



**M1 NORTHERN MOTORWAY  
GORMANSTON – MONASTERBOICE  
(DROGHEDA BYPASS)  
PLATIN TO OLDBRIDGE  
CHAINAGE: 21600–24800  
CONTRACT 7**

**01E0373: RATHMULLAN 2**  
**PRELIMINARY REPORT SITE NAME: DONORE 6**

**FINAL REPORT**

**NGR: 306590, 273860  
CHAINAGE: 23475**

**SITE DIRECTOR: EMMET STAFFORD  
AUTHORS: EMMET STAFFORD AND SHANE DELANEY**

**SUBMITTED TO MEATH COUNTY COUNCIL**

**NOVEMBER 2011**

## PROJECT DETAILS

<b>Project</b>	M1 Northern Motorway Gormanston – Monasterboice (Drogheda Bypass) Platin to Oldbridge Chainage 21600–24800 Contract 7
<b>Excavation Licence Number</b>	01E0373
<b>Excavation Director</b>	Emmet Stafford
<b>Consultant</b>	Irish Archaeological Consultancy Ltd, 120b Greenpark Road, Bray, Co. Wicklow.
<b>Client</b>	Meath County Council
<b>Site Name</b>	Rathmullan 2
<b>Previous Site Name (Preliminary Report)</b>	Donore 6
<b>Site Type</b>	Early Bronze Age pits
<b>Townland</b>	Rathmullan
<b>Parish</b>	Donore
<b>County</b>	Meath
<b>NGR (Easting)</b>	306590
<b>NGR (Northing)</b>	273860
<b>Chainage</b>	23475
<b>Height m OD</b>	57m
<b>RMP No.</b>	N/A
<b>Excavation Start Date</b>	26 April 2001
<b>Excavation Duration</b>	21 days
<b>Report Type</b>	Final
<b>Report Date</b>	November 2011
<b>Report By</b>	Emmet Stafford and Shane Delaney

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This final report has been prepared by Irish Archaeological Consultancy Ltd on behalf of Meath County Council and the National Roads Authority in relation to the M1 Northern Motorway Gormanston – Monasterboice (Drogheda Bypass), Platin to Oldbridge, Chainage 21600–24800, Contract 7. This excavation was carried out under licence to the Department of Environment, Heritage and Local Government (DoEHLG), in consultation with the National Museum of Ireland.

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## **ABSTRACT**

This is a final report of an archaeological excavation at Rathmullan 2 (01E0373) which was located on the route of the M1 Northern Motorway Gormanston – Monasterboice (Drogheda Bypass), Platin to Oldbridge, Chainage 21600–24800, Contract 7, County Meath. The excavation was carried out by Emmet Stafford of Irish Archaeological Consultancy Ltd on behalf of Meath County Council. The work was carried out under licence No. 01E0373 which was received from the DoEHLG in consultation with the National Museum of Ireland. The fieldwork took place between 26 April and 26 May 2001.

Rathmullan 2 was identified during test trenching carried out by Valerie J. Keeley Ltd and appeared as a scattering of small subsoil cut features. An area measuring 10m x 10m (100m<sup>2</sup>) was cleaned back by hand and four pits were excavated.

One phase of archaeological activity at the site was dated to the early Bronze Age – Beaker period (2460–2200 BC) and comprised four pits interpreted as being associated with domestic activity. Flint, charcoal and fragments of burnt bone were recovered from two of the pits. The remaining pits contained no datable finds but are thought to have been associated with the other pits at the site.

These pits add to the picture of continuity of activity in the surrounding area through much of the Bronze Age. The immediate area surrounding Rathmullan 2 contained a large number of sites, most of which were dated to the Bronze Age, and all phases of the Bronze Age were represented indicating that this landscape attracted settlement for prolonged periods throughout the Bronze Age. It is probable that the proximity of the River Boyne may have been a big attraction of this location which resulted in it being revisited repeatedly through time.



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# 1 INTRODUCTION

This report presents the results of the archaeological excavation of Rathmullan 2 carried out in the townland of Rathmullan, Co. Meath (Figures 1–3) as part of an archaeological mitigation program for the M1 Northern Motorway Gormanston – Monasterboice (Drogheda Bypass), Platin to Oldbridge, Chainage 21600–24800, Contract 7. Archaeological fieldwork was directed by E Stafford of Irish Archaeological Consultancy Ltd (IAC) under licence 01E0373. The fieldwork and preliminary reporting was funded by Meath County Council under the supervision of Northconsult Consulting Engineers. The Stage (iv)<sup>1</sup> post-excavation and dissemination work was funded by Meath County Council operating in conjunction with the National Roads Authority.

## 1.1 Background to the Development

The M1 Northern Motorway: Gormanston – Monasterboice (Drogheda Bypass) forms part of Euroroute E01 linking Rosslare, Dublin, Belfast and Larne. The mainline chainage for this section runs from 11.000 (Gormanston) to 32.400 (Monasterboice). The Northern Motorway Scheme involved the construction of 21.5km of two-lane, dual-carriageway motorway (with provision for a future 3rd lane) linking the Balbriggan Bypass at Gormanston and the Dunleer Bypass at Newtown Monasterboice. The scheme also involved: the construction of four interchanges; the upgrading and realignment of 20km of existing national, regional and county roads; and associated ancillary works. The project also included the construction of 24 structures, including a high level bridge crossing the River Boyne.

The archaeological components of the Environmental Impact Statement published in 1995 were carried out by Valerie J. Keeley Ltd (VJK). This included desk based studies and field surveys. Advance archaeological testing and monitoring was completed by VJK between May 2000 and August 2001 (Licence 00E282). Excavations of the sites identified were conducted by VJK, Archaeological Consultancy Services (ACS) and Irish Archaeological Consultancy (IAC) between 2000 and 2001.

The excavations at Rathmullan 2 (01E0373) were carried out in accordance with the written method statement submitted to the National Monuments Service and National Museum of Ireland.

All features identified during the assessment phase were subsequently re-identified and the site was fully excavated during the resolution phase of the scheme which took place between 26 April to 26 May 2001.

The site was assigned the following identification data:

Site Name<sup>2</sup>: Rathmullan 2; Excavation Registration Number: 01E0373; Route Chainage (Ch): 23475; NGR: 306590, 273860.

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<sup>1</sup> Stage (i)–(iv) Contractual Stages within NRA Conditions of Contract for Archaeological Consultancy Services

<sup>2</sup> The site name for the post-excavation and dissemination stage may differ from that stated on the preliminary report, excavation summaries and EIS. A full account of any change in site name is detailed in Appendix 4.

## 1.2 Previous Archaeological Work

### 1.2.1 Testing

Rathmullan 2 was identified as a result of archaeological assessment undertaken by VJK Ltd. in 2000 (Valerie J. Keeley 2003; Licence No. 00E282). The site appeared as a scattering of small subsoil cut features grouped within an area measuring c. 10m x 10m.

### 1.3 Methodology

The methodology adopted was in accordance with the approved Method Statement. The topsoil was removed to the interface between natural and topsoil using a 20 tonne mechanical excavator equipped with a flat toothless bucket under strict archaeological supervision across an area measuring c. 10m x 10m (100m<sup>2</sup>). 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 tied in to the national grid using survey equipment.

All archaeological features were fully excavated by hand and recorded on *pro forma* record sheets using a variant of the single context recording system with plans and sections being recorded at a scale of 1:50, 1:20 or 1:10 as appropriate.

A complete photographic record was maintained throughout the excavation. 35mm print and slide photographs were taken of all features and of work in progress.

An environmental strategy was devised at the beginning of the excavation which consisted of a combination of targeted and random bulk sampling. This ensured that noticeably rich contexts were sampled, but also allowed for samples where environmental remains may not have been obvious.

All artefacts uncovered on site were dealt with in accordance with the guidelines as 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's facility in Lismore, Co Waterford and will ultimately be deposited with the National Museum of Ireland.

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

All post excavation works were carried out in accordance with the relevant approvals and in consultation and agreement with the National Roads Authority (NRA) Project Archaeologist, the National Monuments Section of the DoEHLG and the National Museum of Ireland. Where necessary licences to alter and export archaeological objects were sought from the National Museum of Ireland.

### **Final Report Date Ranges**

The following date ranges for Irish prehistory and medieval periods are used for all final reports for the M1 Northern Motorway (Gormanston – Monasterboice) Platin to Oldbridge sites.

Mesolithic: 7000–4000 BC

Neolithic: 4000–2500 BC

Early Bronze Age: 2500–1700 BC

Middle Bronze Age: 1700–1200 BC  
Late Bronze Age: 1200–800 BC  
Iron Age: 800 BC–AD 500  
Early medieval period: AD 500–1100  
Medieval period: AD 1100–1600  
Post-medieval: AD 1600–1800

*Source:*

Carlin, N., Clarke, L. & Walsh, F. 2008 *The M4 Kinnegad–Enfield-Kilcock Motorway: The Archaeology of Life and Death on the Boyne Floodplain*. NRA Monograph Series No. 2, Wordwell, Bray.

## 2 EXCAVATION RESULTS

One phase of archaeological activity at the site was dated to the early Bronze Age and comprised four pits.

### 2.1 Natural Geology

The geology of this area consists of solid and glacial geology. The solid geological formations are mostly of Palaeozoic slates overlain by carboniferous rocks (shales and limestone). The overlying soils are mostly grey-brown podzolics which are good all-purpose, well drained soils used for both arable and pastoral farming. The natural subsoil at the site comprised compact orange-yellow silty clay.

### 2.2 Early Bronze Age Activity

#### 2.2.1 Pits

##### Contexts:

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
C2	C4	0.8	0.8	0.12	Very compact, light brown silty clay.	Fill of pit.
C3	C4	0.5	0.27	0.07	Loose brown sandy clay.	Fill of pit.
C4	N/A	0.8	0.8	0.15	Subcircular, concave sides, flat base.	Cut of pit.
C5	C6	2.01	1.12	0.59	Greyish mid brown sandy clay.	Fill of pit.
C6	N/A	2.01	1.12	0.59	Sub triangular, vertical sides, blunt base.	Cut of pit.
C7	C8	0.44	0.36	0.13	Dark brown sandy clay.	Fill of pit.
C8	N/A	0.44	0.36	0.13	Subcircular, vertical sides and flat base.	Cut of pit.
C9	C10	0.28	0.1	0.1	Brown sandy clay.	Fill of pit.
C10	N/A	0.28	0.1	0.1	Triangular, concave sides, tapered base.	Cut of pit.

##### Finds:

Context	Find Number	Material	Period	Description
C5	01E0373:5:4	Flint	Middle /late Neolithic.	Debitage.
C5	01E0373:5:5	Flint	Middle /late Neolithic.	Debitage.
C5	01E0373:5:58	Flint	Middle /late Neolithic.	Core.
C5	01E0373:5:59	Flint	Middle /late Neolithic.	Blade.
C5	01E0373:5:60	Flint	Middle /late Neolithic.	Bipolar flake.
C7	01E0373:7:1	Flint	Middle /late Neolithic.	Blade.

