**N11 Gorey to Arklow Link:**
**Archaeological Resolution**

**FINAL REPORT**
**E3507**
**A003/049**

**Site 49, Killybegs,**
**Co. Wexford**

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| **Job No.:** | **05/1177** |
| **Client:** | **Wexford County Council** |
| **Date:** | **September 2010** |

**Valerie J. Keeley Ltd**

## ABSTRACT

This report comprises the final results of the archaeological excavation of Site 49, in the townland of Killybegs, Co. Wexford. Work was undertaken as part of the archaeological mitigation programme for the proposed N11 Gorey to Arklow Link Road Scheme. Excavation was conducted under Ministerial Direction No. A003/049, (Registration No E3507) by Kevin Martin, for Valerie J Keeley Ltd, from 27/06/2005 to 21/07/2005.

The archaeological remains on the site comprised of an irregular shaped deposit/mound of charcoal rich silt and heat shattered stone. A shallow trough cut was found underneath the burnt mound deposit. A palaeo-river channel was recorded running northwest across the middle of the site and was likely contemporary with the burnt mound activity. The artefactual assemblage from the site consisted of 177 artefacts and included: 169 pieces of flint, three pieces of iron (including two nails), two pieces of worked quartzite, two fragments of post medieval pottery and one stem fragment from a clay pipe.

All archaeological work is now complete for this site and this report constitutes the final report on this excavation. A digital copy of the archive is available at the post excavation offices of Valerie J Keeley Ltd., Brehon House, Kilkenny Road, Castlecomer, Co. Kilkenny. The original paper archive for this excavation will rest with the Road Design Offices of Wexford County Council.

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# 1.0 INTRODUCTION

## 1.1 Aims & Objectives

Valerie J. Keeley Ltd. was appointed by Wexford County Council to excavate archaeological sites first identified during a programme of centreline testing[1].

The scope of the archaeological measures was:

- To strip the topsoil from an area measuring approx. 726m$^2$ in area along the road corridor and identify the previously discovered archaeological features and any other features that may be present in this area.
- Photograph and plan any archaeological features or possible features.
- Excavate any features identified and record their contexts and sections, retaining samples where necessary, to resolve them with preservation by record.
- Reinstatement of excavated areas where required.

The proposed excavation was carried out following the initial archaeological assessment by The Irish Archaeological Consultancy Ltd. and completion of the centreline testing (Mullins, 2005). The goal of this project being to preserve by record the archaeological site/s exposed within the take of the proposed route.

These works took place in accordance with the Directions issued by the Minister for Environment, Heritage and Local Government under Section 14A(2) of the National Monuments Acts (1930–2004), in accordance with the terms of the Contract between Kilkenny County Council and Valerie J Keeley Ltd and according to the terms of the Code of Practice agreed between the National Roads Authority and the Minister of Arts, Heritage, Gaeltacht and the Islands. The excavations also complied with the Policy and Guidelines on Archaeological Excavation (Govt of Ireland 1999) and were overseen by the Project Archaeologist.

## 1.2 Summary of Archaeological Significance

The archaeological remains on the site comprised of an irregular shaped deposit/mound of charcoal rich silt and heat shattered stone. A shallow trough cut was found underneath the burnt mound deposit. A palaeo-river channel was recorded running northwest across the middle of the site and was likely contemporary with the burnt mound activity.

## 1.3 Timescale

Topsoil was stripped from this site on 1st June 2005. Excavation commenced on the 27 June 2005 with the site being resolved on 21st July 2005. The site was handed over to the contractor shortly after the work was carried out.

[1] Mullins, G. (2005) *Irish Archaeological Consultancy Ltd*. Archaeological Assessment: N11 Gorey-Arklow Link, Co. Wexford

### 1.4 Site Location & Access

The site was located in the townland of Killybegs in a low-lying area immediately west of slightly rising ground. It was situated along the line of the proposed N11 Gorey to Arklow Link and directly abutting a large forested area on its northern side (NGR. 320323E, 167218N, Chainage 18920 – 19020).

## 2.0 BACKGROUND

### 2.1 Geology and Topography

The bedrock geology for the route of the N11 Gorey to Arklow Link road scheme consists of Acid Volcanics which extend in a band from north-east of Gorey to the south-west, away from the shceme area. Specifically, these are a Campile Formation of Rhyolitic Volcanics with grey and brown slates. Solid geology of Ordovicians occupy most of the study area to the N of Gorey, toward Arklow. The drift geology consists primarily of glacial till from Marine sediments, with pockets around Gorey having little or no Drift cover. The geomorphology is primarily lowlands and high hills (c. > 100m < 300m) of boulder-clay (*Source:* I.A.C. EIS; Mullins 2005).

The soils in this area consist primarily of gleys and grey-brown podzolics, which derive from glacial muds of Marine origin. These are mostly wet, mineral soils, which occur in flat to undulating lowland. For the most part the land of the study area has limited capability due to the poor drainage characteristic of the soil type and is predominantly used for pasture, however, the south and SW facing slopes of Ask Hill are suitable for tillage and soft-fruit growing (*ibid.*).

The general topography of the area through which the N11 Gorey to Arlow Link passes can be characterized as a coastal lowland. To the west the area is dominated by the eastern foothills of the Blackstairs and Wicklow Mountains; The route passes between the foothills and some outlying hills Ballyminaun Hill to the south of Gorey and Ask Hill / Gorey Hill to the northeast of the town. While much of the route is only 3-8 km from the sea the intervening undulating topography does not allow views of the coast. (*ibid.*)

The N11 Gorey to Arlow Link does not cross any significant watercourses. To the north of Ask Hill / Tory Hill small streams drain into the Inch and Clonough Rivers that flow into the Irish Sea via the Kilgorman River. Land to the east and south of Gorey are drained by the Banoge and Bracken Rivers that flow into the Irish Sea at Courtown via the Owenavorragh River (*ibid.*).

### 2.2 Historical Background

#### 2.2.1 Gorey and its environs

The name Gorey is derived from the Irish *Gabhrach*, meaning the place of the goats. The town is a planned one (Ref No.: WX007:033) and was built as part of the seventeenth century plantation of Wexford. It received its first charter of incorporation in 1619, when it was called the town of Newborough or Newtown. According to this charter the town was to consist of a sovereign, twelve burgesses and free common, modeled on the town of Cavan (Hore 1900-11, vi, 611, quoted in Bradley & King n.d.). (Source: EIS by M. Gowen & Co. Ltd, September 2003; additions by F. Smith).

The town was laid out on a grid pattern of *c*. 14 acres. The Main Street runs east to west through the centre, and the original town area stretches from Pearse Street to Church Lane north to south; The Avenue to Church St. west to east. No physical remains of the seventeenth century town survive, although the tomb of Archbishop Ram, which dates to the seventeenth century (1634), still stands in the graveyard within the town. The graveyard is located on the site of the original plantation parish church (Ref No.: WX007:033-01; built 1610) in the southwest corner of the planned town; the present church on the site was built in 1861.

Although the town is best known as a seventeenth century planned town, there is some evidence that there was an Anglo-Norman settlement here in the thirteenth century. The evidence relates to a reference in 1296 of the payment of 13s from 'the community of the town (ville) of Gory' (Hore 1900-11, vi, 609, quoted in Bradley & King n.d.). However, nothing further is known of this settlement.

In common with other plantation towns Gorey was protected by defenses, and from references made these defenses were earthen. The fact that the town was captured easily in 1641 suggests that the defenses were never particularly strong. The ramparts of the town are mentioned in passing in the Corporation records for 1708, while those of 1713 note the construction of a causeway along the rampart to the churchyard (Hore 1900-11, vi, 618, 622). A fort at Gorey is also shown on the Down Survey Map of 1655-6 in the parish of Kilmaclogue to the west of the town. It is depicted surrounded by a wall (Hore 1900-11, vi, 616, 618), which Loeber & Stouthamer-Loeber (1987) suggest was more likely to be made of sod than of stone.

The present parish of Gorey represents the old parish of Kilmakilloge and parts of Kilnahue and Kiltennal (Grattan Flood 1916). While the towns foundation is non-ecclesiastical the old parish church of Kilmakilloge or Kilmochilloge (Ref No.: WX007:034) in Clonatin Upper was founded by St. Sillan or Silog in the Early Christian period, and was originally known as *Cill mo Sillog*, the church of Sillog. Some documentary sources (Lewis 1837) claim that the now ruinous church in Clonatin was founded by St. Edan, stating that the placename may be a modification of *Cluain-Edan,* meaning 'the retreat or cell of St. Edan' or Aedan. However, the church is more likely to have flourished contemporaneously with the Church of St. Aedan of Ferns, and according to Grattan Flood (1916) the true meaning is 'the meadow of the furze'. Apparently, there are many references to furze on an estate map of Clonatin dating from 1786.

The church of St. Sillan was re-dedicated to St. Michael during the thirteenth century when it was attached to the Deanery and abbey of Ferns, and continued as such until 1560. In 1619 Thomas Ram, Protestant Bishop of Ferns and Leighlin obtained a Charter for the new town of Gorey, or Newborough as it then became known. In 1620 Bishop Ram transferred the episcopal palace from Ferns to Gorey, calling his new residence Ramsfort, which became the seat of the Ram family following the restoration of the Cathedral at Ferns until their departure at the end of the nineteenth century. According to O'Donovan (1840) a second church existed near the Ram's residence at Gorey, but neither it nor its graveyard were visible at that time.

The church in Clonatin, indicated on the first edition six-inch map of the OS (dated 1841) as 'Kilmakilloge Church *in ruins*' sits close to Clonatin House, which was built as an auxiliary manor by a member of the Ram family in the eighteenth century. The house, burned in 1798 was later rebuilt, and its estate, over 288 acres, extended amongst others into the townlands of Ballyloughan and Kilmurry. According to local history one of the roads that led to the cemetery passed by way of the outbuildings of Clonattin House; a second had its entrance somewhere in the vicinity of Kilmurry Crossroads (FitzPatrick OP). Local tradition also recalls the existence of the 'Butchers Box', a hanging tree situated alongside the roadway amongst an aged group of trees beyond the entrance gates of Clonattin House and beyond a long line of trees that run parallel to the road from the Clonattin House entrance (FitzPatrick OP).

From Ram title deeds connected with the Clonatin Estate it is recorded that William Plunket Esqr. and heirs were granted by King Charles 'the whole manor castles towns lands of the manor of Cloghleskin with the appurtenances and amongst those the said town and lands of Ballinclare, Ballybanogue, Ballyminaun, Coleshill, and Tuberneering…henseforth forever be reputed and called the Manor of Bewley' (FitzPatrick OP). A subsequent deed dated 20th August 1680 records that 'Sir Walter Plunket…(son and heir of the said William Plunket)…did grant bargain, sell, release and confirm onto the said Abel Ram all that and those the several Manors, towns, villages, lands, tenements, and Hereditaments in the Manor of Bewley…including the said lands of Ballinclare etc., to have and to hold to the same Abel Ram his heirs and assigns forever'.

### 2.2.2 The Rebellion of 1798

Gorey figured prominently in the insurrection of 1798 (Harbison 1995). It was strategically placed on the main coast road to Arklow, one of only three routes open to the Wexford insurgents to spread the rebellion from their county (Whelan 1998). While in possession of the town from June 4th to 12th the Irish insurgent camp was on Gorey Hill, just outside the town to the southwest.

The rebellion covered the summer months of 1798, breaking out on 23rd May in the counties immediately around Dublin. News that forces had mobilised first reached Wexford by the 25th, and by the 26th the early stages of rebel mobilisation took place in central Wexford as forces raided the houses of local gentry and yeomanry members to secure arms (Gahan 1998). In a line from New Ross to Enniscorthy north to Gorey the movement was uncharacteristically strong. The organisation here was led on the parish and barony level by the sons of large tenant farmers or gentry (Gahan 1998). The strength of the movement here is reflected in its success, where by May 30th the United Irishmen of Wexford had taken possession of the entire county apart from a number of towns along the northern and western perimeter. These towns included Gorey.

The United Irish movement emerged in opposition to a political system rooted in sectarian privilege (Whelan 1998), but from the 31st May to the 4th of June the rebellion had become exclusively a Wexford affair, as the rebellion was largely quashed elsewhere. On June 1st the Wexford rebels experienced their first setback as an

advance party from Carrigrew marched north toward Gorey. Unexpectedly meeting with a detachment of militia moving south from the town a battle ensued in the fields around Ballyminaun Hill, repulsing the northern division of the Wexford rebel forces.

Taking definite steps to crush the rebellion in Wexford the government resolved to launch a three-pronged attack on north Co. Wexford; one of three columes under General Loftus was to march south through Gorey, which he reached by June 3rd. A combined militia army was led south from Gorey on June 4th under Loftus and Walpole, who had come from central Kildare through Carnew to Gorey, with the intention of attacking the rebel camp on Carrigrew. The rebels also broke camp and marched toward the approaching soldiers. A short distance outside Gorey Loftus and Walpole split forces; the latter was attached and defeated by the rebels who subsequently took control of the unguarded town at Gorey and set up camp on Gorey hill.

On the 5th June the largest government force to be dispatched to Wexford left Loughlinstown camp in south Dublin, under command of Lieutenant-General Needham. Needham took control of Arklow town by the evening of June 6th, while the northern division of the United Irishmen remained at base camp on Gorey Hill waiting for supplies of ammunition. The rebels finally made their attack on Arklow on June 9th, the most crucial battle of 1798, but failed to storm a vital town and returned to Gorey suffering heavy losses (Gahan 1998). They remained at Gorey until the 12th, when the entire unit moved to Limerick Hill further north. A detachment also set up camp at Aske Hill, east of Limerick Hill, to guard the approach to Gorey.

On June 19th Lieutenant-General Needham marched his forces from Arklow and captured Gorey without meeting any rebel opposition, before moving beyond to Oulart. The northern rebel divisions at this stage were retreating southwards to Vinegar Hill where they were defeated on June 21st bringing the Wexford rebellion essentially to an end.

Both houses of the Ram family, Clonatin and Ramsfort, were destroyed in the insurrection of 1798. At Clonatin the house was rebuilt on a new site (as indicated on the first edition map of the OS six-inch series) and the detached out-offices now at Clonatin occupy the site of the old house. The Ram family continued to reside at Clonatin until near the close of the nineteenth century, after which the property was held by the Earls of Courtown, and the lands sold in lots.

Perrymount townland, near Inch, also claims fame as the home of Anthony Perry, a Protestant member and influential leader in the 1798 rebellion. Previously a Lieutenant in the Coolgreany Yeomen Cavalry Corps, Perry resigned in protest against treatment of the people. He was later executed for his role in the rebellion on 12th of July, 1798, at Edenderry, Co. Offaly.

Inch, in terms of military history, was also the scene of a skirmish between the advanced guard of King William's army and the partisans of James II, on their retreat from the battle of the Boyne at which James forces were defeated.

## 2.3 Archaeological Background

### 2.3.1 Prehistory

There is limited evidence of Neolithic activity in County Wexford (Culleton 1984; Moore 1996). To date a small number of megalithic structures have been identified in upland areas of the county. There is some evidence to indicate that the uplands of Wexford were settled in the Neolithic, although megalithic tombs are rare in the county with only two examples positively identified (Moore 1996). A cairn (RMP Ref.: WX007:014) on the summit of Tara Hill over 3.5 km to the northeast of Gorey may enclose a megalithic structure (Stout 1987). A possible megalithic tomb, or 'Dolmen', is also indicated on the Ordnance Surveys 1940 revision six-inch map in Kilcavan Lower (Ref No.: WX007:009). The structure comprises a large stone (2.4m x 1m) resting on further stones at its west end. Megaliths result from the practice of burial in stone tombs of elaborate construction. They were also the first permanent structures to be built in the Irish landscape. In the Early Bronze Age which followed they were replaced by the adoption of the single burial tradition within a single stone box or cist.

Prior to the commencement of this project the earliest definite evidence of human settlement in this part of Wexford could be traced back to the Bronze Age (c. 2300–500 BC). Cist burials, in which a crouched inhumation or cremation was placed, accompanied by a food vessel, in a single stone lined box was the most common mode of burial in Early Bronze Age Ireland, and notable concentrations occur in the sand and gravel soils of the southeast (Stout 1987). Cist burials are generally chance finds retrieved during land reclamation projects, quarrying or construction, and in north Wexford such burials are mainly concentrated above the 200ft contour. A number of examples of Early Bronze Age burials have been uncovered in the vicinity of Gorey. An Encrusted urn (Ref No.: WX006-065 / 007-041), now in the Edinburgh Museum, was found in 1868 in a gravel pit in the townland of Ballowen or Ramsfortpark (Kavanagh 1973). The precise location of this find is unknown. A vase urn and encrusted urn (Ref No.: WX007-055) were found in a disused sandpit / gravel quarry in the townland of Gorey corporation lands (O'Floinn 1990). The Encrusted urn may originally have been contained in the same sub-circular pit in which the partial remains of the Vase urn were found inverted over cremated bones. A Vase Food vessel was reportedly found near Gorey in 1887 (Ó Ríordáin & Waddell, 1993), it was reportedly found associated with two cists or a double cist, one containing an urn and the other a food vessel under a cairn of earth and stones (*JRSAI* 1881–2).

Such cist burials were frequently covered with mounds of earth or cairns of stone (Waddell 1990). A cairn site (Ref No.: WX007:014) is situated on the summit of Tara Hill, although in cases like the burials in Corporation Lands and Ballyowen, natural 'monuments' such as gravel ridges performed the same function.

A variety of burial monuments existed in the Bronze Age, including cairns and tumuli. A cairn, as implied above, is a mound of stone often used to cover burials, and a tumulus is a mound of earth used for the same purpose. Monuments of the latter type occur in Ask (Ref No.: WX007:020), in Knockavota (Ref No.: WX007:006) and in Monagarrow Upper (Ref No.: WX007:032), which overlooks the valley of the Clonough River. All three

monuments are indicated as 'Tumulus' on OS maps, although the archaeological origin of the 'tumulus' in Ask has been questioned. Described as a flat-topped earthen mound in pasture adjacent to a quarry, the mound may simply be a spoil mound with an advantageous view to the west and north. Toome or *tuaim* is also the Irish word for tumulus, and according to O'Donovan (1840) the tumulus in the townland formerly existed in vicinity of the old parish church.

The tumulus in Ask (Ref No.: WX007:020) is nonetheless situated in a region north of Gorey in which a distinct concentration of Bronze Age activity occurs, centred on the Annagh hills to the west and Tara Hill to the east. The most numerous monument is the standing stone, representing the largest group in the county, such as that in Gorey Corporation Lands (Ref No.: WX007:061). This site is typical of Wexford standing stones in that it is rather short (H. 1.5m), and is of greenish-grey slate. Standing stones very occasionally mark burials. They also may have been used as markers of routeways or territorial boundaries, or to indicate the presence of ritual or sacred places. In the vicinity of Tara Hill standing stones also exist in Ballinacarrig (Ref No.: WX007:027) and Kilcavan Upper (Ref No.: WX007:053), while possible sites exist in Kilcavan Upper (Ref No.: WX007:011), Ballinacarrig (Ref No.: WX007:025, 007:028, 007:029 and 007:054) and in Tinnock Lower (Ref No.: WX007:002). These stones are all located on the Macamores, a badly drained soil formed from drift of the Irish sea. The site in Tinnock Lower is indicated as 'Standing Stone' only on the 1940 edition OS six-inch map, and no above ground trace remains.

Often the most common types of monuments that survive from the Bronze Age, probably because they are largely underground, are the unassuming *fulachta fiadh*, or cooking site. This is also a monument that contributes the greatest amount to our knowledge of Bronze Age settlement across the country. *Fulachta fiadh* manifest themselves in the landscape as mounds of burnt stone, often forming a horseshoe-shape. The stones were heated on a fire and then placed in a water-filled pit in order to heat the water. They are usually found in marshy areas, beside rivers and streams as the pit tended to be dug into the water table in order to fill up naturally with water. After each use, the pit (or trough) was presumably cleaned of the heated and cracked stones, and these were discarded around the pit, forming the mound, from which they get their name. They often appear in groups, and soil stripping in the vicinity of isolated examples frequently reveals additional associated fulachts. Moreover, the mounds of these features are frequently ploughed out or removed, especially in counties such as Wexford with strong tillage traditions, but top-soil stripping reveals the trough or burnt spreads of former fulachts. Examples include a *Fulacht fiadh* site in Kilmurry (Ref No.: WX007:058), which consists of two areas of burnt and broken stone in a black matrix that is visible when the area is ploughed.

During the Late Bronze Age there was a revival in gold working using bar gold as well as sheet metal. Among metalworker products was the gold bar torc, or neck ornament, of which thirty are known from Ireland. Their distribution, which shows a concentrated in south Leinster, is possibly due to the presence of gold in the Wicklow Mountains (Stout 1987), and a gold bar torc was found at Tubberduff (Toberduff) in the vicinity of Ask Hill in

1863, northeast of Gorey. According to Mr. Charles Naughter, Kilmurry, in the Courttown Estate Papers the torc was found in a quarry at Ask Hill.

The evidence for Iron Age activity in Wexford remains inadequate, and knowledge on this period within the county is largely dependent on a small number of defensive sites along the southeast coast (Stout 1987).

### 2.3.2 Early medieval period

Christianity was introduced into Ireland in the fifth century AD and brought with it not only writing and recorded history but also a range of new monuments. The best known native monument of this period is the ringfort—the classic early medieval (*c.*500–*c.*1100 AD) secular settlement type. Ringforts are among the commonest monuments in Ireland, although only around one hundred and fifty survive in Co. Wexford. They are round or oval enclosures defined by a bank and an external ditch, often situated on gentle hill slopes. Excavation suggests they were defended farmsteads, including the dwelling house and outhouses of an extended family, and occasionally also have evidence for small-scale industrial activity. Conclusive ringforts in the environs of Gorey include those in Ballinakill (Ref No.: WX012:029), southwest of Courtown, Ballowen or Ramsfortpark (Ref No.: WX007:017), Ballyfad (Ref No.: WX003:002), Huntingtown (Ref No.: WX011:007), Kilcavan Upper (Ref No.: WX007:012) and in Raheenagurren West (Ref No.: WX012:003). The ringfort in the latter townland is indicated on the first or the 1841 edition OS map much as it survives today, although presently the site is densely covered in damp scrub vegetation.

