/sloe, elm and yew. The evidence of alder and elder charcoal indicates a more wetland environment, possibly down slope in the same location as the present day wetland. Whilst this can be used as the basic theory, other variables affecting wood collection must be taken into account (Prins and Shackleton 1992, 632). These include:

#### *1) Selection of particular species in favour of others within the woodland*

Oak and ash were likely to have been selected for use in hearths as they are considered long lasting and effective fuels (Stuijts 2005, 141 and 143) so it is likely they were preferentially searched for and harvested and may have a higher percentage representation within the charcoal assemblage.

#### *2) Differential preservation of charcoal/non-uniform survival of charcoal over time*

Preservation rate of charcoal can be affected by a number of variables, for example a) preservation conditions – mechanical abrasion on a site with stony subsoil may cause the charcoal fragments to be broken into smaller unidentifiable fragments, b) two identical pieces of wood may fragment into different numbers of charcoal fragments when burnt. Some, all or none of these may be recovered from the archaeological record which would affect possible woodland reconstructions and c) the overall heat of the fire may cause the wood to turn to ash and not be represented at all in the archaeological record (Asouti and Austin 2005, 1-5).

As a result of these variables it is not possible to use the fragment counts obtained to infer the percentages/numbers of each of these species within the local environment, however based on the assumption that communities will collect wood from the closest possible source (Scholtz 1986) the charcoal assemblage does suggest that the local vegetation close to Rathwilladoon 2 and 3 would have consisted of an ash-oak woodland. The dominant trees would be oak and ash mixed with elm. Hazel,

the *Maloideae* species (hawthorn/rowan/crab apple) wild/bird cherry, blackthorn/sloe, wayfaring tree and yew would all be found in clearings within oak-ash woodland (perhaps where a tree has fallen), or on the outer margins where there is more light and nutrients (Mitchell and Wilkinson, 1978:14, 54, 63, 65, 66; Stuijts 2005, 139-141). The evidence of Scot's pine, elder and alder, which are species which grow in wetland/fen areas (Stuijts 2005, 129, 141) also indicate an alder-carr woodland also nearby to the site, possibly in the same location as the present day wetlands, although further work (pollen/radiocarbon dating) would be required to confirm this. This must however be interpreted with caution as some of these woods (oak, ash and hazel in particular) would have been specifically collected as they are excellent fuels and this may mean that there are some species that did exist within the woodlands that are not represented in the charcoal assemblage. This reconstruction therefore does not provide a definitive list of species within the local woodland.

### **Conclusion**

The sample retrieved from Rathwilladoon 2 and 3 has allowed an interesting insight into the diet of occupants, use of fuel and subsequent composition of local woodlands in the Rathwilladoon area. The plant macrofossils from Rathwilladoon 2 indicate the possible processing of cereals to produce food such as bread, porridges and stews; however a larger assemblage of seeds would be required to produce a more accurate picture of activities at the site. The presence of carbonised hazelnut shells and wild and bird cherry pips does indicate the hand collection and consumption of fruits and nuts which would have added extra nutrients and vitamins to the diet of the people at Rathwilladoon. The charcoal recovered from the curvilinear feature at Rathwilladoon 3 does not provide any additional information as to its function; however the charcoal appears to represent waste material from a hearth/fire spot possibly indicating domestic or industrial waste.

The oak and ash would most likely have provided the main fuels for the fires as they provide long lasting heat at relatively high temperatures. The remaining species were likely to have been used as kindling material for the fire. There is no evidence for industrial activities on the site (cereal processing/metal working) therefore the hearths are likely to represent domestic activities (fires for cooking, heat). As fuel wood is usually selected from local woodlands these charcoal remains have made it possible to suggest that the woodland close to the site at Rathwilladoon 2 and 3 would have consisted of an oak-ash climax community woodland consisting of hazel, oak, ash, wild/bird cherry, yew, wayfaring tree, hawthorn/rowan/crab apple and blackthorn/sloe and alder-carr fen containing alder, elder and Scot's pine.

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## Appendix

**Table 1:** Plant macrofossil species identified from E3656 Rathwilladoon 2 and 3, Co Galway.

Sample Number			2	12	32	33	65	72
Feature Number (Fill)			C6	C10	C16	C54	C58	C159
Feature Number (Cut)			C5	C9	C15	C53	C57	C158
Family	Species	Common Name						
Betulaceae	<i>Corylus avellana</i>	Hazelnut shells	3	108	1		1	
Poaceae	<i>Hordeum</i> spp	Barley				2		
	<i>Triticum</i> spp	Wheat	1		1			
	<i>Poaceae</i>	Indeterminate grain (whole grains)						5
Fabaceae	<i>Pescaria lapathifolia</i>	Nodding smartweed				2		
Rosaceae	<i>Prunus avium</i>	Wild cherry						1
	<i>Prunus padus</i>	Bird cherry					1	
<b>Total macrofossils</b>			4	108	2	4	2	6

**Table 2:** charcoal species identified from E3656 Rathwilladoon 2 and 3, Co Galway (samples 1-51).

Sample Number			1	2	3	12	22	29	31	32	33	39	43	44	45	50	51
Fill Number			C4	C6	C8	C10	C52	C64	C70	C16	C54	C75	C187	C143	C145	C237	C238
Cut Number			C3	C5	C7	C9	C51	C63	C69	C15	C53	C74	C186	C142	C144	C130	C130
Family	Species	Common Name															
Adoxaceae	<i>Sambucus nigra</i>	Common elder			2												
	<i>Viburnum lantana</i>	Wayfaring tree															
Betulaceae	<i>Alnus glutinosa</i> / <i>Corylus avellana</i>	Alder/hazel	31		15			4		2							3
	<i>Alnus glutinosa</i>	Alder			6												
	<i>Corylus avellana</i>	Hazel	32			15						7		3			
Fagaceae	<i>Betula</i> spp	Birch															
	<i>Quercus robur</i> / <i>petraea</i>	Pedunculate/ sessile oak		17	26	75	79	30	21		1	28	93	12	3		1
Oleaceae	<i>Fraxinus excelsior</i>	Common ash	36	10	8	7	1	34		1		4	7	3	4	5	12
Pinaceae	<i>Pinus sylvestris</i>	Scot's pine															
Roseaceae	Maloideae spp ( <i>Crateagus monogyna</i> / <i>Sorbus</i> spp/ <i>Malus sylvestris</i> )	Hawthorn/ rowan/crab apple	1							7						2	
	<i>Prunus avium</i> / <i>padus</i>	Wild/bird cherry															
	<i>Prunus spinosa</i>	Blackthorn/sloe															
Taxaceae	<i>Taxus baccata</i>	Yew		5		3	4		2	3							4
Ulmaceae	<i>Ulmus glabra</i>	Elm		1								1					
		Indeterminate species		5				3				1		2			
Total fragments identified			100	33	57	100	84	68	23	13	1	40	100	18	7	7	20

**Table 3:** Charcoal species identified from E3656 Rathwilladoon 2 and 3, Co Galway (samples 54-89)

Sample Number			54	58	62	65	67	70	71	72	73	74	78	83	87	89
Fill Number			C137	C58	C60	C58	C123	C187	C189	C159	C169	C251	C329	C76	C321	C169
Cut Number			C136	C57	C59	C57	C122	C186	C188	C158	C168	C57	C328	C77	C320	C168
Family	Species	Common Name														
Adoxaceae	<i>Sambucus nigra</i>	Common elder												1		
	<i>Viburnum lantana</i>	Wayfaring tree														
Betulaceae	<i>Alnus glutinosa</i> / <i>Corylus avellana</i>	Alder/hazel		4		6	2			3		3	2	20	3	2
	<i>Alnus glutinosa</i>	Alder							20		1					
	<i>Corylus avellana</i>	Hazel	5	12	7	6								11		
Celestraceae	<i>Euonymus europaeus</i>	Spindle tree				1										
Fagaceae	<i>Betula</i> spp	Birch														
	<i>Quercus robur</i> / <i>petraea</i>	Pedunculate/ sessile oak		56	16	17		5	9	22	99	82	2	41	3	
Oleaceae	<i>Fraxinus excelsior</i>	Common ash	18	12	10	64		3	30	17			5	1	10	4
Pinaceae	<i>Pinus sylvestris</i>	Scot's pine							37							
Roseaceae	Maloideae spp ( <i>Crateagus monogyna</i> / <i>Sorbus</i> spp/ <i>Malus sylvestris</i> )	Hawthorn/ rowan/crab apple	1	2	1			1	4	1		1	1			
	<i>Prunus avium</i> / <i>padus</i>	Wild/bird cherry				1						4		8		
	<i>Prunus spinosa</i>	Blackthorn/sloe												9		
Taxaceae	<i>Taxus baccata</i>	Yew		5	1	5						9				
Ulmaceae	<i>Ulmus glabra</i>	Elm		2								1		9		
		Indeterminate species		7	6		1							2		1
Total fragments identified			24	100	35	100	2	9	100	43	100	100	10	100	16	6



**Table 4:** Charcoal species identified from E3656 Rathwilladoon 2 and 3, Co Galway (samples 98-209).

Sample Number			98	109	123	132	146	156	159	173	176	183	197	198	204	209
Fill Number			C282	C307	C173	C111	C351	C139	C147	C171	C141	C371-C373	C344	C381	C248	C76
Cut Number			C281	C306	C172	C110	C126	C138	C146	C170	C140	C140	C343	C379	C247	C77
Family	Species	Common Name														
Adoxaceae	<i>Sambucus nigra</i>	Common elder														
	<i>Viburnum lantana</i>	Wayfaring tree														1
Betulaceae	<i>Alnus glutinosa</i> / <i>Corylus avellana</i>	Alder/hazel										12		1		11
	<i>Alnus glutinosa</i>	Alder							12							
	<i>Corylus avellana</i>	Hazel										22				14
Fagaceae	<i>Betula</i> spp	Birch														
	<i>Quercus robur</i> / <i>petraea</i>	Pedunculate/ sessile oak	1	2				100	2	100	100	37			3	63
Oleaceae	<i>Fraxinus excelsior</i>	Common ash		9	4	1	100		11			19	2	13	5	
Pinaceae	<i>Pinus sylvestris</i>	Scot's pine														
Roseaceae	Maloideae spp ( <i>Crateagus monogyna</i> / <i>Sorbus</i> spp/ <i>Malus sylvestris</i> )	Hawthorn/ rowan/crab apple		1					2			9	2			
	<i>Prunus avium</i> / <i>padus</i>	Wild/bird cherry														5
	<i>Prunus spinosa</i>	Blackthorn/sloe														
Taxaceae	<i>Taxus baccata</i>	Yew										1				6
Ulmaceae	<i>Ulmus glabra</i>	Elm														
		Indeterminate species														25
Total fragments identified			1	12	4	1	100	100	27	100	100	100	4	14	8	100

**Table 5:** Charcoal species identified from E3656 Rathwilladoon 2 and 3, Co Galway (samples 212-234).

Sample Number			212	213	215	216	219	223	231	234
Fill Number			C395	C81	C384	C305	C286	C91	C338	C326
Cut Number			C394	C80	C304	C304	C285	C90	C337	C325
Family	Species	Common Name								
Adoxaceae	<i>Viburnum lantana</i>	Wayfaring tree								
Betulaceae	<i>Alnus glutinosa</i> / <i>Corylus avellana</i>	Alder/hazel		2			1	10		1
	<i>Alnus glutinosa</i>	Alder								
	<i>Corylus avellana</i>	Hazel						4		
Fagaceae	<i>Betula</i> spp	Birch								
	<i>Quercus robur/ petraea</i>	Pedunculate/ sessile oak	1		30		8	18		
Oleaceae	<i>Fraxinus excelsior</i>	Common ash	6	1	1	6	6	21	13	3
Pinaceae	<i>Pinus sylvestris</i>	Scot's pine								
Roseaceae	Maloideae spp ( <i>Crateagus monogyna</i> / <i>Sorbus</i> spp/ <i>Malus sylvestris</i> )	Hawthorn/ rowan/crab apple	1					4		
	<i>Prunus avium/ padus</i>	Wild/bird cherry								
	<i>Prunus spinosa</i>	Blackthorn/sloe	1							
Taxaceae	<i>Taxus baccata</i>	Yew		1	2					
Ulmaceae	<i>Ulmus glabra</i>	Elm								
		Indeterminate species								
<b>Total fragments identified</b>			9	4	33	6	15	57	13	4

OSTEOLOGICAL REPORT ON FAUNAL REMAINS  
RATHWILLADOON 2 & 3, CO. GALWAY, E3656  
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Dublin 2*

## 1 Introduction

1.1 The archaeological excavations along the N18 Gort to Crusheen road scheme identified animal bone on ten sites; Rathwilladoon 2 & 3 and Curtaun 1 & 2 in county Galway, and Caheraphuca 1, Caheraphuca 4, Caheraphuca 6, Gortaficka 1, Gortaficka 2, Sranagalloon 2, Sranagalloon 3, Monreagh 2 and Curtaun 1 and 2 in county Clare. The majority of these sites are of Bronze Age date, mainly burnt mounds or *fulacht fiadh*. A settlement site with Neolithic, Bronze Age and Iron Age period dates is represented by Rathwilladoon 2 and 3, an early medieval and medieval kiln features were identified at Curtaun 1 and 2 and the early modern enclosure at Sranagalloon 2 has also produced a Bronze Age date.

1.2 The total animal bone assemblage consisted of only 1847 fragments, with a weight of about 4 kg. The osteological analysis will therefore only reveal the variety of species identified and the anatomical distribution of the bones on these sites. Not enough data was available for any assessment of husbandry economy or age at slaughter strategies. The largest bone quantities by weight were found at Caheraphuca 4, Caheraphuca 1, and Curtaun 1 and 2 (Table 1).

**Table 1** - The quantity of the animal bone samples from the archaeological excavations of the N18 Gort to Crusheen Road Scheme by chronology and site. Abbreviation: NISP = Number of Identified Specimens

Site	Type	NISP	Weight (g)
Rathwilladoon 2, Co. Galway	Multi period settlement	1216	383.95
Caheraphuca 1, Co. Clare	Burnt mound	27	956.72
Caheraphuca 4, Co. Clare	Burnt mound	126	1533.90
Caheraphuca 6, Co. Clare	Burnt mound	13	121.37
Gortaficka 1, Co. Clare	Burnt mound	1	25.80
Gortaficka 2, Co. Clare	Burnt mound	10	60.47
Monreagh 2, Co. Clare	Burnt mound	32	9.64
Sranagalloon 3, Co. Clare	Burnt mounds	1	8.32
Curtaun 1 and 2, Co. Galway	Kilns	418	619.18
Sranagalloon 2, Co. Clare	Enclosure	3	9.49
<i>Total:</i>		<i>1847</i>	<i>3728.84</i>

## 2 Osteological methodology

2.1 The bone and shell fragments were identified to species, element, and body side with the aid of an osteological reference collection (Margaret Gowen & Co. Ltd. and the Natural History Museum of Ireland), and references atlases (Iregren 2002; Răduleț 2007; 2008; Schmid 1972). Traces of slaughter, butchery and food preparation were also examined, as well as post-depositional taphonomic changes on bones such as erosion and animal gnawing.

2.2 Mammal bone fragments not identifiable to species were assigned to a category of animal based on the size of the fragment if possible. These categories were large mammal (LM), which primarily would include bones from cattle and horses; medium mammal (MM), which includes for example caprovines (sheep/goat), pigs and large dogs; and small mammal (SM), which would include small dogs, cats, hares and rabbits. These categories were however not considered in the interpretative analysis of the data.

2.3 The bones were counted and weighed on a digital weight scale with an

accuracy of 0.01g (OHAUS Scout Pro SPU402). Only fragments that could be identified to species are regarded as identified in this analysis (NISP = Number of Identified Species). In addition to fragment count and weight, the assemblage was also quantified by MNI (Minimum Number of Individuals). Size, side and sex characteristics were taken into considering when the total MNI was estimated (see Chaplin 1971), and a zone recording system (Serjeantson 1996) was employed when identifying the fragments.

2.4 Measurements were taken following the metric standards by von den Driesch (1976) using an osteometric boards and a measuring tape with 0.50mm accuracy, as well as a digital calliper with 0.01 mm accuracy (BILTEMA 16-105). The most important post-cranial measurements are available in Appendix 2. A complete and comprehensive register of all the measurements, including the cranial metrics, is available with the author. Shoulder height of horse was calculated using the equations by May (1985).

The descriptions given by Boessneck et al. (1964) and Prummel and Frisch (1986) were consulted when attempting to distinguish between sheep and goat bones in caprovine remains. The estimation of age-at-slaughter and death was conducted by assessing the degree of mandibular dental wear (Grant 1982; Payne 1973; 1987), and by examining the stage of fusion of the epiphyseal ends of the long bones (Habermehl 1961; 1975; Silver 1969).

## 2.5 Acknowledgments

Acknowledgments are given to Dr Leona Leonard of the Natural History Museum in Dublin for giving access to their fox bone collection and to Dr Nadja Pöllath of Institute für Paläoanatomie und Geschichte der Tiermedizin at Ludwig-Maximilians-Universität in Munich, Germany for help with accessing relevant literature

## 3 Neolithic/Bronze Age Settlement

### 3.1 Rathwilladoon 2, Co. Galway

This site consisted of postholes, stakeholes, pits and hearth features indicative of a settlement of Neolithic/Bronze age date. A total of 1135 burnt animal bone fragments (383.95 g) were found in 22 of these features. Only 88 fragments (107.03 g) could be identified, dominated by cattle (81 fragments; 79.08 g) and followed by caprovine (6 fragments; 27.95 g) and pig (1 fragment; 1.03 g).

The majority of the bones were found in the fills of postholes and stakeholes (264.04 g), followed by pits (78.34 g) and hearth features (41.57 g). The identified species and skeletal elements suggest that the animal bone constitute burnt food waste (Table 2).

**Table 2** - Identified taxa and skeletal elements in the burnt bone samples from Rathwilladoon 2 by type of context

Type of context	Number of fragments	Weight (g)	Identified taxa and elements
Hearths	273	41.57	Caudal fragment of a caprovine sacrum (0.44g)
Pits	255	78.34	A proximal phalanx of caprovine (0.46g), and fragment of a cattle molar tooth (8.57g)
Postholes / Stakeholes	688	264.04	Fragments of a rib, scapula, femur and metapodial from cattle (70.5 1g), fragments of a right scapula, radius and ulna of caprovine (27.05g) and a femur fragment of pig (1.03g).

### 3 Summary and discussion

The only animal bones from a settlement site were discovered at Rathwilladoon 2. These constituted burnt remains of cattle and caprovine bones, which have been interpreted as discarded food waste. A large proportion of the bones were found in postholes and stakeholes. The presence of bones in these kinds of features have previously been interpreted as remnants of food waste from occupation on the site, and that they are percolated inclusions due to human and/or animal activity within the structure they supported, or that they may represent ritual deposits in the structural foundations (see McCormick 1988, 182).

