Centre for Archaeological Fieldwork

School of Archaeology and Palaeoecology Queen's University Belfast



Data Structure Report: No.21.

Investigations at Clonfeacle Church, Tullydowey, Co. Tyrone AE/03/104

On behalf of



Data Structure Report: Clonfeacle, Co. Tyrone Janet Bell CAF DSR 021 SMR No: TYR 62:03 Grid Reference: H 8316 5596 Excavation Licence: AE/03/104

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1 Summary

1.1 General

- 1.1 This a report on the results of the archaeological investigations at Clonfeacle, Blackwatertown, Co. Tyrone, to the southeast of St. Jarlath's Church. Archaeological features at the site, including an Ecclesiastical Site, Early Christian Church, Early Christian Parish Church, Medieval Graveyard, Modern Cross, Early Christian Font and the Church are recorded in the SMR as TYR 62:03 and are located at Irish Grid Reference H83165596.
- 1.2 St. Jarlath's church is built on an early ecclesiastical site which has its first mention in the Annals of Ireland by the Four Masters in 1003 (O'Donovan, year 1003.). The upper part of a high cross is situated on this site, as is a roughly rectangular stone 0.5 metres high with a cross-carved into one of the faces believed to have come from the old graveyard at the site. In 1598 the Battle of Yellowford took place in this area. The current church was built in 1780, and was re-erected in 1845. To the northeast of the church is the old graveyard, with headstones dating from the late 17th century. To the south of the church is the modern graveyard, and to the southeast, the field in which the excavation took place to allow the extension of the modern graveyard into this area.
- 1.2.1 In July 2003 a geophysics survey was carried out (Moore, 2003). The survey covered 0.5 hectares of the land to the southeast of the church. Several potential archaeological features were identified as a result of this survey, including an area of intense burning and a number of linear features in the excavation area.
- 1.3 The excavation was directed by Janet Bell of the Centre for Archaeological Fieldwork, School of Archaeology and Palaeoecology, Queen's University Belfast, and was carried out under licence number AE/03/104.
- 1.4.1 Prior to excavation and top-soil stripping by mechanical digger, a metal detector survey took place (Appendix Seven). Only modern material was found, and the survey was stopped after 3 square metres due to time constraints and lack of artefactual findings. The excavation of the site revealed evidence of post-medieval industrial and agricultural occupation.
- 1.5 It is recommended that a programme of post-excavation is conducted, in order to complete the excavation and bring the project to completion and publication.



Figure One: Northern Ireland site location map.

2 Introduction

2.1 General

2.1.1 The following report details the preliminary results of the archaeological excavation at Clonfeacle Church, Tullydowey, undertaken by the Centre for Archaeological Fieldwork, School of Archaeology and Palaeoecology at Queens University Belfast in October and November 2003. This programme of work was undertaken on behalf of the Environment and Heritage Service: Built Heritage, DOENI, who funded the investigations.

2.2 Background

- 2.2.1 Clonfeacle Church is located in Tullydowey townland near Blackwatertown (Fig. One). Blackwatertown itself is situated about 5 miles outside of Moy, on the Co. Tyrone/Armagh border, which is marked by the river Blackwater. St. Jarlath's church is about 200 metres across the bridge on the Co. Tyrone side of the river, while Blackwatertown is on the Co. Armagh side. The church sits on top of a roughly circular mound measuring about 200 metres in diameter, and is aligned northwest to southeast (Fig. Two). The upper portion of a high cross is set in front of the north gable of the church (Plate A). It is made from sandstone and is very plain with no decoration, although Hamlin records that letters could be seen on the shaft (Hamlin, 1976, vol.3, 787). A stone ring has been inserted between the arms of the cross. It is mounted on a base that probably dates from the early 20th century when Bigger wrote that this cross 'is at present almost buried in the graveyard. I am doing what I can ... to have it restored on a suitable base' (Bigger, 1908, 143). Next to this cross is a rectangular stone about 0.5 metres high inscribed with a Latin cross with flared arms (Plate B), that is reported to have been used as a headstone and found in the graveyard by a sexton (Hamlin, 1976, vol.3, 787). To the east of the church is the old graveyard, the ground level of which is significantly higher than the surrounding area due to the amount of burials. The modern graveyard is to the south of the church. The remains of a curvilinear wall survive to the south and east of the site, which is possibly a revetment to the early ecclesiastical mound (Plate C). To the east of the church and graveyard is the field into which the modern graveyard will be extended. The field is dog-leg in shape, with a stonewall separating the graveyard from the field.
- 2.2.2 The monastic site is believed to have been founded in the 6th century by St. Lugaid (Gwynn and Hadcock, 1970, 32 and Leslie, 1911, 186), but the tradition of Clonfeacle goes back to St. Patrick, and many of the 19th and 20th century sources state that St. Patrick met Bishop Olcan here (Gwynn and Hadcock, 1970, 32) when Patrick urged a 'charioteer' to drive over the Bishop. The name 'Clonfeacle' is thought to have come from one of Patrick's



Figure Two: Location map showing excavation trenches and field boundaries associated with the site.

I - Old graveyard	- Excavation trench
II - Modern graveyard	- Proposed graveyard extension
III - St. Jarlath's church	 Probable line of Early Christain ecclesiastical enclosure
	Revetment wall on line of probable enclosure

teeth, which was kept at the monastery (Gwynn and Hadcock, 1970, ibid.) although a footnote in the Annals of Ireland by the Four Masters says the name means St. Fiachna's lawn, meadow or bog-land (O'Donovan, 1856, footnotes for year 1252). Leslie claims the name means 'meadow of the tooth' (Leslie, 1911, 182).

