



N25 YOUGHAL BY-PASS

REPORT ON THE ARCHAEOLOGICAL RESOLUTION OF FEATURES EXPOSED AT PROPOGUE, YOUGHAL BY-PASS, CO. CORK.

Site: Propogue.
Licence: 01E0861

**PREPARED BY
DAN NOONAN**

**ARCHAEOLOGICAL CONSULTANCY
SERVICES LIMITED**



Ascon Limited,
Civil Engineering and
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Youghal N25 By-pass
Project,
Ballyvergan,
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Unit 21, Boyne Business Park,
Greenhills, Drogheda,
Co. Louth

Cork County Council



Mr. J. Matson, B.E.,
County Engineer,
Cork County Council,
County Hall,
Cork.

PROJECT DETAILS

Project	Archaeological Excavation
Road Scheme	N25 Youghal Bypass
Site Name	Propogue Fulacht Fiadh
Archaeologist	Daniel Noonan
Client	Ascon Ltd.
Townland	Propogue
Parish	Youghal
Nat. Grid. Ref.	E 208520.097, N 77974.806
Chainage	220, Kirk's Farm Access Road
Licence No.	01E0861
Report Date	5th November 2002

NON-TECHNICAL SUMMARY

This site was uncovered in the townland of Propoge during monitoring of ground works for 'Kirk's Farm Access Road' at Chainage 220 of that line. It is a levelled *fulacht fiadh* in an excavation area of 6m north-south by 6m east-west. It consisted of a thin spread of burnt-mound material and an unlined circular trough. A modern field drain cut across both of these features from north to south. No artefacts were recovered during excavation.

This monument extends beyond the CPO line to the east and west. A calibrated radiocarbon date of Cal. 1120–910BC places the monument in the Bronze Age. These sites, along with the discovery of a possible Bronze Age unenclosed settlement at Ballyvergan West (AR 26) and combined with a brief analysis of the information contained in the Archaeological Inventories (Power 1994; Moore 1999) for the area surrounding the transect of land for the scheme, indicate the remains of a Bronze Age landscape in the Youghal area.

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1. INTRODUCTION

Archaeological testing of the route of the N25 Youghal Bypass was carried out in the form of an advanced strip prior to construction stripping. Archaeological Consultancy Services Ltd. was contracted by Ascon Ltd., construction contractors, to carry out this work. Daniel Noonan carried out advanced testing under state licence 01E0224. During the course of monitoring of topsoil stripping by site scrapers, the damaged remains of a levelled *fulacht fiadh* were exposed in the townland of Propogue at Chainage 220 on the centre line of the new 'Kirk's Farm Access Road'. Following consultation with *Dúchas* The Heritage Service and the National Roads Authority Project Archaeologist, a strategy of total excavation was carried out under licence 01E0861.

2. METHODOLOGY

All archaeological features were excavated by hand utilising the single context method. A team of one supervisor and two archaeological operatives carried out the excavation over a period of three days. The site was entered into the overall road scheme site register as AR 34 (see Appendix 4). The site was dry during excavation which took place in late August of a dry summer when the water table was high.

3. SETTING OF PROPOGUE TOWNLAND

The site was located in flat agricultural land in the townland of Propogue at Chainage 220. In *Irish Names of Place, Volume III* (Joyce 1913, p. 534), the origin of the townland name of Propogue is given as 'little prop or stake'. For a similar name in County Waterford, the meaning has been given as 'round (stack-like) hill'.

The surrounding field system appeared modern with new ditches and fence lines. The underlying geology consisted of mixed clays. The site was approximately 200m east of the main line of the bypass. The closest areas of archaeological interest were the pit feature (AR 19) 200m to the southwest that contained pottery of possible Bronze Age date and the remains of another damaged *fulacht fiadh* (AR 29) 800m to the south in the townland of Clashadunna East. Apart from the newly-uncovered sites on the route, there were no other known archaeological sites within 500m.