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## Appendix 1 - Identified species by site and sample

### Neolithic/Bronze Age

Table A1.1.1. Identified species (NISP) by sample at Rathwilladoon 2, Co. Galway

Sample	Cattle	S/G	Pig	Indet.	Weight (g)	Comments
12	-	-	-	35	6.60	Burnt
29	-	-	-	1	0.26	Burnt
49	-	-	-	29	5.07	Burnt
51	-	-	-	8	1.38	Burnt
52	-	-	-	7	0.85	Burnt
58	-	-	1	106	14.77	Burnt
59	20	-	-	68	51.32	Burnt
65	-	-	-	254	27.59	Burnt
82	2	4	-	182	144.66	Burnt
145	-	-	-	1	0.47	Burnt
150	44	-	-	-	24.39	Burnt
159	1	-	-	-	0.49	Burnt
162	-	-	-	5	0.30	Burnt
166	-	1	-	117	39.99	Burnt
176	-	-	-	7	1.12	Burnt
178	-	-	-	4	2.27	Burnt
179	-	1	-	46	14.68	Burnt
180	-	-	-	29	1.79	Burnt
183	-	-	-	186	21.71	Burnt
196	13	-	-	21	21.96	
219	-	-	-	3	0.09	Burnt
224	-	-	-	19	2.19	Burnt

## Appendix 2 - Epiphyseal bone fusion

Table A2.1. Caprovine bone epiphyseal fusion data. Abbreviations: UF = unfused; IF = infusion; F = fused

<i>Fusion period</i>	<i>Period</i>	<i>UF</i>	<i>IF</i>	<i>F</i>	<i>%UF</i>
Early fusion (< 1 years)	Neo/Bronze Age	0	0	2	0.00%
	Bronze Age	0	0	1	0.00%
	Early medieval	1	0	1	50.00%
	<i>Total:</i>	1	0	4	25.00%
Mid fusion (1 - 2 Vi years)	Neo/Bronze Age	0	0	0	-
	Bronze Age	0	0	0	-
	Early medieval	2	0	0	100.00%
	<i>Total:</i>	2	0	0	100.00%
Late fusion (> 3 years)	Neo/Bronze Age	0	0	0	-
	Bronze Age	0	0	0	-
	Early medieval	0	0	1	0.00%
	<i>Total:</i>	0	0	1	0.00%

Table A2.2. Pig bone epiphyseal fusion data. Abbreviations: UF = unfused; IF = infusion; F =

<i>Fusion period</i>	<i>Period</i>	<i>UF</i>	<i>IF</i>	<i>F</i>	<i>%UF</i>
Early fusion (< 1 years)	Neo/Bronze Age	0	0	0	-
	Bronze Age	0	0	0	-
	Early medieval	0	0	0	-
	<i>Total:</i>	0	0	0	-
Mid fusion (1 - 2 <sup>1</sup> years)	Neo/Bronze Age	0	0	0	-
	Bronze Age	0	0	0	-
	Early medieval	0	0	0	-
	<i>Total:</i>	0	0	0	-
Late fusion (> 3 years)	Neo/Bronze Age	1	0	0	100.00%
	Bronze Age	0	0	0	0
	Early medieval	0	0	0	0
	<i>Total:</i>	1	0	0	100.00%



LITHIC FINDS REPORT  
RATHWILLADOON 2 & 3 E3656

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## Introduction

A total of 266 lithic finds from the archaeological excavation of a prehistoric site at Rathwilladoon 2 and 3, Co. Galway were presented for analysis (Table 1). The finds are associated with Areas 1, 2 and 3 at Rathwilladoon 2, where a possible rectangular structure (Area 2), several pits, postholes, stakeholes and hearths were excavated.

## Methodology

All lithic artefacts were examined visually and catalogued using Microsoft Excel. The following details were recorded for each artefact which measures at least 20 mm in length or width: context information, raw material type, artefact type, the presence of cortex, artefact condition, length, width and thickness measurements, fragmentation and the type of retouch (where applicable). The technological criteria recorded are based on the terminology and technology presented in Inizan et al. 1999. The general typological and morphological classifications are based on Woodman et al. 2006. Struck lithics smaller than 20 mm were classed as debitage and were not analysed further. The same was done with natural chunks.

## Quantification

The lithics are 161 flaked pieces of chert, 33 flaked pieces of flint, six flaked pieces of quartz crystal, five flaked pieces of what appears to be siltstone and two used pieces of sandstone (Table 1). In addition, 58 pieces of chert and one piece of flint are unworked. A total of 132 artefacts are larger than 20 mm in length and width and were therefore recorded in detail.

## Provenance

The lithics were recovered from the topsoil, several pit fills, the fills of two postholes and a stakehole and from a spread (Table 2).

Context No.	Area No.	Description	No. of Lithics
1	1, 2 & 3	Topsoil	118
6	1	Single fill of possible circular pit	2
10	1	Pit fill	36
12	1	Single fill of a possible pit/posthole	1
20	1	Fill of a possible stakehole	1
28	1	Single fill of cut 27	3
37	1	Fill of a pit	1
76	3	Middle fill of a possible pit	92
83	3	Single fill of a possible pit	3
145	2	Fill of possible pit	1
171	2	Bottom fill of a probable pit	1
187	2	Top fill of a possible pit	1
189	2	Single fill of a possible pit	1
268	2	Fill of a posthole	2
323	2	Fill of a possible stakehole	1
326	2	Fill of a shallow spread	1
369	2	Top layer of a pit	1

**Table 2** Context Information for the Assemblage from Rathwilladoon 2 and 3 (E3656)

**Table 1** Composition of the Lithic Assemblage from Rathwilladoon 2 and 3 (E3656)

Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:1:174	1	Chert	Natural Chunk							
E3656:1:175	1	Chert	Flake	Reasonably fresh	Yes	27	16	7	Yes	No
E3656:1:176	1	Chert	Natural Chunk							
E3656:1:177	1	Chert	Natural Chunk							
E3656:1:178	1	Chert	Natural Chunk							
E3656:1:179	1	Chert	Natural Chunk							
E3656:1:180	1	Chert	Natural Chunk							
E3656:1:181	1	Chert	Debitage							
E3656:1:182	1	Chert	Natural Chunk							
E3656:1:183	1	Chert	Natural Chunk							
E3656:1:184	1	Chert	Natural Chunk							
E3656:1:185	1	Chert	Retouched artefact	Lustred	Yes	22	16	3	No	Distal direct semi-abrupt
E3656:1:186	1	Chert	Natural Chunk							
E3656:1:187	1	Chert	Natural Chunk							
E3656:1:188	1	Chert	Debitage							
E3656:1:189	1	Chert	Flake	Reasonably fresh	No	30	16	9	Yes	No
E3656:1:190	1	Chert	Flake	Reasonably fresh	Yes	21	22	10	Yes	No
E3656:1:191	1	Chert	Natural Chunk							
E3656:1:192	1	Chert	Natural Chunk							
E3656:1:193	1	Chert	Debitage							
E3656:1:194	1	Chert	Natural Chunk							
E3656:1:195	1	Chert	Natural Chunk							
E3656:1:196	1	Chert	Natural Chunk							
E3656:1:197	1	Chert	Natural Chunk							
E3656:1:198	1	Chert	Flake	Reasonably fresh	Yes	28	27	11	Yes	No
E3656:1:199	1	Chert	Retouched artefact	Reasonably fresh	No	24	33	11	Yes	Right edge inverse abrupt

Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:1:200	1	Chert	Flake	Reasonably fresh	Yes	26	23	7	No	No
E3656:1:201	1	Chert	Blade	Reasonably fresh	No	24	12	7	Yes	No
E3656:1:202	1	Chert	Flake	Reasonably fresh	Yes	27	23	6	Yes	No
E3656:1:203	1	Chert	Retouched artefact	Reasonably fresh	Yes	22	20	5	Yes	Distal direct abrupt, left and right edge direct semi-abrupt
E3656:1:204	1	Chert	Flake	Reasonably fresh	Yes	32	25	12	Yes	No
E3656:1:205	1	Chert	Retouched artefact	Reasonably fresh	Yes	26	17	7	Yes	Distal and left edge direct abrupt
E3656:1:206	1	Chert	Flake	Reasonably fresh	Yes	16	26	3	Yes	No
E3656:1:207	1	Chert	Flake	Reasonably fresh	Yes	16	23	5	No	No
E3656:1:208	1	Chert	Retouched artefact	Lustred	Yes	26	27	9	No	Distal and right edge direct abrupt
E3656:1:209	1	Chert	Natural Chunk							
E3656:1:210	1	Chert	Natural Chunk							
E3656:1:211	1	Chert	Natural Chunk							
E3656:1:212	1	Chert	Natural Chunk							
E3656:1:213	1	Chert	Natural Chunk							
E3656:1:214	1	Chert	Debitage							
E3656:1:215	1	Chert	Retouched artefact	Lustred	Yes	23	25	6	Yes	Right edge direct low angle
E3656:1:216	1	Chert	Flake	Reasonably fresh	Yes	24	24	7	No	No
E3656:1:217	1	Chert	Natural Chunk							
E3656:1:218	1	Chert	Natural Chunk							
E3656:1:219	1	Chert	Flake	Reasonably fresh	No	21	13	6	Yes	No
E3656:1:220	1	Chert	Natural Chunk							
E3656:1:221	1	Chert	Flake	Reasonably fresh	Yes	28	24	10	Yes	No
E3656:1:222	1	Chert	Natural Chunk							
E3656:1:223	1	Chert	Flake	Lustred	Yes	45	24	11	Yes	No
E3656:1:224	1	Chert	Natural Chunk							
E3656:1:225	1	Chert	Flake	Reasonably fresh	Yes	22	21	5	Yes	No
E3656:1:226	1	Chert	Natural Chunk							

Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:1:227	1	Chert	Flake	Lustred	Yes	22	24	13	Yes	No
E3656:1:228	1	Chert	Natural Chunk							
E3656:1:229	1	Chert	Natural Chunk							
E3656:1:230	1	Chert	Natural Chunk							
E3656:1:231	1	Chert	Natural Chunk							
E3656:1:232	1	Chert	Flake	Lustred	Yes	24	33	5	Yes	No
E3656:1:233	1	Chert	Natural Chunk							
E3656:1:234	1	Chert	Debitage							
E3656:1:235	1	Chert	Flake	Reasonably fresh	Yes	29	26	8	No	No
E3656:1:236	1	Chert	Retouched artefact	Reasonably fresh	Yes	21	21	6	Yes	Left edge direct semi-abrupt
E3656:1:237	1	Chert	Natural Chunk							
E3656:1:238	1	Chert	Natural Chunk							
E3656:1:239	1	Chert	Retouched artefact	Reasonably fresh	No	17	19	4	Yes	Distal direct semi-abrupt
E3656:1:240	1	Chert	Retouched artefact	Reasonably fresh	Yes	32	18	9	Yes	Left edge direct low angle
E3656:1:241	1	Chert	Natural Chunk							
E3656:1:242	1	Chert	Natural Chunk							
E3656:1:243	1	Chert	Natural Chunk							
E3656:1:244	1	Chert	Flake	Reasonably fresh	Yes	22	26	7	No	No
E3656:1:245	1	Chert	Flake	Reasonably fresh	Yes	27	23	6	Yes	No
E3656:1:246	1	Chert	Flake	Reasonably fresh	Yes	26	27	8	Yes	No
E3656:1:247	1	Chert	Debitage							
E3656:1:248	1	Chert	Core	Reasonably fresh	Yes	34	29	8	Yes	No
E3656:1:249	1	Chert	Natural Chunk							
E3656:1:250	1	Chert	Flake	Reasonably fresh	Yes	24	22	6	No	No
E3656:1:251	1	Chert	Flake	Reasonably fresh	Yes	25	16	4	Yes	No
E3656:1:252	1	Chert	Retouched artefact?	Reasonably fresh	Yes	21	19	6	No	Left edge direct semi-abrupt
E3656:1:253	1	Chert	Natural Chunk							
E3656:1:254	1	Chert	Flake	Reasonably fresh	No	55	41	9	No	No

Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:1:255	1	Chert	Natural Chunk							
E3656:1:256	1	Chert	Natural Chunk							
E3656:1:257	1	Chert	Debitage							
E3656:1:258	1	Chert	Natural Chunk							
E3656:1:259	1	Chert	Natural Chunk							
E3656:1:260	1	Chert	Natural Chunk							
E3656:1:261	1	Chert	Natural Chunk							
E3656:1:262	1	Chert	Flake	Reasonably fresh	Yes	20	21	5	Yes	No
E3656:1:263	1	Chert	Flake	Reasonably fresh	Yes	22	18	3	No	No
E3656:1:264	1	Chert	Debitage							
E3656:1:265	1	Chert	Core	Reasonably fresh	Yes	30	34	9	Yes	No
E3656:1:266	1	Chert	Flake	Reasonably fresh	Yes	39	45	16	Yes	No
E3656:1:267	1	Chert	Retouched artefact	Reasonably fresh	Yes	28	32	8	Yes	Proximal Inverse abrupt, right edge invers Semi abrupt, distal direct low angle
E3656:1:268	1	Chert	Natural Chunk							
E3656:1:269	1	Chert	Flake	Lustred	No	27	18	4	Yes	No
E3656:1:270	1	Chert	Flake	Reasonably fresh	No	17	28	10	No	No
E3656:1:271	1	Chert	Flake	Reasonably fresh	No	31	20	5	No	No
E3656:1:272	1	Chert	Flake	Reasonably fresh	Yes	25	33	7	Yes	No
E3656:1:273	1	Chert	Natural Chunk							
E3656:1:274	1	Chert	Core	Burnt	Yes	51	42	19	Yes	No
E3656:1:275	1	Flint	Flake	Slightly Patinated	Yes	20	17	6	Yes	No
E3656:1:276	1	Chert	Natural Chunk							
E3656:1:277	1	Flint	Natural Chunk							
E3656:1:278	1	Flint	Debitage							
E3656:1:279	1	Flint	Debitage							
E3656:1:280	1	Flint	Retouched artefact	Burnt	No	29	24	7	No	bifacial
E3656:1:281	1	Flint	Flake	Patinated	Yes	29	18	5	No	No

Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:1:282	1	Flint	Debitage							
E3656:1:283	1	Flint	Flake	Burnt	Yes	30	24	10	No	No
E3656:1:284	1	Flint	Debitage							
E3656:1:285	1	Flint	Blade	Patinated	No	32	7	12	Yes	No
E3656:1:286	1	Flint	Flake	Slightly Patinated	Yes	25	21	12	Yes	No
E3656:1:287	1	Flint	Flake	Lustred	Yes	26	29	4	Yes	No
E3656:1:288	1	Flint	Debitage							
E3656:1:289	1	Chert	Natural Chunk							
E3656:1:290	1	Flint	Core	Lustred	Yes	24	21	8	Yes	No
E3656:1:291	1	Sandstone	Hammer stone	Weathered	n/a	68	65	32	No	No
E3656:6:1	6	Flint	Core	Burnt	Yes	28	23	14	No	No
E3656:6:2	6	Chert	Flake	Reasonably fresh	Yes	15	20	5	Yes	No
E3656:10:29	10	Chert	Flake	Reasonably fresh	Yes	42	30	7	Yes	No
E3656:10:30	10	Chert	Debitage							
E3656:10:31	10	Chert	Debitage							
E3656:10:32	10	Chert	Debitage							
E3656:10:33	10	Chert	Flake	Reasonably fresh	Yes	22	23	27	Yes	No
E3656:10:34	10	Chert	Chunk	Reasonably fresh	Yes	23	57	24	No	No
E3656:10:35	10	Chert	Flake	Slightly weathered	Yes	23	14	6	Yes	No
E3656:10:36	10	Chert	Flake	Reasonably fresh	Yes	21	16	7	No	No
E3656:10:37	10	Chert	Flake	Reasonably fresh	No	21	11	8	Yes	No
E3656:10:38	10	Chert	Natural Chunk							
E3656:10:39	10	Chert	Debitage							
E3656:10:40	10	Chert	Debitage							
E3656:10:41	10	Chert	Debitage							
E3656:10:42	10	Chert	Flake	Reasonably fresh	Yes	24	45	18	Yes	No
E3656:10:43	10	Chert	Flake	Burnt	Yes	19	22	4	No	No
E3656:10:44	10	Chert	Chunk	Reasonably fresh	Yes	50	28	17	No	No

Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:10:45	10	Chert	Flake	Reasonably fresh	Yes	35	35	10	Yes	No
E3656:10:46	10	Chert	Flake	Reasonably fresh	Yes	19	20	4	Yes	No
E3656:10:47	10	Chert	Retouched artefact	Reasonably fresh	Yes	28	19	8	Yes	Distal direct abrupt, right edge direct semi-abrupt
E3656:10:48	10	Chert	Flake	Reasonably fresh	Yes	17	21	6	Yes	No
E3656:10:49	10	Chert	Flake	Reasonably fresh	Yes	22	30	30	Yes	No
E3656:10:50	10	Chert	Debitage							
E3656:10:51	10	Chert	Debitage							
E3656:10:52	10	Chert	Debitage							
E3656:10:53	10	Chert	Debitage							
E3656:10:54	10	Chert	Natural Chunk							
E3656:10:55	10	Chert	Debitage							
E3656:10:56	10	Chert	Retouched artefact	Reasonably fresh	Yes	31	42	13	Yes	Distal direct semi-abrupt
E3656:10:57	10	Chert	Debitage							
E3656:10:58	10	Chert	Blade	Reasonably fresh	No	24	13	5	No	No
E3656:10:59	10	Chert	Flake	Burnt	Yes	27	15	13	No	No
E3656:10:60	10	Chert	Chunk	Reasonably fresh	Yes	25	24	13	No	No
E3656:10:61	10	Chert	Flake	Burnt	Yes	59	33	7	No	No
E3656:10:62	10	Chert	Blade	Reasonably fresh	Yes	69	20	10	Yes	No
E3656:10:63	10	Chert	Chunk	Reasonably fresh	No	22	11	9	No	No
E3656:10:64	10	Chert	Flake	Reasonably fresh	Yes	46	30	18	Yes	No
E3656:12:3	12	Chert	Flake	Reasonably fresh	Yes	36	46	16	No	No
E3656:20:23	20	Chert	Flake							
E3656:28:2	28	Chert	Flake	Reasonably fresh	No	21	14	4	No	No
E3656:28:3	28	Chert	Chunk	Burnt	Yes	28	32	13	No	No
E3656:28:4	28	Chert	Chunk	Burnt	Yes	40	19	7	No	No
E3656:37:31	37	Chert	Retouched artefact	Reasonably fresh	Yes	30	32	8	Yes	Distal direct semi-abrupt
E3656:76:1	76	Chert	Flake	Lustred	Yes	26	28	6	Yes	No



Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:76:2	76	Chert	Debitage							
E3656:76:4	76	Chert	Debitage							
E3656:76:6	76	Flint	Blade	Lustred	Yes	31	15	5	No	No
E3656:76:7	76	Flint	Debitage							
E3656:76:8	76	Flint	Debitage							
E3656:76:9	76	Flint	Debitage							
E3656:76:10	76	Flint	Debitage							
E3656:76:11	76	Flint	Debitage							
E3656:76:12	76	Flint	Debitage							
E3656:76:13	76	Chert	Debitage							
E3656:76:14	76	Flint	Debitage							
E3656:76:15	76	Flint	Debitage							
E3656:76:16	76	Flint	Blade	Lustred	No	23	11	2	Yes	No
E3656:76:17	76	Flint	Debitage							
E3656:76:18	76	Chert	Debitage							
E3656:76:19a	76	Flint	Flake	Slightly weathered	Yes	30	18	8	Yes	No
E3656:76:19b	76	Flint	Debitage							
E3656:76:20	76	Chert	Natural Chunk							
E3656:76:21	76	Chert	Debitage							
E3656:76:22	76	Chert	Debitage							
E3656:76:23	76	Chert	Flake	Reasonably fresh	No	25	24	4	Yes	No
E3656:76:24	76	Chert	Chunk	Burnt	Yes	24	12	7	No	No
E3656:76:25	76	Flint	Debitage							
E3656:76:26	76	Chert	Debitage							
E3656:76:27	76	Chert	Debitage							
E3656:76:28	76	Chert	Debitage							
E3656:76:29	76	Chert	Debitage							
E3656:76:30	76	Flint	Flake	Slightly patinated	Yes	39	18	5	Yes	No

Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:76:31	76	Flint	Retouched artefact	Slightly patinated	Yes	44	18	7	Yes	Left edge direct low angle
E3656:76:32	76	Chert	Flake	Reasonably fresh	Yes	40	20	6	Yes	No
E3656:76:33	76	Flint	Flake	Patinated	Yes	47	23	8	No	No
E3656:76:34	76	Flint	Debitage							
E3656:76:35	76	Chert	Flake	Reasonably fresh	Yes	33	42	11	Yes	No
E3656:76:36	76	Chert	Blade	Reasonably fresh	No	47	18	5	Yes	No
E3656:76:38	76	Chert	Debitage							
E3656:76:39	76	Chert	Flake	Reasonably fresh	Yes	29	23	7	Yes	No
E3656:76:40	76	Chert	Chunk	Reasonably fresh	Yes	30	15	8	No	No
E3656:76:41	76	Flint	Flake	Reasonably fresh	No	30	16	6	Yes	No
E3656:76:42	76	Chert	Debitage							
E3656:76:43	76	Chert	Blade	Reasonably fresh	Yes	52	21	9	Yes	No
E3656:76:44	76	Chert	Flake	Reasonably fresh	Yes	29	20	3	Yes	No
E3656:76:45	76	Chert	Debitage							
E3656:76:46	76	Chert	Debitage							
E3656:76:47	76	Chert	Debitage							
E3656:76:48	76	Chert	Debitage							
E3656:76:49	76	Chert	Debitage							
E3656:76:50	76	Siltstone?	Debitage							
E3656:76:51	76	Chert	Debitage							
E3656:76:52	76	Chert	Debitage							
E3656:76:53	76	Chert	Debitage							
E3656:76:54	76	Chert	Debitage							
E3656:76:55	76	Chert	Natural Chunk							
E3656:76:56	76	Chert	Debitage							
E3656:76:57	76	Siltstone?	Debitage							
E3656:76:58	76	Chert	Debitage							
E3656:76:59	76	Chert	Debitage							

Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:76:60	76	Chert	Debitage							
E3656:76:61	76	Chert	Natural Chunk							
E3656:76:62	76	Chert	Flake	Slightly rolled	No	13	34	7	No	No
E3656:76:63	76	Chert	Flake	Reasonably fresh	Yes	47	58	12	Yes	No
E3656:76:64	76	Chert	Flake	Reasonably fresh	No	41	24	6	Yes	No
E3656:76:65	76	Chert	Flake	Weathered	Yes	28	25	8	Yes	No
E3656:76:66	76	Chert	Flake	Reasonably fresh	No	19	23	4	No	No
E3656:76:67	76	Chert	Natural Chunk							
E3656:76:68	76	Chert	Debitage							
E3656:76:69	76	Chert	Debitage							
E3656:76:70	76	Chert	Core	Reasonably fresh	Yes	52	45	11	Yes	No
E3656:76:71	76	Chert	Core	Reasonably fresh	Yes	47	40	13	Yes	No
E3656:76:72	76	Chert	Chunk	Burnt	Yes	58	24	14	No	No
E3656:76:73	76	Chert	Flake	Reasonably fresh	Yes	40	28	21	Yes	No
E3656:76:74	76	Chert	Flake	Reasonably fresh	Yes	23	29	8	No	No
E3656:76:75	76	Chert	Blade	Reasonably fresh	Yes	54	21	10	No	No
E3656:76:76+77	76	Chert	Flake	Reasonably fresh	No	51	28	9	No	No
E3656:76:78	76	Chert	Blade	Burnt	Yes	23	17	6	No	No
E3656:76:79	76	Chert	Flake	Reasonably fresh	Yes	24	21	6	Yes	No
E3656:76:80	76	Chert	Flake	Reasonably fresh	No	25	26	9	Yes	No
E3656:76:81	76	Chert	Flake	Reasonably fresh	Yes	26	22	5	Yes	No
E3656:76:82	76	Chert	Flake	Reasonably fresh	No	27	22	3	Yes	No
E3656:76:83	76	Chert	Debitage							
E3656:76:84	76	Chert	Blade	Reasonably fresh	No	30	13	6	Yes	No
E3656:76:85	76	Chert	Flake	Reasonably fresh	No	28	22	5	Yes	No
E3656:76:86	76	Chert	Flake	Reasonably fresh	Yes	22	15	4	No	No
E3656:76:87	76	Mudstone?	Flake	Burnt	n/a	45	64	11	No	No
E3656:76:88	76	Mudstone?	Flake	Weathered	n/a	18	27	5	Yes	No

Find Number	Context	Material	Type	Condition	Cortex	Length (mm)	Width (mm)	Thickness (mm)	Complete	Retouch
E3656:76:89	76	Mudstone?	Flake	Heavily weathered	n/a	46	49	9	Yes	No
E3656:76:90	76	Quartz crystal	Debitage							
E3656:76:91	76	Quartz crystal	Flake	Reasonably fresh	No	20	27	6	Yes	No
E3656:76:92	76	Quartz crystal	Blade	Reasonably fresh	No	27	11	4	Yes	No
E3656:76:93	76	Quartz crystal	Debitage							
E3656:76:94	76	Quartz crystal	Debitage							
E3656:76:95	76	Quartz crystal	Debitage							
E3656:83:1	83	Chert	Natural Chunk							
E3656:83:2	83	Chert	Natural Chunk							
E3656:83:3	83	Chert	Flake	Reasonably fresh	No	25	18	9	Yes	No
E3656:145:1	145	Sandstone	Rubbing Stone	Burnt	n/a	155	107	57	No	No
E3656:171:4	171	Chert	Flake	Reasonably fresh	Yes	24	26	7	Yes	No
E3656:187:1	187	Chert	Flake	Reasonably fresh	Yes	28	39	9	Yes	No
E3656:189:1	189	Chert	Debitage							
E3656:268:1	268	Chert	Debitage							
E3656:268:2	268	Chert	Debitage							
E3656:323:1	323	Chert	Flake	Reasonably fresh	Yes	36	26	7	Yes	No
E3656:326:1	326	Chert	Debitage							
E3656:369:1	369	Chert	Flake	Reasonably fresh	No	26	17	6	No	No

### Condition

The lithics survive in a variable condition (Table 3). A total of 46 artefacts are incomplete and 84 chert and 12 flints bear the remnants of cortex (Table 1). The lustre observed on 12 artefacts (Table 1) is a direct result of their exposure to heat, i.e. they did not directly come into contact with fire, but where perhaps strewn around a hearth. In general, the topsoil finds show extensive plough damage which made a positive identification of retouched artefacts difficult and extreme caution was exercised in doing so.

CONDITION	AMOUNT
Reasonably Fresh	92
Slightly Patinated	5
Patinated	3
Slightly Weathered	1
Weathered	3
Heavily Weathered	1
Slightly Rolled	1
Burnt	14
Lusted	12
<b>Total</b>	<b>132</b>

**Table 3** Assemblage Condition from Rathwilladoon 2 and 3 (E3656)

### Technology/Morphology

The assemblage comprises six types of flaking products including 16 retouched artefacts (Table 4). In addition, two macro tools were identified (Table 4).

TYPE	AMOUNT
Core/Chunk	16
Blade	12
Flake	86
Debitage	75
Retouched Artefact	16
Macro Tools	2
<b>Total</b>	<b>207</b>

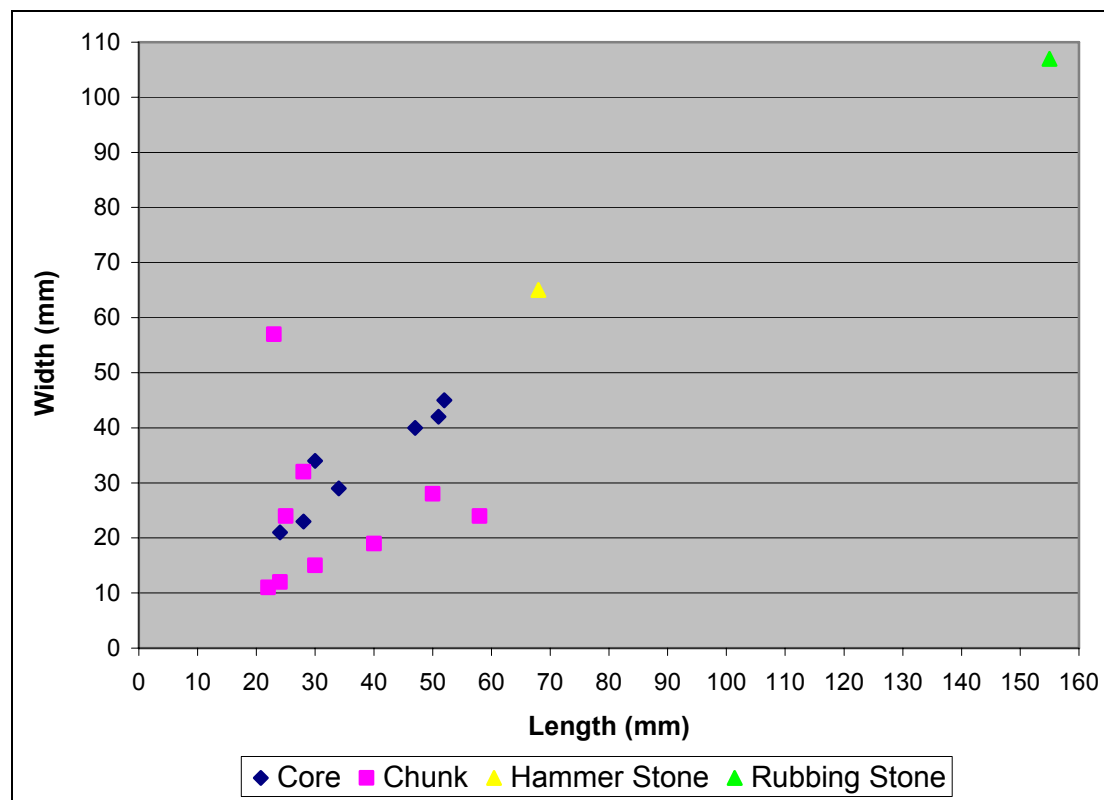
**Table 4** Assemblage Composition from Rathwilladoon 2 and 3 (E3656)

### Cores

The assemblage contains seven cores and nine chunks. The chunks are parts of cores and typical, larger by-products resulting from the reduction of predominantly angular pieces of chert (Sternke pers. obs.). Five cores (E3656:1:248, E3656:1:265, E3656:1:274, E3656:76:70 and E3656:76:71) are made of chert and two (E3656:1:290 and E3656:6:1) of flint. The cores can be divided into three groups: four bipolar cores (E3656:1:248, E3656:1:290, E3656:6:1 and E3656:76:71), two dual-platform cores (E3656:1:265 and E3656:76:70) and a bifacial/discoidal example (E3656:1:274). Three bipolar cores were produced on flakes (E3656:1:248, E3656:1:290 and E3656:76:71) and one (E3656:6:1) on a pebble. Core E3656:76:71 is a controlled bipolar example which appears to have been produced on a flake. This core displays attempts to remove blades using a bifacial-like reduction strategy on an anvil. The dual-platform core E3656:1:265 was produced on a chunk. Core E3656:76:70 is a dual opposed platform example, from which blades were removed. This core may be early Mesolithic or early Neolithic in date. The small bipolar core which was produced on a pebble may date to the late Neolithic/Early Bronze Age.

The remaining cores most likely date to the first half of the Neolithic period, based on their technology and morphology.

The cores measure between 24 mm and 52 mm long and the chunks between 22 mm and 58 mm long (Fig. 1).



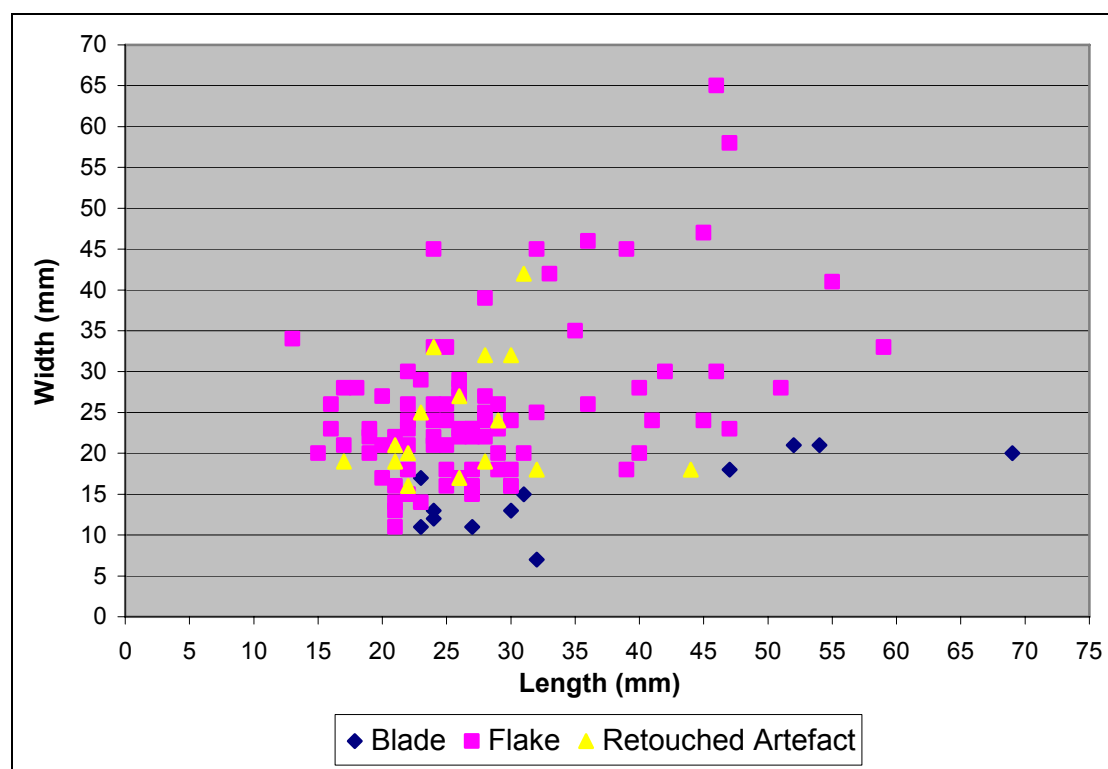
**Figure 1** Dimensions (mm) of the Cores, Chunk and Macro Tools from Rathwilladoon 2 and 3 (E3656)

### Blades

The assemblage contains only 12 blades: eight chert blades, three flint blades and one quartz crystal blade. This can be regarded as low, given the presence of seven cores. The missing blades were probably removed for further use elsewhere. Only two of the blades (E3656:1:201 and E3656:1:285) were produced using the bipolar reduction technique. The remaining blades appear to be platform examples, many of which appear to have been produced on single platform cores using a soft or medium-soft stone hammer. Interestingly, blade E3656:76:43 displays a faceted platform, a characteristic of the early Neolithic blade technology. Blade E3656:76:16 is most likely associated with the bifacial/discoidal core E3656:1:274.

The majority of the blades measures between 20 mm and 35 mm long (Fig. 2).

The blades most likely date to the first half of the Neolithic period based on their technology and morphology.



**Figure 2** Dimensions (mm) of the Blades, Flakes and Retouched Artefacts from Rathwilladoon 2 and 3 (E3656)

### Flakes

The assemblage contains 86 flakes. The majority of the flakes derived from the topsoil ( $n=35$ ), some ( $n=14$ ) from the fill of a pit (C10) and 28 examples from the fill of a possible pit (C76). With the exception of 13 flakes, all flakes are made of chert. Nine flakes are made of flint, three of what appears to be siltstone and one is made of quartz crystal.

Only five flakes are bipolar examples (E3656:1:175, E3656:1:190, E3656:1:223, E3656:1:269 and E3656: or medium-soft stone hammer. Flakes E3656:76:76+77 represent the two halves of the same flake and refit. Four flakes display use-wear traces on their right (E3656:10:29) or left edges (E3656:1:202, E3656:1:269 and E3656:76:30) and two flakes (E3656:1:254 and E3656:187:1) have faceted platforms. Flake E3656:76:44 is a bifacial production flake and an attempt may have been made to reuse flake E3656:76:35 as a core.

The three mudstone flakes (E3656:76:87-89) derive from a polished stone axe. Flakes E3656:76:87 and E3656:76:89 are the result of a reworking of this axe, while flake E3656:76:88 appears to be the cause of the reworking as it represents an edge flake which is the result of accidental breakage during the use of the axe. Each flake still displays the polished surfaces of the axe. Unfortunately, the axe was probably taken elsewhere, as it was not recovered during the excavation.

The majority of the flakes measures between 20 mm and 30 mm long (Fig. 2).

The entire flake population most likely dates to the first half of the Neolithic period based on its technology and morphology.

### **Debitage**

The presence of 75 pieces ofdebitage, predominantly in Area 3 (n=46), but also in Area 1 (n=12) and Area 2 (n=4), suggests that extensive knapping of chert, flint and quartz crystal and tool-resharpening took place at this site. Debitage piece E3656:76:57 also derives from the reworked siltstone axe.

