

Archaeological Excavation Report E2411 - Ballynacarriga I, Co. Cork

Dry water course





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Ballynacarriga 1

Co Cork

May 2011

Client: **Cork County Council**

Project: **N8 Fermoy to Mitchelstown**

E No: **E2411**

Excavation Director: **John Lehane**

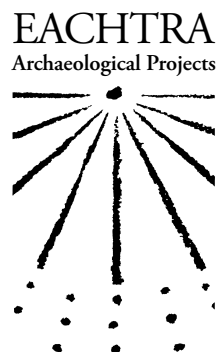
Written by: **John Lehane and Jacinta Kiely**



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Excavation Director
John Lehane

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Summary

The excavation of the site at Ballynacarriga 1 revealed a dry water course. The stream may have been diverted during construction works associated with the nearby Ballynacarriga House. A flint flake and sherds of 18th/19th century pottery were recovered from the sands and gravels of the dry water course. The flint flake dates to the Neolithic period.

Project Details

Road project name	N8 Fermoy to Mitchelstown
Site name	Ballynacarriga 1
Ministerial Order no.	A040
E no.	E2411
Site director	John Lehane
Townland	Ballynacarriga
Parish	Kilcrumper
Barony	Condon & Clangibbon
OS Map Sheet No.	CO27
National Grid Reference	181584 102225
Chainage	1100

Acknowledgements

The senior archaeologist was John Tierney and the post-excavation managers were Penny Johnston and Jacinta Kiely. Administration of the project was by Choryna Kiely and Fiona Greene. Illustrations are by Ben Blakeman and Maurizio Toscano. Photographs are by John Sunderland, Hawkeye and Eachtra Archaeological Projects. Specialist analysis was carried out by Farina Sternke. The project was funded by the Irish Government under the National Development Plan 2007-2013 and was commissioned by Cork County Council on behalf of the National Roads Authority. The project archaeologist was Ken Hanley.

1 Scope of the project

The archaeological works associated with the N8 Fermoy to Mitchelstown Bypass was carried out on behalf of Cork County Council, National Road Design Office, Richmond, Glanmire, Co. Cork. The project was funded by the Irish Government under the National Development Plan 2007-2013. The total archaeological cost was administered by the National Roads Authority through Cork County Council as part of the Authority's commitment to protecting our cultural heritage. The purpose of the archaeological services project was to conduct archaeological site investigations within the lands made available, to assess the nature and extent of any potential new sites uncovered and to preserve by record those sites of agreed archaeological significance, as approved by the Department of Environment, Heritage and Local Government in consultation with the National Museum of Ireland.

Phase 1 of the project (archaeological testing of the route) was carried out in October 2005 under licence 05E1150 issued by Department of the Environment Heritage and Local Government (DoEHLG). The principal aim of this phase of the project was to test for any previously unknown sites by a programme of centreline and offset testing and to test sites of archaeological potential identified in the EIS and geophysical surveying. Five Cultural Heritage Sites were tested under individual excavation licences 05E1122-05E1126.

Phase 2 of the project (resolution) involved the resolution of all archaeological sites identified within the proposed road corridor prior to commencement of the construction of the bypass. This phase of the project was carried out from September 2006 to September 2007 and excavations were conducted under the management of a Senior Archaeologist. A total of 28 sites were excavated during this phase of works under separate licences issued by DoEHLG.

A post-excavation assessment and strategy document was prepared in Phase 3 of the project to present a management strategy for dealing with post-excavation work arising from archaeological works along the route of the new N8 Fermoy to Mitchelstown Bypass. It included a proposal for post-excavation and archiving work and a budget for the works. The document detailed the location of the route, the receiving environment, the archaeological and historical background, the scope of the project and the circumstances and scope of fieldwork. The document presented a scheme-wide summary of the archaeological findings, a research framework within which the findings were dealt with and a publication plan and dissemination strategy for the end results.

2 Route location

The route of the N8 Fermoy to Mitchelstown road is located in the rich pastureland of North Cork (Figure 1). The project involves the construction of c. 16 km of the N8 from Gortore north of Fermoy to Carrigane north-east of Mitchelstown. The N8 Fermoy to Mitchelstown road passes through the townlands of Gortore, Ballynacarriga, Glenwood, Ballinglanna North, Ballinrush, Caherdrinny, Gortnahown, Ballybeg, Turbeagh, Glana-

