

**Final Report on
Archaeological Monitoring
at Mullaghmarky Td.,
Castleisland, Co. Kerry**



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1. Introduction

Following Archaeological Works as part of the N21 Castleisland Bypass Road Improvement Scheme – Archaeological Works Contract 2, Kerry County Council, in association with the National Monument Service of the Department of the Environment, Heritage and Local Government, an area was identified as requiring archaeological monitoring of topsoil stripping and other earthwork excavations, during the main civil engineering works. The Archaeology Company was appointed by Kerry County Council to carry out archaeological monitoring of these works, covering c. 53,000 square metres and located in Mullaghmarky townland, Co. Kerry.

Work was completed under Licence No. 07E 0474 Ext. This document is a report on the results of the monitoring works.

2. Site location

The site is located in the townland of Mullaghmarky, approximately 2.3 km north-east of Castleisland Co. Kerry (figs.1-6). The monitored area occupied a 5 fields between Pound Road (NE limit), which runs NW of Castleisland and local, unclassified road runs through Portduff and Doolaig South townlands (SW limit) (fig.3).

3. Archaeological & Historical Background

Mullaghmarky townland consists of 406 acres and is located with the Barony of Trughanacmy and the Civil Parish of Castleisland. The etymology of Mullaghmarky is from the Irish *Mullac mairce*, meaning 'summit of the horse'. The settlement pattern of extant archaeological sites represented on the Record of Monuments and Places (RMP) maps of Mullaghmarky (Sheets No. 39 and 40), is of Early Christian/early medieval date range with a high concentration in ringforts and enclosure sites. These sites are generally considered to have functioned as semi-fortified homesteads and farms within a society where wealth was largely based in livestock. The high concentration in this type of settlement within Mullaghmarky and surrounding townlands is suggestive of relatively intense settlement and agricultural land exploitation in the region during the broader medieval period.

In February and March 2006 a programme of archaeological testing was carried out along the proposed route of the 5.4km N21 Castleisland Bypass (J14) Road Improvement Scheme (RIS) [KY-00-110], Co. Kerry by TVAS Ireland Ltd. under licensed director Kate Taylor (Taylor & McNamara 2006). An archaeological

evaluation of Recorded Monument KE039-027, a ringfort was conducted involving targeted archaeological testing at the ringfort site. Several archaeological sites were identified during the 2006 testing programme. Subsequent to the initial phases of assessment and testing, the Archaeology Company was engaged by Kerry County Council to complete the archaeological resolution and preservation by record of the eight archaeological sites requiring additional excavations along the proposed route. This work began in June 2007 directed Michael Tierney. The archaeological resolution of these sites (AR014, AR016, AR020, AR021, AR022, AR023, AR024 and AR025) was completed in December 2007 (Tierney *et al*, 2010-2011).

A number of features were excavated within Mullaghmarky townland in close proximity to the present monitoring zone, including the ringfort RMP KE039-027. This excavation site was known as Site AR016 and carried out under Licence Number 07E 0474. About one third of the ringfort ditch and interior and previously unknown, subsurface features on the exterior were excavated between August and October 2007. A prehistoric roundhouse of slot trench, post and stakehole construction was excavated. This was radiocarbon-dated to cal. BC 1219-1109, placing it within the Middle Bronze Age. The ringfort was interpreted as a cattle corral rather than a house site because of the lack of interior features and the cattle bones found in the ditch backfill. The upper layer of the backfilled ditch was cut into by a bowl furnace for smelting iron and a corndrying kiln both of which were radiocarbon-dated to the medieval period. To the south of these there were two modern limekilns and a series of previously unrecorded field boundaries that were dated by radiocarbon dating and association to the 18th-19th centuries. These were the most relevant features for comparison with the features found during monitoring. They were the remains of a period of land improvement, part of which included enclosure (new field boundaries) and soil improvement (lime production and spreading).

4. Methodology

Monitoring of groundworks was carried out between 22nd - 26th June 2009 and 16th - 17th July 2009. In total two bulldozers were used to remove the topsoil to the potential archaeological horizons. The soil was stored along NW side of the stripped area. Hedgerows between fields were removed using a mechanical excavator machine with grading bucket or cleaning rake attached. All work was carried out under archaeological supervision. Any archaeological and potential archaeological features were cleaned by hand to assess their nature. Written and photographic records of potential features were taken during the works and potential features were surveyed. Due to an oversight during fieldwork no levels were recorded.