### **Retouched Artefacts**

The assemblage contains 12 retouched artefacts and a further four possible retouched artefacts (Table 1). With the exception of two examples, all retouched are made of chert. Finds E3656:1:280 and E3656:76:31 are made of flint.

The majority of the retouched tools derive from the topsoil. The retouched tools can be divided into four groups: ten scrapers (including the possible example E3656:1:252), two arrowhead production attempts, an invasively retouched form and three possible miscellaneous retouched tools. The size of the retouched tools generally reflects that of the available flake and blade blanks (Fig 2).

### **Scrapers**

The nine securely identifiable scrapers (E3656:1:199, E3656:1:203, E3656:1:205, E3656:1:208, E3656:1:236, E3656:1:239, E3656:10:47, E3656:10:56 and E3656:37:31) are all convex end scrapers. The possible scraper E3656:1:252 may be a concave example. The scrapers are generally small or very small. They range in length from 17mm to 31mm. Scraper E3656:1:236 could even be described as a micro disc scraper. The scrapers probably date to the first half of the Neolithic period, with the possible exception of scrapers E3656:1:252, which may date to the middle Neolithic, and the very small scrapers E3656:1:236 and E3656:1:239, which could date to the late Neolithic/early Bronze Age. However, it has to be noted that small scrapers were also occasionally recovered at early Neolithic sites, e.g. at Cloghers, Co. Kerry (Finlay 2000; Kiely 2003).

### **Arrowhead Production Attempts**

Two artefacts (E3656:1:267 and E3656:1:280) appear to be abandoned arrowhead production attempts. The possible arrowhead attempt E3656:1:267 was later turned into a convex end scraper.

The second attempted arrowhead (E3656:1:280) is an easily identifiable leaf-shaped arrowhead perform which was shaped bifacially, but abandoned early due to the excessive thickness of the flake blank.

Both artefacts date to the first half of the Neolithic period based on their typology and morphology.

### **Invasively Retouched Form**

Artefact E3656:76:31 is a fine retouched flint blade which was produced with a soft stone hammer. It is retouched on its left edge and measures 44mm long, 18mm wide and 7mm thick. This artefact may either be a very small invasively retouched form or a backed blade. The dating of this artefact has to remain ambiguous, as it could date to the early Mesolithic or the early Neolithic period. It has to be noted however, that it was recovered from a pit fill that also contained pottery, early Neolithic artefacts and possibly also further early Mesolithic artefacts.

### **Miscellaneous Retouched Tools**

The three miscellaneous retouched artefacts (E3656:1:185, E3656:1:215 and E3656:1:240) all derive from the topsoil and thus, their identification remains uncertain.



## Macro Tools

The two macro tools recovered at this site are a fragmented hammer stone and a fragment of a rubbing stone (mano). The weathered hammer stone (E3656:1:291) is made of sandstone and shows extensive use-wear on its surviving half in the form of abrasions on its edge. This stone is also polished on one small section of its edge. The artefact measures 68 mm long, 65 mm wide and 32 mm thick. It most likely dates to the early Neolithic period and is directly associated with the flaked lithic artefacts of the same date. The burnt portion of the mano (E3656:145:1) is made of sandstone and measures 155 mm in length, 107 mm in width and 57 mm in thickness. It shows extensive use-wear and probably dates to the Neolithic period. This artefact may reflect the activities that took place in and around the rectangular early Neolithic structure and probably belonged to a quern stone which was not recovered during the excavation.

## Dating

The lithic assemblage from Rathwilladoon 2 and 3 is typologically and technologically diagnostic. The majority of the assemblage, including most of the cores, blades, flakes, scrapers and arrowhead production attempts, dates to the early Neolithic period based on its technology, typology and morphology. These artefacts are associated with the rectangular structure and its environs in Area 3 and the adjacent pits in Area 2. Two small convex end scrapers and a bipolar pebble flint core probably dates to the late Neolithic/early Bronze Age (O'Hare 2005; Woodman et al. 2006).

## Conservation

Lithics do not require specific conservation, but should be stored in a dry, stable environment. Preferably, each lithic should be bagged separately and contact with other lithics should be avoided, so as to prevent damage and breakage, in particular edge damage which could later be misinterpreted as retouch. Larger and heavier items are best kept in individual boxes to avoid crushing of smaller assemblage pieces.

## Comparative Material

The most suitable, comparative lithic assemblages for this site are those excavated at Cloghers, Co. Kerry (Finlay 2000; Kiely 2003) and at Gortore, Co. Cork (Sternke 2007).

## Discussion

Flint in this region is scarce, but it can occur in smaller nodules along the nearby coast or, less common, locally in the form of erratic flint pebbles and nodules. The flint nodules used at Rathwilladoon 2 and 3 was procured at the coast. Due to the limited availability of flint, local chert was the dominant raw material used at this site. Chert in this region occurs in river beds and in the local limestone.

Given the location of the site on a shelf on the side of a hill overlooking a wetland/lake area and the presence of numerous stakeholes, it is possible that the early Neolithic rectangular structure at this site may have been preceded by an early Mesolithic hut. This idea could also be supported by the presence of potentially early Mesolithic artefacts such as a dual platform blade core, several soft hammer blades and a possible backed flint blade. The juxtaposition of early Mesolithic and early Neolithic sites is not uncommon (Woodman pers. comm.; Sternke pers. obs.), e.g. at Cooldrinagh, Co. Dublin (Mullins 1999; Sternke 2006) and Gortore, Co. Cork (Sternke 2007), given that the same locations were preferred, i.e. preferably south-facing bluffs/shelves on hillsides overlooking a river, stream, lake or marsh.

## Summary

The lithic finds from the archaeological excavation at Rathwilladoon 2 and 3, Co. Galway are 161 flaked pieces of chert, 33 flaked pieces of flint, six flaked pieces of quartz crystal, five flaked pieces of siltstone and two used pieces of sandstone. In addition, 58 pieces of chert and one piece of flint were also presented for analysis. The worked assemblage comprises seven cores, nine chunks, 12 blades, 86 flakes, 75 pieces of debitage, 16 retouched artefacts, a fragmented hammer stone and a fragmented rubbing stone (mano). The retouched artefacts include nine convex end scrapers, a possible concave end scraper, two abandoned arrowhead preforms and one possible invasively retouched form or backed blade.

The majority of the flaked assemblage is typologically and technologically diagnostic and dates to the first half of the Neolithic period. The macro tools most likely also date to that period. At least one bipolar pebble flint core and two small scrapers appear to date to the late Neolithic/ early Bronze Age. It is possible that at least one dual platform blade core and several blades and flakes as well as possibly the backed blade represent an early Mesolithic occupation at this site, evidence for which was heavily disturbed by subsequent settlements and activities.

There is a great deal of evidence that *in situ* (flint) knapping and tool resharpening took place at this site. The recovered artefacts are probably associated with domestic tasks carried out in and around the environs of a prehistoric house.

This site makes a major contribution to the evidence for early prehistoric settlement in Co. Galway.

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SUMMARY REPORT ON STONE AXES  
RATHWILLADOON 2 & 3, CO. GALWAY, E3656  
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*Irish Stone Axe Project,  
University College Dublin*

**Rathwilladoon, Co. Galway**

**ISAP: 21627**

(E3656:76:087)

Petrology: Mudstone

Unknown: Flake from mudstone axe, dorsal surface polished. EOK

L. 4.5 cm W. 6.4 cm T. 1.1 cm

**Rathwilladoon, Co. Galway**

**ISAP: 21628**

(E3656:76:088)

Petrology: Mudstone

Unknown: Flake from mudstone axe. Dorsal surface polished. EOK

L. 1.8 cm W. 2.7 cm T. 0.5 cm

**Rathwilladoon, Co. Galway**

**ISAP: 21629**

(E3656:76:089)

Petrology: Mudstone

Unknown: Flake from mudstone axe. Dorsal surface polished. EOK

L. 4.6 cm W. 4.9 cm T. 0.9 cm

THE METAL FINDS  
FROM  
RATHWILLADOON 2 & 3, CO. GALWAY, E3656  
JACQUELINE MAC DERMOTT

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Two copper alloy buttons from the topsoil layer, E3656:1:155-156, date to the 18<sup>th</sup> or early 19<sup>th</sup> century. Both have undecorated fronts, but were probably livery or uniform buttons. 1:155 bears the remains of a legend ' (STANDAR)D COLOUR... ' which refers to the technique of coating the button in brass, silver or gilt (Hurley 1997, 121). 1:156 is smaller and came from a blazer or jacket sleeve.

Bullet casing E3656:1:157 also came from the topsoil layer. It appears to be the cartridge of a mid 19th century 12 mm pinfire bullet, although its present condition makes it uncertain whether it was from a revolver or a rifle. Copper fragment E3656:171:3 is too small to be identified.

## Catalogue

E3656:1:155

**Button.** Copper alloy. Flat disc. Front face plain, corroded. Back contains legend (STANDAR?)D COLOUR.... Loop missing. Diam (mm): 24. Thickness (mm): 1.5. Context C1, topsoil.

E3656:1:156

**Button.** Copper alloy. Flat disc. Front face plain, corroded. No legend visible on back. Raised foot with broken loop. Diam (mm): 15. Thickness (mm): 1. Context C1, topsoil.

E3656:1:157

**Bullet cartridge.** Copper alloy. Circular flat base, only part of ragged cylinder remains. 19<sup>th</sup> century 12mm pinfire type cartridge. Diam (mm): 12. Length (mm): 18.5. Context C1, topsoil.

E3656:171:3.

**Fragment.** Copper alloy. Amorphous. Length (mm): 7. Width (mm): 5.5. Context C171. Fill of large pit C170.

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## Recommendations.

None.

## Objects for illustration/photography.

None.



**Prehistoric Pottery – Eoin Grogan**

THE PREHISTORIC POTTERY FROM  
RATHWILLADOON 2 AND 3, CO. GALWAY, E3656

EOIN GROGAN AND HELEN ROCHE

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## Summary

*The site produced 86 sherds (plus 29 fragments, weight: 395g) representing at least three early Neolithic vessels, 10 final Neolithic/ early Bronze Age Beakers and an early medieval E-Ware vessel. The pottery came from pits and postholes and consists of domestic debris. The assemblage is particularly important as very little prehistoric pottery has been recorded from this regional.*

## The early Neolithic pottery: context and condition

The site produced 22 sherds (two rim-, six neck-, one shoulder- and 13 bodysherds, plus three fragments, weight: 195g) representing at least three early Neolithic vessels. The sherds from Vessel 1, from the fill **76**<sup>1</sup> of pit **77** (Lyne 2009), are generally well-preserved although there is a reddish, iron-rich, deposit on the surfaces and edge breaks. This deposit was not recorded from the pit base or sides so it appears that the pottery had been in a layer, probably on the subsoil surface and subject to percolating iron-rich water, for some considerable time prior to deposition in the pit. The remainder of the pottery came from the fills (**20** and **10/37**) of stakehole **19** and Pit A (**9**); both of these contexts also produced Beaker pottery. A single sherd (**1:1**), possibly from Vessel 1, also came from the topsoil. This material is fragmentary and worn to much worn; all of the pottery represents domestic debris and blackened accretions on sherds from Vessel 1 and Group X<sup>2</sup> indicate that these pots had been used for cooking.

## The pottery

Vessel 1 is a large early Neolithic carinated bowl of fine dark grey fabric with quartzite inclusions. This has a rounded everted rim, a high (53mm+) concave neck and small step shoulder and had a maximum external rim diameter of c. 270mm. These forms (Case 1961: 'Dunmurry-Ballymarlagh styles'; Sheridan 1995: 'classic' carinated bowls) are widely dated to c. 4000–3600 BC. The fabric and firing indicate that Groups I and X are from similar vessels although here the identification is less certain as there are no feature sherds preserved. There is little recorded early Neolithic pottery from the region although more extensive Neolithic settlement is indicated by the distribution of megalithic tombs and stone axes (Grogan 1989). A small assemblage came from the court tomb at Parknabinnia on the Burren in Co. Clare (Jones and Gilmer 2000) and there are two sherds from Mooghaun, Co. Clare (Grogan 2005, 323–27).

## The Beaker pottery: context and condition

The site produced 62 sherds (10 neck-, one base-angle-, one belly- and 47 bodysherds, plus 26 fragments, weight: 189g) representing at least eight fine (No. 3, Groups II–VI, and VIII–IX) and two domestic<sup>3</sup> Beakers (No. 2 and Group VII). The bulk of the assemblage (67% of the sherds and fragments, weight: 135g) came from the fills (**10** and **37**) from pit A (**9**; Lyne 2009). Sherds from three vessels (No. 2 and Groups II and IV) came from both layers which also produced what appears to be early Neolithic pottery (see above). The remaining pottery came from the fills (**12**, **22**, **28**, **20**, **171**) of postholes (**11**, **21**, **27**, **19**) and a pit (**170**) in the same area.

<sup>1</sup> Throughout this report the context number, in **bold**, is followed by the find number (e.g. **76:104**).

<sup>2</sup> Group numbers (Roman numerals) refer to sherds from a distinct vessel where the overall form is not identifiable.

<sup>3</sup> Other terms, such as 'coarse' Beaker or 'rusticated' ware have also been used to refer to this material. Often, as at Rathwilladoon, this material, while heavier, is not appreciably 'coarser' than the so-called 'fine' wares. Rustication refers specifically to decoration with fingernail, or sometimes bird bone, impressions frequently arranged haphazardly over the entire vessel.

### The pottery

The cream- to red-buff fabric is well-fired and of good quality and darker cores, typical of much Beaker pottery, are common. Fine inclusions of crushed quartzite occur in all of the vessels: in the case of Vessel 3, Groups V and IX, these are of very small 'sandgrade' material. The assemblage consists of worn to much worn sherds. The presence of so many vessels represented by a small assemblage (6.2 sherds per pot) is indicative of domestic contexts and sooting on sherds from Group II, which appear to have been burnt, indicates use in cooking.

Although only limited reconstruction is possible the fine vessels appear to have soft S-shaped profiles. Vessel 3 was decorated with scored horizontal lines alternating with blank zones. This arrangement forms one of the most common Irish Beaker designs. Examples include Knowth, Co. Meath, concentrations B, C, and D (Eogan 1984, 266–8, fig. 94: 1565–95, fig. 95: 1596–1618, 277–80, figs 100–1, 294, fig. 110), Dalkey Island, Co. Dublin, Site 5 (Liversage 1968, 72, fig. 8: p51–2), Lough Gur Sites, Co. Limerick, C, D (including a reconstructed example; Ó Ríordáin 1954, 277–8, pls 36–7, and 394, fig. 36: 1–12), L (Grogan and Eogan 1987, 407, fig. 46) and 10 (Grogan and Eogan 1987, 451, fig. 68: V.5 and V.6). The only other decoration is a possible lozenge motif on Group IV. These forms and decorative styles have generally been assigned to Clarke's European Bell Beaker, or his Wessex/Middle Rhine types (1970). More recently, following reviews by, for example, Lanting and van der Waals (1972), there has been a greater recognition of the regional development of Beaker. Case's (1993) simpler threefold scheme, and its specific application to the Irish material, provides a straightforward medium for insular comparison (Case 1995). The formal horizontally zoned decoration on Vessel 3 suggests that the Rathwilladoon pottery belongs to his style 2 and should date to c. 2450–2300 BC.

### Regional context

There is very little recorded Beaker from this region. An extensive settlement complex at Parknabinnia, Roughan Hill, on the Burren in Co. Clare produced a small assemblage of both fine and domestic vessels (Jones 1998; Roche 1999). At least one fine vessel (Jones 1998, fig. 3: 183, 891, 9) is very similar to No. 3 from Rathwilladoon. Very small quantities of Beaker also came from Mooghaun, Coolnatullagh and the portal tomb at Poul nabrone, Co. Clare (Grogan 2005, 323–27; Eogan 1998; Lynch 1994).

### Other material

Fragments of shaped and fired clay came from the fills (**252**, **135**) of pits **186** and **134**. These appear to be from clay moulds and are of distinctive porous fabric with very fine ( $\leq 0.5\text{mm}$ ) but unevenly distributed inclusions. The material is from outer mould casings and only very small areas of the finer inner matrix, that might indicate the type of artefact being cast, is preserved. This technology, principally for the manufacture of copper alloy artefacts, was introduced in the latter part of the middle Bronze Age (1400/1300 BC) for casting rapiers but was not in general use for other objects until the late Bronze Age (1100 BC). The technical process did not develop significantly until the medieval period and, as there are no diagnostic features on these pieces, it is not possible to indicate their date although the mould fragments are clearly not contemporary with the prehistoric pottery.

### Wheel-thrown early medieval pottery

A single base-angle sherd of fine, very well-fired, pottery came from the topsoil (Vessel 4). This appears to be from an E-ware beaker or dish and should be examined by a specialist. (*Directors Note: This has since been identified as post-medieval in date*)

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## CATALOGUE

The excavation number E3656 is omitted throughout: only the context number, in **bold**, followed by the find number is included (e.g. **76**:104). Numbers in square brackets (e.g. **76**:[103, 106]) indicate that the sherds are conjoined. The thickness refers to an average dimension; where relevant a thickness range is indicated. Vessel numbers have been allocated to pottery where some estimation of the form of the pot is possible, or where the detailed evidence of featured sherds (e.g. rims, shoulders), decoration or fabric indicates separate pots. Group numbers (Roman numerals) refer to sherds from a vessel where the overall form is not identifiable principally due to the absence of sufficient feature (rim/ neck/ shoulder) sherds. While this generally indicates separate pots due to the nature of the material it is possible that some Vessel Groups may represent portions of vessels otherwise identified by Vessel Numbers. Individual sherds that could not be definitely ascribed to either category are described separately; these may come from further pots that are not, however, included in the calculations of minimum and maximum numbers of vessels. Fragments are small sherds (generally less than 10mm square) where only one surface has survived while crumbs are very small pieces ( $\leq 5 \times 5$ mm) generally without surviving surfaces. The inclusions were examined using simple magnification and in some cases attribution reflects probable, rather than certain, identification.

Worn: some wear damage to surfaces and edge breaks    much worn: considerable wear damage

Abraded: very considerable wear resulting in loss of surfaces

R. rimsherd    N. necksherd    Be. Bellysherd    N/A accurate measurement not possible

## Early Neolithic carinated bowls

### Rathwilladoon 2 Area 3: Phase 2

#### Middle fill **76** of pit **77**

#### **76**:96–108

*Vessel 1.* This is represented by 13 sherds (4 rim-/ necksherds: **76**:[R. 96, 99, N. 97–98]; 3 necksherds: **76**:100–02; 1 shouldersherd: **76**:104; 5 bodysherds: **76**:[103, 106], 105, [107–08]) from a vessel with a rounded everted rim, a high (53mm+) concave neck and a small step shoulder. The dark grey fabric has a dark grey core and lighter inner surface; a patchy blackened accretion occurs on the outer surface of the neck. There is a medium to high content of quartzite inclusions ( $\leq 2.5 \times 2$ mm, occasionally up to  $5.07 \times 4.66$ mm). Neck thickness: 8.97mm; body: 8.42mm; weight: 165g.