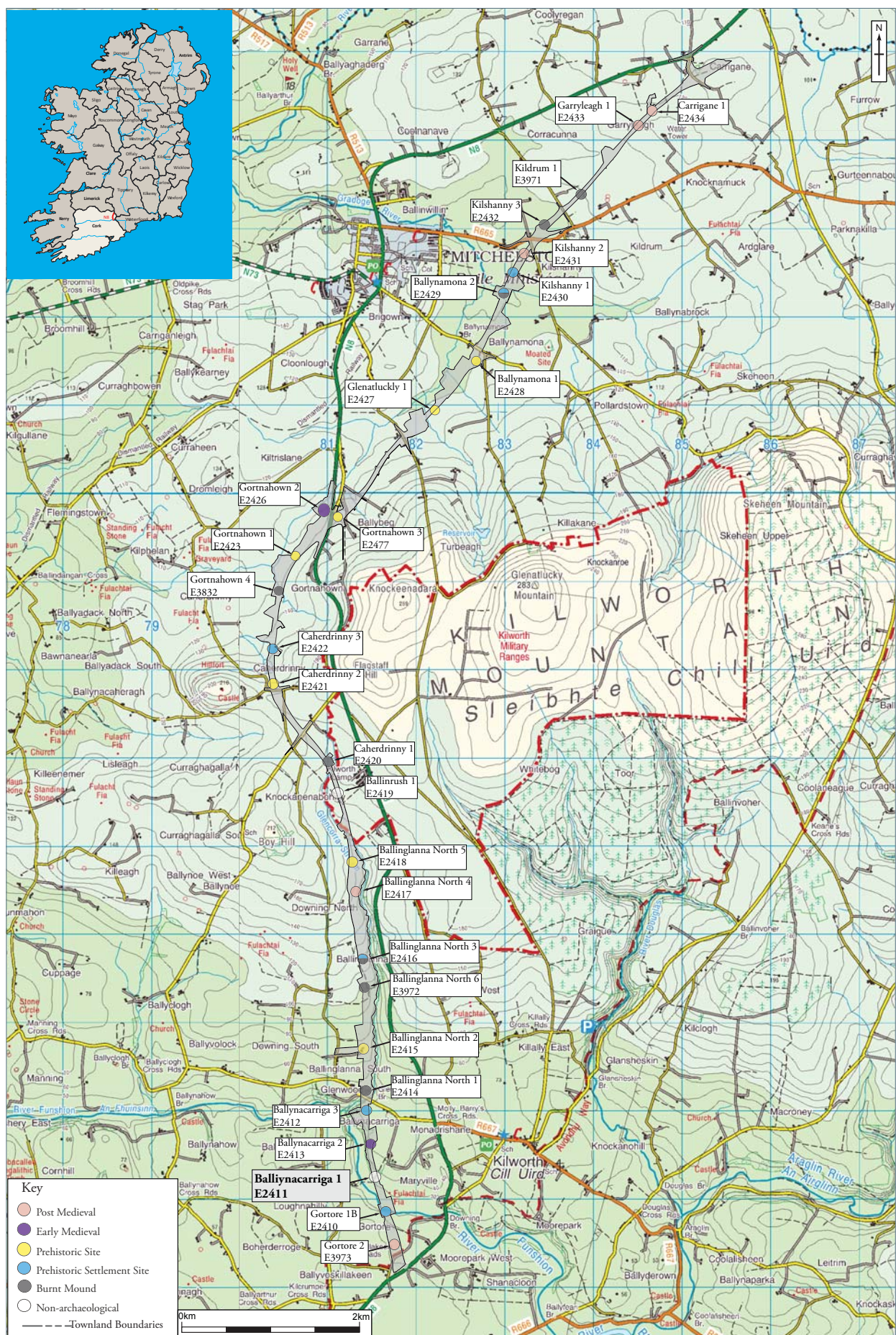


Figure 1: The route of the N8 Fermoy to Mitchelstown Bypass overlain on the Ordnance Survey Discovery Series map.

tlucky, Ballynamona, Kilshanny, Corracunna, Kildrum, Garryleagh, and Carrigane. The townlands are located in the parishes of Kilcrumper, Glanworth and Brigown and Barony of Condons & Clangibbon, with the exception of Gortore, and Glenwood, which are located in the Barony of Fermoy.

The route begins at the northern end of the Fermoy Bypass at Gortore, c. 2km north of Fermoy, and continues northwards across the River Funshion, and to the west of the Glencorra Stream, a tributary of the Funshion, for 4 km. At Caherdrinny, it crosses over the western extremities of the Kilworth Mountains. From there it descends north-eastwards onto the broad plain that extends east and north-eastwards from Mitchelstown. It crosses the existing N8 at Gortnahown and passes to the east of Mitchelstown, crossing the R665 Mitchelstown-Ballyporeen road and links up with the N8 Cashel Mitchelstown Road at Carrigane south of Kilbeheny and 2 km west of where the borders of the Cork, Limerick and Tipperary counties meet.

3 Receiving environment

The topography of East Cork and Waterford consists of east/west valleys separated by intervening ridges. The ridges consist of sandstones and mudstones of the Devonian Period (Old Red Sandstone) laid down 355-410 million years ago and the valleys of Carboniferous limestones laid down 290-355 million years ago. The sediments covering many of the rocks are mainly of glacial origin deposited by glacial ice or meltwater (Sleeman and McConnell 1995, 1).

The landscape of the area is dominated by the Galtee Mountains to the north, the Ballyhoura Mountains to the north-west, the Kilworth Mountains to the east and the Nagles to the south. The landscape is drained by the Blackwater River, the Funshion River (which flows into the Blackwater River c. 2 km north-east of Fermoy), and the Glencorra Stream, a tributary of the Funshion River. The largest population centres in the area, Fermoy and Mitchelstown, have developed on the banks of the River Blackwater and Gradoge (a tributary of the Funshion), respectively.

The route begins at Gortore, c. 2 km north of Fermoy, at an elevation of c. 40 m OD. At Caherdrinny, it rises to its maximum elevation of c. 180 m OD as it crosses over the western extremities of the Kilworth Mountains, before descending onto the broad plain that that extends east and north-eastwards from Mitchelstown, at an elevation of 100-120 m OD.

The soils on the southern portion of the route are characterised by acid brown earths derived from mixed sandstone and limestone glacial till. These soils occur generally in the valleys of Cork and Waterford (Gardiner and Radford 1980, 61), and have a wide use range, being suitable for tillage and grass production. The soils on the western limits of Kilworth Mountains are characterised by brown podzolics derived from sandstone. The soils on the northern portion of the route are characterised by brown podzolics derived from sandstone and shale glacial till. They have a wide range of potential uses and are well

suited to arable and pastoral farming (ibid., 67). Land use along the route was almost entirely grassland devoted to intensive dairying and cattle-rearing, with only an occasional tillage field.

4 Archaeological and historical background

Archaeological sites of numerous periods were discovered along the route of the new road (Figure 2). The periods are referred to as follows: Mesolithic (c. 8000 to 4000 BC), Neolithic (c. 4000 to 2000 BC), Chalcolithic (Beaker) (c. 2500-2000 BC), Bronze Age (c. 2000 to 500 BC), and Iron Age (c. 500 BC to AD 500), early medieval period (c. AD 500 to 1100), medieval period (c. AD 1100 to 1650), post-medieval period (c. AD 1650 to the present).

A number of Giant Irish Deer (*Megaloceros giganteus*) skulls, large antlers, antler fragments and various long-bones were retrieved from the clay sediments, c. 1.5 m below the peat stratum at Ballyoran Bog (04E1014) on the route of the N8 Rathcormac Fermoy. A radiocarbon date of cal BC 11201-10962 was returned for the Giant Irish Deer. Giant Irish Deer are extinct but are known to have inhabited Ireland during two separate periods in the Pleistocene (from 37,000-32,000 BP and 11,750-10,950 BP), with examples from lake deposits beneath peat bogs frequently dating to the period between 11,750 BP and 10,950 BP (Woodman et al. 1997). The Ballyoran Bog examples were found in this typical location of lacustrine (lake) sediments beneath peat and they therefore pre-date the beginnings of bog formation and the first human settlement of the area.