5. Results of archaeological monitoring

The proposed road, between chainage 2800 and 3370, was marked out through 5 fields which were used for pasture. Those fields, for the purpose of this report, were numbered from 1 to 5 (fig.3). Limits between them were defined by field boundaries consisted mainly of hedgerows but occasionally with small earthen embankments. Monitoring was undertaken between 22nd - 26th June 2009 and 16th -17th July 2009. During that time weather conditions were dry and sunny.

Field 1

Field 1 was located in NE portion of the current project. It was a part of the bigger field which was a subject of archaeological excavation in 2007 (Tierney, Buggie, & Leiniger). A small section of the field that had not been assessed before required monitoring. The monitored area measured approximately 84m (NNW-SSE) by 8m (EEN-WWS) and was gently sloping in S direction. From E and S sides Field 1 was limited by earthen bank with mature hedgerows (pl. 1).

The topsoil was 0.15-0.2m deep and consisted of dark grey silty clay. Occasionally it contained fragments of modern pottery and glass. The natural subsoil consisted of yellowish sandy clay with patches of grey sand and gravelly-sandy clay. A number of parallel linear features running NW-SE were noted (pl.2). They were modern shallow U-shaped furrows.

In southern part of the Field 1 a circular, potentially archaeological feature was noted. It measured 0.65m (N-S) by 0.7m (E-W). The upper fill consisted of black clayey sand with small flecks of charcoal and occasional small stones. It was thought to be a bowl furnace on the basis of its appearance but turned out to be shallow and non-archaeological (pl.3).

Field 2 & 3

These fields sloped gently to the south and west (pls.4-7). The boundary between fields consisted of small earthen bank topped with a hedgerow. The soil was stripped up to a depth of 0.4m. Topsoil of 0.2-0.4m in depth consisted of dark grey and brownish grey silty clay. It occasionally contained pieces of glass and modern pottery. The natural subsoil consisted of yellowish and grey sandy clay with frequent patches of grey gravelly clay. In places the natural oxidised into reddish brown, black and very light grey soil usually contained a large number of stones. Quite often those patches were fairly regular in shape and big in size suggesting an archaeological feature. However, on examination all of them appeared to be natural

in origin (pl.8) and were related to natural iron panning process within the soil horizon.

During monitoring traces of previous test trenching were noted as well as a number of modern agricultural furrows (pl.9). Also a number of archaeological features were identified within fields 2 & 3 including three curving parallel linear features, a charcoal pit and a kiln.

Linear feature I

It was noted in central part of the Field 2 and SE portion of Field 3. First it run NE-SW and then slightly turned in WSW direction (fig.6 and pls.10-12). The continuation was impossible to observe due to spoil heap created by the bulldozer. The uncovered part measured c.125m in length and 0.6-1.3m in width, with a maximum depth of 0.1m, although in many places the linear was intermittent. Also in some places it was cut by previous test trenching or other linear features (eg. linear feature VI). The fill consisted of light grey and mid brownish grey gravely silty clay in NE part changing into mid greyish brown silty clay in SW portion. Due to similarity of the fill with natural and soil disturbance caused by previous, some edges of the feature were irregular and unclear (fig. 14).

This linear feature was interpreted as an early modern field boundary that went out of use by the 19th century (see figs. 4 and 5).

Linear feature II

It was similar to linear feature I (fig.12). It ran parallel to it within the distance of c.7m in NW direction (pl.10). The uncovered part measured c.88m in length and 0.6-1.4m in width and was shallow again at 0.15m (pls.13 and 14). It was so shallow in places as to disappear and some edges were difficult to detect, especially in NE and SW sections. The fill consisted of mid brownish grey and grey gravely silty clay (NE part) changing into brownish grey clay with a number of stones (SW part).

This was another early modern field boundary.

Linear feature III

It was positioned between linear features I and II and parallel to them (pl.10). The uncovered part measured c.116m in length and 0.6-1.9m in width and up to 0.2m deep. Edges of the feature were quite clear but in many places irregular (pl.15). The fill consisted of light and dark grey gravely silty clay and gravel (NE part) changing into dark brownish grey silty clay with a number of stones.

