Final report

Cloghabreedy
Co. Tipperary

N8 Cashel to Mitchelstown Road Improvement Scheme

Ministerial Scheme Reference No. A035/000
Registration No. E2274

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On behalf of
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For
South Tipperary County Council

2nd November 2007

N8 Cashel to Mitchelstown Road Improvement Scheme

Preliminary Archaeological Excavation Report

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NGR	E205840 N127850; E205875 N127961; E205959 N128196
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Abstract

The following report details the results of three archaeological excavations (Site 125.4, Site 125.5 and Site 127.1) carried out at Cloghabreedy, Co. Tipperary as part of the N8 Road Improvement scheme. The sites excavated included a possible Early Bronze Age cremation pit, (Site 127.1), a large Middle Bronze Age settlement site (Site 125.4) and a Late Bronze Age cremation pit (Site 125.5). Possible Early Bronze Age burial activity was identified at Site 127.1 in the form of truncated pit that contained a small quantity of cremated bone. Unfortunately, due to the small quantity of burnt bone and its fragmentary nature the cremated remains from this feature could not be identified to species (Appendix 6). A large Middle Bronze Age settlement site consisting of at least four circular structures and numerous ancillary features was identified at Site 125.4. The buildings at this site used a combination of slot trenches and postholes in their construction and generally had east/southeast facing entrances. Specialist analysis suggests that barley was the dominant crop used on site while oak wood was the preferred construction material. Finds recovered from the site included 2 sherds of residual Neolithic pottery and 10 sherds of Middle Bronze domestic pottery (Appendix 8). Late Bronze Age burial activity was identified at Site 125.1 in the form of an unlined cremation pit. The burial consisted of the partial remains of an unsexed adult, aged between 35-89 years at the time of death (Appendix 5). Analysis of the charcoal found in association with the cremated remain indicates that oak wood was used as fuel for the cremation pyre (Appendix 3).

1 Introduction

1.1 This report gives the final excavation results for three excavations carried out along a section of the N8 Cashel to Mitchelstown Road Improvement Scheme. The three sites excavated, Site 125.4, Site 125.5 and Site 127.1, were located in the townland of Cloghabreedy, in the parish of Knockgraffon, Co. Tipperary, E205840 N127850; E205875 N127961; E205959 N128196.

1.2 Site 127.1 was first identified during a programme of testing carried out by Margaret Gowen and Co. Ltd during August 2005 (Licence No. 05E0877), while Site 125.4 and 125.5 were uncovered during monitoring associated with the construction phase of the road scheme in April 2006 (A035/001, Registration No. E2279).

1.3 The sites excavated included a large Middle Bronze Age settlement site (Site 125.4), a Late Bronze Age cremation pit (Site 125.5) and a small Early Bronze Age pit containing a token deposit of cremated bone (Site 127.1).

1.4 The archaeological excavation programme was conducted under Ministerial Direction A035/000, Registration No. E2274 by Colm Moriarty of Margaret Gowen & Co. Ltd. for South Tipperary Co. Council. The sites excavated were initially stripped by machine under archaeological supervision (approximately 2475m^2 was stripped at Site 125.4, 400m^2 was stripped at Site 125.5 and 225m^2 was stripped at Site 127.1). The works were carried out on site between 27th of April and the 22nd of May 2006.

1.5 The writer would like to acknowledge the assistance and contribution of the excavation staff especially the supervisors James Hession and Riona Doolan; the surveyors Eamonn Briscoe and Andrea Acinelli; the CAD illustrators Johnny Ryan and James Hession; the specialists who contributed to this report; and the report production team of Lindsay Delahunty and Mario Sughi. Thanks are also due to project archaeologists Richard O'Brien, James Eogan and Mairead McLaughlin; the on site contractors Roadbridge/Sisk; and the project managers McCarthy Hyder Carlbro.

2 Archaeological and Historical Background

2.1 The three sites excavated under Registration No. E2274 (Site 125.4, Site 125.5 and Site 127.1) were located in the townland of Cloghabreedy which is approximately 3km to the north of Cahir and 12km to the south of Cashel. The sites included a large Middle Bronze Age settlement site (Site 125.4), a Late Bronze Age cremation pit (Site 125.5) and a possible Early Bronze Age cremation pit (Site 127.1).

2.2 The sites were located approximately 11km from the southern end of the Cashel By-Pass where archaeological excavations revealed extensive evidence for Bronze Age activity. Settlement sites were uncovered at Hughes'-Lot East townland, where a rectilinear enclosure surrounded up to three roundhouses (Hughes 2006, NRA 2005), and at Mondaereela townland where more Bronze Age structures were identified (O'Flanagan 2006a, NRA 2005). Probable Bronze Age burial evidence included a group of cremation pits from Boscabell townland (Kavanagh 2006), a ring ditch from Monadreela townland (Flanagan 2006b), a cremation pit from Windmill townland (Fairburn 2006) and another cremation pit from Gortmakellis townland (McKinstry 2006). Twenty four *fulachta fiadh*/burnt mounds were also excavated on this scheme including a cluster of seven sites surrounding two ponds in Owen's & Bigg's Lot townland. The most significant *fulacht fiadh* consisted of a deep wood-and-wattle-lined pit from which worked timbers were retrieved A possible wooden totem and a wooden pick were amongst the artefacts found (Hughes 2006b).

2.3 Further evidence for Bronze Age activity in this part of Tipperary was identified at Curraghatoor, which is c. 9km to the southeast of the E2274 sites. At this location excavations revealed up to eight hut sites, fence lines and a palisade trench (enclosing the structures) dating from the middle to late Bronze Age (Doody 2007a). Pottery and some tools were also uncovered.

2.4 A number of RMP sites in the surrounding area are also possibly Bronze Age in date. These include mounds at Cloghabreedy (TI075:028), Drangan (TI075:025) and Ballydrehid (TI075:033) which may represent the remains of Bronze Age burial

monuments. A Late Bronze Age socketed axehead was found to the southeast of the Cloghabreedy mound (TI075:028). A large hilltop enclosure (TI075:40) located at Kedrah (approximately 700m to the southeast of the E2274 sites) may also date from this period. Slightly further a field two ring barrows, the first located in Carrow townland (TI069:00202) and the second in Clonmore North townland (TI081:073), are further evidence for prehistoric burial activity in the area. Both of these ring barrows are located within a 15km radius of the E2274 sites.

2.5 A large number of Bronze Age sites were also uncovered during excavations associated with the N8 road improvement scheme. These sites included evidence for both burial and settlement activity. Nearby burial sites included three Late Bronze Age cremation pits identified 2km to the southeast (E2126, Site 203.4, McQuade, 2007a) and a possible Early Bronze Age cremation pit located c. 3km to the north (E2270, site 137.3, Moriarty 2007a). Settlement sites in close proximity included a Middle Bronze circular structure located 600m to the north (E2271, Site 129.1, Moriarty 2007b), a Middle Bronze Age round house situated 700m to the south (E2273, Site 125.1, Moriarty 2007c), a site containing evidence for both Early and Middle Bronze Age activity located 800m to the southeast (E2273, Site 125.3, Moriarty 2007c) and a pair of Middle Bronze Age buildings situated 2km to the north (E2270, Site 137.1, Moriarty 2007a).

3 Stratigraphic Report Site 125.4

Townland: Cloghabreedy, Chainage 25+980, NGR E205840 N127850, O.D. 50.70m – 50.90m

3.1 *Introduction*

This site was located in pastureland on a relatively flat ground. The land rose gently to the south of the site leaving it sheltered from the prevailing south westerly winds. The surrounding landscape was gently undulating farmland that was well drained and fertile. A small tributary of the river Suir was located 500m to the east, while the river Suir itself was located roughly 700m to the south.

The site contained four Middle Bronze Age circular structures and a large number of ancillary features. Archaeological sites excavated as part of the road scheme that were in close proximity to this site included a Late Bronze Age cremation burial identified approximately 100m to the north (E2274, Site 125.5, this report), a Middle Bronze Age circular structure located roughly 300m to the south (E2271, Site 125.1, Moriarty 2007b) and an Early Bronze Age settlement site situated 380m to the southwest (E2273, Site 125.3, this report). Other prehistoric sites in the surrounding landscape included a large hilltop enclosure (TI075:040) located approximately 1km to the southeast.

3.2 *The Excavation (Figure 4)*

The area of excavation was sub-rectangular in plan and measured 50m (north-south) by 50m (east-west). The stratigraphy comprised 0.30m – 0.40m of topsoil overlying natural subsoil. The subsoil was hard yellow compact clay that contained occasional inclusions of decayed stones, while topsoil was dark brown silty clay. All of the features were cut into natural subsoil and there was evidence for 3 phases of activity. Phase 1 dated to the Early Neolithic period and was represent by two fragments of pottery, which appeared to be residual; Phase 2 activity consisted of a large Middle Bronze Age settlement site; while Phase 3 contained two linear cuts, which probably represented old field boundaries. Dating was based on radiocarbon analysis (Appendix 9) and the pottery assemblage (Appendix 8). The site had clearly been truncated by intensive farming. No buried sod was observed and the uppermost fills of all the features was exposed beneath cultivated soil.

3.2.1 *Phase 1*

The earliest activity identified at this site was represented by two much worn sherds (Finds Nos. E2274.6 & E2274.7) of Early Neolithic pottery, probably derived from carinated bowls (Appendix 8). The first sherd (Finds No. E2274.7) was recovered from a slot trench (F404) belonging to a Middle Bronze Age building (Structure A), while the second sherd (E2274.6) was recovered from a Middle Bronze Age pit (F248). The pottery sherds were in worn and abraded state which suggests that they were not in their primary place of deposition. This and the fact that they were recovered from Middle Bronze Age features suggest that they were residual artefacts.

3.2.2 *Phase 2*

Phase 2 activity consisted of four Middle Bronze Age structures (Structures A-D) and a large number ancillary features such as pits, postholes, fence lines and hearths. Twelve sherds of prehistoric pottery (Finds Nos. E2274.1-9) were recovered from Phase 2 features along with occasional charred cereal grains and burnt bone inclusions. For descriptive purposes the structures have been labelled A, B, C and D, while the surrounding features have divided up according to their proximity to each building.

Structure A (Figures 7 & 8, Plates 4-6)

Structure A was a sub-circular building that was located in the south eastern part of the site. It was defined by curving slot trench (F404) that partially enclosed a sub-circular area with an internal diameter of 6.80m. The structure had a southeast facing entrance that was defined by a pair of large double post-holes (F209A, F209B and F417, F418). A circular arrangement of postholes, probably designed to support the roof was identified in the interior of the structure. A number of small shallow pits were also identified within the structure. A fragment of hazel charcoal from the slot trench gave a radiocarbon date of 1666 – 1494 cal BC (UB-7172) (Appendix 9). A number of pits, postholes and hearths as well as two fence lines (Fences 1 & 2) were located in the vicinity of Structure A and may be contemporary with this building.

Building Wall (Figures 7-9, Plates 8 & 9)

The wall of Structure A was defined by an incomplete curving slot trench (F404). The slot trench was deepest approaching the entranceway, where it measured up to a maximum of 0.30m in depth. It gradually grew shallower as it approached the northern side of the structure, where at points it completely petered out. The cut had a

u-shaped profile, and measured between 0.20m – 0.30m in width. The depth varied from a maximum of 0.30m to a minimum of 0.10m. It was filled by orange brown clayey silt (F405) that contained infrequent inclusions of charcoal and two fragments of prehistoric pottery (Finds No. 2274:7 & 2274:8). The pottery included a much worn necksherd from an Early Neolithic carinated bowl (Find No. 2274:7) and a rimsherd from Middle Bronze Age bucket shaped domestic vessel (Find No. 2274:8) (Appendix 8). Charcoal analysis identified three different species of wood within the slot trench fill (Appendix 3). These included oak, pomaceous fruitwood and hazel with hazel being the dominant *taxa* present. A fragment of hazel charcoal was radiocarbon dated to 1666-1494 cal BC (UB-7172) (Appendix 9). The prevalence of hazel charcoal from the slot trench may be an indictor of the type of wood used in the construction of the building wall. Thirteen stakeholes (F422.1-F422.12 and F181.7) were identified along the base of the slot trench and these probably represent the remains of stakes belonging to a post and wattle wall. Four large postholes (F187, F230, F237 and F226) were also identified along the circuit of the slot trench and these may have acted as additional structural supports. Twelve fragments of burnt animal bone which were too small to assign to either species or skeletal element were recovered from one of these postholes (F187) (Appendix 7). Another large posthole (F193) was identified 0.30m to the west of the slot trench F404. Although this posthole was located outside of the building, its proximity to the slot trench may indicate that it was intended as an additional wall support.

Table1: Postholes and stakeholes belonging to wall of Structure A

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F181.17	0.13m x 0.10m	0.14m	Oval	Tapered	Pointed	Grey clayey silt
F422.1	0.12m x 0.06m	0.06m	Oval	Tapered	Pointed	Dark orange brown clayey silt
F422.2	0.12m x 0.04m	0.07m	Oval	Tapered	Pointed	Dark orange brown clayey silt
F422.3	0.12m x 0.06m	0.03m	Oval	Tapered	Pointed	Dark orange brown clayey silt
F422.4	0.12m x 0.06m	0.08m	Oval	Tapered	Pointed	Dark orange brown clayey silt
F422.6	0.10m x 0.06m	0.18m	Oval	Tapered	Pointed	Dark orange brown clayey silt
F422.7	0.09m x 0.05m	0.12m	Oval	Tapered	Pointed	Dark orange brown clayey silt
F422.8	0.06m x 0.06m	0.08m	Oval	Tapered	Pointed	Dark orange brown clayey silt
F422.9	0.12m x 0.10m	0.12m	Oval	Tapered	Pointed	Dark orange brown clayey silt
F422.10	0.08m x	0.12m	Oval	Tapered	Pointed	Dark orange brown

	0.07m					clayey silt
F422.12	0.11m x 0.07m	0.12m	Oval	Tapered	Pointed	Dark orange brown clayey silt
F187	0.30m	0.39m	Circular	Vertical	Flat	F188 grey brown silty clay that contained occasional flecks of charcoal and burnt bone
F230	0.24m x 0.21m	0.30m	Sub-circular	Vertical	Concave	F231 dark blackish brown silty clay that contained frequent charcoal flecks
F237	0.20m x 0.17m	0.24m	Sub-circular	Vertical	Concave	F238 brown silty clay that contained occasional charcoal flecks
F226	0.37m x 0.30m	0.36m	Sub-circular	Vertical	Concave	F227 dark brown silty clay
F193	0.32m x 0.25m	0.22m	Sub-circular	Tapered	Concave	F194 dark brown silty clay that contained occasional charcoal flecks

Entrance into Structure A *(Figures 7-9, Plate 6)*

Structure A had a southeast facing entrance that was defined by a pair of substantial double postholes (F209A - F209B and F417 - F418). The entrance gap between these postholes measured approximately 0.80m in width. Two small stakeholes (F181.7 and F181.6) were located at the southern side of the entrance gap adjacent the entrance posthole F209A. It is possible that these may have been related to some form of door structure.

Table 2: Postholes defining the entrance into Structure A

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F209A	0.24m	0.49m	Circular	Vertical	Flat	F210A greyish brown silty clay that contained occasional charcoal flecks
F209B	0.29m	0.45m	Circular	Vertical	Flat	F210B greyish brown silty clay that contained occasional charcoal flecks
F417	0.24m x 0.22m	0.22m	Circular	Vertical	Concave	F419A dark brown silty clay that contained occasional charcoal flecks
F418	0.45mx 0.40m	0.37m	Sub-circular	Vertical	Concave	F419B dark brown silty clay that contained occasional charcoal flecks
F181.6	0.06m	0.06m	Circular	Tapering	Pointed	Grey silty clay that contained occasional charcoal flecks
F181.7	0.06m	0.05m	Circular	Tapering	Pointed	Grey silty clay that contained occasional charcoal flecks

Internal load bearing postholes (Figures 7-9, Plates 7, 10 & 11)

A sub-circular arrangement of fourteen large postholes was identified within the interior of structure A. They respected the curve of the slot-trench (F404) and were on average 1m distant from it. The postholes measured between 0.23m and 0.46m in diameter and between 0.18m and 0.50m in depth. The positioning of the postholes suggests that they were probably designed to support the weight of the roof. Twelve of the postholes occurred in paired groups (F221&F219, F205&F224, F234&F190, F207A&F207B, F189&F241 and F253&F200). This may indicate that at certain locations additional postholes were needed to support the roof or else the replacement of old postholes over time with new ones. Analysis of the charcoal from one of the postholes (F190) identified three different species of wood (Appendix 3). These were oak, hazel and pomaceous fruitwood, with oak being by far the dominant *taxa* present. This suggests that this posthole originally held and oak post. One of the roof supporting postholes (F189) was partially truncated by a shallow pit (F423).

Table 3: Structure A internal roof supports

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F221	0.30m x 0.28m	0.44m	Sub-circular	Vertical	Flat	F220 greyish brown silty clay that contained occasional flecks of charcoal
F219	0.36m x 0.31m	0.23m	Sub-circular	Concave	Concave	Greyish brown silty clay that contained occasional flecks of charcoal
F205	0.29m x 0.27m	0.50m	Circular	Vertical	Rounded point	F206 grey clayey silt that contained occasional flecks of charcoal
F224	0.32m x 0.26m	0.23m	Oval	Vertical	Concave	F225 light greyish brown sandy silt that contained frequent flecks of charcoal
F259	0.20m x 0.19m	0.29m	Circular	Vertical	Rounded point	F260 mid-brown sandy silt that contained occasional flecks of charcoal
F234	0.29m x 0.28m	0.33m	Circular	Vertical	Concave	F236 grey black silty clay that contained occasional flecks of charcoal
F190	0.33m x 0.23m	0.24m	Sub-rounded	Concave	Blunt point	F191/F192; dark grey clayey silt that contained occasional flecks of charcoal and burnt clay
F207A	0.28m	0.18m	Circular	Concave	Concave	F208A mid-brown grey sandy silt with yellow mottling that contained occasional flecks of charcoal
F207B	0.28m in	0.23m	Circular	Concave	Concave	F208B mid-brown grey

	diameter					sandy silt with yellow mottling that contained occasional flecks of charcoal
F213	0.33m x 0.22m	0.25m	Sub-rounded	Vertical	Flat	F214 yellow brown clayey silt that contained occasional flecks of charcoal.
F241	0.24m x 0.18m	0.29m	Sub-circular	Vertical	Concave	F242 grey clayey silt that contained occasional flecks of charcoal
F189	0.31m x 0.17m	0.26m	Circular	Vertical	Concave	F199 light brown silty sand
F200	0.37m x 0.46m	0.37m	Sub-circular	Concave	Flat	F201 mid-black grey sandy clay that contained occasional flecks of charcoal.
F253	0.21m x 0.20m	0.28m	Circular	Tapered	Pointed	F254 grey clayey silt that contained occasional flecks of charcoal

Additional internal postholes and stakeholes

In addition to the circular arrangement of roof supporting postholes, seven postholes and seven stakeholes were identified within the interior of structure. These did not form any coherent spatial or structural patterns.

Table 4: Additional internal postholes & stakeholes

Cut	**Dimensions**	**Depth**	**Plan**	**Sides**	**Base**	**Fill description**
F198	0.29m x 0.27m	0.13m	Circular	Concave	Concave	F199 light brown silty sand
F217	0.23m x 0.20m	0.16m	Sub-rounded	Concave	Rounded point	F218 light brown grey sandy silt
F222	0.16m x 0.13m	0.16m	Circular	Tapered	Concave	F223 light brown silty clay that contained occasional charcoal flecks
F232	0.15m	0.15m	Circular	Vertical	Rounded point	F233 dark grey brown sandy clay that contained occasional flecks of charcoal
F235	0.20m	0.21m	Circular	Vertical	Rounded point	F236B grey black silty clay that contained occasional flecks of charcoal
F239	0.17m	0.13m	Circular	Vertical	Concave	F240 dark brown silty clay that contained occasional charcoal flecks
F257	0.17m	0.16m	Circular	Vertical	Flat	F258 mid-brown sandy clay that contained occasional flecks of charcoal
F181.1	0.16m	0.07m	Circular	Tapered	Pointed	Grey clayey silt
F181:2	0.10m x 0.08m	0.18m	Oval	Tapered	Pointed	Grey clayey silt

F181.3	0.10m x 0.08m	0.12m	Oval	Tapered	Pointed	Grey clayey silt
F181.4	0.10m	0.16m	Circular	Tapered	Pointed	Grey clayey silt
F181.10	0.07m	0.10m	Circular	Tapered	Pointed	Grey clayey silt
F181.11	0.11m	0.19m	Circular	Tapered	Pointed	Grey clayey silt.
F181:16	0.10m	0.18m	Circular	Tapered	Pointed	Grey clayey silt

Internal pits (Figures 7 & 8)

Five shallow pits (F168, F203, F185, F170 and F423) were identified within the interior of Structure A. One of the cuts (F203) was filled by a charcoal rich deposit that also contained fragments of burnt clay. The sides and base of this cut were not heat scorched, as would be expected from a hearth pit, which suggests that this feature was instead a refuse pit used to discard hearth waste. The remaining four pits contained only occasional flecks of charcoal and their original functions remain uncertain. One of these cuts (F423) truncated pit F170 and the roof supporting posthole (F189) suggesting that it may have post-dated Structure A.

The first internal pit (F168) was located to the northwest of the entrance postholes F209A & B. It was sub-circular in shape with a u-shaped profile and measured 0.63m in length by 0.60m in width by 0.27m in depth. The break of slope at the top was sharp, moderate at the sides and gradual at the base. The sides and base of the cut were concave. It was filled by mid-brown sandy silt (F169) of moderate compaction that contained inclusions of small stones 0.05m – 0.08m in size and some larger stones ranging up to 0.21m in size. There were also flecks of charcoal found throughout this fill.

A shallow pit (F203) was located directly to the north of pit F168. It was circular in shape with a concave profile. It measured 0.45m in length by 0.40m in width by 0.10m in depth. The break of slope at the top was sharp and gradual at the base. The sides and base were concave. It was filled by mid-grey black silty clay (F204) that contained frequent charcoal pieces and occasional flecks of burnt clay. There was no evidence for *in situ* burning on the base or sides of the feature so the deposit must have been dumped into the cut indicating a possible refuse function.

A large sub-rectangular pit (F185) was located in the north-western part of the structure. It measured 1.24m in length (east-west) by 0.57m in width by 0.18m in depth. The break of slope at the top and middle was sharp with a more gradual break of slope at the base. The sides and base were concave. It was filled by mid-brown

sandy silt (F186) of loose compaction that contained occasional flecks of charcoal and small rounded pebbles.

A very shallow pit (F170) was located in the eastern part of Structure A. It was circular in shape with a concave profile. It measured 0.45m in length by 0.41m in width by 0.08m in depth. The break of slope at the top was sharp with a more gradual break of slope at the middle and base. The sides were concave and the base was flat. It was filled by mid-grey brown sandy silt (F171) with inclusions of charcoal and occasional small sub-angular and rounded stones. The south eastern side of this cut was truncated by pit F423.

Pit 423 was located to the east of pit F170. It measured 0.45m in length (northeast-southwest) by 0.25m in width by 0.14m in depth. It was sub-circular in shape with a concave profile. The break of slope at the top was sharp with a more gradual break of slope at the middle and base. The sides and base were concave. It cut pit F170 and posthole F189. It was filled by light-mid grey brown sandy silt.

Fence protecting entrance into Structure A (Fence 1)

A curving fence line was identified immediately to south of Structure A. This feature which measured approximately 8m in length appeared to have been designed to protect the doorway leading into Structure A. The fence contained a gap, 1.2m in width, directly opposite the doorway into Structure A. This gap would have allowed easy access for people wishing to exit and enter the building. The gap in the fence was approximately 2.20m to the southeast of the door into Structure A. The fence was composed of thirteen stakeholes (F414:1-F414:12, F181:13), four postholes (F412, F415, F281, F275) and a short section of slot trench (F228). The postholes belonging to the fence are described in detail in Table 5 below. The short section of slot trench (F228) measured 1.75m in length by 0.32m in width (max) by 0.17m in depth. It had a concave profile and was filled by mid-brown sandy clay (F229) that had a notable concentration of charcoal flecks towards the western end of the feature. There were slightly wider and deeper areas located at the centre (0.17m in width by 0.12m in depth), eastern (0.17m in width by 0.13m in depth) and western (0.25m in width by 0.08m in depth) parts of the slot which suggests that it may have supported at least three stakes/posts.

Table 5: Postholes and stakeholes belonging to Fence 1

Cut	Dimensions	Depth	Plan	Base	Sides	Fill description
F281	0.18m x 0.17m	0.46m	Circular	Rounded point	Concave	F282 brown clayey sand that contained occasional charcoal flecks
F275	0.18m x 0.15m	0.15m	Oval	Rounded point	Concave	F276 light grey brown fine sandy silt
F412	0.23m x 0.20m	0.17m	Oval	Flat	Concave	F413 brown silty clay that contained occasional charcoal flecks
F415	0.29m x 0.18m	0.23m	Kidney shaped	Rounded point	Straight and tapered	F416 brown compact silty clay that contained occasional charcoal flecks
F414.1	0.10m	0.17m	Circular	Pointed	Tapered	Light brown silty clay
F414.2	0.10m	0.15m	Circular	Pointed	Tapered	Light brown silty clay
F414.3	0.12m x 0.11m	0.14m	Circular	Pointed	Tapered	Light brown silty clay
F414.4	0.14m x 0.10m	0.19m	Oval	Pointed	Tapered	Light brown silty clay
F414.5	0.09m	0.15m	Circular	Pointed	Tapered	Light brown silty clay.
F414:6	0.08m x 0.07m	0.10m	Circular	Pointed	Tapered	Light brown silty clay
F414.7	0.08m	0.11m	Circular	Pointed	Tapered	Light brown silty clay
F414.8	0.14m x 0.15m	0.12m	Sub-Circular	Pointed	Tapered	Light brown silty clay
F414.9	0.10m	0.11m	Circular	Pointed	Tapered	Light brown silty clay
F414.10	0.08m x 0.08m	0.10m	Circular	Pointed	Tapered	Light brown silty clay
F414.11	0.08m x 0.08m	0.11m	Circular	Pointed	Tapered	Light brown silty clay
F414.12	0.10m x 0.10m	0.16m	Circular	Pointed	Tapered	Brown silty clay
F181.13	0.13m x 0.13m	0.19m	Oval	Pointed	Tapered	Grey clayey silt

Shallow pits located between Structure A and Fence 1 (Figure7)

Seven features, including six pits (F215, F243, F246, F248, F166 and F244) and a linear gully (F247) were identified between the doorway into Structure A and Fence 1. Four of the pits (F215, F243, F246 and F248) formed a roughly east-west line and were filled with an identical deposit (F216) suggesting that they might represent natural hollows that gradually filled up with habitation debris rather than individual pits. Four sherds of Middle Bronze Age pottery and one sherd of Early Neolithic pottery were recovered from the homogenous deposit (F216) that filled the pits (Finds Nos: E2274.1, E2274.2 and E2274.6). A fifth pit (F166) was identified 0.30m to the northeast of this line of pits. This shallow cut was filled by a different deposit and does not appear to be related to the other pits at this location. Later activity in this area was identified in the form of a linear gully (F247) and a pit (F244).

A shallow pit (F215) was located 0.60m to the southeast of the entrance postholes F209A & F209B. It was circular in shape with a concave profile. It measured 0.43m in length by 0.50m in width by 0.15m in depth. The break of slope at the top was sharp and gradual at the sides and base. The sides and base were concave. It was filled by F216, which was a deposit that filled the majority of the pits in this area (described below). Four sherds of prehistoric pottery were recovered from this deposit. These included three sherds (2a, 2b and 2c) from a Middle Bronze Age domestic vessel (Finds No. E2274.2) and a much worn necksherd from an Early Neolithic carinated bowl (Find No. E2274: 6) (Appendix 8).

Pit F243 was located to the east of pit F215. It was circular in shape with a concave profile. The break of slope at the top was sharp with a more gradual break of slope at the middle and base. It measured 0.52m in length by 0.40m in width by 0.18m in depth. The pit was filled by F216 (see below). It was cut to the east initially by the linear gully F247 and secondly by pit F244.

Pit F246 was located to the east of pit F243. It was circular in shape with a concave profile. The break of slope at the top was sharp and more gradual at the middle and base. The sides and base were concave. It measured 0.50m in length by 0.44m in depth by 0.22m in depth. It was filled by F216 (see below). A necksherd from a Middle Bronze Age domestic vessel (Find No. E2274: 1) was recovered from this deposit. This was feature was truncated by pit F244 along its western side.

Pit F248 was located to the east of pit F246. It was circular in shape with a concave profile. The break of slope at the top was sharp and gradual at the sides and base. The sides and base were concave. The pit filled by F216 (see below).

Pits F215, F234, F246 and F248 were all filled by homogeneous grey brown silty clay (F216). This deposit was of firm compaction with sandy patches throughout making these areas quite friable. There were also inclusions of charcoal flecks and small stones. Five sherds of prehistoric pottery were recovered from this fill (Finds Nos. E2274:1, 2274:2 & F2274.6). These include a much worn sherd of Early Neolithic carinated bowl (Finds No. E22772.6), which was probably residual and four sherds of Middle Bronze Age domestic pottery (Finds Nos. E2272.1 and E2272.2) (Appendix 8).

Pit F166 was located to the northeast of pit F248. It was circular in shape with a u-shaped profile. It measured 0.75m in length by 0.60m in width by 0.29m in depth. The break of slope at the top was sharp and gradual at the base and sides. The sides and base were concave. It was filled by grey brown silty clay (F167) of friable compaction that contained occasional charcoal flecks and frequent small pebbles ranging up to 0.01m in size.

A short gully (F247) was located to the south of the entrance of Structure A. It was curvilinear in shape and concave in profile. It was cut by ditch F195 to the southeast so the true dimensions could not be ascertained. The surviving feature measured 3.60m in length (north-south) by 0.60m in width by 0.30m in depth. The break of slope at the top was sharp and very gradual at the middle and base. The sides and base were concave. It cut stake-holes F414:10 and F414:11 and pits F243 and F246. It was in turn truncated by pit F244

A large pit (F244) was located southeast of the entrance to Structure A. It was sub-circular in shape with a concave profile. The break of slope was sharp at the top and more gradual at the middle and base. The sides and base were concave. It measured 0.80m in length by 0.76m in width by 0.20m. It cut pit F234 to the west, pit F246 to the east and gully F247 to the north and south. It was filled by grey brown silty clay (F245) that contained frequent inclusions of charcoal flecks and small stones.

Pits located to the east of Structure A (Figure 7)

Five pits were identified to the east of Structure A. Three of the pits (F172, F179 and F212) contained charcoal rich fills and evidence of *in situ* burning, suggesting that they may have functioned as cooking pits.