##### Interpretation:

The site consisted of a series of four small to medium sized pits (C4, C6, C8 & C10: Figures 4 and 5) grouped in an apparently random manner. The largest of these features (C6) was an irregularly cut, steep sided pit with an average width of over 1m and a maximum depth of 0.59m (Plate 2). The pit was filled by one deposit (C5). Five pieces of worked flint were recovered from this fill consisting of two pieces ofdebitage (01E0373:5:4–5); a core (01E0373:5:58: Figure 7); a blade (01E0373:5:59: Figure 7) and a bipolar flake (01E0373:5:60) and these are characteristic of the middle/late Neolithic period (Sternke, Appendix 2.1). The presence ofdebitage suggests that bipolar flint knapping was taking place on the site (*ibid.*). There were also 17 pieces of burnt animal bone recovered from this fill none of which were identifiable to species (McCarthy, Appendix 2.3). The inclusions recovered from C5 would appear to suggest that C6 functioned as a domestic refuse pit.

Approximately 0.55m to the south-east of C6 a second, smaller pit C10, was excavated (Figure 4). C10 had a maximum width of 0.28m and a maximum depth of 0.1m. The morphology of C10 suggests that it may be the result of the removal of a natural stone by modern ploughing activity and although its fill (C9) contained inclusions of charcoal these may have originated in nearby pit C6.

The other features excavated on the site were uncovered at some distance from C6 and C10. C4 was a sub-circular bowl shaped pit 0.15m in depth with a maximum diameter of 0.8m, was situated approximately 6m to the south-east of C6 (Figures 4 and 5; Plate 3). The fills of C4, C2 and C3, contained no direct evidence of the feature's function but it is thought likely to have been associated with the other pits excavated at the site.

C8 was a sub-circular flat based pit 0.13m in depth with a maximum diameter of 0.44m was situated approximately 4m to the east of C6. The fill of pit C8 (C7) contained one piece of flint and some heat affected stones as well as a large proportion of charcoal suggesting the use of the feature as a refuse pit. The single piece of flint was a bipolar produced blade characteristic of the middle/late Neolithic period (Sternke, Appendix 2.1).

Samples of charcoal from fills C2 and C5 of pits C4 and C6 were selected for analysis and oak (*Quercus* sp.) proved to be the only taxon present. Oak charcoal was particularly important to activities which required heat, as it burned hotter and cleaner than wood and was considered superior to wood. The charcoal may be representative of fuel collection policies where oak was selected to obtain high temperatures (O'Carroll, Appendix 2.2).

A fragment of oak charcoal (0.15g) recovered from fill C5 of pit C6 was chosen for AMS dating. The charcoal was identified by Ellen O'Carroll and was from a branch 1–8 years in age. The charcoal returned an AMS result of  $3840 \pm 30$  BP (SUERC 31897). The 2 Sigma calibrated result for this was 2460–2200 BC (Appendix 2.4), indicating a date at the start of the early Bronze Age for this pit.

## 2.3 Topsoil

### Contexts:

Context	Fill of	L(m)	W(m)	D(m)	Basic Description	Interpretation
C1	N/A	N/A	N/A	0.3–0.4	Loamy, agricultural topsoil	Topsoil.

### Finds:

Context	Find Number	Material	Period	Description
C1	01E0373:1:1	Flint	Middle/late Neolithic	Core.

### Interpretation:

The topsoil was consistent across the site and was comprised of a loamy soil. It sealed all of the archaeological features on site. A single residual flint core (Figure 7) was retrieved from the topsoil which is characteristic of the middle/late Neolithic period (Sternke, Appendix 2.1).

### 3 SYNTHESIS

The synthesis presents the combined results of all of the archaeological analysis carried out at Rathmullan 2. This includes the analysis of the physical and archaeological landscape, the compilation of information gathered during research into the site type, date, and function, and the results of the excavation and specialist analysis of samples taken during the course of on-site works.

#### 3.1 Landscape Setting

The topography of the Platin–Oldbridge section of the M1 Northern Motorway is generally undulated drift-covered relief. The general region is characterised by a combination of prosperous farms of meadow, pasture and arable, with deciduous woodland occurring in demesne and steep river valleys (Stout 2002, 2). The River Boyne flows west–east to the sea at Drogheda immediately to the north of the Platin–Oldbridge section of the scheme (equating to Chainage 25120–25600).

The geology of Meath consists of solid and glacial geology. The solid geological formations are mostly of Palaeozoic age (slates) dating between 545–290 million years ago which form an east/west ridge on the northern edge of the Boyne valley (Finch *et al.* 1983, 9; Stout 2002, 3). Carboniferous rocks overlie this with Carboniferous shales overlying limestone (*ibid*).

The overlying soils of County Meath are mostly classified as grey-brown podzolics which are good all-purpose, well drained soils used for both arable and pastoral farming. A detailed survey of the soils of County Meath is provided by Finch *et al.* (1983).

#### *Topography*

The general topography of the Platin–Oldbridge section of the scheme (from south to north) starts at raised ground north of the River Nanny (38.5m OD at Chainage (Ch) 19500). The route then rises irregularly to the southern edge of the immediate River Boyne Valley which forms a broad brow from Ch. 23200–23900 at 56–57m OD. From Ch. 23900 (57m OD) the route slopes down to a broad terrace at c. 25m OD between Ch. 24950–25120. The actual Boyne River Channel lies between Ch 25120 and Ch. 25600 with the tidal river flowing at the bottom of this channel at between 0m OD and 2m OD.

Rathmullan 2 was located at about 57m OD. There is a recorded ringfort (ME020-021) located c. 250m to the south-east (Figure 2). The first edition OS survey map of 1837 shows the rectangular shaped field divided into two square-shaped fields. The ringfort is marked just north of the third class road.

#### 3.2 The Archaeological Landscape – Bronze Age

As part of the general research relating to sites along the scheme and the specific research relating to Rathmullan 2, the known archaeology within the surrounding landscape was assessed in order to establish the level and type of activity in the surrounding area in the past. This included a review of information from the Record of monuments and places, previous excavations and other relevant documentary sources including mapping and other sites excavated as part of the M1 scheme. The excavated archaeology at Rathmullan 2 has been identified as being early Bronze Age in date

##### 3.2.1 General Bronze Age Landscape of the Scheme

Bronze Age occupation in this landscape was quite widespread and excavations along the entire stretch of the M1 Northern Motorway Gormanston–Monasterboice scheme revealed both funerary and settlement activity dating to this period (2500–



800 BC). Evidence of industry and burnt mound activity was also uncovered. The relatively short distances between the excavated sites would suggest high density Bronze Age settlement in the wider area. In examining the known Bronze Age activity in the region it is possible to identify distinct concentrations of activity within this landscape. To the west of the Platin–Oldbridge section<sup>3</sup>, the Brú na Bóinne complex acted as a major focal point throughout prehistory and to the north-west, Moynagh Lough and Raffin Fort were also important sites during the Bronze Age period. To the east of the Platin–Oldbridge section, a cluster of Bronze Age activity is also visible at Donacarney Great, Colp West and Bettystown, and to the south and south-west, similar clusters of activity are apparent as a result of road scheme projects, namely the M3 Clonee–North of Kells Road Scheme and the N2 Finglas–Ashbourne Road Scheme. Furthermore, to the north of the River Boyne, distinct cluster of Bronze Age occupation is apparent at Tullyallen, Mell, the Hill of Rath and Balgatheran.

### Settlement activity

Several settlement and occupation sites dating to the Bronze Age were uncovered as part of the Platin–Oldbridge section. At Lagavooren 6, a Bronze Age enclosure with internal features that appear to represent the remains of two possible structures was excavated (Clarke & Murphy 2002). At Lagavooren 7, c. 100m to the north, occupation evidence was also excavated in the form of pits and a circular structure (1540–1410 BC and 1500–1380 BC) that included a possible central hearth (Stafford forthcoming a). A large pit, which may indicate the presence of a well or deer trap (1270–1040 BC), was also identified at the site (*ibid.*). Adjacent to this a burnt mound with large pits and wells at Rathmullan 3 returned early Bronze Age dates of 2200–1960 BC, 2140–1950 BC and 1880–1680 BC (Stafford 2011a). A similar large early Bronze Age pit (1900–1730 BC) was also identified at Rathmullan 8 (Nelis 2011a). At Rathmullan 10 (Bolger forthcoming), a series of stakeholes and postholes and three curving trenches were excavated (2030–1880 BC & 1520–1400 BC) that could represent the remains of a circular building (*ibid.*). Ditches, pits, postholes and stakeholes (1630–1450 BC, 1620–1450 BC, 1540–1410 BC) were also excavated to the exterior of the ring-ditch/barrow at the funerary site of Sheephouse 3 (Nelis forthcoming), which may also indicate settlement/industry activity.

To the west, in the Brú na Bóinne complex, Bronze Age activity is recorded in the form of ritual and funerary activity which is indicative of settlement, however no evidence of Bronze Age habitation has been recovered. However, Bronze Age structures have been identified c. 21km to the north-west of the Platin–Oldbridge section at the lakeshore settlement of Moynagh Lough, Brittas (Bradley 2005) and at Raffin, Co. Meath. Evidence for an important late Bronze Age settlement consisting of an oval palisade enclosure enclosing a circular double walled building with a central posthole was excavated here (Eogan 1998, 318). Approximately 7km to the east, at Donacarney Great, a Bronze Age bivallate enclosure was recently excavated (Giacometti 2010). A number of structures dating to the Bronze Age and late Bronze Age were revealed at the site, as well as linear features within the enclosure, a boundary ditch and large pits (*ibid.*). Structures have also been identified close-by at Colp West (Clarke & Murphy 2003). Excavations on a rock promontory known as Platin Fort, immediately south of the Platin–Oldbridge section, recovered a miniature Bronze Age flat axe, lignite bracelets and middle–late Bronze Age pottery (Seaver 2001; 2002; Conway 2003a; 2003b; Smyth 2009, 29). To the south of the Platin–Oldbridge section, extensive evidence of Bronze Age occupation was recovered as part of the M1 Motorway Gormanston to Monasterboice scheme. A late Bronze Age oval enclosure and a possible sub-circular structure were excavated at Kilsharvan 16

<sup>3</sup> M1 Northern Motorway Gormanston–Monasterboice (Drogheda Bypass), Platin to Oldbridge, Chainage 21600–24800.