Similar to linear features I and II and also interpreted as an early modern field boundary (Figs. 7 and 13).

Linear feature IV

This was located in the SW part of Field 2 (fig. 15). It measured c.21.3m in length and 0.6-0.9m in width with a maximum depth of 0.2m, and was orientated NW-SE (pl.16). The fill consisted of dark grey silty clay with big number of small stones.

The linear feature was interpreted as an old field boundary.

Linear feature V

This was the remains of the field boundary removed at this location during the works we were monitoring. It was orientated NNW-SSE (pl.17). The overall length measured c.50.6m although some part of northern fraction was removed completely by bulldozer because again it was a fairly shallow feature with a maximum depth of only 0.15m. The width of the varied from 0.6 to 1.3m. The fill consisted of mid greyish brown peaty-like silty clay with a number of roots and stones (fig. 11).

Linear feature VI

It was parallel to linear feature V, running within the distance of 2m in SW direction (pl.17). The average width was 0.8m and the overall length measured c.52m with a depth of only 0.08m (fig.10) and the northern fraction was removed completely by bulldozer. The fill consisted of mid greyish brown peaty-like silty clay with some roots and stones.

As the linear feature was observed in close proximity of linear V and had similar fill it was interpreted as a part of a modern field boundary.

Linear feature VIII

That was noted in central part of Field 3 (pl.7). It was orientated W-E and measured c.22.5m in length (in total, with the gap) by c.0.8-1m in width and 0.15m deep. Upper fill consisted of dark brown, very soft silty clay in places with inclusion of gravelly (fig. 19).

Probably the same as Linear feature 11 or 111.

Linear feature IX

That was noted in central part of Field 3 (pl.7). It was roughly parallel to linear feature VIII and orientated WWS-EEN. It measured c.16 m in length, c.1.2-1m in width and was 0.15m deep. Upper fill consisted of dark brownish grey, peaty-like clay sand with a number of stones.

Due to its position, this linear feature could be a continuation of linear feature I.

Charcoal pit

It was noted in SW part of Field 2. It was roughly circular in shape measuring 1.6m x 1.7m with a maximum depth of 0.19m. . The upper fill consisted of black and dark grey sandy clay (fig.21 and pl.18) (Tierney and O Dowd, 2010). The feature was interpreted as a pit used for charcoal production. Similar features were found elsewhere on the scheme at AR024 and AR025 where they were found in direct association with iron smelting and smithing furnaces. In this case there were no other ironworking features found. They may have laid outside the roadtake. However, a similar feature was found in the next field at AR016 in the middle of modern field boundaries that are probably a continuation of the linear features found during monitoring. This had no other ironworking features nearby either.

Limekiln

It was observed in the Field 2, close to SE limit. In total the feature measured 5.7m in length and 0.6-2.9m in width and was extended along NE-SW axis (pls. 19-20). The main part, chamber was 2.9m in diameter. The flue part was long c.2.8m and .0.65-1.8m wide. Upper fill consisted of black and very dark soil mixed with a big number of heat-shattered stones (fig.22 and 23). The feature was interpreted as an early modern limekiln (Tierney and O Dowd, 2010). Two similar kilns were excavated in the field to the north during the excavation of AR016 that were dated to the 18th and 19th centuries (Tierney *et al* 2011). There are also the remains of a late 19th century limekiln and quarry to the south in the next field (figs. 3 and 5).

Field 4

This was another field gently sloping to the SW (pl. 21). The northern limit of the field was formed of an earthen bank covered by mature hedgerow. The topsoil consisted of dark brownish grey clayey silt with an average depth of 0.3m. The natural subsoil consisted of light brown and yellowish brown sandy clay (pl. 22) with occasionally black decayed stones and a small number of irregular patches of grey gravelly clayey sand. There were the remains of a late 19th century limekiln and quarry on the eastern boundary of the field but outside the roadtake.

No archaeological features were present.

Field 5

This was another pasture field located on down-slope from Field 4 (pl.23). The topsoil consisted of dark brownish grey clayey silt. The natural subsoil consisted of light brown and yellowish brown sandy clay with occasional black decayed limestone (pl. 24).