The first cooking pit (F172) was an oval shaped cut that was located 2.50m to the east of Structure A. It was sub-circular in plan and measured 0.75m in length by 0.60m in width by 0.16m in depth. The break of slope at the top was moderate with a more gradual slope at the middle and base. The sides and base were concave. The base of the pit was fire reddened which indicated burning *in situ*. It was filled by dark brown sandy clay (F173) of soft compaction. This deposit contained frequent inclusions of charcoal as well as occasional inclusions of burnt stone.

A sub-circular cooking pit (F212) was located 1m to the south of cooking pit F172. It was roughly circular in plan and measured 0.65m in length by 0.60m in width by 0.30m in depth. The break of slope at the top and middle was sharp with a more gradual break of slope at the base. The sides and base were concave. The sides and base of the pit were fire reddened which indicates *in situ* burning. It was filled by dark brown sandy clay (F211) of loose friable compaction that contained frequent charcoal flecks and stones ranging between 0.05m – 0.06m in size.

A large cooking pit (F179) was located 2.20m to the south of cooking pit F212 (Plate 13). It was circular in shape and measured 1.03m in diameter by 0.25m in depth. The break of slope at the top and middle was sharp with a more gradual break of slope at the base. The sides were straight and tapered to an almost flat base. The base and sides were fire reddened demonstrating *in situ* burning. It was filled by two deposits. The primary fill (F180) was dark brownish black charcoal rich silty clay that measured 0.08m in depth. Nineteen fragments of burnt animal bone which were too small to assign to either species or skeletal element were recovered from this deposit (Appendix 8). It is likely that these flecks of burnt animal bone represent food waste. Analysis of the plant remains from this deposit revealed that it contained very few seed remains. The species identified included an indeterminate cereal grain, a dock seed and a knotweed seed (Appendix 4). The secondary fill (F197) was brown silty clay of hard compaction that contained frequent inclusions of charcoal. There were also inclusions of burnt clay located at the top and side of this fill. It measured 0.17m in depth.

A large circular pit (F174) was located 1.10m to the north of cooking pit F172. It was circular in shape with a concave profile and measured 0.95m in diameter by 0.23m in depth. The break of slope at the top was sharp with a gradual break of slope at the middle and base. The sides and base were concave. It was filled by two deposits F176 and F175. The primary fill (F176) was grey brown silty clay with yellow sandy mottling that measured 0.10m in depth. It was loosely compacted and had occasional charcoal inclusions. The upper fill (F175) was grey brown silty clay of loose compaction that measured 0.13m in depth. It had inclusions of occasional charcoal pieces and very occasional medium sized stones.

A sub-circular shaped pit (F305) was located 2.50m to the southeast of cooking pit F212. It measured 0.90m in length by 0.65m in width by 0.37m in depth. It was oval

shaped in plan with a concave profile. The sides and base were concave. It was filled by grey brown silty clay (F306) of soft compaction that contained frequent flecks of charcoal and occasional small angular stones.

Fence 2 (Figure 7)

A series of postholes and slot trenches probably representing the remains of a fence was located 5.50m to the southeast of Structure A. The fence line was composed of eleven postholes (F299, F290, F277, F261, F271, F279, F267 & F265), two post-pits (F288 and F294) and a section of slot trench (F303). These postholes and slot trenches formed a northeast-southwest orientated line, approximately 8.50m in length. The postholes belonging to this fence line are described in detail in Table 6. The first post-pit (F294) was located at the middle of the fence and appeared to have originally contained two postholes. It measured 0.76m in length by 0.29m in width by 0.28m in depth. It was filled by mid-brown friable sandy clay (F295) of moderate compaction. Two deeper areas located at either end of the cut appear to have been the remains of postholes. The south-western posthole would have measured 0.30m in length by 0.21m in width by 0.28m in depth. The north-eastern posthole would have measured 0.40m in length by 0.29m in width by 0.27m in depth. Post-pit F288 was located to the northeast of post-pit F294. It measured 0.80m in length by 0.34m in width by 0.36m in depth. It was sub-oval in plan and concave in profile. It was filled by mid-brown grey sandy clay (F289) that contained occasional charcoal flecks. This post pit also had indications that it may have supported two posts. The first post would have been located at the south-western end and would have measured 0.24m in diameter by 0.24m in depth. The second post would have been located at the north-eastern end of the feature and would have measured 0.30m in diameter by 0.36m in depth. The slot trench F303 was linear cut located to the northeast of posthole F290. It measured 2.05m in length by 0.32m in width (max) by 0.26m in depth. The break of slope at the top and middle was sharp with a more gradual break of slope at the base. It was filled by mid-brown grey sandy clay (F304) of friable compaction that contained occasional charcoal flecks (with a notable concentration on the base and edges). There was evidence that F303 supported at least two postholes as there was a truncated posthole at the north-eastern end measuring 0.25m in diameter by 0.26m in depth. Again at the south-western end there was a possible posthole measuring 0.15m in diameter by 0.22m in depth.

Table 6: Postholes belonging to Fence 2

Cut	Dimensions	Depth	Plan	Base	Sides	Fill description
F265	0.20m	0.19m	Circular	Rounded	Tapered	F266 dark brown sandy silt that contained occasional charcoal flecks
F267	0.20m x 0.17m	0.15m	Circular	Rounded	Concave	F268 dark brown sandy silt that contained occasional charcoal flecks
F279	0.22m x 0.17m	0.18m	Oval	Rounded	Tapered	F280 mid-brown sandy silt that contained occasional charcoal flecks
F271	0.16m x 0.14m	0.15m	Circular	Rounded	Vertical	F272 mid-brown sandy silt that contained occasional charcoal flecks
F261	0.16m	0.13m	Circular	Rounded	Vertical	F262 mid-brown sandy silt that contained occasional charcoal flecks
F277	0.25m x 0.21m	0.21m	Sub-circular	Flat	Vertical	F278 mid-grey brown clayey silt that contained frequent charcoal flecks
F275	0.15m	0.15m	Oval	Flat	Vertical	F276 light grey brown sandy silt
F269	0.15m x 0.13m	0.20m	Oval	Rounded	Concave	F27 mid-grey brown sandy clay that contained occasional charcoal flecks
F263	0.23m x 0.18m	0.21m	Circular	Rounded	Straight	F264 mid-grey brown sandy clay that contained occasional charcoal flecks
F290	0.24m	0.34m	Circular	Concave	Vertical	F291 grey brown silty clay that contained occasional charcoal flecks
F299	0.20m x 0.14m	0.40m	Oval	Rounded	Tapered	F300 mid-grey brown sandy silt that contained occasional charcoal flecks

Features to the south of Fence 2 (Figure 7)

A number of features were identified to the south of Fence 2. These included two highly truncated hearths (F296 and F400) and three pits (F283, F286 and F292). One of the pits (F283) contained a concentrated deposit of charcoal and burnt stone, which may indicate that it was used as roasting pit. Analysis of the plant remains from one of the hearths (F296) identified large quantities of indeterminate cereal grains as well as three barley grains (Appendix 4).

A highly truncated hearth (F400) was located to 3.55m to the southeast of Fence 2. It measured 1.02m in length by 0.90m in width by 0.02m in depth. It was irregular in shape with a very gradual break of slope at the top, middle and base. The sides and base of the cut were oxidised red, demonstrating *in situ* burning. The northern and

southern sides were concave, while the eastern and western sides were truncated by modern activity. The base of the cut was flat. The hearth was filled by black charcoal rich silty clay (F401)

A second hearth (F296) was identified 9m to the southwest of Fence 2. It had been severely truncated by intensive cultivation and all that survived was a sub-circular area of oxidised clay and charcoal. This deposit (F297) measured 0.96m in length by 0.70m in width by 0.04m in depth. It consisted of brown sandy silt with orange mottling of moderate compaction. There were inclusions of occasional charcoal flecks, occasional small burnt stones and fragments of burnt clay. Analysis of the plant remains from this feature identified large quantities of indeterminate cereal grain, a small amount of barley grain and a possible wheat grain (Appendix 4).

A large sub-rectangular pit (F283) was located 1.50m to the southeast of Fence 2 (Plate 14). It measured 1.41m in length by 0.90m in width by 0.26m in depth. It had a u-shaped profile with vertical sides and a concave base. The break of slope at the top, middle and base was sharp. It was filled by two fills. The primary fill (F284) was friable grey black silty clay that measured a maximum of 0.26m in depth. It contained frequent charcoal flecks and fire reddened stone inclusions. The secondary fill (F285) of the pit was light brown sandy clay that was confined to the northern part of the cut. It measured a maximum of 0.17m in depth and contained occasional inclusions of charcoal and small angular stones. The presence of burnt stone and charcoal in this feature suggests that it was a roasting pit used to cook food.

A sub-circular pit (F286) was located 1.40m to the southwest of pit F283. It measured 0.63m in length by 0.60m in width by 0.23m in depth. The sides and base of the cut were concave. It was filled by red brown silty clay (F287) that contained grey mottling due to a concentration of charcoal in the upper part of the fill.

Pit F292 was located to the northwest of pit F286. It was sub-circular in plan with a concave profile. It measured 0.62m in length by 0.46m in width by 0.13m in depth. The break of slope was sharp at the top with a more gradual break of slope at the middle and base. The sides and base were concave. It was filled by grey brown sandy silt (F293) that contained occasional small stones and charcoal flecks.

Structure B (Figures 6 & 8, Plates 17 & 18)

A distinct concentration of postholes, probably representing the truncated remains of a circular structure, was identified approximately 12m to the west of Structure A. The most definite part of this building was an east facing entrance defined by a porch like arrangement of substantial postholes. All that survived of the outer wall of the building were two short sections of slot trench extending outwards from each of the large entrance postholes (F373 and F384). A large number of postholes and stakeholes were located to the west of the entrance porch and these probably represent the remains of wall and roof supports associated with the building. Unfortunately, due to the truncated nature of the structure, these postholes and stakeholes failed to form any definite structural pattern. A number of pits were also identified within the interior of the structure. A fragment of charcoal (alder) from a posthole (F373) belonging to this structure gave a radiocarbon date of 1604-1414 cal BC (UB-7173) (Appendix 9).

Entrance Porch (Figures 6, 8 & 9, Plates 17, 19 & 20)

The entrance into structure B was defined by a rectangular porch, orientated broadly east-west. It measured 2.90m in length by 2.30m in width and was composed of six postholes (F384, F386, F344, F373, F398 and F388) and a short section of slot trench (F424). The internal access width measured 1.75m at the eastern end of the porch and 0.85m at the western end. The entrance threshold, which was located at the western end of the porch, was defined by two very large and deep postholes, F384 and F373. These substantial cuts measured between 0.55m – 0.80m in diameter and were 0.50m in depth. Analysis of the charcoal from posthole F373 identified numerous wood species including alder, hazel, oak, willow, pomaceous fruitwood and cherry (Appendix 3). The identifications were clearly dominated by oak. A fragment of alder charcoal from this feature gave a radiocarbon date of 1604-1414 cal BC (UB-7173) (Appendix 9). The fills of both the threshold postholes (F373 and F384) produced large quantities of indeterminate cereal grains, occasional barley grains and one possible oat seed (Appendix 4). These seed remains probably represent domestic debris worked into the posthole fills through daily activities (Halwas 2007). Seven fragments of burnt bone which were too small to assign to either species or skeletal element were also recovered from posthole F384 (Appendix 7). A short east-west orientated slot trench (F424) joined up two of the postholes (F373 and F398) which formed the southern side of the porch. This short section of slot trench measured 1.10m in length by 0.20m in width by 0.10m in depth. The break of slope at the top

was sharp and more gradual at the middle and base. It as filled by grey brown sandy clay (F425) very similar to the fill of the posthole F399.

Table 7: Postholes belonging to entrance porch

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F384	80m x 0.64m	0.50m	Circular	Vertical	Flat	F385 dark grey brown silty clay that contained frequent charcoal flecks
F373	0.60m x 0.55m	0.50m	Circular	Vertical	Concave	F374 primary fill, dark brown silty clay F377 secondary fill, light brown silty clay
F386	0.41m x 0.32m	0.25m	Circular	Steeply sloping	Concave	F387 grey brown silty clay that contained frequent charcoal flecks
F398	0.30m x 0.20m	0.27m	Sub-circular	Vertical	Concave	F399 grey brown sandy silt that contained occasional charcoal flecks
F344	0.30m	0.46m	Circular	Vertical	Concave	F345 dark black brown silty clay that contained frequent charcoal flecks
F388	0.23m	0.58m	Circular	Vertical	Concave	F389 black silty clay that contained frequent charcoal flecks

Wall Slot Trench (Figures 6 & 8)

The presence of an enclosing slot trench, similar to the one identified at structure A, was suggested by two short cuts that extended out from the entrance postholes F373 and F384. The first slot trench extended from the entrance posthole F384 in a north-easterly direction. It measured 0.60m in length by 0.15m in width by 0.10m in depth. The break of slope at the top and middle was sharp and more gradual towards the base. The sides and base were concave. The second slot trench extended from the entrance posthole F373 in a southerly direction. It measured 0.75m in length by 0.25m in width by a maximum of 0.17m in depth. The break of slope at the top and middle was sharp and more gradual towards the base. The sides and base were concave. Both of the slot trenches were filled by dark silty clays that contained frequent flecks of charcoal. It is possible that prior to truncation caused by deep ploughing these two sections of slot trench carried on to encircle the structure.

Postholes and stakeholes associated with Structure B (Figures 6, 8 & 9)

Thirty four postholes and stakeholes were identified to the west of the entrance porch. Due to the truncated nature of Structure B the postholes failed to form any definite

structural patterns. However, it is likely that some of them, such as F330, F342, F348, F364 and F356 may have acted as internal roof supports, while others such as F375, F338, F334, F347 and F326.1 could have supported the outer wall of the building. One of the postholes that may have defined the outer wall of Structure B (F375) had two shallow linear gullies extending out from its western and north-eastern sides. Each of these cuts measured approximately 0.40m in length by 0.09m in depth. They had u-shaped profiles and were very similar to the short slot trenches extending out from the entrance postholes F373 and F384.

Possible internal division *(Figure 6)*

Eleven of the postholes/stakeholes (F330, F332, F326.7, F326.5, F326.12, F326.11, F326.10, F326.6, F326.14, F326.13, and F326.15) belonging to Structure B appeared to form a short north-south oriented line 3.5m in length and it is possible that these are evidence for an internal division. A small sherd from Middle Bronze Age domestic vessel (Finds No. E2274.5; Appendix 8) was recovered from one of these stakeholes (F326.5).

Table 8: Postholes and stakeholes associated with Structure B

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F332	0.16m	0.10m	Circular	Steeply sloping	Concave	F333 Greyish brown silty clay that contained occasional flecks of charcoal
F348	0.26m x 0.24m	0.20m	Circular	Straight & tapering	Rounded	F349 grey brown silty clay that contained occasional charcoal flecks
F356	0.25m in diameter	0.32m	Sub-circular	Vertical	Tapered blunt point	F357 grey brown sandy silt that contained occasional charcoal flecks
F366	0.22m x 0.18m	0.26m	Triangular	Vertical	Flat	Grey clayey silt
F336	0.22m	0.31m	Circular	Concave	Concave	Grey brown clayey silt
F334	0.18m	0.17m	Circular	Tapering	Rounded	Dark sandy clay
F364	0.25m x 0.23m	0.51m	Sub-circular	Tapering	Rounded point	F365 mid-grey brown sandy silt that contained very occasional charcoal flecks
F340	0.52m x 0.46m	0.34m	Sub-circular	Vertical	Concave	F341 mid-brown sandy clay that contained occasional charcoal flecks
F375	0.26m	0.19m	Circular	Vertical	Flat	F376 mid-brown grey sandy clay that contained very occasional charcoal flecks
F338	0.32m x 0.31m	0.34m	Circular	Vertical	Flat	F339 dark brown sandy silt that contained

						occasional charcoal flecks
F342	0.59m x 0.52m	0.49m	Circular	Concave	Concave	F343 brown silty clay that contained occasional charcoal flecks
F346	0.19m x 0.16m	0.16m	Sub-circular	Vertical	Flat	F347 greyish brown silty clay that contained frequent charcoal flecks
F330	0.31m x 0.25m	0.38m	Sub-circular	Vertical	Flat	F331 dark grey black silty clay that contained frequent charcoal flecks
F368	0.34m x 0.20m	0.21m	Sub-circular	Vertical	Concave	F369 grey brown sandy silt that contained occasional charcoal flecks
F326.1	0.12m	0.16m	Circular	Tapering	Pointed	Grey brown silty clay
F326.2	0.06m	0.08m	Circular	Tapering	Pointed	Charcoal rich grey brown silty clay
F326.3	0.06m	0.08m	Circular	Tapering	Pointed	Grey brown silty clay
F326.4	0.09m	0.07m	Circular	Tapering	Pointed	Reddish brown silty clay
F326.5	0.10m	0.08m	Oval	Tapering	Pointed	Grey black sandy silt containing fragment of pottery
F326.6	0.12m	0.11m	Circular	Tapering	Pointed	Grey brown silty clay
F326.7	0.10m x 0.09m	0.08m	Circular	Tapering	Pointed	Black brown silty clay
F326.08	0.08m	0.18m	Circular	Tapering	Pointed	Black brown silty clay
F326.09	0.08m	0.12m	Circular	Tapering	Pointed	Black brown silty clay
F326.10	0.08m	0.10m	Circular	Tapering	Pointed	Grey brown silty clay
F326.11	0.12m x 0.10m	0.16m	Oval	Tapering	Pointed	Grey sandy silt
F326.12	0.10m	0.11m	Circular	Tapering	Pointed	Grey sandy silt
F326.13	0.13m	0.12m	Circular	Tapering	Pointed	Grey sandy silt
F326.14	0.07m x 0.05m	0.10m	Oval	Tapering	Pointed	Grey sandy silt
F326.15	0.09m x 0.08m	0.10m	Circular	Tapering	Pointed	Grey sandy silt
F326.16	0.10m x 0.08m	0.12m	Oval	Tapering	Pointed	Grey sandy silt
F326.17	0.10m x 0.08m	0.12m	Circular	Tapering	Pointed	Grey sandy clay
F326.18	0.09m	0.15m	Circular	Tapering	Pointed	Grey sandy clay
F326.19	0.09m x 0.06m	0.10m	Oval	Tapering	Pointed	Grey sandy clay
F326.20	0.09m	0.23m	Circular	Tapering	Pointed	Grey sandy silt

Pits associated with Structure B (Figure 6)

Nine pits were found in close proximity to Structure B. At least one of the pits (F370) post-dated Structure B as it truncated a posthole belonging to the entrance porch (F388). None of the pits were particularly large or deep averaging between in 0.10 and 0.38m in depth. They were mainly filled with silty/sandy clays that contained occasional to frequent inclusions of charcoal. Two of the pits (F360 and F390) also contained fire reddened stones and burnt clay fragments suggesting that they may have been utilized to discard hearth waste or possibly as roasting pits.

Pit F358 was located to the southwest of the entrance posthole F373 and was probably originally located within the interior of the structure. It was oval in plan and concave in profile. It measured 1.46m in length by 0.65m in width by 0.18m in depth. The break of slope at the top was gradual, moderate at the sides and not perceptible at the base. The sides and base of the cut were concave. It was filled by grey brown silty clay (F359) of moderate compaction with inclusions of charcoal flecks.

Pit F350 was located to the northwest of pit F358. It was sub-circular in plan with a concave profile. It measured 0.69m in length by 0.68m in width by 0.30m in depth. The break of slope at the top and middle was sharp and gradual at the base. The sides and base were concave. It was filled by friable grey brown sandy clay (F351) with inclusions of occasional charcoal pieces and frequent round and angular stones.

Pit F360 was located in the western part of the area occupied by Structure C. It was sub-circular in plan with a concave profile. It measured 0.56m in length by 0.43m in width by 0.22m in depth. The break of slope at the top, middle and base was gradual. It was filled by dark brown silty clay (F361) that contained frequent flecks of charcoal and occasional fire reddened stones. There was no evidence of burning *in situ.* This feature may have been a rubbish pit that was used to discard hearth waste or possibly a roasting pit used to cook food.

Pit F362 was located to the north of pit F360. It was sub-circular in plan with a concave profile. It measured 0.53m in length by 0.44m by 0.24m in depth. The break of slope at the top, middle and base was gradual. The sides and base were concave. It was filled by friable dark brown sandy clay (F363) that contained infrequent flecks of charcoal.

An oval shaped pit F390 was located to the north of pit F362 and was probably originally located just outside of Structure B. It was sub-circular in plan with a concave profile. It measured 1m in length by 0.70m in width by 0.38m in depth. The break of slope at the top, middle and base was gradual. The sides and base were concave. It was filled by friable dark brown sandy clay (F391) that contained frequent charcoal flecks and lumps of oxidised clay. There were also some large heat affected stones measuring 0.09m-0.12m in size. There was no evidence of burning *in situ.* This feature may have been a rubbish pit that was used to discard hearth waste or possibly a roasting pit used to cook food.

Pit F328 was located to the north of the entrance post F384 and was probably originally located just outside of Structure B. It was sub-circular in plan with a concave profile. It measured 0.72m in length by 0.69m in width by 0.22m in depth. The break of slope at the top, middle and base was gradual. The sides and base were concave. It was filled by F329 which was friable grey black silty clay with inclusions of occasional flecks of charcoal.

A shallow pit F352 was located at the entrance threshold to Structure B, between postholes F373 and F384. It measured 0.50m in length by 0.40m in width by 0.10m in depth. It was sub-circular in plan with a concave profile. It was filled by F353 which was brown grey sandy clay of loose compaction that contained occasional charcoal pieces. This shallow pit may have formed by the continuous wear of people travelling through the entrance of Structure B.

A large sub-rectangular pit F370 was located to the east of Structure B. This feature truncated a posthole (F399) belonging to the entrance porch of Structure B suggesting that it post-dated the building. It was sub-rectangular in plan and concave in profile. It measured 2.51m in length (north-south) by 1.35m in width by 0.18m in depth. The break of slope at the top, middle and base was gradual. The sides and base were concave. It was filled by two deposits. The primary fill was friable grey black silty clay (F371) with inclusions of frequent flecks of charcoal and small stones ranging up to 0.10m in size. There were also occasional larger stones. It measured 0.18m in depth. The upper fill was friable dark brown silty clay (F372) with inclusions of occasional flecks of charcoal and frequent large stones measuring up to 0.15m in size.

Spread F327

An irregular spread (F327) was located within Structure B to the north of pit F342. It was irregular in plan and measured 0.93m in length (north-south) by 0.69m in width by 0.02m in depth. It was composed of charcoal rich blackish brown silty clay with inclusions of small stone throughout.

Fence 3 (Figures 6 & 7)

A curving roughly northwest-southeast orientated fence line was identified approximately 5m – 7m east of Structure B and 3m - 7m to the west of Structure A. The slight curvature of this fence suggests that it was related to structure B rather than Structure A. The fence line measured 9m in length and was composed of eight

postholes. These postholes measured between 0.11m – 0.44m in diameter and 0.12m – 0.33m in depth. They were filled by brown sandy/silty clays that contained occasional flecks of charcoal. A sherd of Middle Bronze Age domestic vessel (Finds No. E2274.4) was recovered from one of the postholes (F317.2) belonging to this fence line (Appendix 8).

Table 9: Postholes forming Fence 3

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F309	0.43m x 0.44m	0.24m	Circular	Tapering	Rounded	F310 grey brown silty clay that contained occasional flecks of charcoal and two packing stones
F315	0.11m	0.12m	Circular	Tapering	Pointed	F316 mid-grey brown sandy silt that contained occasional flecks of charcoal
F307	0.24m	0.33m	Circular	Vertical	Concave	F308 mid-brown silty clay that contained infrequent flecks of charcoal
F311	0.38m	0.30m	Circular	Concave	Uneven	F312 mid-grey brown sandy silt that contained occasional flecks of charcoal
F322	0.18m x 0.16m	0.20m	Oval	Tapering	Concave	F323 mid-grey brown sandy silt that contained occasional flecks of charcoal
F313	0.25m	0.34m	Circular	Vertical	Flat	F314 dark brown silty sand
F317:2	0.09m	0.10m	Circular	Tapering	Pointed	Brown sandy clay that contained a sherd of Middle Bronze Age pottery (E2274.4)
F318	0.16m	0.20m	Circular	Vertical	Concave	F319 grey brown silty clay

Structure C (Figures 5 and 8)

Structure C was a small sub-circular building that was located approximately 8m to the northeast of Structure B and 2.5m to the southwest of Structure D. Site layout suggest that this building may have been contemporary with Structure D. The building, which measured 6m north south by 4m east-west, was defined by ten postholes. These measured between 0.16m – 0.30m in diameter and between 0.20m – 0.40m in depth. All of the postholes contained occasional flecks of charcoal. Ninety one fragments of burnt bone which were too small to assign to either species or

skeletal element were also recovered from posthole F72 (Appendix 7). Two larger postholes (F52 and F18) appeared to define a 1.50m wide entrance in the western wall of the structure. The interior of the building was divided in two by a short north-south orientated line of five postholes. This line of postholes, which was 4m in length, may have functioned as some form of internal division. The postholes forming this internal division measured between 0.13m – 0.27m in diameter and between 0.16m-0.25m in depth. Two pits (F68 and F8) were also identified within the interior of Structure C. However, as pit F86 was truncated by a posthole (F72) it seems likely that these features pre-date the building. The slightly irregular shape of this structure and its apparent lack of internal roof supports may indicate that this building was the remains of animal pen rather than a domestic dwelling.

Table 10: Postholes forming Structure C

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F72	0.30m	0.20m	Circular	Tapering	Concave	F73 dark grey black silty clay that contained frequent charcoal flecks and flecks of burnt bone
F32	0.14m x 0.13m	0.21m	Circular	Tapering	Rounded	F33 brown sandy silt that contained occasional charcoal flecks
F52	0.28m x 0.26m	0.32m	Oval	Straight	Concave	F53 mid-brown sandy silt that contained occasional charcoal flecks
F18	0.35m x 0.31m	0.40m	Circular	Vertical	Concave	F19 mid-brown clayey sand that contained occasional charcoal flecks
F62	0.20m x 0.17m	0.23m	Circular	Concave	Flat	F63 mid-grey brown sandy silt that contained occasional charcoal flecks
F50	0.16m	0.20m	Circular	Tapering	Rounded	F51 grey brown silty clay that contained occasional charcoal flecks
F10	0.20m	0.23m	Circular	Vertical	Flat	F11 grey brown silty clay that contained very occasional charcoal flecks
F42	0.42m x 0.35m	0.30m	Oval	Tapering	Pointed	F43 dark brown sandy clay
F24	0.30m	0.20m	Circular	Tapering	Rounded	F25 grey brown sandy clay that contained occasional charcoal flecks
F54	0.20m	0.25m	Circular	Vertical	Rounded	F55 dark grey black charcoal rich silty clay
F36	0.27m x 0.26m	0.23m	Circular	Tapering	Blunt	F37 dark brown sandy clay
F46	0.20m x 0.12m	0.24m	Oval	Tapering	Concave	F47 brown sandy silt
F12	0.15m x	0.16m	Circular	Tapering	Rounded	F13 light brown sandy silt

	0.13m					that contained occasional charcoal flecks
F14	0.16m x 0.15m	0.16m	Circular	Vertical	Concave	F15 light brown sandy silt that contained occasional charcoal flecks
F16	0.17m x 0.16m	0.18m	Oval	Vertical	Concave	F17 light brown sandy silt that contained occasional charcoal flecks

Pits pre-dating Structure C

Two pits (F68 and F8) were located in the southern interior of Structure C. One of the pits (F68) was truncated by a structural posthole (F72) which suggests that the pits pre-date Structure C.

Pit F68 was a large sub-circular shaped cut that was truncated by posthole F72 (Plates 28 and 29). It measured 1m in length by 0.90m in width by 0.73m in depth. The break of slope at the top and middle was sharp and more gradual at the base. The sides of the cut were steeply sloping while the base was concave. It was filled by three deposits. The primary fill (F70) was light brown silty clay that contained frequent small rounded pebbles and very occasional flecks of charcoal. It measured 0.10m in depth. The secondary fill (F69) was dark blackish brown sandy clay of moderate compaction that contained occasional flecks of charcoal. It measured 0.75m in depth. The tertiary fill (F71) was a small localised deposit situated on the eastern side of the pit. It was light brown silty clay with inclusions of occasional flecks of charcoal. It measured 0.30m in diameter by 0.08m in depth.

Pit F8 was located 0.60m to the northeast of pit F68. It was irregular in plan and profile measuring 1m in length by 0.67m in width by 0.40m in depth (max). The sides were also irregular varying from concave to straight with a stepped side along the north western edge of the pit. It was filled by a single homogeneous fill (F9), which was mid-brown sandy silt that contained occasional charcoal flecks.

Features in the vicinity of Structure C (Figure 5)

A small shallow pit (F6) and two postholes (F26 and F44) were found in close proximity to Structure C. Pit F6 and posthole F44 were located to the west of the structure, while posthole F26 was located to the east of the structure. The original function of these features remains uncertain.

Table 11: Features in the vicinity of Structure C

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F6	0.67m x 0.63m	0.09m	Circular	Concave	Concave	F7 brown silty clay that contained occasional inclusions of charcoal
F26	0.24m x 0.26m	0.11m	Circular	Concave	Concave	F27 dark brown sandy clay that contained occasional inclusions of charcoal
F44	0.45m x 0.39m	0.27m	Sub-circular	Steeply sloping	Concave	F45 grey brown silty clay that contained occasional inclusions of charcoal

Fence line 5 (defining yard area in front of Structure C)

A curving, roughly north-south orientated fence line was identified approximately 2.50m – 3.5m to the west of Structure C. The curvature of this fence line suggests that it was probably related to Structure C. The fence line measured 6m in length (north-south) and was composed of seven postholes. These postholes measured between 0.09m – 0.38m in diameter and 0.11m – 0.27m in depth. They were filled by brown sandy/silty clays that contained occasional flecks of charcoal. It is possible that this fence enclosed a small yard area in front of Structure C. The yard area would have been defined by Fence 5 to the west and south and by the side of Structure C to the east. The enclosed an area would have measured approximately 5m north-south by 3.5m east-west. Two large postholes, one belonging to the fence (F30) and one belonging to Structure C (F18), may have defined a gateway leading into the yard area.