Mesolithic (c. 8000 to 4000 BC)

The earliest known human settlement in Ireland dates from the Mesolithic period (c. 8000 BC - 4000 BC). In Munster, the majority of the evidence (flint scatters) for Mesolithic occupation has 'come from the Blackwater valley in Co. Cork' (Woodman 1989, 116). Flint scatters were recorded in the townlands of Kilcummer Lower (CO034-060) on the northern bank of the Blackwater c. 13 km to the south-west of the route and in Ballynamona (CO018-099) and Wallstown (CO018-100) on the northern and southern sides of the Awbeg river respectively c. 20 km to the west of the route (Power et al. 2000, 2). Mesolithic sites and find spots were recorded on other road schemes in Co. Cork, these included; Rath-healy 3 03E1678 and Curraghprevin 3 03E1138 (N8 Rathcormac Fermoy Bypass), Ballynacarriaga 1 01E0567 (N25 Youghal Bypass), Ballinaspig More 5 01E0546 (N22 Ballincollig Bypass) and Carrigrohane 3 02E0431 (N22 BG).

Mesolithic activity was recorded on the route of the N8 Fermoy-Mitchelstown at Gortore E2410 and at Caherdrinny 3 E2422 and Mesolithic stone tools were recovered from Ballinglanna North 1 E2414, Ballinglanna North 3 E2416 and Ballinglanna North 6 E3972.

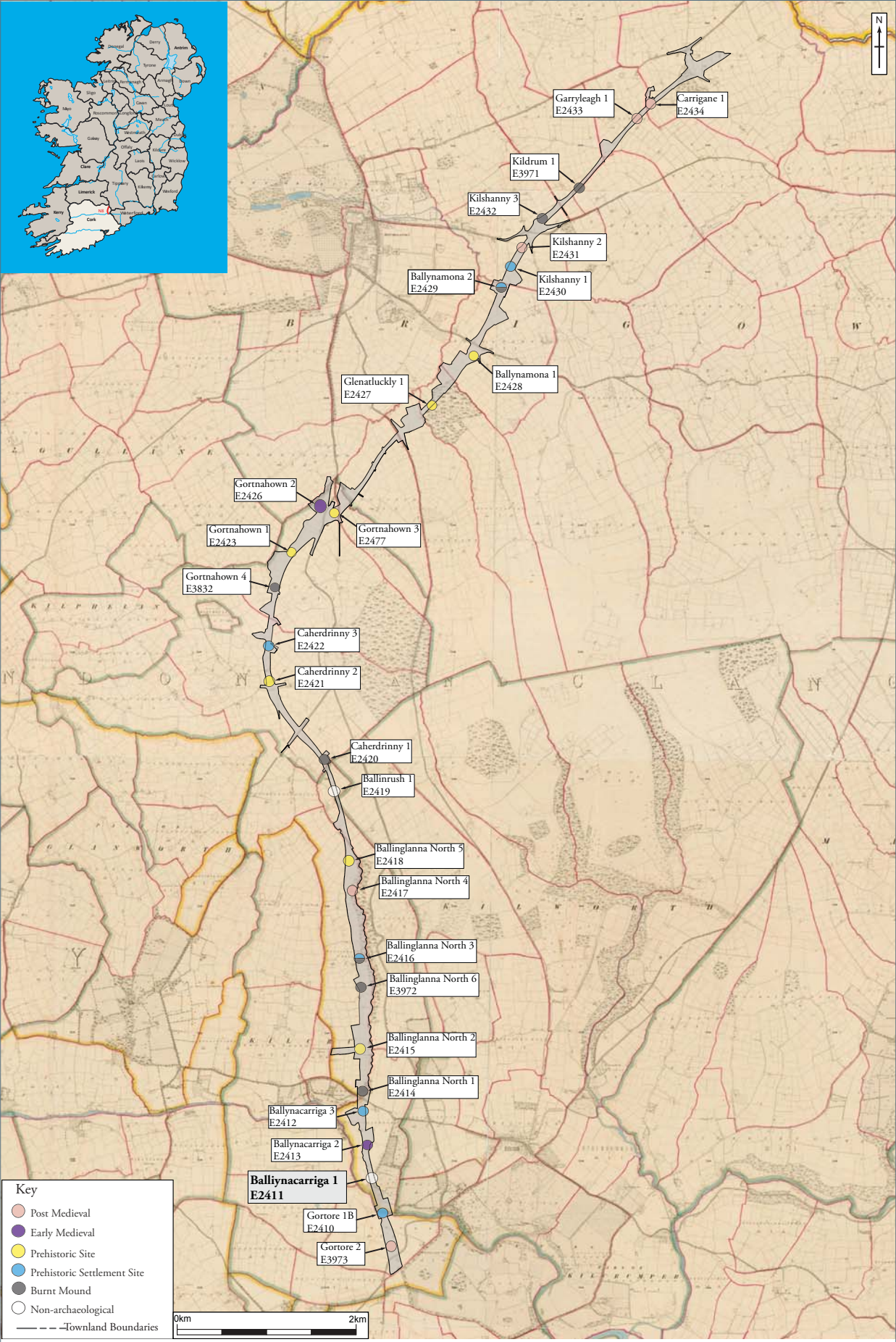


Figure 2: The route of the N8 Fermoy to Mitchelstown Bypass overlain on the first edition Ordnance Survey map CO010, 011, 019, 020, 027 and 028.