Many of the monuments classified as enclosures in the environs of the proposed realignment are also undoubtedly ringforts or the sites of ringforts, although enclosures can date to various periods and have different functions. Often identified from early Ordnance Survey maps or through aerial photography (See Figures 3-5), where they appear as cropmarks, they are referred to as 'enclosures' until a more precise classification can be established. Enclosure sites exist in Ask (Ref No.: WX007:060), Ballinglin (Ref No.: WX007:008), Balloughter (Ref No.: WX011:043), Ballybanoge (Ref No.: WX011:017), Ballycanew (Ref No.: WX011:022), Ballydaniel (Ref No.: WX011:018, 011:021; 011:041), Ballylarkin (Ref No.: WX003:020), Ask (Ref No.: WX007:021; Plate 1), Clonsilla East (Ref No.: WX007:007), Clonsilla West (Ref No.: WX007:059) and in Raheen (Ref No.: WX012:031). Upstanding enclosures in comparison exist in Ballyhast (Ref No.: WX011:012), Ballyscartin (Ref No.: WX007:024), Killowen (Ref No.: WX011:003) and in Raheenagurren West (Ref No.: WX012:001 and 012:030). A large enclosure also exists in Kilmurry (Ref No.: WX007:023), while a rectilinear enclosure survives in Tullabeg (Ref No.: WX011:040). Rectangular enclosure sites are also recorded in Plattinstown (Ref No.: WX003:007), Raheen (Ref No.: WX011:035) and in Toberanierin Upper (Ref No.: WX011:037), which may have been Anglo-Norman moated sites.

Sites that have been disturbed, so much so that they cannot be readily attributed to any class or group of monument are termed simply earthwork. Sites that are marked on Ordnance Survey maps but not identifiable on

the ground are termed earthwork sites, and numerous examples of the latter, also likely to have been ringforts, are recorded, including those in Ballykilty Upper (Ref No.: WX003:006), Ballyminaunhill (Ref No.: WX011:008 and 011:009), Coolishal Upper (Ref No.: WX011:006), Coolroe Great (Ref No.: WX003:022), Courteencurragh (Ref No.: WX007:035 and 007:036), Hollyfort (Ref No.: WX003:014), Hydepark (Ref No.: WX003:031), Kilowen (Ref No.: WX001:004), Limerick (Ref No.: WX003:025), Raheenagurren West (Ref No.: WX012:002), Tara Hill (Ref No.: WX007:031) and Whitepark (Ref No.: WX003:015) (See Figures 3-5; Plate 1).

### 2.3.3 Later medieval period

Many of the ruinous churches visible in the landscape today date from the early medieval period, as, built of wood, none of the early churches of the Early Christian or Early Historic period will survive above ground. Often the Irish word 'cill', meaning a church appears as a root word in townland names where early churches were known to have been founded, as in Kilmakilloge. Many medieval stone churches or church sites were formerly parish churches, such as that in Churchtown (Ref No.: WX011:036), the parish church of Liskinfere, and in Ballinclare (Ref No.: WX011:011), the parish church of Toome. The medieval church in Churchtown is no longer visible above ground, and the site, at Clogh, is occupied by a modern Church of Ireland. Similarly, the site of the parish church of Inch (Ref No.: WX003:028) is now occupied by a nineteenth century Church of Ireland church. Both the earlier parish church site and the present church, built in 1831, were situated adjacent to the to a glebe of seventeen acres, on which the Glebe house was under construction in 1791 (Lewis 1837). The latter building, present in 1841, appears to have been replaced by a new building indicated as the Rectory by the turn of the twentieth century. The church represented the focal point for the village of Inch, which developed on the mail coach road from Dublin to Wexford.

Parish churches also existed in Clonatin Upper (Ref No.: WX007:034), the parish church of Kilmakilloge, and in Kilcavan Lower (Ref No.: WX007:010), the parish church of Kilcavan. The 'Site of Graveyard' (Ref No.: WX003:021) is also indicated on the 1841 edition OS map, with a well, marked 'St Michaels Well', shown nearby close to banks of the Clonough River in Clonough. A graveyard site also existed in Ballowen or Ramsfortpark (Ref No.: WX007:018) close to a natural spring marked 'Holy Well' on OS editions, and locally dedicated to St. Michael, while a D-shaped graveyard presently survives in Toberanierin Lower (Ref No.: WX011:039). None of these three sites are traditionally associated with a church.

It is recorded that the graveyard in Ballinclay (Ref No.: WX011:038, delisted) was given to the 'friends' in 1778 [the Religious Society of Friends, or Quakers, was founded in 1652 as the Friends of the Truth by George Fox. William Edmonds, a former soldier, first introduced the society into Ireland, where its doctrine spread rapidly in the wake of the Cromwellian period. However, there was a meeting house at Ballinclay since 1743, and the first recorded burial relates to an Elizabeth Rousom who died in 1767. From the Registry of Deeds an indented deed dated 14 July 1759 outlines the lease made by John Wright of 'Ballinclea' of 'that part of the lands of Ballinclea

now walled in and set apart for a graveyard or place of burial for the people called Quakers'. Margaret Wright, wife of John, and residing in Ballinclay House, was buried in the graveyard in 1774; the above said John was buried in 1785. A William Watson Waring, then residing in Ballinclay, was buried in the graveyard in 1836, and reportedly during the Waring's occupation of the House the meeting house was neglected and fell into ruins. The graveyard is currently still in use and burial took place as recently as 2000.

North county Wexford would have been relatively inaccessible until the sixteenth century, and the few Anglo-Norman settlements in the area suggest that the Anglo-Norman infiltration had not been strong (Loeber & Stoutamer-Loeber 1987), although the entire county was sub-infeudated in the early stages of Anglo-Norman activity in Ireland (Colfer 1987). The various elements of society that the Anglo-Normans introduced include boroughs, demesne manors and manorial villages. The introduction of continental monastic orders also followed, including a possible Augustinian friary in Coolgraney Demesne (Ref No.: WX003:011). The reform of the Irish church into a diocesan and parochial system, begun in the twelfth century, was greatly boosted by Anglo-Norman settlement in the thirteenth century (Moore 1996).

Anglo-Norman fortifications include motte-and-baileys and moated sites. Mottes are steep-sided earthen mounds, originally topped with a wooden lookout tower or *bretasche*, and often associated with a rectangular enclosure, defended by a bank and ditch, and palisade fencing, known as a bailey. Mottes were usually located at defendable vantage points, often overlooking fords on rivers, and were among the first fortifications constructed by the Anglo-Normans on their arrival in Ireland. Moated sites, in comparison, are defended farmsteads dating from the thirteenth and fourteenth centuries. They are usually square or rectangular areas, defined by banks and external ditches, often built in damp areas where the ditch becomes naturally waterlogged. The distribution of mottes and moated sites in the county indicate that initially the Anglo-Normans intended to occupy and settle all of the county, and examples in the environs of Gorey include a motte in Ballymore Demesne (Ref No.: WX016:014), southeast of Camolin, in Middlemount (Ref No.: WX012:010), on the east coast south of Courtown and in Pallis Lower (Ref No.: WX002:019), west of Inch. A mound site at Kilgorman (Ref No.: WX007:046) may also possibly be a motte. Moated sites occur in Camolin (Ref No.: WX011:014) and in Clones Middle (Ref No.: WX007:003), northeast of Tara Hill. The subsequent building of stone castles, particularly tower houses, examples of which shown a marked southern distribution, highlight the failure of Anglo-Norman settlement in the north of the county (Colfer 1987). The scarcity of medieval tower houses in the region, what became the seventeenth century plantation area, has also led Loeber & Stoutamer-Loeber (1987) to suggest that timber dwellings must have remained common, given an abundant supply of wood from forests of the Leinster hills.

Following the Anglo-Norman invasion in 1169 Gorey was situated within the major Prendergast fief of Ui Mealla and Kynaloh, the largest fief in the county (Colfer 1987), and to which Pallis motte (Ref No.: WX002:019), west of Inch, must have been related. The fief passed to the Roches toward the end of the thirteenth century. As previously alluded to Gorey may have been a possible borough on Prendergast fief, but would possibly never

have been more than just a 'rural borough' with no locational or economic advantages. As such, the survival of Gorey in the modern landscape must be owed to the seventeenth century plantation. A borough at Courtown may simply have resulted from the need for a port and ready access to England by sea from the north of the county.

### 2.3.4 The Wexford Plantation

The plantation of Wexford was the first colonial settlement undertaken by the Dublin government after the massive introduction of British settlers into Ulster at the beginning of the seventeenth century (Loeber & Stouthamer-Loeber 1987). It was initiated in order to settle the northern part of the county, which had never been fully penetrated following the Anglo-Norman conquest of the twelfth century, and where the native Irish sept, the McMurrough Kavanaghs, retained a strong presence. Large tracts of land, ranging from 1000 to 3000 acres, belonging to families of both old Gaelic and Anglo-Norman stock were confiscated, and colonial strong houses, subsequently destroyed in the rebellion of the 1640s, sprang up throughout the barony of Gorey. To shire the north of the county a fort was built by 1610 as a garrison for troops five miles northeast of Gorey, called Fort Chichester (now named Fortchester). It was built to protect the county against raids from displaced natives, but had passed to private hands by 1618. Access to north Wexford from the Pale was through the pass at Fort Chichester.

The Wexford Plantation was to have a plantation town, and King James I in 1618 gave directions to that effect. The result, as indicated above, was the grant of a charter to Bishop Ram, Protestant Bishop of Ferns and Leighlin, in 1619, and the development of a town, initially called Newborough, and later Gorey. A plantation village and a church also sprang up at Limerick, around the new manor of Sir Lawrence Esmond four miles to the north of Gorey (no trace of this latter village survives). The estate of Lemanagh, anglicised to Limerick, was granted to Sir Lawrence Esmond in 1612 (and again in 1618), who, as a condition of plantation, was required to build a defensible castle or house. Esmond had built on this property by 1617, the largest of known plantation castles of the area (Ref No.: WX003:024). Little of the castle or Jacobean house at Limerick survives; it was burnt in 1649 during the rebellion and the site of the house may coincide with the present farm buildings on site.

Ramsfort, one mile north of Gorey was another plantation site. Thomas Ram, the protestant Bishop of Ferns and Leighlin moved his seat from Ferns to the new plantation town of Gorey in 1620, and when he died in 1634 his body was buried in the chapel built by him in the town. Rebels burned the Bishop's Palace in 1641 when the town was sacked during the rebellion of that year. Rams son had also built a house close to the town called Ramsfort, which was also burnt around this time. It probably stood on the site of the present country house, which built in 1751. The Civil Survey mentions the site as 'a ffort in repaire & a decayed Mill', suggesting that the residence may have been situated in a fortified enclosure.

Additional plantation estates included that at Prospect east of Gorey, granted to Sir Edward Fisher in 1612 as the manor of Chichester, and regranted in 1618 as the manor of Fisherstown. The decayed castle at Prospect (Ref No.: WX007:049) is probably shown on the Down Survey map as a tower-like feature. The estate of Sir Richard Cooke was located at Newtown Lower, close to the county boundary with Wicklow, from 1612, becoming the manor of Cookestown from 1618; a castle stood on site by 1621 (Ref No.: WX003:004). Lands were also granted to Sir Rodger Jones at Middletown on the outskirts of Courtown in 1618. The subsequent defensive house or castle (Ref No.: WX012:018), built by 1621, was in a state of decay by 1654. A plantation castle was also erected in Monaseed Demesne (Ref No.: WX006:071), west of the Esmond estate at Limerick, on land granted to William Marwood in 1618. A plantation site, which was not government sponsored, also existed at Killybegs, immediately west of Inch. Its Irish owner William Doyle of Fortchester mortgaged it to a merchant Thomas Wakefield, where a brick house was subsequently built following the rebellion.

During the intervening period between the rebellion of the 1640s and the late 1870's landed properties in Wexford became progressively smaller (Gahan 1987). The once extensive Esmond estate, at one time occupying the entire parish of Kilcavcan, had shrunk to an area around the manor of Limerick, to be replaced by the Quinn estate and several smaller properties nearby (Gahan 1987). The Esmonds did however remain a large landowning family in the parish of Kilcavan. The Ram family, with a modest estate around Gorey (expanded in the seventeenth century when the property of an absentee grantee Sir Walter Plunkett, i.e. the Clonatin estate, was incorporated), similarly remained a prominent landed family into the nineteenth century.

### 2.3.5 Industrial sites

Other monuments, such as watermills, which can date from the medieval period or later, also appear in the archaeological record. Many of these features are noted from the Civil Survey and, in some case, relate to features still extant today or extant on later maps, such as the first edition OS map (1841). However, little is known of the horizontal Mill in Corcannon (Ref No.: WX007:057), discovered during land reclamation in *c*. 1985, although a dendrochronological felling date of AD 1228±9 was established for timbers recovered. There is also record of timbers from a 'crannog', discovered in *c*. 1900 in Toberduff, from which a granite quern was also recovered. The site, WX007:052, which is not precisely located may also possibly have been a horizontal mill (Moore 1996).

The first edition map of the OS six-inch series indicates an unnamed 'Corn Mill' on the townland boundary between Clogh and Cain. Its 'Mill Pond' lies slightly to the northwest along the channel of a 'Mill Race' that sources in Moneylawn Upper and travels through the centre of Moneycross Upper townland, thereby dividing the townland in two. A second mill, on the east side of the present Arklow to Gorey road on the Ballylarkin and Ballyellin townland boundaries is indicated as 'Ballylarkin Corn Mill'. The building of water powered corn mills

reached a peak in the years immediately preceding the Famine, and took place all over County Wexford in the first half of the nineteenth century.

## 2.4 Townland

The townland placename Killybegs is anglicised from *cealla-beaga*, the little churches (Rafferty 2004). Townland names were taken down in the nineteenth century by the Ordnance Survey, at which time some were anglicised, some were translated while others were given entirely different names by the new landowners. The greatest number of townland names traversed by, or in the vicinity of the proposed realignment are anglicised Irish names such as Ballinclay or Kilmurry; examples of translated names include Ashwood and Hollyfort on the county boundary with Wicklow; Ramstown and Fortchester, along with Perrymount, are examples of the introduced English names of seventeenth century plantation or later settlers. By the time the OS collected placenames in the area in the 1840's, both the native Irish and introduced English forms would have been simultaneously in use in the area, although the Irish language itself in Wexford had ceased to be spoken by 1851.

Of the Anglicised Irish place names a high ratio are cultural in origin, meaning they relate to human activity. Among generic cultural elements, by far the most numerous is *baile* (a town) and in Gorey barony over one quarter of the townland names contain baile as a prefix. Ballyloughlan is derived from both *baile*, meaning town and *loch*, meaning lake, so that it may translate to the town of the lake. Ballinclare contains the suffix *clár*, meaning a level piece of land, so that the townland may mean the town of the plain. Ballinclay is probably anglicised from *baile na cliath,* or the town or place of the hurdles. Ballyminaunhill contains the root word *mín*, for level; *mínán* subsequently means a small level place. Ballydermot contains a personal name, the town of Dermot, as may Ballyellin, although ellin may be derived from oileáin, for island. The prevalence of *baile* in placenames is an expression of the Gaelic influence that prevailed during the medieval period in Wexford. Placenames with the English suffix town, such as Ramstown, are much less common. Other English name elements include land, park (Parkbaun) and mount (Perrymount).

None of the names relate directly to pre-Christian monuments, a fact reflected in the almost complete lack of prehistoric monuments in the area. Names that do indicate archaeological activity in the landscape include those names referring to ringforts, such as Raheenagurren, which includes the root word *raheen*, which means little rath or fort. The gurren element of the townland could be anglicised from garran, which means a shrubbery or garden. Kilmurry is so called from a dedication to the Blessed Virgin, *Cill-Mhuire*, Our Lady's or Mary's Church. Reference to a well exists in the Irish Toberduff, derived from *tobar dubh,* meaning the black well. Anglo-Norman heritage may be represented by the old English name Frankfort, which possibly meaning the fort of the French or Gall. Tinnock is anglised from *Tigh na cnoic*, the house of the hill.

Many townlands are also anglicisations of Irish names that refer to topographical and agricultural aspects of the landscape. Ask, may derive from *eisc*, an Irish word for water or a stream channel. Courteencurragh, likely

includes *cúirtín*, little court and *curragh*, meaning marsh. Corcannon, contains *cor*, meaning a round hill, cannon may derive from *cunna*, meaning hounds. Clogh is the Irish for stone. Inch derives from *Inis*, an island of land or low meadow by a river. Parkbaun contains the suffix *bawn*, which simply means green field. Clonatin, as mentioned earlier is derived from *cluain* and *aiteann*, the meadow of the furze. Coolnaveagh and Coolnastudd contain either *cuil*, a corner or *cul*, the back; Coolnaveagh is possibly anglicised from *cuil* and *bheith*, meaning birch corner or alternatively from *cuil* and *fiach*, the ravens back. Coolroe translates as the red corner or back. Moneylawn and Moneycross also both contain money, which is derived from *muine* or scrubby place. Knockduff is an anglicised version of *cnoc dubh*, or black, black hill. Carriganeagh contains the prefix *carrig*, the Irish for rock; the townland name may simply mean little rock, or alternatively the rock of the deer (from fiadh). Banogehill contains the root work *bánóg*, the Irish for a meadow. Cronecribbin contains the root word *cró*, which means a hollow or valley predominantly in the northwest, and a cattle hut elsewhere. However, the prefix crone may derive from *crón*, for brown.

## 3.0 THE EXCAVATION

### 3.1 Site Description & Topography

The site was located in the townland of Killybegs in a low-lying area immediately west of slightly rising ground. It was situated along the line of the proposed N11 Gorey to Arklow Link and directly abutting a large forested area on its northern side. The use of this land until its CPO could be defined as agricultural / grazing.

### 3.2 Previous Archaeological Assessment

The excavation was carried out following the completion of archaeological assessment by Irish Archaeological Consultancy Ltd., for the N11 Gorey–Arklow Link (Mullins 2005). The goal of this project being to preserve by-record the archaeological site/s exposed within the take of the proposed route.

### 3.3 Method

Topsoil from one cutting measuring approx. 726m$^2$ was removed utilising a hydraulic excavator under the direction, supervision and monitoring of a qualified archaeologist. Once the topsoil had been removed, the entirety of the site area was cleaned back to reveal the features identified during the previous testing (*ibid*) and to try to identify any new features which may have been exposed.

Upon location all archaeological materials were cleaned and excavated by hand using methods appropriate to their composition, nature and date. All archaeological contexts were photographed and planned (in relation to the site grid) prior to excavation. Sections were excavated through all features to obtain profiles and to expose the stratigraphic sequences and then fully excavated. All sections and cut features were photographed and drawn. The position of all finds and samples were recorded in three-dimensions (where appropriate) in relation to the site-grid. The composition, stratigraphic position and interpretation of all contexts were recorded on a context sheet prior to excavation. Contexts have been sampled for palaeobotanical material, radiocarbon dating, micromorphology, petrology and wood identification, where appropriate. Features that proved to be of modern origin were fully investigated and characterised.

Following prior hand investigation to determine strata and depth, removal of large areas of overburden, excess topsoil and excessive deposits of burnt mound material was undertaken by machine under the careful supervision of the director and archaeological team. Mechanical excavation was used only where no complex stratigraphy had been demonstrated within the mound material and where prior hand cleaning and trenching had already been undertaken. The use of selective mechanical excavation was employed on consultation with the Project Archaeologist, and only following written approval by the National Monuments Section (Dept. of the Environment, Heritage and Local Govt.). Upon identification of pre-mound, earlier or subsoil cut features such as

trough pits, postholes or ditches, mechanical excavation was ceased and any features were excavated by hand as outlined above. A sufficient sample of material of that mechanically removed was retained for wet sieving and such material was also carefully inspected for artefactual evidence.

### 3.4 STRATIGRAPHIC SUMMARY

For the purpose of this report archaeological features have been divided into groups for ease of discussion. These groupings are based on the feature types and their location rather than any suggested phasing. For this report the features uncovered are divided into two categories, Non-linear Features / Linear Features. They are discussed below under these headings.

**Non-linear Features**

The main archaeological feature consisted of a burnt mound type feature located towards the middle of Site 49. It comprised a spread of silty clay (C4) measuring 5.50m long, 5.50m wide and 0.25m deep (Fig 9, Plate 1,2). It contained frequent inclusions of charcoal and heat cracked stones. A t-section was excavated through the centre of this deposit along its north-south and east-west axis. From the section it was evident that (C4) had been subsequently covered over by a compact sandy clay deposit (C10) probably associated with a central palaeo / river channel which ran through the middle of the site (Fig 8). Associated with (C4) were similar charcoal rich layers (C9), (C103), (C104). It was evident from the t-section excavated that there was a significant amount of silts mixed in with the burnt mound material (Fig 8, Plate 3, 9). This evidences that it was constantly being flooded and mixed with deposits from the central river channel over time.

Located on southern side of the spread (C4) and was a shallow rectangular trough cut (C106) (Fig 6, Plate 6). It was orientated east west and measured 2.40m x 2.10m in plan and 0.15m deep. It had vertical sides and a sharp break of slope at the base, which was regularly cut and of compact clay. The trough contained a single fill (C103), which consisted of compact silty clay with frequent inclusions of charcoal and heat cracked stones (Fig 9). It was very similar to (C4) but contained a higher density of heat-cracked stones. No organic timber remains were found in the trough and furthermore no associated post-holes or stake-holes were noted. The fill of the trough (C103) was sampled for C14 radiocarbon analysis. A possible second shallow trough (C16) was excavated directly east of (C106) (Fig 6). It was rectangular in plan and measured 1.50m x 1.10m and 0.16m in depth. It had concave sides and an irregular cut base. It was filled by (C4) and its base was heavily scorched indicating in situ burning.