In the centre of the Field 5 a linear feature VII (fig.18 and pl. 25). It measured c.47m in length and 1-1.2m in width and was the remains of a recently cleared modern field boundary.

No archaeological features were present.

6. Conclusion

This area in Mullaghmarky Td. has been a subject of archaeological work since February/March 2006. Testing that took place in 2006 and identified several archaeological features including a number of linear features.

Monitoring of the area between CH2800 and CH3370 took place in June-July 2009. Within that zone 9 linear features, a charcoal production and a limekiln were identified. Most of those discoveries were located in Fields 2 and 3. The linear features were the remains of early modern field boundaries, the relict feature of the early enclosure landscape of the 18th century, and the limekiln was from the same period. They form part of a cluster of smallscale industrial activity that was part of the movement to improve agriculture and society in general at this time (Tarlow, 2007). Another part of this cluster was found during the excavations at AR016 in the next field to the north and the latest section is still extant the form of an upstanding limekiln and quarry from the late 19th century located on the eastern boundary of Field 4.

7. References

Kerry NRDO 2006 N21 Castleisland Bypass Road Improvement Scheme (KY-00-110) Archaeological Works Contract 2

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Taylor, K. & McNamara, M. 2006, N21 Castleisland Bypass Road Improvement Scheme, AR016 Mullaghmarky, Co. Kerry, Archaeological Works Contract 1, Licence No: 06E0082, unpublished preliminary archaeological assessment report.

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Tierney, M and O Dowd, J, 2010, *Castleisland Bypass Road Improvement Scheme County Kerry, Archaeological Excavation at Mullaghmarkey, Licence No. 07E0474 Ext.*

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8. Figures

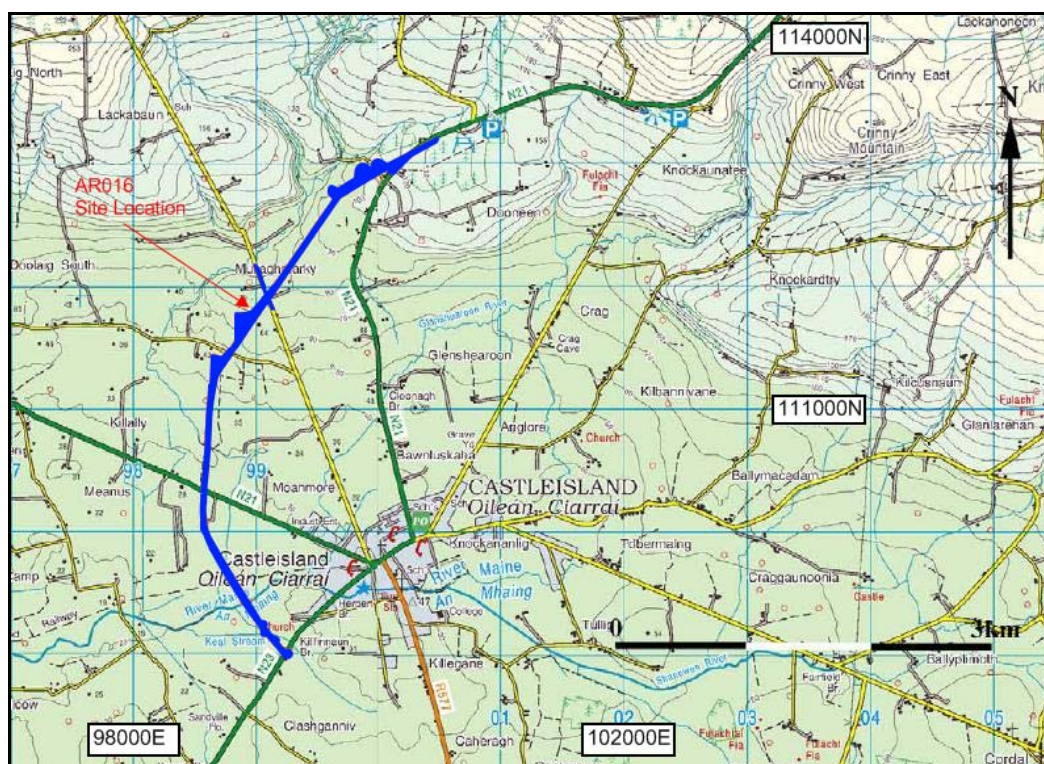


Figure 1 Site location within N21 Castleisland Bypass RIS (indicated in blue)