Table 12: Postholes forming Fence 5

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F48	0.19m x 0.17m	0.19m	Oval	Vertical	Uneven & concave	F49 mid-grey brown sandy silt that contained occasional charcoal flecks
F64	0.11m	0.14m	Circular	Vertical	Concave	F65 mid-brown silty clay that contained occasional charcoal flecks
F143	0.09m	0.11m	Circular	Vertical	Concave	F144 grey brown silty clay that contained frequent charcoal flecks
F28	0.14m	0.16m	Circular	Vertical	Concave	F29 mid-brown silty clay that contained occasional charcoal flecks
F56	0.13m x 0.10m	0.13m	Circular	Vertical	Rounded	F57 mid-brown clayey sand
F30	0.38m	0.27m	Circular	Tapering	Concave	F31 grey brown silty clay
F40	0.13m x 0.14m	0.18m	Circular	Vertical	Concave	F41 mid-brown clayey sand

Structure D (Figures 5, 8 and 10, Plates 21 & 22)

Structure D was located in the north-eastern part of the site, approximately 10m to the north of Structure A and 2.5m to the northwest of Structure C. The outer wall of the building was defined by ten substantial postholes which enclosed a sub-circular area that measured approximately 6.50m in diameter. A circular arrangement of postholes, probably designed to support the roof, was also identified in the interior of the structure. The entrance into the building was defined by a substantial southeast facing porch. A charcoal sample from one of the structural postholes (F98) gave a radiocarbon date of 1427-1268 cal BC (UB-7171) (Appendix 9). A number of pits and postholes were located in the vicinity of Structure D and are probably contemporary with this building. Later activity at this location was also identified in the form of substantial pit (F123) surrounded by a large number of stakeholes which truncated the interior of the building.

Building wall (Figure)

The wall of the building was defined by a sub-circular arrangement of ten postholes (F80, F82, F121, F112, F76, F149, F104, F94, F162 and F408). The postholes measured between 0.22m – 0.50m in diameter and between 0.20m – 0.50m in depth. They were generally circular to sub-circular in plan with steeply sloping sides and concave or flat bases. Two of the postholes (F80 and F94) contained evidence of packing stones. One of these postholes (F80) also truncated an earlier pit (F92), as did posthole F121, which truncated pit F116.

Table 12: Postholes forming building wall of Structure D

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F82	0.50m x 0.47m	0.45m	Oval	Concave & tapering	Rounded	F83 mid-brown grey clayey silt that contained frequent charcoal flecks
F121	0.28m	0.50m	Oval	Concave	Concave	F118 orange grey sandy clay that contained occasional charcoal flecks
F112	0.28m	0.50m	Circular	Vertical	Concave	F113 grey black silty clay that contained frequent charcoal flecks
F76	0.47m x 0.34m	0.31m	Oval	Concave	Concave	F77 brown grey sandy clay that contained occasional charcoal flecks
F149	0.22m	0.22m	Circular	Tapered	Concave	F150 mid grey brown sandy clay that contained occasional charcoal flecks
F104	0.41m x 0.37m	0.23m	Sub-circular	Tapered	Concave	F105 mottled black brown silty clay that contained

						frequent charcoal flecks
F94	0.45m x 0.42m	0.35m	Sub-circular	Vertical	Uneven	F95 dark brown sandy clay that contained occasional charcoal flecks as well as a packing stone (0.16mx0.10mx0.07m)
F80	0.32m	0.38m	Circular	Tapering	Flat	F81 greyish brown silty clay that contained occasional charcoal flecks, as well as a packing stone (0.18mx0.12mx0.07m)
F108	0.45m x 0.32m	0.27m	Circular	Vertical	Concave	F109 dark brown sandy clay that contained occasional charcoal flecks
F162	0.16m	0.40m	Circular	Vertical	Rounded	F163 black brown silty clay that contained frequent charcoal flecks
F408	0.40m	0.28m	Circular	Steeply sloping	Flat	F409 brown silty clay that contained occasional charcoal flecks

Entrance Porch (Figures 5, 8 & 10)

The entrance into structure D was defined by a large porch located on the south-eastern side of the structure. The porch was composed of two alignments of postholes, orientated broadly north-south. The eastern side of the porch was defined by six postholes (F78, F96, F126, F138 and F408), while the western side was defined by three postholes (F141, F106 and F80). Two of the postholes (F408 and F80) that defined the entrance porch also formed part of the building wall. Five stakeholes, three on the eastern side and two on the western side of the porch, also appeared to form part of this structure. The porch, which measured 2.75m in length, (north-south) tapered slightly, getting narrower towards the entrance to the actual structure itself. The initial access width measured 3.25m, while at the actual threshold the access measured 1.85m wide. Analysis of the charcoal from one of the porch postholes (F126) identified the presence of two wood species, namely oak and hazel (Appendix 9). Of these oak was the dominant *taxa.* Three fragments of burnt bone which were too small to assign to either species or skeletal element were also recovered from this posthole (F126) (Appendix 7).

Table 14: Postholes & stakeholes belonging to entrance porch

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F141	0.16m x 0.20m	0.20m	Sub-circular	Vertical	Concave	F142 mid-brown silty clay that contained occasional charcoal flecks
F106	0.24m x 0.20m	0.15m	Sub-circular	Vertical	Flat	F107 light brown silty sand clay that contained

						occasional charcoal flecks
F78	0.17m x 0.14m	0.30m	Circular	Vertical	Concave	F79 dark brown sandy clay that contained infrequent charcoal flecks
F96	0.60m x 0.30m	0.30m	Oblong	Vertical	Concave	F97 dark brown sandy clay that contained occasional charcoal flecks
F126	0.52m x 0.30m	0.53m	Oval	Vertical	Flat	F127 dark greyish brown sandy clay that contained frequent charcoal flecks and infrequent flecks of burnt bone
F138	0.15m x 0.13m	0.30m	Circular	Tapering	Pointed	F139 greyish brown silty clay that contained occasional charcoal flecks
F408 (also part of building wall)	0.40m	0.28m	Circular	Steeply sloping	Flat	F409 brown silty clay that contained occasional charcoal flecks
F80 (also part of building wall)	0.32m	0.38m	Circular	Tapering	Flat	F81 greyish brown silty clay that contained occasional charcoal flecks, as well as a packing stone (0.18mx0.12mx0.07m)
F151.109	0.06m	0.06m	Circular	Tapering	Pointed	Grey brown silty clay
F151.108	0.06m	0.10m	Circular	Tapering	Pointed	Grey brown silty clay
F151.110	0.07m	0.13m	Circular	Tapering	Pointed	Grey brown silty clay
F151.111	0.07m	0.14m	Circular	Tapering	Pointed	Grey brown silty clay
F151.120	0.07m	0.13m	Circular	Tapering	Pointed	Grey brown silty clay

Internal roof supports (Figures 5, 8 & 10, Plate 23)

A circular arrangement of seven postholes (F410, F66, F134, F74, F98, F84, F145 & F154), probably designed to support the roof, was identified in the interior of the structure. These postholes measured between 0.16m – 0.47m in diameter and between 0.21m – 0.44m in depth. A sample of pomaceous fruitwood charcoal from one of the roof supports (F98) gave a radiocarbon date of 1427-1268 cal BC (UB-7171) (Appendix 9). The internal roof supports included one set of paired postholes, specifically F154 – F84. It is possible that these paired postholes represent two phases of activity with one posthole replacing the other or else the addition of a second post for extra structural support. One of the internal postholes (F84) was truncated by a stakehole (F151.29) which was associated with a latter pit (F123)

Table 15: Internal roof supports

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F134	0.30m	0.30m	Circular	Vertical	Concave	F135 grey brown silty clay that contained occasional charcoal flecks
F66	0.35m x 0.28m	0.28m	Sub-circular	Vertical	Flat	F67 dark brown sandy clay containing occasional charcoal fleck
F98	0.47m x 0.40m	0.43m	Oval	Straight & tapering	Rounded	F99 mid-dark grey brown clayey silt that contained frequent charcoal flecks
F84 (truncated by stakehole F 151.29)	0.34m	0.44m	Sub-circular	Vertical	Flat	F85 black grey silty clay that contained occasional charcoal flecks and a number of possible packing stones
F154	0.23m	0.36m	Circular	Vertical	Concave	F155 grey sandy silt that contained occasional charcoal flecks
F410	0.34m x 0.23m	0.28m	Sub-circular	Vertical	Flat	F411 grey brown silty clay that contained occasional charcoal flecks
F74	0.31m x 0.28m	0.35m	Circular	Vertical	Flat	F75 grey black friable silty clay that contained occasional charcoal flecks

Possible internal division (Figure 8)

A northeast-southwest line of seven postholes/stakeholes (F152, F145, F140, F151.85-88) appeared to define an internal division within Structure D. The line of postholes/stakeholes measured 4.30m in length and stretched between the roof supporting postholes F66 and F98. This internal division would have separated the north-western part of the structure, which was directly opposite the entrance way, from the remainder of the building.

Table 16: Postholes/stakeholes forming internal division

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F152	0.32m x 0.22m	0.31m	Oval	Vertical	Concave	F153 black brown silty clay that contained frequent charcoal flecks
F145	0.19m x 0.16m	0.21m	Oval	Concave	Rounded	F146 friable mid-brown sandy clay that contained occasional charcoal flecks
F140	0.17mx 0.15m	0.20m	Sub-circular	Steeply sloping	Concave	Grey brown silty clay that contained occasional flecks of charcoal
F151.85	0.07m	0.12m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.86	0.08m	0.12m	Circular	Straight & Tapering	Pointed	Grey brown silty clay

F151.87	0.11m	0.19m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.88	0.07m	0.09m	Circular	Straight & Tapering	Pointed	Grey brown silty clay

Internal postholes and stakeholes (Figure 8)

An additional six postholes and seven stakeholes, which were probably cotemporary with the Structure D, were also identified. These were scattered thorough out the building and did not form any coherent structural patterns. One of the postholes (F183) was partially truncated by a stakehole (F150.60) that was related to the large pit (F123) that truncated the interior of Structure D.

Table 17: Internal postholes & stakeholes

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F156	0.19m x 0.15m	0.31m	Oval	Straight	Concave	F157 mid-grey clayey silt that contained occasional charcoal flecks
F114	0.12m	0.22m	Circular	Vertical	Concave	F115 greyish brown silty clay containing occasional charcoal flecks
F183 (truncated by stakehole F 151.60)	0.21m x 0.20m	0.20m	Circular	Tapering	Pointed	F184 brown black silty clay that contained frequent charcoal flecks
F160	0.20m x 0.17m	0.20m	Oval	Straight	Concave	F161 grey clayey silt
F177	0.19m x 0.14m	0.21m	Oval	Vertical	Flat	F178 grey brown silty clay that contained occasional charcoal flecks
F138	0.19m x 0.14m	0.21m	Oval	Tapering	Pointed	F158 grey silty clay
F151.12	0.07m	0.11m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.75	0.07m	0.14m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.76	0.07m	0.12m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.77	0.08m	0.12m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.85	0.09m	0.10m	Circular	Tapering	Pointed	Grey brown silty clay
F151.94	0.10m	0.14m	Circular	Tapering	Pointed	Grey brown silty clay
F151.112	0.11m	0.13m	Circular	Tapering	Pointed	Grey brown silty clay

Internal pits

Two pits (F88 and F130), which were probably contemporary with Structure D, were identified in the northern part of the building. The original function of both these cuts remains uncertain, although it is possible that they were simple refuse pits.

Pit F88 was located in the north-western part of the structure. It was sub-circular in plan and measured 0.61m in length by 0.51m in width by 0.43m in depth. The break of slope at the top and middle was sharp and more gradual towards the base. The sides and base were concave. It was filled by dark brown black sandy clay (F89) with inclusions of charcoal pieces and occasional small – medium sized stones.

Pit F130 was located in the northern part of the structure. It measured 1.54m in length (northwest-southeast) by 0.60m in width by 0.27m in depth. It was oblong shaped in plan with a concave profile. The break of slope at the top and middle was sharp and more gradual at the base. It was filled by two fills F131A & F131B. The upper fill F131A was moderately compact grey brown clayey silt with inclusions of round and angular stones measuring up to 0.13m in size. There were also some charcoal flecks throughout and occasional fragments of burnt clay. It measured 0.17m in depth. The primary fill F131B consisted of reddish brown clayey silt with similar inclusions of rounded and angular stones ands burnt clay fragments. It measured 0.10m in depth.

Features truncating the interior of Structure D (Figure 5)

The interior of Structure D was severely truncated by a large oblong shaped pit (F123). This charcoal rich cut was surrounded by a large number of stakeholes which enclosed the pit in a u-shaped fashion.

Pit F123 was located in the south-eastern part of Structure D. It was a large oblong shaped cut that had a broadly concave profile (Plate 27). It measured 3.96m in length (northeast-southwest) by 1.10m in width by 0.30m in depth. The break of slope at the top was sharp and gradual at the middle and base. The pit truncated two postholes (F410 and F408) belonging to Structure D, indicating that it post-dated this building. The pit was filled by two distinct deposits. The primary fill (F124) was black clayey silt of soft compaction that contained frequent charcoal flecks and occasional pieces of burnt clay and burnt stone. Thirteen fragments of burnt bone which were too small to assign to either species or skeletal element were also recovered from this deposit

(Appendix 6). There was no evidence of burning *in situ* on the base or sides of the cut so the fill must have been deposited into pit F123. The secondary fill (F125) was brown grey silt of moderate compaction that contained moderate inclusions of charcoal. This deposit appears to have formed due to natural silting.

The pit was surrounded by a large number of stakeholes. These enclosed the pit in a u-shaped fashion, with the opening located on the south western side. Two of the stakholes (F151.29 and F151.60) truncated postholes (F84 and F183) belonging to Structure which indicates that they post-dated this building. The stakeholes are described in detail in the table below.

Table 18: Stakeholes associated with Pit F123

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F151.113	0.10m in diameter	0.14m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.114	0.07 in diameter	0.13m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.115	0.06m in diameter	0.19m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.116	0.08m in diameter	0.18m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.117	0.06m in diameter	0.14m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.3	0.06m in diameter	0.14m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.4	0.06m in diameter	0.13m	Circular	Straight & tapered	Pointed	Grey brown silty clay
F151.5	0.05m in diameter	0.09m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.6	0.04m in diameter	0.08m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.10	0.06m in diameter	0.09m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.11	0.08m in diameter	0.18m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.13	0.10m in diameter	0.14m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.14	0.07m in diameter	0.13m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.17	0.06m in diameter	0.14m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.18	0.07m in diameter	0.12m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.19	0.07m in diameter	0.09m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.29	0.05m in diameter	0.16m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.30	0.13m in diameter	0.15m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.31	0.08m in	0.17m	Circular	Straight &	Pointed	Grey brown silty clay

	diameter			Tapered		
F151.32	0.06m in diameter	0.12m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.32	0.08m in diameter	0.11m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.35	0.06m in diameter	0.13m	Circular	Straight & Tapered	Pointed	Grey brown silty clay
F151.36	0.10m in diameter	0.19m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.37	0.05m in diameter	0.09m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.42	0.08m in diameter	0.15m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.38	0.10m in diameter	0.14m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.41	0.06m in diameter	0.13m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.39	0.07m in diameter	0.12m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.45	0.11m in diameter	0.17m	Circular	Straight & tapering	Pointed	Grey brown silty clay
F151.46	0.06m in diameter	0.13m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.44	0.06m in diameter	0.11m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.51	0.05m in diameter	0.08m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.52	0.09m in diameter	0.09m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.53	0.05m in diameter	0.10m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.54	0.07m in diameter	0.13m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.55	0.09m in diameter	0.19m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.56	0.11m in diameter	0.09m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.57	0.07m in diameter	0.11m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.58	0.07m in diameter	0.07m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.59	0.06m in diameter	0.08m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.60	0.08m in diameter	0.18m	Circular	Straight & tapering	Pointed	Grey brown silty clay
F151.61	0.08m x 0.06m	0.12m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.62	0.08m in diameter	0.16m	Circular	Straight & tapering	Pointed	Grey brown silty clay
F151.63	0.10m in diameter	0.16m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.64	0.08m in diameter	0.08m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F151.65	0.09m in diameter	0.14m	Circular	Straight & Tapering	Pointed	Grey brown silty clay
F100	0.18m in diameter	0.21m	Circular	Tapering	Pointed	F101 mid-brown clayey silt that contained occasional charcoal flecks

External Activity associated with Structure D (Figure 5)

A number of pits and postholes were identified in the immediate environs of Structure D. Two of the pits (F92 and F116) were truncated by postholes belonging to Structure D, which suggest that these feature pre-dated the building. Three of the pits (F102, F128 and F147) were filled by charcoal rich deposits that contained burnt clay and burnt stone inclusions. These pits may have been rubbish pits used to discard hearth waste or possibly roasting pits used to cook food. A number of postholes/stakeholes, which no coherent structural patterns, were also identified in the vicinity of Structure D. These included three postholes (F255, F251 and F240) identified to the east of Structure D, a cluster of three postholes located c. 4m to the west of the building, and six stakeholes (F151.101, F151.103, F151.04, F151.105, F151.106 and F155.122) located immediately to the west of the structure. The postholes and stakeholes are described in Table 19, while the pits are described below.

Pit F147 was located 1.1m to the north of Structure D. It was sub-rectangular in shape with a concave profile. It measured 1.20m in length (east-west) by 0.70m in width by 0.32m in depth. The break of slope at the top and middle was sharp and more gradual at the base. The sides and base were concave. It was filled by mid-brown silty clay (F148) of loose compaction that contained frequent inclusions of charcoal flecks, fire reddened stones and burnt clay fragments. The sides and base of this feature were not fire reddened. This feature may have been a rubbish pit that was used to discard hearth waste or possibly a roasting pit used to cook food.

Pit F102 was located 0.15m to the south of Structure D. It was irregular in plan with a concave profile. It measured 1.38m in length by 0.85m in width by 0.27m in depth. The break of slope at the top and middle was sharp and more gradual at the base. The sides and base were concave. It was filled by dark brownish black silty clay (F103) that contained frequent charcoal flecks as well as lenses of ash and burnt clay. The absence of burnt stones from this feature suggests that it was a pit used to discard hearth waste rather than a roasting pit.

Pit F128 was located 7m to the west of Structure D. It was oval in plan with a concave profile. It measured 0.80m in length, 0.63m in width and 0.30m in depth. The break of slope at the top and middle was sharp and more gradual at the base. It was filled by dark brown sandy silt (F129) that contained frequent charcoal and burnt

stone inclusions. This feature may be a rubbish pit that was used to discard hearth waste or possibly a roasting pit used to cook food.

Pit F324 was located 0.20m to the west of pit F128. It was circular in plan and had a concave profile. The break of slope at the top and middle was sharp and more gradual at the base. It was filled by dark brown silty clay (F325) that contained occasional flecks of charcoal.

Pit F90 was located immediately to the southeast of Structure D. It was oval in plan with a concave profile. It measured 0.53m in length, 0.40m in width and 0.31m in depth. The break of slope at the top and middle was sharp and more gradual at the base. The sides and base were concave. It was filled by light brown sandy silt (F91) that contained frequent charcoal flecks.

Pit F116 was an irregular shaped cut that was truncated by a posthole (F121) belonging to Structure D. The pit measured 1m in length (north-south), a maximum of 0.60m in width and 0.40m in depth. It had steeply sloping sides and concave base. The cut was filled by two deposits F117/F119 and F120. The primary fill (F120) was greyish brown silty clay that measured 0.20m in depth. It contained occasional charcoal flecks. The secondary fill (F117/F119) was charcoal rich black brown silty clay that measured 0.20m in depth.

Pit F92 was a shallow cut that was truncated by a posthole (F82) belonging to Structure D. It was oval in plan with a concave profile. It measured 0.37m in length by 0.35m in width by 0.17m in depth. The break of slope at the top and middle was sharp and more gradual at the base. The sides and base were concave. It was filled by reddish brown sandy silt (F93) that contained occasional charcoal flecks.

Table 19: External postholes and stakeholes

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F151.101	0.11m	0.18m	Circular	Tapering	Pointed	Grey brown silty clay
F151.104	0.10m	0.13m	Circular	Tapering	Pointed	Grey brown silty clay
F151.105	0.12m	0.12m	Circular	Tapering	Pointed	Grey brown silty clay
F151.106	0.13m in diameter	0.14m	Circular	Tapering	Pointed	Grey brown silty clay

F151.105	0.14m in diameter	0.22m	Circular	Tapering	Pointed	Grey brown silty clay
F151.107	0.06m in diameter	0.11m	Circular	Tapering	Pointed	Grey brown silty clay
F151.122	0.12m	0.14m	Circular	Tapering	Pointed	Grey brown silty clay
F255	0.15m	0.19m	Circular	Vertical	Concave	F256 dark brown sandy clay
F249	0.19m	0.25m	Circular	Vertical	Flat	F250 dark brown sandy clay
F251	0.24m x 0.20m	0.19m	Sub-circular	Vertical	Flat	F252 dark brown sandy clay
F380	0.20m	0.14m	Circular	Concave	Concave	F381 brown sandy silt containing occasional flecks of charcoal
F394	0.17m x 0.14m	0.13m	Sub-circular	Steeply sloping	Flat	F395 dark brown sandy silt containing occasional flecks of charcoal
F396	0.34m x 0.24m	0.18m	Oval	Steeply sloping	Pointed	F397 brown sandy silt containing occasional flecks of charcoal

Fence line 4 (Figure 5)

A roughly northwest-southeast orientated fence line was identified running across the centre of the site. The fence line measured 15m in length and was composed of seven large postholes. These postholes measured between 0.13m – 0.50m in diameter and 0.18m – 0.40m in depth. They were filled by brown sandy/silty clays that contained occasional flecks of charcoal. This fence may have been intended as an internal site division or possibly to protect Structures C and D from the prevailing winds.

Table 20: Postholes forming Fence 4

Cut	**Dimensions**	**Depth**	**Plan**	**Sides**	**Base**	**Fill description**
F38	0.35m in diameter	0.25m	Circular	Concave	Concave	F39 dark brown sandy clay that contained occasional charcoal flecks
F34	0.35m x 0.33m	0.40m	Oval	Vertical	Concave	F35 mid-grey brown clayey silt that contained occasional charcoal flecks
F20	0.40m x 0.30m	0.30m	Oval	Concave	Concave	F21 mid-grey brown silty clay that contained occasional charcoal flecks
F4	0.39m x 0.33m	0.45m	Oval	Vertical	Flat	F5 grey black silty clay that contained occasional charcoal flecks and one fleck of burnt bone
F22	0.31m	0.35m	Circular	Vertical	Flat	F23 light brown sandy clay
F60	0.50m x 0.43m	0.26m	Oval	Concave	Concave	F61 dark brown clayey silt that contained

						occasional charcoal flecks
F2	0.16m x 0.13m	0.18m	Oval	Tapering	Pointed	F3 dark brown clayey silt that contained occasional charcoal flecks
F58	0.22m x 0.20m	0.40m	Circular	Vertical	Flat	F59 yellow grey sandy silt

Randomly placed features

A number of apparently randomly placed features were identified in the southern part of the site. These included 5 postholes and two pits (F402 and F406). These features are described below in table 21.

Table 21: Randomly placed postholes

Cut	Dimensions	Depth	Plan	Sides	Base	Fill description
F317.1	0.10m	0.20cm	Circular	Tapering	Pointed	Light brown silty clay
F317:4	0.11m	0.15m	Circular	Tapering	Pointed	Light brown silty clay
F317.5	0.09m	0.11m	Circular	Tapering	Pointed	Dark brown silty clay
F317.6	0.07m	0.09m	Circular	Tapering	Pointed	Dark brown silty clay
F317.7	0.09m	0.11m	Circular	Tapering	Pointed	Dark brown silty clay
F320	0.25m x 0.16m	0.23m	Oval	Steeply sloping	Concave	F321 sandy silt that contained occasional charcoal flecks
F402 (pit)	0.26m x 0.21m	0.21m	Sub-circular	Concave	Concave	F403 greyish brown silty clay that contained occasional charcoal flecks
F406 (pit)	0.43m x 0.40m	0.23m	Circular	Concave	Flat	F406 grey brown sandy silt that contained occasional charcoal flecks

3.2.3 *Phase 3*

Phase 3 activity consisted of two ditches (F195 and F84) probably related to land division and a curving gully (F301) possibly representing an agricultural furrow.

Ditch, F195 (Figures 6 & 7, Plate 31)

The earlier of the two ditches (F195) was a northeast-southwest orientated cut that traversed the southern part of the site. It cut natural boulder clay and was truncated by a later ditch (F86). It was linear in plan with a v-shaped profile. It extended beyond the southern and eastern limits of excavation so the true length was not ascertained. The exposed ditch measured 35m in length by 0.90m (max) in width by 0.40m (max) in depth. The break of slope at the top and middle was sharp with a gradual break of slope at the base. The sides and base were concave. The ditch was filled by friable

dark brown sandy clay (F196) that contained occasional charcoal flecks and small angular stones. No finds were recovered from this feature to indicate a possible date.

Ditch, F84 (Figures 5, 6 & 7)

The second ditch excavated (F84) was a larger north-south orientated cut that traversed the central part of the site. It was linear in plan and concave in profile. The exposed ditch measured 50m in length by 1.2m in width by 0.45m in depth. The break of slope at the top was sharp and more gradual at the middle and very gradual at the base. The sides and base were concave. It was filled by dark brown sandy clay (F87) that contained frequent charcoal flecks and angular small and large sized stones, along with occasional pieces of animal bone. This ditch truncated ditch F195 and corresponds to an old filed boundary shown on the First Edition Ordnance Survey Map (1841).

Gully/Furrow, F301 (Figure 5)

A curving gully (F301) was identified in the north-western part of the site. It measured approximately 10m in length (northeast-southwest), 0.40m in width and 0.10m in depth. It was a shallow u-shaped cut that was filled by a by greyish brown sandy clay (F302) that contained occasional flecks of charcoal. The gully truncated the Phase 2 pit F128. This feature is probably the remains of an agricultural furrow.

3.3 ***Site 125.4 discussion***

This site contained the remains of an extensive Middle Bronze Age settlement which consisted of four structures (Structures A-D) along with numerous pits, fences and postholes. Earlier activity was also identified at the site in the form of two sherds of Neolithic pottery.

The Neolithic pottery consisted of two sherds of carinated ware (Finds Nos. E2274.6 & E2274.7) (Appendix 8) both of which were recovered from Middle Bronze Age features (F404 and F215). This form of pottery represents the earliest type of Neolithic pottery in Ireland and is widely dated to *c*. 4000–3700 BC (Grogan & Roche 2007). The pottery sherds were in a worn and abraded state which suggests that they were not in their primary place of deposition. This and the fact that they were recovered from Middle Bronze Age features suggest the pottery sherds were residual finds. They do, however,

indicate some form of activity occurring in the vicinity of site during the Neolithic period. Carinated ware pottery was also found at number of other locations along the N8 road route, including Marlhill, Caherabbey Upper, Caherabbey Lower, Ballylegan and Suttonrath (Grogan and Roche 2007).

The Middle Bronze Age phase of activity at the site consisted of four circular structures and a large number of ancillary features. The structures were located on relatively flat ground in the lee of a slight hill that rose gradually to the south. This location would have afforded some protection from the prevailing south-westerly winds. For descriptive purpose the buildings have been labelled Structure A, Structure B, Structure C and Structure D. Radiocarbon analysis (Appendix 9) suggests that Structure A (1666-1494 BC) and Structure B (1604-1404 BC) were broadly contemporary, although it is possible that Structure B, which had a slightly later date, may have replaced Structure A. Structure D was definitely later than both these structures as it was radiocarbon dated to 1427-1268 BC (Appendix 9). Although Structure C was not subjected to radiocarbon analysis, site layout suggests it may have been contemporary with Structure D. If this was the case, the buildings at this site probably represent two sets of paired structures. Similar site layouts, where Middle Bronze Age buildings occurred in pairs, were identified at number of locations along the route of the N8 including Knockgraffon (E2270, Site 137.1, Moriarty 2007a), Ballydrehid (E2267, Site 185.5, McQuade 2007b) and Clonmore North (E2294, Site 92.3, Molloy 2007a).

Structure A was defined by a circular slot trench and a concentric ring of internal posts. This house form is a common Bronze Age type and has been recorded at a number of sites including Corrstown, Co. Antrim (Conway *et all* 2004/2005), Ballybrowney, Co. Cork (Cotter 2005), Kilmurray, Co. Wicklow (O'Neill 2001), and Lisheen, Co. Tipperary (O'Neill 2005). Although highly scarped, the surviving remains of Structure B suggest that it was probably similar in form to Structure A, with an external wall defined by a slot trench and an internal arc of roof supports. Structure D, in contrast, appears to have had a slightly different floor plan. Although retaining the circle of inner roof supports seen in the earlier structures it had no evidence for a surrounding slot trench. Instead the building walls were defined by a circle of postholes, which were concentric with the roof supports. Bronze Age buildings defined by an inner circle of roof supports and an outer circle of wall supports have been identified at sites such as Cullyhanna, Co. Armagh (Hodges 1958) and Mullagharlin, Co. Louth (McLoughlin 1999). The fourth building excavated,

Structure C, was also defined by a circle of postholes. However, unlike the previous structures, there was no evidence for an internal circuit of roof supports.

The walls of the four structures were probably weather proofed by the addition of wattle screens formed using flexible rods of willow and hazel. In Structure A, the wattle panels would have been held in place by the circular slot trench (F404) with additional support being provided by a number of large postholes found along the circuit of the trench. Both hazel and oak charcoal were identified in the fill of the slot trench, which suggests that the wattle panels may have been made of hazel rods, possibly supported by oak posts (Appendix 3). The small stakeholes identified along the base of the slot trench are probably the remains of such a post and wattle structure. Wattling of willow and hazel is known from a number of Bronze Age sites, including Ballyveelish 3, Clonfinlough and the Knockadoon Cave site at Lough Gur (Doody 2000, 144). A similar walling system, utilising a circular footing trench and supporting posts, may also have been used in Structure B. In Structure C and Structure D the building walls were defined by a circle of postholes rather than a slot trench. These posts would have formed a sturdy structural frame onto which wattle screens could have been attached. However, it is also possible that the building walls were made of other materials such as wooden planks, animal skins or sods.

The circular layout of the structures suggests that they were covered by conical roofs, which were probably thatched. Where discernable, the roofs appear to have been supported by an internal ring of posts. This circle of posts was probably joined together by placing a ring beam on top, which would have supported the main roof rafters. The only building that clearly deviated from this roofing system was Structure C which had a central line of postholes that may have supported the roof instead. However, this variation in the internal posthole layout may also indicate that this structure was never roofed and instead represents some form of animal pen etc. With the exception of Structure B, the orientation of the building entrances were generally east/southeast, which would have maximised the amount of natural light entering the structures. The entrances into Structures B and D were marked by substantial porches which would have provided additional protection from the elements. Simpler door structures, defined by large postholes, were found in Structures A and C. In both of these buildings wooden fences (Fences 1 & 5) were located in front of the entrances and these may have afforded some protection during adverse weather conditions.

Analysis of the charcoal from the site suggests that the main structural posts were probably made of oak wood (Appendix 3). For example, oak heartwood was identified in postholes belonging to Structures A and D (F190 and F126), while oak wood derived from branches was identified in a posthole from Structure B (F373). The use of oak as a building material is not surprising as it is strong durable wood with a heartwood that will last considerably longer than most native wood species (O'Donnell 2007). Smaller quantities of hazel, willow, pomaceous fruitwood, alder and cherry charcoal were also identified on site (Appendix 3). Although some of this charcoal may have been derived from on site burning, it also possible that some of it, especially the willow and hazel, represents the types of wood that were used in the construction of the buildings.