(Russell & Corcoran 2002) and a middle–late Bronze Age settlement site consisting of four post-holes representing a hut, two possible fence lines and two refuse-pits was recovered at Lisdornan 4 (Russell 2003f). In addition to these, a middle–late Bronze Age structure, constructed using a number of curved slot-trenches was excavated at Kilsharvan 5 (Russell 2003a). Bronze Age habitation was also unearthed to the north of the Platin–Oldbridge section. To the north of the River Boyne, the western arc of a prehistoric enclosure was excavated at Tullyallen 6 (Campbell 2002b) and in addition to the funerary activity recovered at the Hill of Rath, possible Bronze Age habitual evidence was also identified (Duffy 2002a). A residential development in Tullyallen townland also revealed an extensive spread of Bronze Age structural and ditch features with associated pits (Murphy 2002; Stephen Linnane, pers. comm.; Smyth 2009, 39).

Further a-field to the WSW, as part of the excavations for the M3 Clonee–North of Kells Road Scheme, Bronze Age settlement in the form of structures were excavated at Grange 3 (Kelly 2010), Nugentstown 1 (Lynch 2010a), Phoenixtown 3 (Lyne 2010a), Cakestown Glebe 2 (Lynch 2010b), Kilmainham 1A (Lyne 2010b), Town Parks 3 (Gleeson 2010), Chapelbride 4 (O'Hara, Gallagher & Ginn 2009) and Skreen 3 (O'Neill 2005). In addition to these, two small early Bronze Age 'D shaped' structures were excavated at Cookstown Great 3 (McLoughlin 2010) and some small Bronze Age huts were identified at Kilmainham 1C (Walsh 2010).

### **Ritual/funerary Activity**

Three of the sites along the Platin–Oldbridge section produced evidence of either funerary or ritual activity. A shattered urn base was recovered towards the rear of the Grooved Ware timber circle structure at Lagavooren 7, which contained flecks of burnt bone (Stafford forthcoming a). The pottery sherds recovered indicate a middle Bronze Age date (*ibid.*). At Sheephouse 3, a large circular ditch or barrow was dated to the late Bronze Age (1120–910 BC) and was associated with a number of cremation pits (1420–1260 BC, 1130–920 BC and 790–520 BC) and a habitation/industrial area were among the features uncovered at this site (Nelis forthcoming). A circular structure was also excavated at the adjacent site, Sheephouse 2 (Moore forthcoming) which was interpreted as a possible ring-ditch.

Bronze Age funerary monuments are a prevalent feature of the surrounding landscape. Continuity of use is evident in the Brú na Bóinne complex to the west, where a ring-ditch is recorded at Knowth (ME019:029) and a possible ring-ditch is also recorded at Newgrange (ME019:078). Furthermore a ring barrow is recorded at Newgrange (ME019:058002) and a cluster of mound barrows are located at Dowth (ME019:040, :042, :043 & ME020:012) and Newgrange (ME019:049001, :051 & :058001). A ring-ditch has also been noted at Knowth to the west of Site M (Stout 2006). Directly to the west of these features an additional mound barrow is located at Rosnaree (ME019:059). Both a ditched barrow and mound barrow can also be identified at Monknewtown (ME019:016003, ME019:017) located directly to the north of the Brú na Bóinne complex. A ring-ditch was also excavated at Monknewtown; it contained cremations possibly associated with late Bronze Age activity (Sweetman 1976; Roche & Eogan 2001, 135; Smyth 2009, 35) and a ring-ditch containing three burial urns was excavated at Stalleen (Campbell 2007) located along the eastern fringes of the Brú na Bóinne complex, c. 3km to the WSW of the Platin–Oldbridge section. Ritual activity spanning the entire Bronze Age period has also been recorded at Raffin Fort (Newman 1994) c. 23 km to the north-west. Ring-ditches are a common element of the Co. Meath Bronze Age landscape and can be found at Beymore (ME027:063) directly to the south of the Platin–Oldbridge section and at Oldbridge (ME020:025002,003) to the north-east. A cist is also recorded at Oldbridge (ME020:002), as are four barrows (ME020:025014–17). As part of the Sheephouse–

Oldbridge Bypass, a double ring-ditch was excavated at Sheephouse/Oldbridge, c. 1km to the south-west of Staleen (Seaver 2010) and adjacent to the Platin–Oldbridge section an embanked barrow is recorded at Lagavooren (ME020:068). Ring-ditches have also been identified to the east of the Platin–Oldbridge section at Donacarney Great (ME021:022) and at Ninch, Laytown (ME028:025005) to the south-east, to name but a few. Barrows are also recorded at Ninch (ME028:006) and Calliaghstown (ME027:005). An early Bronze Age flat cemetery has also been excavated at Bettystown (Eogan 2000), c. 7km to the east, close to where a cist is recorded at Betaghstown (ME021:01001). Also to the south-east, a further cist can be identified at Briarleas (ME028:008).

Bronze Age funerary activity was also uncovered as part of the M1 Northern Motorway Gormanston–Monasterboice excavations to the north the Platin–Oldbridge section in Co. Louth. At 00E0429 Tullyallen 1, a ring barrow with a centrally placed cremation within a pottery vessel was discovered (Chapple 2002), at 00E0430 Mell 2, two ring-ditches and a cremation pit were recovered (Breen 2002) and at 00E0535 Hill of Rath, an urnfield was excavated (Duffy 2002a). A small deposit of cremated bone was also recovered from one of four pits excavated at 00E0941 Newtown–Monasterboice (Campbell 2002a). Further to the north at Balgatheran, a Bronze Age habitation site has also been identified as a result of the South-North Gas Pipeline (Halpin & Rohan 2006). Also, in the region, a ring barrow is recorded at Tullyallen (LH024:046) and a ditch barrow is recorded at Mell (LH024:062). No ring-ditches are evident in the immediate vicinity of the M1 Motorway in Co. Louth although concentrations of this monument type are present in the northern half of the county. Cists are however recorded to the north of the River Boyne at Monasterboice (ME021:035003) and at Fieldstown (LH021:062005).

Further a-field as part of the N2 Finglas–Ashbourne Road Scheme a small barrow-type monument was excavated at Ballybin/Cookstown, Co. Meath (McGowan 2007) and shallow pits containing burnt bone and a crouched inhumation were also excavated at Cookstown (Clutterbuck 2007). At Harlockstown, Co. Meath, excavation revealed that an early Bronze Age enclosure was a burial monument with a cremation pit and two inhumations within the interior (Fitzgerald 2006, 36). As a result of the M3 Clonee–North of Kells Road Scheme to the WSW, Bronze Age ring-ditches have also been identified at Grange 3 (Kelly 2010), Kilmainham 3 (Whitty 2010), Johnstown 4 (Elder & Ginn 2009), Raynestown 1 (Elder, O'Connor & Owen 2009), Ardsallagh 2 (Clarke & Carlin 2008a), Garretstown 2 (Rathbone 2009), Lismullin 1 (O'Connell 2009) and a circular enclosure representing a possible ring-ditch was excavated at Boyerstown 3 (Clarke 2009). A flat cemetery was also excavated at Ardsallagh 2 (Clarke & Carlin 2008a) and urn burials were discovered at Ardsallagh 1 (Clarke & Carlin 2008b), Collierstown 2 (Linnane 2008) and Lismullin 1 (O'Connell 2009). Two barrows are also located at Bellewstown (ME027:035, 027) and a cist is recorded at Collierstown (ME027:029001), located c. 6km to the south-west of the Platin–Oldbridge section of the road scheme.

### **Burnt Mound Activity**

Another feature particularly indicative of Bronze Age occupation are burnt mounds. Five sites on the Platin–Oldbridge section revealed this type of activity.

At Lagavooren 7 a large pit possibly representing a deer trap was adjacent to a series of troughs (1890–1690 BC) as part of a burnt mound and at adjacent Rathmullan 3, burnt early Bronze Age mound activity was represented by three troughs (Stafford 2011a). At Donore 1 (Stafford 2011b) two Beaker/early Bronze Age burnt mound troughs (2470–2280 BC) and some pits were excavated while a component of the site at 01E0449 Sheephouse 4 (Stafford forthcoming b) included

metalled surfaces, a final Neolithic/earliest Bronze Age trough (2580–2460 BC), a hearth (1910–1740 BC) and deep pits some of which contained Bronze Age pottery sherds (*ibid.*). The site was located c. 20m to the north of the Bronze Age barrow at Sheephouse 3. Some burnt mound material was also recovered from one of the fills of a ditch excavated at Rathmullan 1 however no other indication of such activities were recorded at the site (Nelis 2011b).

*Fulacht fiadh*, or burnt mounds, are the most common type of field monument in the country (O'Connor 2007, 2). In terms of dating, *fulacht fiadh* have their floruit in the middle/late Bronze Age (Grogan, O'Donnell & Johnston 2007, 96) although examples dating from the Neolithic and the Iron Age are also known. Two *fulacht fiadh* (ME020:029002–003) and a possible third (ME020:029001) are recorded in the townland of Sheephouse c. 2km to the south-west of the Platin–Oldbridge section. Further burnt mound activity is present at Colp West (ME021:016, 018, 023–024) to the east and at Carranstown (ME027:058) to the south. A large number of sites excavated to the south of Platin–Oldbridge section as part of the M1 Motorway Gormanston to Monasterboice also revealed burnt mound activity. Burnt mound activity was excavated at Lisdornan 3 (Russell 2003b), Moorechurch 1 (Russell 2003c), Claristown 1 (Russell 2003d) and Sarsfieldstown 1 (Russell 2003e), although the site excavated at Moorechurch 1 has returned an early Neolithic date. To the north of the Platin–Oldbridge section, possible burnt mound activity was excavated at Hill of Rath (Duffy 2002a), Hill of Rath 1 (Campbell 2002c), Hill of Rath 2 (Campbell 2002d), Hill of Rath 4 (Duffy 2002b), Newtown Monasterboice 1 (O'Drisceoil 2002a), Newtown Monasterboice 2 (O'Drisceoil 2002b), Newtown Monasterboice 3 (O'Drisceoil 2002c), Coolfore 2 (O'Drisceoil 2002d), Mell 1 (Campbell 2002e), Mell 4 (Campbell 2003), Mell 5 (Campbell 2002f) and Mell 11 (Duffy 2002a) as part of the M1 Motorway Gormanston to Monasterboice. Although relatively few sites have been identified or excavated in Co. Meath (O'Connor 2007, 3.), (in comparison to the large corpus of sites known across the country), it is likely that agricultural activity and land improvement projects may have obliterated surface traces of these sites (*ibid.*). Nonetheless burnt mounds played an important role in Bronze Age subsistence and their extensive distribution represents the widespread nature of Bronze Age settlement in the region.