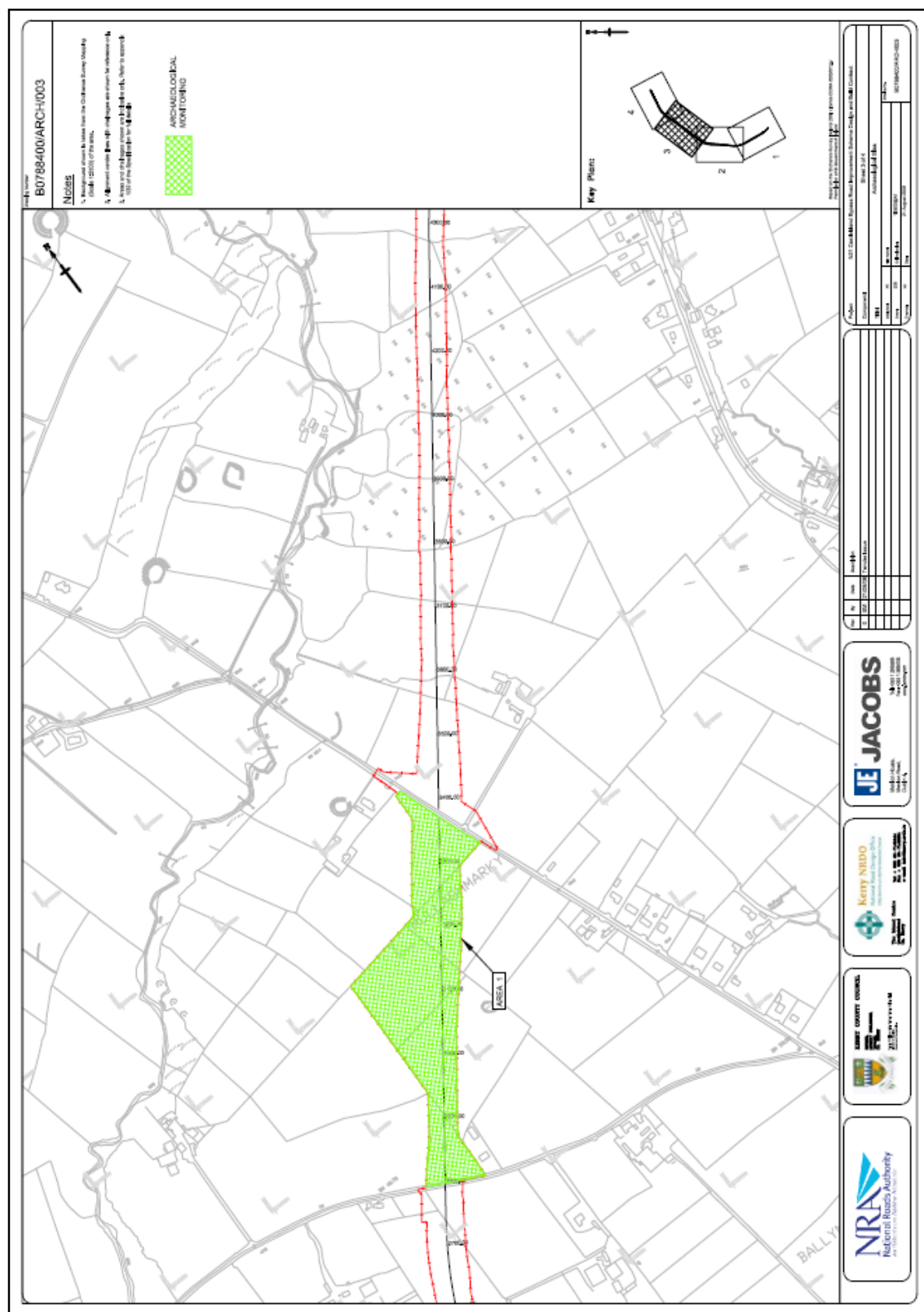


Figure 2 Site layout plan

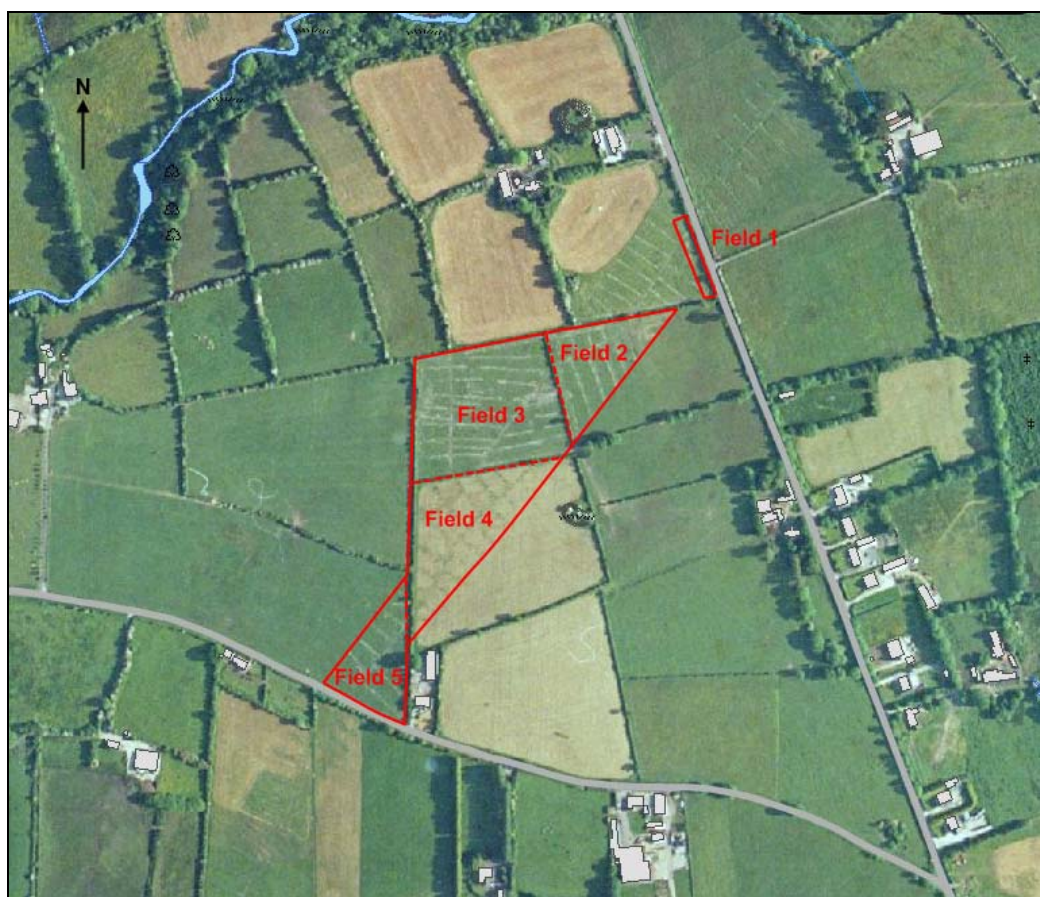


Figure 3 Aerial photo of PDA with marked field boundaries (Field 1-5). On that photo location of test trenches is clearly visible (www.osi.ie).