Internally the buildings contained small pits, probably representing rubbish and storage pits, as well as scatters of postholes and stakeholes. Possible internal divisions were also identified in Structure B and D in the form of short lines of postholes/stakeholes. These probably represent wall divisions and in each case appeared to separate the rear of the buildings from the front. Assuming that light entered the buildings mainly through the doorways, these internal divisions would have left the rear of the building largely in darkness. This may indicate that this area was intended for sleeping, while the brighter front of the building was used for everyday activities such as food preparation. Similar divisions, separating the front of the building from the rear, have also been recorded in Middle Bronze Age structures at Caltragh, Co. Sligo (McCabe 2006), Knockdomny, Co. Westmeath (Hull 2007 p 348) and Ballydrehid, Co. Tipperary (E2267, Site 185.5, McQuade 2007b). There was no evidence for internal hearths in any of the structures and this appears to be a recurring theme with Bronze Age houses (Doody 2000, Carlin 2006). It is possible that the absence of internal hearths indicates that most cooking related activities were carried out in the open air and that the structures were used purely for sleeping. Indeed, a number of external hearths and cooking pits were identified, especially in the vicinity of Structure A. However, the absence of internal hearths could also have been due to truncation caused by intensive farming. Deep ploughing was noted across most of the site and simple hearths in the form of burnt spreads are unlikely to have survived such truncation. The interior of one of the buildings (Structure A) was also truncated by a large oblong shaped pit (F123) that was surrounded by a u-shaped setting of stakeholes. The original function of this unusual pit/structure remains uncertain.

Although no hearths were identified within any of the structures a number of external cooking areas were recognised. These included four possible roasting pits (F172, F179,

F212 and F283) and two truncated hearths (F298 and F400) located to the south and east of Structure A, two possible roasting pits (F360 and F390) located to the west of Structure B and two possible roasting pits (F128 and F147) located to the west and north of Structure D. Evidence of food waste from these features included charred cereal grains from hearth F298 and roasting pit F179 as well as burnt animal bone from roasting pit F179.

Plant analysis identified barley as the dominant crop used on site (Appendix 4). It was recovered, albeit in small quantities, from two postholes (F373 & F384) belonging to Structure B and a hearth (F296) located to the south of Structure A. The lack of chaff and small quantity of weed seeds recovered with the barley from Structure B suggests a cleaned crop which may have been a stored in association with this building (Halwas 2007). Barley is generally the commonest crop found at Bronze Age sites (e.g. Monk 1985) and was used in breads, gruels, porridges and soup bases (Sexton 1998). A possible oat grain was also recovered from one of the postholes belonging to Structure B. It was not possible to tell if this was from a wild or cultivated variety. The rest of the plant remains identified at the site consisted of indeterminate cereal grains and low quantities of weed seeds including fat-hen, dock, goosefoot, knotweed and chickweed (Appendix 4).

Small flecks of burnt bone were identified from a number of features. These included fragments of burnt animal bone from posthole F187 (Structure A) and cooking pit F179 and fragments of unidentifiable burnt bone from posthole F72 (Structure C), posthole F126 (Structure D), posthole F384 (Structure B) and pit F123 (Appendix 5). In a domestic context these deposits probably represented food waste. However, the presence of cremated bone from entrance postholes belonging to Structure B and Structure D could also be indicative of ritual deposition. It is possible that these bone deposits represent "foundation deposits", which were placed in the posthole during the construction phase of the buildings. Cremated remains are often placed in "liminal" areas such as entrances and exits and Cleary has suggested that this may have been a way "of blessing" those entered, while keeping "bad spirits" out (Cleary 2006 p.29).

Ten sherds of Middle Bronze Age pottery were also recovered during the excavation (Finds Nos. E2274.1-E2274.5 & E2274.8-E2274.9) (Appendix 8; Figure 10). These came from various features including the slot trench defining Structure A (F404), two pits located at the entrance into Structure A (F215 and F246), a stakehole associated with Structure B (F326.5), a stakehole associated with Fence 3 (F317.2) and topsoil (F1/F298).

The pottery recovered is a domestic variant of the cordoned urn and represents at least three, and probably as many as six coarse domestic vessels (Grogan & Roche 2007). The pottery is fragmentary and worn in a manner typical of material from domestic sites and a number of sherds have burnt accretions indicative of use in cooking. This type of pottery has been identified at a number of other locations along the N8 route, albeit in small quantities, including Cloghabreedy, Suttonrath, Ballydrehid and Clonmore North (Grogan E. & Roche H. 2007).

The specific activities carried out at each of the Cloghabreedy buildings remains uncertain, although it likely that at least some of them were residential in nature. The presence of internal divisions, probably demarking sleeping areas, in both Structures B and D may indicate that these were domestic houses. It is notable that both of these buildings also contained substantial porches, which may have been a structural embellishment that was reserved for residential structures. If this was the case, and the structures at this site do represent two sets of paired buildings, it could be suggested that Structures B and D were the main residential buildings, while Structures A and C had ancillary functions. However, a number of factors suggest that Structure A may also have had a domestic role. These include the large number of hearths and roasting pits that were identified in the vicinity of the building, which suggest that it was associated with cooking. Also a number of sherds of domestic pottery were recovered around the entrance of the building along with flecks of burnt animal bone from one of the structural postholes (F187). These finds are suggestive of domestic waste and may indicate that this was also a residential structure. Structure C, in contrast, appears to have had a more utilitarian function. This is suggested by its small size, its west facing door and the absence of an internal circuit of roof supports. There were also what appeared to have been a small enclosed yard area directly in front of the building door and this may have been used to corral livestock. This combination of factors suggests that Structure C may have been an animal pen/byre rather than a domestic structure.

A number of other Middle Bronze Age settlements site were identified within 3km radius of this site. The closest of these sites was located approximately 300m to the south and consisted of a circular post built structure (E2273, Site 125.1, Moriarty 2007c). This building measured 6.5m in diameter and had a northwest facing entrance porch. There was no evidence for an internal hearth or roof supports. This building was radiocarbon dated to 1435-1271 BC, which makes it broadly contemporary with Structure D at Site 125.4 (1427-1268 BC). A second, badly truncated, circular structure was identified 700m

to the north of Site 125.4 (E2271, Site 129.1, Moriarty 2007b). This building measured 8m in diameter and was defined by a circle of postholes. There was no evidence for an internal hearth and the roof appears to a have been supported by a pair centrally placed postholes. This structure was radiocarbon dated to 1530-1440 BC, which makes it roughly contemporary with Structure B at Site 125.4 (1604-1414 BC). Approximately 2.5km to the south of Site 125.4 a pair of circular structures was also identified (E2267, Site 185.5, McQuade 2007b). These buildings used a combination of post and slot trenches in their build and internally contained hearths, pits and internal divisions. They had east facing entrances one of which consisted of large porch. These buildings were radiocarbon dated to between 1492 – 1289 BC, which makes them broadly contemporary with Structure D at Site 125.4 (1427-1268 BC). A second pair of circular post built structures was identified 2.5km to the north of Site 125.4 (E2270, Site 137.1, Moriarty 2007a). These buildings had no evidence for internal roof supports or hearths and the interior of both structures were dominated by a large number of pits, which may indicate that they had a storage purpose. Radiocarbon results suggest that this site was occupied from 1489 -1100 BC, which makes it roughly contemporary with Structures B and D from Site 125.4. This wide range of occupation sites surrounding Site 125.4 suggests that this part of Tipperary was intensively settled during the Middle Bronze Age.

4 Stratigraphic Report Site 125.5

Townland: Cloghabreedy, Chainage 26+060, NGR E205875 N127961, O.D. 51.90m

4.1 *Introduction*

This site was located in pasture land on relatively level ground. The surrounding landscape was gently undulating farmland that was well drained and fertile. The site consisted of a Late Bronze Age cremation pit. Archaeological sites excavated in close proximity included a large Middle Bronze Age settlement site located 90m to the south (E2274, Site 125.4, this report), an Early Bronze Age cremation pit identified 230m to the north (E2274, Site 127.1, this report) and a Middle Bronze Age structure and a group of Late Bronze Age pits situated 440m to the south (E2273, Site 125.1, Moriarty 2007c).

4.2 ***The Excavation*** (Figure 13)

The area of excavation was square in plan and measured 20m (north-south) by 20m (east-west). The stratigraphy comprised 0.30m – 0.40m of topsoil overlying natural subsoil. The subsoil was hard yellow compact clay that contained frequent bands of loose gravel, while topsoil was dark brown silty clay. The site had clearly been truncated by intensive farming. No buried sod was observed and the uppermost fill of the cremation pit was exposed beneath cultivated soil.

4.2.1 *The cremation pit (Figure 13)*

The cremation was contained within an unlined circular pit (F2) that measured 0.40m in diameter and 0.18m in depth. The sides and base of the pit were concave, with a gradual break of slope at the top and bottom of the cut. It was filled by blackish brown silty clay (F3) that contained frequent flecks of charcoal and cremated bone. The analysis of the cremated remains revealed the bones were those of an adult individual aged between 35-89 years at the time of death (Appendix 5). The cremated bone was highly fragmented and the remains consisted of 2938 pieces which weighed 225.34g. The colour of the bone fragments was white, which indicate that they were exposed to temperatures exceeding 700-800ºC, a basic condition for a complete and successful cremation (Hermann 1988, 578; Wahl 1982, 27). Analysis of the charcoal found in association with the cremated remains indicates that oak wood was used as fuel for the cremation pyre (Appendix 3).

4.3 ***Discussion***

This site consisted of a small unlined cremation pit. A charcoal sample from the cremation deposit gave a radiocarbon date of 1213 – 993 cal BC (UB-7378) , indicating that this feature dates to the Late Bronze Age (Appendix 9). Isolated cremation pit burials, together with enclosed and unenclosed cremation pit burials, burials in barrows, ring-ditches and mounds are characteristic modes of burial during this period (Cooney and Grogan 1994, 126-127). The cremated bone is often only a token deposit, which was placed either in a coarse pot or often directly into the pit (Cooney and Grogan 1994, 145).

The burnt bone from the cremation pit contained the remains of at least one adult individual, aged between 18 – 89 years at time of death (Appendix 5). The bone, which was highly fragmented, was derived mainly from denser skeletal elements such as skull vaults and long bone shafts (Appendix 5). The small size of these fragments of bone may indicate that it was manually crushed prior to deposition, although other factors such as ground conditions and pyre technology could also have been responsible. The quantity of bone recovered was quite low, which suggests that this was a token cremation burial. The placement of token deposits of cremated bone in burial contexts is a common Bronze Age funerary custom and it has been recognised on many archaeological sites (www.excavations.ie). It has been suggested that the small amounts of bone present in these burials is due to the symbolic selection of bone deemed more suitable for interment or that bone from one and the same cremation was deposited at different locations (Arcini 2005, 63-65).

Charcoal analysis identified oak wood as the primary fuel used in the cremation pyre. This is not surprising as oak is an extremely good, calorific fuel that is capable of reaching the high temperatures required for cremation. It is frequently appears in association with cremated remains and appears to have been the fuel of choice for Bronze Age cremation in the Munster area (O'Donnell 2007).

This site was just one of a number of Late Bronze Age sites that were excavated in the surrounding area. Circular structures, probably representing domestic dwellings, were identified at a number of locations including Site 203.3 (1256 – 1012 BC) situated 1.8km to the southeast (E2126, McQuade 2007a), Site 137.3 (1100 – 830 BC) located 3.2km to the north (E2270, Moriarty 2007a) and Site 207.2 (1256 – 1012 BC) situated roughly 3.3km to the southeast (E2265, McQuade 2007c). A series of Late Bronze Age pits (1140

– 920 BC) located 430m to the south may also have been related to settlement activity (E2273, Site 125.1, Moriarty 2007c). Late Bronze Age burial activity was identified at Site 203.4, where three small unlined cremation pits contained token deposits of cremated bone (E2126, McQuade 2007a). This site, which was located approximately 1.8km to the southeast of Site 125.5, was radiocarbon dated to 1001 – 821 BC. Further Late Bronze Age activity in the locality was suggested by a large hill top enclosure (TI075:040) situated approximately 1km to the southeast of Site 125.5 and by a copper alloy socketed axe that was recovered from a field roughly 500m to the northeast of the site. This wide range of Late Bronze Age sites suggests that this part of Tipperary was intensively settled during this period.

5 Stratigraphic Report Site 127.1

Townland: Cloghabreedy, Chainage Ch26+325, NGR E205959 N128196, O.D.53.50m

5.1 *Introduction*

This site was located in a relatively flat field of pasture near the base of a pronounced natural hillock which was situated in the adjoining field to the east. The surrounding landscape was gently undulating farmland that was well drained and fertile. The site consisted of an Early Bronze Age pit containing a token deposit of cremated bone. Sites excavated in close proximity included a Late Bronze Age cremation pit located 230m to the south (E2274, Site 125.5, this report), a Middle Bronze Age circular structure situated 400m to the north (E2271, Site 129.1, Moriarty 2007b), and a large Middle Bronze Age settlement site identified 500m to the south (E2274, Site 125.4, this report). Further evidence for prehistoric activity in the surrounding area included a small undated burial mound (TI075-028) located approximately 150m to the east.

5.2 *The Excavation (Figure 14)*

The area of excavation was square in plan and measured 15m (north-south) by 15m (east-west). The stratigraphy comprised 0.30m – 0.40m of topsoil overlying natural subsoil. Natural subsoil was compact yellow clay, while topsoil consisted of greyish brown silty clay of moderate compaction. The site had clearly been truncated by intensive farming. No buried sod was observed and the uppermost fill of the cremation pit was exposed beneath cultivated soil

5.2.1 *Possible cremation pit, F2 (Figure 14)*

A small unlined pit (F2), containing a token deposit of cremated bone, was identified at the centre of the site. The pit was circular in plan and measured 0.29m in diameter and only 0.12m in depth. The sides and base of the pit were concave, with a gradual break of slope at the top and bottom of the cut. It was filled by mid-brown silty clay (F3) of friable compaction that contained infrequent inclusions of cremated bone and hardly any charcoal. None of the fragments of cremated bone could be identified to species other than mammal *(Mammalia sp.)*, which could be either human *(Homo sapiens)* or animal *(Animalia sp.)* (Appendix 6). The cremated bone was highly fragmented and the remains consisted of 105 pieces which weighed 3.68g. The colour of the bone fragments was white, which indicate that they exposed to temperatures exceeding 700-800ºC. Analysis of the charcoal from this feature identified the

presence of oak wood (Appendix 3), a fragment of which was radiocarbon dated to 2280 – 2020 cal BC (Beta-228978) (Appendix 9).

5.3 *Discussion*

This site consisted of a highly truncated pit that contained a token deposit of cremated bone. A charcoal sample from the cremation deposit gave a radiocarbon date of 2280 – 2020 cal BC (Beta-228978), indicating that this feature dates to the Early Bronze Age (Appendix 9). Unfortunately, due to the small quantity of burnt bone and its fragmentary nature the cremated remains from this site could not be identified to species (Appendix 7). For this reason the pit can only be tentatively described as a cremation burial.

Early Bronze Age burials are generally interred in cist or pit graves, or in rarer examples in cist cairns or flat cemeteries. The burial remains, cremated or as inhumations, were often accompanied by grave goods, with a preference for elaborately decorated pottery vessels. Small pits, such as the one from this site, which contain only small amounts of cremated bone and no artefacts, are unusual but not unheard off from this period. For example small unlined pits containing cremated bone and no associated pottery were uncovered along with more elaborate cist burials at the large Early Bronze Age flat cemetery at Edmondstown, Co. Dublin (Mount and Hartnett 1993).

Analysis of the charcoal from this feature suggests that if it does represent a cremation burial then oak wood was the fuel used in the cremation pyre (Appendix 3). This is not surprising as oak is an extremely good, calorific fuel that is capable of reaching the high temperatures required for cremation. It frequently appears in association with cremated remains and seems to have been the fuel of choice for Bronze Age cremation in the Munster area (O'Donnell 2007).

Possible contemporary burial evidence to this site was identified approximately 3km to the north in the townland of Knockgraffon (E2270, Site 137.3, Moriarty 2007a). At this location a small highly truncated pit contained the partial remains of an inverted encrusted urn. Although, no cremated bone was identified, the preservation of the upper part of the pot and the virtually exclusive funerary context of this pottery type, suggests that this feature was the truncated remains of an Early Bronze Age burial (Grogan & Roche in Moriarty 2007a). Further evidence for Early Bronze Age activity in the surrounding area included a series of pits and hearths (2289 – 2121 BC) located 730m to the south (E2273,

Site 125.3, Moriarty 2007c) and a possible structure (2139 – 1927 BC) located 3.3km to the southeast (E2265, Site 207.1, McQuade 2007c). A small burial mound (TS075-028) located 150m to the east of Site 127.1 may also date from this period.

6 Summary

6.1 This report details the results of three excavations carried out along a section of the N8 Cashel to Mitchelstown Road Improvement Scheme. The three sites excavated, Site 125.4, Site 125.5 and Site 127.1 were located in the townland of Cloghabreedy, in the parish of Knockgraffon, Co. Tipperary. The archaeological excavation programme was conducted under Ministerial Direction Scheme Reference No. A035/000, Registration No. E2274.

6.2 A large Middle Bronze Age settlement site consisting of at least four circular structures and numerous ancillary features was identified at Site 125.4. The buildings at this site used a combination of slot trenches and postholes in their construction and generally had east/southeast facing entrances. Specialist analysis suggests that barley was the dominant crop used on site while oak wood was the preferred construction material. Finds recovered from the site included 2 sherds of residual Neolithic pottery and 10 sherds of Middle Bronze domestic pottery (Appendix 8). Late Bronze Age burial activity was identified at Site 125.1 in the form of an unlined cremation pit. The burial consisted of the partial remains of an unsexed adult, aged between 35-89 years at the time of death (Appendix 5). Analysis of the charcoal found in association with the cremated remain indicates that oak wood was used as fuel for the cremation pyre (Appendix 3). A highly truncated pit containing a token deposit of cremated bone was excavated at Site 127.1. A charcoal sample from the cremation deposit gave a radiocarbon date of 2280 – 2020 cal BC (Beta-228978), indicating that this feature dates to the Early Bronze Age (Appendix 9). Unfortunately, due to the small quantity of burnt bone and its fragmentary nature the cremated remains from this site could not be identified to species (Appendix 6).

6.3 This report constitutes the final report for Sites 125.4, 125.5 and 127.1 (A035/000, E2274). The sites have been fully excavated and no further works are necessary.

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Appendix 1 – Feature Registers

Table 1: Site 125.4 feature register

Feature Number	**Description**	**Structure** (where applicable)
F1	Topsoil	
F2	Posthole	
F3	Fill of F2	
F4	Posthole	Fence 4
F5	Fill of F4	
F6	Shallow pit	
F7	Fill of F6	
F8	Oval pit	
F9	Fill of F8	
F10	Posthole	Structure C
F11	Fill of F10	
F12	Posthole	Structure C
F13	Fill of F12	
F14	Posthole	Structure C
F15	Fill of F14	
F16	Posthole	Structure C
F17	Fill of F16	
F18	Posthole	Structure C
F19	Fill of F18	
F20	Posthole	Fence 4
F21	Fill of F20	
F22	Posthole	Fence 4
F23	Fill of F22	
F24	Posthole	Structure C
F25	Fill of F24	
F26	Posthole	
F27	Fill of F26	
F28	Posthole	Fence 5
F29	Fill of F28	
F30	Posthole	Fence 5
F31	Fill of F29	
F32	Posthole	Structure C
F33	Fill of F32	
F34	Posthole	Fence 4
F35	Fill of F34	
F36	Posthole	Structure C
F37	Fill of F36	
F38	Posthole	Fence 4
F39	Fill of F38	
F40	Stakehole	Fence 5
F41	Fill of F40	
F42	Posthole	Structure C
F43	Fill of F42	
F44	Posthole	
F45	Fill of F44	
F46	Posthole	Structure C
F47	Fill of F46	
F48	Posthole	Structure C
F49	Fill of F48	
F50	Posthole	Structure C
F51	Fill of F50	

F52	Posthole	Structure C
F53	Fill of F52	
F54	Posthole	Structure C
F55	Fill of F55	
F56	Stakehole	Fence 5
F57	Fill of F57	
F58	Posthole	Fence 4
F59	Fill of F58	
F60	Pit	
F61	Fill of F60	
F62	Posthole	Structure C
F63	Fill of F62	
F64	Posthole	Fence 5
F65	Fill of F64	
F66	Posthole	Structure D
F67	Fill of F67	
F68	Pit	
F69	Secondary fill of F68	
F70	Primary fill of F68	
F71	Tertiary fill of F68	
F72	Posthole	Structure C
F73	Fill of F72	
F74	Posthole	Structure D
F75	Fill of F74	
F76	Posthole	Structure D
F77	Fill of F76	
F78	Posthole	Structure D
F79	Fill of F78	
F80	Posthole	Structure D
F81	Fill of F80	
F82	Posthole	Structure D
F83	Fill of F82	
F84	Posthole	Structure D
F85	Fill of F84	
F86	Ditch	
F87	Fill of F87	
F88	Pit	
F89	Fill of F89	
F90	Posthole	Structure D
F91	Fill of F90	
F92	Pit	
F93	Fill of F92	
F94	Posthole	Structure D
F95	Fill of F95	
F96	Posthole	Structure D
F97	Fill of F96	
F98	Posthole	Structure D
F99	Fill of F99	
F100	Posthole	Structure D
F101	Fill of F100	
F102	Pit	
F103	Fill of F102	
F104	Pit	
F105	Fill of F104	
F106	Posthole	Structure D
F107	Fill of F106	

F108	Posthole	Structure D
F109	Fill of F108	
F110	Pit	
F111	Fill of F110	
F112	Posthole	Structure D
F113	Fill of 113	
F114	Stakehole	Structure D
F115	Fill of F114	
F116	Pit	
F117	Fill of F116	
F118	Fill of F116	
F119	Fill of F116	
F120	Fill of F116	
F121	Posthole	Structure D
F122	Fill of F121	
F123	Pit	
F124	Primary fill of F123	
F125	Secondary fill of F123	
F126	Posthole	Structure D
F127	Fill of F126	
F128	Pit	
F129	Fill of F127	
F130	Pit	
F131	Fill of F130	
F132	Stakehole	Structure D
F133	Fill of F132	
F134	Posthole	Structure D
F135	Fill of F134	
F136	Posthole	
F137	Fill of F136	
F138	Posthole	Structure D
F139	Fill of F138	
F140	Cancelled	
F141	Posthole	Structure D
F142	Fill of F141	
F143	Stakehole	Fence 5
F144	Fill of F143	
F145	Posthole	Structure D
F146	Fill of F146	
F147	Pit	
F148	Fill of F147	
F149	Posthole	Structure D
F150	Fill of F147	
F151	Series of stakeholes	Structure D
F152	Posthole	Structure D
F153	Fill of F152	
F154	Posthole	Structure D
F155	Fill of F154	
F156	Posthole	Structure D
F157	Fill of F156	
F158	Posthole	Structure D
F159	Fill of F158	
F160	Posthole	Structure D
F161	Fill of F160	
F162	Posthole	Structure D
F163	Fill of F162	

F164	Cancelled	
F165	Cancelled	
F166	Pit	
F167	Fill of F166	
F168	Pit	
F169	Fill of F168	
F170	Posthole	Structure A
F171	Fill of F170	
F172	Pit	
F173	Fill of F172	
F174	Pit	
F175	Primary fill of F174	
F176	Secondary fill of F174	
F177	Posthole	Structure D
F178	Fill of F177	
F179	Pit	
F180	Fill of F179	
F181	Series of stakeholes	
F182	Fill of F182	
F183	Posthole	
F184	Fill of F183	
F185	Pit	
F186	Fill of F186	
F187	Posthole	Structure A
F188	Fill of F187	
F189	Posthole	Structure A
F190	Posthole	Structure A
F191	Fill of F190	
F192	Secondary fill of F190	
F193	Posthole	Structure A
F194	Fill of F193	
F195	Ditch	
F196	Fill of F195	
F197	Upper fill of F179	
F198	Pit	
F199	Fill of F198	
F200	Posthole	Structure A
F201	Fill of F200 (post pipe)	
F202	Fill of F200 (backfill)	
F203	Pit	
F204	Fill of F203	
F205	Posthole	Structure A
F206	Fill of F205	
F207	Posthole	
F208	Fill of F208	
F209	Posthole	Structure A
F210	Fill of F209	
F211	Fill of 212	
F212	Pit	
F213	Posthole	Structure A
F214	Fill of F213	
F215	Pit	
F216	Fill of F215, F243, F246 and F248	
F217	Posthole	Structure A
F218	Fill of F217	
F219	Posthole	Structure A

F220	Fill of F220	
F221	Posthole	Structure A
F222	Posthole	Structure A
F223	Fill of F222	
F224	Posthole	Structure A
F225	Fill of F224	
F226	Posthole	Structure A
F227	Fill of F226	
F228	Short slot	Fence 2
F229	Fill of F228	
F230	Posthole	Structure A
F231	Fill of F231	
F232	Posthole	Structure A
F233	Fill of F232	
F234	Posthole	Structure A
F235	Posthole	Structure A
F236	Fill of F234	
F237	Posthole	Structure A
F238	Fill of F239	
F239	Posthole	Structure A
F240	Fill of F239	
F241	Posthole	Structure A
F242	Fill of F241	
F243	Pit	
F244	Pit	
F245	Fill of F244	
F246	Pit	
F247	Linear gully	
F248	Pit	
F249	Posthole	
F250	Fill of F249	
F251	Posthole	
F252	Fill of F251	
F253	Posthole	Structure A
F254	Fill of F253	
F255	Posthole	
F256	Fill of F255	
F257	Posthole	Structure A
F258	Fill of F257	
F259	Posthole	Structure A
F260	Fill of F259	
F261	Posthole	Fence 1
F262	Fill of F261	
F263	Posthole	Fence 1
F264	Fill of F263	
F265	Posthole	Fence 1
F266	Fill of F265	
F267	Posthole	Fence 1
F268	Fill of F267	
F269	Posthole	Fence 1
F270	Fill of F269	
F271	Posthole	Fence 1
F272	Fill of F271	
F273	Posthole	Fence 2
F274	Fill of F273	
F275	Posthole	Fence 1

F276	Fill of F275	
F277	Posthole	Fence 1
F278	Fill of F272	
F279	Posthole	Fence 1
F280	Fill of F279	
F281	Posthole	Fence 2
F282	Fill of F281	
F283	Cancelled	
F284	Cancelled	
F285	Secondary fill of F283	
F286	Pit	
F287	Fill of F286	
F288	Post pit	Fence 1
F289	Fill of F288	
F290	Posthole	Fence 1
F291	Fill of F291	
F292	Pit	
F293	Fill of F292	
F294	Post pit	Fence 1
F295	Fill of F294	
F296	Hearth	
F297	Fill of F297	
F298	Clean back	
F299	Posthole	Fence 1
F300	Fill of F299	
F301	Gully	
F302	Fill of F301	
F303	Slot trench	Fence 1
F304	Fill of F303	
F305	Pit	
F306	Fill of F306	
F307	Posthole	Fence 3
F308	Fill of F307	
F309	Posthole	Fence 3
F310	Fill of F309	
F311	Posthole	Fence 3
F312	Fill of F311	
F313	Posthole	Fence 3
F314	Fill of F313	
F315	Posthole	
F316	Fill of F315	Fence 3
F317	Series of stakeholes	
F318	Stakehole	Fence 3
F319	Fill of F318	
F320	Posthole	
F321	Fill of F320	
F322	Posthole	Fence 3
F323	Fill of F322	
F324	Pit	
F325	Fill of F324	
F326	Series of stakeholes	
F327	Spread	
F328	Pit	
F329	Fill of F329	
F330	Posthole	Structure B
F331	Fill of F330	

F332	Posthole	Structure B
F333	Fill of F332	
F334	Posthole	Structure B
F335	Fill of F334	
F336	Posthole	Structure B
F337	Fill of F336	
F338	Posthole	Structure B
F339	Fill of F338	
F340	Pit	
F341	Fill of F340	
F342	Posthole	Structure B
F343	Fill of F342	
F344	Posthole	Structure B
F345	Fill of F345	
F346	Posthole	Structure B
F347	Fill of F346	
F348	Posthole	Structure B
F349	Fill of F348	
F350	Pit	
F351	Fill of F350	
F352	Pit	
F353	Fill of F352	
F354	Pit	
F355	Fill of F354	
F356	Posthole	
F357	Fill of F356	
F358	Pit	
F359	Fill of F358	
F360	Pit	
F361	Fill of F360	
F362	Pit	
F363	Fill of F362	
F364	Posthole	
F365	Fill of F365	
F366	Posthole	
F367	Fill of F366	
F368	Posthole	Structure B
F369	Fill of F368	
F370	Pit	
F371	Fill of F370	
F372	Fill of F370	
F373	Posthole	Structure B
F374	Primary fill of F373	
F375	Pit	
F376	Fill of F375	
F377	Secondary fill of F373	
F378	Cancelled	Cancelled
F379	Cancelled	
F380	Pit	
F381	Fill of F380	
F382	Pit	
F383	Fill of F382	
F384	Posthole	Structure B
F385	Fill of F384	
F386	Posthole	Structure B
F387	Fill of F386	

F388	Posthole	Structure B
F389	Fill of F388	
F390	Pit	
F391	Fill of F391	
F392	Unused number	
F393	Unused number	
F394	Posthole	
F395	Fill of F395	
F396	Pit	
F397	Fill of F397	
F398	Posthole	Structure B
F399	Fill of F398	
F400	Hearth	
F401	Fill of F400	
F402	Pit	
F403	Fill of F402	
F404	Slot trench	Structure A
F405	Fill of F404	
F406	Pit	
F407	Fill of F406	
F408	Posthole	Structure D
F409	Fill oF409	
F410	Posthole	Structure D
F411	Fill of F410	
F412	Posthole	Fence line 2
F413	Fill of F412	
F414	Series of stakeholes	
F415	Posthole	Fence line 2
F416	Fill of F415	
F417	Posthole	Structure A
F418	Posthole	Structure A
F419	Fill of F417/F418	
F420	Pit	
F421	Fill of F420	
F422	Series of stakeholes	
F423	Pit	
F424	Short slot	Structure B
F425	Fill of F424	

Table 2: Site 125.5 feature register

Feature Number	Description
F1	Topsoil
F2	Cut of cremation pit
F3	Fill of F2
F4	Natural

Table 3: Site 127.1 feature register

Feature Number	Description
F1	Topsoil
F2	Cut of cremation pit
F3	Fill of F2
F4	Natural

Appendix 2 – Finds Register

Table 1: Finds Register

Finds no.	Site no.	Feature no.	Category	Description
E2274.1	125.4	F246	Pottery	Middle Bronze Age domestic pottery
E2274.2	125.4	F215	Pottery	Middle Bronze Age domestic pottery, 3 sherds
E2274.3	125.4	F298/F1	Pottery	Middle Bronze Age domestic pottery
E2274.4	125.4	F317	Pottery	Middle Bronze Age domestic pottery
E2274.5	125.4	F326.5	Pottery	Middle Bronze Age domestic pottery (2 fragments)
E2274.6	125.4	F215	Pottery	Neolithic carinated bowl pottery, necksherd
E2274.7	125.4	F404	Pottery	Neolithic carinated bowl pottery, necksherds (in 2 fragments)
E2274.8	125.4	F404	Pottery	Middle Bronze Age domestic pottery, rimsherd
E2274.9	125.4	F317.2	Pottery	Middle Bronze Age domestic pottery

Appendix 3 – *Charcoal Analysis for E2274*

By Lorna O'Donnell

1 Introduction

1.1 Charcoal was examined from sites excavated by Colm Moriarty at Cloghabreedy, Co. Tipperary. Charcoal was identified from four Middle Bronze Age settlement contexts from Site 125.4, including posthole and slot trench fills. Material from the cremation deposits from the Early and Middle Bronze Age sites of 127.1 and 125.5 were examined, to determine what sort of fuel was used for the cremation pyres. The aim of the charcoal analysis is to provide information on structural material used on the site, and the type of woodlands that could have grown nearby when the site was in use.