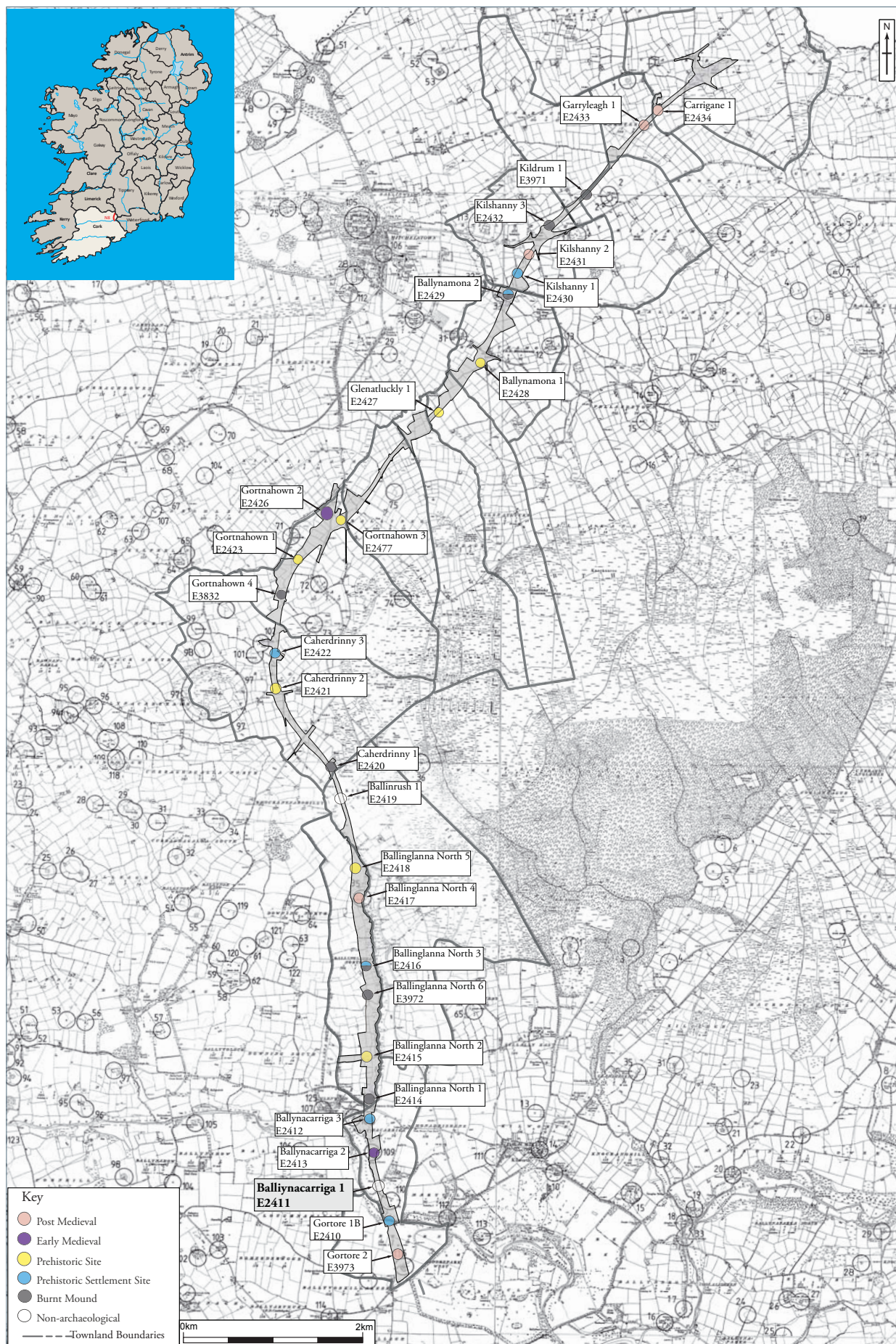


Figure 3: The route of the N8 Fermoy to Mitchelstown Bypass overlain on the RMP map CO010, 011, 019, 020, 027 and 028. The map is based on the second edition Ordnance Survey maps.

Neolithic (c. 4000 to 2000 BC)

The Neolithic Period is characterised by the introduction of agriculture and the beginnings of the clearance of the woodlands. The population increased and became more sedentary in nature. A substantial Neolithic settlement site has been recorded at Lough Gur, Co. Limerick. Previously the nearest known Neolithic house was located in Pepperhill (CO016-226/01) c. 30 km to the northwest of the route. It was recorded during the construction of the Bruff-Mallow gas pipeline (Gowen 1988, 44-51).

The material culture includes the manufacture of pottery, flint and stone arrowheads, scrapers, axes etc. The range of monuments types includes Megalithic tombs, single burial graves and stone circles. Megalithic tombs can be sub-divided into court tombs, portal tombs, passage tombs and wedge tombs. There are few wedge tombs or stone circles known from north or east Cork. Two of the exceptions are wedge tombs located at Lab-bacallee (CO027-086), which is one of the largest wedge tombs in the country, and at Manning (CO027-091) both located c. 4 km west of the N8.

Recent infrastructural work on the N8 Rathcormac to Fermoy and the Ballincollig Bypass have added significantly to the number of Neolithic sites in the county. A Neolithic house was excavated at Gortore (E2119), on the N8 Rathcormac to Fermoy road and another Neolithic house was excavated at Barnagore (02E0384), along the route of the Ballincollig Bypass. Both of these Cork examples produced essentially the same radiocarbon results (cal BC 3940-3620 at Barnagore and cal BC 3928-3655 from Gortore) and they represent the oldest known houses in the county. A single pit at Fermoy townland (05E0078), located c. 3 km to the south of Gortore, produced 12 sherds of a Middle Neolithic Globular bowl, and another site at Curraghprevin (c.12 km south of Gortore) produced Western Neolithic (Early Neolithic) pottery and a radiocarbon date of 3090-2580 BC (Late Neolithic).

Rectangular Neolithic houses were recorded on the route of the N8 FM at Gortore 1b (E2410), Ballinglanna North 3 (E2416) and Caherdrinny 3 (E2422). A large enclosure containing several structures associated with Late Neolithic pottery was excavated at Ballynacarriga 3 (E2412). Activity dating to the Neolithic was also recorded at Ballynamona 1 (E2428), Ballynamona 2 (E2429), and Gortnahown 2 (E2426) and Gortore 2 (E3973).

Bronze Age (c. 2000 to 500 BC)

The Bronze Age is characterised by the introduction of metallurgy and an increase in settlement and burial sites. Copper ores were mined and copper, bronze and gold items manufactured. The range of burial site types includes cist graves, pit and urn burials, cremation cemeteries, barrows, ring-ditches and wedge tombs. Stone circles and standing stones also date to the Bronze Age. Both enclosed and unenclosed settlement sites are known. The most prolific Bronze Age site type is the *fulacht fiadh*; over 2,000 examples have been recorded in County Cork alone. These monuments survive as low mounds of charcoal rich black silt, packed with heat-shattered stones, and generally situated close to a water source. *Fulachta fiadh* are generally classified as 'cooking places', whereby stones

were heated in a hearth and subsequently placed in a trough of water, the water continued to boil with the addition of hot stones and wrapped food was cooked within the hot water. The trough eventually filled with small stones, ash and charcoal that were removed, forming the basis of the familiar mound.