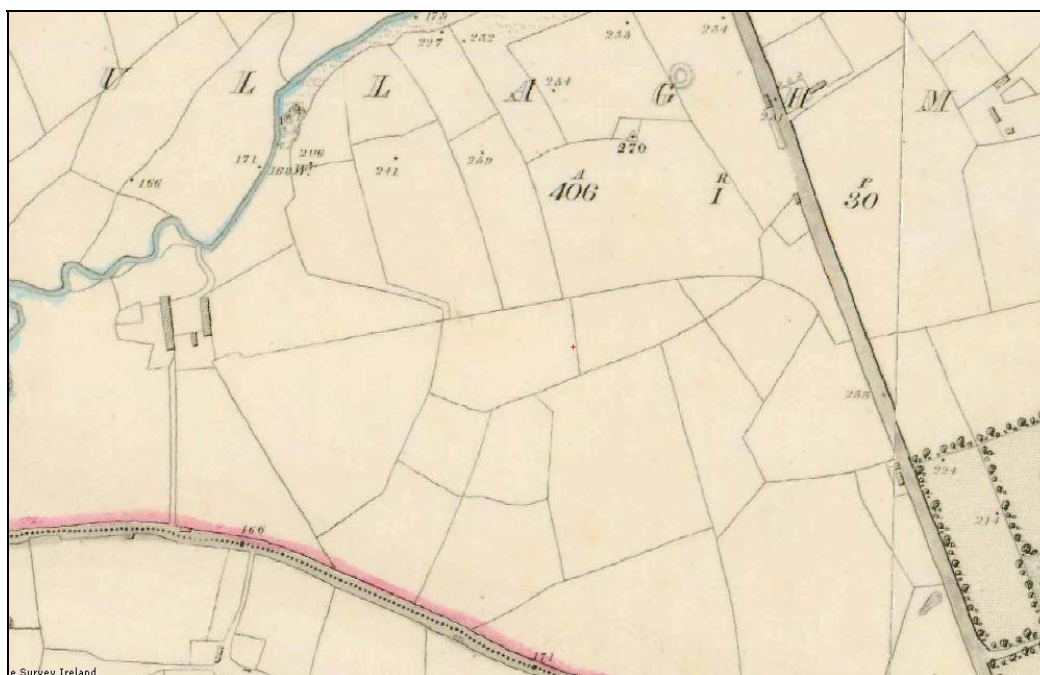


Figure 4 First Edition Ordnance Survey 6 inch map (1829-41) of Mullaghmarky showing the area of PDA