A number of irregular tree bole cuts were also recorded within the proximity of (C4) (Fig 6). Cut (C17) was located under the eastern section of (C4). It comprised an irregular shaped bole cut with a north-south orientation. It measured 1.10m long, 0.41m wide and 0.25m deep. It was filled with (C4) had steep sides and its

base tapered to a point. Tree bole (C105) was located directly north of (C17). It measured 2.30m x 0.75m in plan and 0.60m in depth. Its cut was very irregular with concave sides and an irregular base (Fig 6, 7 Plate 5). It was evident that the tree boles predated the archaeological activity on the site as they were filled with charcoal rich material (C4) & (C9) relating to the burnt mound phase. They may have been used during the burnt mound phase as troughs or dumping pits. This suggests that trees were felled and removed to accommodate burning or industrious activity on Site 49, and also likely used as fuel for the burnt mound feature.

At the south-western edge of the site what appeared initially to represent a ditch feature was investigated (Fig 6). A section through this deposit (C6) revealed a fill of extremely compact grey brown silty clay with no inclusions (Fig 7, Plate 5). The section was excavated to a depth of 1.25m and a width of 3.40m. At this point it was confirmed that the deposit (C6) was not archaeological but geological. This was evident as (C6) kept getting deeper and spreading out under the natural ground surface. It may represent a potential pingo type glacial feature (James Eogan pers comm.). This feature forms when "the ground surface thaws, while a still frozen layer remains below" (Mitchell: 26, 1990). Its overall visible surface dimensions measured 6.75m x 5.0m.

A D-shaped feature (C14) was investigated along the southwest edge of the site approximately 3.0m north of the potential pingo (Fig 6, Plate 7). Initially the feature appeared to represent a slot trench for a structure. In plan it defined an area of 5.00m x 3.50m. Two 0.50m wide sections were excavated across the northern and eastern extents of (C14). The fill (C5) comprised compact grey silty clay with inclusions of small pebbles and stones. The width varied between 0.83m – 1.20m and 0.16m – 0.31m in depth. Following the excavations of these sections it was determined that (C14) represented a natural depression with irregular sides and was non archaeological.
A further 21 roughly circular and irregular features comprising of very compacted grey and white sandy clay deposits were investigated on the eastern side of the site (Fig 6). They were numbered (C77) – (C96), (C100). Each was half sectioned and recorded. The average dimensions of the features recorded were typically 0.25m in diameter and up to 0.20m in depth. The fills were sterile and contained no inclusions. A small number of these features contained occasional small flecks of charcoal. However upon excavation they were found to be nonarchaeological.

**Linear Features**

A palaeo / river channel ran north south across the site for a recorded distance of 7.50m (Fig 6, Plate 1, 8). It was 5.00m wide, 0.50m deep. Two 2m wide sections were excavated into the channel. The first was against the northern edge of the site and the second 4.0m south of this. The fills of the channel (C23, C24, C102, C37, C38 & C39) comprised grey silty and sandy clays with orange flecks throughout and occasional charcoal (Fig 12). Four
flint flakes (A003/049:8,12,13 & 21) were recovered from context (C24). It was evident that the river channel had predated the burnt mound activity on the site as the channel fills were recorded under the mound material (Plate

3). Furthermore, the trough cut (C106) was truncating one of the main channel fills (C12). It was also found that the river channel was actively depositing material over the burnt mound following the abandonment of the site (Fig 11). It is likely that it provided an accessible water source for use in the trough. This factor may have determined the locating of the burnt mound on Site 49 in the first place.

Four linear field drains (C42), (C7), (C20) & (C42) were also recorded on Site 49 (Fig 6). Each had a series of 0.50m box sections excavated along their lengths to determine their cut profiles and fills. While varying in overall length between 10– 25m the drains had similar u-shaped cut profiles and stone rich fills. All of the drains recorded were modern.

### 3.4.9 Topsoil

The topsoil / subsoil on site was a mixture of glacial and riverine deposited gravels, silts and boulder clays and varied in depth from 0.12m – 0.30m.

### 3.5 Condition Post Excavation

Following archaeological resolution of the site, the site was made safe – deep excavations were backfilled and sharp slopes levelled and smoothed out, and the site was fully fenced-off. The site was taken into possession by the contractor in September 2005, and formed part of the mainline of the new road scheme.

## 4.0 THE FINDS

### 4.1 Directors Overview

The artefactual assemblage from the site consisted of 177 artefacts. The artefact types included: 169 pieces of flint, 3 pieces of iron - including 2 nails and a tool head - See Appendix 1, 2 pieces of worked quartzite, 2 fragments of post medieval pottery and 1 fragment of a stem from a clay pipe. Twenty-three artefacts were from stratified contexts Finds A003/049:1 – A003/049:23. The remainder of the artefacts were topsoil finds. The flint assemblage contained 22 flakes, 26 spalls, 16 cores, 4 scrapers and 1 worked piece were identified. The quartzite pieces consisted of a flaked pebble and a struck flake (pers comm. Dermot Moore). The post medieval pottery comprised 1 piece of cream ware and 1 piece of modern pottery – See Appendix 2. No other finds, notably no worked bone were recovered from the site.

## 5.0 DISCUSSION

The archaeological evidence on Site 49 took the form of a burnt mound type feature and its associated underlying trough and likely associated tree bole features. The burnt mound features uncovered are characterised by the use of hot stone or 'pyrolithic' activities which produce charcoal and heat-reddened/cracked stone-rich spreads or deposits and often overlie pits or troughs. The heated stones were used to heat water within the trough. These site types are the most common type of field monument recorded in Ireland. They are generally located nearby to water sources such as streams or in marshy areas.

The function of these sites has been the subject of much debate within the archaeological community. What is generally accepted is that the burnt mound spreads are the bi-product or waste product following the constant re-use and cleaning out over time of water boiling troughs which had previously been used to boil water using fire-heated stones. Experiments by O'Kelly in 1954 proved that a 4.5kg leg of lamb could be cooked in a controlled manner using the hot stone and water filled trough technique (O'Kelly 1954). Since then a number of additional theories regarding the use of these features have developed and been put forward ranging from cloth dying, sweat houses, steam bending timber, bathing and even brewing beer (Buckley 1990), (Quinn & Moore 2007). A useful analogy may be to think of the troughs on these sites as representing the kitchen sinks of the Bronze Age period which were employed and used boiled water for a myriad of uses.

The lack of associated animal bone is a common characteristic of burnt mound/fulacht fiadha type sites and has been used to argue against the interpretation of these sites as cooking places. The lack of animal bone may evidence that the animal carcases were being butchered off the site at another location and that the bone from the cooked meat joints was not discarded along with the waste material from the troughs but was kept possibly for marrow extraction or distribution to domesticated animals. In addition to this the likelihood is that these site types were likely to have been used for a number of processes requiring hot or boiled water one of which was cooking. The lack of animal bone may evidence the fact that the sites were not exclusively used for cooking or roasting meat but also for the other functions outlined above.

There was no associated remains of structural evidence found on Site 49 i.e. (post-holes, stake-holes, slot trenches). This is another common characteristic shared with the previously excavated burnt mound sites in Ireland. Settlement evidence associated with the sites is not regularly found. It seems in the case of Site 49 this was a site used by a group who moved through the landscape preferring to keep their settlements away from the wet or marshy areas. Located approximately 1km northwest of Site 49 were two burnt mound type sites (Site 51 – A003/051 & Site 52 – A003/052) in the townland of Ballyellin which were also excavated as part of the N11 Gorey to Arklow Link Road Scheme. Radiocarbon dates returned from each site indicate that similar activity as that excavated on Site 49 was occurring during the Middle and Later Bronze Age periods on these sites. The occurrence and proximity of other contemporary burnt mound sites to Site 49 evidences that this site was not an

isolated example of this activity in the local area. It is likely that the activity on Site 49 and Site 51 were contemporaraneous and were probably used by the same group of people moving through the landscape.

### 5.1 ENVIRONMENTAL EVIDENCE

The analysis of charcoal samples recovered from features excavated on Site 49 revealed that a number of species of trees were available locally during the Later Bronze Age period and were exploited for use as fuel in domestic activities such as cooking or roasting. Oak (*Quercus),* Hazel (*Corylus avellana)*, Ash (*Fraxinus excelsior),* Alder (*Alnusglutinosa)* and Blackthorn were identified in varying amounts from the charcoal samples retrieved (See Table Below). Alder was the most abundant species represented in the samples evidencing that it may have dominated the local species available and therefore was deliberately targeted for fuel. The occurrence of Alder as a fuel used in prehistoric burnt mound type activity is well established in the archaeological record (Grogan *et al 2007).* The charcoal identifications of multiple wood species perhaps also indicate that the main species identied was coppiced in order to maintain a regular sustainable supply of wood for fuel or for construction (ibid).

**Table 1**: Charocal Species Identifications from Enviornmental Samples from Site 49

| Context # | Sample # | Type | Species Identification |
|---|---|---|---|
| 4 | 3 | Charcoal | Alder (6g), Oak (0.2g), Blackthorn (0.2g) |
| 4 | 8 | Charcoal | Ash (4g), Alder (1.5g) and Blackthorn (1g) |
| 103 | 12 | Charcoal | Hazel brushwood (1.5g) and Alder (6g). (Oak 1.1g) |

### 5.2 Chronology & Dating

Burnt mound/fulacht fiadha type sites can date from the Bronze Age to the medieval period (Buckley 1990), (Walsh 1990). The vast majority identified however have been dated to the Bronze Age period. Three radiocarbon dates were determined from charcoal samples from the burnt mound and trough feature on the site. One sample was dated from the trough beneath burnt mound itself and two samples were dated from the lower fill of burnt mound. All three samples dated the features to the Later Bronze Age Period. The radiocarbon results and overlap of the date ranges also indicate that the burnt mound activity on the site took place within a 500 year period during the Later Bronze Age period. Based on the depth and spread area of the burnt mounds it seems likely that the trough on site 49 was used over a period of decades before being abandoned. The overlap of all three radiocarbon dates occurs during the 495 year period 1411-916BC. Most of the overlap for the two sigma date ranges from the dated samples occurs around the period 1250-1050BC. It seems likely that activity on the site dated from within this period.

**Table 2:** Radiocarbon Results from Site 49

| C# | S# | Lab Code | Calibrated BP Date | Conventional Date (BP) | 13C/12C |
|---|---|---|---|---|---|
| 4 | 3 | UBA-8246 | 3005 +/- 50 | 1372- 1343BC,<br>1317- 1193BC,<br>1172- 1168BC,<br>1142- 1132BC one sigma,<br>1406- 1113BC,<br>1099- 1088BC,<br>1062- 1060BC two sigma | -28.4 |
| 4 | 8 | UBA-8247 | 2874 +/- 50 | 1126- 976BC,<br>952- 947BC one sigma,<br>1251- 1243BC,<br>1212- 916BC two sigma | -31.6 |
| 103 | 12 | UBA-8248 | 3012 +/- 51 | 1376- 1338BC,<br>1320- 1207BC,<br>1204- 1195BC,<br>1140- 1134BC one sigma,<br>1411- 1114BC<br>1096- 1094BC two sigma | -29.2 |

## 6.0 CONCLUSION

*Fulachta fiadha* /Burnt Mound type sites are common features from the Bronze Age, but typically provide minimal evidence as to their function, let alone economic or dietary evidence, as seen here. All one can say is that some form of hot stone technology which produced a burnt mound feature was occurring at this site during a period from 1411 – 916 BC. The flint arefacts found are likely to be associated with the Later Bronze Age activity uncovered on the site.

Excavations at the site are complete and no further work is recommended. All post excavation archaeological work is now complete for this site and this report constitutes the final report on this excavation. A digital copy of the archive is available at the post excavation offices of Valerie J Keeley Ltd., Brehon House, Kilkenny Road, Castlecomer, Co. Kilkenny.

## 7.0 ACKNOWLEDGEMENTS

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## 8.0 REFERENCES

Brindley, A., Lanting, J. & Monk, M. 1989/90 Radiocarbon Dates from Irish Fulachta Fiadh and Other Burnt Mounds *Journal of Irish Archaeology* V.

Bradley, J. & King, H, nd *County Wexford Urban Archaeological Survey*, Part XI

Buckley, V. 1990. *Burnt Offerings: International Contributions to Burnt Mound Archaeology.* Wordwell: Bray

Carlin, N., Clarke, L. & Walsh, F. 2008 *The archaeology of life and death in the Boyne floodplain.* NRA Scheme Monographs Series 2 Bray: Wordwell

Colfer, B. 1987 'Anglo-Norman settlement in county Wexford', in Whelan, K and Nolan, W ed., *Wexford: History and Society*, Geography Publications, Dublin

Culleton, E. 1984 Early Man in County Wexford (5,000 BC – 300 BC). Mount Salus Press, Dublin

Eogan, J. 2007 'Cleansing Body and Soul?' in *Seanda. The NRA Archaeology Magazine* Vol 2. *PP38-39*

FitzPatrick, M *Clonattin in the Field*, Offprint (OP)

Gahan, D 1987 'The estate system of county Wexford 1641-1876', in Whelan, K and Nolan, W ed., *Wexford: History and Society*, Geography Publications, Dublin

Gahan, D J 1998 *Rebellion-Ireland in 179.,* The O'Brien Press, Dublin

Government of Ireland 1999. *Code of Practice between the NRA and the Minister for Arts, Heritage, Gaeltacht and the Islands.* Dublin: Stationary Office

Grattan Flood, W. H 1916 *History of the Diocese of Ferns*, Downey & Co., Waterford

Grogan, E, O'Donnell, L, & Johnston, P, 2007 *The Bronze Age landscapes of the Pipeline to the West, an integrated archaeological and environmental assessment*, Wicklow

Harbison, P 1995 *The Shell Guide To Ireland*, Gill & Macmillan, Dublin

Hodder, M. A. 1990 'Burnt mounds in the English West Midlands', in Buckley, V. (ed.) *Burnt Offerings, international contributions to Burnt Mound Archaeology*, 106-111, Wordwell: Dublin.

Hore, P. H. 1911 *History of the Town and County of Wexford*, Elliot Stock, London

Laidlaw, G. 2008 "The Ballykeoghan burnt mound" in *Old Kilkenny Review* 2008. PP 7 -15

Lewis, S 1837 *A Topographical Dictionary of Ireland*, Vols. 1 & 2, S. Lewis & Co., London

Loeber, R & Stouthamer-Loeber, M. 1987 'The lost architecture of the Wewford plantation', in Whelan, K and Nolan, W ed., *Wexford: History and Society*, Geography Publications, Dublin

Martin, K. 2008 Preliminary Archaeological Report for E3503, A003/018 - Site 46: N11 Gorey-Arklow, Valerie.

J. Keeley Ltd. Unpublished Preliminary Excavation Report preparted on behalf of Wexford County Council

Monk, M. 2007 "A Greasy Subject". *Archaeology Ireland* Vol. 21(1) (summer) 22-24

Moore, M 1996 *Archaeological Inventory of County Wexford*, The Stationery Office, Dublin

Mullins, G. 2005 *Irish Archaeological Consultancy Ltd*. Archaeological Assessment: N11 Gorey-Arklow Link, Co. Wexford

N11 Gorey to Arklow Link, Environmental Impact Assessment 2005. VOL 2. Section 13.3 Existing Environment, 291-301

O' Kelly, M. J. 1954 'Excavations and experiments in ancient Irish cooking-places', *Journal of the Royal Society of Antiquaries Ireland,* 84: 105-155.

Ó Néill J. 2003-2004 Lapidibus in igne calefactis coquebatur: The Historical burnt mound 'tradition'. *Journal of Irish Archaeology* XII-XIII 79-85

O'Donnell, L 2007 Charcoal and wood, in Grogan, E, O'Donnell, L, & Johnston, P, *The Bronze Age Landscapes of the Pipeline to the West, and integrated archaeological and environmental assessment,* Wicklow.

O' Donovan, J *et al* 1840 *Letters containing information relative to the Antiquities of the County of Wexford collected during the progress of the Ordnance Survey in 1840*, Vol. 1, reproduced under the direction of the Rev. M. O'Flanagan (1933), Bray

Ó' Néill, J. 2000. 'Just another fulachta fiadh story.' *Archaeology Ireland* 14(2) (summer): 19

O'Floinn, R. 1990 'Gorey Corporation Lands', in Bennet, I ed. *Excavations 1989: Summary Accounts of Archaeological Excavations in Ireland*, Wordwell Ltd., Dublin

Power, D. 1990 'Fulachta fiadh in County Cork', in Buckley, V. (ed.) *Burnt Offerings, international contributions to Burnt Mound Archaeology*, 13-17. Wordwell: Dublin.

Quinn, B & Moore, D 2007. 'Beer brewing and fulacht fiadh' *Archaeology Ireland*. Vol. 21. No. 3.

Rafferty, C. 2004 *Between place and parish: A guide to the historical administrative divisions of County Wexford.* Wexford County Council, Wexford

Roycroft, N. 2006 A Theory on Boiled Bull and Burnt Mounds in *Seanda* Issue 1. NRA. 38-39.

Stout, G 1987 'Wexford in prehistory 500BC to 300 AD', in Whelan, K and Nolan, W ed., *Wexford: History and Society*, Geography Publications, Dublin

Waddell, J. 2000 *The Prehistoric Archaeology of Ireland*. Galway University Press, Galway.

Walsh, C. 1990 'A medieval cooking trough from Peter Street, Waterford' in Buckley, V. (ed.) *Burnt Offerings:* International conference to burnt mound archaeology. Dublin: Wordwell.

Whelan, K 1998 *Fellowship of Freedom-The United Irishmen and 1798*, Cork University Press

Williams, G. 1990 'Burnt mounds in south-west Wales', in Buckley, V. (ed.) *Burnt Offerings, international*

*contributions to Burnt Mound Archaeology*, 129-141, Wordwell, Bray.

## 9.0 SPECIALIST APPENDICES

# APPENDIX 1

**Report on Metal Artefacts**

**From Excavations on the**

**N11 Gorey to Arklow Link,**

**Co. Wexford.**

**For**

**Valerie J. Keeley, Ltd.**

**By**

**Órla Scully, MA MIAI**

# Report on Metal Artefacts from Sites on the N11 Project

## By Órla Scully, MA MIAI

## For

## Valerie J. Keeley Ltd

**Introduction**

The excavations on the route of the N11 Gorey to Arklow Link, undertaken by Valerie J. Keeley Ltd, from which metal artefacts was retrieved are as follows;

Site 06; A003/057; Moneycross Upper; Site 13; A003/014, Moneylawn Lower; Site 24, A003/042, Raheengurran West; Site 27, A003/019, Raheengurran West; Site 33; A003/017, Ballyloghan; Site 37, A003/028, Ask; Site 39, A003/035, Ask; Site 40, A003/ 036, Ask; Site 42, A003/020, Ask; Site 49, A003/049, Killybegs; Site 53, A003/053, Cooladangan; -all in Co. Wexford. An arrowhead from was also included with the assemblage, A001/032, Ballykilmore 6 Context 206, find 95. In total, 34 metal artefacts were examined, 33 of which are from the N11 Gorey to Arklow link. They are catalogued in the attached tables and grouped for discussion under headings according to their function. There were eight groups of artefacts under the headings of domestic, dress, horse equipment, knives, miscellaneous, structural, tools and weaponry.

**A003/014, Moneylawn Lower**,

There were two iron objects from this site and one copper alloy & iron item; a possible file, a nail and a folding knife.

**A003/017**, **Ballyloghan**,

There were three iron objects from this site; a horseshoe and two horseshoe nails.

**A003/019**, **Raheengurran West,**

There were eight iron objects from this site; a wedge, a horseshoe nail, an ornamental mount, possibly for a horse, several nails and an iron ring.

**A003/020, Ask**,

There was a single copper alloy object from this site; a cross-shaped mount.

**A003/028**, **Ask**,

There were three objects from this site; one is non-metallic, not included in report. The remaining iron objects were a wedge and an unidentified bar.

**A003/035**, **Ask**,

There were two iron objects from this site, a rivet and the partial remains of a horseshoe.

**A003/036**, **Ask**,

There were two objects from this site, one iron, a nail, and a lead and iron disc.

**A003/042**, **Raheengurran West**,

There were two objects from this site, and iron nail and a fragment of a spur, made of iron, decorated with strips of copper alloy.

**A003/049, Killybegs**,

There were three iron objects from this site, a nail, a horseshoe nail and a possible trowel.

**A003/053, Cooladangan**,

There was a single iron nail from this site.

**A003/057; Moneycross Upper**, There were six objects from this site, all iron; an arrowhead, some slag, a nail, two horseshoes and a horseshoe nail.

**A001/032, Ballykilmore 6**,

The single artefact from this site was an iron socketed arrow head.

## Discussion of the Artefacts

### Domestic

The only artefact ascribed to this category is tentatively placed. It is an iron ring, (A003/019:643: surface VV), quite small and thick and it is suggested as a possible hanging fixture. Such rings could also have formed a piece of horse tackle, but given its surface provenance, may just be a corroded nut from a bolt, with its rectangular section. Alternatively it may have functioned as a collar, a wide variety of sizes of which have been recovered in medieval excavations in Britain. These were used to bind, link or strengthen fittings. 'The smaller circular ones would have been particularly suited to securing the handles of various tools'.[2]

[2] Goodall, 1990, 330

**Dress**

The copper alloy cross-shaped mount, (A003/020:591:2074) is a very special find. It is a cast cruciform object with raised interlace decoration. It is not exactly symmetrical. The longest arm is 12mm, the arm above it is 9mm long, and the side arms are 9mm and 7.5mm. The width of the arms is 8mm. The arms are 4mm thick, and the maximum thickness of the objects is 8mm. The obverse has the remains of two attachments, each 7mm long, with a gap of 4mm between them. One of the attachments has a central depression, possibly the worn remnant of what may originally have been an aperture. The second has a suggestion of the same. It was found in a pit enclosed by a circular ditch 10-12m in overall diameter. The ditch is quite slight approx. 0.4m wide and 0.2-0.3m deep. A group of 3 ring ditches is located approx 30m WNW of the find spot. A 4th ring ditch is located approx 140m to the east. Apart from this object the finds from the site are Early Bronze Age (a few sherds of Beaker pottery) and Middle Bronze Age (1 burial in an inverted cordoned urn, a few sherds of possible domestic cordoned urn) in date[3]. The object may not have been worn by somebody, but rather may have adorned a harness.