Maximum external rim diameter: 270mm    Internal rim diameter: 250mm

*Comment* The surfaces and edge breaks are coated with a reddish, iron-rich, post-depositional deposit. The breaks and surfaces are fresh with little evidence for wear. It is evident that the sherds were in an undisturbed context for some considerable period; however, this context was subject to considerable percolation of ground water resulting in the iron-rich deposit. This context was more probably on or at the interface between the sub- and topsoil rather than in the middle pit fill (there is no suggestion of this deposit on the base or sides of the pit in the site report, Lyne 2009); this indicates that the pottery was removed from its original context of deposition into the pit some considerable period after breakage. It will be interesting to see the condition of the lithics from the pit to see if these were also re-deposited.

**Rathwilladoon 2 Area 1: Phase 2**

*Group X.* This is represented by a single necksherd (20:1) from a vessel of brown-buff fabric with a dark grey core and inner surface; there is a blackened accretion on the internal surface. There is a medium content of quartzite inclusions ( $\leq 1\text{mm}$ , occasionally up to  $2.47 \times 2.2\text{mm}$ ). Neck thickness: 7.3mm; weight: 6g.

*Comment* This context also produced Beaker pottery (Group IX, see below).

**Fills 10 and 37 of pit A 9**

*Group I.* This is represented by 8 worn bodysherds (10:3, 5–6, 8, 37:6, 9–11; 3 fragments: 10:14, 22, 37: 4) from a vessel or vessels of red-buff to brown-buff fabric with a grey to dark grey core and inner surface. There is a medium content of quartzite inclusions ( $\leq 1.5 \times 1\text{mm}$ , occasionally up to  $3.19 \times 2.5\text{mm}$ ). Body thickness: 6.39mm; weight: 24g.

*Comment* Although this material has similarities with the Beaker recovered from the same contexts (see below) the fabric, firing and colour are more typical of early Neolithic pottery; however, this represents a probable rather than a certain identification.

**Final Neolithic/ early Bronze Age Beaker****Rathwilladoon 2 Area 1: Phase 2****Fill 10 of pit A 9**

*Vessel 3.* This is represented by a single worn bellysherd (10:27; 6 fragments: 10:11, 13, 16–17, 23–24) from a fine vessel with a soft, S-shaped profile. The red-buff fabric has powdery texture and a grey-buff to dark grey core. There is a low content of sandgrade inclusions. Belly thickness: 8.9mm; weight: 9g.

Decoration There is a continuous band of deeply scored, closely spaced, horizontal lines on the belly and lower neck.

**Fills 10 and 37 of pit A 9**

*Vessel 2.* This is represented by 9 worn sherds (6 bodysherds: 37:[2, 14], [3, 5], 22, 29; 3 base-anglesherds: 10:15, 26, 37:18; 6 fragments: 37:13, 15–16, 22–24) from an apparently plain domestic vessel. The red-buff fabric has a grey-buff to dark grey core and inner surface. There is a medium content of quartzite inclusions ( $\leq 1.5 \times 1\text{mm}$ , occasionally up to  $3.18 \times 2.5\text{mm}$ ). Body thickness: 9.67mm; weight: 52g.

*Group II.* This is represented by 3 worn necksherds (10:25, 37:[7–8]) from a fine vessel with a gently concave neck and a probable soft, S-shaped, overall profile. The hard, brittle, cream- to red-buff fabric has a grey-buff to dark grey core; there is sooting on the internal surface. There is a low content of quartzite inclusions ( $\leq 1.5 \times 1\text{mm}$ ). Neck thickness: 5.63mm; weight: 11g.

*Comment* These sherds appear to have been burnt.

*Group III.* This is represented by 3 much worn sherds (1 necksherd: 10:2; 2 bodysherds: 37:[12, 28]) from a fine vessel of porous red-buff fabric with numerous internal cavities now partly exposed on the outer surface; the internal surface is cream-buff and there is a grey core. There is a low content of quartzite inclusions ( $\leq 1.5 \times 1\text{mm}$ ). Neck thickness: 4.4mm; body: 5.51mm; weight: 8g.

*Group IV.* This is represented by 8 worn to much worn sherds (1 neck-/ bellysherd: 10:12; 7 bodysherds: 10:4, [9–10], 4, 18, [10:19, 37:25]; 1 fragment: 10:21) from a fine vessel of red-buff fabric with a grey core and cream-buff inner surface. There is a low content of quartzite inclusions ( $\leq 1.5 \times 1\text{mm}$ ). Body thickness: 7.65mm; weight: 14g.

**Decoration** What appears to be a lozenge motif formed of two converging bands of 3 very closely spaced fine incised lines occur on the neck/belly.

#### *Other sherds*

A further 11 worn to abraded bodysherds ([**10:1**, **37:27**], **10:2**, 20, **37:1**, 17, 19–21, 26, 30) came from Pit A **9**; weight: 17g. **10:28** is a lump of fired clay; weight: 5g.

#### *Fill 12 of posthole 11*

**Group V.** This is represented by 2 much worn to abraded sherds (1 necksherd: **12:1**; 1 bodysherd: **12:2**) from a fine vessel of cream- to red-buff fabric with a grey core. There is a low content of sandgrade inclusions. Neck thickness: 5.76mm; body: 7.97mm; weight: 15g.

#### *Fill 22 of posthole 21*

**Group VI.** This is represented by 3 worn necksherds (**22:[1–3]**<sup>4</sup>) from a fine vessel of cream-buff fabric with a grey core which is exposed on the inner surface. There is a low content of quartzite inclusions ( $\leq 2.13 \times 2\text{mm}$ ). Neck thickness: 6.27mm; weight: 7g.

#### *Fill 28 of posthole 27*

**Group VII.** This is represented by a single abraded necksherd (**28:1**) from a domestic vessel of red-buff fabric with a dark grey core. There is a low content of quartzite inclusions ( $\leq 1.7 \times 1.5\text{mm}$ ). Neck thickness: 10.6mm; weight: 8g.

#### *Primary fill 171 of pit 170*

**Group VIII.** This is represented by a single abraded necksherd (**171:1–2**) from a vessel of gritty cream-buff fabric. There is a medium to high content of quartzite inclusions ( $\leq 1\text{mm}$ , occasionally up to  $1.7 \times 1.5\text{mm}$ ). Thickness: 9.28mm; weight: 4g.  
*Comment* This may be from the base of a fine vessel.

#### *Fill 20 of stakehole 19*

**Group IX.** This is represented by 10 small bodysherds (**20:2–7**, 12–13, 17, 20; 10 fragments: **20:8–11**, 15–16, 18–19, 21–22) of porous red-buff fabric. There is low content of fine, sandgrade quartzite inclusions. Body thickness: 7.67mm; weight: 18g.

#### *Other sherds*

Single much worn bodysherd (**20:14**) of cream-buff fabric with a dark grey core and a low content of quartzite inclusions. Thickness: N/A, weight: 2g.

### **Other material**

#### *Primary fill 252 of pit 186*

This fill produced five pieces of shaped and fired clay (**252:1–5**) of gritty, porous red-buff fabric; a grey inner surface or core is exposed on **252:3**. The outer surfaces are even but not smooth and part of a similar inner surface is preserved on **252:4**. There is a medium content of fine quartzite inclusions ( $\leq 0.5\text{mm}$ ). Nos **252:1–2** and 4 have L-shaped profiles while **252:3** and 5 are shapeless. Dimensions: 1. 25.81 (length) x 13.34 (width) x 23.12mm (thick); 2. 21.49 x 29.56 x 14.41mm; 3. 30.60 x 13.15 x 18.63mm; 4. 32.01 x 22.16 x 16.52mm. 5. 18.05 x 17.70 x 8.11mm; total weight: 31g.  
*Comment* The fabric, firing and shape of these pieces indicate that they are the outer casing of clay mould fragments. This technology for manufacturing copper alloy artefacts was introduced in the latter part of the middle Bronze Age (1400/1300 BC) for casting rapiers but was not in general use for other objects until the late Bronze

<sup>4</sup> This context also produced a piece of charcoal: **22:4**.

Age (1100 BC). The technical process did not develop significantly until the medieval period and, as there are no diagnostic features on these pieces, it is not possible to indicate their date.

**Fill 135 of pit 134**

There are two sherds (135:[1–2]) of buff fabric with a partly exposed grey core; this has a low content of fine, sandgrade quartzite inclusions ( $\leq 0.5\text{mm}$ ); thickness: 12.44mm; weight: 17g.

*Comment* This is certainly shaped and fired clay but it is not definitely from a ceramic vessel: the inclusions are very unevenly distributed and the overall shape is not readily reconciled with a pot. This may be from a clay mould. See note for fill 252 (above).

**Fill 244 of pit 244**

This (244:1) is a small piece of water-rolled sandstone.

**Phase 4**

**Topsoil 1**

Single much worn bodysherd (1:1) of grey-brown fabric with a grey core. There is a medium to high content of quartzite inclusions ( $\leq 3 \times 2\text{mm}$ , but frequently up to 5.69 x 5mm). Body thickness: N/A, c. 8.12mm; weight: 5g.

*Comment* Although much fragmented this appears to be a sherd of early Neolithic pottery from a vessel similar to No. 1 (see above).

**Wheel-thrown early medieval pottery**

*Vessel 4.* This is represented by a single base-anglesherd (1:2) from a fine vessel with a flat, footed, base that splays out sharply into the lower body. The compact, evenly fired, wheel-thrown pottery is brown-buff with a bright orange-buff core. There is a low content of fine red quartzite (?) inclusions. Body thickness: N/A; weight: 6g. Base diameter: c. 63mm.

Decoration consists of three closely spaced, fine horizontal incised lines at the junction between the foot and body.

*Comment* This appears to be from the base of an E-Ware beaker or dish and should be examined by a relevant specialist. (*Directors Note: This has since been identified as post-medieval in date*).



Vessel No.	Context/feature	Number of sherds	Rimsherds	Necksherds	Base- and shoulder sherds	Shouldersherds	Bellysherds	Bodysherds	Fragments	Crumbs	Inclusions	Vessel size (mm)	Weight (g)	Pottery type	Burnished/ decorated
<b>1</b>	<b>76</b>	13	2	5	0	1	0	5	0	0	Q	270	165	ENCB	--
<b>Group X</b>	<b>20</b>	1	0	1	0	0	0	0	0	0	Q	-	6	ENCB	--
<b>Group I</b>	<b>10/ 37</b>	8	0	0	0	0	0	8	3	0	Q	-	24	Early Neolithic?	--
<b>Other</b>	<b>1</b>	1	0	0	0	0	0	1	0	0	Q	-	5	ENCB	--
<b>Total</b>		<b>23</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>14</b>	<b>3</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>200</b>	<b>ENCB</b>	
<b>3</b>	<b>10</b>	1	0	0	0	0	1	0	6	0	sg	-	9	Fine Beaker	- ■
<b>2</b>	<b>10/ 37</b>	9	0	0	3	0	0	6	6	0	Q	-	52	Domestic Beaker	--
<b>Group II</b>	<b>10/ 37</b>	3	0	3	0	0	0	0	0	0	Q	-	11	Fine Beaker	--
<b>Group III</b>	<b>37</b>	3	0	1	0	0	0	2	0	0	Q	-	8	Fine Beaker	--
<b>Group IV</b>	<b>10/ 37</b>	8	0	1	0	0	0	7	1	0	Q	-	14	Fine Beaker	- ■
<b>Other</b>	<b>10/ 37</b>	11	0	0	0	0	0	11	0	0	-	-	17	Fine Beaker	--
<b>Total</b>	<b>Pit A</b>	<b>43</b>	<b>0</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>34</b>	<b>16</b>	<b>0</b>	<b>-</b>	<b>-</b>	<b>135</b>	<b>Beaker</b>	
<b>Group V</b>	<b>12</b>	2	0	1	0	0	0	1	0	0	sg	-	15	Fine Beaker	--
<b>Group VI</b>	<b>22</b>	3	0	3	0	0	0	0	0	0	Q	-	7	Fine Beaker	--
<b>Group VII</b>	<b>28</b>	1	0	1	0	0	0	0	0	0	Q	-	8	Domestic Beaker	--
<b>Group VIII</b>	<b>171</b>	2	0	0	1	0	0	1	0	0	Q	-	4	Beaker, fine?	--
<b>Group IX</b>	<b>20</b>	10	0	0	0	0	0	10	10	0	sg	-	18	Fine Beaker	--
<b>Other</b>	<b>20</b>	1	0	0	0	0	0	1	0	0	Q	-	2	Beaker	--
<b>Total</b>		<b>19</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>10</b>	<b>0</b>			<b>54</b>	<b>Beaker</b>	
<b>Site total</b>		<b>62</b>	<b>0</b>	<b>10</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>47</b>	<b>26</b>	<b>0</b>			<b>189</b>	<b>Beaker</b>	
<b>4</b>	<b>1</b>	1	0	0	1	0	0	0	0	0	Q	S	6	E-Ware?	- ■

Q quartzite  
sandgrade  
medium

M mica  
c cordoned  
L large

sg sandgrade  
b burnished  
ENCB early Neolithic carinated bowl

D dolerite  
■ decorated

Sh shale  
S small

sg  
Me

**Table 1.** Details of pottery including individual vessels from Rathwilladoon 2 and 3, Co. Galway.

<b>Vessel</b>	<b>Context</b>	<b>Sherds to draw</b>	<b>Section only</b>	<b>Photograph</b>
<b>1</b>	<b>76</b>	<b>76:</b> [R. 96, 99, N. 97–98], S <b>76:</b> 104		✓
<b>3</b>	<b>10</b>	Be. <b>10:</b> 27		
<b>Group IV</b>	<b>10</b>	Be. <b>10:</b> 12		
<b>4</b>	<b>1</b>	Ba. <b>1:</b> 2		✓

R. rim      N. neck      S. shoulder      Be. belly      Ba. base

**Table 2.** Suggestions for illustration: Rathwilladoon 2 and 3, Co. Galway.

A NOTE ON THE MODERN POTTERY  
RATHWILLADOON 2 & 3, CO. GALWAY, E3656

CLARE MCCUTCHEON MA MIAI

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**Introduction:**

A total of 84 sherds of pottery were presented for study. Following identification and some reassembly this was reduced to 82 sherds.

Fabric	Sherds	MVR	Form	Date
Creamware	12	2	Plates	18th
Black glazed ware	3	1	Bowl?	18th/19th
Glazed red earthenware	5	3	Cup, jug, bowl	18th/19th
Pearlware	22	4	Plates, jars	L18/19th
Shell-edged ware	1	1	Plate	L18th/19th
Painted pearlware	8	2	Cup, plate	18th/19th
Transfer printed ware	15	7	Plates, cup	18th/19th
Mochaware	10	3	Mugs, jar	19th
Spongeware	4	2	Plate, jar	19th
Stoneware	1	1	Whiskey jar?	19th/20th
Red earthenware	1	1	Jug?	19th/20th
<b>Total</b>	<b>82</b>	<b>27</b>		

**Table 1:** Pottery identification, Rathwilladoon 2/3 (E3656)

**Creamware:**

In the 1760s, cream coloured earthenware with a creamy glaze was developed by Josiah Wedgwood to combat the overwhelming influx of blue and white Chinese Porcelain. Instead, it only succeeded in putting tin glazed earthenwares out of business and creamware became known as English faïence on the continent.

**Glazed red earthenware:**

Glazed red earthenware or 'brownwares' were made widely in Britain and Ireland from the later 17th century through to the 19th century (Dunlevy 1988, 24-5). Because of the standardisation of the clay and vessel form it is always difficult to specify a particular production site but a typical kiln was excavated at Tuam, Co. Galway with milk pans and dishes comprising a majority of the vessels (Carey & Meenan 2004). The fabric is generally sandy earthenware, usually oxidised buff to light orange through to brown. The clear lead glaze takes its colour from the fabric with variations due to firing conditions (Jennings 1981, 157).

**Black glazed ware:**

The addition of iron to the lead glaze gives the distinctive black colouring. Many of the vessels were produced in Lancashire and Staffordshire and exported in large quantities to Ireland in the 17th and 18th centuries. The clay can be intermixed with white clay giving a marbled effect, or near stoneware in dark red/brown, or soft red earthenware. It appears that these wares were also made in Ireland in the 18th and 19th centuries, as are the sherds from this assemblage (Meenan 1997, 349).

**Pearlware:**

Wedgwood's development of creamware was further refined as pearlware, with a harder-fired clay and a blue rather than a green tinge in the collected glaze (Savage & Newman 2000, 216). This formed the basis for many decorative forms of the later 18th and 19th centuries such as shell-edged, mochaware and banded ware, transfer printed and sprigged wares.

Mocha or Banded ware was decorated with moss-like design made by dabbing the body with a liquid pigment that spread out in branching tree-like tracteries (ibid. 194). Many of these vessels were also decorated with horizontal banding.

Spongeware was the cheapest form of decoration with soft greens, pinks and blues the principal colours applied to the vessels.

Transfer printing is commonly associated with the so-called 'Willow pattern', but there is a wide variety with landscapes, particularly English and Italianate, very popular as well as many varieties of Chinese style or Chinoiserie. While the principal colour used is a deep blue, decoration also comes in red, grey, brown, purple, green and black. The decoration consists of the application of a coloured tissue paper design.

**Red earthenware:**

This is a general term to describe vessels such as the popular teapots in red earthenware with a dark brown glaze.

**Stoneware:**

The term is used here to cover all English stonewares, made of a clay and fusible stone, which can be fired to partial vitrification, not then requiring a glaze to make it impervious to liquids (Savage & Newman 2000, 275).