### 3.2.2 Archaeological Landscape of site Rathmullan 2

Rathmullan 2 comprised four pits, one of which returned a date in the early Bronze Age/Beaker period (2460–2200 BC). Early Bronze Age activity was also excavated c. 300m to the south-east at Rathmullan 9 where a scatter of pits was excavated one of which contained Beaker pottery and returned an AMS date of 2470–2290 BC (Nelis 2011c). Further sites dating to this period were also excavated in this townland and included metalworking activity at Rathmullan 10 c. 600m to the south-east (Bolger forthcoming) and Beaker activity at Rathmullan 6 c. 850m to the south-east (Bolger 2011)

Further contemporary activity was excavated at Donore 1 c. 650m to the north-west and was comprised of pits related to burnt mound activity and returned an AMS date of 2470–2280 BC (Stafford 2011b). Slightly later activity was also indicated at Donore 2 c. 500m to the north-west where a cluster of pits was excavated and one of them returned a date range of 2210–2030 BC (Stafford 2011c).

Early Bronze Age activity in the area was preceded by a possible early Neolithic structure at Sheephouse 2 c. 1.3km to the north-west (Moore forthcoming) and a late Neolithic timber circle at Lagavooren 7 c. 1.4km to the south-east (Stafford forthcoming a).

Continuity of activity in the immediate area is further evidenced by early and middle Bronze Age and Iron Age activity at the adjacent site of Rathmullan 8 (Nelis 2011a) and early Bronze Age activity at Rathmullan 1 c. 50m to the south (1890–1690 BC) (Nelis 2011b)

### **3.3 Summary of the Excavation Results**

One phase of archaeological activity at the site was dated to the early Bronze Age (2460–2200 BC) and comprised four pits. The largest of the pits (C6) contained flint, charcoal and fragments of burnt bone and is likely to have functioned as a refuse pit. Pit C8 also contained flint and frequent charcoal and was also interpreted as a refuse pit. The remaining pits contained no datable finds but are thought to have been associated with the other pits at the site.

### **3.4 Summary of the Specialist Analysis**

A number of specialists provided analysis of samples and artefacts recovered from the site as part of the post-excavation works. This work in part formed the basis for the dating evidence for the site. The detailed reports on the results of all analysis are in Appendix 2.

#### ***Lithics Analysis***

The lithic finds from the archaeological excavation at Rathmullan 2, Co. Meath are seven worked pieces of flint. The artefacts are two bipolar cores, two bipolar blades, a bipolar flake and two pieces of bipolar debitage. The cores, blades and the flake all display use-wear and are technologically diagnostic. The assemblage most likely dates to the later (middle or late) Neolithic period (Sternke, Appendix 2.1).

#### ***Charcoal and Wood Species Identification***

Two charcoal samples were submitted for analysis. Fifty-three charcoal fragments, weighing a total of 1.8g, relating to the fills of pits C4 and C6 were analysed from excavations at Rathmullan 2. Oak was the only taxon present in the assemblage and may be representative of fuel collection policies where oak was selected to obtain high temperatures at the site (O'Carroll, Appendix 2.2).

#### ***Burnt Bone Analysis***

Seventeen burnt bone fragments recovered from C5 on site Rathmullan 2 were submitted for examination. The bone samples were assessed and identified to element where possible. Due to size and poor preservation it was not possible to identify any of the 17 calcined bone fragments to species. No definite or statistically detailed conclusions could be drawn from the calcined bone assemblage (McCarthy, Appendix 2.3).

#### ***Radiocarbon Dating***

A total of one sample was sent for AMS radiocarbon dating. A fragment of oak charcoal recovered from fill C5 of pit C6 returned a calibrated AMS result of 2460–2200 BC (SUERC, Appendix 2.4).

\*An assemblage of prehistoric pottery was recovered from one of the pits at this site however this is now missing presumed lost and has not been reported on. It is thought that this pottery may have been lost when the basement of UCC where the pottery was in storage was flooded.

## 4 DISCUSSION AND CONCLUSIONS

### 4.1 Discussion

One phase of archaeological activity at the site was dated to the early Bronze Age/Beaker period (2460–2200 BC) and comprised four pits. This site was situated on a north facing slope overlooking the River Boyne c. 1km to the north. It is highly likely that the features excavated on the site represent an area of domestic activity. The site was located at the edge of the area of archaeological investigation along the road-take and it is possible that these features may represent peripheral activity associated with an undiscovered settlement site outside of the line of the road.

#### **The significance of the site in the Bronze Age landscape**

The early Bronze Age pits at Rathmullan 2 add to the picture of continuity of activity in the surrounding area through much of the Bronze Age. These pits may have been contemporary with activity at the nearby site of Rathmullan 9, c. 300m to the south-east (Figure 2) where a scatter of pits was excavated one of which contained Beaker pottery and returned an AMS date of 2470–2290 BC (Nelis 2011c). Further sites dating to this period were also excavated in this townland and included Rathmullan 10 and Rathmullan 6, c. 600m and c. 850m to the south-east respectively (Bolger forthcoming, Bolger 2011).

Continuity of activity in the immediate area is further evidenced by early and middle Bronze Age and Iron Age activity at the adjacent site of Rathmullan 8 (Nelis 2011a) and early Bronze Age activity at Rathmullan 1 c. 50m to the south (1890–1690 BC) (Nelis 2011b).

#### **The surrounding environment in the early Bronze Age**

Analysis of charcoal samples retrieved from the site identified oak only and this could have originated from mixed woodlands or oak woods close to the site (O'Carroll, Appendix 2.2). At the nearby site of Rathmullan 9 oak was also the only taxon identified from the pit assemblage there (*ibid.*) and one of those pits contained Beaker pottery and returned a very similar date to Rathmullan 2.

### 4.2 Conclusions

The excavation at Rathmullan 2 uncovered four pits thought to have been associated with domestic activity. These pits add to the picture of continuity of activity in the surrounding area through much of the Bronze Age. The immediate area surrounding Rathmullan 2 contained a large number of sites, most of which were dated to the Bronze Age, and all phases of the Bronze Age were represented indicating that this landscape attracted settlement for prolonged periods throughout the Bronze Age. It is probable that the proximity of the River Boyne may have been a big attraction of the wider location which resulted in it being revisited repeatedly through time.

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## **5.2 Other Sources**

Record of Monuments and Places (RMP), The Department of the Environment, Heritage and Local Government, 7 Ely Place Upper, Dublin 2.

Topographical Files of the National Museum of Ireland, Kildare Street, Dublin 2.

## APPENDIX 1 CATALOGUE OF PRIMARY DATA

### Appendix 1.1 Context Register

Context	Fill of	L(m)	W(m)	D(m)	Interpretation	Description
C1	N/A	N/A	N/A	0.3-0.4	Topsoil.	Loamy, agricultural topsoil
C2	C4		0.8	0.12	Fill of pit.	Very compact, light brown silty clay, plastic to the touch. Occasional inclusions of charcoal and stones from 0.03m to 0.15m. Darker brown toward the base of the deposit
C3	C4	0.5	0.27	0.07	Fill of pit.	Loose brown sandy clay with inclusions of very occasional charcoal and some pebbles max. 0.02m.
C4	N/A	0.8	0.8	0.15	Cut of pit.	Subcircular, concave side, sharp B.O.S. at top, gradual at base. Flat base interrupted by two sharp indentations, small rock-sockets or truncated stake holes. 0.15m in depth, 0.80m in diameter
C5	C6	2.01	1.12	0.59	Fill of pit.	Greyish mid brown sandy clay. Moderately compact with frequent charcoal inclusions, pottery, flint burnt bone, frequent small rounded pebbles max. 0.04m and very occasional stone max. 0.10m. Occasional orange flecking possibly caused by decayed ceramic material.
C6	N/A	2.01	1.12	0.59	Cut of pit.	Sub triangular, near vertical sides at southern edge, north-eastern and south-western corners sloped gently to a blunt base, northern and north-western sides sloped at sixty degrees to a U-shaped base which met the blunt base to form a bowl-like bottom at centre of cut.
C7	C8	0.44	0.36	0.13	Fill of pit.	Dark brown sandy clay with inclusions of flint, 15% sub angular and burnt stones 0.01m - 0.15m in size. 30% of deposit consisting of charcoal.
C8	N/A	0.44	0.36	0.13	Cut of pit.	Subcircular, sharp B.O.S. top and bottom, vertical sides and flat base.
C9	C10	0.28	0.1	0.1	Fill of pit.	Brown sandy clay with moderate inclusions of charcoal and infrequent pebbles max. 0.02m.
C10	N/A	0.28	0.1	0.1	Cut of pit.	Sub-triangular, rounded corners, sharp B.O.S. top, gradual at base, concave sides, leading to bluntly tapered base. Elongated, shallow eastern edge may represent stone drag.

## Appendix 1.2 Catalogue of Artefacts

Registration Number	Context	Item No.	Simple Name	Full Name	Material	No. of Parts	Description
01E0373:1:1	1	1	Core	Bipolar flake	Flint	1	Bipolar-on-an-anvil example that was produced on a bipolar flake
01E0373:5:4	5	5	Debitage	Debitage	Flint	1	Debitage
01E0373:5:5	5	6	Debitage	Debitage.	Flint	1	Debitage
01E0373:5:58	5	58	Core	Core	Flint	1	Controlled bipolar example that was made on a bipolar split pebble flake. It shows use-wear on its left edge and was used as a natural burin
01E0373:5:59	5	59	Blade	Blade	Flint	1	Controlled bipolar or bipolar-on-an-anvil blade. It shows use-wear and polish on its right edge
01E0373:5:60	5	60	Flake	Bipolar flake	Flint	1	A bipolar example that is missing its proximal end and dist right side. It has use-wear on its left edge
01E0373:7:1	7	1	Blade	Blade	Flint	1	Blade produced using bipolar production methods.

\*An assemblage of prehistoric pottery was recovered from one of the pits at this site however this is now missing presumed lost and has not been reported on. It is thought that this pottery may have been lost when the basement of UCC where the pottery was in storage was flooded.

### Appendix 1.3 Catalogue of Ecofacts

Seven soil samples were taken from features at Rathmullan 2 and five of these were processed by flotation and sieving through a 250µm mesh. The results are listed below.