A collection of what are described as harness mounts was found, 'along with a horse-bit and other objects, as well as human and horse bones, near Navan, Co Meath. The find is almost certainly that of a pagan Viking horseman. [The] set of cast and gilt copper-alloy mounts were once attached to leather straps, the cruciform mounts being fitted where two straps met or crossed. The interlace and animal ornament is typical of such fittings which have been found widely throughout Britain and Ireland, as well as in Viking graves in Norway'.[4] 'Expensively decorated bridles were highly prized in contemporary Irish society. The Brehon Laws establish compensation ranging from five to twenty cows if a bridle is not returned by a borrower.'[5]

Mounts, per se, are affixed by means of a rivet to leather or wood – as per harness or reliquary. The cross from Ask has the remains of two lugs which may have facilitated a bar through which a strap was threaded.

Three early medieval mounts, recent stray finds from the environs of Navan fort in County Armagh, are identified as strap attachments.[6] One of these- from Killylea, is not identical to the Ask object, but its 'original outline may have been approximately cruciform', and is identified as 'possibly a belt fitting and a 9th- or 10th-century date is a probability[7]. The author comments that it is a moot point whether the lozenge and cross are Christian symbols or no more than shapes to a metalworker's eye.

**Horse Equipment**

[3] Eogan, J., pers comm

[4] Ó Floinn, (2002), 182

[5] Kavanagh, (1988), 100

[6] Bourke, (2003), 95

[7] ibid

There were eleven items in this category. Four horseshoes, or parts thereof, were recovered and five horseshoe nails. The nails are fairly standard rectangular slender shafts with rectangular heads. A large almost complete horseshoe from Ballyloughan, (A003/014: 28:3) has an upturned stop on the toe, a feature not seen on medieval horseshoes. The shoe was very wide, almost 18 centimetres indicating a large draught animal. Fittingly, it was recovered from a plough furrow. It has a fullered groove around the line of where the nails were inserted. This is a common feature of late-medieval and post-medieval horseshoes. The second horseshoe, from Ask, is less complete (A003/035:001:013). It also has vestiges of the fullered groove which would indicate a post medieval or early modern date. The third and fourth horseshoes in the assemblage are from Moneycross Upper; (A003/057:094:355 & A003/057:120:269), one is complete and the other is only a piece of a shoe. Both are similar, with U-shaped arches and wide branches. Though no detail survives due to corrosion, the outline of these shoes from Moneycross comforms to a Type 4 shoe, (formerly called 'Later Medieval'), according to the London classification by Clark. [8]

An unusual mount may have adorned a harness. This iron object is cast in the shape of a frond, with a basal calyx. Technically perhaps this cannot be called a mount in the absence of any sign of a mechanism for attachment. It is unusual in that the pattern of the leaves is not symmetrical. The closest parallel to this type of object I have seen is a group of metal 'leaves' found in an early 15th century deposit in London. These were found in conjunction with a leather strap with rivets which would have attached to a loop on the top of the leaves, which were iron with tin coating. 'Leaf pendants are shown hanging in large numbers from the sleeves of the armour of St George in a late 15th century painting…..and they also figure in horse trappings; cf the 15th century painting *The Conversion of St Hubert*'.[9]

The mount and the partial remains of a decorated spur are high status objects. The spur fragment consists of a circular-sectioned bar with spirally wound decoration with copper alloy strips, protruding from an incomplete curved bar. The protrusion, 17mm long, would have served as a goad, to spur on the horse. The prick spur preceded the rowel spur, which began to replace it in the 13th century.[10] The suggested prick spur from Raheengurren West, (A003/042:011:065), would appear to have the goad on the same plane as the arms of the spur, though not a lot remains of the arms. 'This feature is typical of spurs in northern Europe from the 7th to perhaps the early 12th century, when spur arms begin to be curved downwards to fit more closely under the wearer's ankle bone'[11].

**Knives**

Only one knife was recovered from Moneylawn Lower, (A003/014:122:279/297), a medieval farmstead enclosure. The knife is a folding one, made from a combination of iron and copper alloy. The blade is encased in

[8] Clark, (1995), 88

[9] Egan, (1991) 217

[10] Ellis, (1990), 1037

[11] Ottaway, (1992), 698

the copper alloy plates, with a rivet securing the scale tang. A double-bladed example of a folding knife with a non-ferrous metal case is known from Birka.[12] Two examples of folding knives from London are dated to the 13th and 14th century.

**Structural**

Twelve objects were found, nine of which were nails, and one is possibly a rivet. Other objects included a lead disc (A003/036:001:001) with iron adhesions which may have been used in roofing and an iron hasp or bracket (A003/019:782: surface JJ). Neither is from an archaeologically significant feature and they are early modern in date. Nails shafts are tapered and are almost invariably square or slightly rectangular in section with round heads in various states of repair. These are ubiquitous on medieval sites in Britain and Ireland, and have changed little from Iron Age examples from Freestone Hill, Co. Kilkenny to early modern types.

**Tools**

Four objects belong to this category. The tang and partial body of what may be a trowel was recovered from Killybegs, (A003/049:001:122). The tang is slightly cranked and the shoulders of the tools are sloped. It was recovered from the topsoil. Medieval examples are known from Winchester, and what remains of the artefact from Killybegs is similar to an illustrated trowel from there dating to the early 14th century. A small trowel or mason's leaf was recovered from the courtyard in Kells Priory, Co. Kilkenny[13]. Another tentatively-catalogued item is the possible file from Moneylawn Lower, (A003/014:012:029). This consists of a tapered whittle tang which expands into a rectangular shaped incomplete body. Two wedge-shaped pieces of iron, (A003/019:658: surface II & A003/028:001:016) may indeed have functioned as woodcutting aids. Wedges used to secure wood in the eye of a pick were discovered in Lydford Castle, dating to the early 12th century[14]. Both examples in N11 assemblage are surface finds.

**Weaponry**

There was one arrowhead from the N11, (A003/057:100:268), from Moneycross Upper. A second arrowhead from Ballykilmore, (A001/032:206:098), was include with the assemblage.

The arrowhead from Moneycross Upper is a socketed one with a leaf or lozenge-shaped blade, which is unfortunately incomplete. This type of arrowhead would most probably have been shot with a long bow and would have been used for both military and hunting purposes. Socketed arrowheads such as these are well

[12] Op cit 588

[13] Scully, (forthcoming)

[14] Goodall, (1980),165

dated to the earlier part of the middle Ages. Comparable arrowheads from Cork[15] and Waterford[16] are dated to 12th and 13th centuries.

The arrowhead from Ballykilmore is has a triangular blade, with a thicker central rib. Its full length is nearly 8 centimetres. Though traditionally believed to be predominantly for hunting, whilst the narrower blades and bodkin-headed types were used to pierce armour during combat, 'there is little doubt that in the Irish context the majority of combatants would have been un-armoured (especially in the pre-Norman period) and thus the use of all of the triangular-bladed arrowheads … for military purposes cannot be ruled out'[17].

**Miscellaneous**

A piece of slag, (A003/057:090:083) and an unidentified bar of iron, (A003/028:072:033) complete the assemblage. The slag, from Moneycross Upper, was found in the fill of a ditch enclosing a medieval farmstead and may indicate on site smithing. The bar of iron from Ask is unusual as it appears to enclose some lead, or perhaps a globule of slag, which again would indicate on site metal work. The provenance of this artefact is the lower fill of a pit which contained cremated bone, and coloured glass beads. Also from this context comes a fragment of what this writer considered to be a crucible, initially included with metal finds, (A003/028:072:038). It is likely to date to the Iron Age.

**Ó. SCULLY,**

**2007**

[15] Scully, (1997),169

[16] Halpin, (1997) 541

[17] ibid

## Bibliography

**Bourke, C**., (2003), 'Three Early Medieval Mounts from County Armagh', in Ulster Journal of Archaeology, Vol 62,

**Clark, J.,** (1995), 'The Medieval Horse and Its Equipment, *c*.1150 – *c*. 1450.' Medieval Finds From Excavations in London: 5

**Cowgill, J., de Neergaard, M., & Griffiths, N.,** (1987) 'Knives and Scabbards', Medieval Finds from Excavations in London. 1.

**Egan, G. & Pritchard, F**., (1991) 'Dress Accessories' *c*. 1150 – *c*.1540, Medieval Finds from Medieval London'.

**Ellis, B.,** (1990), 'Horse and Riding Equipment' in Object and Economy in Medieval Winchester, 7, part ii.

**Goodall, I.,** (1980), 'Iron Objects' in Lydford Castle, Devon by A. D. Saunders, Medieval Archaeology, vol. 24.

**Goodall, I**., (1990), 'Building Ironwork', in Object and Economy in Medieval Winchester, 7, part ii.

**Halpin, A**., (1997), 'Archery Material' in Late Viking Age & Medieval Waterford, Excavations 1986 – 1992 by M. Hurley & O. Scully.

**Kavanagh, R. M.,** (1988), 'The Horse in Viking Ireland', in settlement and Society in Medieval Ireland, Studies presented to F.X. Martin, o.s.a.

**Ó Floinn, R**., (2002) 'Beginnings: Early Medieval Ireland, ad 500 – 850, in Treasures of the National Museum of Ireland, Irish Antiquities, Patrick F Wallace and Raghnall Ó Floinn eds

**Ottaway, P**., (1992), 'Anglo-Scandinavian Ironwork from Coppergate, The archaeology of York; The small finds, 17/6.

**Scully, Ó.,** (1997), 'Ferrous and Non-Ferrous metal Artefacts' in Skiddy's Castle and Christ Church Cork, Excavation 1974 -77 by D.C. Twohig, eds R. Cleary, M. Hurley and E. Shee-Twohig.

**Scully, Ó**., (Forthcoming) 'The Ferrous Artefacts' in Kells Priory Co. Kilkenny, by M. Clyne.

# APPENDIX 2

## POST-MEDIEVAL POTTERY REPORT FOR THE N11/NEW GOREY-ARKLOW LINK ROAD

*Prepared by Fiona White MA*

### 1.0 NON-TECHNICAL SUMMARY

The ceramic assemblage from the N11 by pass dates between the late 17th century to the late 19th/early 20th century. The assemblage is overwhelmingly of English origin with some possible Irish examples. The variety of wares and in particular table wares, indicates that the early residents of this habitation site were reasonably prosperous, with access to a number of luxury items. The domestic wares indicate that access to a local potter may have been possible.

The contexts (located in drains (C3, 7, 29) in which the ceramic assemblage were discovered were possibly a result of the accumulation of rubbish pits, the remains of domestic fires, post-medieval kitchen middens and possibly the build up of organic material associated with homes. A description of the different wares is provided and a follow up discussion. A catalogue is also provided (but could not be produced in excel format due to time constraints, this can be added again).

## 2.0 DATING

Pottery as an ancient craft has probably been studied more closely than any other.
The rich resource of complete vessels and sherds discovered from stratified contexts are often helpful in establishing a dating sequence for archaeologists. The time period in this case, the post-medieval period is generally set between 1550 –1800. According to Roseanne Meenan this corresponds with a shift towards different centres of production and export as exploration and settlement of the Americas was developed.

In the early 1960's it was becoming clear that pottery from the post-medieval period 1500-1750, and from the later 18th century and 19th century, possessed a potential second only to that of clay pipes (and to a less accurate degree glass) for close dating of deposits, necessary if archaeological and documentary material were to complement each other (Crossley, 1991). The potential for dating a group of material with a post-medieval and early modern ceramic assemblage is considerable, due to relatively rapid changes in styles both of English and imported wares (Crossley, 1991).

The date for this assemblage ranges from the late 17th / early 18th century to the early 20th century. The majority of the sherds date from the 18th and 19th centuries.

## 3.0 METHODOLOGY

A description of the different wares and their origins is provided. There were approximately 2600 sherds (some in poor condition).Where post-medieval pottery is evident, it is possible to give a likely date, due to the circulation and rapid changes in style, during this period, both of English and imported wares.

Ceramics form England, Ireland and possibly Germany are represented. The greatest source of imported pottery comes from England; this can be explained by market trends.

## 4.0 THE WARES

### ENGLAND AND IRELAND

The majority of the assemblage is of English representation. The date of the assemblage is mainly between the late seventeenth, eighteenth and nineteenth centuries. This was a phase of great change and rapid development within the ceramic industry in England, with a notable improvement in quality of all types of wares. The fabric of the wares is principally wholly untempered and the method of manufacture is wheel-made with spin and press moulding. The majority of the assemblage can be classed as delfts or tin glazed ware; a ware which was developed during the sixteenth century as a response to the over-riding influence of Chinese porcelain. The forms range from everyday tablewares to large domestic storage vessels.

### TIN-GLAZED EARTHENWARE

### ORIGINS

Known as delft or majolica today. The ware is a soft earthenware body covered with tin enamel. It was developed in Antwerp and the Low Countries during the sixteenth century. It originated due to the endeavours of potters to find a ware of native production that could compete with the blue-and-white Chinese porcelain, imported by East Indian merchants.

Tin glazed earthenware, earthenwares coated after firing with a moist powdered glaze (of tin-oxide, lead oxide and ground glass) and painted in a small range of high temperature colours before a second firing. Sometimes called delftware was first made in England in the early 16th century and the main centres of manufacture in the 17th were Southwark and Lambeth, London, Bristol. The techniques of tin glazing were introduced to England from the Continent during the 16th. The smooth white glaze enabled potters to decorate their wares with a range of bright colours for the first time.

### VESSEL FORMS

The forms can often change. Mugs, bottles and posset pots were increasingly made of tin glazed earthenware from the 1630's often decorated in imitation of Chinese porcelain. Scenic decorations on dishes of Flemish influence i.e. great religious subjects or flowers or landscapes were also popular.

17th century lighter blues 18th century darker blues more sophisticated copies. Tin glazed was popular up to the end of the 18th century but from the 1750's came under increasing competition from soft paste porcelain and from creamware. New types of teawares were made and new decorative styles evolved. Main centres Lambeth Bristol

Liverpool and Glasgow and Ireland. Irelands' production centre's included Dublin, Belfast, and Limerick. The most notable being Henry Delamain's factory in Dublin set up in 1752. Delamain wished to encourage the standard and establishment of native industries. Dunlevy states in Ceramics in Ireland, (1988, p.17): "Delamain's pottery produced dinner services, spirit barrels, wall fountains, small fruit baskets and the mainstay of many delf factories then, apothecary's jars". The ware was exported to Germany, Spain, Portugal and the West Indies. These items were painted in strong blues with Chinese and Japanese motifs, landscapes, coat-of –arms and crests. Delamain used Carrickfergus clay, also used by potters in Liverpool, Glasgow and Bristol. Delamain died in 1757, and the factory failed shortly after this, due to war on the Continent which diminished exports.

Irish delf ware can be distinguished from English delf ware by its makers mark. The Irish normally marked their wares while the English were less likely to mark mass produced delf ware. However, a lot of Irish and English delf ware is similar particular links were made with Liverpool so it cannot be ruled out completely that some of the delf ware may be Irish.

## CREAMWARE

### ORIGINS

The manufacture of porcelain was well established by 1760 but these were essentially luxury objects being expensive and none too practical. The middle class market for teawares and dinner services was mostly satisfied by the earthenware potters of Staffordshire which developed rapidly in the 18th century local clays being whitened and strengthened by the addition of calcified flints and pipe clay. This mixture which vitrifies at a high temperature was first used for saltglaze stoneware. Fired at a lower temperature and with an almost colourless lead glaze it made whitish earthenware which came to be known as creamware.

Creamware is the largest group represented in this assemblage.

In the 1740's this clay was often combined with other darker clays producing marbled wares. From about 1750 creamware began to be painted in enamels. Throughout the 1760's Wedgwood was improving his creamware and by 1768 he had made it paler and stronger largely by introducing the porcelain materials of china clay and having received the patronage of Queen Charlotte he called it Queensware and it achieved almost a monopoly of the tableware trade. Wedgwood was also responsible for the development of a new class of highly fired porcellaneous biscuit stonewares known as Jaspers which were in production from 1774 ideally suited fashionable demand for decorative objects in the style of Graeco-Roman antiquities The Grand Tour.
A white ware or queensware was being produced at Doneraile, Co. Cork (Dunlevy 1988, 22) and also in Dublin in 1769 but the most successful producer of cream ware was at the Downshire pottery in Belfast. It is unlikely that the creamware from this assemblage is Irish again due to the lack of marking.

**VESSEL FORMS**

Vessel forms are mainly tea wares, like cups, saucers, tea pots, dinner plates, large serving platters

**BLACKWARE**

Blackware classified as red earthenware, black glazed vessels, were made in Britain and Ireland throughout the seventeenth and eighteenth centuries. Traditional blackwares were transformed into Black Basalt superlative black stoneware. Wedgwood's success led his competitors to develop similar wares and by the end of the18th century durable earthenwares and stonewares were gaining new mass markets. The ware's likely origins lie in the Buckley area of North Wales. Successful production centres also existed at Liverpool, Lancashire and Staffordshire. Considerable quantities of the ware were exported to Dublin from North Wales during the seventeenth century and it is generally the largest single group of post-medieval ware discovered in Dublin. As a result of its popularity a local industry developed in Ireland during the middle of the eighteenth century. There are three possible representatives of blackware evident in this assemblage. The first is likely to come from North Wales recognizable from its two clays of different colours and consistencies and dated to the late seventeenth century, the second is likely to be native Irish blackware as it has a softer clay of one colour and one consistency, probably dated to the mid eighteenth century, the third, likely from the Staffordshire region, as they represent tablewares. The ware is much more delicate than the examples mentioned above.

**VESSEL FORMS**

Blackware is associated with domestic containers, generally jars, bowls, milk pans, jugs, pipkins and storage vessels. The sherds form this assemblage represent storage vessels, milk pans and a small number of tankards.

**SLIPWARE**

**ORIGINS**

Slipware of the seventeenth and eighteenth centuries demonstrated the skill and excellence the ceramic industry had reached in England. Most of the specimens were the show pieces of potters, made for some special occasion. Utility wares were produced although little survives in England. Ireland has produced a significant amount of this slipware (which has been debated in regional contexts may have been local copies (White, 2006)) although again this example is likely to be English. The fast effective and versatile decorative techniques of slip-trailing and incising designs on to a slipped surface enabled potters to develop a range of attractive and marketable items. During the early to mid-seventeenth century (which make it the earliest dated ceramics from this assemblage) a number of distinctive regional slipware styles emerged across the south-east and south-west and in the Midlands.

No attempt has been made to distinguish these wares. Production commenced in Staffordshire circa 1650 and ceased circa 1730, and Bristol production commenced in 1690 and ceased in 1760 (Meenan, 1997).

**VESSEL FORMS**

The Ware is a buff colour with a clear glaze. The brown and /or white slip, give the ware its characteristic appearance. The forms are mainly of tankards and in this case of dishes.

**NORTH DEVON**

**ORIGINS**

North Devon was another important centre of pottery production and export to Ireland. Potteries were in operation throughout the medieval period, up until the end of the seventeenth century. They declined due to the rise of the Staffordshire potteries.

Imports into Ireland increased dramatically from the middle of the seventeenth century. Irish butter producers were packing butter in North Devon pots and exporting it to the colonies from the south of Ireland. (Meenan, 1992). The ware is distinguishable by its fabric, which can be very coarse (tempered) to an untempered variety. The ware is highly fired and the glaze usually is a green colour.

There are three distinctive groups from North Devon; ND gravel-tempered, ND gravel-free and ND sgraffitto. Only North Devon gravel-tempered is represented in this assemblage

**VESSEL FORMS**

The vessel forms of ND gravel-free are mainly tankards, drinking vessels and plates

.

**North Devon gravel-tempered:** Usually large domestic vessels, with a coarse fabric, glazed on the interior and flat rims. Cooking vessels, jugs and candlesticks were also made from this ware. It is difficult to surmise what vessel form this sherd represents, possibly a storage jar.

**MOTTLED WARE**

**ORIGINS**

It was made all over England mainly the Staffordshire and Lancashire regions. It was in circulation from circa 1680-1760.

**VESSEL FORMS**

This ware mainly consists of tablewares. Its fabric is highly fired and a buff colour. The glaze can range from light to dark brown.

**STONEWARES**

Various types of clay became vitrified at a temperature of around 1300 degrees centigrade and pots fired in this way known as stonewares are impervious to liquids and very strong. A good deal of stoneware was imported from Europe in the 17th and 18th centuries. It was first made in England in 1670's by John Dwight near Fulham and then spread to Nottingham and Staffordshire. They are variously glazed and decorated with grey/brown and red clays.

From the 1730's Staffordshire potters were able to lighten the colour of their stoneware fabric body by adding Devonshire clay and calcite flints which also made it easier to turn and mould the clay. These wares were invariably salt-glazed and have sometimes been painted in enamels and re-fired or have been gilded. They remained popular up to the 1770's when they were gradually superseded by creamware some jugs have silver mounts. Stoneware remained popular up to the twentieth century and continued to be reproduced.

The sherds of English stoneware from this assemblage, suggest that they were made in Staffordshire (from the examination of their form and fabric).

**VESSELS FORMS**

The sherds represented were probably from tea ware vessels. They may be Staffordshire salt-glazed stoneware, and therefore sherds of tea pots, cups, saucers and dinner plates.

**BROWNWARES**

**ORIGNS**

Also known as glazed red earthenwares. The earthenware body ranges in colour from light red/buff to dark brown or red. The lead glazes include a variety of colours brown, green and yellow. The vessels are usually coarse tablewares, kitchen vessels, dairy vessels and sanitary vessels. The wares are generally assumed to be local to each centre as it would have been uneconomical to import vessels of such size and bulk. In England brown earthenwares were produced all over the country, more intensively in Staffordshire.

**1.5**

**1.6 Local and Native Wares from Urban Contexts in Ireland**

A number of the earthenware sherds from this assemblage suggest that they were made locally, because of their size and bulk. There are a number of finer sherds which may have been produced in Ireland.