4. FINDINGS

This site was uncovered in the townland of Propogue during monitoring of ground works for ‘Kirk’s Farm Access Road’ at Chainage 220 of that line. It was a levelled *fulacht fiadh* in an excavation area of 6m north–south by 6m east–west. It consisted of a thin spread of burnt mound-material and an unlined circular trough. A modern field drain cut across both of these features from north to south. No artefacts were recovered during excavation. This monument extends beyond the CPO line to the east and west.

The findings of the excavation can be divided into three parts (detailed descriptions are contained in Appendix 1):

1. A modern machine-dug field drain, C5, cut through the centre of the site in a north–south direction, truncating the trough and burnt spread. It measured 6m in length by 0.4m in width and was 0.6m deep. It had a plastic pipe at the base covered with gravel and clay, C3.
2. A burnt spread, C2, covering most of the site ran from the east to the northwest of the site. It measured 6m east–west by 3m north–south at its widest and 1m north–south at its narrowest. It consisted of a layer of dark-brown slightly sandy silty clay set amongst heat-shattered stones and charcoal. It measured between 0.2m and 0.3m deep. This spread was the levelled remains of a possibly crescent-shaped burnt mound. The modern drain cut through the middle of this spread. The spread continued beyond the edge of the CPO line to the east.
3. A trough, C4, was located at the north of the spread of burnt material. It measured 2m north–south by 1.8m east–west and was 0.46m deep. The trough had been backfilled with a single fill (C1) of burnt-mound material, a dark-brown silty clay set amongst heat-shattered stones and charcoal. There were no other fills in the trough that may indicate whether it was open for any period or was filled soon after use. The modern field drain, C5, cut through the western edge of the trough.

A calibrated radiocarbon date obtained from a charcoal sample recovered from the fill of the trough, C1, placed the monument in a range of Cal. 1120–910BC (Cal BP 3070 to 2860).

5. FINDS

No finds were recovered during the excavation of this site.

6. DISCUSSION

The surviving thin spread of burnt material and the associated trough-like pit that was backfilled with burnt material, conforms to the established model of a *fulacht fiadh*. This model maintains that a boiling pit or trough was dug in an area where water will naturally fill it, for instance at a spring or below water-table level. Fired stones were then placed in the water to heat it. The spreads and mounds of burnt stone and charcoal are by-products of this action (O'Neill 2000, 19).

Fulachta fiadh are one of the most ubiquitous monument types of the Irish archaeological record and are distributed across the country, with the largest concentration of sites in Munster, especially in County Cork (Buckley & Sweetman 1991, 88). They are generally contemporary with similar monument types in Scotland, England and Wales (Waddell 1998, 177). To date, over 4,500 known examples of *fulachta fiadh* have been recorded in Ireland; in County Cork over 3,000 have been identified (Power and Lane 2000, 43). They are invariably associated with functions such as cooking, bathing and possible industrial functions such as preparing leather (Waddell 1998, 177).

However, it is felt that they are still an enigma, with a further story to tell about their wider landscape setting (O'Neill 2000, 19). By establishing what activities were associated with this monument type, be they seasonal or specialised, they can contribute as an integrated aspect of the prehistoric settlement pattern (Cooney and Grogan 1994, 102). A general date range, from the early third millennium to beyond the Iron Age, has been established for this site type. On morphological grounds, the circular unlined troughs generally tend to be the earliest with rectangular troughs of wood or stone lining appearing later (O'Neill 2000, 19). The overall date range would place them firmly in the Bronze Age, 4200–2600BP (Waddell 1998, 177).

The site at Propogue is one of three *fulachta fiadh* sites of varying sizes and levels of preservation that were excavated as part of this scheme. There was no previous knowledge of the monument in this location, as is often the case when *fulachta fiadh* have been levelled by land development. There was no evidence for a lining of either stone or wood in the circular trough, tentatively indicating an early date sometime in the Bronze Age. The levelled condition of the monument made it difficult to identify any further features than can be associated with this site type. The small size of the single trough uncovered, coupled with the lack of identifiable variation in the surviving burnt-mound material and trough fill, would tentatively indicate that activity at this site was carried out over a short period.