The Bronze Age cemetery site at Mitchelstowndown West, c. 16 km to the north of Mitchelstown, contains 53 small barrows. The Discovery Programme Report 1 (Daly and Grogan 1992, 44) selected four of this group for excavation.

Until recently, Bronze Age settlement sites were a rarity in North Cork. A Bronze Age occupation site was recorded underlying the medieval ringfort Lisleagh I (CO027-158) c. 2.5 km to the west of the N8 (Power et al. 2000, 210). A house site was excavated at Killydonoghoe on the route of the N8 Glanmire-Watergrasshill Bypass (Sherlock 2003). Three circular houses dating to the Middle Bronze Age were excavated at Mitchelstown (04E1072) on the N8 Mitchelstown Relief Road. A large Bronze Age settlement site consisting of three circular enclosures and three circular houses was excavated in 2003 at Ballybrowney (03E1058), on the route of the N8 Rathcormac-Fermoy (Cotter 2007, 40).

Bronze Age round houses were recorded on the route of the N8 Fermoy – Mitchelstown at Kilshanny 1 (E2432) and Ballynamona 2 (E2429). Burnt mounds/*fulachta fiadh* sites were recorded at Ballinglanna North 1 (E2414), Ballinglanna North 3 (E2416), Ballinglanna North 6 (E3972), Ballynamona 2 (E2429), Caherdrinny 1 (E2420), Kilshanny 3 (E2432) and Kildrum 1 (E3971). Two ring ditches and associated cists and pits burials were recorded at Ballynacarriga 3 (E2412). Portions of several encrusted urns and food vessels dating to the Early Bronze Age were recorded in association with the burials. A cremation burial and associated Early Bronze Age urn were also recorded at Glenatlucky (E2427).

Iron Age (c. 500 BC to AD 500)

Until the last decade there was little evidence of a significant Iron Age presence in the Cork region. Settlement sites are few and far between as well as being difficult to identify (Woodman, 2000) while the material culture of this period is limited. Linear earthworks, believed to have marked tribal boundaries, and hillforts are two of the most visible monuments of the period. Recent infrastructural work on the N22 Ballincollig Bypass, the N8 Glanmire Watergrasshill Bypass and the M8 Rathcormac Fermoy has altered the picture considerably.

Three separate stretches of a linear boundary, the Claidh Dubh, have been recorded in County Cork. The longest stretch, c. 24 km in length extends from the Nagle Mountains, across the Blackwater valley and into the Ballyhoura Hills. Radiocarbon dating following excavation of a section of it revealed it dated to some time before AD100 (Doody 1995, 23).

Two of the four hillfort sites in Cork are located in North Cork (Power et al. 2000, 205). Caherdrinny (CO019:97/01&03) is located at the western end of the Kilworth Mountains, c. 700 m to the west of the N8, Corrin (CO035:49/01) is located at the east-

ern end of the Nagle Mountains, overlooking a pass between the Blackwater and Bride river valleys just south of Fermoy.

Iron Age dates were returned from a roundhouse at Ballinaspig More 5 01E0546, a possible bowl furnace at Curraheen 1 01E1209 and the fulacht fiadh at Curraheen 4 02E1297 on the N22 Ballincollig Bypass; the Iron Age structure at Muckridge 1 01E0429 on the N25 Youghal Bypass; iron working sites at Kilrussane 01E0701 and Trabstown 01E0501 on the N8 Glanmire Watergrasshill Bypass; the iron working site at Lisnagar Demesne 1 03E1510, the pit at Maulane East 1 03E1286, the pit at Scartbarry 3 03E1800, the corn-drying kiln at Rath-healy 1 03E1139, the burnt mound at Fermoy Wood 04E1014 and the ring ditch at Ballybrowney Lower 3 05E0233 all on the M8 Rathcormac Fermoy.

Activity dating to the Iron Age was recorded on the route of the N8 Fermoy – Mitchelstown at Ballinglanna North 3 E2416, Ballinglanna North 4 E2417, Ballynacarriga 3 E2412, Gortnahown 1 E2423, Gortnahown 3 E2477 and Caherdrinny 3 E2422. The sites, with the exception of a single fire pit at Ballinglanna North 4 E2417, did not date exclusively to the Iron Age.

5 Site Location and Topography

The site at Ballynacarriga 1 was located on a south-west facing slope leading to the floodplain of the river Funshion. The area has been recently planted with broad-leaf trees. A prehistoric settlement site was recorded at Gortore 1 E2410, 350 m to the south and a medieval enclosure was found at Ballynacarriga 2 E2413, 370 m to the north.

6 Excavation methodology

The excavation was carried out under E-Number E2411 and complied with the method statement approved by the Department of Environment, Heritage, and Local Government, in consultation with the National Museum of Ireland. The site was mechanically stripped of topsoil under strict archaeological supervision. Stripping was done with a tracked machine with a flat toothless bucket. Where appropriate mini-diggers were used, and in the larger areas to be stripped multiple large tracked machines were used; all stripping operations involved the use of multiple dumpers for topsoil mounding. Topsoil stripping commenced in the areas of identified archaeology and continued radially outward until the limit of the road take was reached or until the limit of the archaeological remains was fully defined. A grid was set up in the excavation area and all archaeological features were sufficiently cleaned, recorded and excavated so as to enable an accurate and meaningful record of the site to be preserved. The excavation, environmental sampling, site photographs, site drawings, find care and retrieval, on-site recording and site archive was as per the Procedures for Archaeological works as attached to the licence method statements for excavation licences.