It is important to differentiate between native and local wares. Irish fine ceramics (excluding finer local earthenwares) are considered to be native wares as their production was concentrated in certain centres like Dublin and Belfast (Dunlevy, 1988), where the resources and capital were available. They were then exported

abroad or sold to the elite Irish clientele. It is difficult to class earthenwares as similar in fabric and form from all centres. They were almost certainly locally made and then transported around the country. The ware is heavy and bulky and created for domestic use and therefore uneconomical for transport over long distances (Meenan, 1997).

The discovery of kiln furniture, saggers and wasters from some excavations like Red Abbey Yard, Cork (McCutcheon, 1995), supports the notion that the wares are local. Earthenware sherds represent domestic vessels, glazed and unglazed, like storage jars, chamber pots, cooking vessels and jugs. The decorated local earthenwares, in comparison to the finer native wares are limited in their style and production. The earthenware collection also includes an Irish version of blackware (Meenan, 1997). Irish blackware and glazed red earthenware were discovered together from a number of excavations, and most significantly the post-medieval kiln discovered from Tuam Co. Galway, where potters were producing both blackware and earthenware simultaneously (Meenan, 1996).

## SHELL BORDERS

Another version of creamware, with a distinctive shell border, likely to have been produced by Thomas Whieldon mid eighteenth century. Copies of this ware were produced in the north-east of Ireland in the Lagan/Downshire potteries.

**Whieldon-type**

Thomas Whieldon is known chiefly for his tortoise shell wares. In the case of this ware, colouring oxides were dusted onto transparent glaze. A whole range of colours were used by Whieldon during the mid eighteenth century. The sherds from this collection sport a blue feathered edge. A number of Staffordshire potteries made similar pieces. None of the pieces had signature trade marks.

### INDUSTRIAL SLIPWARE

Possible sample of a generic ware produced on mass by a number of Staffordshire potters, during the late eighteenth century and throughout the nineteenth century.

### TRANSFER PRINT

There is a large representation of transfer-printed pottery. These examples were likely produced in Staffordshire originally. Josiah Spode initiated a number of innovative measures to ceramic production. In 1784 Spode perfected a technique for printing patterns from hand-engraved copper plates on to unglazed biscuit, adapting to this to produce the blue and white designs that were to prove the most popular of the factory's wares. (See further discussion on transfer printed pottery in section entitled 'Site 8')

## 5.0 DISCUSSION

This assemblage is from a time period when drastic changes were taking place in ceramic technology and design, which begun from the mid 15th century onwards in both Britain and on the Continent. Closer commercial and cultural links were being forged. The urban mercantile and artisan classes gained greater purchasing power. House design was changing providing more privacy and comfort. There were major refinements in dining habits. Emphasis was placed on individual rather than communal utensils. This ceramic revolution was not confined to the aristocracy. The increase of taverns and eating houses demanded production of appropriate vessels on a wider scale. Many of these vessel forms were contemporary copies of pewter, silver and glass. Vessels were more likely wheel-made and handles and decoration applied using mechanical aids. Potters were encouraged to diverse their wares particularly for the table. Wares imported from the continent had a profound impact on pottery manufactured in Britain and Ireland. Continental wares were superior by virtue of their robust impervious body, glaze technology and diverse shapes and forms. The development of the Luxury ware ensued. On the Continent Rhenish stonewares were popular as were Spanish and Italian Majolica and lusterware. England must follow the fashion and trends. They did so by developing their basic earthenwares.

The majority of this collection dates to the mid/late eighteenth century and early nineteenth century. The industrialisation of Great Britain had started to gather pace, and this was to affect the ceramic industry. As mentioned above heightened commercial activity brought prosperity to various sections of society, which witnessed a rise in living standards. A demand for practical household pottery and tableware emerged, demanding refinement, durability and aesthetic quality. Manufacturers improved their wares with major technological advances in production and design. By the nineteenth century social reforms and progress in science and engineering led to the development of new facets of the ceramic industry.

By the end of the eighteenth/early nineteenth centuries, British potteries were equipping themselves for large scale manufacture. Established techniques like the production of tin-glazed earthenware continued, with improved decorating processes and design production techniques, like transfer-printing.

Traditional brown stonewares and earthenwares continued to be in demand for taverns, food storage in kitchens and due to the bulky nature of these wares, were likely to have been produced locally (including wares in Ireland). The area of Stoke-on-Trent, North Staffordshire, was a particularly enterprising region (and a likely origin for a lot of this assemblages' tin-glazed earthenware). The region had an abundance of clay, skilled local workforce and local coal supply, communication networks were good and the area became known as 'The Potteries'.

Since the late seventeenth century the area had seen the development of a number of small potteries. By the late eighteenth century the region became the largest ceramic manufacturing centre in the British Isles and consequently Europe. This was at a cost, however, North Staffordshire had become extremely polluted from the soot and smoke and local clay pits grew to dangerous sizes. In any case, many advances were made in the diversity of forms, glazes and fabrics. New forms of vessels emerged. Twelve different sizes of dish were recorded in 1770 and prices became fixed. Sauce boats, stool pens (chamber pots) were developed along with butter tubs, tea cups and saucers, plates and tureens.

A number of different innovations were identified with certain potters and some potters emerged as the leaders in the ceramic industry, during the late eighteenth century and into the early nineteenth century. Potters like John Astbury, Ralph Daniel, Thomas Whieldon and Josiah Wedgewood. Wedgwood is most notable for his cream coloured earthenware's which he labelled 'Queensware'. The ware became the most popular in Britain at that time.

By the early nineteenth century Wedgwood's factory continued to develop suitable and sound earthenware, with close rivals like Spode and Minton emerging. Other great names like Copeland and Doulton would also leave their impression on the ceramics period of this period. Terms and techniques like 'maiolica' (meaning the technique of painting coloured oxides onto an opaque white tin glaze and 'lustre ware' (to give the appearance of metal) were employed. Verses and quotations were commonly found on jugs and plates commemorating events and great figures (Ireland's earlier Delamain tinglazed ware is a good example).

However, it was a period that saw the mass production of bone-china which became inexpensive and virtually ousted earthenware for general use right into the modern period.

This assemblage as outlined in section 4 exhibits many examples of this innovative period.

**Site 8**

Site 8 merits a brief discussion as the ceramics from this site produced a large amount of not only generic late eighteenth/early nineteenth century tin glazed earthen wares and creamwares from the Staffordshire region, but it also contained a wonderful collection of sherds of blue and white transfer-printed pottery. This ware with its recognisable blues made from cobalt, were first used for painted decorated China from the fifteenth century. Porcelain which had been imported into Europe was decorated with blue designs, and after about 1650, when tea was introduced, the volume of blue and white 'chinaware' brought back from China was enormous (Copeland, 2000). European potters attempted to copy this tableware, on artificial porcelain and tin-glazed earthenwares. The imports from China declined in the 1780's, because of the popularity of Wedgwood's

Queensware. The reduction of heavy taxation on tea in England also saw the demand for teawares. The owners of Chinese services found it difficult to obtain replacements and additions (Copeland, 2000). British potters responded by copying the hand-painted patterns (the 'Willow Pattern' being the most popular, and still is today) using transfer-printing from engraved copper plates. Spode is renowned for perfecting this processing.
"Most blue and white earthenware is dinnerware, but some is toiletware. Teaware is also occasional found but less has survived because it was more often broken. Dessert ware was produced in some popular dinnerware patterns." (Copeland, 2000, p.21). Site 8 produced a significant amount of this ware, again possibly highlighting the prosperity of the community and accessibility to luxury items like fine ceramics.

**6.0 CONCLUSION**

The assemblage is overwhelmingly English (possibly reflected by the population using the vessels?). There are some local wares (large bulky domestic vessels) represented, possibly produced and traded by local potters and an area where future research is vital. Further investigations are needed on the activities of local potters and whether they were producing fine ceramics. Overall the assemblage dates from the late seventeenth century to early twentieth century, with the majority of the assemblage (creamware) dating late eighteenth/early nineteenth.

**REFERENCES**

Barton, K.J. 1975 Pottery in England from 3500BC-AD1700

Cooper, Emmanuel. 2000 Ten Thousand Years of Pottery

Copeland, Robert 2000 Blue and White Transfer-Printed Pottery

Crossley, David. 1991 Post-medieval archaeology in Britain

Dunlevy, M. 1988 Ceramics in Ireland, National Museum of Ireland

**1.7**

Mellor M. 1997 Pots and People – that have shaped the heritage of medieval and later England. Oxford

Meenan, R. 1997 'The post-medieval pottery' in Hurley, Scully and McCutcheon Late Viking Age and Medieval Waterford: Excavations 1986-1992. Waterford.

White F. 2006 'Post-Medieval Pottery: An Assemblage of Post-Medieval Local Wares from Merchants Road, Galway' P. 176-184 in the Journal of the Galway Archaeological and Historical Society Volume 58: 2006

# APPENDIX 3

## CHARCOAL IDENTIFICATIONS BY ELLEN O CARROLL

| Licence | Townland | Site | S# | C# | Description | Species |
|---|---|---|---|---|---|---|
| A003/049 | Killybegs | 49 | 3 | 4 | Charcoal | Alder (6g) |
| A003/049 | Killybegs | 49 | 8 | 4 | Charcoal | Ash (4g) |
| A003/049 | Killybegs | 49 | 12 | 103 | Charcoal | Alder (6g) |

# APPENDIX 4

## DATING CERTIFICATES

Valerie VJK Ltd
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VAT No. 8242379B

$^{14}$CHRONO

$^{14}$CHRONO Centre
Queens University
Belfast
42 Fitzwilliam
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Belfast BT9 6AX
Northern Ireland

### Radiocarbon Date Certificate

Laboratory Identification: UBA-8246
Date of Measurement: 2007-11-12
Site: E3507/A003 049, Killybegs, site
Sample ID: C.4, S.3
Material Dated: Charcoal
Pretreatment: AAA
Submitted by: Post ex VJK Ltd

$^{14}$C Date: 3005±50
$\delta^{13}$C: -28.4

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Belfast BT9 6AX
Northern Ireland

# Radiocarbon Date Certificate

| | |
|---|---|
| Laboratory Identification: | UBA-8247 |
| Date of Measurement: | 2007-11-12 |
| Site: | E3507/A003 049, Killybegs, site |
| Sample ID: | C.4, S.8 |
| Material Dated: | Charcoal |
| Pretreatment: | AAA |
| Submitted by: | Post ex VJK Ltd |

| | |
|---|---|
| $^{14}C$ Date: | 2874±50 |
| $\delta^{13}C$: | -31.6 |

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Belfast BT9 6AX
Northern Ireland

# Radiocarbon Date Certificate

Laboratory Identification: UBA-8248
Date of Measurement: 2007-11-12
Site: E3507/A003 049, Killybegs, site
Sample ID: C.103, S.12
Material Dated: Charcoal
Pretreatment: AAA
Submitted by: Post ex VJK Ltd

$^{14}$C Date: 3012±51
$\delta^{13}$C: -29.2

C.4 S.3
UBA-8246
Radiocarbon Age BP 3005 +/- 50
Calibration data set: intcal04.14c

| % area enclosed | cal AD age ranges | # Reimer et al. 2004 relative area under probability distribution |
|---|---|---|
| 68.3 (1 sigma) | cal BC 1372- 1343 | 0.143 |
| | 1317- 1193 | 0.789 |
| | 1172- 1168 | 0.018 |
| | 1142- 1132 | 0.050 |
| 95.4 (2 sigma) | cal BC 1406- 1113 | 0.990 |
| | 1099- 1088 | 0.008 |
| | 1062- 1060 | 0.002 |

C.4 S.8
UBA-8247

Radiocarbon Age BP 2874 +/- 50
Calibration data set: intcal04.14c

| % area enclosed | cal AD age ranges | # Reimer et al. 2004 relative area under probability distribution |
|---|---|---|
| 68.3 (1 sigma) | cal BC 1126- 976 | 0.982 |
| | 952- 947 | 0.018 |
| 95.4 (2 sigma) | cal BC 1251- 1243 | 0.008 |
| | 1212- 916 | 0.992 |

C.103 S.12
UBA-8248
Radiocarbon Age BP  3012 +/-  51
Calibration data set: intcal04.14c  # Reimer et al. 2004

| % area enclosed | cal AD age ranges | relative area under probability distribution |
|---|---|---|
| 68.3 (1 sigma) | cal BC 1376- 1338 | 0.199 |
| | 1320- 1207 | 0.731 |
| | 1204- 1195 | 0.041 |
| | 1140- 1134 | 0.028 |
| 95.4 (2 sigma) | cal BC 1411- 1114 | 0.999 |
| | 1096- 1094 | 0.001 |

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

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

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

## 10.0 EXCAVATION RECORD

## APPENDIX A: LIST OF CONTEXTS

**Note:** Site 49 and 50 shared a context register. The numbers below are those that were used for Site 49 during the excavation of both sites.

**Key**: Freq. = frequent Occ. = occasional
Mod. = moderate Nat. = natural

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Topsoil | N/A | N/A | N/A | 0.12-0.30m | | | Orange brown | Silty clay | Mod. smaller, angular stones | 1-14,27-38,40-43,122 | | Topsoil |
| 2 | Subsoil | N/A | N/A | N/A | 0.04-0.12m | | | Orange-brown | compact clay | Occ. small stones | | | Subsoil |
| 3 | Natural | N/A | N/A | N/A | N/A | | | Brown-yellow | Clay | Occ. stones of various size | | | Natural |
| 4 | Deposit | Irregular | 5.50m | 5.50m | 0.25m | | [105] | N/A | N/A | N/A | | 2,3 | Burnt spread |
| 5 | Fill | Rectangular | | 1.20m | 0.31m | | [14] | Grey-blue | Very compact silty clay | Mod. pebbles, small stones | | | Fill of natural depression |
| 6 | Deposit | N/A | N/A | N/A | 0.15m | | | Grey-brown | Very compact silty clay | None | | | Natural deposit. Not fully excavated |
| 7 | Cut | Linear | 10m | 0.15m | 0.28m | Vertical sides, concave base | | | | | | | Cut of modern drain |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | Fill | Linear | Across | 0.55m | 0.55m | | [42] | N/A | N/A | N/A | | | Fill of modern drain |
| 9 | Deposit | Irregular | 6.30m | 3m | 0.20m | | [105] | Dark grey | compact sandy clay | Freq. burnt stones, occ. charcoal | | 1,9 | Burnt deposit |
| 10 | Deposit | Irregular | N/A | N/A | 0.20m | | [105] | Brown-grey | compact sandy clay | Occ. charcoal, smaller river-rolled stones | 15-18 | 6 | |
| 11 | Deposit | Irregular | N/A | 1.07m | 0.27m | | | Brown-yellow | Firm clay | Mod. heat-cracked stones, occ. charcoal | | | Likely natural deposit |
| 12 | Deposit | Irregular | N/A | 1m | 0.20m | | | Grey-yellow | Firm silty clay | Occ. charcoal | 19,20 | | Natural, occurs in many places over site |
| 13 | Deposit | Same as (c37) | | | | | | | | | | | (c13)=(c37) |
| 14 | Cut | Rectangular | | 1.20m | 0.31m | Vertical sides, flat base | | | | | | | Natural depression |
| 15 | Deposit | Same as (c4) | | | | | | | | | | | (c15)=(c4) |
| 16 | Cut | Oval | 1.10 | 1.10 | 0.16m | Concave sides, irregular base | | | | | | | Poss. Trough cut |
| 17 | Cut | Irregular | 1.10m | 0.62m | 0.25m | Concave sides, Irreg. base | | | | | | | Nat. cut under a part of (c4),root activity |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | Deposit | Irregular | 5.10m | 0.80m | 0.20m | | | Orange | Firm silty clay | Occ. charcoal, smaller stones | | | Modern drainage ditch |
| 19 | Deposit | N/A | N/A | N/A | 0.20m | | | Brown-grey | Very compact silty clay | Occ. pebbles | | | Nat. layer under subsoil, not fully excavated |
| 20 | Fill | Linear | N/A | N/A | N/A | | | | | Freq. pebbles | | | Modern drain |
| 21 | Deposit | Rectangular | N/A | N/A | 0.15m | | | Brown-orange | Compact sandy clay | None | | | Nat. lense |
| 22 | Deposit | N/A | N/A | N/A | 0.18m | | | Brown-grey | Compact silty clay | None | | | Nat. layer. Prob. same as (c19) |
| 23 | Deposit | Irregular | 13m | 1.40m | 0.20m | | | Grey-black | Firm silty clay | Freq. heat-cracked stones, mod. charcoal | 21 | | River deposit |
| 24 | Deposit | Irregular | N/A | N/A | 0.15m | | | Grey-brown | Loose gravely sand | Mod. small river rolled stones | 22-26,39,64-66,163,166-167,173-175 | | River deposit from paleo-channel |
| 25 | Deposit | Oval | 0.40m | 0.26m | 0.06m | | [77] | Mid-grey | Compact clayey sand | None | | | Clayey sand, filling nat. depression |
| 26 | Deposit | Irregular | 0.48m | 0.40m | 0.09m | | [78] | Grey-brown | Compact clayey sand | None | | | Clayey sand, filling nat. depression |
| 27 | Deposit | Rectangular | 0.18m | 0.16m | 0.05m | | [79] | Mid-grey | Compact clayey sand | None | | | Clayey sand, filing nat. depression |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | Deposit | Oval | 0.22m | 0.13m | 0.06m | | [80] | Mid-grey | Compact clayey sand | None | | | Clayey sand, filing nat. depression |
| 29 | Deposit | Oval | 0.98m | 0.70m | 0.14m | | [81] | White-grey | Very compact sandy clay | Occ. pebbles | | | Sandy clay, filling nat. depression |
| 30 | Deposit | Oval | 1.03m | 0.60m | 0.14m | | [82] | White-grey | Very compact sandy clay | Occ pebbles | | | Sandy clay, filling nat. depression |
| 31 | Deposit | Oval | 1.15m | 0.67m | 0.10m | | [83] | Mid-grey | Compact clayey sand | Mod. Charcoal | | | Clayey sand, filling nat. depression |
| 32 | Cut | Linear | | | | | | | | | | | Field drain, running across site 49 |
| 33 | Fill | | | | | | | | | | | | |
| 34 | Deposit | Linear | 7.50m | 0.92m | 0.15m | | [44] | Orange-brown | Firm sandy clay | None | | | Non-arch |
| 35 | Deposit | Circular | 0.41m | 0.41m | 0.15m | | [84] | Mid-grey | Compact clayey sand | None | | | Clayey sand, filling nat. depression |
| 36 | Fill | Irregular | 0.68m | 0.46m | 0.05m | | [99] | Light brown | Compact clay | Occ. small stones, charcoal, chalk | | 4 | Clay, filling nat. depression |
| 37 | Deposit | Linear | N/A | 6.53m | 0.20m | | [43] | Orange-brown | Compact silty clay | Occ. angular stones, charcoal | | | Riverine deposit |
| 38 | Deposit | Linear | N/A | 5.30m | 0.28m | | [43] | Grey | Firm sandy clay | Occ. charcoal, orange flecks | | | Riverine deposit |
| 39 | Deposit | Linear | N/A | 0.95m | 0.19m | | | Grey-brown | Firm silty clay | Occ. sand pockets, orange flecks | | | Riverine deposit |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | Fill | Square | 0.52m | 0.38m | 0.04m | | [97] | Light brown | Compact clay | Occ. charcoal, grey flecks | | | Clay, filling nat. depression |
| 41 | Fill | Irregular | 0.79m | 0.50m | 0.05m | | [98] | Light grey | Compact sandy clay | Occ. charcoal | | | Sandy clay, filling nat. depression |
| 42 | Cut | Linear | Across | 0.55m | 0.55m | Vertical sides, V-shaped base | | | | | | | Cut for modern field drain |
| 43 | Cut | Linear | N/A | N/A | N/A | Concave sides and base | | | | | | | River bed, natural cut |
| 44 | Cut | Linear | 7.30m | 0.92m | 0.15m | Straight sides, flat base | | | | | | | Natural cut of river channel |
| 45 | Deposit | Circular | 0.28m | 0.22m | 0.20m | | [87] | Dark grey | Compact clayey sand | Occ. charcoal | | | Clayey sand, filling nat. depression |
| 46 | Fill | Oval | 0.50m | 0.20m | 0.05m | | [88] | Light grey | Compact clay | Occ. charcoal | | | Clay, filling nat. depression |
| 47 | Deposit | Rectangular | 0.27m | 0.22m | 0.07m | | [85] | Mid-grey | Compact clayey sand | None | | | Clayey sand, filling nat. depression |
| 48 | Deposit | Oval | 0.20m | 0.15m | 0.06m | | [86] | Mid-grey | Compact clayey sand | None | | | Clayey sand, filling nat. depression |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 49 | Deposit | Oval | 0.50m | 0.32m | 0.09m | | [91] | White-grey | Compact sandy clay | None | | | Sandy clay, filling nat. depression |
| 50 | Fill | Rectangular | 0.60m | 0.50m | 0.05m | | [90] | Light grey | Compact clay | Occ. small stones | | | Clay, filling nat. depression |
| 51 | Fill | Oval | 0.30m | 0.17m | 0.08m | | [89] | Light brown | Compact clay | None | | | Clay, filling nat. depression |
| 52 | Deposit | Banana-shaped | 0.60m | 0.40m | 0.03m | | [92] | White-grey | Compact sandy clay | None | | | Sandy clay, filling nat. depression |
| 53 | Deposit | Oval | 0.50m | 0.40m | 0.07m | | [93] | White-grey | Compact sandy clay | Flecks of charcoal | | | Sandy clay, filling nat. depression |
| 54 | Fill | Linear | N/A | N/A | N/A | | | N/A | N/A | N/A | | | Modern drain |
| 55 | Deposit | Rectangular | 0.50m | 0.25m | 0.06m | | [95] | Mid-grey | Compact clayey sand | None | | | Clayey sand, filling nat. depression |
| 56 | Deposit | Rectangular | 0.20m | 0.17m | 0.05m | | [100] | Mid-grey | Compact clayey sand | None | | | Clayey sand, filling nat. depression |
| 57 | Deposit | Oval | 0.98m | 0.40m | 0.08m | | [94] | Mid-grey | Compact clayey sand | None | | | Clayey sand, filling nat. depression |
| 58 | Deposit | Oval | 0.85m | 0.30m | 0.08m | | [96] | Mid-grey | Compact clayey sand | Occ. charcoal | | | Clayey sand, filling nat. depression |
| 72 | Cut | Linear | 24.30m | 0.35m | 0.52m | Vertical sides, flat base | | | | | | | Cut of modern drain |
| 73 | Fill | Linear | 12.90m | 0.40m | 0.03m | | [72] | Grey-blue | Loose limestone chippings | None | | | Stone fill in modern drain |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | Cut | Oval | 0.40m | 0.26m | 0.06m | Convex sides, concave base | | | | | | | Natural depression |
| 78 | Cut | Irregular | 0.48m | 0.40m | 0.13m | Concave sides, irreg. base | | | | | | | Natural depression |
| 79 | Cut | Rectangular | 0.18m | 0.16m | 0.06m | Concave sides and base | | | | | | | Natural depression |
| 80 | Cut | Oval | 0.22m | 0.13m | 0.08m | Straight sides, concave base | | | | | | | Natural depression |
| 81 | Cut | Oval | 0.98m | 0.70m | 0.14m | Concave sides, irreg. base | | | | | | | Natural depression |
| 82 | Cut | Oval | 1.03m | 0.60m | 0.14m | Concave sides, irreg. base | | | | | | | Natural depression |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83 | Cut | Oval | 1.15m | 0.67m | 0.10m | Concave sides and base | | | | | | | Natural depression |
| 84 | Cut | Circular | 0.41m | 0.41m | 0.20m | Concave sides, pointed base | | | | | | | Natural depression |
| 85 | Cut | Rectangular | 0.27m | 0.22m | 0.07m | Concave sides, irreg. base | | | | | | | Natural depression |
| 86 | Cut | Oval | 0.20m | 0.15m | 0.06m | Concave sides, irreg. base | | | | | | | Natural depression |
| 87 | Cut | Circular | 0.28m | 0.23m | 0.22m | Concave sides, flat base | | | | | | | Natural depression |
| 88 | Cut | Oval | 0.50m | 0.20m | 0.05m | Concave sides and base | | | | | | | Natural depression |
| 89 | Cut | Oval | 0.30m | 0.17m | 0.08m | Concave sides and base | | | | | | | Natural depression |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | Cut | Square | 0.60m | 0.50m | 0.05m | Convex sides, flat base | | | | | | | Natural depression |
| 91 | Cut | Oval | 0.50m | 0.32m | 0.09m | Concave sides and base | | | | | | | Natural depression |
| 92 | Cut | Irregular | 0.60m | 0.40m | 0.03m | Concave sides, flat base | | | | | | | Natural depression |
| 93 | Cut | Oval | 0.50m | 0.40m | 0.07m | Concave sides and base | | | | | | | Natural depression |
| 94 | Cut | Oval | 0.98m | 0.40m | 0.08m | Concave sides and base | | | | | | | Natural depression |
| 95 | Cut | Irregular | 0.50m | 0.25m | 0.03m | Concave sides, flat base | | | | | | | Natural depression |
| 96 | Cut | Oval | 0.85m | 0.30m | 0.08m | Concave sides, irreg. base | | | | | | | Natural depression |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97 | Cut | Square | 0.52m | 0.38m | 0.04m | Concave sides, flat base | | | | | | | Natural depression |
| 98 | Cut | Irregular | 0.79m | 0.50m | 0.05m | Concave sides, irreg. base | | | | | | | Natural depression |
| 99 | Cut | Irregular | 0.69m | 0.46m | 0.05m | Straight sides, flat base | | | | | | | Natural depression |
| 100 | Cut | Square | 0.20m | 0.17m | 0.05m | Concave sides and base | | | | | | | Natural depression |
| 101 | Cut | Linear | N/A | 0.85m | 0.27m | Straight sides, concave base | | | | | | | Cut of poss. Drain similar to [44] |
| 102 | Deposit | Linear | N/A | 1.65m | 0.24m | | [43] | Mid-grey | Loose silty sand | Mod. small stones, orange flecks | | | River channel deposit |
| 103 | Deposit | Linear | 2m | 1.15m | 0.15m | | [106] | Dark grey | Mod. Compact silty clay | Freq. fire-cracked stones, charcoal | | | Deposit of burnt material, build up in riverbed |
| 104 | Deposit | Irregular | N/A | N/A | N/A | | | Grey | Compact silty clay | Mod. heat-cracked stones, charcoal | | | Very similar to (c9) |