- 2.2.3 The current church was erected in 1780, and re-erected in 1845. It was dedicated to St. Jarlath, who became Archbishop of Armagh in 468AD (St. Augustine Abbey, 1921, under Feb.1) and was a disciple of St. Patrick (O'Hanlon, 1875, under Feb.11). The old graveyard to the east of the church contains headstones dating from the late 17th century. It was probably in use some time before this as the ground level is much higher than the surrounding area.
- 2.2.4 A geophysical survey was carried out at Clonfeacle in July 2003 by the Centre for Archaeological Fieldwork. The aim of the survey was to identify possible archaeological sub-surface features. The survey was carried out using a gradiometer, and highlighted several archaeological features within the field. Fig. Three (after Moore, 2003) shows a large, curving positive anomaly (feature A) Features B and C are two di-polar features that could be interpreted as hearths or kilns. Features D and E are a cluster of sub-circular and horse-shoe shaped positive anomalies, suggesting that they could be cut features. Two possible archaeological features in the area covered by the excavation were highlighted. Features C and E fall within the area that was excavated, and were highlighted as areas of intense burning in the geophysical survey. Feature E is probably the area of intense burning that was found in the southeast end of the trench. Feature C in Fig. Three appears to be more substantial than Feature E, but there is no corresponding area of intense burning that was found on the excavation.
- 2.2.5 The site was originally recorded in the SMR as TYR62:03. This designation includes the Ecclesiastical Site, Early Christian Church, Early Christian Parish Church, Medieval Graveyard, Medieval Graveyard, Modern Cross, and the Church.
- 2.3 Reason for, and aims of, the excavation
- 2.3.1 The graveyard at St. Jarlath's church was being extended into a field to the northeast of the graveyard. As the area is on an ancient ecclesiastical site it was decided that an excavation was needed to determine if there was any archaeologically important remains on the site.

- 2.3.2 The aim of the excavation was to identify the location, extent and nature of any features likely to be threatened by the extension of the graveyard at St. Jarlath's church, Clonfeacle. This would assist the Environment and Heritage Service in making decisions about the future management of the site.
- 1.5.1 Archiving
- 2.4.1 A copy of this report will be deposited with the Environment and Heritage Service: Built Heritage. All site records and finds will be initially archived within the School of Archaeology and Palaeoecology, Queens University Belfast.
- 2.5 Credits and Acknowledgements
- 2.5.1 The excavation team; Janet Bell, Cormac McSparron, Keith Adams, Naomi Carver, Brian Sloane, Eimear Nelis, Ronan McHugh. Help in preparing this report was provided by Cormac McSparron and John O'Neill. Other assistance was provided by John O'Keefe and Declan Hurl.



3 Excavation

3.1 Methodology

- 3.1.1 One trench measuring 30 x 10 metres was opened. This was then sub-divided into three areas. Area one was the middle of the trench, including features 109 and 110 and 145. Area two was in the southeast end of the trench, incorporating linear feature 111 and feature 153. Area three was in the north of the trench, and included linear feature 118/143 and the surrounding cluster of stake/post-holes. Linear feature 102 was not assigned to an area as it extended the length of the site.
- 3.1.2 The excavations were undertaken by hand and the context record for the site was created using the standard context recording method. Individual features were photographed both prior to, and following, excavation and included in a series of overall plans (Scale 1:100 and 1:20) of the site which were prepared throughout the course of the excavation. Section drawings (Scale 1:20 and 1:10) were undertaken of archaeological deposits in features 102, 109, 110, 111, 118/143 (for details of site photography see Appendix Three and for field illustrations see Appendix Four). In addition to the photography and illustration, the principal site records consisted of context sheets augmented by separate register of samples (Appendix Five). Following the completion of the site recording, the excavation trench was left open pending site visits from John O'Keefe.
- 3.1.3 It is intended that the Harris Matrix for the site (see Appendix Two) is referred to whilst reading the account of the stratigraphic sequence.

3.2 Account of the excavations

- 3.2.1 The graveyard of St. Jarlath's church is being extended into the field to the north-east of the graveyard. The field covers 0.5 hectares, but only the area immediately next to the graveyard boundary was excavated so the graveyard could be extended into this area as quickly as possible. A stone wall, which will eventually be pulled down, separates the graveyard from the field. A 10 metre by 35-metre trench was laid out next to the wall leaving a thin baulk of roughly 0.3 metres to prevent the wall being undermined and collapsing while the trench was being excavated.
- 3.2.2 The topsoil was stripped under supervision by a mechanical digger that was monitored. Once the topsoil was stripped the area was cleaned and possible archaeological features investigated. Initially the site was evaluated for any archaeological remains that could be



threatened by the extension of the graveyard. Features were therefore only investigated until it was esablished that they were archaeological. Once this was established, the archaeological remains were fully excavated and recorded.