An analysis of the monuments recorded in the inventories for Counties Cork and Waterford (Power 1994; Moore 1999) within an approximate 5km radius of the bypass route, show the remains of a Bronze Age landscape into which the findings at Propogue can be incorporated. These monuments of probable Bronze Age date include a standing stone approximately 4.5km to the north-northeast at Shanacoole across the Blackwater estuary (Waterford, 257), as well as several other *fulachta fiadh* including the site of two levelled examples 7km to north-northwest at Ballynatray Demesne (Waterford 302), an extant example at Killea (Waterford 369; 3.5km) and two further levelled *fulachta fiadh* at Cornaveigh (Cork, 3957 & 3958; 4.5km). The site at Propogue is intervisible with the hill on which the remains of a possible Late Bronze Age/Iron Age hilltop enclosure at Rath some 6km to the northwest (Cork, 4251) were found.

7. CONCLUSIONS

The damage remains of a *fulacht fiadh* (AR 34) encompassing an area of 6m east–west by 6m north–south was excavated on the route of the Kirks’ Farm Access Road. A single circular trough, 1.8m east–west by 2m north–south and 0.46m deep, was uncovered when the disturbed remains of a burnt spread was removed. There was no other evidence for a lining of either stone or wood in the circular trough. Radiocarbon dating of the monument to Cal. 1120–910BC places the site in the Middle to Late Bronze Age. The small size of the single trough uncovered, coupled with the lack of identifiable variation in the surviving burnt mound material and trough fill, would tentatively indicate that activity at this site was carried out over a short period.

The site at Propogue was one of three *fulachta fiadh* sites of varying sizes and levels of preservation which were excavated as part of this scheme. On a macro level, these sites, along with the excavation of a Middle Bronze Age unenclosed settlement, as part of this scheme at Ballyvergan West (01E0549) and an analysis of the entries in the Archaeological Inventories for Cork and Waterford present a Bronze Age landscape around Youghal into which the findings at Propogue can be incorporated.

8. BIBLIOGRAPHY

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APPENDIX 1: CONTEXT INFORMATION

Context	Description	Interpretation
1	Moderately-compact deposit of heat-shattered stone set amongst a dark-brown silty clay with moderate flecks of charcoal. Extent 1.8m E–W by 2m N–S depth 0.46m.	Burnt-mound material that filled possible trough, C4 .
2	Moderately-compact deposit of heat-shattered stone set amongst a dark-brown silty clay with moderate flecks of charcoal. Extent 6.4m E–W by maximum 4.8m N–S; depth 0.3m.	Remains of burnt mound, possibly crescent-shaped.
3	Dark-brown silty clay around a modern plastic field drainpipe. Extent 6.4m long by 0.4m wide; depth 0.6m.	Backfill of modern field drain, cut C5 .
4	Pit, circular in plan. Extent 1.8m N–S by 2m E–W. Maximum depth 0.46m.	Circular pit that may have been a trough
5	Linear cut. Extent 6.4m long NW–SE by 0.4m wide; depth 0.6m. Vertical sides, rounded bottom. Truncates C1 , C2 & C3 .	Cut of machine-dug modern field drain that truncates site.
6	Firm greyish-yellow sandy clay.	Natural subsoil

APPENDIX 2: PLATES



Plate 1. Pre-excavation looking east.