| C.# | Type | Shape in Plan | Length | Width | Depth | Cut Profile | Fills | Colour | Composition | Inclusions | F # | S # | Interpretation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 105 | Cut | Irregular | 2.30m | 0.75m | 0.60m | Concave sides, irreg. base | | | | | | | Poss. cut of treebole |
| 106 | Cut | Linear | 2.40m | 2.10m | 0.15m | Concave sides, flat base | | | | | | | Nat. cut of riverbed |
| 108 | Fill | Linear | 10m | 0.15m | 0.28m | | [7] | Grey | Stone fill | Orange clay-pipe | | | Stone fill in modern drain |

## APPENDIX B: LIST OF ARTEFACTS

| Works# | C# | Find# | Material | Type | Identification | Description | Location |
|---|---|---|---|---|---|---|---|
| A003/049 | 10 | 1 | Flint | Un-worked | Non-arch. | Brown-grey | VJK |
| A003/049 | 10 | 2 | Flint | Un-worked | Non-arch. | Red-brown | VJK |
| A003/049 | 10 | 3 | Flint | Un-worked | Non-arch. | Yellow-brown | VJK |
| A003/049 | 10 | 4 | Flint | | Spall | Orange-brown | VJK |
| A003/049 | 12 | 5 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 12 | 6 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 23 | 7 | Flint | | Spall | Red | VJK |
| A003/049 | 24 | 8 | Flint | | Broken flake | Yellow-grey | VJK |
| A003/049 | 24 | 9 | Flint | Un-worked | Non-arch. | Brown-red | VJK |
| A003/049 | 24 | 10 | Flint | | Spall or poss. debitage | Dark brown | VJK |
| A003/049 | 24 | 11 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 24 | 12 | Flint | | Flake | Orange-brown | VJK |
| A003/049 | 24 | 13 | Flint | | Weathered flake | Brown | VJK |
| A003/049 | 24 | 14 | Flint | Un-worked | Non-arch. | Orange-brown | VJK |
| A003/049 | 24 | 15 | Flint | Un-worked | Non-arch. | Brown-orange | VJK |
| A003/049 | 24 | 16 | Flint | Un-worked | Non-arch. | Orange | VJK |
| A003/049 | 24 | 17 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 24 | 18 | Flint | | Spall | Red-brown | VJK |
| A003/049 | 24 | 19 | Flint | Un-worked | Non-arch. | Yellow | VJK |
| A003/049 | 24 | 20 | Flint | Un-worked | Non-arch. | Yellow | VJK |
| A003/049 | 24 | 21 | Flint | Worked | Flake | Brown | VJK |
| A003/049 | 24 | 22 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 103 | 23 | Flint | Un-worked | Non-arch. | Mid-brown | VJK |
| A003/049 | 1 | 24 | Ceramics | Post medieval | Clay-pipe | Stem fragment | VJK |
| A003/049 | 1 | 25 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 26 | Flint | Fragment | Poss. core | Orange-brown | VJK |
| A003/049 | 1 | 27 | Flint | Un-worked | Non-arch. | Yellow-grey | VJK |
| A003/049 | 1 | 28 | Flint | | Flake | Grey | VJK |
| A003/049 | 1 | 29 | Flint | Un-worked | Non-arch. | Yellow-brown | VJK |
| A003/049 | 1 | 30 | Flint | Un-worked | Non-arch. | Cream-coloured | VJK |
| A003/049 | 1 | 31 | Flint | | Spall | Orange | VJK |
| A003/049 | 1 | 32 | Flint | Un-worked | Non-arch. | Grey | VJK |
| A003/049 | 1 | 33 | Flint | Fragment | Flake | Burnt red | VJK |

| Works# | C# | Find# | Material | Type | Identification | Description | Location |
|---|---|---|---|---|---|---|---|
| A003/049 | 1 | 34 | Flint | Un-worked | Non-arch. | Yellow-brown | VJK |
| A003/049 | 1 | 35 | Flint | | Spall | Light orange | VJK |
| A003/049 | 1 | 36 | Flint | | Flake | White-grey | VJK |
| A003/049 | 1 | 37 | Flint | Un-worked | Non-arch. | Light brown | VJK |
| A003/049 | 1 | 38 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 39 | Flint | Un-worked | Non-arch. | Red | VJK |
| A003/049 | 1 | 40 | Flint | | Poss. worked | White | VJK |
| A003/049 | 1 | 41 | Flint | | Flake | Yellow-brown | VJK |
| A003/049 | 1 | 42 | Flint | | Irregular core | Grey-orange | VJK |
| A003/049 | 1 | 43 | Flint | Un-worked | Non-arch. | Red-brown | VJK |
| A003/049 | 1 | 44 | Flint | | Flake | Orange | VJK |
| A003/049 | 1 | 45 | Quartzite | | Flaked pebble | Brown | VJK |
| A003/049 | 1 | 46 | Flint | | Spall | White | VJK |
| A003/049 | 1 | 47 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 48 | Iron | | Nail | Nail head | VJK |
| A003/049 | 1 | 49 | Flint | Worked | Blade | Red-brown | VJK |
| A003/049 | 1 | 50 | Iron | | Nail | | VJK |
| A003/049 | 1 | 51 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 52 | Flint | | Weathered core | Purple-grey | VJK |
| A003/049 | 1 | 53 | Flint | | Pot-lid flake | Orange-brown | VJK |
| A003/049 | 1 | 54 | Flint | Un-worked | Non-arch. | Red-orange | VJK |
| A003/049 | 1 | 55 | Flint | | Large spall | Brown-red | VJK |
| A003/049 | 1 | 56 | Flint | Un-worked | Non-arch | Orange-grey | VJK |
| A003/049 | 1 | 57 | Flint | | Spall | Yellow-cream | VJK |
| A003/049 | 1 | 58 | Flint | | Spall | White-grey | VJK |
| A003/049 | 1 | 59 | Flint | Un-worked | Non-arch. | Yellow-orange | VJK |
| A003/049 | 1 | 60 | Flint | | Core | Orange | VJK |
| A003/049 | 1 | 61 | Flint | Un-worked | Non-arch. | Orange-brown | VJK |
| A003/049 | 1 | 62 | Flint | Un-worked | Non-arch. | Orange | VJK |
| A003/049 | 1 | 63 | Flint | Un-worked | Non-arch. | Light brown | VJK |
| A003/049 | 1 | 64 | Flint | | Shattered pebble | Grey | VJK |
| A003/049 | 1 | 65 | Flint | | Pebble | Burnt, brown-orange | VJK |
| A003/049 | 1 | 66 | Flint | Un-worked | Non-arch | Orange-red | VJK |
| A003/049 | 1 | 67 | Flint | Un-worked | Non-arch. | Orange-brown | VJK |
| A003/049 | 1 | 68 | Flint | Un-worked | Non-arch. | Red | VJK |
| A003/049 | 1 | 69 | Flint | Un-worked | Non-arch. | Cream | VJK |
| A003/049 | 1 | 70 | Flint | | Core | Brown-orange | VJK |

| Works# | C# | Find# | Material | Type | Identification | Description | Location |
|---|---|---|---|---|---|---|---|
| A003/049 | 1 | 71 | Flint | Un-worked | Non-arch. | Brown-grey | VJK |
| A003/049 | 1 | 72 | Flint | Un-worked | Non-arch. | Grey-orange | VJK |
| A003/049 | 1 | 73 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 74 | Flint | Un-worked | Non-arch. | Red-brown | VJK |
| A003/049 | 1 | 75 | Flint | | Flake | Grey-orange | VJK |
| A003/049 | 1 | 76 | Flint | Un-worked | Non-arch. | Yellow-orange | VJK |
| A003/049 | 1 | 77 | Flint | | Flake | Orange-brown | VJK |
| A003/049 | 1 | 78 | Flint | Un-worked | Non-arch. | Brown-grey | VJK |
| A003/049 | 1 | 79 | Flint | | Flake | Grey | VJK |
| A003/049 | 1 | 80 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 81 | Flint | Un-worked | Non-arch. | Grey | VJK |
| A003/049 | 1 | 82 | Flint | Un-worked | Non-arch. | Orange-brown | VJK |
| A003/049 | 1 | 83 | Flint | Un-worked | Non-arch. | Light orange | VJK |
| A003/049 | 1 | 84 | Flint | Un-worked | Non-arch. | Red-brown | VJK |
| A003/049 | 1 | 85 | Flint | Un-worked | Non-arch. | Yellow-grey | VJK |
| A003/049 | 1 | 86 | Flint | | Coarse spall | Brown | VJK |
| A003/049 | 1 | 87 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 88 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 89 | Flint | | Spall | Cream | VJK |
| A003/049 | 1 | 90 | Flint | | Weathered flake | Orange-brown | VJK |
| A003/049 | 1 | 91 | Flint | Un-worked | Non-arch. | Orange-brown | VJK |
| A003/049 | 1 | 92 | Flint | Un-worked | Non-arch. | Red | VJK |
| A003/049 | 1 | 93 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 94 | Flint | Un-worked | Non-arch. | Orange-brown | VJK |
| A003/049 | 1 | 95 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 96 | Flint | Un-worked | Non-arch. | Red | VJK |
| A003/049 | 1 | 97 | Flint | | Flake | Light orange | VJK |
| A003/049 | 1 | 98 | Flint | | Coarse spall | Orange-brown | VJK |
| A003/049 | 1 | 99 | Flint | Un-worked | Non-arch. | Cream | VJK |
| A003/049 | 1 | 100 | Flint | Un-worked | Non-arch. | Cream | VJK |
| A003/049 | 1 | 101 | Flint | Worked | Spall | Light orange | VJK |
| A003/049 | 1 | 102 | Flint | | Spall | Grey-brown | VJK |
| A003/049 | 1 | 103 | Quartzite | | Flake | Grey-white | VJK |
| A003/049 | 1 | 104 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 105 | Flint | | Core | Brown-grey | VJK |
| A003/049 | 1 | 106 | Flint | Worked | Scraper | Orange-white | VJK |

| Works# | C# | Find# | Material | Type | Identification | Description | Location |
|---|---|---|---|---|---|---|---|
| A003/049 | 1 | 107 | Flint | Un-worked | Non-arch. | Red-orange | VJK |
| A003/049 | 1 | 108 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 109 | Flint | | Spall | White-grey | VJK |
| A003/049 | 1 | 110 | Flint | Un-worked | Non-arch. | White-cream | VJK |
| A003/049 | 1 | 111 | Flint | | Core | Brown | VJK |
| A003/049 | 1 | 112 | Flint | | Core | Orange-brown | VJK |
| A003/049 | 1 | 113 | Flint | | Core | Red-orange | VJK |
| A003/049 | 1 | 114 | Flint | | Spall | Grey-white | VJK |
| A003/049 | 1 | 115 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 116 | Flint | Un-worked | Non-arch. | Yellow-brown | VJK |
| A003/049 | 1 | 117 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 118 | Flint | Un-worked | Non-arch. | Orange | VJK |
| A003/049 | 1 | 119 | Flint | | Spall | White | VJK |
| A003/049 | 1 | 120 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 121 | Flint | | Weathered core | Brown-grey | VJK |
| A003/049 | 1 | 122 | Iron | | Unidentified | | VJK |
| A003/049 | 1 | 123 | Flint | Un-worked | Non-arch. | Red-brown | VJK |
| A003/049 | 1 | 124 | Flint | | Flake | Grey-brown | VJK |
| A003/049 | 1 | 125 | Flint | | Broken side scraper | Orange | VJK |
| A003/049 | 1 | 126 | Flint | | Core portion | Dark grey | VJK |
| A003/049 | 1 | 127 | Flint | | Core | Grey | VJK |
| A003/049 | 1 | 128 | Flint | | Large coarse spall | Grey-orange | VJK |
| A003/049 | 1 | 129 | Flint | | Core | Brown-grey | VJK |
| A003/049 | 1 | 130 | Flint | Un-worked | Non-arch. | Red-brown | VJK |
| A003/049 | 1 | 131 | Flint | | Poss. core | Brown | VJK |
| A003/049 | 1 | 132 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 133 | Flint | | Core | Grey | VJK |
| A003/049 | 1 | 134 | Flint | Un-worked | Non-arch. | Light orange | VJK |
| A003/049 | 1 | 135 | Flint | Un-worked | Non-arch. | Grey | VJK |
| A003/049 | 1 | 136 | Flint | Un-worked | Non-arch. | Red | VJK |
| A003/049 | 1 | 137 | Flint | | Spall | Cream | VJK |
| A003/049 | 1 | 138 | Flint | Un-worked | Non-arch. | Grey | VJK |
| A003/049 | 1 | 139 | Flint | Un-worked | Non-arch. | Brown-grey | VJK |
| A003/049 | 1 | 140 | Flint | Un-worked | Non-arch. | Grey-brown | VJK |
| A003/049 | 1 | 141 | Flint | | Spall | Light orange | VJK |
| A003/049 | 1 | 142 | Flint | Poss. worked | Flake | Orange-brown | VJK |
| A003/049 | 1 | 143 | Flint | Un-worked | Non-arch. | Orange-brown | VJK |

| Works# | C# | Find# | Material | Type | Identification | Description | Location |
|---|---|---|---|---|---|---|---|
| A003/049 | 1 | 144 | Flint | Un-worked | Flake | White | VJK |
| A003/049 | 1 | 145 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 146 | Flint | Un-worked | Non-arch. | Orange | VJK |
| A003/049 | 1 | 147 | Flint | Un-worked | Non-arch. | Orange-brown | VJK |
| A003/049 | 1 | 148 | Flint | Un-worked | Non-arch. | Grey-orange | VJK |
| A003/049 | 1 | 149 | Flint | Un-worked | Non-arch. | Orange-grey | VJK |
| A003/049 | 1 | 150 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 151 | Flint | Un-worked | Non-arch. | White-grey | VJK |
| A003/049 | 1 | 152 | Flint | Un-worked | Non-arch. | Brown | VJK |
| A003/049 | 1 | 153 | Flint | Un-worked | Non-arch. | Orange-grey | VJK |
| A003/049 | 1 | 154 | Flint | Un-worked | Non-arch. | Orange-brown | VJK |
| A003/049 | 1 | 155 | Flint | Un-worked | Non-arch. | Red-orange | VJK |
| A003/049 | 1 | 156 | Flint | | Poss. scraper | Cream-orange | VJK |
| A003/049 | 1 | 157 | Flint | | Spall | Red | VJK |
| A003/049 | 1 | 158 | Flint | Un-worked | Non-arch. | Light brown | VJK |
| A003/049 | 1 | 159 | Flint | Un-worked | on-arch. | White | VJK |
| A003/049 | 1 | 160 | Flint | | Spall | Orange-brown | VJK |
| A003/049 | 1 | 161 | Flint | Un-worked | Non-arch. | Light brown | VJK |
| A003/049 | 1 | 162 | Flint | | Flake | Brown | VJK |
| A003/049 | 1 | 163 | Flint | | Spall | Red-brown | VJK |
| A003/049 | 1 | 164 | Pottery | Sherd | Post-medieval | Brown base sherd | VJK |
| A003/049 | 1 | 165 | Pottery | Sherd | Post-medieval | Brown base sherd | VJK |
| A003/049 | 1 | 166 | Flint | | Coarse spall | Grey | VJK |
| A003/049 | 1 | 167 | Flint | Un-worked | Non-arch. | Brown-orange | VJK |
| A003/049 | 1 | 168 | Flint | Un-worked | Non-arch. | Grey-brown | VJK |
| A003/049 | 1 | 169 | Flint | | Weathered flake | Light orange | VJK |
| A003/049 | 1 | 170 | Flint | | Weathered core | Grey-brown | VJK |
| A003/049 | 1 | 171 | Flint | | Coarse spall | Grey | VJK |
| A003/049 | 1 | 172 | Flint | | Flake | Grey-white | VJK |
| A003/049 | 1 | 173 | Flint | Un-worked | Non-arch. | Orange-brown | VJK Offices |
| A003/049 | 1 | 174 | Flint | | Flake | Yellow-grey | VJK |
| A003/049 | 1 | 175 | Flint | Un-worked | Non-arch. | Dark grey | VJK |
| A003/049 | 1 | 176 | Flint | | Flaked pebble | Light brown | VJK |
| A003/049 | 1 | 177 | Flint | | Weathered core | Creamy-brown | VJK |