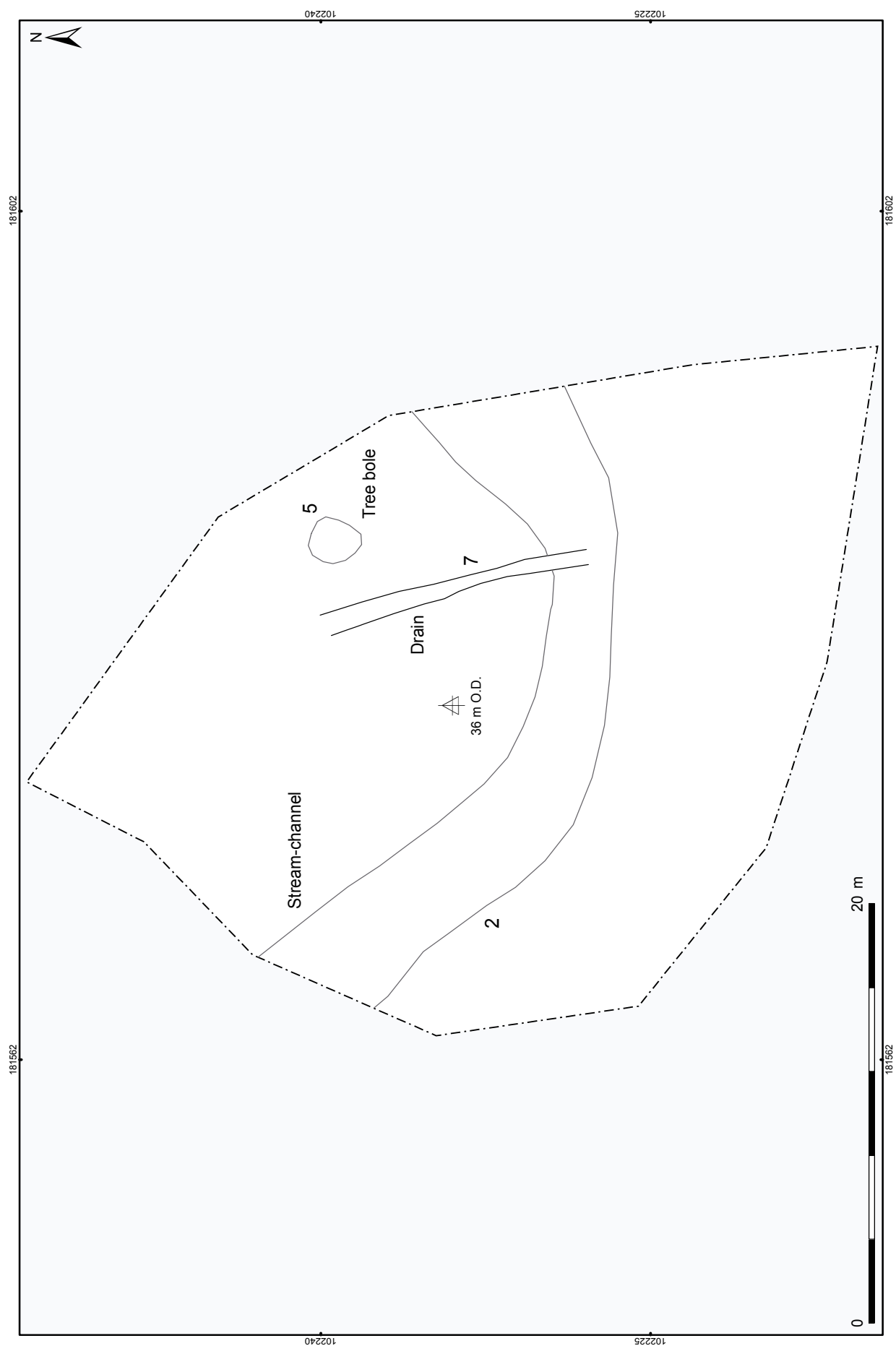


Figure 4: Post-excavation plan of Ballynacarriga 1 E2411.

The site was excavated over a period of five days from 2 October to the 6 October 2007 by a team of six people. Only areas within the CPO were resolved. The full extent of the area of excavation measured 1135 m² (Figure 4).

7 Excavation results

The site at Ballynacarriga 1 was identified during Phase 1 archaeological testing of the new route, carried out under licence no. 05E1150 (Cotter et al. 2006). Features found during testing included two linear ditches running north-west to south-east. The site was classified as a potential enclosure on the basis of testing results but excavation revealed that the potential features within the enclosure were irregularly shaped tree boles or stone sockets. No evidence of the remainder of an internal or external bank were found nor any trace of a palisade fence.

A separate cutting was opened on the western side of the farm lane to investigate for structures that were observed on the first edition Ordnance Survey map. The structures were a possible farm cottage of early modern date with an outlying shed. The area was heavily overgrown and much disturbance of the cultural remains was evident. Several pieces of blue glaze china pottery were noted and a single flagstone was found in-situ. No structural evidence was observed in situ.

A stream-channel (C.2) sloped naturally from north to south and the excavated portion of the stream-channel contained nine deposits (C.10 – C.11). All the excavated fills were combinations of various grades of sands and gravels and these were interpreted as deposits from a natural dried-up stream, deposited as a result of natural processes. Artefacts from the stream-channel included a flint flake (E2411:14:1) and sherds of 18th /19th century ceramics (E2411:11:2 and E2411:11:3).

The stream-channel may have naturally backfilled over time. It was a natural feature but it is possible that the stream was diverted during landscaping works related to the construction and/or the extension of the big house at Ballynacarriga. Ms. Coban-Lucas, the landowner, mentioned a reference to landscaping ‘in the English style’ around that time (pers comm.).

A tree bole (C.5) was located to the north of the stream-channel. It measured 2.25 m in length, 2.1m in width and 0.5 m in width. It was backfilled with a single deposit (C.6). It contained a single sherd of modern glass (E2411:6:1).

A modern, stone-lined field drain (C.7) cut the stream-channel. It was aligned north-west to south-east. It was exposed for a length of 21.2 m, it was 0.5 m wide and 0.3 m depth and it contained two fills (C.8 and C.9).

Lithics

The single lithic find from this site (E2411:14:1) was examined by Dr Farina Sternke (Appendix 5). It was a flake produced on a split beach flint pebble core and most likely dates to the Neolithic period (Plate 1).



Plate 1: Flint flake (E2411:14:1)

8 Discussion

The stream-channel excavated at Ballynacarriga 1 was a dry stream bed and was of no archaeological significance. It was filled with natural sands and gravels. A flint flake (E2411:14:1) was recovered from the upper fill. The artefact could be associated with the large prehistoric site at Gortore E2410, located 350 m to the south on the southern bank of the river Funshion.