#### 1.3.1 Burnt Bone


Context number	Sample number	Feature	Sample weight (g)
5	7	Fill of C6	2.6

#### 1.3.2 Charcoal

Context number	Sample number	Feature	Sample weight (g)
9	1	Fill of C10	
2	3	Fill of C4	
5	5	Fill of C6	63.9
5	6	Fill of C6	
			Approx overall weight of charcoal is 106.4g



## Appendix 1.4 Archive Checklist

<b>Project: M1 N. Motorway C7 Platin–Oldbridge</b>	<b>Irish Archaeological Consultancy Ltd</b>	
<b>Site Name: Rathmullan 2</b>		
<b>Excavation Registration No.: 01E0373</b>		
<b>Site director: E Stafford</b>		
<b>Date: October 2010</b>		
<b>Field Records</b>	<b>Items (quantity)</b>	<b>Comments</b>
Site drawings (plans)	1	
Site sections, profiles, elevations	4	
Other plans, sketches, etc.	0	
Timber drawings	0	
Stone structural drawings	0	
Site diary/note books	1	
Site registers (folders)	1	
Context sheets	10	
Wood Sheets	0	
Skeleton Sheets	0	
Worked stone sheets	0	
Digital photographs	0	
Photographs (print)	4	
Photographs (slide)	0	
<b>Finds and Environ. Archive</b>		
Flint/chert	7	
Stone artefacts	0	
Pottery (specify periods/typology)	0	
Ceramic Building Material (specify types eg daub, tile)	0	
Metal artefacts (specify types - bronze, iron)	0	
Glass	0	
Other find types or special finds (specify)	0	
Human bone (specify type eg cremated, skeleton, disarticulated)	0	
Animal bone	1	Burnt bone
Metallurgical waste	0	
Enviro bulk soil (specify no. of samples)	7	
Enviro monolith (specify number of samples and number of tins per sample)	0	
Security copy of archive	Yes	Digital copy

## **APPENDIX 2 SPECIALIST REPORTS**

Appendix 2.1 Lithics Analysis Report – Farina Sternke

Appendix 2.2 Charcoal and Wood analysis Report – Ellen O'Carroll

Appendix 2.3 Faunal Assemblage Report – Aoife McCarthy

Appendix 2.4 Radiocarbon Dating Results – SUERC Laboratory



**Appendix 2.1 Lithics Analysis Report – Farina Sternke**

THE LITHICS  
RATHMULLAN 2 (01E0373), CO. MEATH

FARINA STERNKE  
MA, PHD

OCTOBER 2010

## Introduction

A total of 7 lithic finds from the archaeological excavation of a prehistoric site at Rathmullan 2, Co. Meath as part of an archaeological mitigation programme associated with the M1 Road Scheme were presented for analysis (Table 1). The finds are associated with four pits.

Find Number	Context	Material	Type	Cortex	Condition	Length (mm)	Width (mm)	Thickn. (mm)	Complete	Retouch
01E0373:1:1	1	Flint	Core	No	Lustred	19	20	7	Yes	No
01E0373:5:4	5	Flint	Debitage							
01E0373:5:5	5	Flint	Debitage							
01E0373:5:58	5	Flint	Core	Yes	Reasonably Fresh	32	17	9	Yes	No
01E0373:5:59	5	Flint	Blade	No	Lustred	28	11	4	Yes	No
01E0373:5:60	5	Flint	Flake	No	Patinated	20	26	7	No	No
01E0373:7:1	7	Flint	Blade	No	Lustred	31	11	6	Yes	No

**Table 1:** Composition of the lithic assemblage from Rathmullan 2 (01E0373)

## Methodology

All lithic artefacts were examined visually and catalogued using Microsoft Excel. The following details were recorded for each artefact which measures at least 2cm 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.

## Quantification

The lithics are seven worked pieces of flint (Table 1). Five artefacts are larger than 2cm in length and width or are technologically and typologically significant and were therefore recorded in detail.

## Provenance

The lithics were recovered from the topsoil C1 (01E0373:1:1), the fill C5 of a pit C6 (01E0373:5:4–5 and 01E0373:5:58–60) and the fill C7 of a pit C8 (01E0373:7:1).

### Condition:

The lithics survive in reasonably fresh (01E0373:5:58), patinated (01E0373:5:60) and lustred (01E0373:1:1, 01E0373:5:59 and 01E0373:7:1) condition. The lustre observed on artefacts 01E0373:1:1, 01E0373:5:59 and 01E0373:7:1 is a result of their exposure to heat, i.e. they did not directly come into contact with fire, but were perhaps left lying beside a hearth. Artefact 01E0373:5:60 is incomplete and artefact 01E0373:5:58 bears the remnants of cortex.

### Technology/Morphology:

The artefacts are two cores (01E0373:1:1 and 01E0373:5:58), two blades (01E0373:5:59 and 01E0373:7:1), a flake (01E0373:5:60) and two pieces ofdebitage (01E0373:5:4–5).

Core (01E0373:1:1) is a very small bipolar-on-an-anvil example that was produced on a bipolar flake. It displays use-wear on its left edge and edge damage, but is not retouched. The core is 19mm long, 20mm wide and 7mm thick.

Core (01E0373:5:58) is a classic controlled bipolar example that was made on a bipolar split pebble flake. It shows use-wear on its left edge and was used as a natural burin. The core measures 32mm in length, 17mm in width and 9mm in thickness.

The two blades (01E0373:5:59 and 01E0373:7:1) were produced using bipolar production methods. Blade 01E0373:5:59 is a controlled bipolar or bipolar-on-an-anvil blade. It shows use-wear and polish on its right edge.

Blade 01E0373:7:1 was made on a frost-fractured nodule and also displays use-wear and polish on its right edge.

The blades measure 28mm and 31mm in length, 11mm in width and 4mm and 6mm in thickness, respectively.

The only flake (01E0373:5:60) is a bipolar example that is missing its proximal end and dist right side. It has use-wear on its left edge. The flake measures 20mm long, 26mm wide and 7mm thick.

The two pieces of flint debitage (01E0373:5:4-5) may be associated with bipolar knapping that presumably took place in close proximity to the pits

#### Dating:

The lithic assemblage from Rathmullan 2 is technologically diagnostic. The use of the bipolar technology is generally associated with the late Neolithic and the Bronze Age (O'Hare 2005; Woodman *et al.* 2006). However, the controlled bipolar method generally dates to the middle Neolithic period, but may also have been occasionally used in the late Neolithic period (Sternke pers. obs.). The small size of the cores may point to a later rather than an earlier date in the Neolithic period.

#### **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.

#### **Summary**

The lithic finds from the archaeological excavation at Rathmullan 2, Co. Meath are seven worked pieces of flint. The artefacts are two bipolar cores, two bipolar blades, a bipolar flake and two pieces of bipolar debitage. The cores, blades and the flake all display use-wear and are technologically diagnostic. The assemblage most likely dates to the later (middle or late) Neolithic period. The assemblage is associated with activities such as wood working and food processing that may have taken place in the immediate vicinity of the pits, as part of a larger settlement site that is located outside the road-take.

This site makes a minor contribution to the evidence for Neolithic settlement in Co. Meath.

### Recommendations for Illustration

- Core (01E0373:1:1)
- Core (01E0373:5:58)
- Blade (01E0373:5:59)

### Bibliography

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**Appendix 2.2 Charcoal and Wood analysis Report – Ellen O’Carroll**

THE CHARCOAL REMAINS  
RATHMULLAN 2 (01E0373), CO. MEATH

ELLEN O’ CARROLL  
MA DIP EIA MGT

NOVEMBER 2010



## **Table of Contents**

1	Background and Introduction
2	Methodology
3	Description of feature types and receiving environment
4	Results and Analyses
5	Discussion of the charcoal assemblage
6	Summary and conclusions on the charcoal assemblage
7	References

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Table 1 Wood taxa present in the charcoal assemblage from Rathmullan 2.

Table 2 Taxa types identified from the charcoal assemblage from Rathmullan 2.

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Figure 1 All taxa identified from Rathmullan 2.

## 1 Background and Introduction

Excavation of a series of pits containing archaeological material was undertaken in the townland of Rathmullan, Co. Meath in 2001 as part of the archaeological resolution of the M1 Northern Motorway, Contract 7 (Rathmullan 2; Licence No. 01E0373; Stafford 2001). A small quantity of lithic material characteristic of the late Neolithic/early Bronze Age and burnt animal bone, as well as charcoal fragments were recovered from the excavation (Sternke 2010; McCarthy 2010). A date of 2460–2200 BC (cal. 2 Sigma) was returned for activity on the site.

Two samples were submitted for analysis, comprising S3/C2/fill of a pit C4 and S6/C5/fill of a pit C6. A total of 53 charcoal fragments, weighing a total of 1.8g, were analysed. Oak was the only taxon present. The level of preservation within the charcoal assemblage was moderate.

Wood and its by-product, charcoal, was a vital and widely used material from prehistoric to medieval times, although its importance is rarely reflected in the analysis of archaeological assemblages mainly due to its perishable nature. It is important to note that people in prehistoric, early Christian and medieval communities were mainly dependant on woodland resources for the construction of buildings, for the manufacture of most implements and for fuel for wood-burning and metalworking activities. The woods in a surrounding catchment area were exploited and often managed to provide an essential raw material for the community. A study of the range of species on an archaeological site offers an indication of the composition of local woodland in its period of use and any selection policies for particular species at any given time and place *i.e.* post-holes, wall-posts, burnt remains of wattle and so on. In summary, charcoals are excellent indicators of exploited environments and the vegetation that developed within them.

The analysis completed from the charcoal recovered from Rathmullan 2 and indeed from the whole road scheme will contribute to the rapidly expanding database of environmental indicators particularly in relation to the prehistoric period in the area. This area of work is especially important in Ireland where there are very little written records up to the 18th century relating to the amount and type of woodland in Ireland (McCracken 1971, 15).

The analysis presented here concentrates on species identification, species selection and the composition of the local woodland during the early Bronze Age period in the townland of Rathmullan, Co. Meath.

## 2 Methodology

The process for identifying wood, whether it is charred, dried or waterlogged is carried out by comparing the anatomical structure of wood samples with known comparative material or keys (Schweingruber 1990). A wood reference collection from the Botanical Gardens in Glasnevin, Dublin was also used.

### *Charcoal*

The identification of charcoal material involves breaking the charcoal piece along its three sections (transverse, tangential and radial) so clean sections of the wood pieces can be obtained. This charcoal is then identified to species under a universal compound microscope reflected and transmitted light sources at magnifications x 10-400. By close examination of the microanatomical features of the samples, the charcoal species are determined.

The purpose of the charcoal identifications was two-fold. In some cases the identifications were carried out prior to <sup>14</sup>C dating in order to select specific species

for dating. In other cases the charcoal was analysed to determine fuel selection policies and selection of wood types for structural use. Each species was identified, bagged together and then weighed. Insect channels were noted on the charcoal fragments identified, as this may indicate the use of dead or rotting wood used for fuel or other such functions. The distinction can sometimes be made between trunks, branches and twigs if the charcoal samples are large enough. This was noted where possible. When charcoal samples showed indications of fast or slow growth this was also recorded. The samples identified for environmental reconstruction and wood usage were counted per fragment and then weighed and tabulated.

A number of wood taxa cannot be identified to species or sub-species level anatomically, notably oak (*Quercus* sp), which is relevant to the discussion of this report.