- The topsoil was a dark brown loamy clay, containing 19th century pottery and modern 3.2.3 ceramics. The subsoil was a yellowy-orange sandy loam. There were several features found after removal of the topsoil (Fig. Four). A long linear feature ran along the west side of the trench (102) parallel to the stone wall. Three main areas of archaeological features were identified and recorded as Area 1, Area 2 and Area 3. The features in Area 1 included feature 109, a shallow pit containing slag with a post-hole adjacent to it, and feature 110, a larger pit containing a number of fills and slag. Area 2 was located at the southwest end of the site, and features included a shallow ditch and a bowl-shaped feature in the middle of an area of intense burning. Area 3 in the northeast end of the site contained a cluster of stake- and post-holes and a shallow linear feature. Linear feature 102 cut through feature 109, a shallow pit that ran into the southwest section, the fill of which contained large amounts of slag. Around 0.5 metres to the northwest there was a post-hole 0.32 metres in diameter and 0.24 metres deep. Opposite this feature, running into the northeast section, was a large oval-shaped pit (feature 110), which also contained large amounts of slag. An area of intense burning in the south end of the trench was uncovered (feature 153), which cut into linear feature 111 running parallel to the southeast section of In the northern area of the trench there was a cluster of stake/post-holes the trench. (contexts 122,124,129-142, 154-171) clustered around linear feature 118/143. A spread of reddy-orange soil on either side of this feature suggests that 118/143 cut through an area of burning, which the post-holes surrounded. The subsoil in the southeast half of the site was a lot redder in colour than the subsoil in the north-western half.
- 3.2.4 Along the east side of the trench, about 0.5 metres out from the stone wall and running parallel with it, there was a long linear feature running the length of the trench (35 metres). This feature (context 102) varied in width from 1 1.5 metres. Two box trenches were cut into it. It was 0.8 metres deep with gently sloping sides. The fill (context 103) was a midbrown clay loam and contained 19th century pottery s at the bottom of both box trenches along with fragments of bone. The edge of the cut was indistinct due to root action, and indicates that this feature was probably a hedge boundary.
- 3.3 Area 1
- 3.3.1 The southern end of feature 109 was cut by the hedge boundary. The surviving part measured 2.1 metres by 0.9 metres and was 0.22 metres deep, being roughly rectangular





Figure Six: Sections of feature 110.

in shape (Fig. Five). The main fill of this feature was a black-brown loam flecked with charcoal (context 115), and contained large amounts of slag, as well as burnt bone fragments, flint and pottery. Along the eastern edge of this cut there was a thin lens of light brown clay, 50 mm deep, 0.03 metres wide and 0.15 metres long. To the north of this feature was a sub-circular depression (context 145) measuring 0.33 metres long, 0.31 metres wide and 0.24 metres deep that was filled with a medium dark brown sandy loam containing flecks of charcoal (context 146). To the east of feature 109 was a small spread of a dark browny-orange sandy loam containing flecks of charcoal. This spread (context 149) had a depth of 20 mm and was roughly circular in shape measuring 0.2 metres in diameter.

3.3.2 As can be seen from Fig. Four about 3 metres to the northeast of feature 109 was another cut feature (110) measuring 3.5 metres long (possibly longer as it ran into the section), 2 metres wide and roughly rectangular in shape. The cut was 0.8 metres deep, with a gully at the bottom along the southern edge measuring 0.2 metres in depth (Plate D). The gully was filled with a mid-brown sandy loam (context 172), containing burnt bone fragments, beneath a dark charcoal deposit (context 182). Above this was the main fill, context 112, a dark grey, gritty sandy-loam that contained a large amount of slag, pottery, a few splinters of burnt bone and a few pieces of unstruck flint. In the eastern end of the cut this fill gave way to context 113, a light orangey-brown context (see Fig. Six) in which flint and fragments of burnt bone was found. This pit cut through a long linear feature running west across the site for 4.3 metres (context 120) and was 0.5 metres wide and 0.38 metres deep. It was filled with a mid-brown sandy loam

3.4 Area 2

3.4.1 At the southeast end of the site there was an area of intense burning (feature 153), roughly circular in shape, with a diameter of 1.6 metres. At the centre of this feature was context 104, a greyish-white clay that was 0.2 metres deep (Fig. Seven). This was sitting on a thin layer (30 mm) of charcoal-rich black loam (context 105), beneath which was another charcoal-rich layer (context 150), softer in consistency and 10 mm deep containing fragments of burnt bone. It only extended under the northwest side of the clay deposit and contained some burnt bone. Beneath this was context 151, a grey-brown sandy loam, 50 mm thick and containing fragments of burnt bone. The grey-white clay and the charcoal contexts were cut into context 106/152, a mid-grey sandy loam with occasional flecks of charcoal and fragments of burnt bone. This context was also roughly circular, with a diameter of 1.6 metres and 0.35 metres at the deepest point. A bowl-like shape had been



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Figure Eight: Plan of feature 111.

cut in to the subsoil, in which these contexts sat. The bowl-like shape was 0.35 metres deep at the southeast end and rose to the northwest side.

3.4.2 Feature 153 was cut into linear feature 111, which ran northeast to southwest across the bottom of the site for 8.8 metres and varied in width between 1.6 to 2.4 metres wide (Fig. Eight). This feature was also cut by the hedge boundary. Three box trenches were cut into the feature, the second being at the widest part of the cut at the northeast end. As Fig. Nine b) shows the feature is a shallow ditch with a depression in the bottom of it. The ditch was 0.3 metres deep, and the depression was 0.2 metres deep and filled with a dark grey loam (context 180). The rest of the cut was filled with a mid-grey sandy loam (context 108/176/179). The gully can also be seen in the box trench 1 (Fig. Nine a) but is shallower and not as distinct, and was filled with the same mid-grey sandy loam. In the third box trench the whole feature has become narrower and the sides' steeper, but the gully can still be seen (Fig. Nine c). This part of the ditch was filled with context 177, a light orange-brown sandy-loam fill, similar to the subsoil. Above this was context 176, a dark-grey sandy-loam. The depression in the northeast of the cut was filled with a grey sandy-clay containing small pebbles and sand.