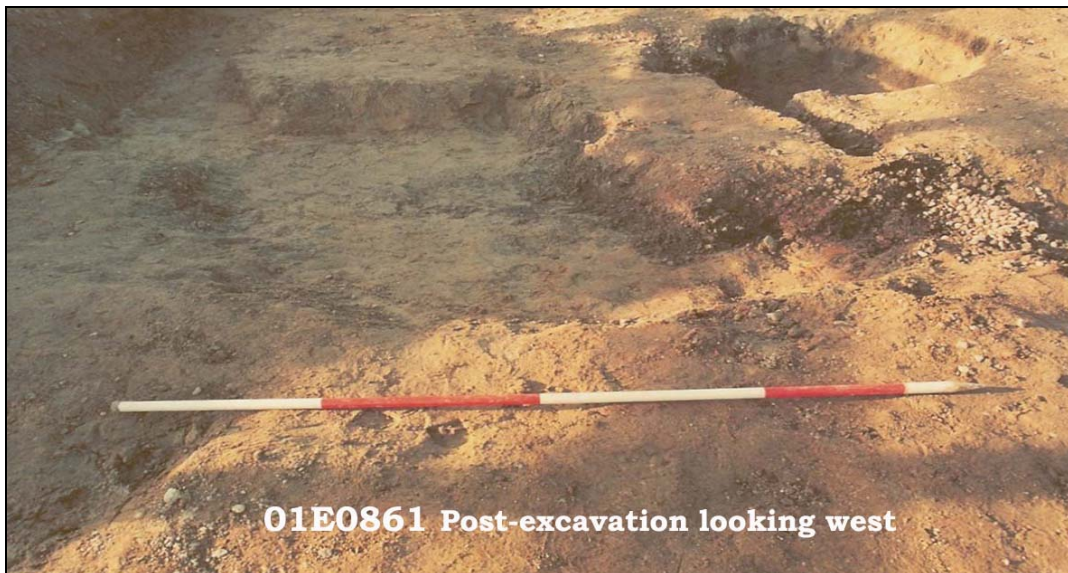


Plate 2. Pre-excavation looking west.



Plate 3. Excavated trough.

APPENDIX 3: ARCHAEOLOGICAL SITE REGISTER

AR	Chainage	Townland	Site Type	Licence Number	National Grid Reference
1	5150	Muckridge	Brickwork's feature	01 E 0543	E208693.354, N79945.042
2	4900	Muckridge	<i>Fulacht fiadh</i>	01 E 0430	E 208572.273, N 79760.202
3	4600	Muckridge	Standing building	01 E 0543	E208432.177, N79481.737
4	4500	Muckridge	Isolated pit	01 E 0543	E208407.529, N79405.148
6	4575	Muckridge	Settlement site	01 E 0429	E 208370.589, N 79356.863
10	4200	Ballynacarriga	Linear feature	01 E 0543	E208290.353, N79110.689
11	4180	Ballynacarriga	Two pits	01 E 0543	E208288.825, N79106.905
12	4150	Ballynacarriga	Settlement site	01 E 0567	E 208273.812, N 79034.539
19	3070	Propoge	Pit	01 E 0543	E208348.253, N78010.456
20	2550	Clashadunna East	Pit	01 E 0543	E208255.002, N77535.995
21	2510	Clashadunna East	Pit/pos. hearth	01 E 0543	E208206.740, N77493.920
22	2350	Clashadunna East	Possible pit	01 E 0543	E208161.804, N77393.174
23	2120	Ballyvergan West	Two pits	01 E 0543	E207960.981, N77180.080
24	2105	Ballyvergan West	Pit	01 E 0543	E207974.524, N77202.473
25	1530	Ballyvergan West	Possible corn-dryer	01 E 0543	E207522.552, N76798.958
26	1400	Ballyvergan West	Settlement site	01 E 0549	E 207415.735, N 76734.803
27	700	Ballyvergan West	Standing building	01 E 0543	E206805.892, N76380.403
28	480	Clashadunna East	<i>Fulacht fiadh</i>	01 E 0543	E208502.892, N77248.260
29	320	Clashadunna East	<i>Fulacht fiadh</i>	01 E 0728	E 208297.591, N77332.8175
30	230	Clashadunna East	Pit	01 E 0543	E208223.916, N77274.820
31	3960	Knockattigan/ Ballymacask	Bridge	01 E 0543	E208233.095, N78887.929
32	5960	Rincrew	Standing building	01 E 0543	E209341.603, N80454.988
33	427	Ballynacarriga	Corn dryer	01 E 0751	E208214.752, N79039.753
34	220	Propoge	<i>Fulacht fiadh</i>	01 E 0861	E208520.097, N77974.806
35	6100	Rincrew	Limekiln	01 E 0543	E209419.530, N80478.094

APPENDIX 4: ANALYSIS OF SOIL SAMPLES *by Penny Johnston, MGL Ltd.*

Analysis of the Plant Remains

**Ballynacarriga and Propoge
Co. Cork**

Licence No.s 01E0567 and 01E0861

By
Penny Johnston
Margaret Gowen and Co. Ltd.