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**Appendix: Catalogue of Pottery from Rathwilladoon 2 and 3**

Feature	Context	Finds number	Links	Category	Type	Identification	Description
Test pit 1	1	3		Ceramic	Pottery	Creamware	Body
Test pit 8	1	4		Ceramic	Pottery	Black glazed ware	Body
Test pit 12	1	5		Ceramic	Pottery	Transfer printed ware	Body
Test pit 12	1	6		Ceramic	Pottery	Pearlware	Body
Test pit 12	1	7		Ceramic	Pottery	Mochaware	Body
Test pit 14	1	8		Ceramic	Pottery	Pearlware	Rim
Test pit 14	1	9		Ceramic	Pottery	Painted pearlware	Body
Test pit 18	1	10	+11	Ceramic	Pottery	Pearlware	Base
Test pit 18	1	11	+10	Ceramic	Pottery	Pearlware	Base
Test pit 19	1	12		Ceramic	Pottery	Transfer printed ware	Body
Test pit 23	1	13		Ceramic	Pottery	Spongeware	Rim
Test pit 23	1	14		Ceramic	Pottery	Transfer printed ware	Base
Test pit 23	1	15		Ceramic	Pottery	Pearlware	Base
Test pit 23	1	16		Ceramic	Pottery	Mochaware	Base
Test pit 24N	1	17		Ceramic	Pottery	Mochaware	Body
Test pit 26	1	18		Ceramic	Pottery	Pearlware	Base
Test pit 27	1	19		Ceramic	Pottery	Spongeware	Body
Test pit 28S	1	20		Ceramic	Pottery	Pearlware	Body
Test pit 28S	1	21		Ceramic	Pottery	Creamware	Base
Test pit 28S	1	22		Ceramic	Pottery	Glazed red earthenware	Body
Test pit 28E	1	23		Ceramic	Pottery	Creamware	Body
Test pit 28E	1	24		Ceramic	Pottery	Creamware	Body
Test pit 29	1	25		Ceramic	Pottery	Stoneware	Body
Test pit 30	1	26		Ceramic	Pottery	Transfer printed ware	Body
Test pit 30	1	27		Ceramic	Pottery	Transfer printed ware	Body
Test pit 33	1	28		Ceramic	Pottery	Transfer printed ware	Body
Test pit 36	1	29		Ceramic	Pottery	Glazed red earthenware	Body
Test pit 36	1	30		Ceramic	Pottery	Creamware	Body
Test pit 37	1	31		Ceramic	Pottery	Pearlware	Base
Test pit 39W	1	32		Ceramic	Pottery	Creamware	Rim
Test pit 39W	1	33		Ceramic	Pottery	Transfer printed ware	Body
Test pit 46	1	34		Ceramic	Pottery	Pearlware	Body
Test pit 47	1	35		Ceramic	Pottery	Creamware	Body

Feature	Context	Finds number	Links	Category	Type	Identification	Description
Test pit 49	1	36		Ceramic	Pottery	Creamware	Body
Test pit 49	1	37		Ceramic	Pottery	Glazed red earthenware	Body
Test pit 50	1	38		Ceramic	Pottery	Spongeware	Base
Test pit 50	1	39		Ceramic	Pottery	Creamware	Body
Test pit 50	1	40		Ceramic	Pottery	Red earthenware	Handle
Test pit 53	1	41		Ceramic	Pottery	Pearlware	Body
Test pit 54	1	42		Ceramic	Pottery	Pearlware	Rim
Test pit 55	1	43		Ceramic	Pottery	Painted pearlware	Body
Test pit 56	1	44	+45	Ceramic	Pottery	Mochaware	Body
Test pit 56	1	45	+44	Ceramic	Pottery	Mochaware	Body
Test pit 57	1	46		Ceramic	Pottery	Transfer printed ware	Rim
Test pit 58	1	47		Ceramic	Pottery	Pearlware	Body
Test pit 60	1	48		Ceramic	Pottery	Pearlware	Base
Test pit 62	1	49		Ceramic	Pottery	Painted pearlware	Body
Test pit 64	1	50		Ceramic	Pottery	Transfer printed ware	Base
Test pit 65	1	51		Ceramic	Pottery	Painted pearlware	Body
Test pit 72W	1	52		Ceramic	Pottery	Glazed red earthenware	Body
Test pit 72W	1	53		Ceramic	Pottery	Mochaware	Body
Test pit 77	1	54		Ceramic	Pottery	Painted pearlware	Body
Test pit 77N	1	55		Ceramic	Pottery	Creamware	Body
Test pit 77W	1	56		Ceramic	Pottery	Creamware	Body
Test pit 77W	1	57		Ceramic	Pottery	Pearlware	Body
Test pit 78	1	58		Ceramic	Pottery	Mochaware	Body
Test pit 805	1	59		Ceramic	Pottery	Pearlware	Rim
Test pit 86	1	60		Ceramic	Pottery	Mochaware	Body
Test pit 86	1	61		Ceramic	Pottery	Pearlware	Body
Test pit 86S	1	62		Ceramic	Pottery	Black glazed ware	Body
Test pit 86E	1	63		Ceramic	Pottery	Pearlware	Body
Test pit 86E	1	64		Ceramic	Pottery	Pearlware	Body
Test pit 86E	1	65		Ceramic	Pottery	Black glazed ware	Body
Test pit 93	1	66		Ceramic	Pottery	Transfer printed ware	Rim
Test pit 94	1	67		Ceramic	Pottery	Spongeware	Body
Test pit 94	1	68		Ceramic	Pottery	Transfer printed ware	Body
Test pit 97	1	69		Ceramic	Pottery	Pearlware	Body
Test pit 100	1	70		Ceramic	Pottery	Transfer printed ware	Rim
Test pit 104	1	71		Ceramic	Pottery	Mochaware	Base

Feature	Context	Finds number	Links	Category	Type	Identification	Description
Test pit 104	1	72		Ceramic	Pottery	Transfer printed ware	Body
Test pit 107	1	73		Ceramic	Pottery	Mochaware	Body
Test pit 112	1	74		Ceramic	Pottery	Painted pearlware	Handle
Test pit 115	1	75		Ceramic	Pottery	Painted pearlware	Body
Test pit 116	1	76		Ceramic	Pottery	Pearlware	Body
Test pit 117	1	77		Ceramic	Pottery	Pearlware	Body
Test pit 117	1	78		Ceramic	Pottery	Shell-edged ware	Rim
Test pit 121	1	79		Ceramic	Pottery	Pearlware	Body
Site 2	1	80		Ceramic	Pottery	Glazed red earthenware	Body
Site 2	1	81		Ceramic	Pottery	Transfer printed ware	Body
Site 2	1	82		Ceramic	Pottery	Creamware	Rim
Site 2	1	83		Ceramic	Pottery	Painted pearlware	Body
Site 2	1	84		Ceramic	Pottery	Pearlware	Body
Site 2	1	85		Ceramic	Pottery	Mochaware	Handle
Site 2	1	86		Ceramic	Pottery	Transfer printed ware	Base



CATALOGUE OF CLAY PIPE AND UNCONSERVED METAL  
RATHWILLADOON 2 & 3, CO. GALWAY, E3656

MAEVE TOBIN MA

*Irish Archaeological Consultancy Ltd  
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[www.iac.ie](http://www.iac.ie)*

Find number	Object Type	Material	Description	Dimensions
E3656:1:87	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, white in colour, oval in section, central internal hole	L 22mm, Diam 5mm, diam of internal hole 2mm
E3656:1:88	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, white in colour, circular in section, central internal hole	L 38mm, Diam 7mm, diam of internal hole 2mm
E3656:1:89	Clay pipe stem	Ceramic	Fragment of clay pipe stem, white in colour, circular in section, internal hole off centre	L 51mm, Diam 7mm, diam of internal hole 2mm
E3656:1:90	Clay pipe stem	Ceramic	Fragment of clay pipe stem, white in colour, circular in section, central internal hole	L 29mm, Diam 7mm, diam of internal hole 2mm
E3656:1:91	Clay pipe stem	Ceramic	Fragment of clay pipe stem, white in colour, oval in section, central internal hole	L 32mm, Diam 7mm, diam of internal hole 2mm
E3656:1:92	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, cream in colour, oval in section with an off centre internal hole	L 22mm, Diam 8mm, diam of internal hole 2mm
E3656:1:93	Clay pipe stem	Ceramic	Fragment of clay pipe stem, white in colour, circular in section, with an off centre internal hole	L 31mm, Diam 8mm, diam of internal hole 2mm
E3656:1:94	Clay pipe stem	Ceramic	A slightly tapering fragment of clay pipe stem, cream in colour. Circular in section with a central internal hole	L 31mm, Diam 8mm, diam of internal hole 2mm
E3656:1:95	Clay pipe stem	Ceramic	Small fragment of clay pipe stem splayed at one end to join with bowl. White in colour, slightly blackened, circular in section with central internal hole	L 29mm, Diam 8mm, diam of internal hole 2mm
E3656:1:96	Clay pipe stem	Ceramic	Fragment of clay pipe stem, white in colour, circular in section with central internal hole	L 41.5mm, Diam 7mm, diam of internal hole 2mm
E3656:1:97	Clay pipe bowl	Ceramic	Incomplete fragment of clay pipe bowl with flat base stand attached, cream in colour with some blackening along the internal rim. Circular Markers stamp present on bowl - appears to read HARVEY - MAKER - and an indiscernible word beneath. Two small projections appear on either side of stand which may represent hearts. Single line of milling around rim	L 46mm, D of bowl wall 3.5mm, W 22mm. H of stand 5mm
E3656:1:98	Clay pipe bowl	Ceramic	Fragment of clay pipe bowl, cream in colour, blackened internal surface. Milling along rim	L 22mm, D of bowl wall 3mm, W 19mm
E3656:1:99	Clay pipe stem	Ceramic	Fragment of clay pipe stem, cream in colour, oval in section, central internal hole with flat based stand attached. The stem is oval in section with central internal hole and decorated with lengths of herring-bone pattern. The stand appears oval in section and has a shamrock stamped on either side. Probable 19th century origin. Similar to pipe fragment found at Sranagalloon 2 - E3714:1:3 - possible same maker	L 36.5mm, Diam 8mm, diam of internal hole 3mm, H of stand 6mm
E3656:1:100	Clay pipe bowl	Ceramic	Fragment of clay pipe bowl, cream in colour, thick wall of bowl, curving slightly at base	L 22mm, D of bowl wall 5mm, W 21mm
E3656:1:101	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, white in colour, slightly blackened through use, oval in section, off centre internal hole	L 34mm, Diam 8mm, diam of internal hole 2mm
E3656:1:102	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, white in colour, slightly blackened through use, oval in section, off centre internal hole	L 34mm, Diam 9mm, diam of internal hole 2mm
E3656:1:103	Clay pipe bowl	Ceramic	Fragment of clay pipe bowl, white in colour, blackened internal surface	L 26mm, D of bowl wall 3mm, W 12.5mm

Find number	Object Type	Material	Description	Dimensions
E3656:1:104	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, white in colour, slightly blackened through use, oval in section, off centre internal hole. Rolled decoration of linear impressions spiral around stem.	L 41mm, Diam 7.5mm, diam of internal hole 2mm
E3656:1:105	Clay pipe stem	Ceramic	Straight fragment of clay pipe stem, circular in section with central internal hole. Fragment splays at one end to where the bowl would rise. Letters comprising two incomplete workds are stamped on opposite sides of the stem - ...GOW (Glasgow?) and DAVI.... (David ?)	L 37mm, Diam 9mm, diam of internal hole 2mm
E3656:1:106	Clay pipe bowl	Ceramic	Fragment of clay pipe bowl, white in colour	L 20mm, D of bowl wall 2.5mm, W 9mm
E3656:1:107	Clay pipe stem	Ceramic	Fragment of clay pipe stem, cream in colour with stand attached. The stem is circular in section with off centre internal hole. Small section of bowl attached also	L 19mm, Diam 7mm, diam of internal hole 2mm, H of stand 5mm
E3656:1:108	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, white in colour, circular in section, central internal hole	L 32mm, Diam 7mm, diam of internal hole 2mm
E3656:1:109	Clay pipe bowl	Ceramic	Fragment of clay pipe bowl, cream in colour, blackened internal surface. Milling along rim, circular stamp with crowned L on bowl near rim. The crowned L stamp was in use in Dutch examples from 1726 - 1900. - probable 19th century date	L 26mm, D of bowl wall 3.5mm, W 21mm
E3656:1:110	Clay pipe stem	Ceramic	Fragment of clay pipe stem, oval in plan with central internal hole. One end splays for bowl	L 35mm, Diam 8mm, diam of internal hole 2.5mm
E3656:1:111	Clay pipe bowl	Ceramic	Fragment of clay pipe bowl, cream in colour, slight blackened internal surface. Milling along rim,	L 28mm, D of bowl wall 4mm, W 17mm
E3656:1:112	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, white in colour - fragment slipt in half (longitudinal)	L 19.5mm, Diam 7mm,
E3656:1:113	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, white in colour, oval in section, central internal hole	L 37mm, Diam 9mm, diam of internal hole 2mm
E3656:1:114	Clay pipe stem	Ceramic	Small fragment of clay pipe stem, white in colour, circular in section, central internal hole	L 36mm, Diam 8mm, diam of internal hole 2.5mm
E3656:1:115	Clay pipe stem	Ceramic	Fragment of clay pipe stem, white in colour, circular in section, central internal hole	L 46.5mm, Diam 10mm, diam of internal hole 2.5mm
E3656:1:116	Clay pipe stem	Ceramic	Fragment of clay pipe stem, white in colour, circular in section, central internal hole	L 23.5mm, Diam 7mm, diam of internal hole 3mm
E3656:1:117	Clay pipe stem	Ceramic	Fragment of clay pipe stem, white in colour, circular in section, central internal hole	L 39.5mm, Diam 7mm, diam of internal hole 2.5mm
E3656:1:118	Iron nail	Iron	Corroded stem of iron nail, no head present.	L 66mm, W 3mm, D 3mm
E3656:1:119	Iron nail	Iron	A badly corroded iron nail shaft that does not retain its head. The shaft tapers to a blunted point	L 66mm, W 15mm, D 8mm
E3656:1:120	Part of iron horse shoe	Iron	Part of a corroded iron horse shoe. The x-ray shows 3 holes.	L 80mm, W 14.5mm, D 6mm
E3656:1:121	Iron nail	Iron	Part of a badly corroded iron nail shaft, which tapers slightly.	L 40mm, W 7.5mm, D 5mm
E3656:1:122	Fragment of unidentifiable iron	Iron	An irregular shaped piece of corroded iron. No indication as to original use	L 34mm, W 32mm, D 21mm
E3656:1:123	Iron nail	Iron	Part of a badly corroded iron nail shaft, which is bent out of shape.	L 32mm, W 16mm, D 5mm

Find number	Object Type	Material	Description	Dimensions
E3656:1:124	Fragment of unidentifiable iron	Iron	An irregular shaped piece of corroded iron. No indication as to original use	L 29.5mm, W 24mm, D 15mm
E3656:1:125	Fragment of unidentifiable iron	Iron	A small corroded piece of unidentifiable iron, Figure-of-eight shape - but xray indicates original piece may have been a simple shaft. May represent part of a horse bit?	L 55mm, W 24mm, D 19mm
E3656:1:126	Fragment of unidentifiable iron	Iron	An irregular shaped piece of corroded iron. No indication as to original use	L 36.5mm, W 31mm, D 15mm
E3656:1:127	Iron nail	Iron	Part of a badly corroded iron nail shaft, which is bent out of shape. The xray shows the head still attached.	L 36mm, W 19mm, D 11mm
E3656:1:128	Iron nail	Iron	Part of a badly corroded iron nail shaft, which is bent out of shape.	L 30mm, W 6.5mm, D 6mm
E3656:1:129	Iron nail	Iron	Corroded stem of iron nail, no head present.	L 22mm, W 10mm, D 6mm
E3656:1:130	Fragment of unidentifiable iron	Iron	An L-shaped piece of corroded iron. No indication as to original use	L 27mm, W 24mm, D 16mm
E3656:1:131	Iron nail	Iron	Part of a badly corroded iron nail shaft. The piece tapers to a blunted point.	L 29mm, W 15mm, D 13mm
E3656:1:132	Iron nail	Iron	Part of a badly corroded iron nail shaft, which is bent out of shape.	L 29mm, W 8mm, D 4mm
E3656:1:133	Fragment of unidentifiable iron	Iron	An irregular shaped piece of corroded iron. No indication as to original use	L 58mm, W 35mm, D 23mm
E3656:1:134	Part of iron nail	Iron	A badly corroded section of iron nail shaft, which retained its head	L 36mm, W 26mm, D 13mm
E3656:1:135	Fragment of unidentifiable iron	Iron	Badly corroded length of iron which curves at one end. Possibly represents a piece of heavy chain.	L 63mm, W 32mm, D 13mm
E3656:1:136	Part of iron nail	Iron	Half of a badly corroded iron nail shaft, which retained its head	L 27mm, W 17mm, D 6mm
E3656:1:137	Part of an iron blade?	Iron	A very badly corroded piece of iron that may represent part of a blade. According to the x-ray it splays to form a wide trapezoid.	L 87mm, W 29mm, D 23mm
E3656:1:138	Part of iron nail	Iron	A badly corroded section of iron nail shaft, which does not retain its head	L 29mm, W 6mm, D 4mm
E3656:1:139	Part of iron nail	Iron	A badly corroded section of an iron nail shaft with head. The piece tapers to a blunted point.	L 33mm, W 21.5mm, D 12.5mm
E3656:1:140	Fragment of unidentifiable iron	Iron	A small irregular shaped piece of corroded iron. No indication as to original use	L 23mm, W 11mm, D 7mm
E3656:1:141	Iron object	Iron	Disc of badly corroded iron with central hole - may be a corroded iron washer or chain link	L 32mm, W 29mm, D 7mm
E3656:1:142	Part of iron nail	Iron	A badly corroded section of an iron nail shaft with head.	L 24mm, W 12mm, D 9mm
E3656:1:143	Iron object	Iron	Badly corroded length of flat rectilinear iron band. No indication as to original use.	L 46mm, W 19mm, D 11mm
E3656:1:144	Probable iron nail	Iron	Badly corroded thin iron shaft - probable nail.	L 26mm, W 11mm, D 6mm
E3656:1:145	Fragment of unidentifiable iron	Iron	A small irregular shaped piece of corroded iron. No indication as to original use	L 20.5mm, W 19mm, D 14mm
E3656:1:146	Iron object	Iron	Badly corroded length of rectilinear iron. No indication as to original use.	L 47mm, W 19mm, D 19mm
E3656:1:147	Probable iron nail	Iron	Badly corroded thin iron shaft - probable nail, surrounded in lump of corroded iron	L 22mm, W 15mm, D 11mm
E3656:1:148	Probable iron nail	Iron	Badly corroded thin iron shaft - probable nail, surrounded in lump of corroded iron	L 22mm, W 15mm, D 11mm

Find number	Object Type	Material	Description	Dimensions
E3656:1:149	Part of iron nail	Iron	A badly corroded section of an iron nail shaft with head. The piece tapers to a broken point.	L 37mm, W 13mm, D 11mm
E3656:1:150	Fragment of unidentifiable iron	Iron	A small irregular shaped piece of corroded iron. No indication as to original use	L 18mm, W 17mm, D 10mm
E3656:1:151	Part of iron nail	Iron	A badly corroded section of an iron nail shaft twisted in slight S-shape. The xray shows one end tapers to a blunt point.	L 59mm, W 19mm, D 17mm
E3656:1:152	Part of iron nail	Iron	A badly corroded section of a large iron nail shaft. The xray shows a slight raised head at one end	L 90mm, W 30mm, D 22.5mm
E3656:1:153	Part of an iron blade?	Iron	A very badly corroded piece of iron that may represent part of a blade. According to the x-ray a rivet hole is present on the tapered end with the main piece projecting wider c. 40mm from rivet.	L 118mm, W 22mm, D 16mm
E3656:1:154	Iron door hinge?	Iron	Dumbbell shaped piece of heavily corroded iron. The xray shows a circular hole present in the top end of the object with two small rivet holes in the wider splayed end. A narrow rectilinear piece of iron is attached to the wider end. The object may represent a hinge or bracket or functioned as some type of door furniture.	L 83mm, W 59, D 21mm

**APPENDIX 3      LIST OF RMP SITES IN AREA**

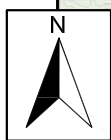
<b>RMP No</b>	<b>Description</b>
GA128-069	Graveyard
GA128-070	Ringfort – unclassified
GA128-070001	Souterrain

See Figure 2 for location.