### **3 Description of feature type and receiving environment**

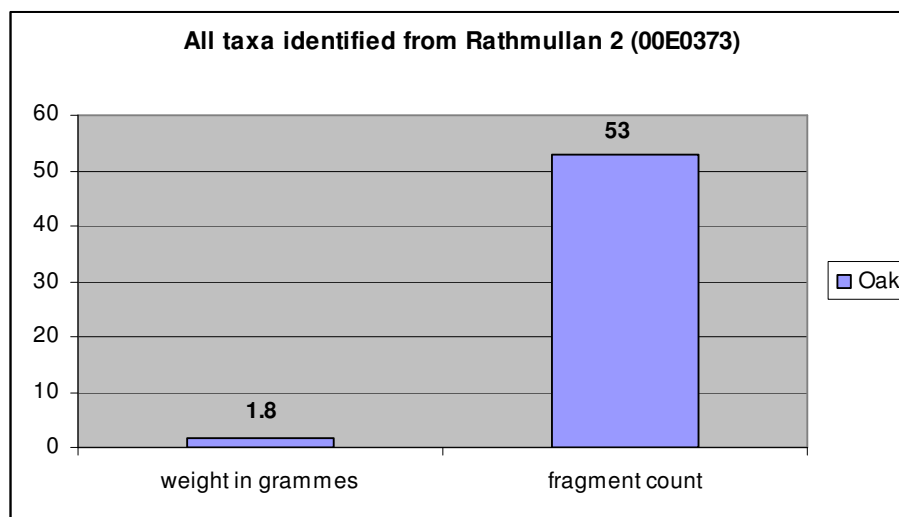
Rathmullan 2 was located in Rathmullan townland, Co. Meath (Chainage 23475; NGR 306590, 273860). The site was located in an area of firm ground sloping down into the Boyne Valley (Stafford 2002). The townland name is derived from *Rath Maoláin* or 'Moylan's fort' and is thought to have been named after a rath or ringfort on the western side of the townland ([www.logainm.ie](http://www.logainm.ie)). The site lay within an area of high archaeological potential, with several archaeological sites recorded from the immediate vicinity, including a possible Beaker settlement at Rathmullan 9 (Licence No. 01E0390; Nelis 2003).

Rathmullan 2 comprised the poorly preserved remains of a domestic site. Samples for analysis were recovered from S3/C2/fill of a pit C4 (Dims. 0.15m in depth; 0.80m in diameter) and S6/C5/fill of a possible refuse pit C6 (Dims. 0.59m in depth; max. 2.01m in diameter). The refuse pit contained a large quantity of prehistoric pottery, charcoal, flint and burnt bone. An oak branch from the fill of the pit was dated to 2460-2200 BC.

Rathmullan 2 was discovered during archaeological monitoring, carried out by Valerie J. Keeley Ltd, along the line of the M1 Northern Motorway (Drogheda Bypass) Contract 7 (*ibid.*, 1).

### **4 Results & Analysis**

A total of 53 charcoal fragments, weighing a total of 1.8g, were analysed from Rathmullan 2. Oak (*Quercus* sp.) was the only taxon present. The weight and fragment count identified from the assemblage is represented below in Figure 1 and Table 1. Three tiny fragments of oak charcoal, between 1–2mm in diameter and between 2–3 years in age, were identified from S3/C2. The sample recovered from the fill of the refuse pit C6 was considerably larger. Fifty fragments of oak charcoal were identified. Although the fragments were quite small (between 1–3mm in diameter) and the microstructure was quite distorted, it was possible to determine that the wood was between 1–8 years in age. The taxa identified are likely to have been deliberately selected for use at the site and will be discussed in detail in the comparative section below.

**Figure 1** All taxa identified from Rathmullan 2.**Table 1** Wood taxa present in the charcoal assemblage from Rathmullan 2.

Sample No.	Feature/Context No.	Feature Description	Identifications	Comment	Date
3	C2	Fill of C4, a sub-circular pit with concave sides, filled by C2 and C3. Sharp B.O.S. at top, gradual at base. Flat base interrupted by two sharp indentations, small rock-sockets or truncated stake holes. 0.15m in depth, 0.80m in diameter. C2 comprised a very compact, light brown silty clay with occasional inclusions of charcoal and stones. Darker brown toward the base of the deposit. Dims: 0.12m in depth, 0.80m in width.	Oak (3f*, 0.1g*)	1 - 2mm in diameter; 1 - 2 years in age. Very little charcoal in sample.	Prehistoric
6	C5	Fill of C6, a possible rubbish pit (Dims. 0.59m in depth, max.2.01m in diameter). C5 comprised a greyish mid- brown, moderately compacted sandy clay with frequent inclusions of charcoal, pottery, flint, burnt bone, and small rounded pebbles.	Oak (50f, 1.7g).	Small fragments and microstructure quite distorted. 1 - 3mm in diameter; 1 - 8 years in age.	2460-2200 BC (cal. 2 Sigma).

\*g = weight in grammes \*f = fragment count

## 5 Discussion of the charcoal assemblage

### Aims of the study

1. To determine the types of wood selected for use either as fuel or as structural wood.
2. To re-construct the environment that the charcoal and wood was selected from and compare with other similar sites in Ireland.

3. To determine use and function of particular features and their associated charcoal through the identification of taxa types.

### Wood types identified from charcoal and wood assemblages

**Table 2** Taxa types identified from the charcoal assemblage from Rathmullan 2.

Botanical Name	Species
<i>Quercus</i> sp.	Oak

Fifty-three charcoal fragments, weighing a total of 1.8g, relating to the fills of a pit C4 and a refuse pit C6 were analysed from excavations at Rathmullan 2. Work was carried out as part of the archaeological resolution of the M1 Northern Motorway (Drogheda By-pass), Contract 7.

Oak was the only taxon present. Three fragments were identified from S3/C2 and the remaining fragments were identified from S6/C5. The oak charcoal was between 1 and 8 years in age and between 1 and 3mm in diameter. Oak charcoal was particularly important to activities which required heat, as it burned hotter and cleaner than wood and was considered superior to wood. Oak woods were valued for their natural resource of timber for many requirements including raw material for metalworking activities. Oak is a dense wood and is very suitable for charcoal production and metalworking activities. The heavier and denser the wood, the higher is its calorific value. Oak can burn for a considerable period of time and reach extremely high temperatures necessary for the production of metal objects and smelting activities. Oak also makes good firewood when dried. It has excellent properties of great durability and strength and was frequently used throughout the prehistory for the production of large timbers, for charcoal production and for activities associated with metalworking. It will grow in wetter areas when other variable conditions are present. Oak timbers are often used to line troughs at *fulacht fiadh* sites. At the late Bronze Age site of Cahiracon Co. Clare (02E0952), radially-split oak timbers lined the trough (O'Donnell 2005). A *fulacht fiadh* at Fauleens townland, excavated as part of the N5 Charlestown Bypass in Co. Mayo, uncovered the well-preserved remains of an oak trough under the mound (O'Carroll 2007a). Oak was also the dominant taxa identified at a burnt mound site at Urraghry, Co. Galway, which was dated to the early Bronze Age (Drumm *et al* 2009).

The wood identified from Rathmullan 2 could have originated from mixed woodlands or oak forest nearby. Oak, which is a tall canopy tree, is more indicative of a dryland environment.

### Comparative Material

The charcoal analysis completed for Rathmullan 2, Co. Meath adds to the growing amount of information obtained from the analysis of wood and charcoal from prehistoric sites excavated in Ireland and in particular in Co. Meath. The pits at the site are thought to represent the remains of a prehistoric occupation site. Although the pottery found in C6 had not been identified at the time of writing, at the nearby site of Rathmullan 9, a quantity of Beaker pottery was recovered (01E0390; Nelis 2003). Oak was also the only taxon identified from the pit assemblage there (O'Carroll 2010). The results from Rathmullan 2 are similar to those from Donore 1, Co. Meath also as excavated as part of M1 and of a similar date where hazel and oak were the only taxa present in the pits (O'Carroll 2010). Faughart Lower 6, Co. Louth, which was excavated in 2004 as part of the M1 Dundalk Western By-pass (Licence no. 04E0335; Hayes 2007) also provides comparative evidence to the analysis at Rathmullan 2. Beaker pottery of various styles was recovered from two

waste pits, which also contained cremated animal bone and charcoal. Wear analysis suggested that the potsherds had been exposed either on a floor surface or midden, prior to being deposited in the pits (*ibid.*, 28). Charcoal sampled from the pits was identified as hazel, malvoideae and oak, which was of poor enough quality to indicate that it had been gathered either from the forest floor or from selected degraded wood species for use as firewood (*ibid.*, 29). Radiocarbon dating of hazel charcoal from the two pits returned a date of between 2860–2460 cal. BC (*ibid.*, 30). A kidney-shaped pit containing fragments of Beaker pottery and animal bone was found at Dunboyne 3, Co. Meath, excavated as part of the M3 Clonee to North of Kells Road Scheme (AO17/013/E3035; O'Hara 2008). A variety of taxa was identified from the fill of the pit, including ash (the dominant taxon), elm, oak, malvoideae and hazel (*ibid.*, 2). Analysis showed that the wood was likely to have been collected as firewood (*ibid.*, 3). Ash charcoal from the fill returned a date of 2576–2341 cal. BC. During the excavation of the pit circle at Newgrange during the mid-1980s, Beaker pottery was recovered from a series of waste pits associated with a house site found in its interior (Sweetman 1987). Charcoal from the pits was identified as oak. Beaker activity at Knowth produced evidence for the use of hazel, alder, elm and oak (Stout 2002, 37).

The comparative evidence shows that the wood species identified from the charcoal assemblages are indicative of wood gathering policies at these sites and that they reflect aspects of the local landscape in the late Neolithic/early Bronze Age, rather than any specific selection policy.

## 6 Summary and conclusions on the charcoal assemblage

Rathmullan 2 comprised the poorly preserved remains of a domestic site. Samples for analysis were recovered from S3/C2/fill of a pit C4 and S6/C5/fill of a possible refuse pit C6. The refuse pit contained a large quantity of prehistoric pottery, charcoal, flint and burnt bone. An oak branch from the fill of the pit was dated to 2460–2200 BC. Fifty-three charcoal fragments, weighing a total of 1.8g were analysed. Oak was the only taxon present in the assemblage.

The charcoal may be representative of fuel collection policies where oak was selected to obtain high temperatures at the site.

The wood identified from the analysed feature could have originated from mixed woodlands or oak woods nearby to the site at Rathmullan 2.

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**Appendix 2.3 Faunal Assemblage Report – Aoife McCarthy**

THE FAUNAL REMAINS & BURNT BONE  
OLDBRIDGE 4 (01E0267), CO. MEATH

AOIFE MCCARTHY MA BA

OCTOBER 2010

## 1. Introduction

### 1.1 Introduction

This report details the osteological analysis of burnt bone fragments recovered during sieving of bulk soil samples from site 01E0373 Rathmullan 2 in the townland of Rathmullan, Co. Meath as part of the archaeological mitigation programme of the M1 Northern Motorway Gormanston-Monasterboice, Contract 7. Aoife McCarthy MA (Osteoarchaeology University of Southampton 2006) undertook the analysis on behalf of Irish Archaeological Consultancy Ltd. in September 2010. At the time of writing this report, background archaeological information was obtained from a draft interim excavation report (Stafford, E. 2010) and from consulting the original site register documents.