For
Archaeological Consultancy Services Ltd.

4th November 2002

1 Introduction

- 1.1 This short report presents the analysis of the plant remains recovered from two sites excavated along the Youghal By-Pass route by Archaeological Consultancy Services Ltd.

2 Methodology

- 2.1 The soil samples were delivered to the laboratory already processed by Archaeological Consultancy Services Ltd. Identification was carried out using a low-powered binocular microscope (magnification X4.8 to X56).

3 Results

Samples from two sites were examined, Ballynacarriga (01E0567) and Propogue (01E0861). The archaeobotanical remains from each site, which were unfortunately only present in small quantities, are presented on a site-by-site basis below.

3.1 *Ballynacarriga (01E0567)*

This enclosed settlement site, possibly dating to the early historic period, produced carbonised plant remains from two deposits, the lower fill of a souterrain (F671, S689) and the lining of a potential cooking pit (F774, S815). The results are presented here.

Table 1: Plant remains from Ballynacarriga, Co. Cork

Scientific name	English name	F774, S815	F671, S689
<i>Avena</i> species	Oat grains	6	-
Cereal indet.	Indeterminate cereal grains	28	-
<i>Corylus avellana</i>	Fragments of hazel nut shell	-	2
Polygonaceae indet.	Indeterminate seeds of the dock family	1	-

- 3.1.1 Hazel nutshell is frequently preserved in archaeological sites, due to some taphonomic factors that work in its favour. Firstly, it is hard and resistant to decay and secondly, it is a waste product, associated with food, but not consumed, making therefore more liable to survive on sites as it was cast away with the rubbish, rather than eaten. Carbonisation of rubbish such as hazel nutshell fragments appears to have been a common means of disposing of this waste. Its occurrence at this site is therefore not surprising, these nutshells are discovered from sites many different periods, from mesolithic to medieval. Small amounts of plant remains are frequently found in souterrain deposits (see Monk *et al.*, 1998 for example), these vary in the types of seeds found, but it is relatively uncommon for the recovered seeds to be directly associated with the function of the souterrain, instead they tend to be from in-wash, or rubbish that was thoughtlessly discarded into the passage.
- 3.1.2 The deposit from the lining of the possible cooking pit contained many cereal grains in a poor state of preservation. Several fragments of the grains were not counted in this analysis, as the diagnostic embryo end, the part of the grain that is generally selected for quantification, was not present. The absence of diagnostic characteristics on the grain fragments was probably due to the extreme nature of the carbonisation process that the grains had been subjected to. Plant material will begin to break down when it is carbonised in fires with high temperatures, readily available oxygen, and of long duration (Boardman and Jones, 1990). Many of the grains in this sample appeared extremely vesicular, as if the cellular structure was about to fall apart due to considerable intensity of heat during carbonisation. It is possible that this occurred because the grains had been accidentally incorporated into the lining of the pit and were repeatedly fired as the pit was used.
- 3.1.3 All the identifiable cereals were from the same cereal type (oat), suggesting that these grains originated from one crop. The dominance of oat from the Ballynacarriga sample is a common feature of assemblages from sites of early historic date. Other enclosed settlement sites from Munster have produced assemblages of plant remains that are consistently dominated by oat. Ecological reasons may explain this prevalence, as oat is a very versatile crop, well suited to the cool, damp Irish climate, and it can be used for animal fodder as well as for human consumption (Monk *et al.*, 1998).

3.2 ***Propoge (01E0861)***

One sample was examined from Propoge, but it merely contained a fragment of modern plant material, unidentifiable, and a fragment of charred plant material, also unidentifiable. No further information was obtained from this sample.