3.5 Area 3

3.5.1 In the northern corner of the site there was a cluster of post-holes around linear feature 118/143 (Fig. Ten), which measured 0.5 metres wide and 0.2 metres deep. It was filled with context 119/144, a mid grey-brown sandy loam containing very occasional charcoal flakes. This feature extended west into the trench for 2.8 metres from the northeastern section. To the south of the cut there was a spread of reddy-orange sandy loam (context 181/126), which was cut by feature 118/143. There were five post-holes to the south of the linear feature. Post-hole 129 (Fig. Eleven b)was at the point were the linear feature ran into the northeast section, it was oval in shape, measuring 160 mm in length along the northsouth axis, 105 mm along the east-west axis, and 123 mm deep. The fill was a mid-brown gritty sandy-loam (context 130). Post-holes 131, 133 and 135 (Fig. Eleven c) were in a line extending southwards, and were all circular in shape (Fig. Ten). Post-hole 131 was 105 mm in diameter and 165 mm deep, and was filled with mid-dark brown sandy-loam with occasional flecks of charcoal and small pebbles. Stake-hole 133 had a diameter of 83 mm and was 87 mm deep. The fill (context 134) was a mid-dark brown sandy-loam with charcoal flecks. Stake-hole 135 was 50 mm in diameter and 60 mm deep, and is also filled with a mid dark-brown sandy loam. Further east was post-hole 122, which had a diameter of 150 mm and was 200 mm deep. It was filled with context 123, a dark brown sandy-loam with charcoal inclusions.



Figure Nine: Sections of feature 111.

A cluster of eleven post-holes were excavated to the northeast of feature 118/143 (Plate E). 3.5.2 Post-hole 139 (Fig. Eleven c) was square in shape, and measured 115 mm in length and 155 mm deep. The fill was mid dark-brown gritty sandy-loam (context 140). Post-hole 154 was egg-shaped, measuring 140 mm north-south and 175 mm east-west, and was 225 mm deep. It was filled with a mid dark-brown gritty sandy loam (context 155). Stake-hole 162 was oval-shaped, measuring 80 mm north-south and 170 mm east-west, and was 105 mm deep. It was filled with the same context as stake-hole 160, a mid to dark-brown sandy loam. Stake-hole 160 and 162 cut into each other (see Fig. Eleven) with stake-hole 160 also being oval in shape, and measuring 55 mm north-south, 130 mm east west, and 133 mm deep. Post-hole 170 (Fig. Eleven d) measured 120 mm north-south and 150 mm eastwest, and was 160 mm deep. The fill was a mid-brown gravely sandy-loam (context 171). Post-hole 168 was 125 mm in diameter, 135 mm deep, and filled with a dark brown sandyloam (context 169) containing flint and fragments of burnt bone. Stake-hole 166 was 80 mm in diameter and 50 mm deep and filled with context 167, a mid dark-brown sandy-loam with fragments of burnt bone. Post-hole 164 (Fig. Eleven e) was 100 mm north-south and 120 mm east-west and had a depth of 180 mm. It was filled with context 165, a mid-brown gritty sandy-loam with charcoal flecks and fragments of burnt bone. Stake-hole 158 had a diameter of 65 mm and was 100 mm deep. It was filled with a mid dark-brown sandy-loam with occasional flecks of charcoal (context 159). Post-hole 156 was rectangular in shape and measured 80 mm north-south and 110 mm east-west and was 145 mm deep. It was filled with a mid dark-brown gritty sandy-loam. Post-holes 137 was unexcavated, but measured 100 mm in diameter. Post-hole 173 was also unexcavated and had a diameter of 220 mm. Post-holes 174 and 175 were unexcavated as they cut surrounding post-holes, 174 was 110 mm in diameter as was post-hole 175.



Figure Ten: Plan of Area 3



Figure Eleven: Profiles of stake/post-holes in Area 3.

4 Discussion

4.1 Conclusions

- 4.1.1 Linear feature 102 did not have distinct edges, with the fill merging with the subsoil due to root action. Shards of glazed pottery were found in the base of linear feature 102, probably dating to the 19 century, and no earlier than the late 18 century. Local tradition suggests that the site at one point was possibly used as a garden, so it is possible that this feature represents a shrubbery, garden hedge or an agricultural field boundary from this.
- 4.1.2 Feature 109 was filled with a charcoal rich deposit that contained slag. It was a shallow pit being only 0.22 metres deep. The presence of a post-hole to the north of this feature could indicate a structure, either temporary or permanent, or it could be associated with the industrial processes happening in this area of the site. Feature 110 was a pit 0.8 metres deep with a gully 0.2 metres deep along the bottom south edge, the pit was most likely associated with feature 109 as it was also filled with large amounts of slag and the deposits were charcoal rich. These features are indicative of industrial activity on the site. Linear feature 120 was cut by pit 110 but it is difficult to tell if it was associated with this feature or not.
- 4.1.3 The hedge boundary also cut linear feature 111, a shallow ditch in the southeast end of the site with a shallow gully. This was cut by context 153, a bowl-shaped feature with charcoal layers and a clay cap. Surrounding this feature is a spread of red burnt soil. The subsoil in the southeast end of the trench was much redder than the rest of the site, indicating intense burning and industrial activity at this end of the site.
- 4.1.4 In area 3 feature 118/143 cut through a spread of red soil, which possibly signifies an area of burning. Curved around this was a collection of post-holes. Post-holes 138 and 139 are rectangular in shape and are probably modern post-holes from fence-posts or shrubbery stakes. Post-holes 129, 131 and 122 are of similar size and shape and are arranged in a line, possibly being the remains of fence-posts. The tight cluster of post-holes at the northwest end of feature 118 (Fig. Ten) represent multiple re-cuts that are arranged in a curvi-linear pattern, although part of the circle has been cut through by feature 118. The stake-holes contained gravel, stones and charcoal flecks suggesting that they could be roots from rotted or burnt shrubs. This area could be the remains of an earlier garden with canes supporting shrubs. The spread of red soil is unlikely to represent a hearth or fire as there is no associated charcoal or ash.