2 Methodology

2.1 *Sampling and processing*

The samples were taken on site as bulk soil and were processed by flotation, whereby each sample was soaked in water in order to suspend the carbonised material; this was then poured off and trapped in a sieve (mesh size 300µm). This "flot" (i.e. the floated material) was dried and stored in sealed plastic bags. The samples were processed by Laoise Cronin, Christina Gomez and Allessandro Soggi.

2.2 *Identification of the charcoal*

Each piece of charcoal was examined and orientated first under low magnification (10x-40x). They were then broken to reveal their transverse, tangential and longitudinal surfaces. Pieces were mounted in plasticine, and examined under a binocular microscope with dark ground light and magnifications generally of 200x and 400x. Each taxa or species will have anatomical characteristics that are particular to them and these are identified by comparing their relevant characteristics to keys (Schweingruber 1978; Hather 2000 and Wheeler *et al* 1989) and a reference collection supplied by the National Botanical Gardens of Ireland, Glasnevin.

3 Results

3.1 Six wood types in total were identified from the Cloghabreedy site (Fig. 1). Oak (*Quercus* spp.) was the main fuel used and was present in all six contexts, while hazel (*Corylus avellana*) was present in four and the pomaceous fruitwood type (Pomoideae) was noted in three contexts.

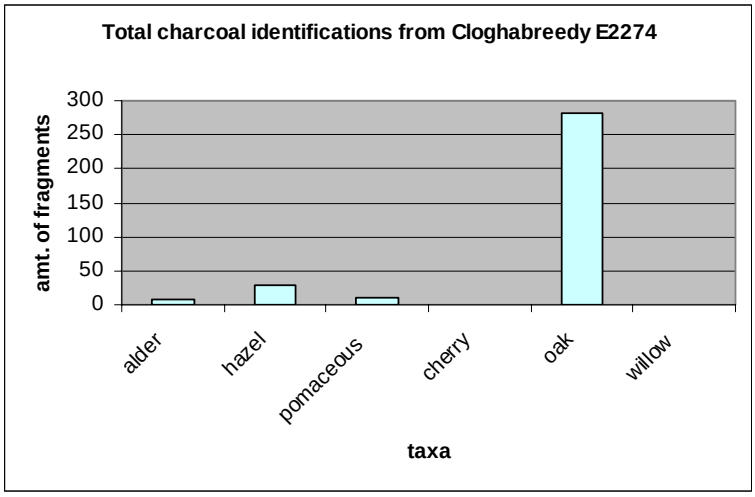

Fig. 1

3.2 ***Site 125.4***

Six trees were used at Cloghabreedy Site 125.4, these were alder (*Alnus glutinosa*), hazel, pomaceous fruitwood, wild/bird cherry (*Prunus avium/padus*), oak and willow (*Salix* spp.). The identifications were dominated by oak (Fig. 2).

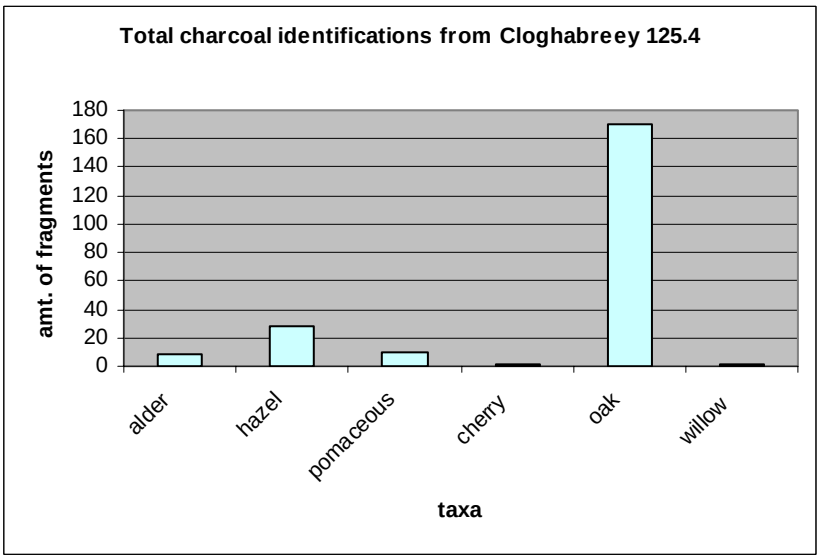

Fig. 2

3.2.1 *Sample 4 Fill Feature 127 Cut Feature 126 Posthole at entrance porch of Structure D.*

Oak and hazel were identified from this sample. Oak was the main tree noted (Fig. 3). The oak pieces were quite large, medium grown and were mainly weakly curved (Fig. 4) with tyloses, indicating they represent heartwood. Tyloses occur when adjacent parenchyma cells penetrate the vessel walls (via the pitting) effectively blocking the vessels (Gale 2003, 37). The hazel pieces were quite degraded with many insect holes, suggesting that it was derived from decayed wood.

3.2.2 *Sample 9 Feature 192 Cut Feature 190 Post hole Structure A, internal roof support*

Oak, hazel and pomaceous fruitwood were identified from this sample, oak was the main tree present. The fragments were all quite small, less than 5mm in size. They had between one and two annual rings remaining.

3.2.3 *Sample 18 Feature 405 Cut Feature 404 Slot trench Structure A*

This sample came from the building wall of Structure A. Oak, pomaceous fruitwood and hazel were present. All of the pieces were of medium growth and had between two to five annual rings present.

3.2.4 *Sample 16 Feature 374 Cut Feature 373 Posthole of the entrance porch of Structure B*

Alder, hazel, oak, willow, pomaceous fruitwood and cherry were identified from this sample. The identifications were clearly dominated by oak. The oak pieces mainly had few tyloses and many had strongly curved annual rings, indicating the use of branches but not heartwood. Growth in the oak pieces was mixed, slow to medium. The hazel and alder pieces both had many insect holes present, suggesting that they were derived from decaying wood.

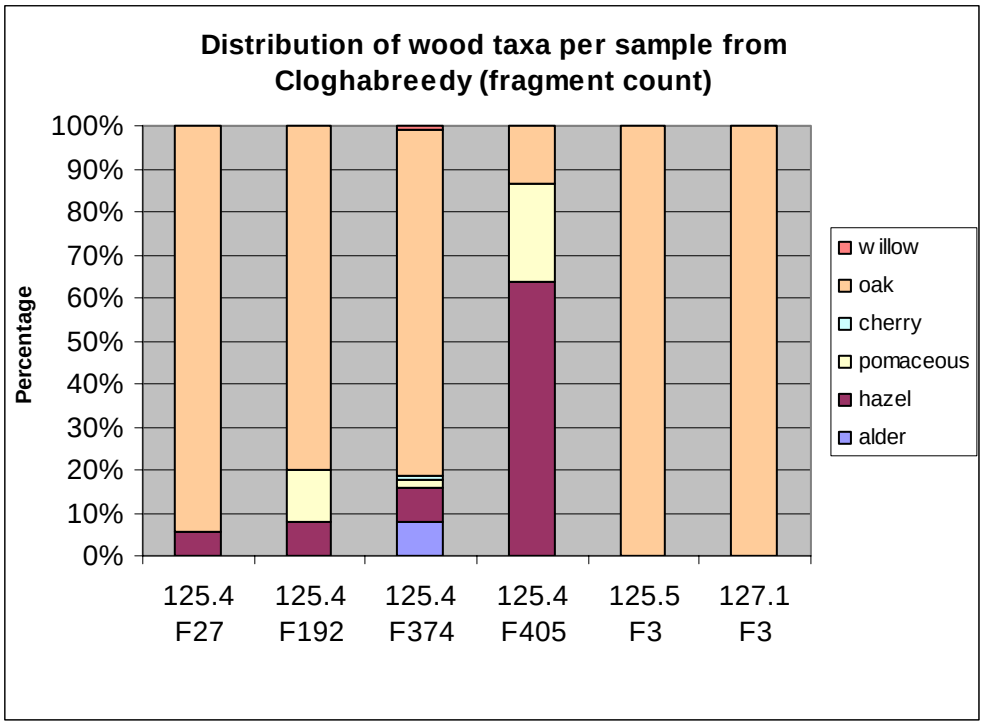

Fig. 3

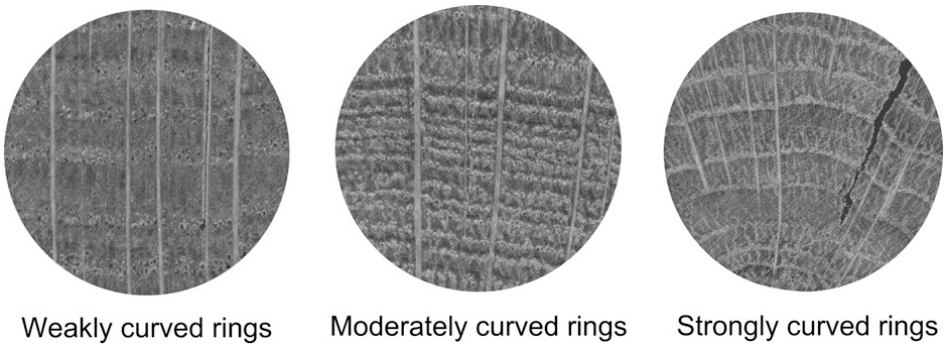

Fig. 4 - Ring curvature. Weakly curved rings indicate the use of trunks or large branches. (After Marguerie and Hunot 2007 1421, Fig. 3).

3.3 ***Site 125.5***

3.3.1 *Sample 1 Feature 3 Fill of cremation pit* F2

Oak only was present in this sample. The pieces were of mixed growth, some slow and some medium to fast. No tyloses were noted in the material and this coupled with the moderately and strongly curved rings on the fragments indicates the use of branches.

3.4 ***Site 127.1***

3.4.1 *Sample 1 Feature 3 Fill of cremation pit F2*

A low level of charcoal was noted in this sample (eleven identifiable fragments). Oak only was identified. The pieces were small, less than 5mm in size and were of medium growth.

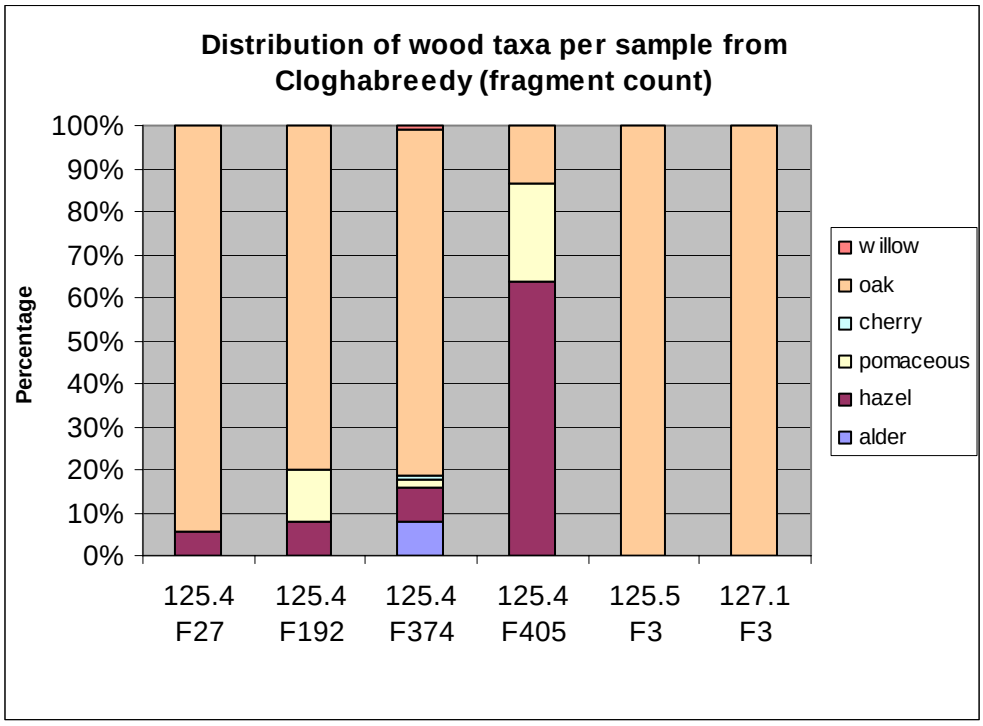

Fig. 5

4 The Cloghabreedy environment

4.1 One sample only was identified from Early Bronze Age deposits at Cloghabreedy, and oak only was present. In comparison, oak was the dominant tree from the rest of the Middle Bronze Age deposits at Cloghabreedy, and present in all five deposits. It is likely that Cloghabreedy was situated near or within oak woodlands during the Early and Middle Bronze Age. The two species of native Irish oak (which cannot be differentiated through wood anatomy) can grow in different circumstances. Sessile oak (*Quercus petraea*) will grow best well drained, shallow, moderately to strongly acidic soils (Preston *et al* 2002, 131). While the pedunculate oak (*Quercus robur*), prefers soils which are heavy and fertile, it is also quite tolerant of waterlogged areas and acid peat (Preston *et al* 2002, 132). Hazel was identified in all four samples from Cloghabreedy Site 125.4. This tree is frequently identified from Irish archaeological sites, and is often found growing in association with oak. It is a tolerant tree, can grow in wetland and dryland areas, but will not tolerate prolonged waterlogging (Orme and Coles 1985). The pomaceous fruitwood type (which includes apple (*Malus sylvestris*), pear (*Pyrus pyraster)*, hawthorn (*Crataegus monogyna)*, rowan (*Sorbus aucuparia)* and whitebeam *(Sorbus aria*)) indicate that closed canopy woodlands did not prevail, as these trees prefer light to grow. These are small, deciduous thorny trees or shrubs which are common on scrubby margins of woodlands and hedgerows. During periods of clearance they are quick to colonise clearings and rapidly forms dense thickets between the woodlands and open areas (Gale and Cutler 2000, 183). In comparison, cherry trees also prefer light to grow. The majority of trees and shrubs from Cloghabreedy indicate the site was located in a dryland environment.

4.2 The presence of alder and willow, however, do suggest areas of wetland near to the site, as both these trees will only grow where there is a constant water source, near to a stream or in waterlogged, wet woodland. Frequently archaeological sites will contain a mixture of dryland and wetland signals, especially settlement sites which would need a nearby water source for domestic work. Growth patterns were mixed on the oak timbers, for example annual rings from Site 125.5 were up to 5mm in size, while from site 125.4 growth was more medium to slow, which suggests variable growth conditions. Oak woodlands with associated mixed scrub would have provided some valuable resources for the Bronze Age community, such as fuel, shelter, structural material and grazing for animals.

5 Discussion

5.1 Four samples were taken from Cloghabreedy Site 125.4 from structural postholes and slot trenches to determine what trees were used for construction. These contexts all date to the Middle Bronze Age. All of the samples had a variety of trees in them (See Fig. 3), however, overall, oak was the dominant tree. Charcoal in post holes generally represent two things, either the post burnt *in situ* and should be the remains of the roundwood used for building, or the post could have been removed and the charcoal just represents charcoal blown in from on site domestic burning. If a sample has a very clearly dominant tree species present, it is appropriate to interpret such a species as representing the tree that was used for construction. Oak heartwood appears to have been used for the post of Feature 127. A variety of wood taxa (6) were identified from the fill of Feature 374, a posthole, yet the high levels of oak fragments do indicate that the main structural wood was oak. In contrast to Feature 127, the pieces are more likely to represent branches than heartwood. Oak was also the main wood identified (of three) from Feature 192, the fill of one of the internal roof supports from Structure A. While the fragment counts and weights are low for this sample the dominance of oak indicates that the post was composed of an oak roundwood. Three wood types (oak, pomaceous fruitwood and hazel) were identified from Feature 405, the slot trench of Building Structure A. Given the similar weights and low level of material overall, it is not possible to interpret what the dominant tree used was. The other types of trees noted in the contexts, particularly hazel could represent on site burning or could have been the remains of wattle woven between the oak posts.

5.2 Oak is one of the strongest native Irish woods, and for this reason it was often favoured for construction in the prehistoric period. Its heartwood is very tough and dense, and is not susceptible to insect attack. Charcoal was also analysed from two nearby Bronze Age sites (E2273 Site 125.1 and Site 125.3) and this identified oak, hazel and pomaceous fruitwood as the dominant taxa present (O'Donnell 2007a). From Early Bronze Age contexts at Site 125.3 (Pit fill Feature 5, Hearth pit Feature 32), seven wood types were noted, including ash (*Fraxinus excelsior*), blackthorn (*Prunus spinosa*), cherry, wych elm (*Ulmus glabra*), hazel, pomaceous fruitwood and willow. Six wood types were noted from a Middle Bronze Age posthole (Feature 49) at Site 125.1, including pomaceous fruitwood, hazel, yew, oak, ash and elm (O'Donnell 2007a). Therefore, five of the trees used during the Early Bronze Age and Middle Bronze Age period have been previously noted from the Cloghabreedy vicinity (hazel, pomaceous fruitwood, cherry, willow and

oak). Alder, present at Cloghabreedy Sites 125.4 (E2274) was not identified from Cloghabreedy E2273.

5.3 Various other Middle Bronze Age sites have been excavated in the Tipperary region. From Knockgraffon (E2270 Site 137.1 and Site 137.3), hazel, ash, pomaceous fruitwood and oak were identified from a posthole (Feature 88) and a kiln fill (Feature 11) (O'Donnell 2007b). From another Knockgraffon site (E2271 Site 129.1), charcoal from a posthole (Feature 35) on a settlement site included hazel, alder and pomaceous fruitwood (O'Donnell 2007c). At Charlesland, Site A (03E0018), Co. Wicklow, finds of Beaker pottery indicated a Final Neolithic/ Early Bronze Age date for two enclosures. Charcoal from two postholes from this site were examined, one of which was probably related to the curvilinear feature. Oak was exclusively identified from one posthole (C162), and was the main wood in the other (C160) (O'Donnell 2004a). Charcoal was also examined from two Bronze Age roundhouses (Structure I and Structure II) with associated domestic pits, hearths and possible surfaces (Charlesland Site D 03E0146). One sample (C38) was analysed from an exterior posthole from Structure 1. The main wood present here was oak, with a small amount of hazel and alder. Another sample was taken from an interior posthole (C87) from Structure 1. Again oak was the main wood present, with small amount of hazel and pomaceous fruitwood. Two samples were analysed from postholes from Structure 2. (C279 & C287) Oak only was found in these two samples (O'Donnell 2004b).

5.4 Charcoal was examined from two cremation pits from Site 127.1 and Site 125.5. The bone from the Early Bronze Age cremation deposit at Site 125.1 was identified as an adult human, and was white in colour, indicating successful cremation, at temperatures between 700-800 ºC (Geber 2007a). The material used for cremation of the body appears to have been oak branches. In comparison, oak only was identified from the cremation deposit of the Middle Bronze Age site of Site 127.1. Bone from this deposit was also successfully cremated, although it was not possible to say whether it was human or animal (Geber 2007b) As oak is an excellent fuel and was widely available in Bronze Age Ireland, it seems to have been frequently used as pyre fuel. Excavations from along the Gas Pipeline to the West stretching from Dublin to Clare demonstrated oak was the preferred fuel for Bronze Age cremation deposits with human remains (forty-six samples from twenty sites) (O'Donnell forthcoming). Charcoal was examined from Middle Bronze Age cremation pit (Feature 2) at Marlhill (E2269 Site 143.1) and oak was the only

wood identified (O'Donnell 2007d). Charcoal was identified from two late Bronze Age cremation deposits at Kilemly, Co. Tipperary E2126 Site 203.4. One deposit was dominated by oak (Feature 20), while the other was dominated by hazel (Feature 75) (O'Donnell 2007e). While other wood types are found in Bronze Age pyre deposits, in the author's experience the main trend appears to be for the use of oak. Almost a tonne of dry timber is normally required for the full cremation of a full human body (Parker Pearson 2003, 49). Based on calculations by Laurence Flanagan on the yield of mature oaks to tonnes, it would only take approximately 0.04% of a mature oak to fully cremate a human body (Mitchell and Ryan 2003, 212). This is approximately 0.01% of a cord of wood, a full cord of wood is approximately four feet high by four feet wide by eight feet long.

6 Summary

6.1 Charcoal was examined from six samples from Cloghabreedy. Six wood types were identified, and oak was the main tree used, followed by hazel and pomaceous fruitwood. The charcoal indicates the site was located in a dryland area, probably close to oak woodlands. Two samples were examined from an Early Bronze Age and Middle Bronze Age cremation pit at Cloghabreedy Site 127.1 and Site 125.5. Oak only was identified from these contexts suggesting that its qualities as excellent firewood were important in its selection as pyre material. This compares well with other Bronze Age sites in the Munster region. A greater variety of trees were used on Site 125.4. Charcoal analysis indicates that oak was used as a post from the entrance porches of Structure B and D (Feature 374 and Feature 127) and for one of the internal roof supports of Structure A (Feature 192). While other wood types were noted in these samples, the dominance of oak indicates that it is appropriate to interpret these as oak posts burnt *in situ*. Other trees identified in these samples could represent on site burning or the remains of burnt wattle. In comparison to Cloghabreedy E2274, the main trees used from a nearby Bronze Age Cloghabreedy site E2273 were oak, hazel and pomaceous fruitwood.

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Table 1 Charcoal identification details from Cloghabreedy 125.4

Sample	4	4	9	9	16	16	18	18
Feature	27	27	192	192	374	374	405	405
	f	w	f	w	f	w	f	w
Alnus glutinosa L. Gärtner Alder			20	0.29	8	1.05		
Corylus avellana L. Hazel	4	0.08	2	0.06	8	0.26	14	0.42
Pomoideae L. / Miller Pomaceous fruitwood			3	0.07	2	0.04	5	0.19
Prunus avium/padus L. Wild/bird cherry					1	0.01		
Quercus spp. L. Liebl Oak	66	6.14			81	1.21	3	0.14
Salix L. Willow					1	0.02		

Table 2 Charcoal identification details from Cloghabreedy 125.5

Sample	1	1
Feature	3	3
	f	w
Quercus spp. L. Liebl Oak	100	18.72

Table 3 Charcoal identification details from Cloghabreedy 127.1

Sample	1	1
Feature	3	3
	f	w
Quercus spp. L. Liebl Oak	11	0.33

Appendix 4 – Analysis of the plant remains from Site 125.4

By Sara Halwas

1 Introduction

1.1 Samples from Site 125.4, directed by Colm Moriarty, were analyzed as part of the N8 Cashel-Mitchelstown roadway project. Site 125.4 is a Middle Bronze Age settlement containing four structures and external pits, hearths, and stakesholes. Sediment samples were collected throughout the excavation and based on the previous assessment (Halwas 2006) four of five samples submitted were chosen for full archaeobotanical analysis. This report details the findings of these analyses and presents botanical information for the site.

2 Methodology

2.1 All plant remains identified from the recovered samples were preserved though carbonization. This is a process where high temperatures convert plant materials into inert carbon which is resistant to decay. Bulk samples were collected on site by Margaret Gowen & Co. Ltd. and processed by simple flotation. Generally five litres is sub-sampled from the bulk sample; if the sample is less than five litres, it is processed in its entirety. The sediment is placed in a bucket with water and gently agitated by hand to loosen the charred remains from the soil. The charred remains float to the surface of the water (known as the flot) and are poured off through a 250 μm sieve. This process is repeated until no remaining material float to the surface. The remainder of the sample is washed through a 1mm sieve to collect any large charred plant remains, and lithic, faunal, and ceramic artifacts. This is referred to as the retent. Both the flot and retent are placed in trays on newspaper to dry.

2.2 Each sample is scanned under a low power binocular microscope (magnification x4.5 to x56). All materials are identified with a series of identification manuals (see Beijerinck 1976; Berggren 1981; Cappers, Bekker and Jans 2006; Martin and Barkley 2000; Montgomery 1978), and a modern reference collection, accessed through the National Botanic Gardens, in Glasnevin, Dublin.

2.3 Nomenclature generally follows Stace (1997); where nomenclature deviates from Stace, Preston, Pearman and Dines (2002) is followed. In order to facilitate easy reading of this

report taxonomic order has been simplified into base categories including cereals, weeds and fruits, which are listed in tables at the end of the report; the plants are named in English within the body of the text first with the scientific name (in Latin) following the first mention of the plant species.

3 Results

3.1 Four samples from this Middle Bronze Age site were analyzed; Sample 8 (F180) from an external cooking pit, located east of Structure A, Sample 12 (F297) from a external hearth, and two entrance postholes to Structure B (Sample 16 (F374) and Sample 17 (385)). Low to moderate amounts of barley (*Hordeum* sp.), indeterminate cereal grains, and low quantities of weed seeds including fat-hen (*Chenopodium album*) and dock (*Rumex* sp.) were identified.

3.2 *External cooking pit (Sample 8 (F180))*

Very few identifiable plant remains were recovered from this sample. One indeterminate cereal grain, a dock seed and a knotweed (Polygonaceae family) seed were identified. The cereal grain showed high levels of abrasion and encrustation likely due to mechanical wear which degrades the structures utilized for identification by erosion and deposition of plant remains in the soil prior to final deposition; this suggests that these remains are a part of a secondary or even tertiary deposit (Monk 2000). The contextual description notes the sample was collected from the primary fill of an external cooking pit (Pit 179) located east of Structure A. The paucity and condition of remains suggests that the pit had been cleaned prior to it being sealed.

3.3 *External hearth feature (Sample 12 (F297))*

This sample contained mostly indeterminate cereal grains a small quantity of barley, a possible fat-hen, dock, and a possible knotweed (cf *Polygonum* sp.) seed. Barley is generally known as the dominate crop during the Bronze Age (e.g. Monk 1985) and was used in breads, gruels, porridges and soup bases (Sexton 1998). Fat-hen, dock and knotweed are all common weeds of arable lands and have been recovered with cereal crops.

The contextual descriptions note that this sample was collected from the primary fill of an external hearth feature south east of Structure A. The large quantity of indeterminate cereal grains exhibited pitting and many had become conglomerated masses caused by prolonged exposure to heat (Boardman and Jones 1990). Repeated exposures to heat can cause splitting, blistering and exploding (Monk 1988). The majority of charred plant remains was unidentifiable and was located within a potential hearth feature suggesting they are the remnants of domestic activities; their presence indicates the hearth was not cleaned after its final use prior to it being filled in.

3.4 *Structure B entrance postholes (Sample 16 (F374) and Sample 17 (F385)*

These samples contained similar plant assemblages, barley and weed seeds, though S17 contained larger quantities of barley and a wider variety of weed seeds. Both samples contained high amounts of charcoal, many indeterminate cereal grains and low to moderate quantity of barley grains. Archaeobotanists identify 50-100 grains as a cache; these samples contained 10-30, under the recognized limit. A possible oat (*Avena* sp.) grain was recovered from S17; oats can only be positively identified by the chaff and rachis base. As neither was present the oat maybe a wild variety which grew as a weed with the barley crop. Charred grass seed, few goosefoot seeds, fat-hen, dock, and knotweed and chickweed (*Stellaria* sp.) were identified.

Barley was widely grown in Ireland during the Bronze Age though there is scant evidence of it cultivated during the Neolithic (Monk 1985). Oats were a weed of cereal crops and not cultivated as a crop until the Early Christian period (Monk 1991). Both barley and oats were used to make flour, breads, porridges, soups, and gruels (Sexton 1998). The plant remains represent domestic debris present on the floor surface which was incorporated into the fill through daily activities which was incorporated into the posthole fill.

4 Comparison and Discussion

4.1 An external cooking pit located near Structure A, another external hearth and the entrance postholes of Structure B provided charred plant remains; the site was highly truncated by modern agricultural practices but generalized observations on plant use can be made.

4.2 As the features were all truncated the plant assemblages will not be representative of plant use during the site's use. Barley was the main crop used on site, though there is no evidence (recovered chaff or spikelet fragments) for crop processing in any of the samples. A possible oat grain was recovered from Structure B; oats are not commonly found on Bronze Age sites as they were not a cultivated crop until the Early Christian period, though a small quantity was recovered from a Bronze Age structural posthole from Site D, Charlesland, Co. Wicklow (04E0146) (Johnston 2004). They could not be conclusively identified as the cultivated variety because no chaff was recovered with it. Barley was also recovered from Site D in significant quantities (Johnston 2004). The lack of chaff and small quantity of weed seeds recovered with the barley suggests a cleaned crop which may was likely a stored in association with Structure B.

4.3 Plant remains from contemporary Bronze Age sites are increasing in numbers. Many Bronze Age sites along the Gas pipeline to the West project contained few charred remains; a possible barley grain was recovered from a Bronze Age round house at Clonard Co. Dublin (02E0298) (Johnston 2003a) and Knockdomny, Co. Westmeath (Johnston 2003b). Johnston (2003a) also lists a number of other sites intensively sampled as part of the same project which exhibited impoverished plant remains assemblages. But other contemporaneous Bronze Age sites including Knockhouse Lower, Co. Waterford (03E1033) contained samples with small quantities of cereal grains and weed seeds, along with a few samples containing caches of barley (Johnston n.d). Caches of charred barely were also recovered from a hearth at Site A (03E0018) and pits and posthole features from Site G (03E0196) (Johnston 2004a; 2004b).

5 Summary

5.1 The plant remains recovered suggest barley was utilized and stored is association with Structure B, though there is no evidence of it being processed on site. The moderate quantity of remains is more similar to Bronze Age sites where caches of grain were recovered than those with few recovered remains.