### 1.2 General Osteological Information

The osteological analysis of burnt bone recovered during sieving of bulk soil samples from site 01E0373 Rathmullan 2 was undertaken to provide an overview of the osteoarchaeological aspect of the site and determine if the material could provide further interpretation of site activity.

A total of 17 fragments from 13 possible skeletal elements, weighing 2.7g were recorded within the assemblage. The degree of preservation of the burnt bone assemblage recovered at Rathmullan 2 was poor with a high degree of fragmentation.

The burnt bone fragments recovered at site 01E0373 originated from C5 the fill of pit feature C6. Due to the high degree of fragmentation and minute size of the individual bone pieces it was not possible to identify any of the 17 bone fragments to species. These were classed as indeterminate vertebrate of medium size.

## 2. Methodology

**SPECIES IDENTIFICATION:** Identification of the bones involved reference to Schmid (1972) and Hillson (1992) as well as comparison with the author's own reference material. The closely related taxa of sheep and goat are difficult to distinguish and where grouped under the term '*caprinae*'

- **NISP:** Number of Identified Specimens Indicates the total number of fragments found.
- **MNI:** Minimum Number of Individuals. Indicates the minimum number of individuals from every species that were present in the material. Estimating MNI is calculated on the specimen of the most abundant skeletal element present; whilst taking age, sex, size and archaeological context into account.
- In order to calculate accurate MNI and MNE figures for each species, bird as well as mammal, a method of zoning was implemented when recording (Serjeantson, 2000). This method was used so as to compensate for any possible biases due to fragmentation; siding was also taken into account at this point.
- **MNE:** Minimum Number of Elements. Indicates the minimum number of anatomical units that are present and what side they are from. To avoid getting a higher MNE all loose epiphyses have to be paired with all un-fused diaphysis.

BUTCHERY/GNAWING/BURNING: Evidence for butchery was recorded under the categories of cut, chopped, chopped and cut. All specimens were analysed for evidence of rodent or carnivorous gnawing as well as evidence of burning. Burnt bones were recorded in accordance with colour changes resulting from differing heat levels e.g. calcined bones acquire a bluish-whitish hue through exposure to high temperatures.

PATHOLOGY: The discovery of any injury and/or pathology was recorded for all specimens, where present.

### 3. Results

#### Context 5 Sample 7

##### INDETERMINATE VERTEBRATE

Due to a high degree of fragmentation and minute size a series of 17 unidentifiable bone fragments of indeterminate vertebrate were recovered during sieving of bulk soil samples site 01E0373. All 17 indeterminate bone fragments recovered at Rathmullan 2 displayed evidence of exposure to a high level of heat, resulting in calcination of the bone. Contact of bone with heat diminishes its moisture content and results in the combustion of the organic or collagen component; the remaining structure of the bone after this process is mineral. Such distortion to the bone structure reduces its size and as detailed alters bone colour (Luff R. & Pearce J. 1994). As Devlin J.P. & Herrmann N. P (2008, 109) state “*increasing exposure to heat bone progresses through a sequence of colours from unburned tan, to shades of dark brown to black, progressing to blue and grey and finally to white.*” A quantity of unidentifiable bone fragments recovered from sieving consisted of tiny fragments of cortical bone.

### 4. Summary

Seventeen burnt bone fragments recovered from archaeological context C5 on site Rathmullan 2 were submitted for examination. The bone samples were assessed and identified to element where possible. Due to size and poor preservation it was not possible to identify any of the 17 calcined bone fragments to species. No definite or statistically detailed conclusions could be drawn from the calcined bone assemblage retrieved from 01E0373 Rathmullan 2 due to its limited size and poor degree of preservation.

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#### **GLOSSARY OF TERMS:**

TAPHONOMY: The study of the processes affecting an organism after death from the time of burial until collection.

CORTICAL BONE: Osseous tissues that fill the interior cavity of bones and resemble a sponge or honeycomb.

DIAPHYSIS: Bone shaft

**Bone Database:**

Spec.	C	S	Taxa	Anat.	Side	Prox.	Dist.	1	2	3	4	5	6	7	8	But	Bu	G	Q	W (g)	Comments
1	C5	7	Unid Med Size	Long Bone													G W		5	1.3	Calcined poorly preserved fragments of diaphysis, cortical bone exposed. Bone surface shows evidence of cracking
2	C5	7	Unid	Unid													G W		12	1.4	Series of small-tiny poorly preserved calcined, un-diagnostic fragments of cortical bone

**KEY:**

C= Context

R=Rodent

Q=Quantity of Pieces

But=Butchery

Anat=Anatomical Element

Dist=Distal

S=Sample

G=Gnaw

G=Grey

Bu=Burnt

Taxa=Taxon

W=White

Unid=Unidentifiable

Prox=Proximal



## Appendix 2.4 Radiocarbon Dating Results – SUERC Laboratory

The  $^{14}\text{C}$  age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The “Calibrated date range” is equivalent to the probable calendrical age of the sample material and is expressed at the one Sigma (68.2% probability) and two-Sigma (95.4% probability) level of confidence.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).

Context	Sample No	Material	Species id/ Weight	Lab	Lab Code	Date Type	Calibrated date ranges	Measured radiocarbon age (BP)	$^{13}\text{C}/^{12}\text{C}$ Ratio ‰
C5, Fill of pit C6	5	Charcoal	<i>Quercus</i> , Oak branch (0.15g)	SUERC	SUERC-31897	AMS(Std)	Cal 2400–2200BC (1 sigma), Cal 2460–2200BC (2 sigma)	3840 ± 30	-27.1‰





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

<b>RMP No</b>	<b>Description</b>
ME020-008	Enclosure site
ME020-014	Promontory Fort inland
ME020-021	Ringfort

See Figure 2 for location.

**APPENDIX 4 M1, CONTRACT 7, PLATIN–OLDBRIDGE SITE NAMES**

Excavation Licence No.	Prelim Report Site Name	Post-Excavation and Dissemination Services Site Name	Director
00E0810	Sheephouse 2	Sheephouse 2	D. Moore
00E0811	Sheephouse 3	Sheephouse 3	D. Nelis
00E0813	Rathmullan 10	Rathmullan 10	T. Bolger
00E0822	Platin 22	Platin/Lagavooren 1	Rob Lynch
00E0914	Rathmullan 15/16	Lagavooren 7	E. Stafford
01E0113	Platin 25	Lagavooren 3	R. Lynch
01E0129	Platin 19	Lagavooren 5	D. Moore
01E0161	Platin 20	Lagavooren 1	R. Lynch
01E0162	Platin 24	Lagavooren 2	R. Lynch
01E0163	Platin 26	Lagavooren 4	R. Lynch
01E0266	Oldbridge 1	Oldbridge 5	D. Nelis
01E0267	Oldbridge 4	Oldbridge 4	D. Nelis
01E0293	Rathmullan 14	Rathmullan 3	E. Stafford
01E0294	Rathmullan 12	Rathmullan 6	T. Bolger
01E0295	Rathmullan 13	Rathmullan 7	T. Bolger
01E0373	Donore 6	Rathmullan 2	E. Stafford
01E0383	Rathmullan 1	Rathmullan 1	D. Nelis
01E0386	Rathmullan 4	Rathmullan 4	D. Nelis
01E0387	Rathmullan 5	Rathmullan 5	D. Nelis
01E0390	Rathmullan 9	Rathmullan 9	D. Nelis
01E0396	Lagavooren 17	Lagavooren 6	E. Stafford
01E0398	Donore 1	Donore 1	E. Stafford
01E0399	Donore 2	Donore 2	E. Stafford
01E0400	Donore 3	Donore 3	E. Stafford
01E0433	Rathmullan 9 (ext)	Rathmullan 8	D. Nelis
01E0449	Sheephouse 2 (ext)	Sheephouse 4	E. Stafford
01E0907	Sheephouse 23	Sheephouse 1	D. Nelis

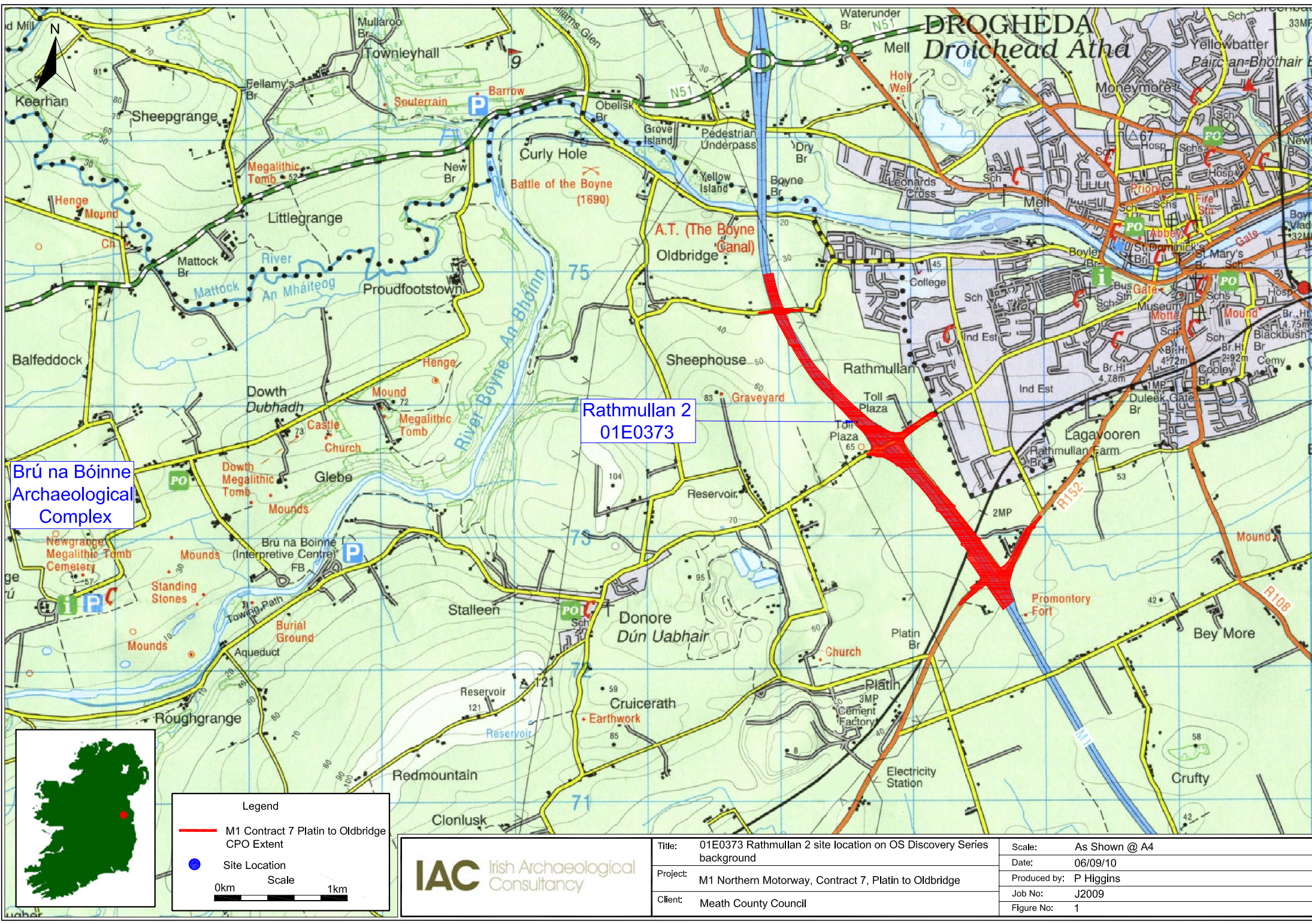
The following site was located in the section between Gormanston and Platin but was also excavated by IAC.