9 References

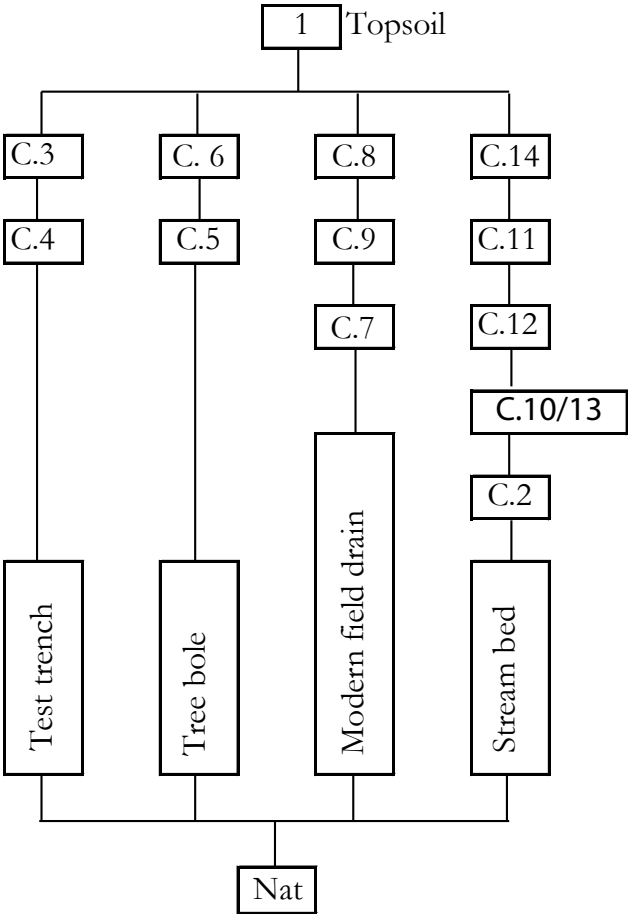
- Cotter, E., Buckley, K. & Drumm, M. (2006) N8 Fermoy Mitchelstown Phase 1 – final archaeological testing report, unpublished report for licence no. 05E1150.
- Cotter, E. (2007) 'Bronze Age Ballybrowney Co. Cork', *Recent Archaeological Discoveries on National Road Schemes 2004*. National Roads Authority Monograph Series No.2.
- Daly, A., Grogan, E (1992) Excavation of Four Barrows in Mitchelstowndown West, Knocklong, Co. Limerick. *Discovery Programme Reports 1*. Royal Irish Academy.
- Doody, M. (1995) 'Ballyhoura Hills project'. *Discovery Programme Reports 2*, 12-44. Royal Irish Academy. Dublin.
- Gardiner, M.J. Radford, T. (1980) *Soil Associations of Ireland and Their Land Use Potential*. An Foras Talúntais.
- Power, D., Lane, S. and Byrne, E., Egan, U., Sleeman, M., with Cotter, E., Monk, J. (2000) *Archaeological Inventory of County Cork, Volume 4: North Cork Parts I & II*. Dublin.
- Sherlock, R. (2003) 'Killdonoghoe' Bennett, I. (Ed) *Excavations 2001*. Wordwell. Bray.
- Sleeman, A.G., & McConnell, B. (1995) *Geology of East Cork-Waterford*. Geological Survey of Ireland.
- Woodman, P.C. (1989) 'The Mesolithic in Munster: a preliminary assessment'. Bonsall, C. (Ed) *The Mesolithic in Europe* 116-124. John Donald. Edinburgh.
- Woodman, P.C. (2000) 'Hammers and Shoeboxes: New Agendas for Prehistory'. *New Agendas in Irish Prehistory. Papers in commemoration of Liz Anderson* 1-10. Wordwell.

Appendix 1 Stratigraphic Index

Context	Cut/Fill	Fill of	Filled with	Strat above	Strat below	Short Description	Dimensions (m) L x W x D
1	Backfill				10, 11	Orangish brown firm clayey silt. Moderate fine sub-angular and sub-rounded; and medium sub-angular pebbles. Moderate small sub-angular stones.	
2	Cut		10, 11, 12, 13, 14	10, 11, 12, 13		Linear in plan. Sharp break of slope at top on N and S. Moderately sloping sides on N and S. Sharp break of slope at base. Base is concave in profile.	34.30 x 6.0 x 1.18
3	Fill	4		1	4	Topsoil, loose compaction with decaying grass sod included	Across site by c.2m
4	Cut		3	3	Natural	Straight sides, sharp corners, dims. Of digger bucket	Across site by c.2m
5	Cut		6	6		Rounded corners on N, S, E and W. Gradual break of slope at top. Sides are vertical and concave on N; steep and concave elsewhere. Break of slope at base is sharp on N; gradual elsewhere. Base is tapered blunt point in profile.	2.25 x 2.10 x 0.50
6	Fill	5		1	5	Orangish brown clayey silt. Firmly compacted fill with very poorly sorted inclusions. Moderately occurring fine sub-angular and sub-rounded; and occasional medium sub-angular pebbles. Occasional small and medium sub-angular stones.	2.25 x 2.10 x 0.50
7	Cut		8, 9	9	Natural	Linear in plan with rounded corners. Gradual top break of slope. Sides are steep and concave. Gradual base break of slope. Base is tapered rounded point in profile. [C7] cuts C001.	21.2 x ? X 0.3
8	Fill	7		1	9	Stones lining field drain. Frequently occurring small and medium sub-angular and sub-rounded stones.	21.2 x ? X 0.2
9	Fill	7		8	7	Orangish brown clayey silt. Moderately occurring fine and medium sub-angular and sub-rounded pebbles. Occasional small sub-angular stones.	21.2 x 0.70 x 0.15
10	Fill	2		1	2	Alluvial sediment. Loose mid reddish brown sand. Moderately occurring medium rounded gravels.	5.86 x 0.50 x 0.40
11	Fill	2		14	12	Probable backfill. Soft, light yellowish brown clayey silt. Occasional small angular and medium sub-angular stones.	5.80 x 0.50 x 0.78

Context	Cut/Fill	Fill of	Filled with	Strat above	Strat below	Short Description	Dimensions (m) L x W x D
12	Fill	2		11	13	Alluvial deposit. Firm, mid reddish yellow clay. Moderate medium and occasional large angular stones. Frequent charcoal flecks.	5.00 x 0.50 x 0.30
13	Fill	2		12	2	Alluvial sediment. Firm, mid yellow clay. Occasional fine and medium sub-rounded pebbles. Occasional small sub-rounded; and medium sub-angular and sub-rounded stones.	
14	Fill	2					
15	Fill	2					
16	Fill	2					
17	Fill	2					
18	Fill	2					