4.2 Discussion

- 4.2.1 The earliest mention of Clonfeacle is in the Annals of Ireland by the Four Masters (O'Donovan, 1856, year 1003), when in 1003 Eochaidh Ua Flannagain 'airchinneach of the Lis-aeidheadh of Ard-Macha and of Cluain-Fiachna....died'. There are also mentions of Clonfeacle (Cluain-Fiachna in early sources) in the Annals of Ulster recording the deaths of Abbots or vice-Abbots in 1053 and 1069. The year 1252 is also mentioned in both Annals in connection with Clonfeacle when the Justiciary of Ireland at the time marched to Armagh with an army to subdue Brian O'Neill, and had to march back to Clonfeacle. It was probably a medium sized ecclesiastical site with at least two concentric circles forming an inner and outer enclosure. Like many early ecclesiastical sites it was located on good agricultural ground near a river.
- 4.2.2 The possible remains of a revetment wall found at Clonfeacle correspond to other sites in Ireland, Edwards comments that many sites on the Dingle and Iveragh peninsula have remains of curvilinear drystone wall enclosures, such as Currauly near Mt. Brandon (Edwards, 1990, 114). Many ecclesiastical sites also have associated graveyards within or adjacent to the enclosure, these were commonly marked with stone pillars and grave markers carved with a cross (Edwards, 1990, 116), which was probably the function of the cross-carved stone found in the graveyard at Clonfeacle.
- 4.2.3 Smelting and craftwork was also carried out on ecclesiastical sites. At Clonfeacle the subsoil at the southeast end was much redder in colour, indicating widespread burning, possibly from smelting. Often the only evidence of smelting furnaces is a bowl shaped depression in the ground, such as feature 153, but typically these hollows are 0.3 to 0.6 metres diameter (Edwards, 1990, 87). The clay deposit in feature 153 was 0.8 metres in diameter, and the hollow had an overall diameter of 1.6 metres and no furnace bottom was found. Features 109 and 110 contained large amounts of slag, obvious indications that smelting had taken place on this site. At Armagh waste from smelting was tipped into adjacent pits (Edwards, 1990, 90), which is what these features could represent. This could also represent later activity on the site, but as no dateable artefacts were found a date cannot be given until post-excavation work has been completed.

5 Recommendations for Further Work

- 5.1.1 There are two main areas of recommendation for further work; the processing of samples and the analysis of finds.
- 5.1.2 Few dateable artefactual finds were recovered from the site, so it is important that the finds be the subject of specialist study. Flakes of flint were found in post-hole 168 and in feature 110, both struck and unstruck. Shards of pottery were found in context 112 and 115 that was not modern pottery, analysis of these shards could be useful in dating part of the site. Large fertilizer bags were used to obtain large samples of context 112, and it is recommended that these are sieved to retrieve any slag, which can then be examined, along with the rest of the slag that was recovered. A fragment of painted mortar was also found, which should be the subject of specialist study. Although fragments of burnt bone were found, the fragments are too small for analysis.
- 5.1.3 In total 18 samples were taken. Processing these samples would identify macrofossils and plant remains. Charcoal for carbon dating would also be extracted at this point, the examination of which would allow the selection of good samples for carbon dating.

6 Bibliography

1998. Annals of Ulster, Dublin.

- Bigger, F.J. 1908. Clonfeacle cross county Tir-eoghan. *Ulster Journal of Archaeology (UJA)*, series 4, 143.
- Edwards, N. 1990. The archaeology of early medieval Ireland, London.
- Gwyn and Hadcock 1970. *Medieval religious houses: Ireland*, London.
- Hamlin, A.E. 1976. *The archaeology of early Christianity in the north of Ireland,* (unpublished PHD thesis, three volumes) Queen's University Belfast.
- Leslie, Rev. J. B 1911. Armagh clergy and parishes, Dundalk.
- Moore, P. W. 2003. *Geophysical and topographical survey report Clonfeacle, County Tyrone*, (Centre for Archaeological Fieldwork Geophysical Rep. No.1, three volumes) Queen's University Belfast, Belfast.
- O'Donovan, J.(ed.) 1856. Annals of Ireland by the Four Masters, Dublin.
- O'Hanlon, J. 1875. Lives of the Irish saints, Dublin.
- St. Augustine Abbey, Ramsgate 1921. The book of saints: a dictionary of servants of God canonized by the Catholics, London.



Plate A: Upper part of high cross outside Clonfeacle Church



Plate B: Carved stone with cross



Plate C: Revetment wall looking east towards site and church



Plate D: West facing section of feature 110



Plate E: Area 3 looking southeast

Appendix One: Context List

Context No.	Description
101	Topsoil
102	Linear feature
103	Fill of 102
104	Deposit of grayish-white clay
105	Charcoal deposit
106	Mid-grey burnt deposit (same as 152)
107	Red burnt soil
108	Fill of feature 111
109	Irregularly shaped cut
110	Irregularly shaped cut
111	Linear feature
112	Fill of 110
113	Fill of 110
114	Charcoal fill of 109
116	Fill of 111
117	Stake-holes
118	Linear feature (same as 143)
119	Fill of 118/143 (same as 144)
120	Linear feature cut by 110
121	Fill of 120
122	Post-hole
123	Fill of 122
124	Post-hole
125	Fill of 124
126	Reddy-brown deposit (same as 181)
127	Orange sub-soil
128	Possible wall footing
129	Post-hole
130	Fill of 129
131	Post-hole
132	Fill of 131
133	Post-hole
134	Fill of 133