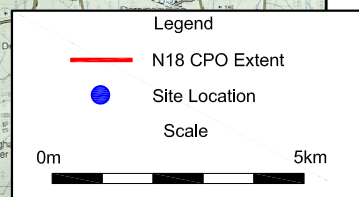
## APPENDIX 4 LIST OF N18 GORT TO CRUSHEEN SCHEME SITE NAMES

Site Name	Ministerial Direction No.	NMS Registration Number	Site Type
Drumminacloghaun 1	A044	E3720	Burnt mound
Ballyboy 1	A044	E3719	Ringditch
Ballyboy 2	A044	E3718	Ringditch
Curtaun	A044	E3721	Burnt mounds and early medieval cereal kilns
Rathwilladoon 2 & 3	A044	E3656	Prehistoric settlement
Rathwilladoon 4	A044	E3655	Burnt mound
Rathwilladoon 5	A044	E3657	Charcoal production kiln
Gortavoher 1	A044	E3904	Burnt mound
Monreagh 1 & 2	A044	E3712	Burnt mound
Monreagh 3	A044	E4037	Burnt mounds
Derrygarraff 1	A044	E3716	Burnt mound
Derrygarraff 2	A044	E3711	Metal production site
Derrygarraff 3	A044	E3710	Burnt mound
Sranagalloon 1	A044	E3713	Burnt mound
Sranagalloon 2/Site 146	A044	E3714	Enclosure
Sranagalloon 3	A044	E3897	Burnt mound
Gortaficka 1 & 2	A044	E3898	Burnt mounds
Clooneen 1	A044	E3722	Burnt mound
Caheraphuca 1	A044	E3654	Burnt mound
Caheraphuca 3 - 12	A044	E3653	Burnt mounds
Ballyline 1 & 2	A044	E3717	Burnt mounds
Ballyline 3	A044	E3715	Prehistoric pit

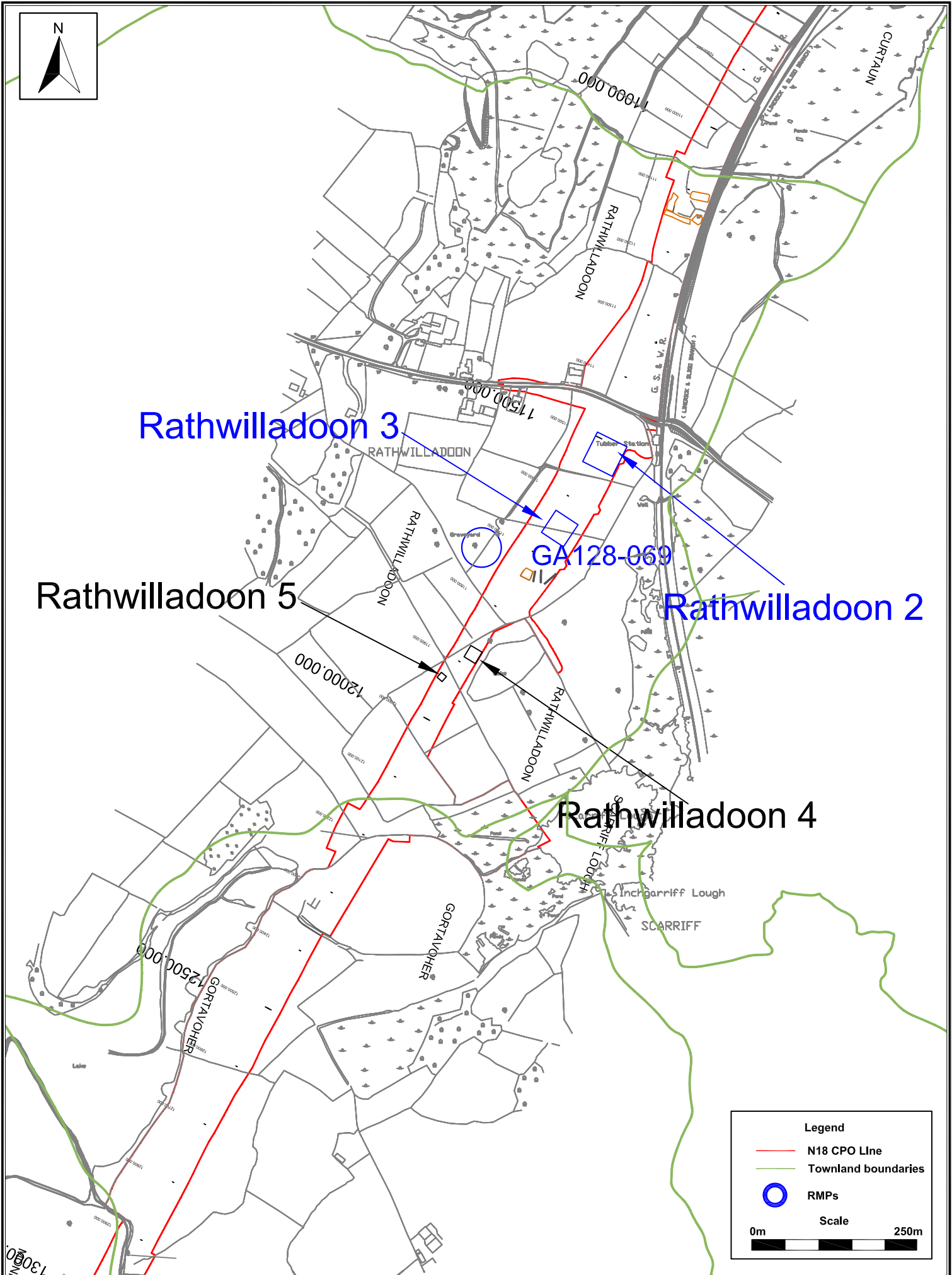




## Rathwilladoon 2 & 3









Area 1

Area 2

Area 3

Furrows

Furrows

0m 10m

Scale

Legend

- Break of slope
- Limit of Excavation
- CPO boundary
- Cxx Cut numbers
- Stone Levels

Title: E3656 Rathwilladoon 2 - Post-excavation plan

Project: N18 Gort to Crusheen

Client: Galway County Council

Scale: 1:200 @ A3

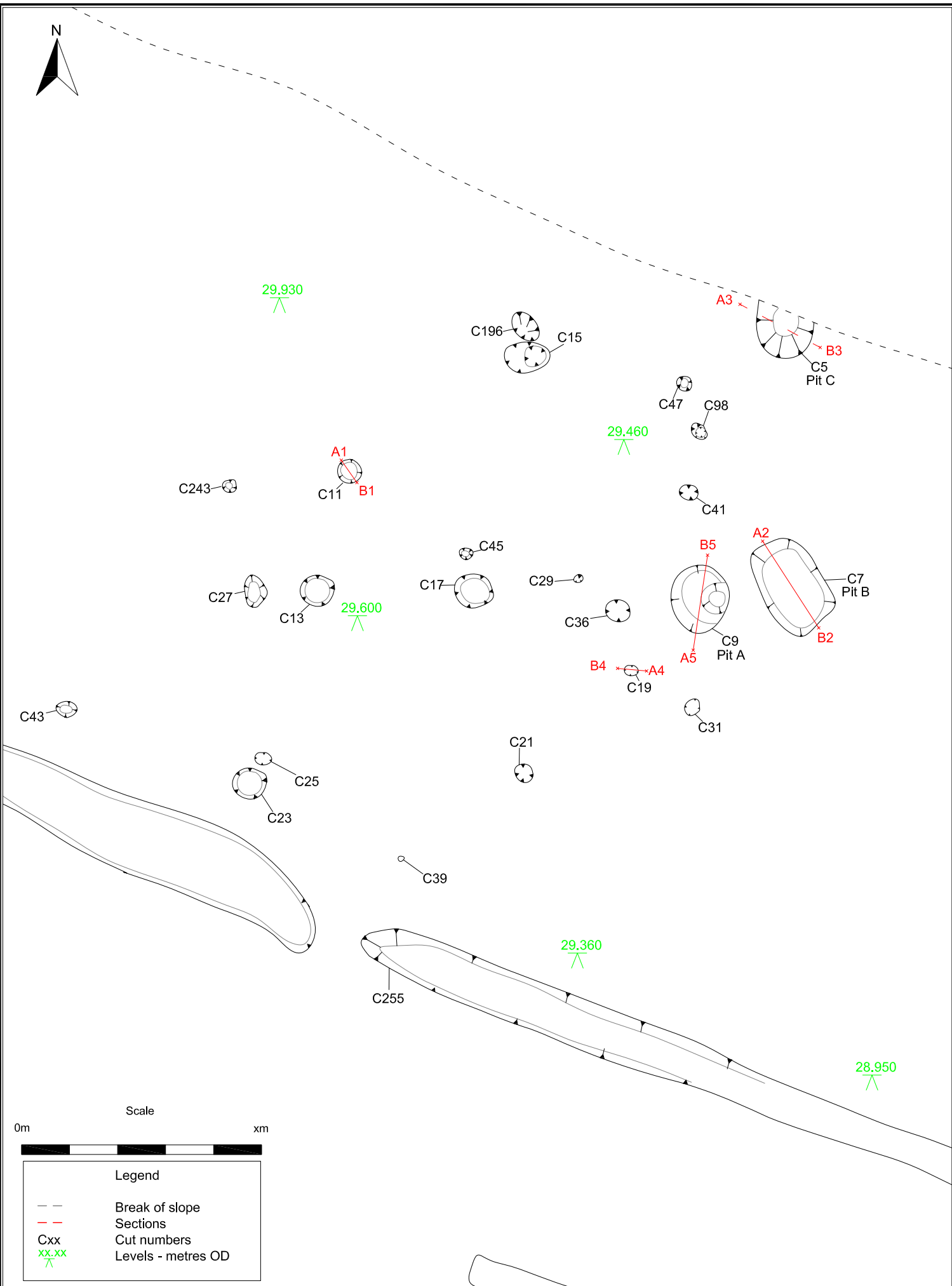
Job No: J2440

Date: 09/12/09

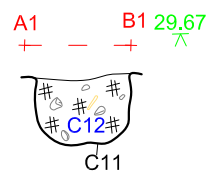
Figure No: 3

Produced by: G Kearney

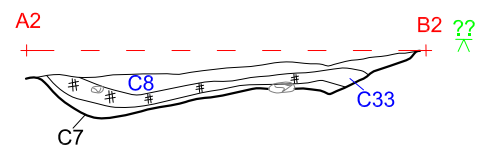
IAC Irish Archaeological Consultancy



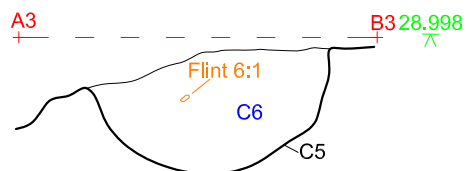
Southwest facing section of posthole C11



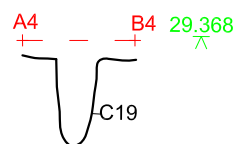
Southwest facing section of pit C7



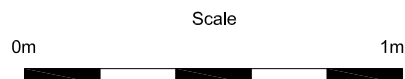
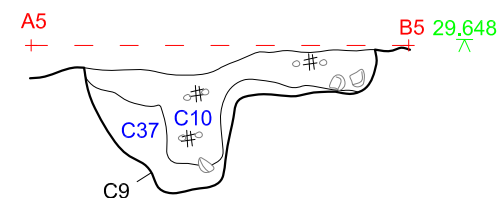
Southwest facing section of pit C5



North facing section of stakehole C19



East facing section of pit C9



Legend

Cxx	Cut numbers
Cxx	Fill numbers
○	Stone
#	Charcoal
xx.xx	Levels - metres OD

**IAC** Irish Archaeological Consultancy

Title:	E3656 Rathwilladoon 2 - Sections of pits C9, C7, C5, posthole C11 & stakehole C19	Scale:	1:20 @ A4
Project:	N18 Gort to Crusheen	Date:	09/12/09
Client:	Galway County Council	Produced by:	G Kearney
		Job No:	J2440
		Figure No:	5

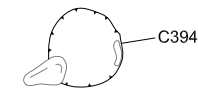
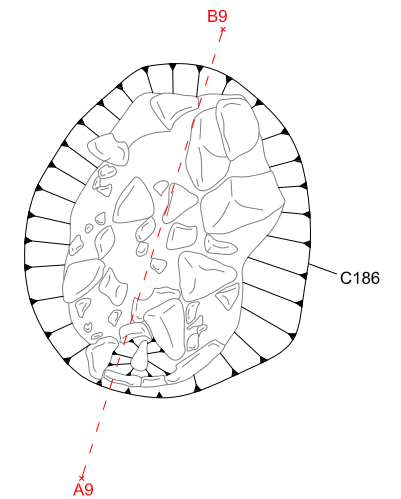