Excavation Licence No.	Prelim Report Site Name	Post-Excavation and Dissemination Services Site Name	Director
01E0411	River Nanny	River Nanny Balgeen	F O'Carroll

## APPENDIX 5 NRA DATABASE CONTENTS SHEET

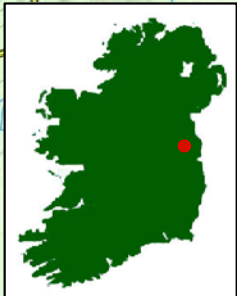
Database entry	Comment
Excavation number	01E0373
Townland	Rathmullan
Site name	Rathmullan 2
County	Meath
Project reference	M1 Northern Motorway Platin to Oldbridge
Year of excavation	2001
Grid reference (Easting)	306590
Grid reference (Northing)	273860
OD Height (m)	57
Landscape setting	Rathmullan 2 was located at about 57m OD. There is a recorded ringfort (ME020-021) located c. 250m to the south-east (Figure 2). The first edition OS survey map of 1837 shows the rectangular shaped field divided into two square-shaped fields. The ringfort is marked just north of the third class road
Project Archaeologist	Mary Deevy
Site Director	Emmet Stafford
Archaeological consultancy	IAC Ltd
Identification technique	Test Trenching
Site type	Prehistoric pits.
Site activity	Pits
Dating period	Early Bronze Age
Radiocarbon dates	SUERC 31897, oak charcoal, pit; 3840 $\pm$ 30 BP, 2460-2200 BC (2 Sigma).
Dendro-chronological dates	None.
Descriptions	Four small pits grouped randomly.
Artefacts	6 pieces of flint.
Environmental evidence	<i>Charcoal and Wood Analysis</i> : Single taxa of oak charcoal were identified from the fills of the pits C4 and C6.
Additional information	N/A
Publication	N/A





Brú na Bóinne  
Archaeological  
Complex

Rathmullan 2  
01E0373



Legend

- M1 Contract 7 Platin to Oldbridge CPO Extent
- Site Location

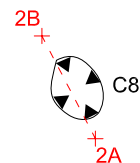
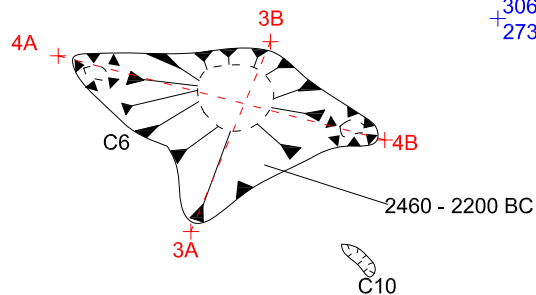
Scale 0km 1km

IAC Irish Archaeological Consultancy	Title:	01E0373 Rathmullan 2 site location on OS Discovery Series background	Scale:	As Shown @ A4
	Project:	M1 Northern Motorway, Contract 7, Platin to Oldbridge	Date:	06/09/10
	Client:	Meath County Council	Produced by:	P Higgins
			Job No:	J2009
			Figure No:	1





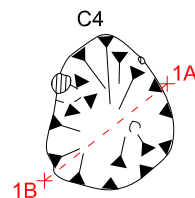




57.22  
^

+306586,  
273858

+306591,  
273858



0m Scale 2.5m

#### Legend

- Break of slope
- Sections
- Cxx Cut numbers
- xxxxxx National Grid Reference
- xx.xx Levels - metres OD

**IAC** Irish Archaeological  
Consultancy

Title: 01E0373 Rathmullan 2 plan of site

Project: M1 Northern Motorway, Contract 7, Platin to Oldbridge

Client: Meath County Council

Scale: 1:50 @ A4

Date: 12/10/10

Produced by: G Kearney

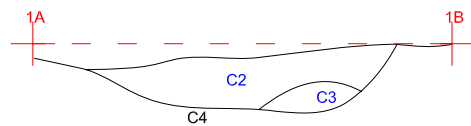
Job No: J2009

Figure No: 4

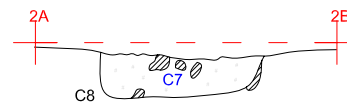
Limit of excavation



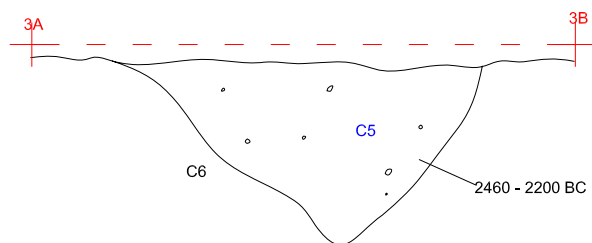
Northwest facing section of C4



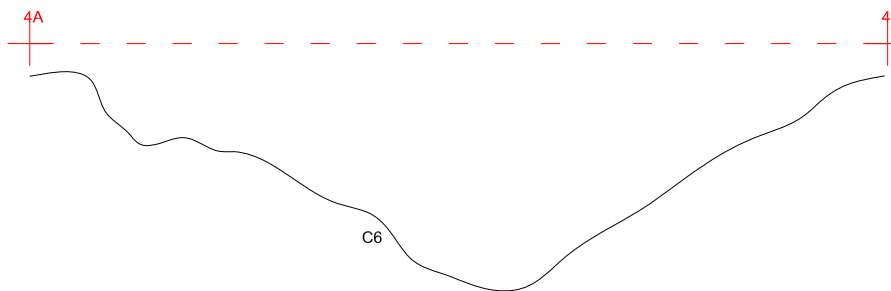
Northeast facing section of C8



ESE facing section of C6



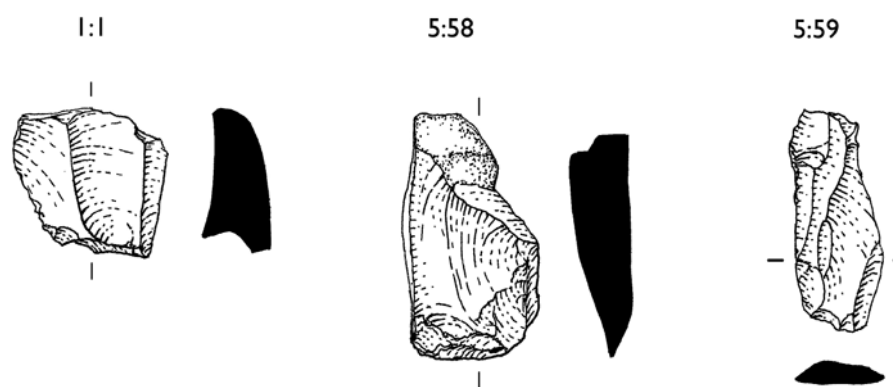
WNW-ESE profile of C6



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

**IAC** Irish Archaeological Consultancy

Title:	01E0373 Rathmullan 2 sections	Scale:	1:20 @ A4
Project:	M1 Northern Motorway, Contract 7, Platin to Oldbridge	Date:	12/10/10
Client:	Meath County Council	Produced by:	G Kearney
		Job No:	J2009
		Figure No:	5



01E0373  
RATHMULLAN 2





Plate 1: 01E0373 Rathmullan 2 overview of site, facing west.



Plate 2: 01E0373 Rathmullan 2 pit C6, post-excavation, facing north-west.





Plate 3: 01E0373 Rathmullan 2 pit C4, post-excavation, facing west.

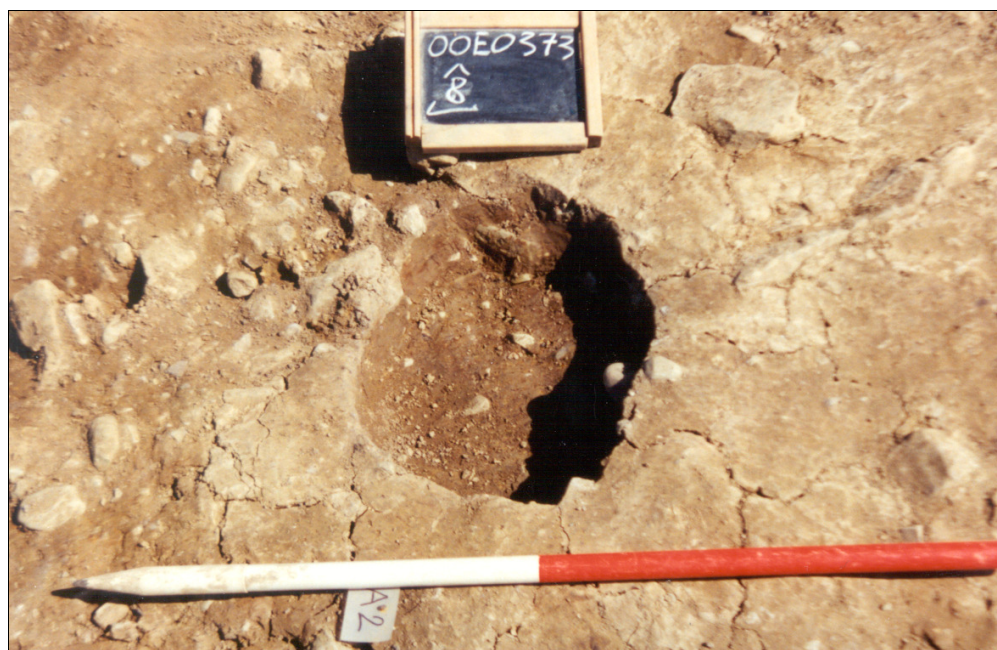


Plate 4: 01E0373 Rathmullan 2 pit C8, post-excavation, facing north-west.