135	Post-hole
136	Fill of 135
137	Post-hole
138	Fill of 137
139	Post-hole
140	Fill of 139
141	D-shaped hollow
142	Fill of 141
143	Linear feature (same as 118)
144	Fill of 118/143 (same as 119)
145	Post-hole
146	Fill of 145
149	Charcoal rich deposit
150	Charcoal-rich deposit in 153
151	Grey/brown deposit in 153
152	Mid-grey deposit in 153 (same as 106)
153	Cut for possible hearth/furnace
154	Post-hole
155	Fill of 154
156	Post-hole
157	Fill of 156
158	Stake-hole
159	Fill of 158
160	Post/stake-hole
161	Fill of 160
162	Post/stake-hole
163	Fill of 162
164	Post-hole
165	Fill of 164
166	Post-hole
167	Fill of 166
168	Post-hole
169	Fill of 168
170	Post-hole
171	Fill of 170
172	Fill at bottom of c.110
173	Post-hole

174	Post-hole
175	Post-hole
176	Fill of 111
177	Fill of 111
178	Fill of 111
179	Fill of 111
180	Fill of 111
181	Reddy-brown deposit (same as 126)
182	Charcoal fill of 110
183	Orangey-brown fill of 110

Appendix Two: Harris Matrix


Appendix Three: Photographic Record

Digital Images - Nikon Coolpix5000 digital camera

- 1 General shot of site prior to stripping looking northwest
- 2 General shot of site prior to stripping looking northwest
- 3 General shot of site prior to stripping looking northwest
- 4 Looking west across site
- 5 Looking west across site
- 6 East facing section of 102
- 7 East facing section of 102
- 8 Looking east along site
- 9 Looking west along site
- 10 Water-pipe in southwest end of site
- 11 Site looking northwest
- 12 Site looking west
- 13 Possible wall footing
- 14 Possible hearth (looking northwest)
- 15 Possible hearth (looking northwest)
- 16 Possible hearth (looking northwest)
- 17 Possible hearth (looking northeast)
- 18 Context 110 (looking west)
- 19 Context 110 (looking west)
- 20 Context 110 (looking east)
- 21 Context 111 (looking southwest)
- 22 Context 111 (looking southwest)
- 23 Context 111 (looking northeast)
- 24 East facing section of cut 110
- 25 East facing section of cut 110
- East facing section of cut 110
- East facing section of cut 110
- 28 South facing section of cut 109
- 29 Southwest facing section of cut 111
- 30 Southwest facing section of cut 111
- 31 Southwest facing section of cut 111
- 32 Quarter-section of context 104
- 33 West facing section of cut 110
- 34 West facing section of cut 110

- 35 West facing section of cut 110
- 36 East facing section of cut 120

Week starting Monday 3 November

Digital Images – Nikon Coolpix5000

- 1 Feature 110 mid-excavation
- 2 Head-stone with cross
- 3 Head-stone with cross
- 4 Sandstone cross from high cross
- 5 Sandstone cross from high cross
- 6 Feature 109 fully excavated, looking north
- 7 Feature 109 fully excavated, looking northwest
- 8 Post-hole 145
- 9 Feature 153 fully excavated looking northeast
- 10 Feature 153 fully excavated looking southeast
- 11 Looking northwest across site to church
- 12 Looking northwest across revetment, site and church
- 13 Looking northwest across revetment, site and church
- 14 Looking northeast along curving field boundary
- 15 Box section 2 in feature 111 looking northwest
- 16 Box section 2 in feature 111 looking southeast
- 17 Southeast section of box section 2 in feature 102
- 18 East facing section of feature 110
- 19 East facing section of feature 110
- 20 West facing section of feature 110
- 21 West facing section of feature 110
- 22 Cut in 110 looking south
- 23 Cut in 110 looking north
- 24 Post-holes in northwest area looking southeast
- 25 Post-holes in northwest area looking northwest
- 26 Post-holes in northwest area looking southwest
- 27 Close up of post-holes in northwest area
- 28 Northwest area looking northeast

Appendix Four: Field Drawing Register

Drawing			
No	Scale	Туре	Description
1	1:20	Section	East facing section of feature 102
2	1:100	Plan	Plan of site showing all features
3	1:20	Section	South facing section of feature 111
4	1:20	Section	Southeast facing section of feature 109
5	1:20	Section	Southwest facing section of feature 110
6	1:20	Section	Northeast facing section of feature 118
7	1:20	Section	Southwest facing section of feature 120
8	1:10	Section	Southwest section of feature153
9	1:10	Section	Southeast facing section of feature 102
10	1:10	Section	Profile of post-hole 145
11	1:10	Plan	Plan of post-hole 145
12	1:20	Section	Profile of feature 109
13	1:20	Plan	Plan of feature 110
14	1:20	Section	Profiles of post-holes in northwest of site
15	1:20	Plan	Plan of post-holes in northwest of site
16	1:20	Plan	Plan of features 111 and 153
17	1:10	Section	South east facing section of feature 110
18	1:10	Section	Northeast facing section of feature 110
19	1:20	Plan	Plan of feature 110