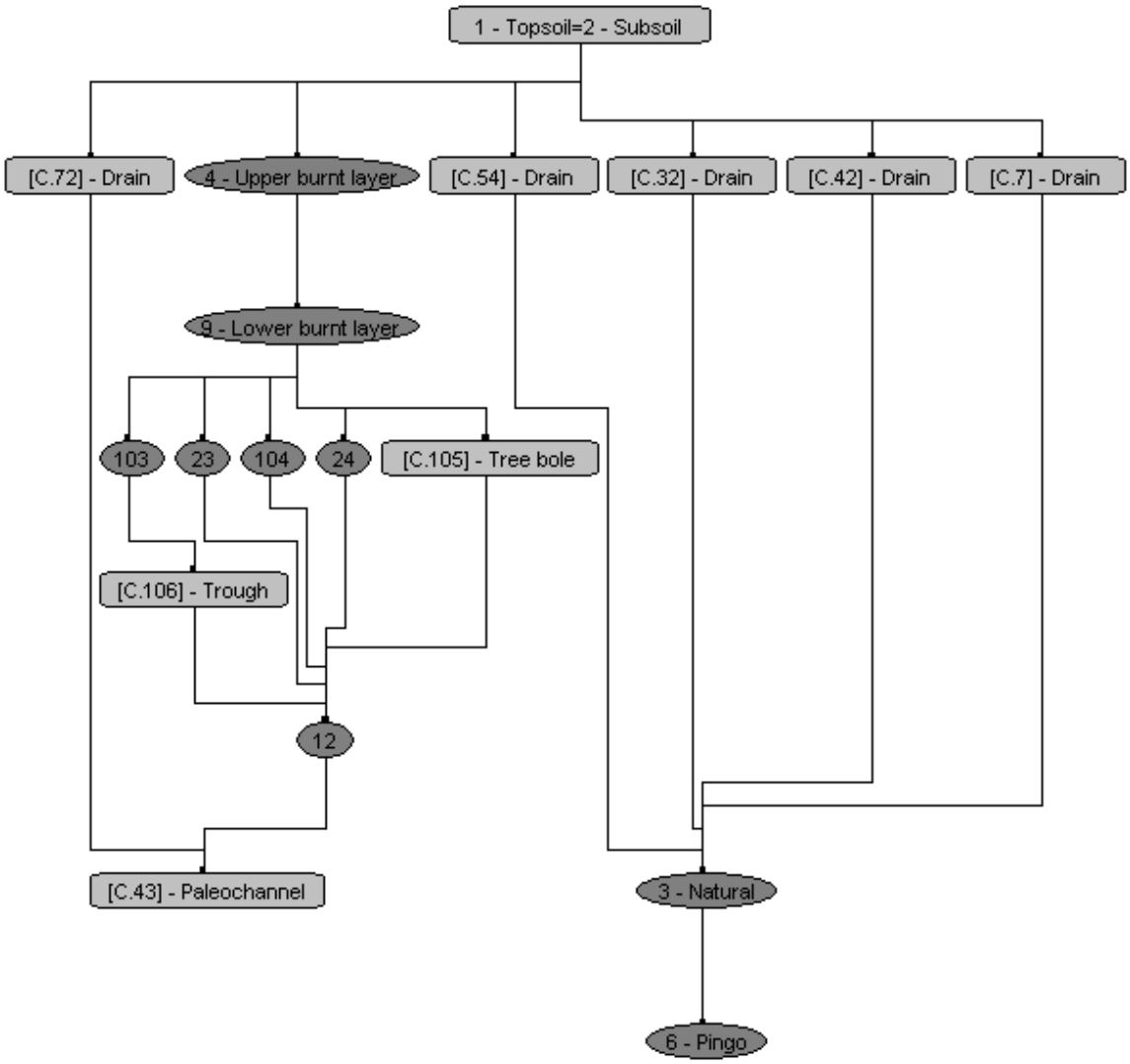
## APPENDIX C: LIST OF SAMPLES

| S# | C# | Type | Volume | Analysis required | Wet-sieving results | Weight of Results |
|---|---|---|---|---|---|---|
| 1 | 9 | Sandy clay, heat-cracked stones | 10 litres | In-house wet sieving | Burnt stones | 1591g |
| 2 | 4 | Silty clay, charcoal and heat-cracked stones | 5 litres | In-house wet sieving | Charcoal / Burnt stones | 32g/4kg |
| 3 | 4 | Silty clay, charcoal and heat-cracked stones | 5 litres | In-house wet sieving | Charcoal/ Burnt Stones | 17g/935g |
| 4 | 36 | Charcoal | 0.25litres | In-house wet sieving | Charcoal / Stones and pebbles | 10g/ 422g |
| 5 | 4 | Silty clay, charcoal and heat-cracked stones | 5 litres | In-house wet sieving | Charcoal/ Burnt stones | 4g/420g |
| 6 | 10 | Clay overlying burnt spread | 10 litres | In-house wet sieving | Charcoal/ burnt stones | 6g/2kg |
| 7 | 37 | Clay with orange flecks | 10 litres | In-house wet sieving | NAS | NAS |
| 8 | 4 | Silty clay, charcoal and heat-cracked stones | 10 litres | In-house wet sieving | Charcoal / burnt stones | 14g/4kg |
| 9 | 9 | Sandy clay, charcoal and heat-cracked stones | 15 litres | In-house wet sieving | Charcoal/ burnt stones | 3g/1346g |
| 10 | 23 | Silty clay, charcoal and heat-cracked stones | 10 litres | In-house wet sieving | Charcoal / burnt stones | 1g/2kg |
| 11 | 104 | Silty clay, charcoal and heat-cracked stones | 5 litres | In-house wet sieving | Charcoal / burnt stones | 28g/2kg |
| 12 | 103 | Silty clay, charcoal and heat-cracked stones | 10 litres | In-house wet sieving | Charcoal / burnt stones | 19g/2kg |

## APPENDIX D: LIST OF QUANTITIES

| Context Sheets | Registers | Photos | Drawings | Finds | Samples | Notebooks |
|---|---|---|---|---|---|---|
| 90 | 5 | 73 | 59 | 177 | 12 | 2 |

**APPENDIX E: SIMPLIFIED STRATIGRAPHIC MATRIX**



Killybegs

Site 49

E3507: A003/049

## PLATES

**Plate 1**: Pre- excavation overview of Site 49 looking north.

**Plate 2**: Pre- excavation view of spread **(C4)** looking east.


**Plate 3**: North facing section showing palaeochannel layers and charcoal rich deposits.


**Plate 4**: North facing section through charcoal rich layer **(C9)**


**Plate 5**: Excavated tree bole **(C105)**.


**Plate 6**: Excavated trough **(C106)**.

**Plate 7**: East facing section of (C6) ‘Pingo’.

**Plate 8**: Section across palaeochannel (C43).

**Plate 9**: Post -excavation view east of burnt mound area


| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client |
|---|---|---|---|---|---|
| Location of Site 49 on the Ordnance Survey Discovery mapping | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council |
| | | **Date** September 10 | **Scale** 1:50000 | **Drawing No.** Figure 1 | **Project** N11 Gorey - Arklow Resolution |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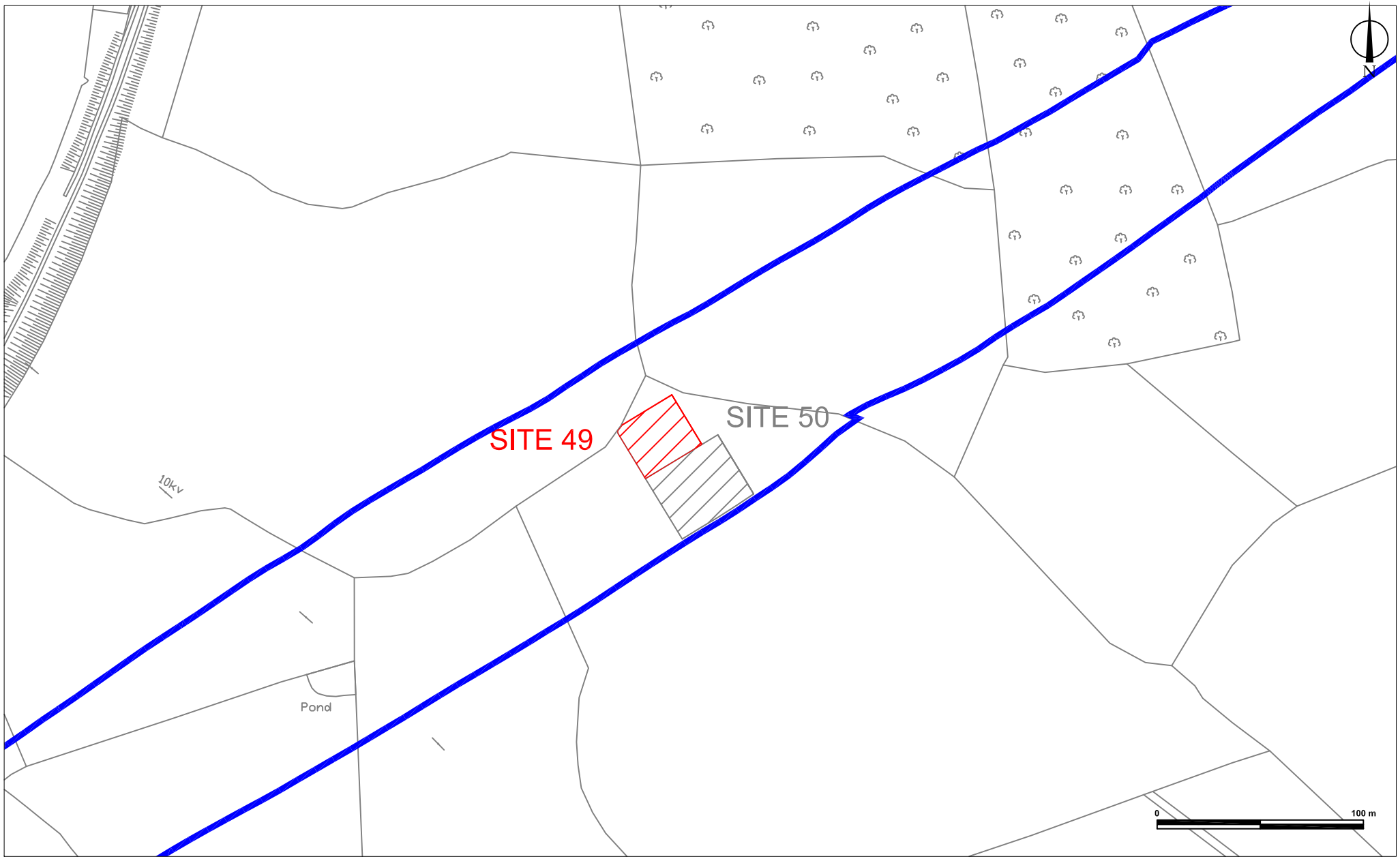


| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client |
|---|---|---|---|---|---|
| Ordnance Survey map showing the location of Site 49 | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council |
| | | Date: September 10 | Scale: 1:2500 | Drawing No.: Figure 2 | Project: N11 Gorey - Arklow Resolution |

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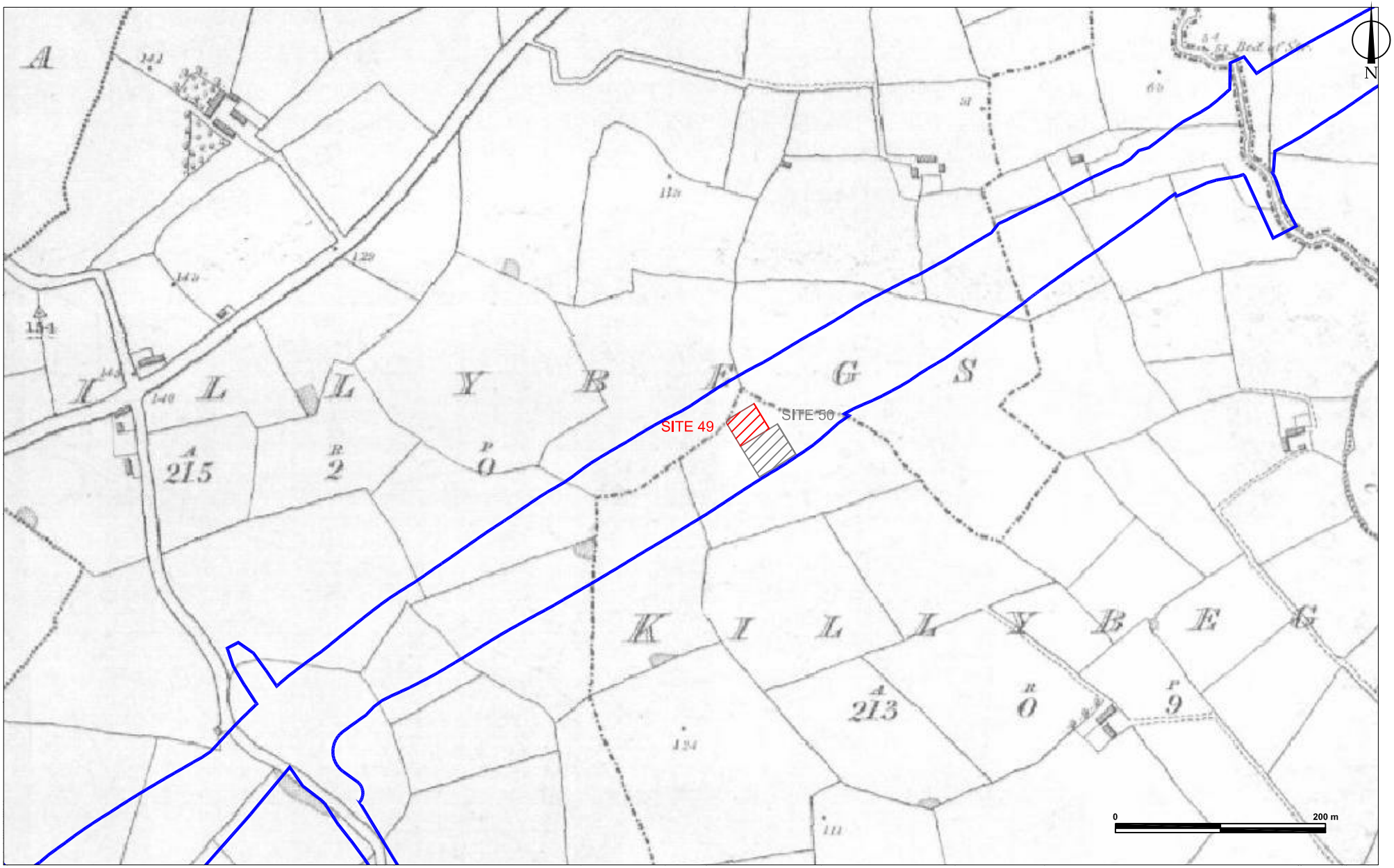


| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client |
|---|---|---|---|---|---|
| 1st Edition Ordnance Survey map showing the location of Site 49 and route of scheme | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council |
| | | **Date** | **Scale** | **Drawing No.** | **Project** |
| | | September 10 | 1:5000 | Figure 3 | N11 Gorey - Arklow Resolution |

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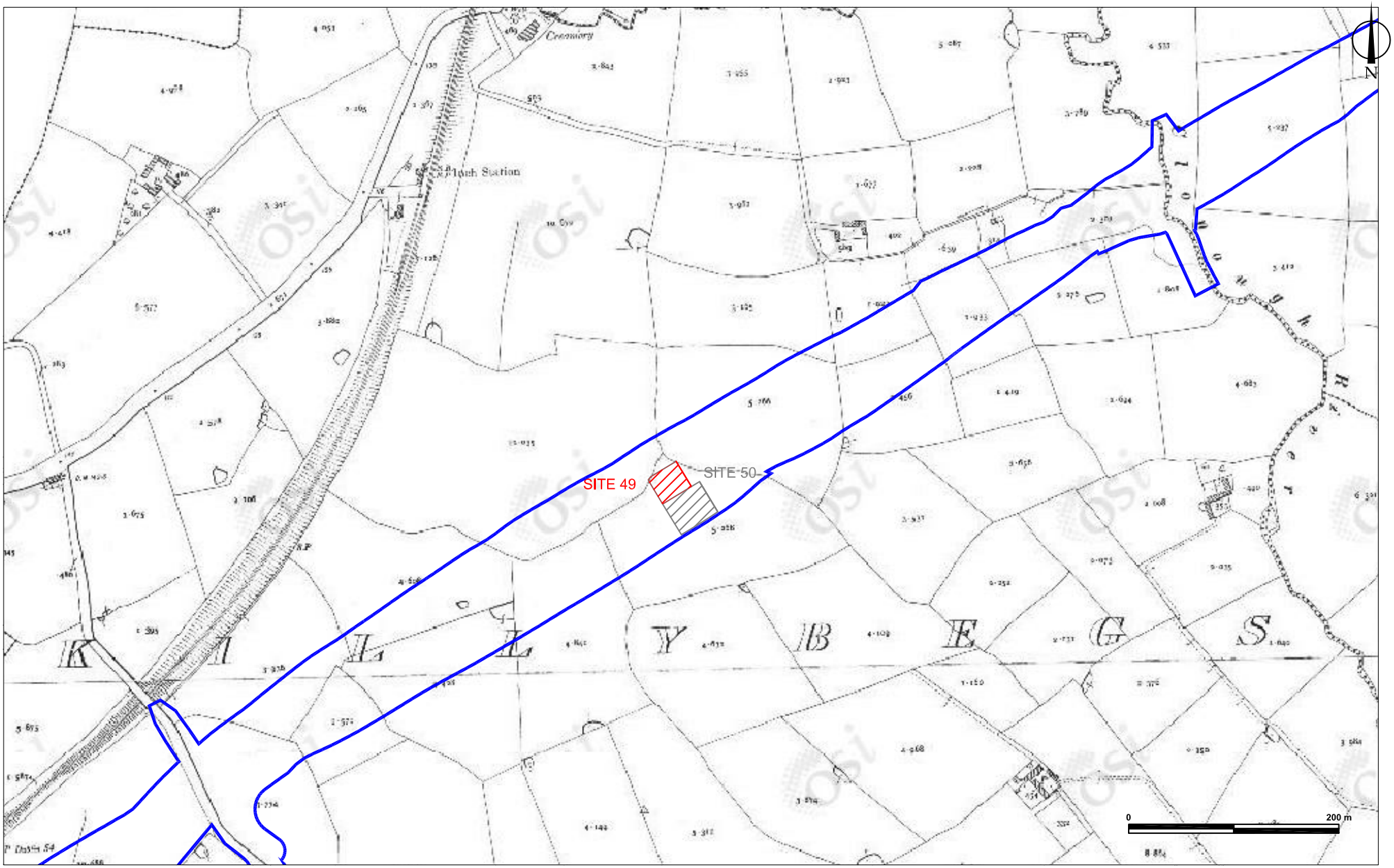


| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client |
|---|---|---|---|---|---|
| 2nd Edition Ordnance Survey map showing the location of Site 49 and route of scheme | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council |
| | | **Date** September 10 | **Scale** 1:5000 | **Drawing No.** Figure 4 | **Project** N11 Gorey - Arklow Resolution |

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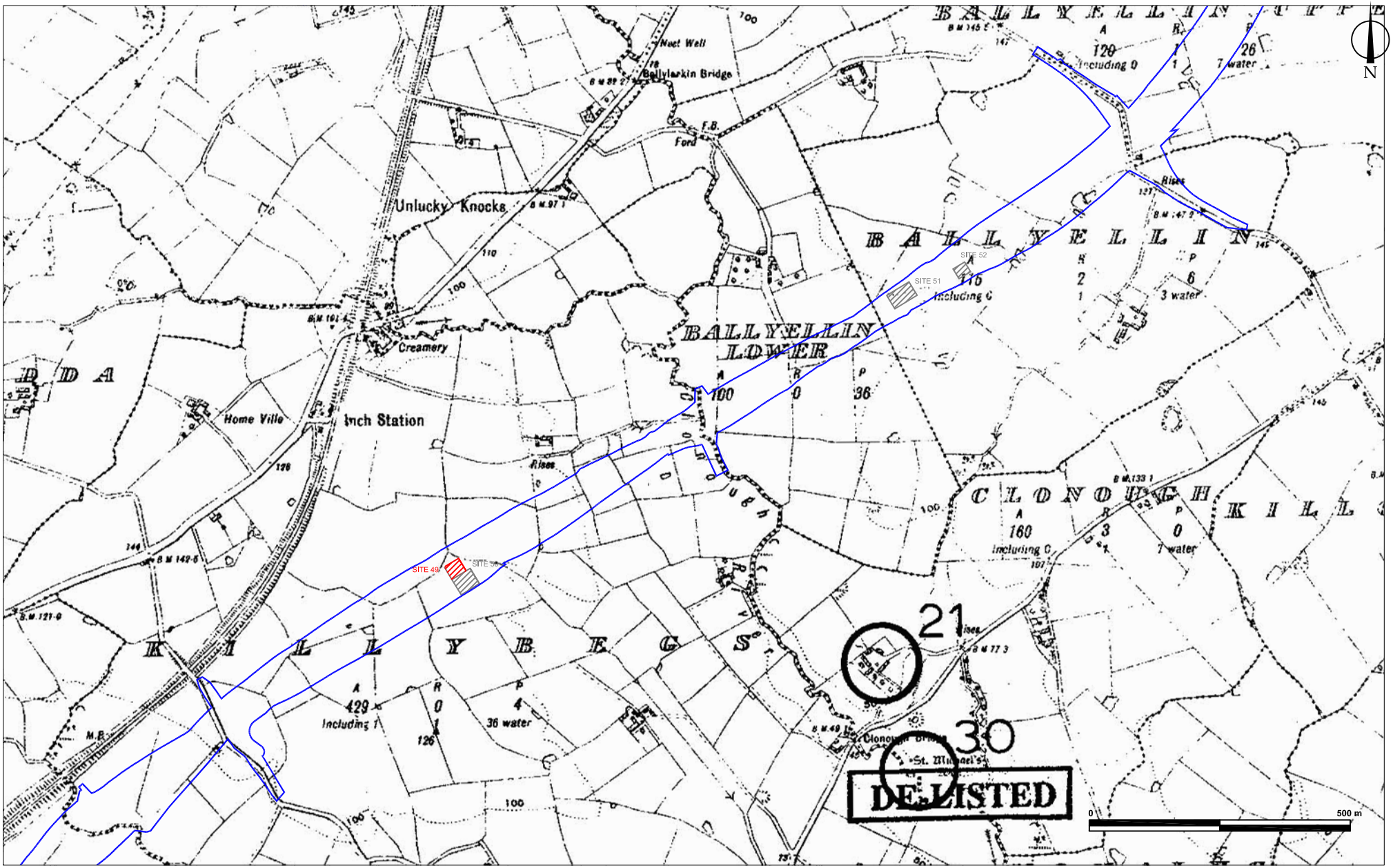


| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client |
|---|---|---|---|---|---|
| RMP map showing the location of Site 49 and route of scheme | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council |
| | | Date: September 10 | Scale: 1:10000 | Drawing No.: Figure 5 | Project: N11 Gorey - Arklow Resolution |