28.048  
^

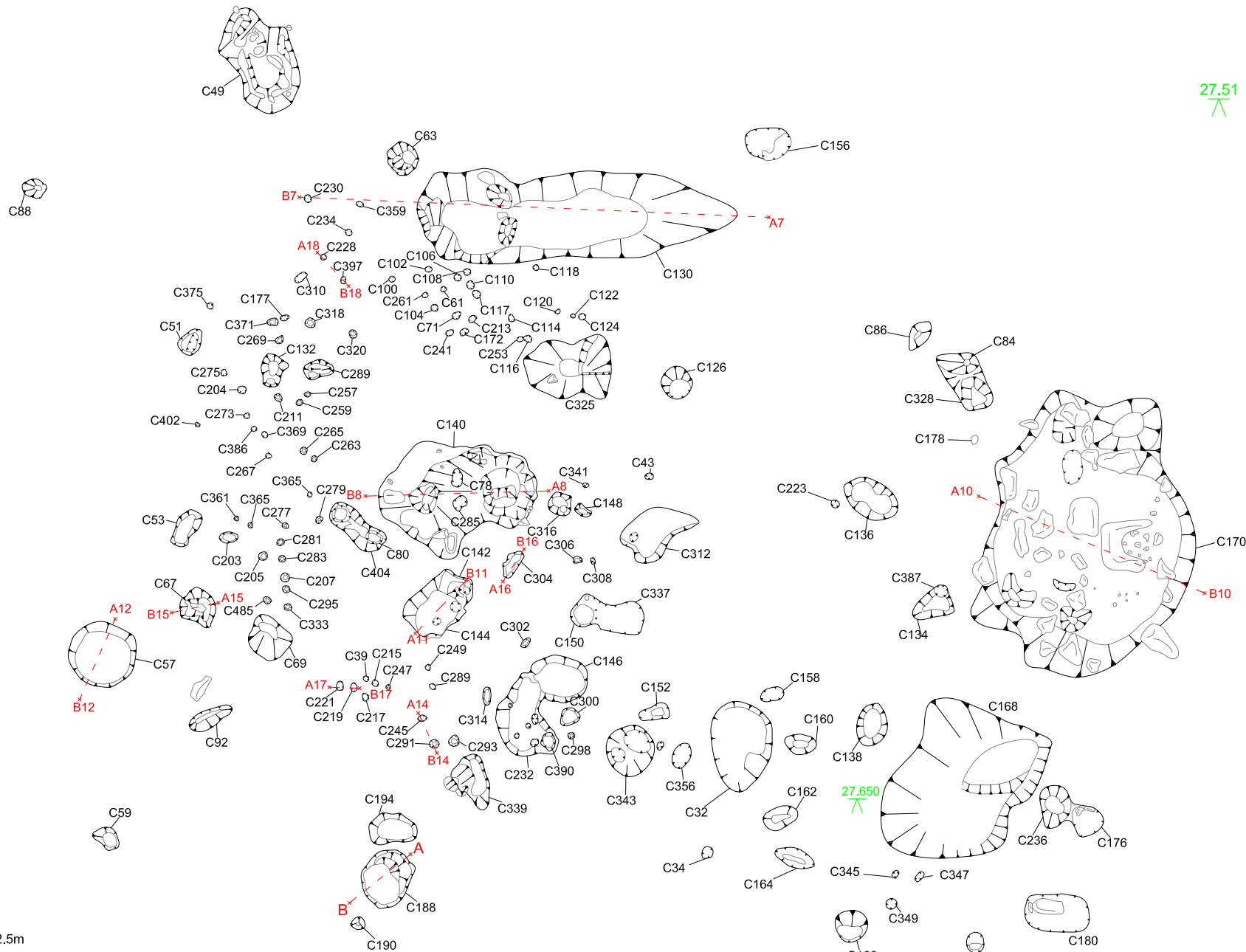


27.578  
^

27.51  
^



27.38  
^



0m Scale 2.5m

#### Legend

- Break of slope
- Sections
- Cxx Cut numbers
- Stone
- xx.xx Levels - metres OD

Title: E3656 Rathwilladoon 2 - Post-excavation plan of Area 2

Project: N18 Gort to Crusheen

Client: Galway County Council

Scale: 1:50 @ A3

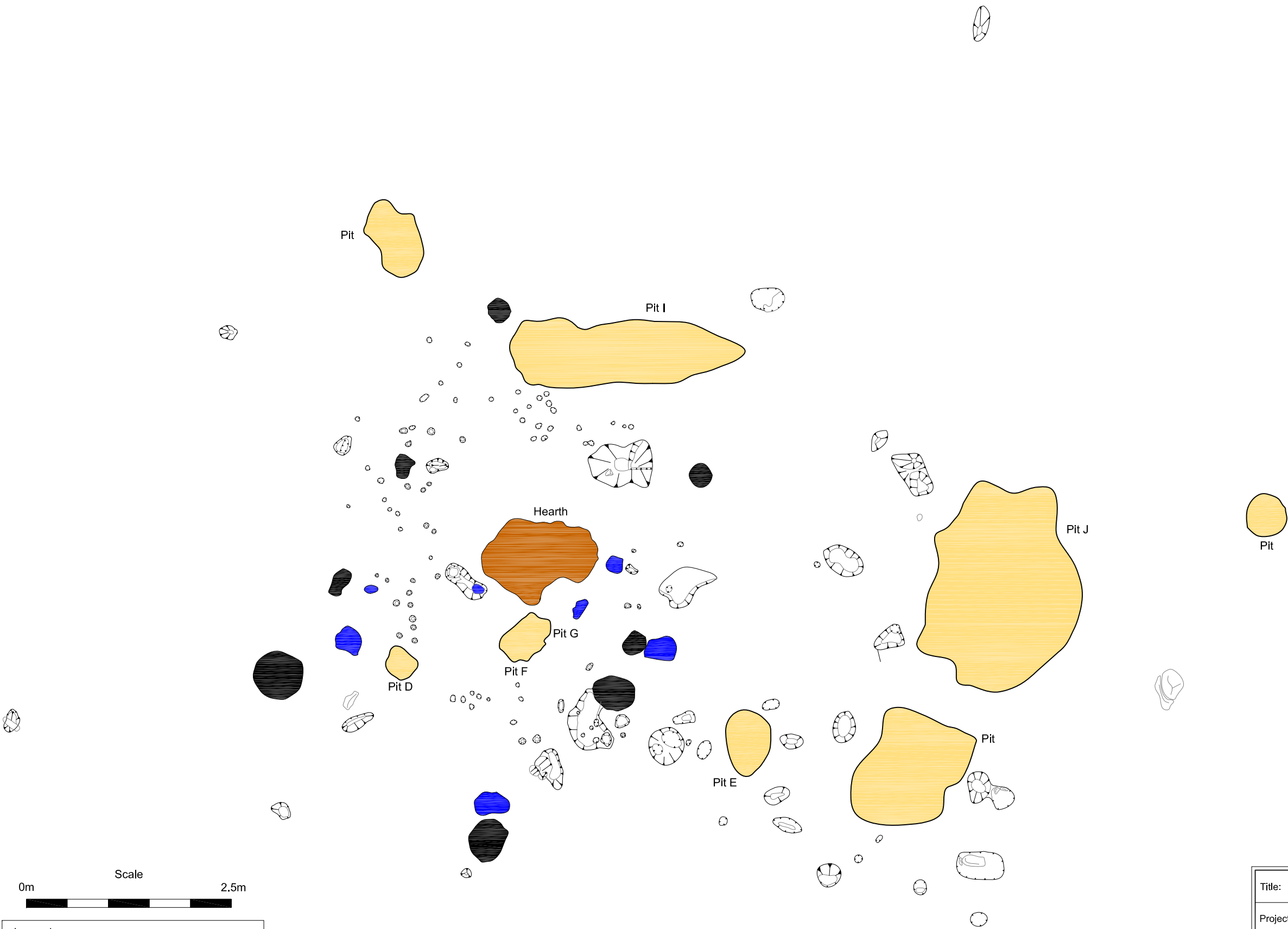
Job No: J2440

Date: 09/12/09

Figure No: 6

Produced by: G Kearney

IAC Irish Archaeological Consultancy



Legend	
	Break of slope
	Stone
	Postholes
	Possible roof supports
	Pits

Title: E3656 Rathwilladoon 2 - Interpretation of structure

Project: N18 Gort to Crusheen

Client: Galway County Council

Scale: 1:50 @ A3

Job No: J2440

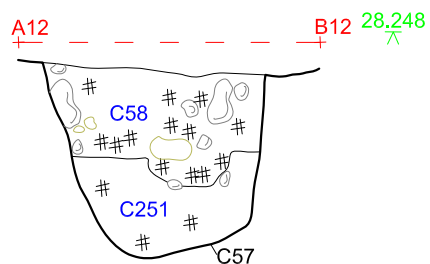
Date: 09/12/09

Figure No: 7

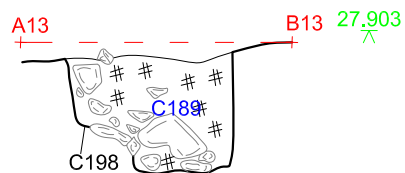
Produced by: G Kearney

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Consultancy

Northwest-facing section of C57



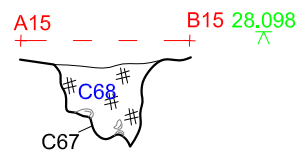
Northwest-facing section of C198



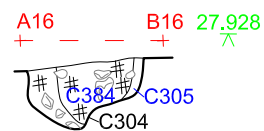
North-facing profile of C245, C291



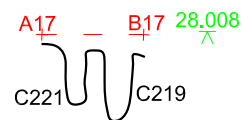
South-facing section of C67



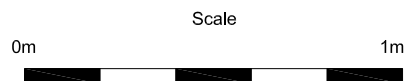
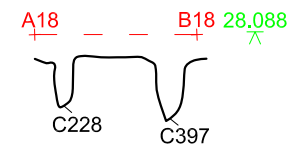
East-facing section of C304



South-facing section of C221, C219



Profile of C397, C228



Legend

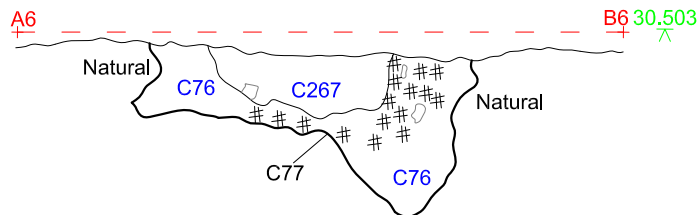
- Cxx Cut numbers
- Cxx Fill numbers
- Stone
- # Charcoal
- xx.xx Levels - metres OD

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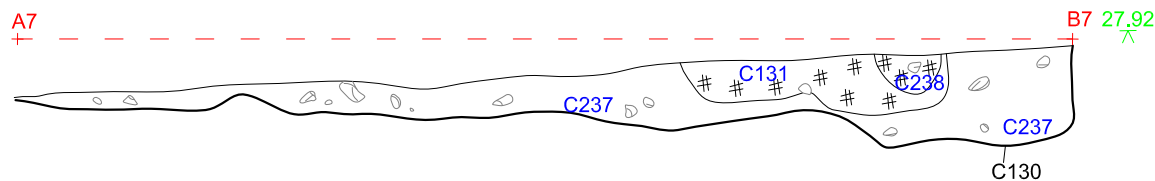
Title: Rathwilladoon 2 - Sections of postholes C57, C188, C67, C304, stakeholes C219, 221, 245, 291, 228, 397  
 Project: N18 Gort to Crusheen  
 Client: Galway County Council

Scale: 1:20 @ A4  
 Date: 09/12/09  
 Produced by: G Kearney  
 Job No: J2440  
 Figure No: 8

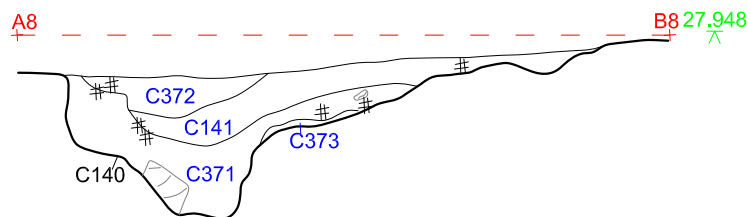
West facing section of pit C77



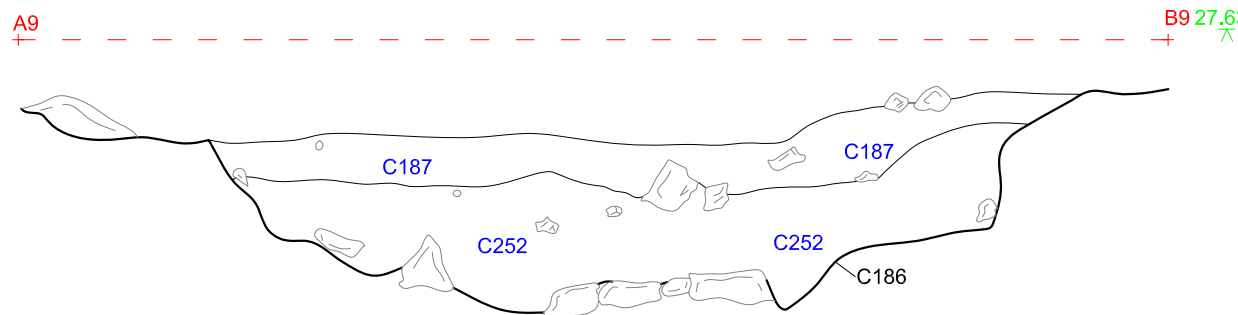
East facing section of pit C130



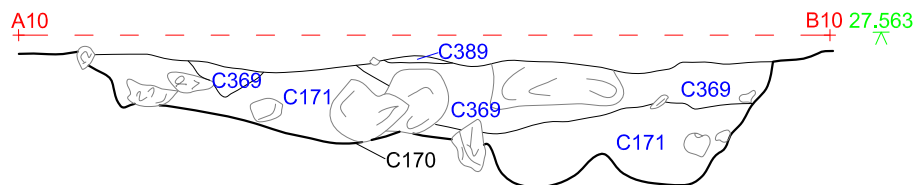
Northwest facing section of hearth C140



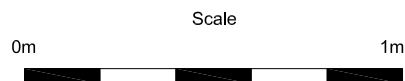
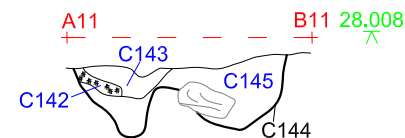
Southwest facing section of pit C186



Southwest facing section of pit C170



Northwest facing section of pit C144



Legend

Cxx	Cut numbers
Cxx	Fill numbers
	Stone
#	Charcoal
xx.xx	Levels - metres OD

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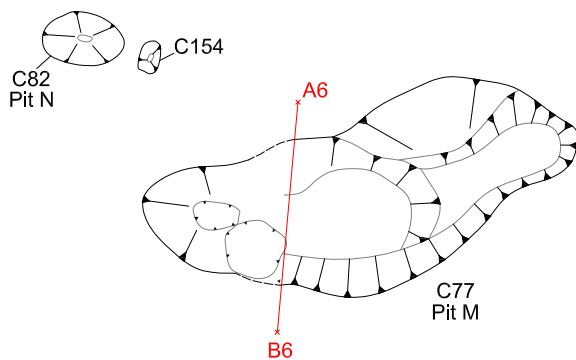
Title:	E3656 Rathwilladoon 2 - Sections of hearth C140, pits C142 and C144, C130, C170, C186, C77
Project:	N18 Gort to Crusheen
Client:	Galway County Council

Scale:	1:20 @ A4
Date:	09/12/09
Produced by:	G Kearney
Job No:	J2440
Figure No:	9

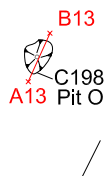




27.578  
^

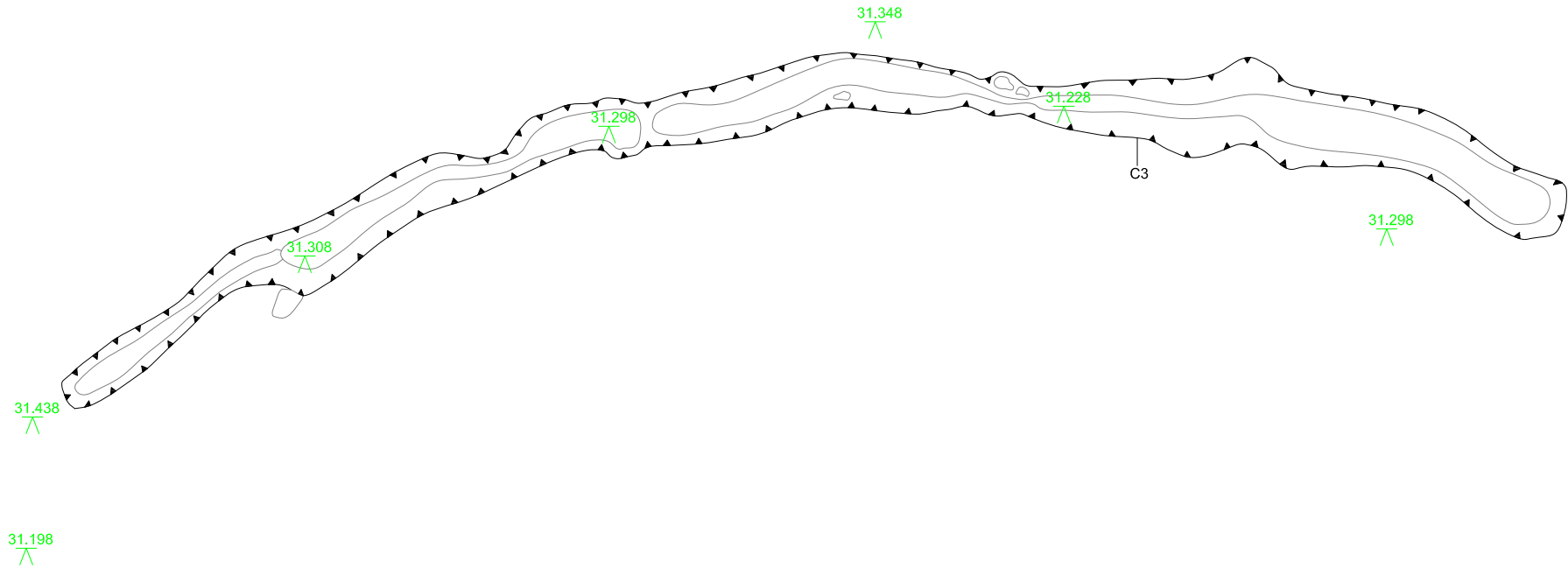


27.388  
^



0m                      Scale                      2.5m

Legend	
---	Break of slope
---	Sections
Cxx	Cut numbers
xx.xx ^	Levels - metres OD



#### Legend

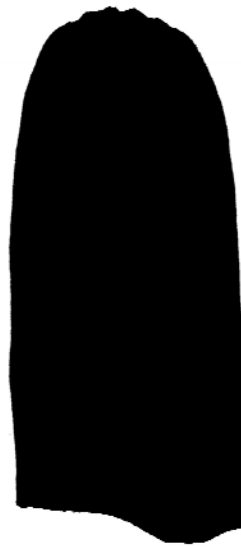
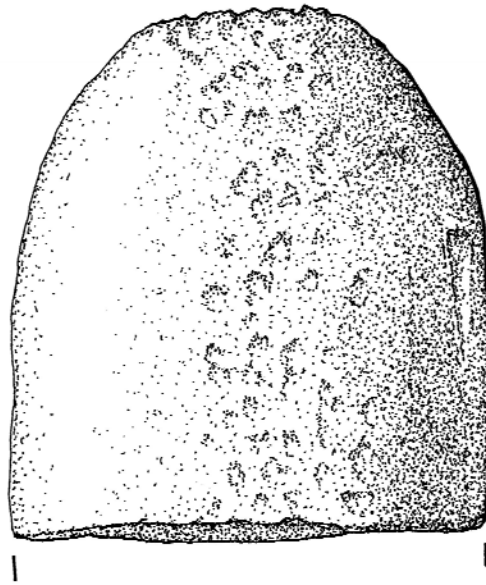
- Break of slope
- Cxx Cut numbers
- xx.xx Levels - metres OD

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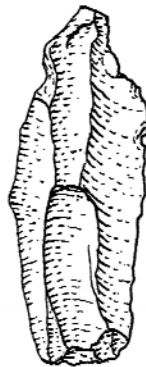
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Project: N18 Gort to Crusheen  
Client: Galway County Council

Scale: 1:25 @ A4  
Date: 09/12/09  
Produced by: G Kearney  
Job No: J2440  
Figure No: 11

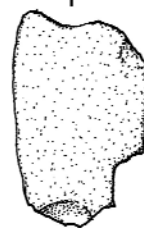
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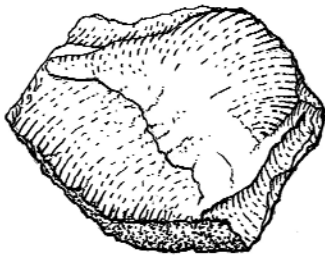
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76:88



10:56



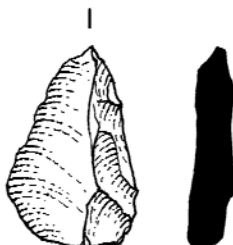
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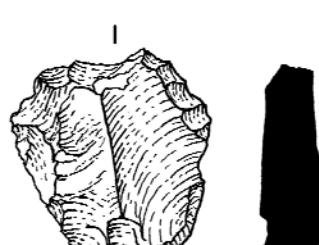
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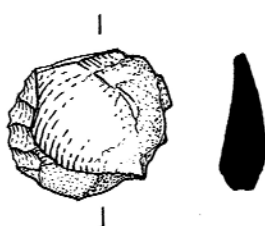
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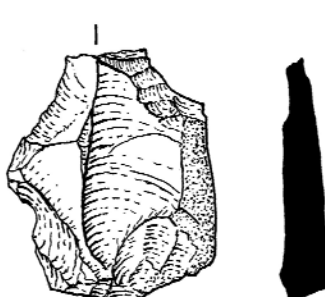
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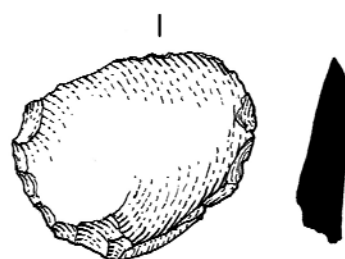
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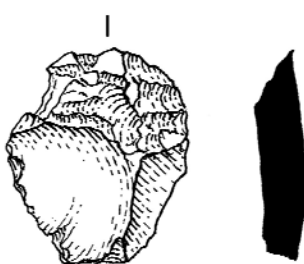
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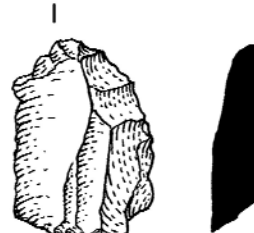
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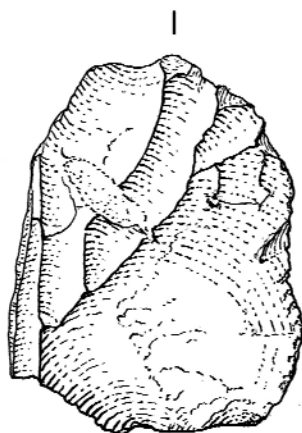
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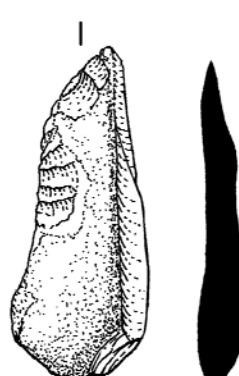
10:47



I:274



76:31



Scale



E3656 Rathwilladoon 2 & 3

76:99



10:27



76:96-98



76:104



10:12