Appendix Five: Samples Record

Sample	Context	Туре	No. of bags	Volume	
No.	No.			(estimated)	
1	115	Fill of 109	1	2 litres	
2	112	Fill of 110	1	2 litres	
3	123	Fill of post-hole	1	2 litres	
4	113	Fill of 110	2	4 litres	
5	145	Fill of post-hole	1	1/2 litre	
6	147	Fill of post-hole	1	1/2 litre	
7	149	Charcoal spread	1	1/2 litre	
8	155	Fill of post-hole	1	1/2 litre	
9	159	Fill of stake-hole	1	1/2 litre	
10	165	Fill of post-hole	1	1/2 litre	
11	171	Fill of post-hole	1	1/2 litre	
12	169	Fill of post-hole	1	1/2 litre	
13	167	Fill of post-hole	1	1/2 litre	
14	112	Fill of 110	2	4 litres	
15	172	Fill of 110	1	2 litres	
16	152	Deposit in 153	2	4 litres	
17	150/105	Deposit in 153	2	3 litres	
18	151	Deposit in 153	1	1 litre	

Appendix Six: Finds List

Context Number	Finds
Topsoil	Pottery
103	Pottery, bone fragments
112	Slag, burnt bone fragments, pottery, flint, painted mortar
113	Slag, burnt bone fragments, flint
115	Slag, burnt bone fragments, flint, pottery
150	Burnt bone fragments
151	Burnt bone fragments
152	Burnt bone, charcoal
165	Burnt bone fragments
167	Burnt bone fragments
169	Burnt bone fragments, flint
172	Burnt bone fragments

Appendix Seven: Clonfeacle Pre-Excavation Metal Detecting Survey

Philip Macdonald and Keith Adams

1 Introduction

1.1 Background

- 1.1.1 It is proposed to extend the graveyard surrounding St. Jarlath's Roman Catholic Church in Clonfeacle, County Tyrone (Grid Reference H839521) (SMR No. TYR062:003). The modern church of St. Jarlath's was built during the Nineteenth Century. It is located within a multi-period ecclesiastical site whose origins date to the Early Christian period (Hamlin 1976, 786-787). Currently, the graveyards associated with St. Jarlath's consist of a curvilinear enclosure to the west of the church and a more recent addition located in a field immediately to the south. It is proposed to extend this second graveyard into an adjoining field situated to the east of the church. Both the current additional graveyard and the site of its proposed expansion are located within a curvilinear field boundary running to the south and east of the church. This field boundary is formed by a revetment wall and apparently represents part of the outer element of a concentric pair of enclosures set around the ecclesiastical site (the inner enclosure being formed by the curvilinear churchyard to the west of the modern church). The possibility that these curvilinear enclosures formed the boundaries of the Early Christian site at Clonfeacle has prompted the series of evaluations of the archaeological significance of the area proposed to form the expansion of the graveyard.
- 1.1.2 In addition to the multi-period ecclesiastical site the site of the Battle of Yellow Ford in 1598 is located near to St. Jarlath's Roman Catholic Church (J.O'Keefe pers.comm.).
- 1.1.3 Following a geophysical and topographical survey of the proposed graveyard extension (Moore and Beer 2003) it is intended to undertake an evaluative excavation during topsoil removal of an area 10 metres by 35 metres within the proposed graveyard. Mr John O'Keefe (Environment and Heritage Service) requested that a metal detecting survey of this area be undertaken by the Centre for Archaeological Fieldwork prior to the evaluative excavation.

1.2 Archiving

1.2.1 All survey records and finds are archived with those derived from the evaluative excavation undertaken by Janet Bell at the same site. These are temporarily held in the School of Archaeology and Palaeoecology, Queen's University Belfast.

1.3 Acknowledgements

1.3.1 The survey was undertaken by Philip Macdonald and Keith Adams under the direction of Janet Bell. For their assistance during the course of the survey and the preparation of this report, the authors are grateful to: Nick Beer (Queen's University Belfast), John Davison (Queen's University Belfast), Colm Donnelly (Queen's University Belfast), John O'Keefe (Environment and Heritage Service: Built Heritage) and Peter Moore (Queen's University Belfast).

2 Methodology

- 2.1 Initially, the 10 metre by 35 metre area which formed the survey area was laid out and its positioned surveyed using an EDM Total Station. It was not possible to reuse the site grid established during the earlier geophysical and topographic surveys of the site because all of the earlier surveys' base points had been disturbed by cattle. A new grid was established and the field boundaries were surveyed so that the grid established for the metal detecting survey could, if necessary, be tied in with that used during the geophysical and topographic surveys.
- 2.2 The 10 metre by 35 metre survey area was subdivided into 350 metre squares. Each of these metre squares was given its own unique signifying code consisting of a letter (A-J) and a number (1-35). The southwest northeast aligned, 10 metre long axis of the survey area was subdivided every metre and labelled from the southwest to the northeast A to J, whilst the northwest southeast aligned, 35 metre long axis of the survey area was subdivided every metre and labelled from the northwest to the south source area was subdivided every metre and labelled from the northwest to the survey area was subdivided every metre and labelled from the northwest to the south east 1 to 35 (Figure 000).
- 2.3 Each square metre of the grid was systematically surveyed using the metal detector. The position of every positive signal recorded by the metal detector was surveyed using the EDM Total Station and was then investigated by excavation to the base of the topsoil (Context No.101). The source of each positive signal within the topsoil was recovered and if retained was awarded a small find number. It was arranged with Janet Bell that the context and small find numbers used during the metal detector survey would form a single series that would run on into those used for the evaluative excavation.
- 2.4 The survey was undertaken with a C.Scope CS550 metal detector. This is a relatively simple machine which has a shallow penetration and is unable to discriminate between ferrous and non-ferrous signals.