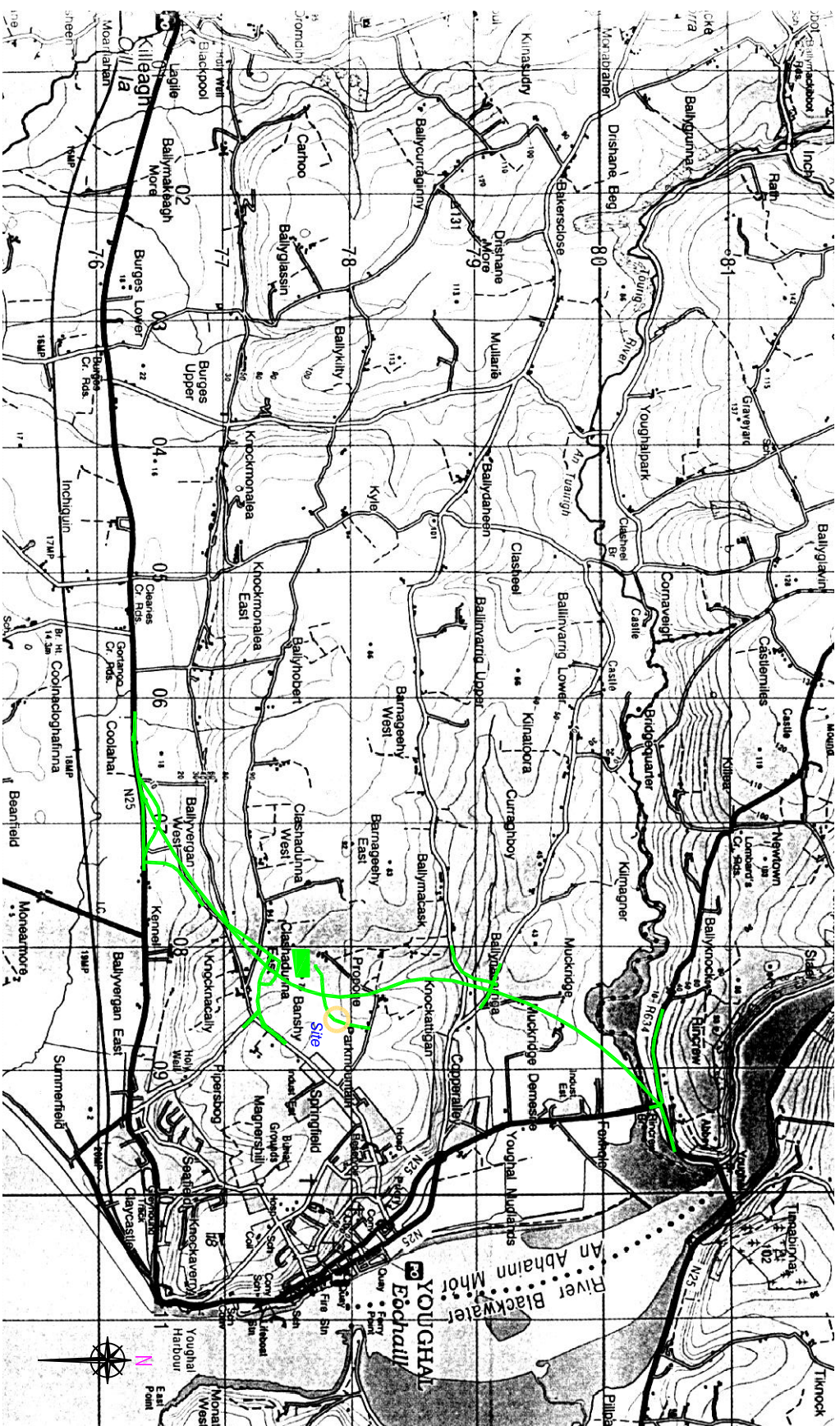
Penny Johnston

4th November 2002

References

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Archaeological Consultancy Services Ltd.