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Appendix 5 – The cremation burial from Site 125.5

By Jonny Geber MA MA MIAI

1 Introduction

1.1 An amount of 200ml of burnt human bone from a cremation burial has been analysed from Site 125.5. The cremated remains were interred in an isolated cremation burial pit (F2), which was circular in shape with a diameter of 40cm, and concave sides at a measured depth of 18cm. The pit was filled with a blackish brown silty clay included fleches of charcoal besides the cremated bone. The burial dates to the Late Bronze Age period.

1.2 ***Osteological methodology***

The cremation pit burial was excavated and 100% sampled on site. The bones have thereafter been wet sieved and dried in a controlled laboratory environment. As part of the osteological analysis, the bones were sieved in >10mm, 5–10mm and 2–5mm mesh size categories for the purpose of assessing the fragmentation of the sample. A fragmentation category, after the classification by Wahl (1982, 31) was also applied to the sample. The sample was quantified to estimated number of fragments, weight (at an accuracy of 0.01g) and volume. The fragments were thereafter identified to species and skeletal elements, body side, colour/degree of incineration, and whether they were clean or sooty.

Age could only be estimated on basis of evaluating the relative thickness of the tables and the diploë of skull vault fragments (Gejvall in Sigvallius 1994, 10). An attempt to determine the sex based on morphological features was undertaken according to the descriptions by Sjøvold (1988). The method by Gejvall (1948) of sexing cremated skeletal remains from skull vault and long bone diaphyseal thickness measurements was also employed.

The anatomical terminology used in this report is strictly according to the international nomenclature as described by Feneis and Dauber (2000).

2 Results

2.1 Considerable fragmentation and bone fragment distortions, which are caused by the heat during the cremation process, is one of the major obstacles which makes osteological studies on cremated bone very difficult. Another limitation is the obvious quantitative

loss, from between the burning to the deposition of the bones into the grave, which often is evident in ancient cremation burials. All these factors often make many of the available osteological methods inadequate when analysing burnt skeletal materials (see Rösing 1977: 54).

2.2 Despite these limitations, there is much potential in cremation burial studies. Analysis of the bone will give new perspectives and knowledge about the demography, religious beliefs and funerary rituals of past communities. Many of the limitative factors described above can be the result of handling of the remains in a ritual context, such as a possible deliberate crushing of the bone fragments and a possible selection of certain skeletal elements for deposition as token burials, all which can be viewed upon as a reflection of religious beliefs within the cult (see Buckley and Buckley 1999).

2.3 ***Quantity and fragmentation***

The total volume of the sample was approximately 200ml, weighing 225.34g and comprising of approximately 2938 fragments. The weight-volume ratio is 1.12 which is higher than the average of 0.9 generally seen in ancient cremation burials (Holck 1997, 80). The higher density ratio is probably easiest explained by the fact that most of the bones in the sample would have derived from denser skeletal elements such as skull vaults and long bone shafts (see catalogue).

A modern cremation of an adult body produce around 2–3.5 litres of burnt bone in volume (Gejvall 1948, 157), but it is very rare to find these amounts in ancient cremation burials. It has been suggested that the loss of bone quantity between the cremation and the deposition/burial is due to a symbolic selection of bone deemed more suitable for burial or that bone from one and the same cremation were deposited at different locations (Arcini 2005, 63-65). There are however practical aspects of collection bones from a pyre which needs to be considered, where spongious bones such as vertebrae, pelvic and epiphyseal long bone fragments are easily fragmented into bone dust, especially directly after incineration, and might therefore not have been possible to retrieve. The cremation experiment by Piontek which included an outdoor pyre reconstruction and the cremation of human remains concluded that it was not difficult to find bone fragments from the ashes after the cremation (Piontek 1976), which could indicate that a selection of only a proportion of the bone took place.

In total, only 97 fragments and 65.50g could be identified to species and skeletal element, which corresponds to 3.30% of the total fragments and 29.07% of the total weight. The quite low identifiable amount is strictly related to the limited quantity of the sample and most of all the considerable fragmentation. The largest fragment in the sample was about 4.4cm in linear size, and the mean weight per fragment was only 0.07g.

About 44% of the total quantity in weight of the bone fragments was between 5-10mm and 2-5mm respectively in size. About eight percent comprised of fragments larger than 10mm in size while the remaining 4 percent consisted of remains less than 2mm in size (Table 1). The general fragmentation corresponds to Wahl's category I (1982, 31).

Table 1. The distribution in weight of the general size of the fragments after sieving of cremation burial F2. Abbreviation: ENF = estimated number of fragments

Volume (ml)	***Weight (g)***	***ENF***	***> 10mm (g)***		***5-10mm (g)***		***2-5mm (g)***		***< 2mm (g)***	
200	225.34	2938	17.30	*7.68%*	100.12	*44.43%*	98.69	*43.80%*	9.23	*4.10%*

The degree of bone fragmentation in cremation burials has in the past been explained by factors such as pyre collapse, ground pressure, frost-action and archaeological excavation (see Lisowski 1968: 79; McKinley 1989: 72), or it has been taken as an indicator that the bones were crushed after the burning and prior to burial (Holck 1997: 35; Kaliff 1992; Sigvallius 1994: 33; Wegewitz 1972: 169). None of these factors are mutually exclusive and a robust explanation would posit that bone fragmentation is likely to be a result of a combination of those mentioned above, alongside other factors such as the sex and age of the individual, other weather conditions (besides just frost-action), pyre technology and so on (Geber 2003).

The different degrees of fragmentation of cremation burials within and between different geographical and climatic zones could be an indicator of cultural and/or chronological differences in the burial practise. Lisowski has for instance noted that the degree of fragmentation of cremation burials in Ireland is less than their British equivalents (1968, 79). It is however difficult to assess any potentially deliberate crushing of bone in a cremation burial in isolation. It is necessary to use comparative contemporary burials from the same site to assess relative fragmentation, so that common possible factors are considered. The high fragmentation of the sample and the relatively low quantity of bone in this case, however, could suggest, however, that the bones in this particular burial were manually crushed before deposition.

2.4 *Age and Sex*

It was only possible to assess age at from one skull vault fragment. The diploë, the middle porous layer of the skull vault, comprised of more than a third of the total vault thickness. The relative thickness between the internal and external tables of the skull vault was impossible to assess, why no more precise age at death than between 18-89 years can be given.

Sex was not possible to estimate due to lack of sex characteristic traits on any of the bone fragments identified.

2.5 *Cremation technology*

The general colour of the bone fragments was white, which indicate that they were exposed to temperatures exceeding 700-800ºC, a basic condition for a complete and successful cremation (Hermann 1988, 578; Wahl 1982, 27).

Whether the burnt bones are clean or sooty reflects how they were handled after the cremation. Clean bones are believed to have been picked out of the pyre debris and sorted after the burning. Sooty bones, on the contrary, would have been collected together with pyre debris, soot and charcoal or possible buried *in situ* at the cremation pyre (Arcini 2005, Gejvall 1948, 155; 1961; Herrmann 1972, Lisowski 1968, 78). The cremation burial F2 was clean, which suggests that the bones were separated from pyre remains before being placed within the burial pit.

3 Summary and conclusion

3.1 The burnt bone within cremation burial pit F2 contained the remains of at least one adult individual, aged between 18-89 years at time of death.

3.2 Suggested from bone condition and colour, the cremation process was a successful one, with an incineration temperature exceeding 700-800ºC. The bones were clean, which indicates that they had been sorted from the pyre prior to being deposited within the pit.

3.3 It is possible that the bones were crushed manually prior to deposition, although, considering the absence of any of other comparative cremation burials from the excavation on the site, this is difficult to ascertain with any certainty.

Catalogue

Abbreviations:

MNI: Minimum Number of Individuals

Cremation burial context:

Cut number: F2
Fill number: F3
Period: Late Bronze Age
Container: Pit
Estimated number of fragments: 2938 (3.30% identified)
Weight: 225.34g (29.07% identified)
Volume: 200ml
Maximal linear fragment size: 44.38mm
Fragmentation category (Wahl 1982): I
Incineration category (Wahl 1982): V
Colour: White
Clean/Sooty: Clean
Skull: Cranial, vault, parietal, maxilla, mandible and teeth (8.00g)
Axial: Axis and vertebra (0.52g)
Upper limb: Ulna (2.22g)
Lower limb: Long bones (54.76g)
MNI: 1
Age: 18-89 years *(Young adult – Older adult)*
Sex: Indeterminable
Pathology: Not present
Metrics (Gejvall 1948) (mm):

	N:	*Min.*	*Mean*	*Max.*	*SD*
1a:	*2*	*4.37*	*4.50*	*4.63*	*0.18*
9:	*1*	-	*7.70*	-	-

Animal bones: Not present.

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Appendix 6 - *Osteological analysis of burnt bone from Site 127.1*

By Jonny Geber MA MA MIAI

1 Introduction

1.1 A small amount of burnt bone, comprising of 105 fragments at a weight of 3.68g, were found in Feature F3.

2 Results

2.1 Due to the small amount of bone, and the heavy fragmentation of only 0.03g per fragment, made it impossible to identify any of the fragments to either species or skeletal elements. There is still a value in the osteological analysis of bone samples of this size, since often a cremation burial of an infant could generate the same small sized quantity.

2.2 What can be concluded from the bright white colour of these bone fragments is that they would have been fired at a high heat which exceeded a temperature of around 700ºC (Wahl 1982: 27).

Appendix: Tables

Table 1. Identified burnt bone from Site 127.1

Feature	*Number of fragments*	*Weight (g)*	*Specie*	*Age*	*Sex*	*Colour*	*Clean/ Sooty?*	*Other*
F3	105	3.68	Indet.	Indet.	Indet.	White	Clean?	Eroded

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Appendix 7 – *The burnt bone from Site 125.4*

By Jonny Geber MA MA MIAI

1 Introduction

1.1 Small deposits of burnt bone were retrieved from six samples from Site 125.4; four postholes (F72, F126, F187 and F384), one pit (F123) and one cooking pit (F179).

2 Results

2.1 The bones were too fragmented for any identification to species or skeletal element, however the fragments in cooking pit F179 and posthole F187 could with certainty be identified as animal. The fragments were chalk-white in colour and had been well burned (Table 1).

Table 1 - The burnt bone from Site 125.4

Feature	*Type*	*Number of fragments*	*Weight (g)*	*Specie*	*Age*	*Sex*	*Colour*	*Other*
F72	Posthole	91	6.44	Indet.	Indet.	Indet.	White	Eroded
F123	Pit	13	1.22	Indet.	Indet.	Indet.	White	
F126	Posthole	3	0.08	Indet.	Indet.	Indet.	White	
F179	Cooking pit	19	1.15	Animal	Indet.	Indet.	White	
F187	Posthole	11	0.92	Animal	Indet.	Indet.	White	
F384	Posthole	7	0.25	Indet.	Indet.	Indet.	White	
Total:		*144*	*10.06*					

Appendix 8 – *Prehistoric pottery report for Site 125.4*

By Helen Roche and Eoin Grogan

Summary

A small assemblage of 12 sherds came from features associated with a settlement (total weight 100g). The pottery represents two early Neolithic bowls and at least three middle Bronze Age domestic vessels. This site provides important new information about the cluster of prehistoric activity in the Cahir area.

1 Context

1.1 The pottery came from features associated with a settlement sites including the wall foundations of Structures A and B and fence No 3.

2 The early Neolithic

2.1 There are two much worn sherds representing two early Neolithic vessels, probably carinated bowls: this form represents the earliest type of Neolithic pottery (Case 1961: 'Dunmurry-Ballymarlagh styles'; Sheridan 1995: 'classic' carinated bowls) in Ireland and is widely dated to *c*. 4000–3700 BC. Other sites include Marlhill, Caherabbey Upper, Caherabbey Lower, Ballylegan and Suttonrath, Co. Tipperary, identified on the N8 scheme (Molloy 2007a; McQuade 2006a; 2006b; 2006c; Grogan and Roche 2007a; 2007b; 2007c; 2007d): these all appear to represent small-scale settlement activity.

3 The middle Bronze Age

3.1 The Cloghabreedy assemblage represents at least three, and probably as many as six, coarse domestic vessels. The pottery is hard and well-fired with a medium to high content of dolerite inclusions. Vessel 3 is a large bucket-shaped vessel with a high panel of incised triangles on the upper neck while Nos 4 and 5 have pinched-up horizontal cordons at the junction between the upright neck and the body. The pottery is fragmentary and worn in a manner typical of material from domestic sites and Vessel 5, and another represented by a single sherd (**2**), has burnt accretions indicative of use in cooking.

3.2 Recent excavations have revealed several domestic sites with pottery of this type which is a domestic variant of the cordoned urn and should date well into the middle Bronze Age (Grogan 2004; Cooney and Grogan 1994, 126–29; see also Kavanagh 1976; Waddell 1995). The largest assemblage comes from the Knockadoon peninsula at Lough Gur, Co. Limerick (Ó Ríordáin 1954; Grogan and Eogan 1987; Cleary 1995). These vessels feature various combinations of applied cordons and rilling, as well as open lattice or in-filled panels of elongated opposed triangles beneath the rim (see Grogan and Eogan 1987, figs 44, 45, 51, 68; Ó Ríordáin 1954, figs 17–19, 34: 25, 26, pls 34, 35). Decorative application occurs in the form of incision (both fine lines and channels), heavy twisted cord, and applied or pinched-up cordons. There is a limited range of rim forms including simple round and flat tops, as well as rims with a straight or slightly curved internal bevel; more sharply curved or stepped bevels also occur (Grogan and Eogan 1987, fig. 68:893, 895, 896). Other assemblages include Ballinaspig More 5 and Ballybrowney, Co. Cork (Fig. 1; Danaher 2004; Grogan and Roche 2004; Cotter 2005; Roche and Grogan 2005; see Grogan and Roche 2006). There is a cluster of related sites in the Cahir area including Cloghabreedy (Site 125.3), Suttonrath, Ballydrehid and Clonmore North (Moriarty 2006; McQuade 2006c; 2006d; Molloy 2007c; Grogan and Roche 2007e; 2007f; 2007g). Cloghabreedy is an important settlement site that emphasises the density of middle Bronze Age activity in this landscape zone. Reasonably extensive dating indicates a range of *c*. 1750–1400 cal. BC for cordoned urn burials but a slighter longer currency, perhaps down to the beginning of the late Bronze Age, for the domestic variant. The dates from Cloghabreedy of 1666–1494 cal. BC (UB–7172, 3290±34) from the wall slot of Structure A which produced Vessel 1, 1427–1268 cal. BC (UB–7171, 3084±35) from Structure D, and 1604–1414 cal. BC (UB–7173, 3213±35) from Structure B provide important new data for this phase of the Bronze Age.

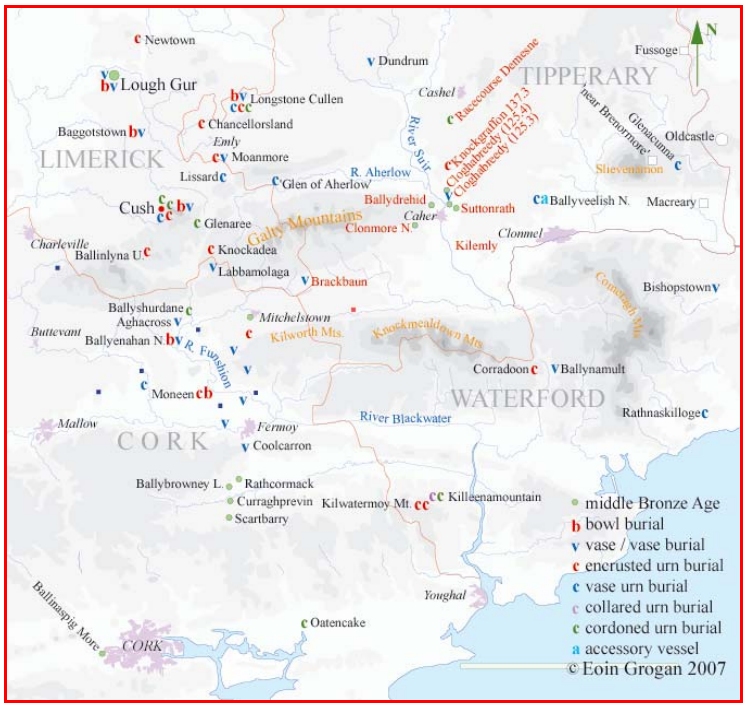

Fig. 1. Distribution of early and middle Bronze Age pottery in southeast Munster: data from Kavanagh 1973; 1976; Waddell 1990; Ó Ríordáin and Waddell 1993; Moore 1999 with additions

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CATALOGUE

Where the pottery is listed in the catalogue the find numbers are in bold: *e.g.*: **8** but the accession number E2274 is omitted throughout. Numbers in square brackets (*e.g.* [**5a**–**b**]) indicate that the sherds are conjoined. The thickness refers to an average dimension; where relevant a thickness range is indicated. Vessel numbers have been allocated to pottery where some estimation of the form of the pot is possible, or where the detailed evidence of featured sherds (*e.g.* rims, bases), fabric or decoration indicates separate vessels.

The Early Neolithic

The site produced two much worn and apparently residual sherds from two Early Neolithic Carinated Bowls (total weight: 2g).

The fill of the wall slot (F404) of Structure A

Vessel 1. This vessel is represented by a single much worn necksherd (**7a–b**) of buff to red-buff fabric with a dark grey core and a low content of dolerite inclusions. Thickness: 4.8mm; weight: 1g.

The fill (F216) of pit a pit F215

Vessel 2. This vessel is represented by a single much worn necksherd (**6**) of buff fabric with a dark grey core and numerous internal and surface cavities. Thickness: 9mm; weight: 1g.

The Middle Bronze Age

The site produced ten sherds from at least three middle Bronze Age domestic vessels (total weight: 98g).

The slot trench F404 of Structure A

Vessel 3. This is represented by a single rimsherd (**8**). The rounded rim has a slight, curved, internal bevel and an upright profile from a bucket-shaped pot. The hard, well-fired, fabric is red-brown throughout. There is a medium content of crushed dolerite inclusions (≤ 3 x 2mm; up to 8.5 x 7mm). Although worn it is evident that there were inclusions visible on, and protruding through, the outer surface while the inner is much smoother and more carefully finished. Thickness: 10.6mm; weight: 57g.

Decoration There is a scored horizontal line, possibly executed with a thumbnail, immediately beneath the rim. Below is a band of irregular triangles of scored lines.

The fill F216 of a pit (F215)

Vessel 4. This is represented two sherds (1 necksherd: **2a**; 1 bodysherd: **2b**) from a vessel with an upright neck and a low pinched-up horizontal cordon at the junction with the body. The fabric is red-buff with a grey-buff core. There is a high content of crushed dolerite inclusions (≤ 4 x 3mm; up to 7 x 5mm). Thickness: 10.5mm; weight: 16g.

Decoration There are vertically arranged fingernail impressions forming short lines on the neck immediately above the cordon.

A small bodysherd (**2c**; weight: 1g) also came from this fill.

The fill F216 of pit (F246)

Vessel 5. This is represented by a single necksherd (**1**) from a vessel with an upright neck and a low pinched-up horizontal cordon at the junction with the body. The well-fired but worn fabric is cream-buff with a dark grey core and inner surface. There is a medium content of crushed dolerite inclusions (≤ 3 x 2mm; up to 5 x 4mm). A burnt accretion occurs on the inner surface. Thickness: 10.5mm; weight: 10g.

Topsoil/clean back (F298)

This produced a single bodysherd (**4**) of red-buff fabric with a red core: this is from Vessel 4 or one very like it. There is a high content of crushed dolerite inclusions (≤ 3 x 2mm; up to 6 x 6mm). Thickness: 11mm; weight: 10g.

The fill of a posthole (F317) associated with Fence 3

This produced a single worn bodysherd (**9**) of pale cream-buff fabric with a pale grey inner surface. There is a medium content of crushed dolerite inclusions (≤ 2 x 2mm; up to 6 x 3mm). There is sooting on the outer surface. Thickness: 9mm; weight: 1g.

The fill of a stakehole (F326) in the outer wall of Structure B

This produced a small bodysherd ([**5a–b**]) of red-buff fabric with a red core: this is from Vessel 4 or one very like it. There is a high content of crushed dolerite inclusions (≤ 3 x 2mm; up to 6 x 6mm). Thickness: 9mm; weight: 1g.

Topsoil overburden F1

This produced a small bodysherd (**3**) of hard, well-fired, buff fabric with a dark grey core and crushed dolerite inclusions. Thickness: 7.4mm; weight: 2g.

Site	*Vessel*	*Context/feature*	*No. of sherds*	*Rim*	*Shoulder*	*Base, baseangle*	*Neck*	*Body*	*Frags*	*Inclusions*	*Vessel size*	*Pottery type*	*Weight*
125.4	**1**	404	1	0	0	0	1	0	0	D	-	ENCB	1
125.4	**2**	215	1	0	0	0	1	0	0	?	-	ENCB	1
125.4	**3**	404	1	1	0	0	0	0	0	D		MBA	57
125.4	**4**	215	2	0	0	0	1	1	0	D	-	MBA	16
125.4	**5**	246	1	0	0	0	1	0	0	D	-	MBA	10
125.4	**Other**		6	0	0	0	0	6	0			MBA	15
	Total		10	1	0	0	2	7	0	0		MBA	98

Table 1. Details of vessels and sherds from Cloghabreedy

Appendix 9 – Radiocarbon results

Table 1: Radiocarbon results

Excavation Ref No	Lab Ref	Dated Material	Context	Measured Radiocarbon Age(BP)	Std Dev	13C/ 12C Ratio (0/00)	2Std Dev	2Sigma Calibration
E2274:125.4	UB-7171	*Pomoidea (Fruitwood)*	F99	3084	35	-28	70	cal BC 1427-1268 (95.4%)
E2274:125.4	UB-7172	Corylus avellana (Hazel)	F405	3290	34	-24	68	cal BC 1666-1494 (95.4%)
E2274:125.4	UB-7173	Alnus glutinosa (Alder)	F374	3213	35	-26	70	cal BC 1604-1414 (95.4%)
E2274:125.5	UB-7378	*Quercus* (Oak)	F3	2899	34	-25	68	cal BC1252-980 (95.4%)
E2274:127.1	BETA-228978	Quercus (Oak)	F3	3750	40	-26	80	Cal BC 2280-2020 (95%)

Graphs illustrating the radiocarbon date calibration curves *

**based on Oxcal 3*

Figure 1: E2274:125.4, F99

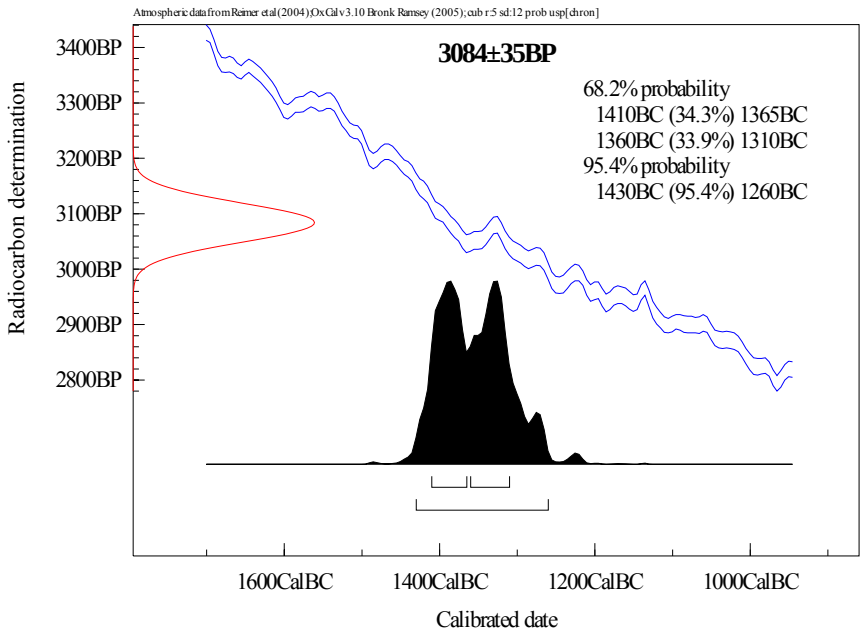


Figure 2: E2274:125.4, F405

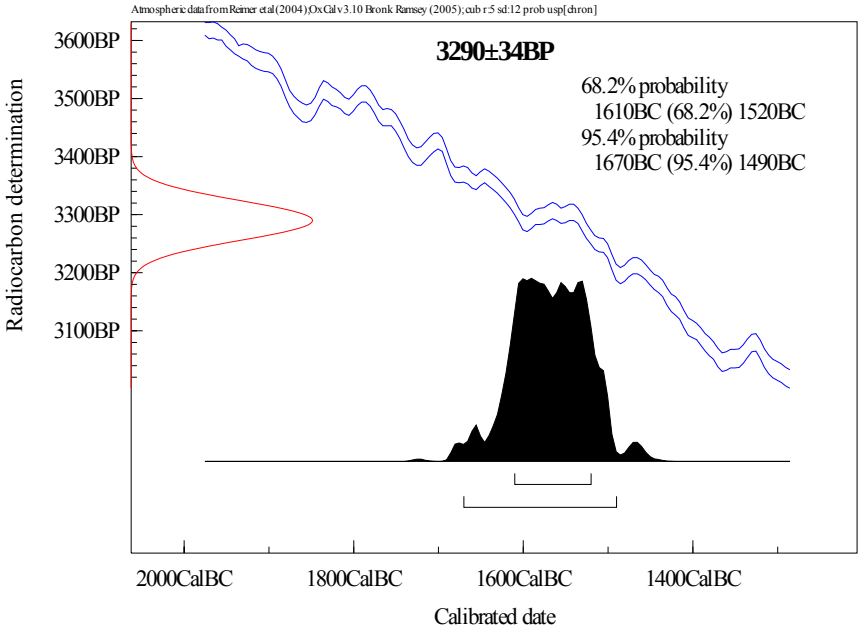


Figure 3: E2274:125.4, F374

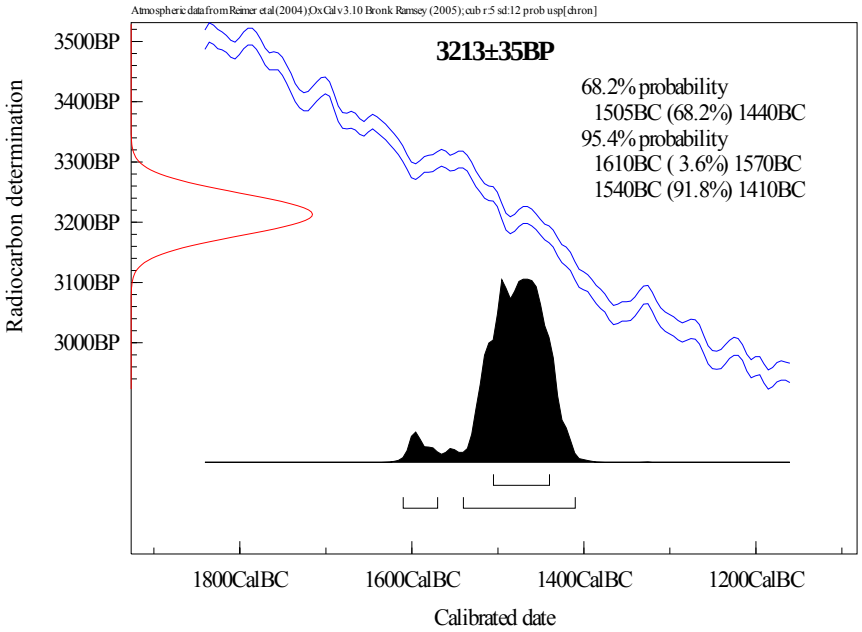


Figure 4: E2274:125.5, F3

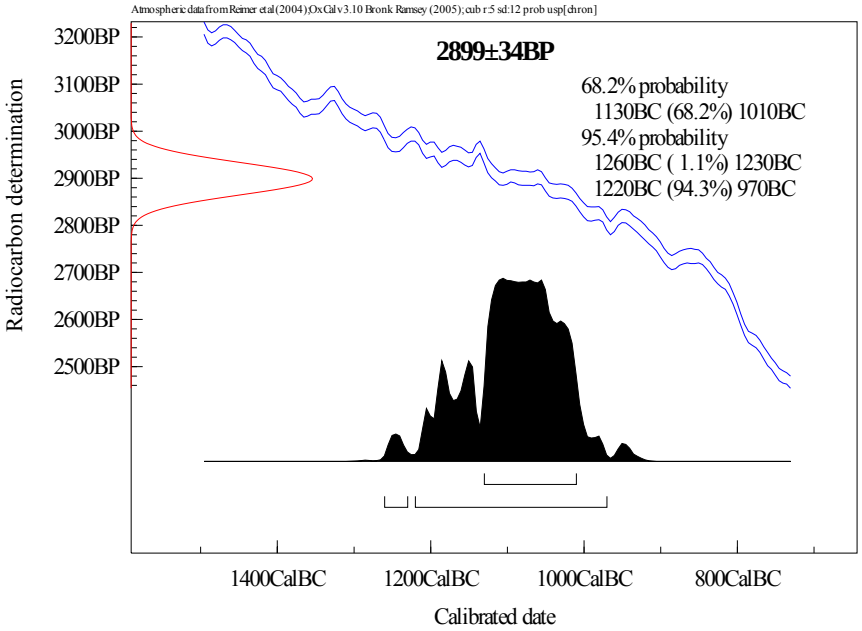
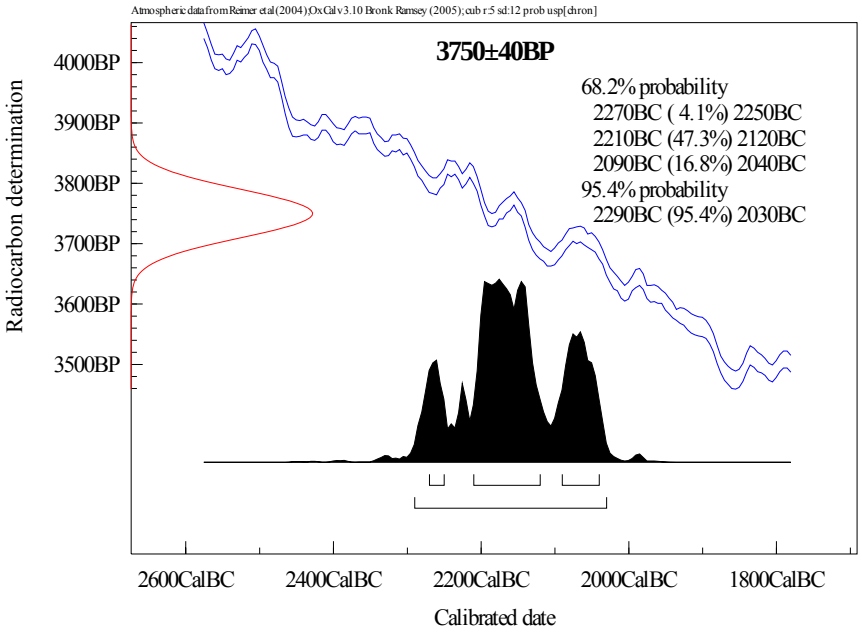
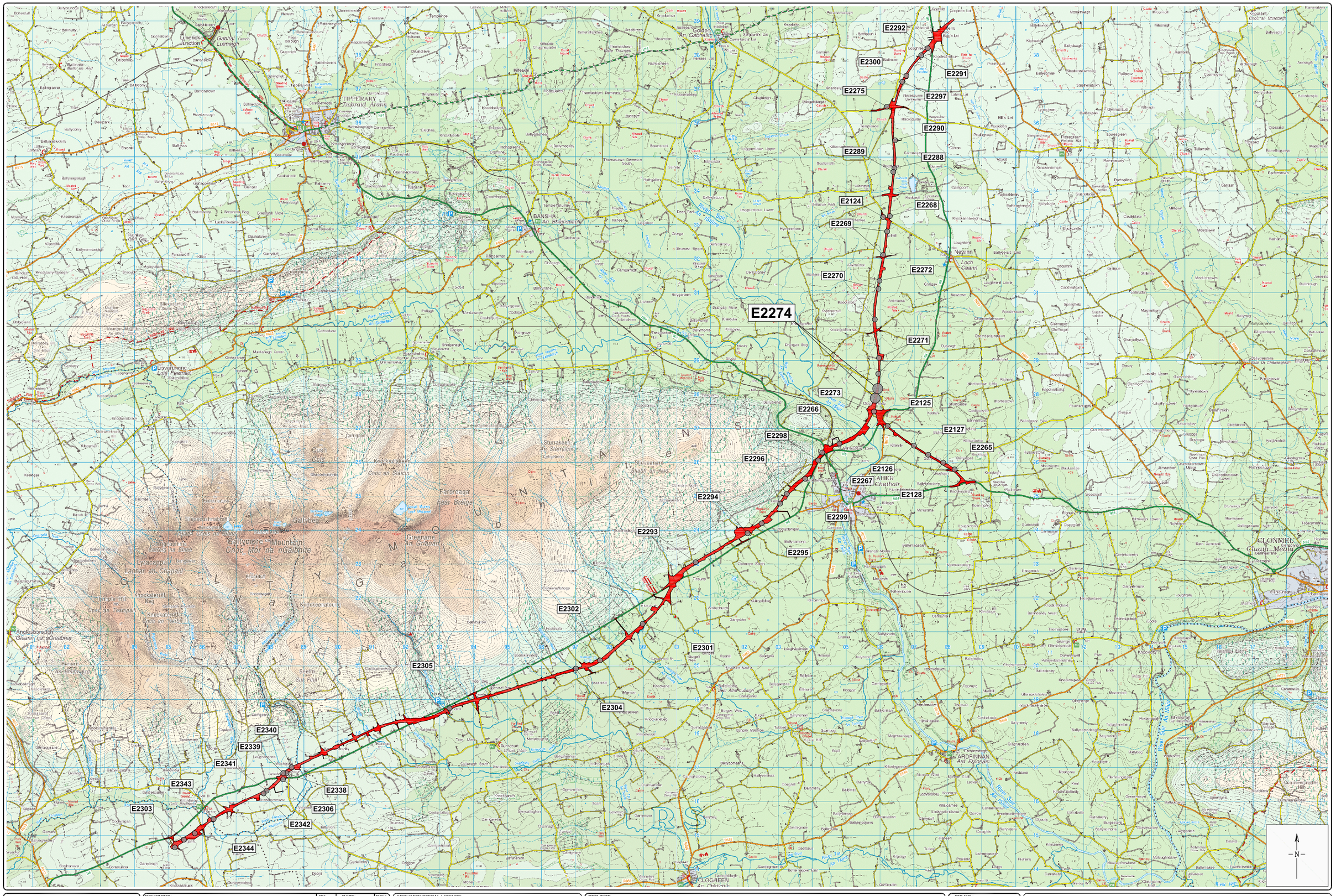