3 Results

3.1 The results of the metal detector survey are tabulated below (Table 000). The results of the survey were disappointing; only artefactual material of recent date was recovered and progress was slow. Following one day of work the survey was abandoned since only three 1m² grid squares (A35, B35 and C35) had been completed using the requested methodology out of a total area of 350 m².

Signal No.	Small Find No.	Context No.	Grid Square	Comments	Easting	Northing	Height (uncorrected)
1	1001	101	A35	Metal foil	989.64	502.88	200.55
2	-	-	A35	Below topsoil	989.82	502.83	200.56
3	-	101	A35	Mortared rounded stone [not retained]	990.01	502.53	200.52
4	1002	101	A35	White metal foil	989.92	502.47	200.52
5	1003	101	A35	White metal foil	989.73	502.55	200.56
6	-	101	A35	Sub-rounded stone [not retained]	989.71	502.38	200.55
7	-	101	A35	Rounded stone [not retained]	990.34	502.51	200.52
8	-	101	A35	Small rounded stone	990.27	502.69	200.45
9	-	101	A35	Small rounded stone	990.36	502.72	200.44
10	-	101	B35	Large stone	990.76	502.74	200.47
11	1004	101	B35	Aluminium drinks can [Coca Cola]	990.75	503.69	200.54
12	-	-	B35	Below topsoil	990.24	503.16	200.55
13	1005	101	B35	White metal foil	991.14	502.96	200.48
14	1006	101	B35	White metal foil	990.69	503.22	200.52
15	1007	101	B35	White metal foil	990.91	503.28	200.52
16	1008	101	B35	White metal foil	991.26	503.05	200.45
17	1009	101	C35	White metal foil	991.18	503.72	200.52
18	-	-	C35	Below topsoil	991.09	503.91	200.45

Table 000: Results of pre-excavation metal detector survey

4 Discussion

4.1 Evaluation of the results

4.1.1 The results of the metal detector survey were not of archaeological significance.

4.2 Evaluation of the survey technique

- 4.2.1 As the Centre for Archaeological Fieldwork has not previously undertaken a metal detector survey as part of a site evaluation, it is appropriate to critically evaluate the efficacy of the technique.
- 4.2.2 There are two types of metal detectors: relatively simple machines and more sophisticated machines. The sophisticated machines are capable of discriminating against ferrous signals which means that the user can avoid picking up signals from modern agricultural ironwork, ferrous stones and natural iron panning. For the 'treasure seeker' type of user this is an advantage because they are interested in picking up non-ferrous objects such as coins, whilst ironwork, even if ancient, presents them with difficult conservation problems. Sophisticated machines have to be carefully calibrated for weather and soil conditions for optimum performance. Most metal detectorists are skilled enough to be able to do this. However, none of the members of staff in the Centre for Archaeological Fieldwork currently have the necessary experience to do this successfully.
- 4.2.3 As an archaeological evaluation technique the metal detector survey undertaken at Clonfeacle was less than impressive. Although eighteen signals were investigated, no artefactual material of archaeological significance was recovered and only a small part of the study area was surveyed. It took approximately one hour to survey a square meter of the Clonfeacle survey area and excavate all of the signal points contained within that square metre. At this rate it would take ten weeks of uninterrupted metal detecting (for seven hours a day) to have completed the metal detecting sweep of the survey area using a single machine.
- 4.2.4 It is not recommended that metal detector surveys are undertaken as a routine element of site evaluations. In assessing the appropriateness of undertaking a metal detector survey two factors should be considered. Firstly, a specific reason for undertaking the survey should be identified; and secondly, the ground conditions of the proposed survey area should be critically assessed. The metal detector survey at Clonfeacle was undertaken because of the proximity of the site to the location of the Battle of Yellow

Ford. Previous metal detecting surveys on other battlefield sites had been productive (J.O'Keefe pers.comm.). Arguably the failure of the metal detecting survey at Clonfeacle was a result of the ground conditions at the site. The close proximity of the site to an existing graveyard had resulted in a large amount of modern foil (presumably derived from the wrappings of flowers placed on graves) as well as other modern rubbish being blown into the survey area. Although a metal detector set to discriminate against ferrous signals would have improved the efficiency of the survey at Clonfeacle it should be noted that nine of the fifteen (i.e. 60%) signals whose sources were identified were nonferrous in origin. Therefore, even if a sophisticated machine that could discriminate against ferrous signals was used at Clonfeacle it would still have taken six weeks of uninterrupted metal detecting (for seven hours a day) to have completed the metal detecting sweep of the survey area using one machine. The extended length of time and concomitant high staff costs in conducting metal detecting surveys makes their use prohibitively expensive in comparison to other evaluative techniques such as geophysical survey and mechanical topsoil stripping.

4.2.5 If the Centre for Archaeological Fieldwork was to undertake another metal detector survey as part of a future site evaluation, it is recommended that rather than undertaking the metal detecting ourselves with the use of a single relatively simple machine, that the Banbridge Metal Detecting Club is invited to assist us. If a large number of experienced users of relatively sophisticated machines were able to participate in a survey then it could be completed within an acceptably short time period. It would only require two experienced staff members to survey in the signals and finds and tie them in with other evaluative surveys.

5 Bibliography

- Hamlin, A.E. 1976. *The archaeology of early Christianity in the north of Ireland*, (Unpublished Ph.D thesis, three volumes), Queen's University of Belfast.
- Moore, P. and Beer, N. 2003. *Geophysical and topographical survey report Clonfeacle, County Tyrone*, (Centre Archaeol. Fieldwork Geophysical Rep. No.1) (three volumes) Queen's University Belfast, Belfast.