Appendix 2 Matrix



Appendix 3 Finds Register

Context	NMI Find	Category	Fabric	Artefact Type	Short Description/Comments	Date	Initials
6	1	Glass	Bottle	Fragment	Modern	10/10/2006	DJF
11	1	Metal	Iron	Fragment	Iron object	10/10/2006	DJF
11	2	Ceramic	Pottery	Body Sherd	Pearlware (19th Century)	10/10/2006	DJF
14	1	Stone	Flint	Flake	Re-touched	10/10/2006	DJF
14	2	Ceramic	Pottery	Body Sherds	x4 - Glazed red earthenware (18th/19th Century)	10/10/2006	DJF
14	3	Ceramic	Pottery	Basal Sherd	Glazed red earthenware (18th/19th Century)	10/10/2006	DJF

Appendix 4 Groups & Subgroups

Group 1 Natural Features

Subgroup 1a Palaeochannel

List of Contexts: C.2, C.10, C.11, C.12, C.13, C.14, C.15, C.16, C.17, C.18.

Description

This subgroup describes a palaeochannel, C.2, which became filled with C.10-18 sands and gravels. The fills are the result of natural processes, artefacts including a flint flake and sherds of 19th-century ceramics. The palaeochannel has a sharp break of slope at top and base on north and south, the sides slope moderately at the north and south, the base is concave.

Interpretation

This is a palaeochannel which became naturally backfilled over time. Not archaeological.

Subgroup 1b Treebole

List of Contexts: C.5, C.6.

Description

This subgroup describes a treebole which became backfilled with C.6, which contained a modern glass sherd.

Interpretation

This is a treebole which became backfilled. Not archaeological.

Group 2 Agricultural Feature

List of Contexts: C.7 C.8, C.9.

Description

This group describes a modern field drain C.7. The fill C.8 consists of stones lining the drain, and C.9 consists of an orange brown clay with moderately occurring pebbles.

Interpretation

This is a modern stone lined field drain.

Appendix 5 Lithics Finds Report

by Farina Sternke

Introduction

One lithic find from the archaeological excavation in the townland of Ballynacarriga 1, Co. Cork was presented for analysis (Table 1). The find is associated with a paleochannel, a dry stream bed.

Find No.	Context	Material	Type	Cortex	Condition	Length mm	Width mm	Thickn. Mm	Complete	Period	Reliability	Retouch
E2411:14:1	14	Flint	Flake	Yes	Patinated	33	29	7	No	Neolithic	Medium	No

Table 1 Composition of the lithic assemblage from Ballynacarriga 1 (E2411)

Methodology

All lithic artefacts were examined visually and catalogued using Microsoft Excel. The following details were recorded for each artefact which measured at least 2 cm in length or width: context information, raw material type, artefact type, the presence of cortex, artefact condition, length, with 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 2 cm were classed as debitage and were not analysed further. The same applies to natural chunks and pebbles. The condition of macro tools was not noted, as they are rarely affected by the elements due to their raw material composition.

Quantification

The lithic is a flaked piece of flint.

Provenance

The artefact was recovered from the fill of a paleochannel.

Condition:

The lithic survives in patinated, incomplete condition and bears the remnants of cortex.

Technology/Morphology:

The lithic is a flake which was produced on a split beach flint pebble core and measures 33 mm long, 29 mm wide and 7 mm thick.

Dating:

Technologically, this flake most likely dates to the Neolithic due to the fact that appears to have been produced using a platform method.

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

Neolithic material was recently recovered at the nearby Neolithic house site at Gortore (E2410), Co. Cork (Sternke 2007).

Discussion

Flint is available in larger and smaller nodules along the Cork coast or in the glacial tills. The use of a limited single platform and bipolar technology on small to medium sized pebbles is in part the result of this availability. The majority of these flint nodules are rather small pebbles with an average dimension of 4-6 cm and often only permit the use of a bipolar or scalar technology to efficiently reduce the nodule achieving a maximum outcome, i.e. the largest possible amount of suitable and usable blanks. The result is the regionally dominant split pebble scalar (Late Neolithic) and bipolar (Neolithic and Bronze Age) character of the south-western lithic assemblages. This flake forms part of this type of assemblage.

Summary

The lithic find from the archaeological excavation at Ballynacarriga 1 (E2411), Co. Cork is a flint flake which was produced on a split beach flint pebble and most likely dates to the Neolithic period.

This site is of minor archaeological importance.

Bibliography

Inizan, M.-L., M. Reduron-Ballinger, H. Roche and J. Tixier 1999. *Technology and Terminology of Knapped Stone* 5. CREP, Nanterre.

Sternke, F., 2007. *Lithics Finds Report for Gortore (E2410), Co. Cork - N8 Fermoy – Mitchelstown Road Project*. Unpublished Report for Eachtra Archaeological Projects.

Woodman, P.C., E. Anderson and N. Finlay, 1999. *Excavations at Ferriter's Cove, 1983-95: last foragers, first farmers in the Dingle Peninsula*. Wordwell, Bray.

Woodman, P. C., Finlay, N. and E. Anderson, 2006. *The Archaeology of a Collection: The Keiller-Knowles Collection of the National Museum of Ireland*. National Museum of Ireland Monograph Series 2. Wordwell, Bray.

Appendix 6 Finds catalogue

Metal

Unidentified Object (E2411:11:1) Fe. L. 46.7 mm., W. 22.6 mm., Th. 4.1 mm. Incomplete. Possible part of a tool. Sub-triangular in shape. Corroded.

Glass

One green bottle fragment (col.5GY, 4/1 – dark greenish grey) from C.6, modern in date.

Modern Pottery

A total of six sherds of modern pottery were found on site.

Glazed red earthenware

One base sherd and four body sherds from C.14, belonging to big plates/bowls, to table ware containers anyway.

Pearlware

One plate body sherd from C.11.

Co. No.	Find No.	Type	Dating	Form
11	2	Pearlware	19 th	Plate
14	2, 3	Glazed Red Earthenware (x5)	18 th /19 th	Table Ware

References

Munsell. Munsell, “Soil Color Charts”, Revised Edition, 1992.