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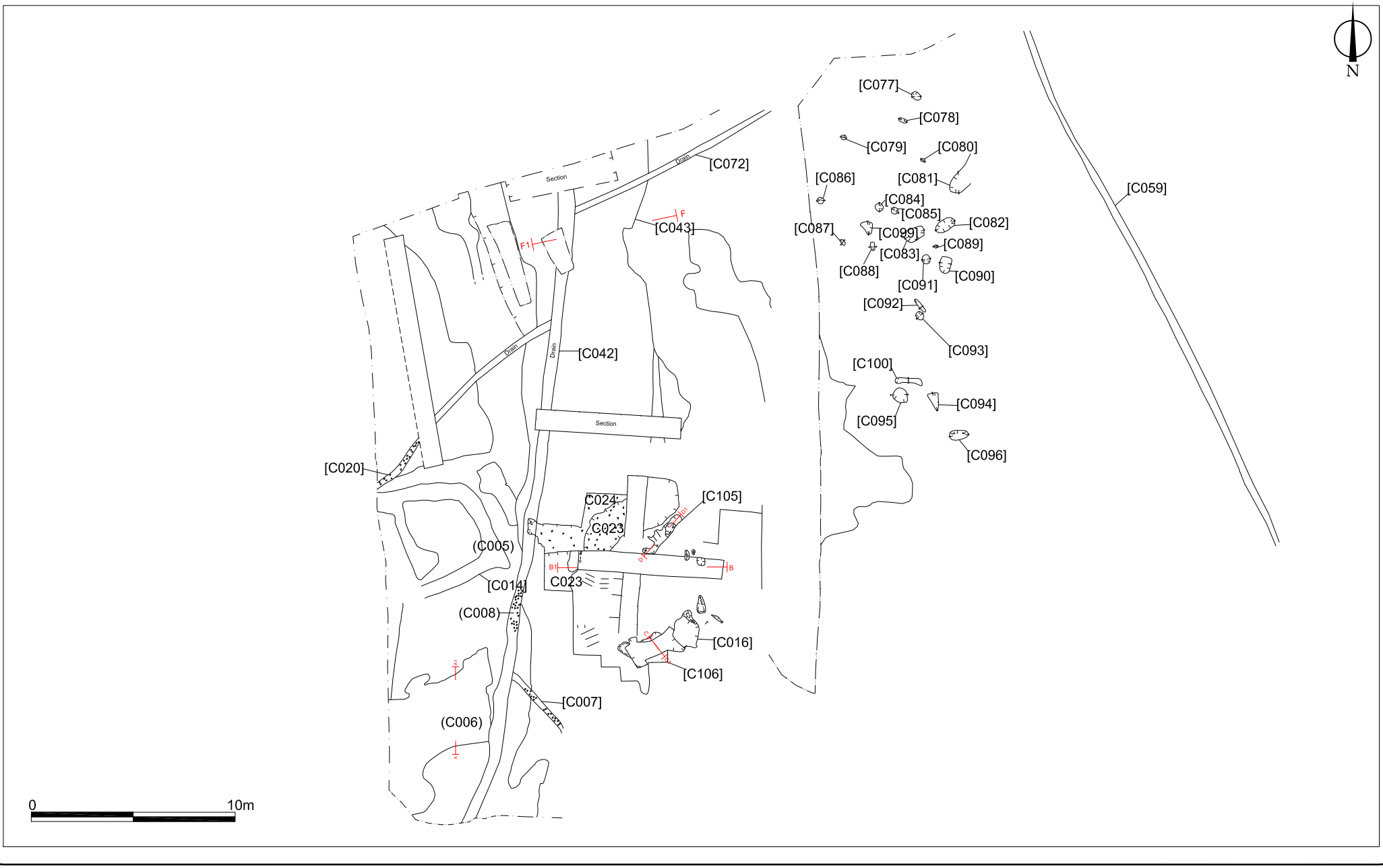


| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client | | |
|---|---|---|---|---|---|---|---|
| Post-excavation plan of Site 49 | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council | | |
| | | Date | Scale | Drawing No. | Project | | |
| | | September 10 | 1:250 | Figure 6 | N11 Gorey - Arklow Resolution | | |


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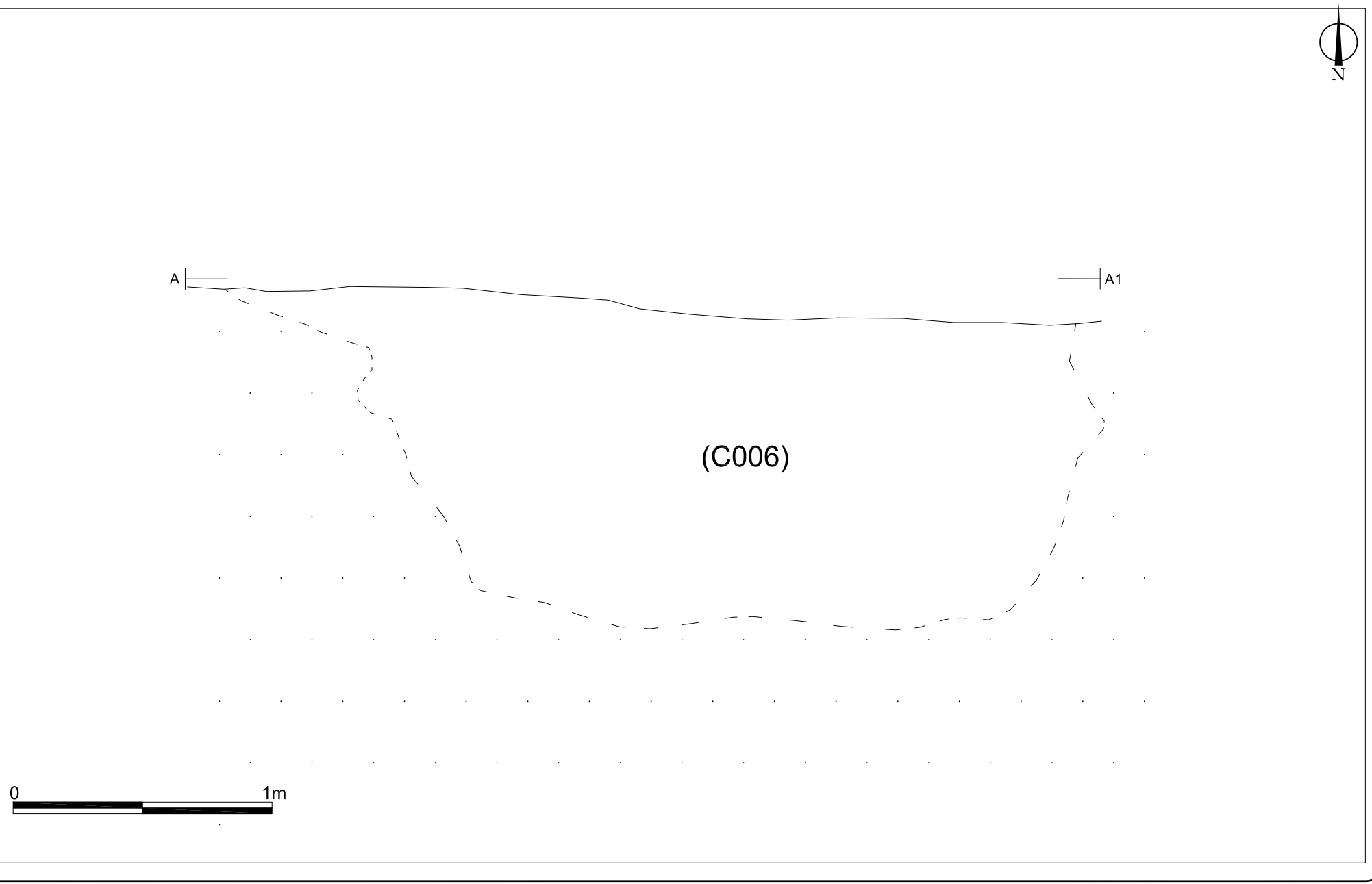


| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client |
|---|---|---|---|---|---|
| East facing section through pingo feature (C006) | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council |
| | | Date: September 10 | Scale: 1:20 | Drawing No.: Figure 7 | Project: N11 Gorey - Arklow Resolution |

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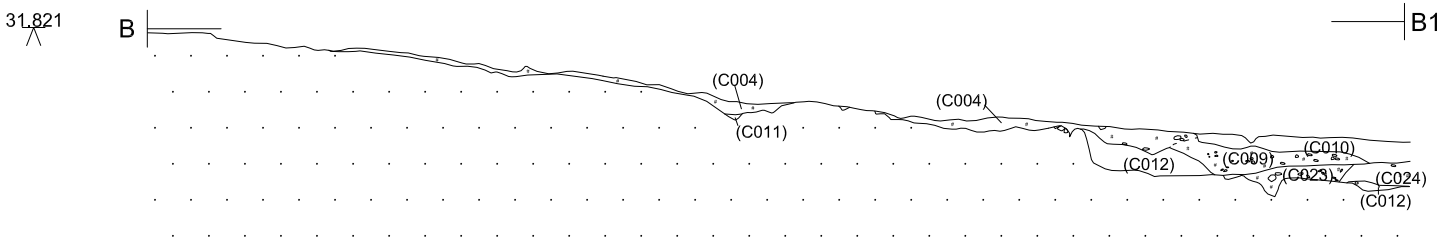
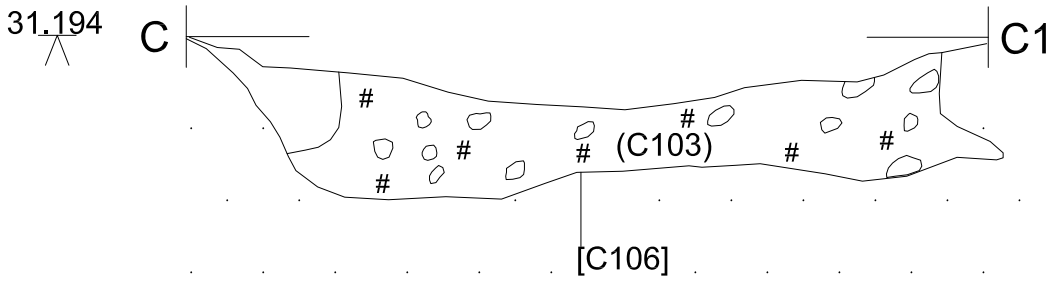




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Title**<br>North facing section through burnt material (C004) | **Notes** | **Job/Exc No.**<br>A003/049<br>E3507 | **Compiled by**<br>GW | **CAD reference**<br>1177-05-400/Tera3 | **Client**<br>Wexford County Council | VJK Valerie J. Keeley Ltd. ARCHAEOLOGICAL CONSULTANCY | Brehon House<br>Kilkenny Road<br>Castlecomer<br>Co. Kilkenny. |
| | | **Date**<br>September 10 | **Scale**<br>1:20 | **Drawing No.**<br>Figure 8 | **Project**<br>N11 Gorey - Arklow Resolution | | Tel: (+353) 056 4440236<br>Fax: (+353) 056 4440237<br>Email: vjk@vjk.ie<br>Website: www.vjk.ie |




0 0.5m

| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client |
|---|---|---|---|---|---|
| Southwest facing section of trough (C106) | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council |
| | | Date: September 10 | Scale: 1:10 | Drawing No.: Figure 9 | Project: N11 Gorey - Arklow Resolution |

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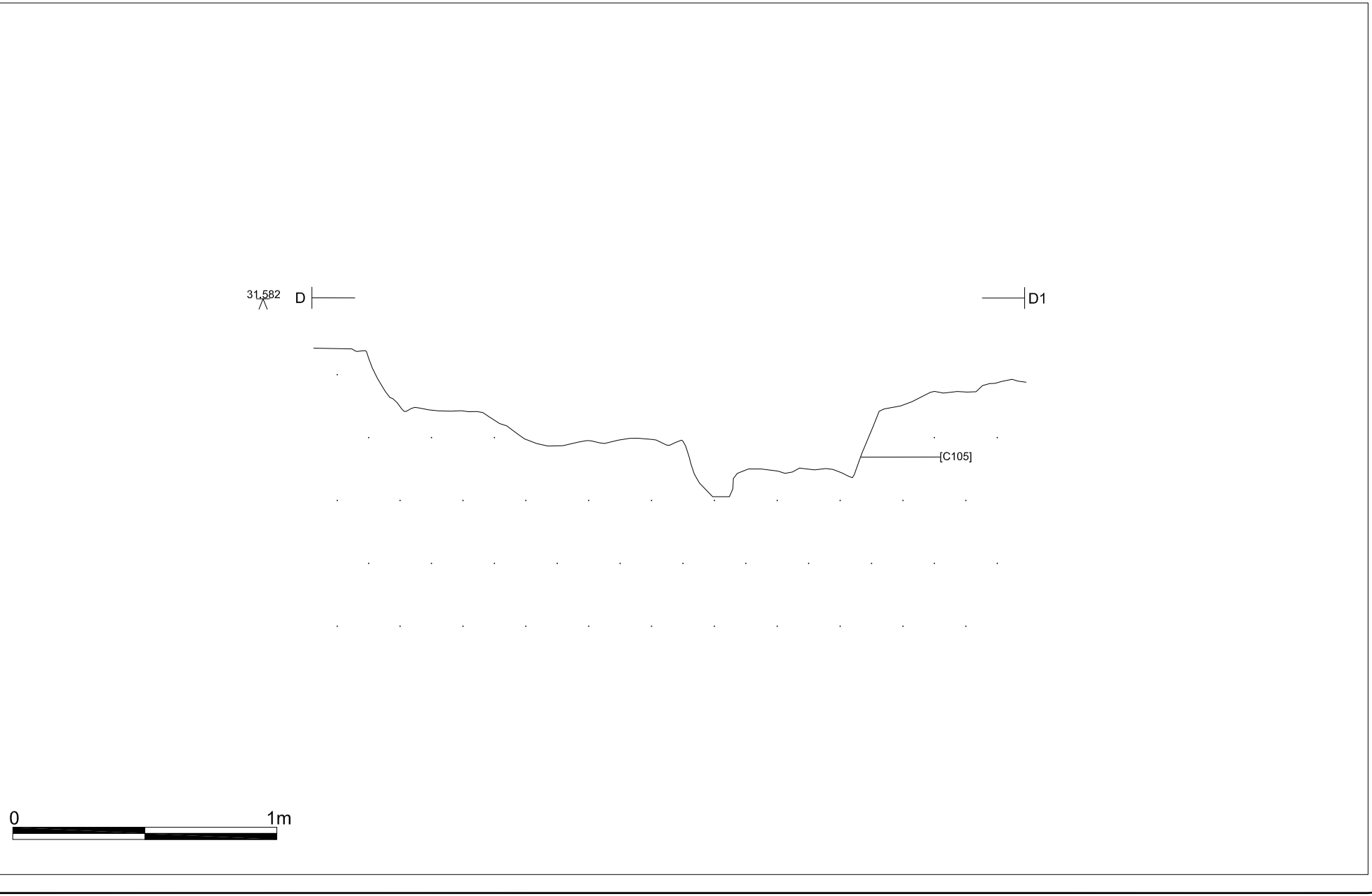


| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client |
|---|---|---|---|---|---|
| Profile of tree bole [C105] | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council |
| | | Date: September 10 | Scale: 1:20 | Drawing No.: Figure 10 | Project: N11 Gorey - Arklow Resolution |

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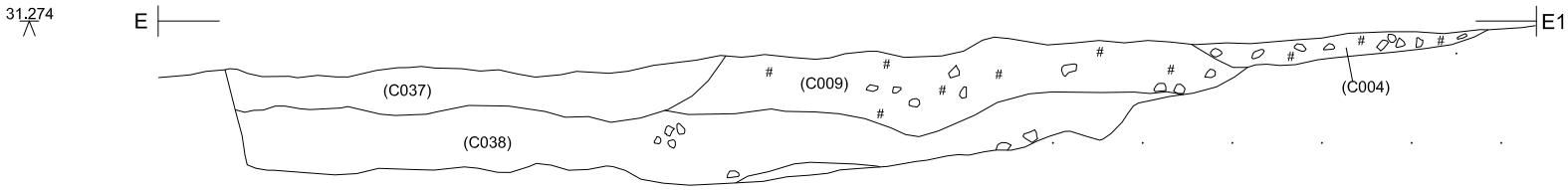


0 1m

| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client |
|---|---|---|---|---|---|
| West facing section of (C004) with covering paleo channel fills | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council |
| | | **Date** September 10 | **Scale** 1:20 | **Drawing No.** Figure 11 | **Project** N11 Gorey - Arklow Resolution |

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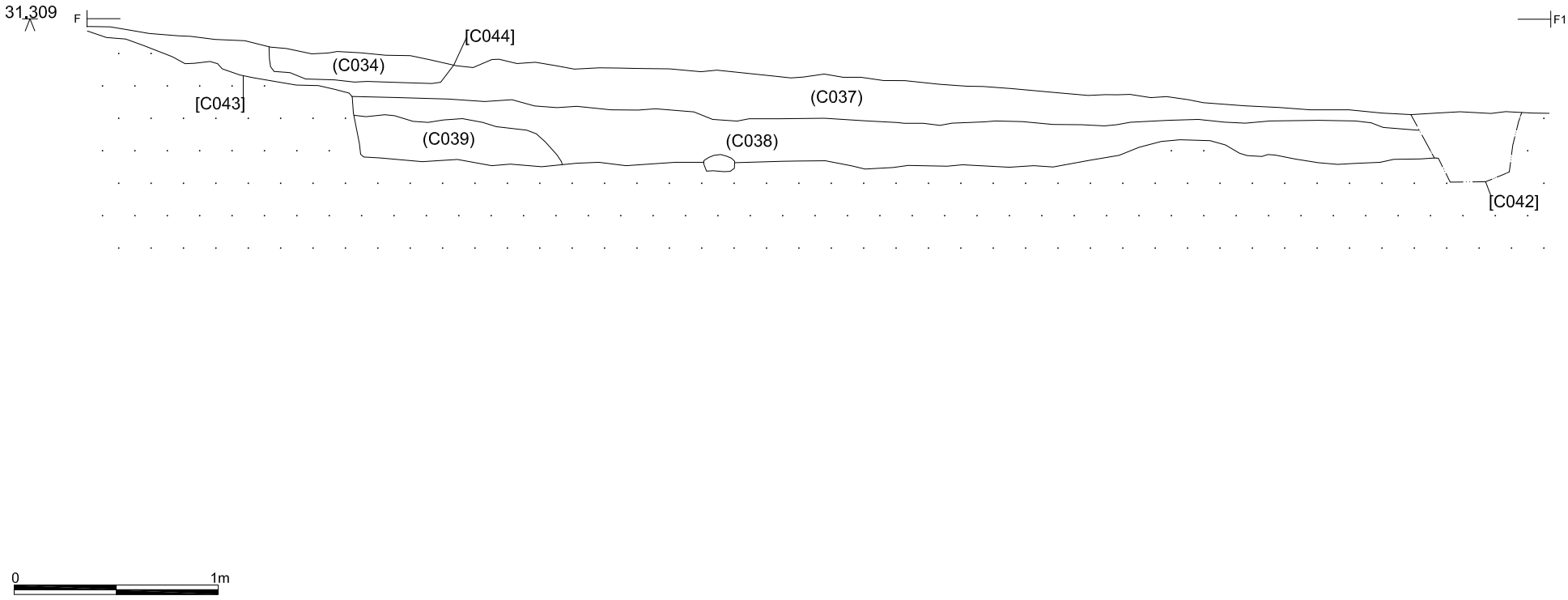


| Title | Notes | Job/Exc No. | Compiled by | CAD reference | Client | | |
|---|---|---|---|---|---|---|---|
| North facing section of paleo channel | | A003/049 E3507 | GW | 1177-05-400/Tera3 | Wexford County Council | | |
| | | Date | Scale | Drawing No. | Project | | |
| | | September 10 | 1:30 | Figure 12 | N11 Gorey - Arklow Resolution | | |

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**NRA DATABASE CONTENTS SHEET**

| Database entry | Comment |
|---|---|
| **Excavation number** | Ministerial Direction: A003/049<br>Registration No.: E3507 |
| **Townland** | Killybegs |
| **Site name** | Site 49 |
| **County** | Wexford |
| **Project reference** | N11 Gorey – Arklow Link |
| **Year of excavation** | 2005 |
| **Grid reference (Easting)** | 320323 |
| **Grid reference (Northing)** | 167218 |
| **OD Height (m)** | 40m OD |
| **Landscape setting** | The site was located in a low-lying area immediately west of slightly rising ground. |
| **Project Archaeologist** | James Eogan |
| **Site Director** | Kevin Martin |
| **Archaeological consultancy** | Valerie J. Keeley Ltd |
| **Identification technique** | Test Trenching (IAC 2005) |
| **Site type** | Fulacht Fiadha / Burnt Mound |
| **Site activity** | Burnt Mound & Trough |
| **Dating period** | Later Bronze Age |
| **Radiocarbon dates**<br>**(2 Sigma Cal BC)** | 1406- 1113BC,<br>1099- 1088BC,<br>1062- 1060BC (UBA-8246), 1251- 1243BC,<br>1212- 916BC (UBA-8247), 1411- 1114BC<br>1096- 1094BC (UBA-8248) |
| **(Dendro-chronological dates** | |
| **Descriptions** | The site comprised an irregular shaped deposit of charcoal rich silt and heat shattered stone which measured 5.50m x 5.50m x 0.25m deep. A shallow trough cut 2.40m x 2.15m x 0.15m deep was found under the burnt mound. A palaeo-river channel 7.50m x 5m x 0.50m deep was recorded running northwest across the middle of the site and was likely to be contemporary with the burnt mound. |
| **Artefacts** | The artefactual assemblage from the site consisted of 177 artefacts and included: 169 pieces of flint, three pieces of iron (including two nails), two pieces of worked quartzite, two fragments of post medieval pottery and one stem fragment from a clay pipe. |
| **Environmental evidence** | Oak (*Quercus),* Hazel (*Corylus avellana)*, Ash (*Fraxinus excelsior),* Alder (*Alnusglutinosa)* and Blackthorn were identified in varying amounts from the charcoal samples retrieved. Alder was the most abundant species represented in the samples evidencing that it may have dominated the local species available and therefore was deliberately targeted for fuel. |
| **Additional information** | |
| **Publication** | Excavations Bulletin |