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Site Location:	Propogoe, Youghal, Co. Cork	Scale:	1:50000 A4	Drawn By:	OS Discovery Series 81
	Client: Cork County Council	Date:	01 August '02	Drawing No.:	01_07_C23

Figure 1: Location of proposed roadway

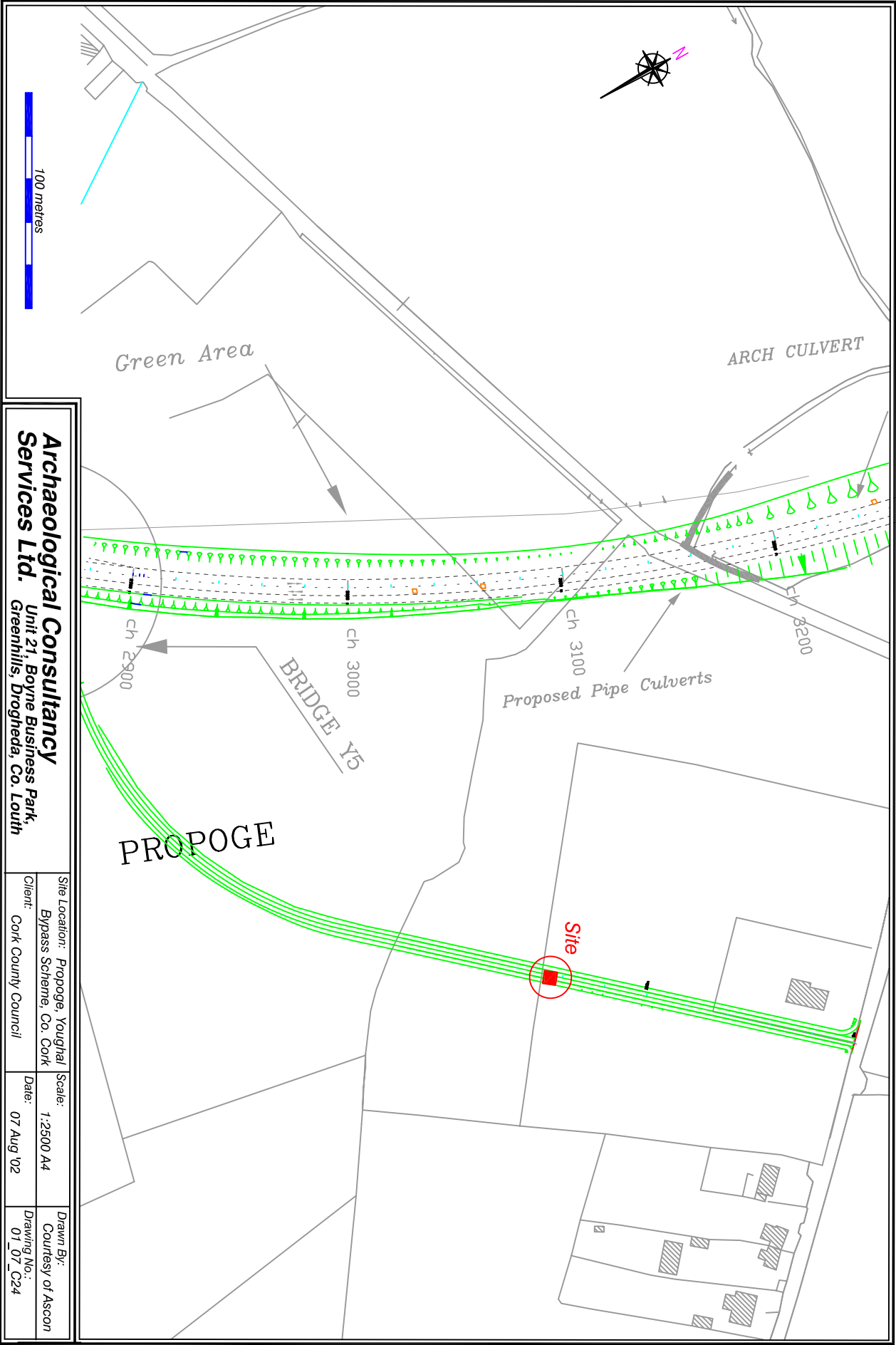


Figure 2.- Location of site within route

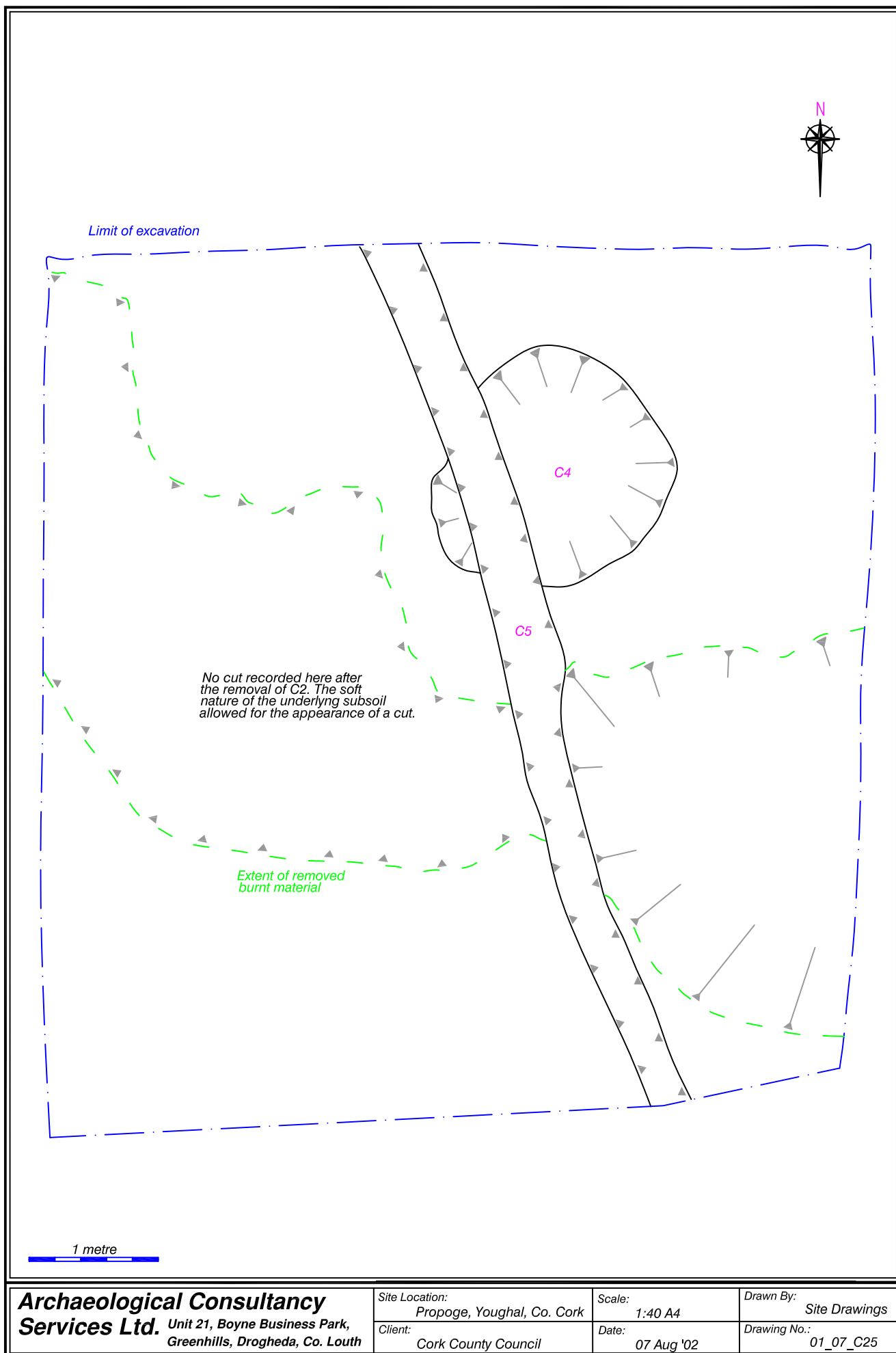


Figure 3: Post Ex of site