Figure 5: E2274: 127.1, F3





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EQA QUALITY ASSURED ORGANISATION
CERT NO. 2976

REVISIONS:	BY:	DATE:	REV:

ARCHAEOLOGICAL LICENCE:
Scheme No. A035 - E2274

PRODUCED BY: AA
DATE SURVEYED: N/A
CHECKED BY: CM
DATE ISSUED: 05.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme

TITLE: Route of road and location of excavation sites

CLIENT: South Tipperary County Council

JOB NO.: 06038-R75
DRAWING NO.: 06038-015-R75
FIG. NO. 1
SCALE: 1/100000 @ A3

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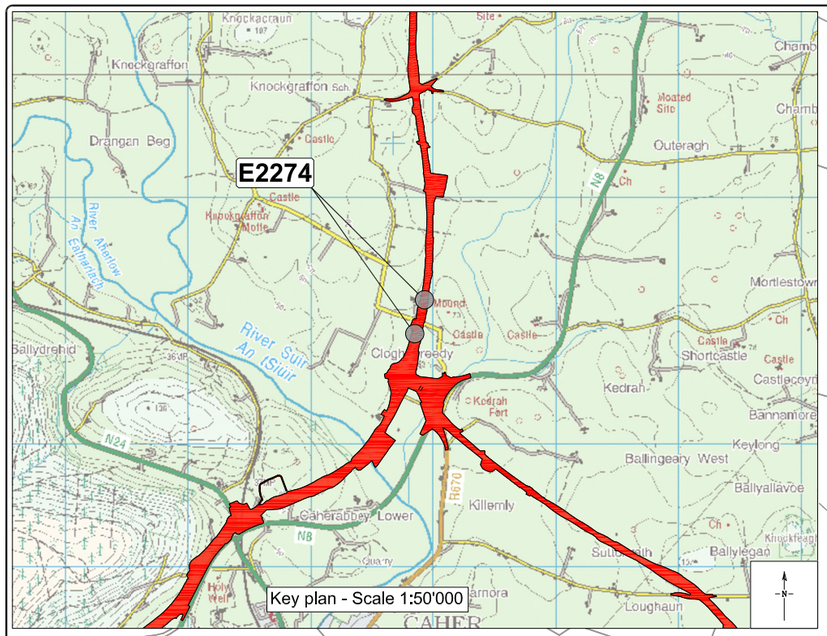

E2274:Site 127.1
E 205959
N 128196

E2274:Site 125.5
E 205875
N 127961

E2274:Site 125.4
E 205840
N 127850

E2273:Site 125.1
E 205770
N 127530

E2273:Site 125.3
E 205899
N 127448

E2125:Site 203.1
E 206226
N 127047

CLOGHABREEDY

26+500 26+400 26+300 26+200 26+100 26+000 25+900 25+800 25+700 25+600 25+500 25+400 25+300

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PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme

TITLE: Site Locations

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DRAWING NO.: 06038-057-R75

FIG. NO. 2

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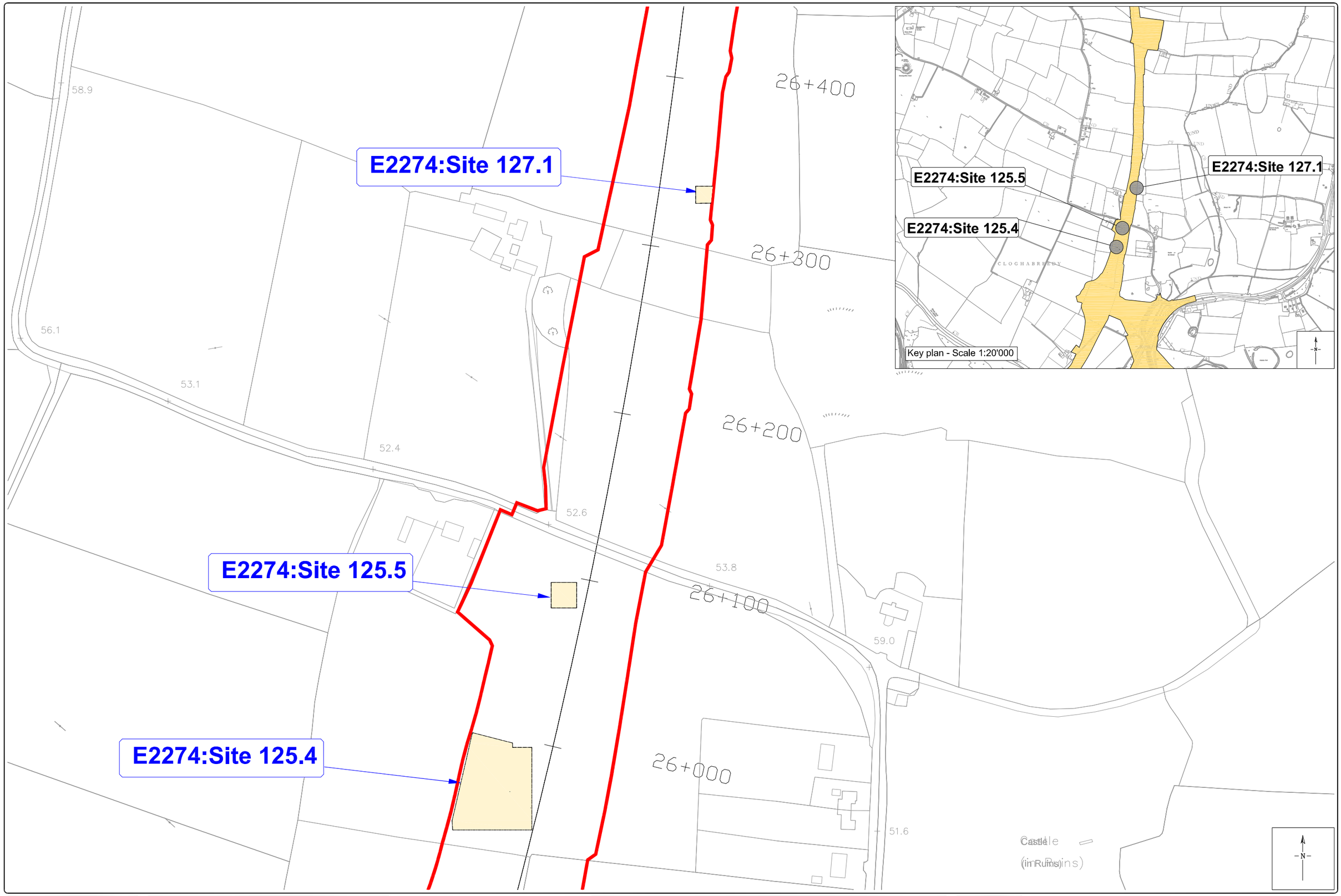

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ARCHAEOLOGICAL LICENCE: Scheme No. A035 - E2274

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DATE SURVEYED: N/A
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PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme
TITLE: Site Locations
CLIENT: South Tipperary County Council

JOB NO.: 06038-R75
DRAWING NO.: 06038-183-R75
FIG. NO.: 3
SCALE: 1/2000 @ A3

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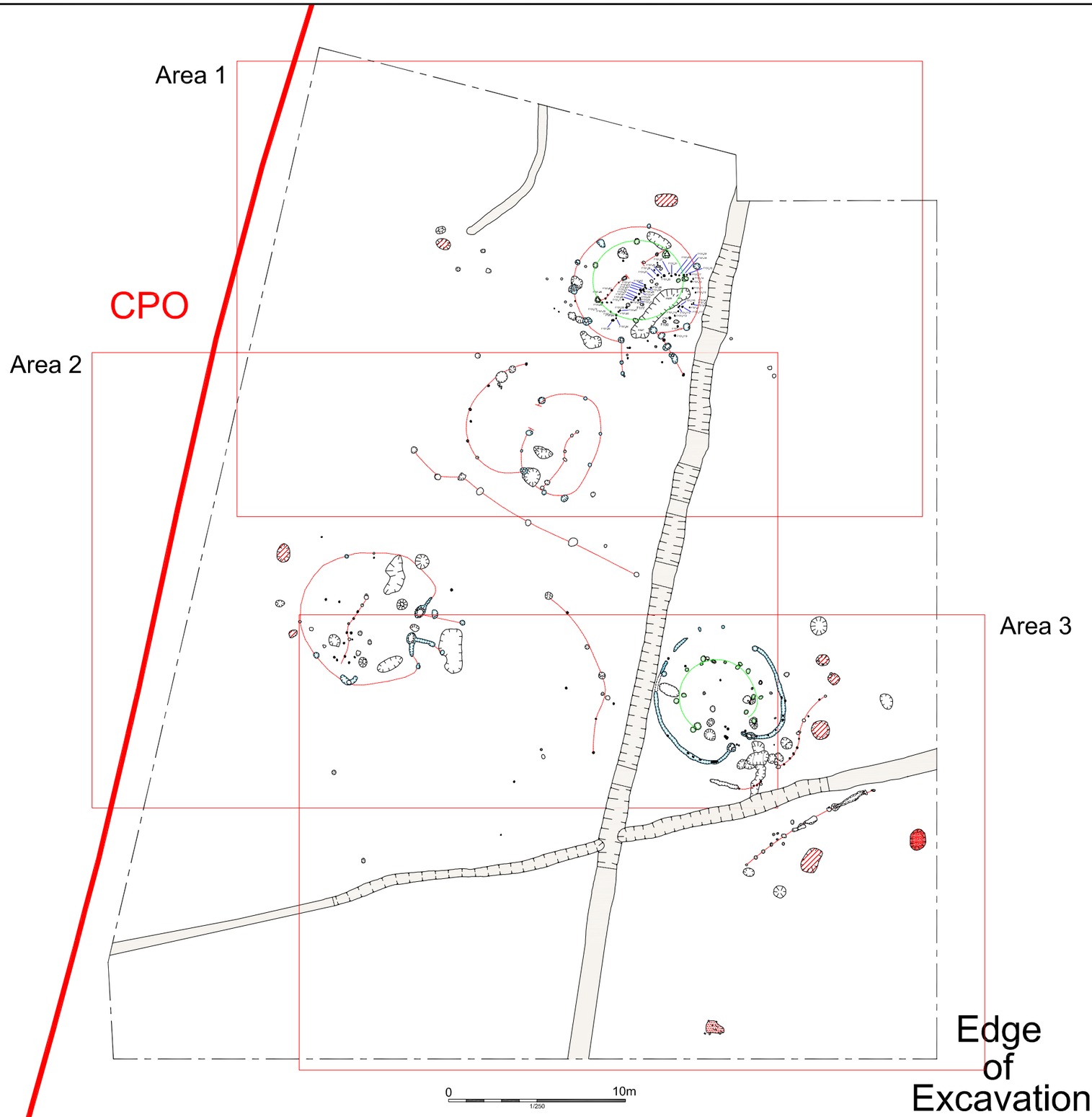
Excavation No. 2274
Site: 125.4



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ARCHAEOLOGICAL LICENCE: Area 3
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DATE SURVEYED: N/A
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DATE ISSUED: 07.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme
TITLE: Post-excavation plan, Site 125.4

CLIENT: South Tipperary County Council

JOB NO.: 06038-R75
DRAWING NO.: 06038-184-R75
FIG. NO.: 4
SCALE: 1/250 @ A3

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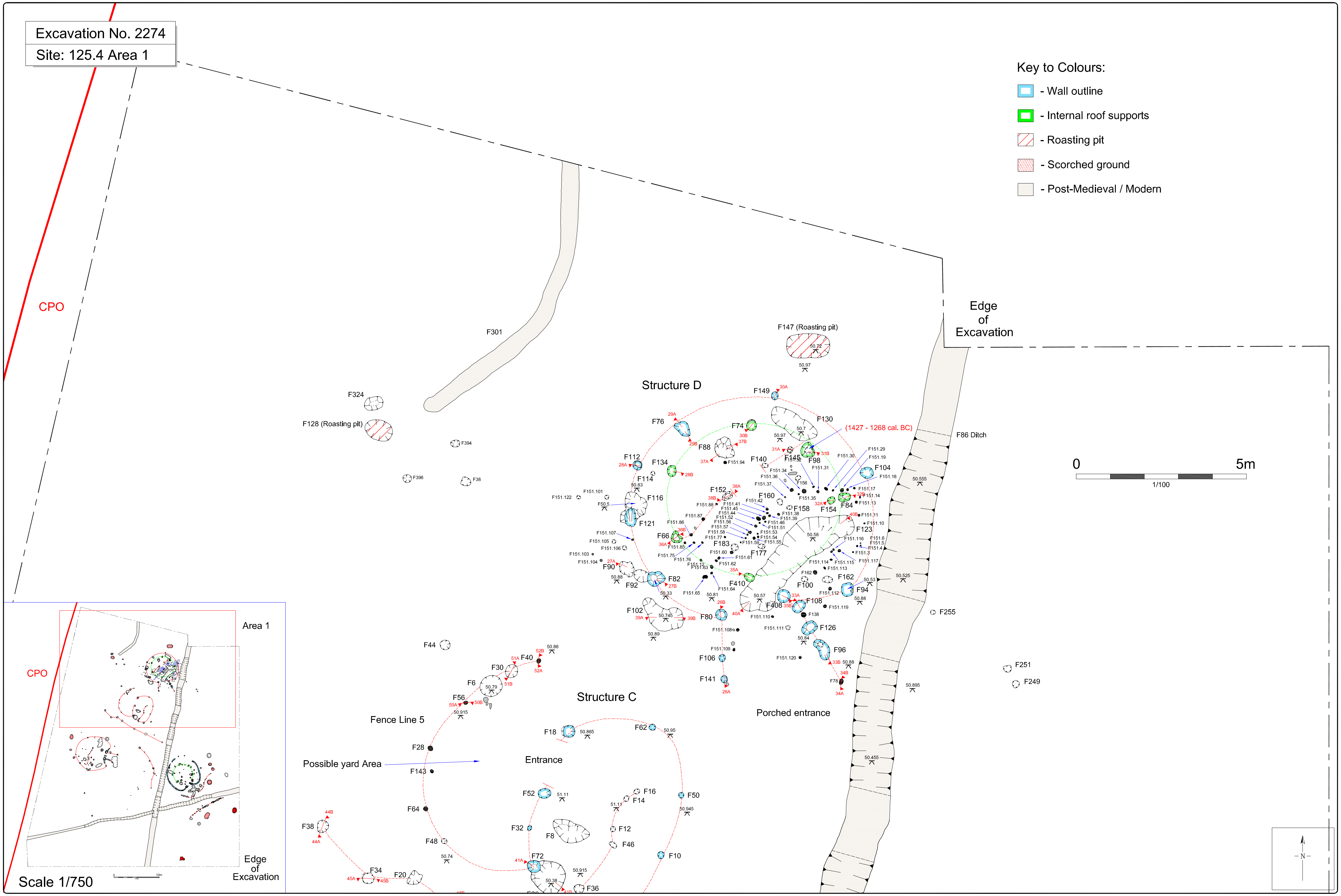

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PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme

TITLE: Post-excavation plan, Site 125.4, Area 1

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DRAWING NO.: 06038-185-R75

FIG. NO. 5

SCALE: 1/100 @ A3

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Excavation No. 2274
Site: 125.4 Area 2

Key to Colours:

- Wall outline
- Internal roof supports
- Roasting pit
- Scorched ground
- Post-Medieval / Modern

CPO

Edge of Excavation

Structure B

Structure C

Fence Line 5

Fence Line 4

Fence Line 3

Possible yard Area

Entrance

Porched entrance

F364 (1604 - 1414 cal. BC)

F390 (Roasting pit)

F360 (Roasting pit)

0 5m

1/100

CPO

Area 2

Edge of Excavation

Scale 1/750

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REVISIONS: | BY: | DATE: | REV:

ARCHAEOLOGICAL LICENCE: Scheme No. A035 - E2274

PRODUCED BY: JH, EB, AA | DATE SURVEYED: N/A

CHECKED BY: CM | DATE ISSUED: 07.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme

TITLE: Post-excavation plan, Site 125.4, Area 2

CLIENT: South Tipperary County Council

JOB NO.: 06038-R75

DRAWING NO.: 06038-186-R75

FIG. NO.: 6

SCALE: 1/100 @ A3

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Excavation No. 2274

Site: 125.4 Area 3

Structure A

Porched entrance

(1604 - 1414 cal. BC)

(1666 - 1494 cal. BC)

Fence Line 1

Fence Line 2

Fence Line 3

F195 Ditch

F195 Ditch

F172 (Roasting pit)

F212 (Roasting pit)

F179 (Roasting pit)

F283 (Roasting pit)

Hearth F400

Hearth F296

Key to Colours:

- Wall outline
- Internal roof supports
- Roasting pit
- Scorched ground
- Post-Medieval / Modern

0 5m

1/100

CPO

Area 3

Edge of Excavation

Scale 1/750

Edge of Excavation

ISO 9001:2000 EQA QUALITY ASSURED ORGANISATION CERT NO. 2976

REVISIONS: | BY: | DATE: | REV:

ARCHAEOLOGICAL LICENCE: Scheme No. A035 - E2274

PRODUCED BY: JH, EB, AA, JPR | DATE SURVEYED: N/A

CHECKED BY: CM | DATE ISSUED: 07.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme

TITLE: Post-excavation plan, Site 125.4, Area 3

CLIENT: South Tipperary County Council

JOB NO.: 06038-R75

DRAWING NO.: 06038-187-R75

FIG. NO. 7

SCALE: 1/100 @ A3

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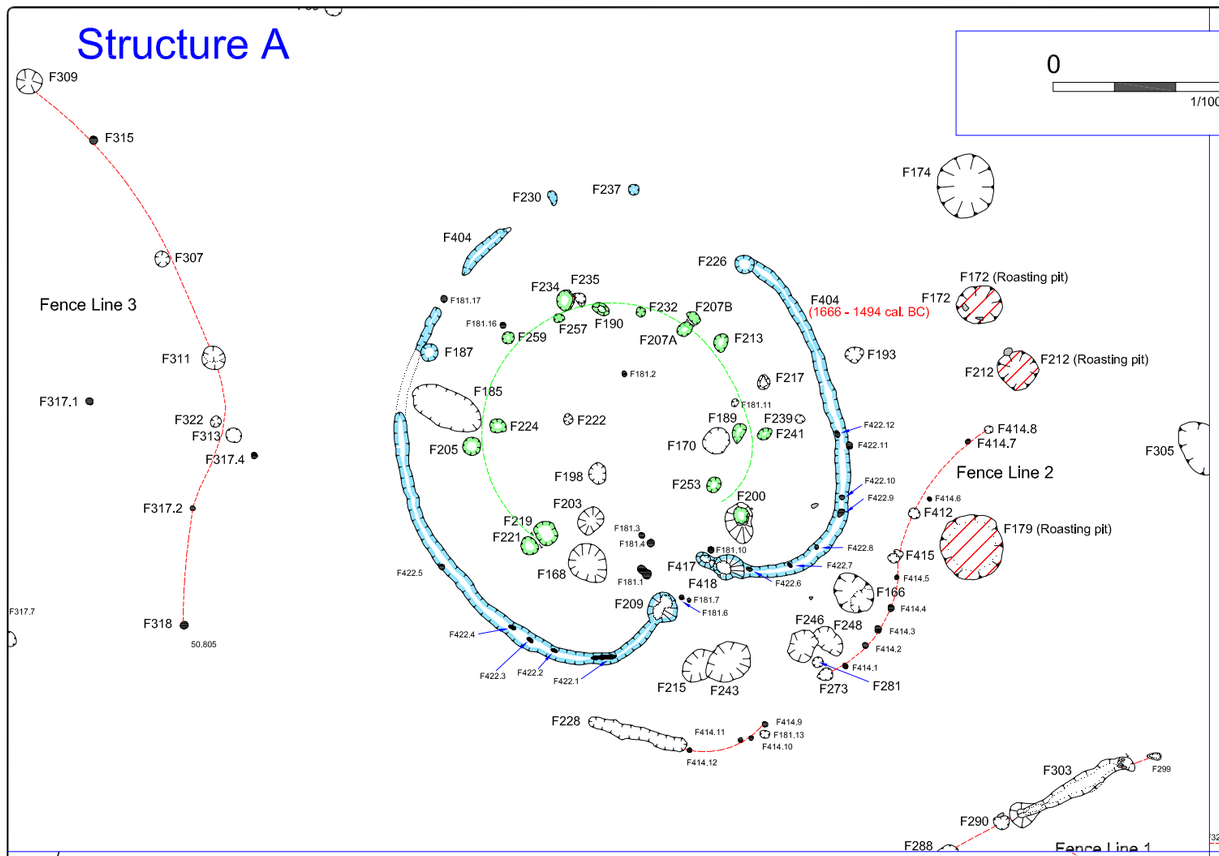
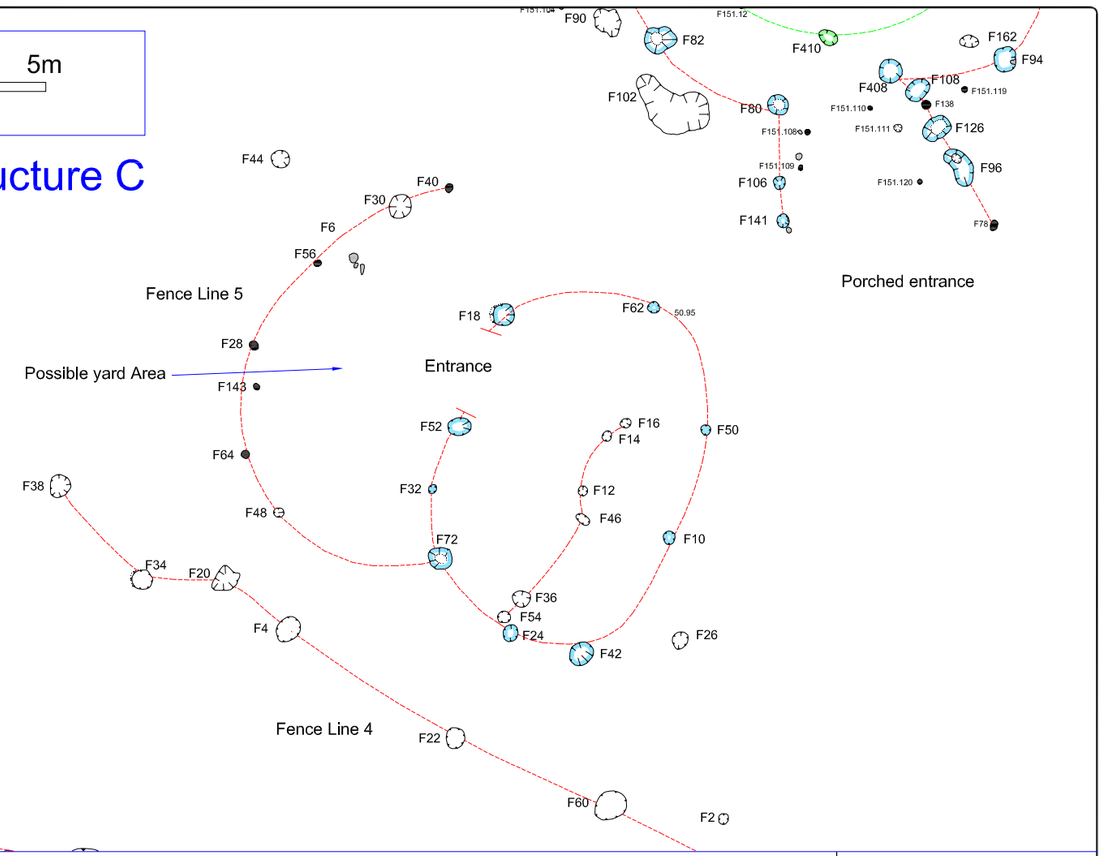
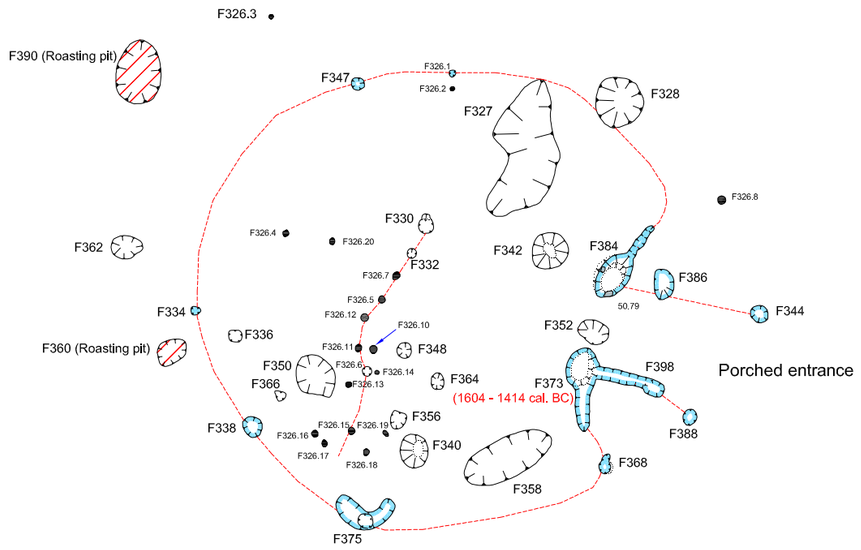
Structure A



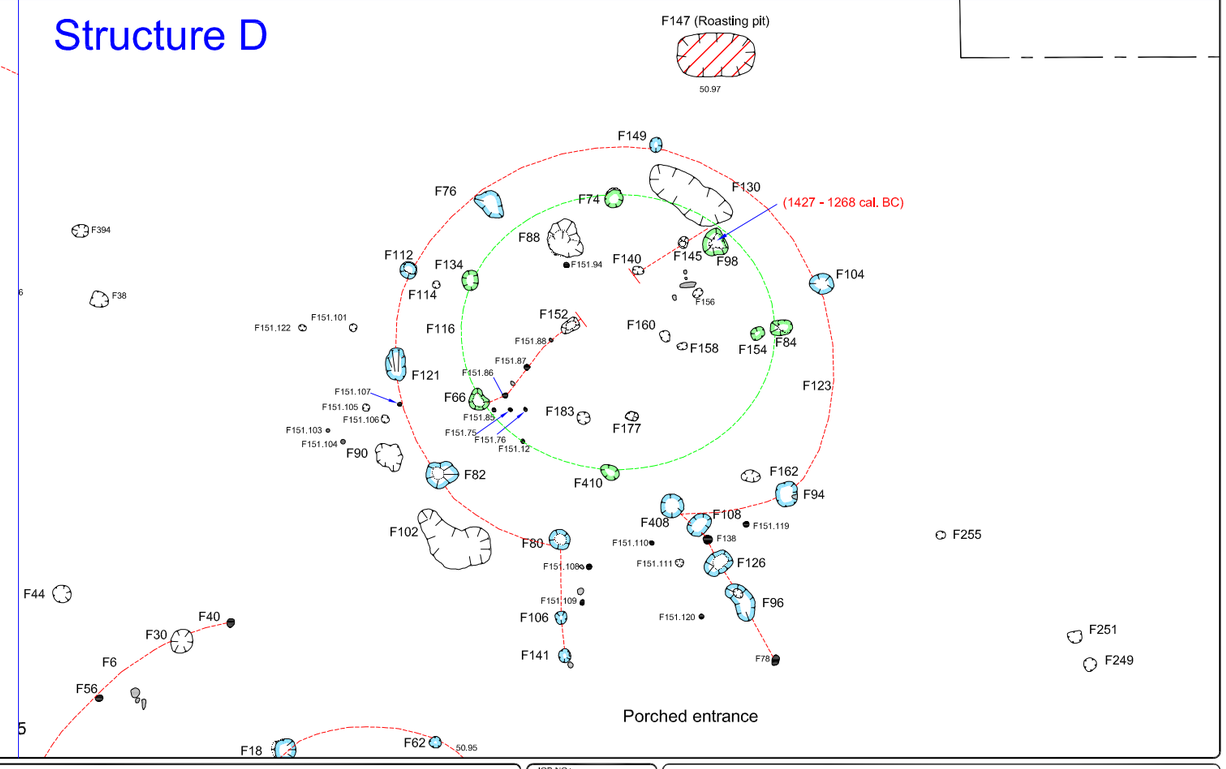
Structure C



Structure B



Structure D



ISO 9001:2000 EQA QUALITY ASSURED ORGANISATION CERT NO. 2976

REVISIONS:	BY:	DATE:	REV:

ARCHAEOLOGICAL LICENCE: Scheme No. A035 - E2274

PRODUCED BY: JH, EB, AA, JPR
DATE SURVEYED: N/A
CHECKED BY: CM
DATE ISSUED: 07.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme
TITLE: Structures, Site 125.4
CLIENT: South Tipperary County Council

JOB NO.: 06038-R75
DRAWING NO.: 06038-233-R75
FIG. NO.: 8
SCALE: 1/100 @ A3

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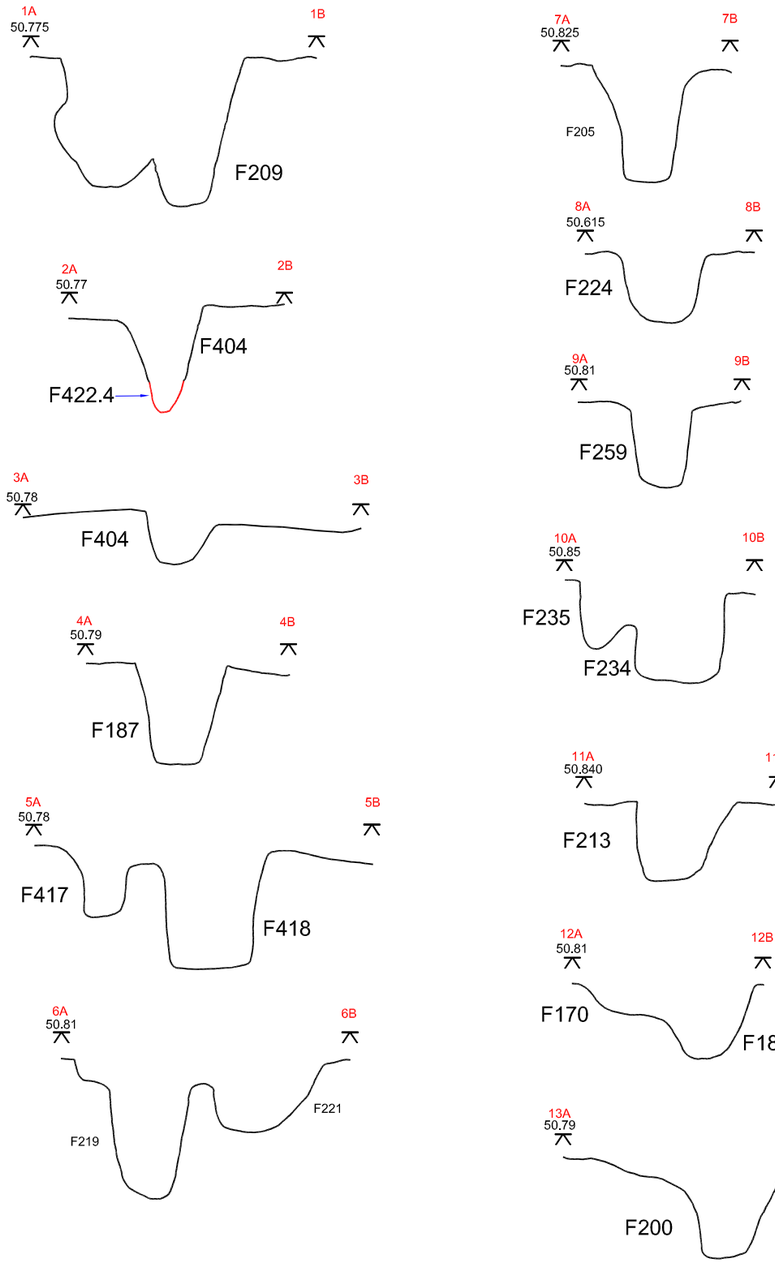
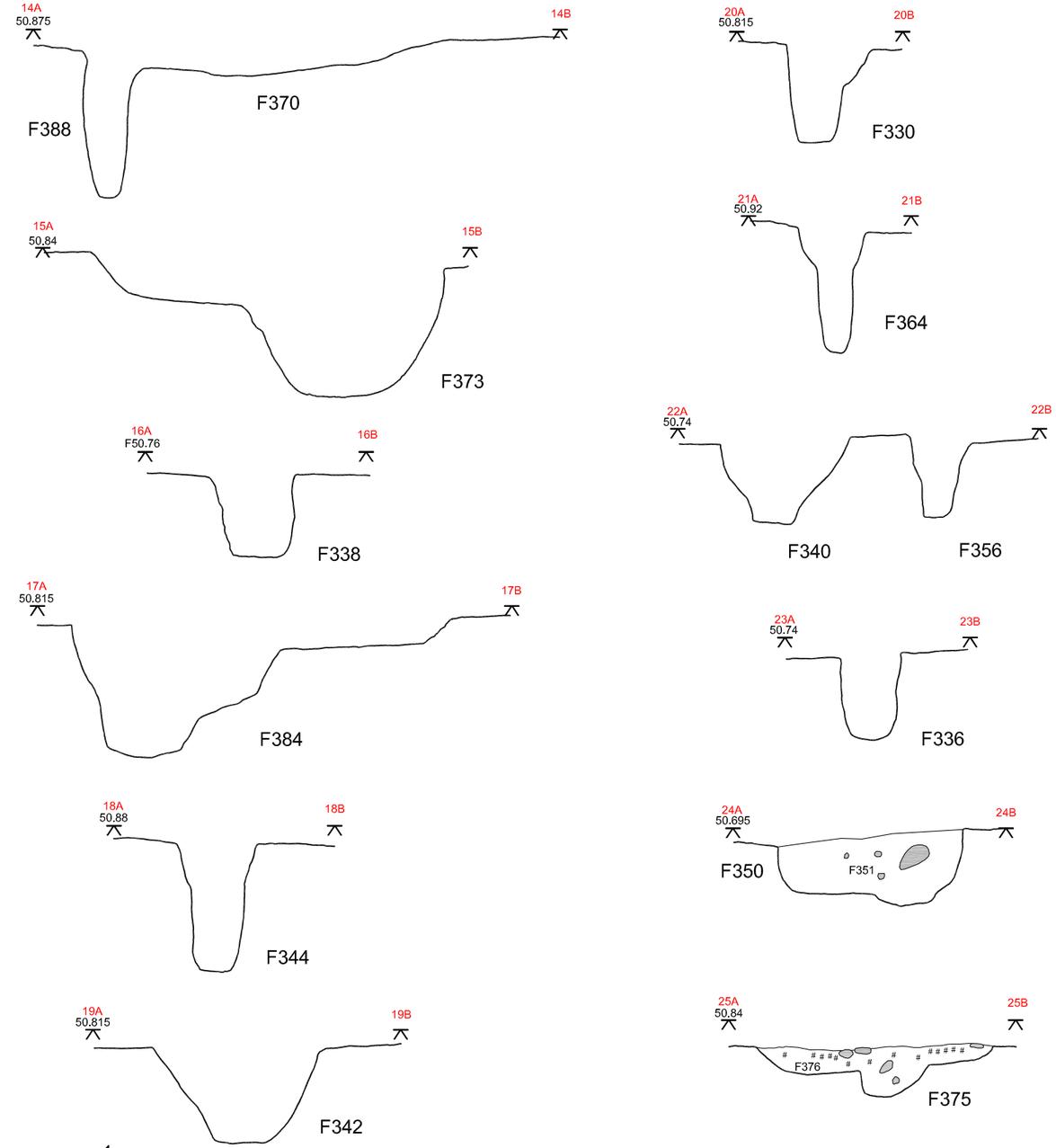
Excavation No. 2274
Site: 125.4 Structures A & B

Structure A 1666 - 1494 BC



Structure B 1604 - 1414 BC



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ARCHAEOLOGICAL LICENCE: Scheme No. A035 - E2274

PRODUCED BY: JH, EB, AA, JPR
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CHECKED BY: CM
DATE ISSUED: 07.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme
TITLE: Sections, Structure A & B, Site 125.4
CLIENT: South Tipperary County Council

JOB NO.: 06038-R75
DRAWING NO.: 06038-234-R75
FIG. NO.: 9
SCALE: 1/20 @ A3

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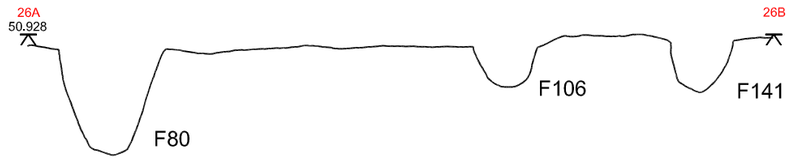
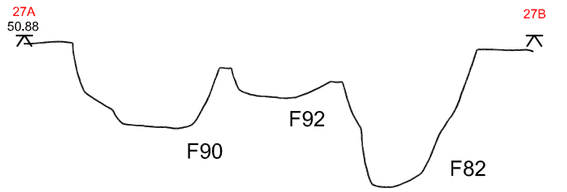
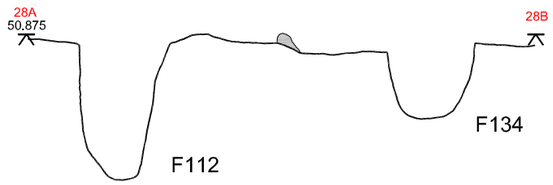
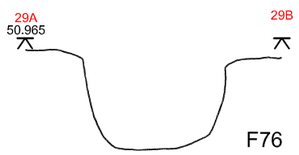
Excavation No. 2274
Site: 125.4 Structure D

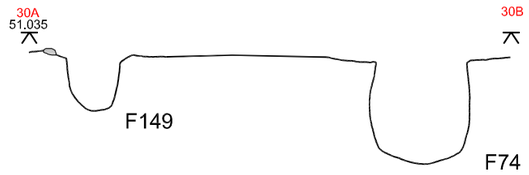
Structure D, 1427 - 1268 BC

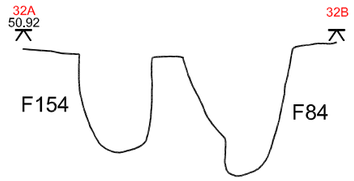


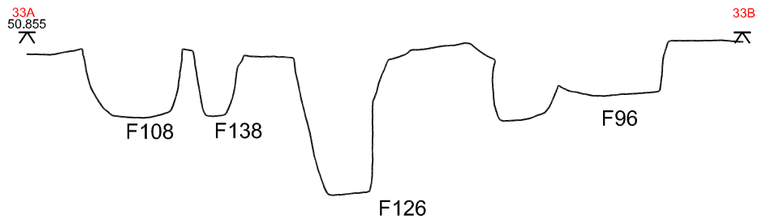


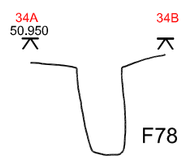


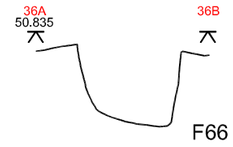


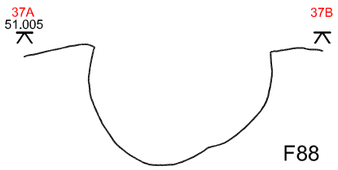


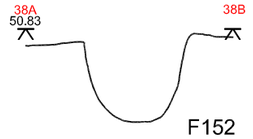


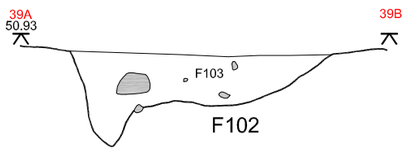


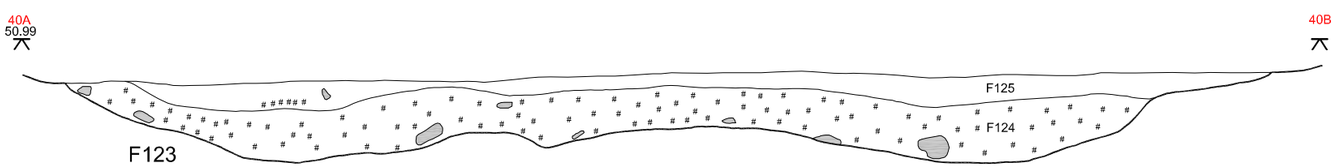












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CERT NO. 2976

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ARCHAEOLOGICAL LICENCE: Scheme No. A035 - E2274
PRODUCED BY: JH, EB, AA, JPR
DATE SURVEYED: N/A
CHECKED BY: CM
DATE ISSUED: 07.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme
TITLE: Sections, Structure D, Site 125.4
CLIENT: South Tipperary County Council

JOB NO.: 06038-R75
DRAWING NO.: 06038-235-R75
FIG. NO.: 10
SCALE: 1/20 @ A3

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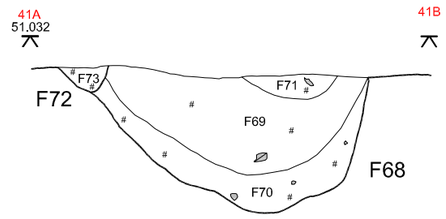
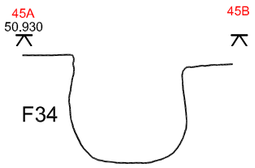
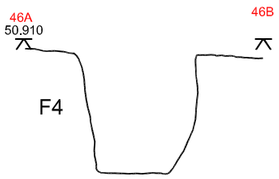
Excavation No. 2274
Site: 125.4

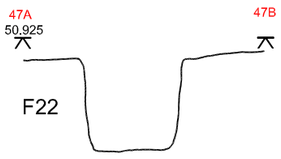
Structure C

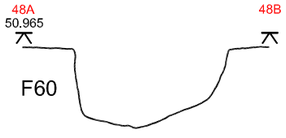


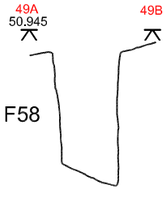
Fenceline 4



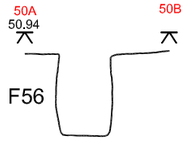


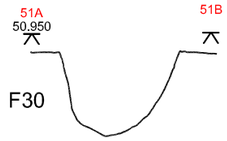


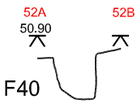




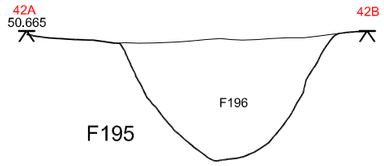
Fenceline 5

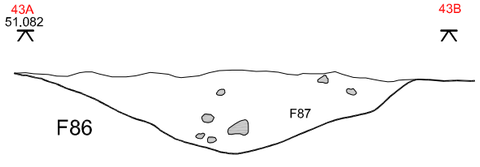




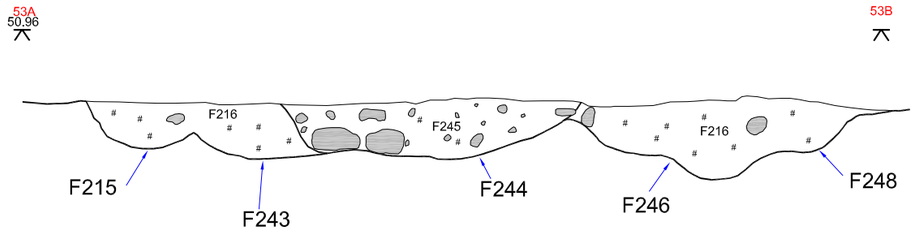


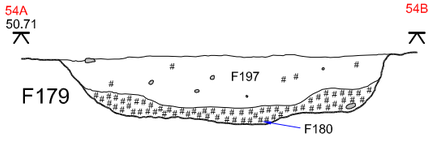
Ditch F195 & F86

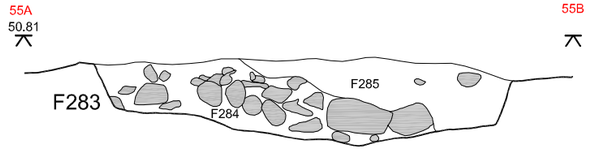




Pits







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ARCHAEOLOGICAL LICENCE: Scheme No. A035 - E2274

PRODUCED BY: JH, EB, AA, JPR
DATE SURVEYED: N/A
CHECKED BY: CM
DATE ISSUED: 07.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme
TITLE: Sections, Site 125.4
CLIENT: South Tipperary County Council

JOB NO.: 06038-R75
DRAWING NO.: 06038-236-R75
FIG. NO. 11
SCALE: 1/20 @ A3

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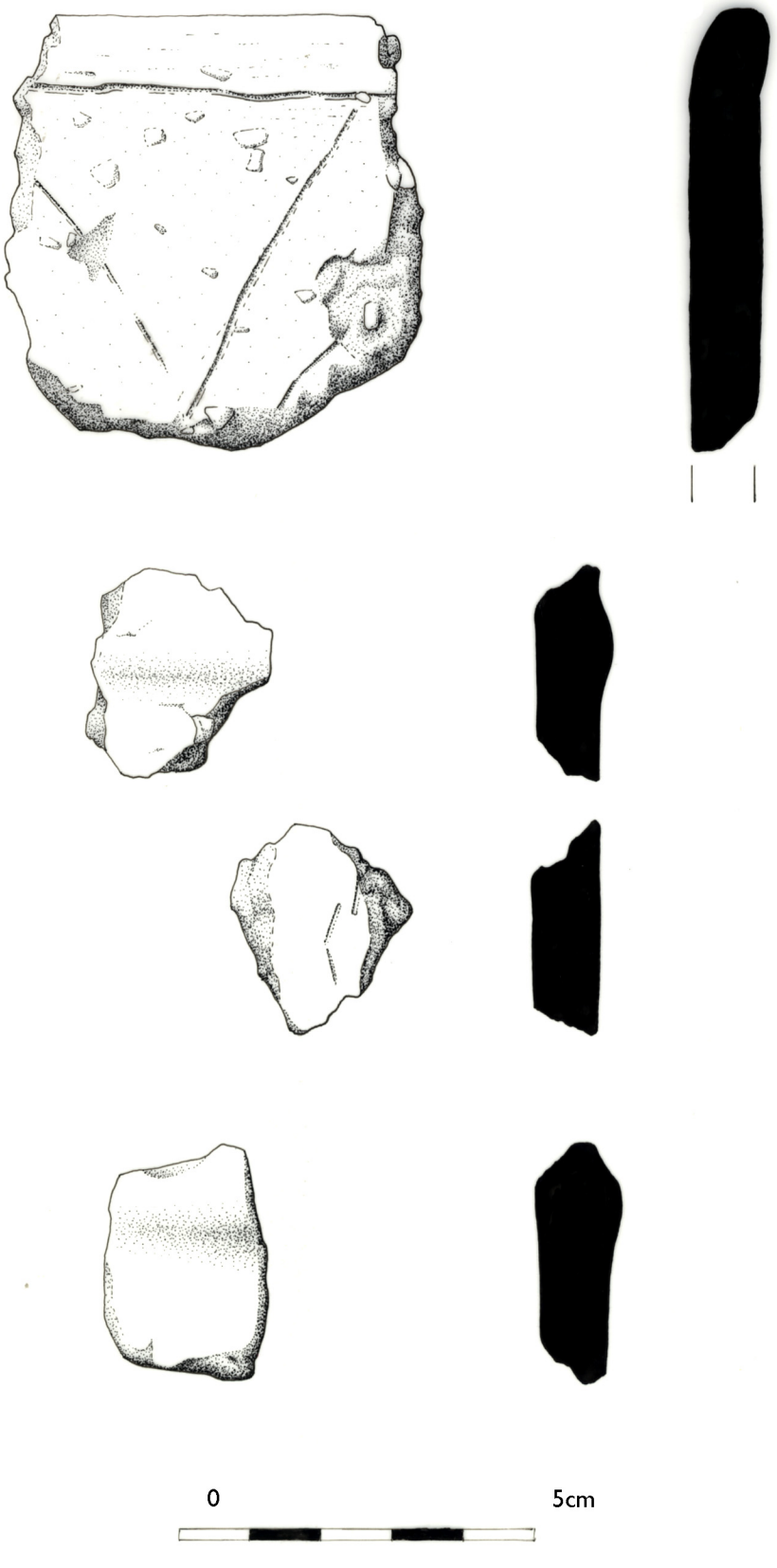

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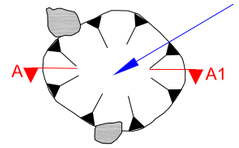
Job	N8/M8 Cashel-Mitchelstown, Co. Tipperary (E2274)
Ref.	06038-R75
Date	02/11/07
Client	South Tipperary County Council
Scale	As indicated
Fig. 12	Site 125.4, pottery illustrations (by Johnny Ryan)

Excavation No. 2274
Site: 125.5

51.90



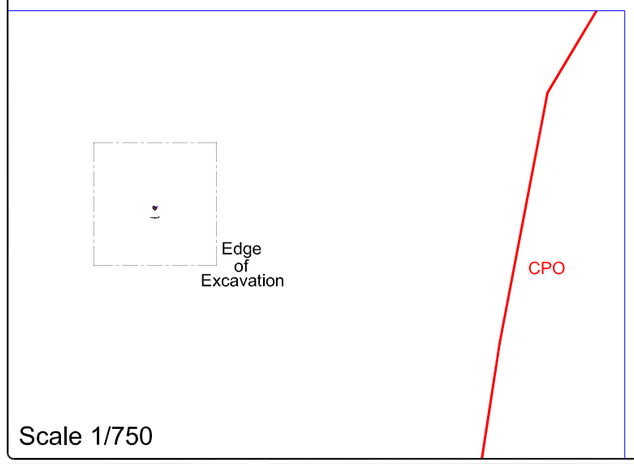
51.65

F2 Cremation pit

51.88

0 1m

1/20



Scale 1/750

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CERT NO. 2976

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ARCHAEOLOGICAL LICENCE: Scheme No. A035 - E2274

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DATE SURVEYED: N/A
CHECKED BY: CM
DATE ISSUED: 07.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme
TITLE: Post-excavation plan and profile, Site 125.5
CLIENT: South Tipperary County Council

JOB NO.: 06038-R75
DRAWING NO.: 06038-188-R75
FIG. NO. 13
SCALE: 1/20 @ A3

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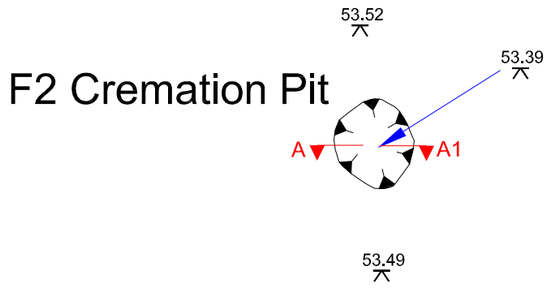
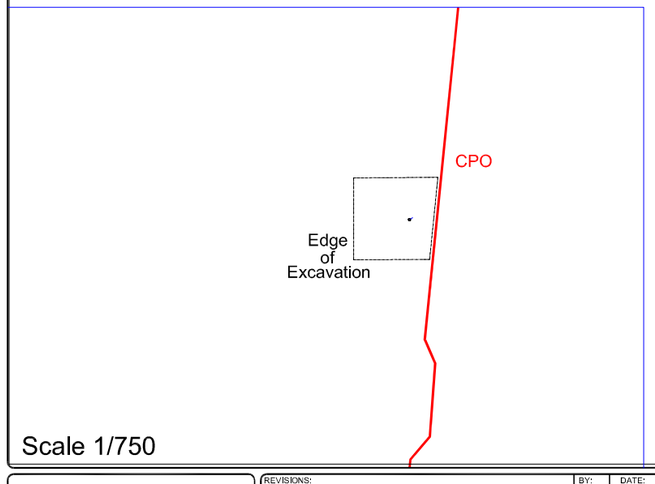
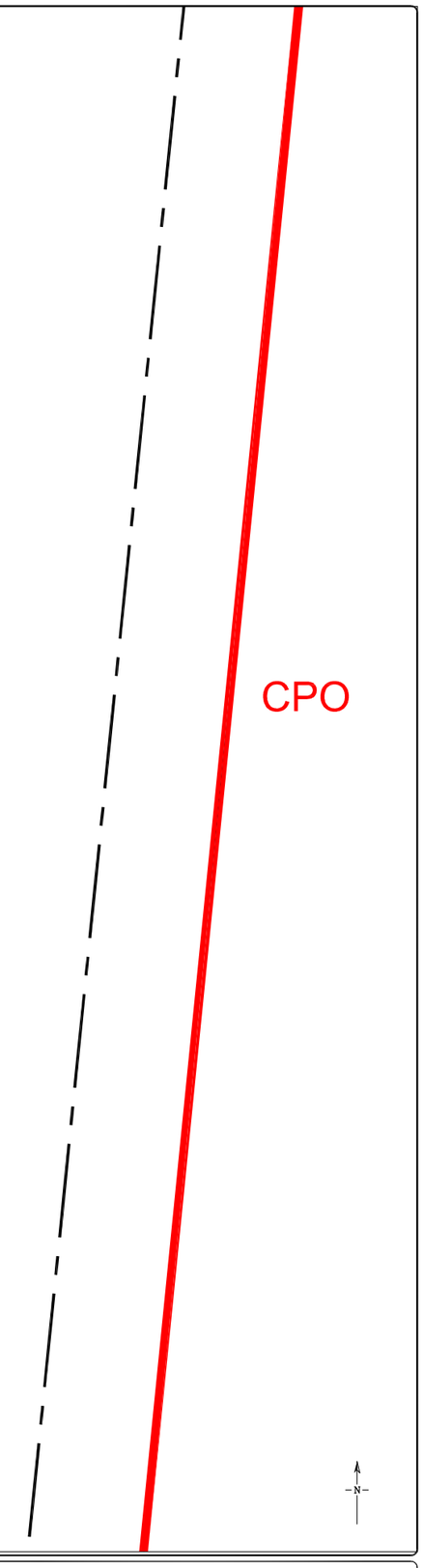
Excavation No. 2274
Site: 127.1







Scale 1/750

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PRODUCED BY: JH, EB, AA, JPR
DATE SURVEYED: N/A
CHECKED BY: CM
DATE ISSUED: 07.11.07

PROJECT: N8 Cashel to Mitchelstown Road Improvement Scheme

TITLE: Post-excavation plan and profile, Site 127.1

CLIENT: South Tipperary County Council

JOB NO.: 06038-R75
DRAWING NO.: 06038-189-R75
FIG. NO.: 14
SCALE: 1/20 @ A3

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Plate 1 Site 125.4, General shot of site location looking southwest

Plate 2 Site 125.4, General shot of site location looking south

Plate 3 Site125.4, Structure during excavation

Plate 4 Site 125.4, Structure A looking north

Plate 5 Site 125.4, Structure A looking north

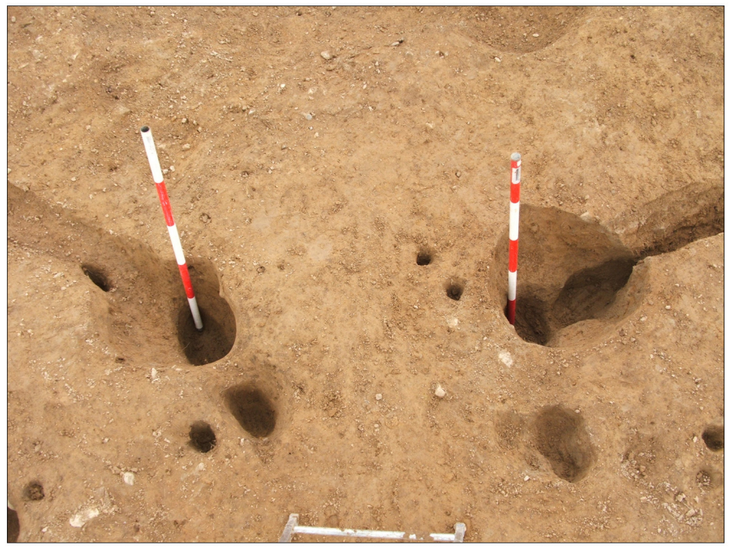

Plate 6 Site 125.4, Structure A entrance

Plate 7 Site 125.4, East facing section of posthole F200

Plate 8 Site 125.4, Slot trench F404 and stakeholes F414.6 & F414.7

Plate 9 Site 125.4, Slot trench F404 and stakeholes F414.8-F414.12

Plate 10 Site125.4, Posthole F224 looking southeast

Plate 11 Site125.4, Posthole F213 looking east

Plate 12 Site 125.4, Pit F188 looking north

Plate 13 Site 125.4, Pit F174 looking west

Plate 14 Site 125.4, Southeast facing section of Pit F283

Plate 15 Site 125.4, Hearth F296 looking east

Plate 16 Site 125.4, Pit F174

Plate 17 Site 125.4, Structure B, entrance porch looking west

Plate 18 Site 125.4, General shot of Structure B looking south

Plate 19 Site 125.4, East facing section of posthole F384

Plate 20 Site 125.4, East facing section of posthole F373

Plate 21 Site 125.4, Structure D looking north

Plate 22 Site 125.4, Structure D looking south

Plate 23 Site 125.4, East facing section of posthole F98

Plate 24 Site 125.4, Northeast facing section of pit F131

Plate 25 Site 125.4, Posthole F44

Plate 26 Site 125.4, South facing section of Pit F147

Plate 27 Site 125.4, Southeast facing section of pit F123

Plate 28 Site 125.4, South facing section of Pit F68 and posthole F72

Plate 29 Site 125.4, Pit F68 and posthole F72

Plate 30 Site 125.4, Pit F166 looking south

Plate 31 Site 125.4, Ditch F195

Plate 32 Site 125.5, Pre-excavation shot of cremation pit F2

Plate 33 Site 125.5, Post excavation shot of cremation pit F2

Plate 34 Site 127.1, Post excavation shot of cremation pit F2