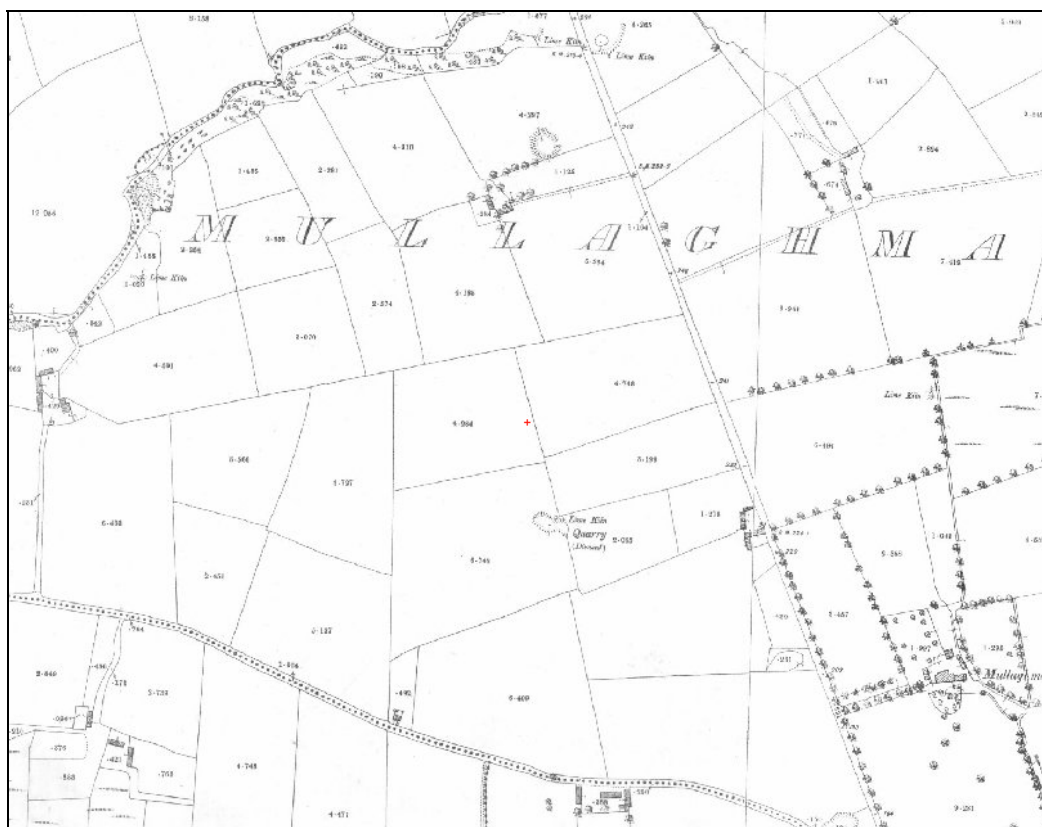


Figure 5 Ordnance Survey 25 inch map (1897-1913) of Mullaghmarky

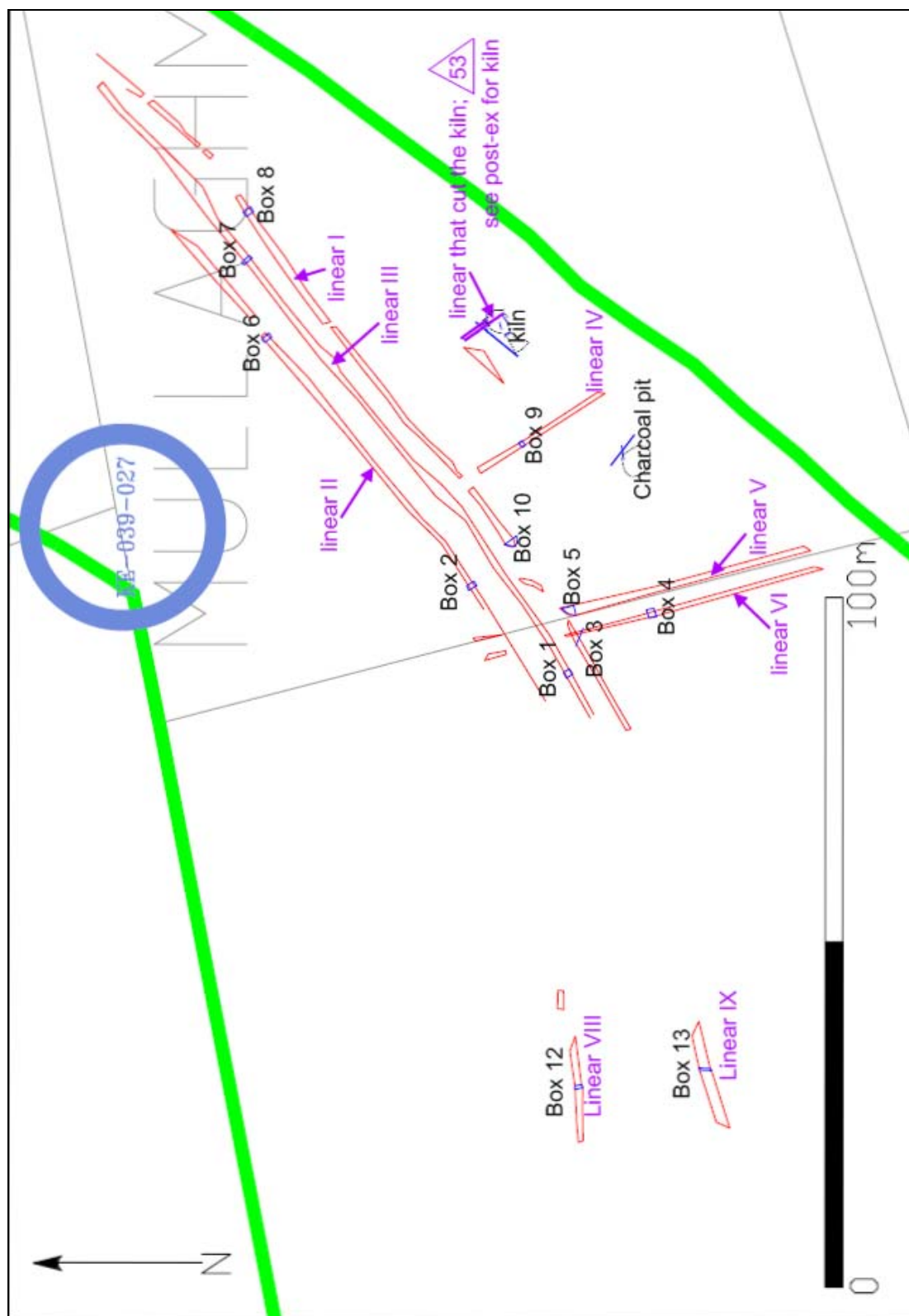


Figure 6 Partial plan of Field 2 & 3 indicating the locations of archaeological features

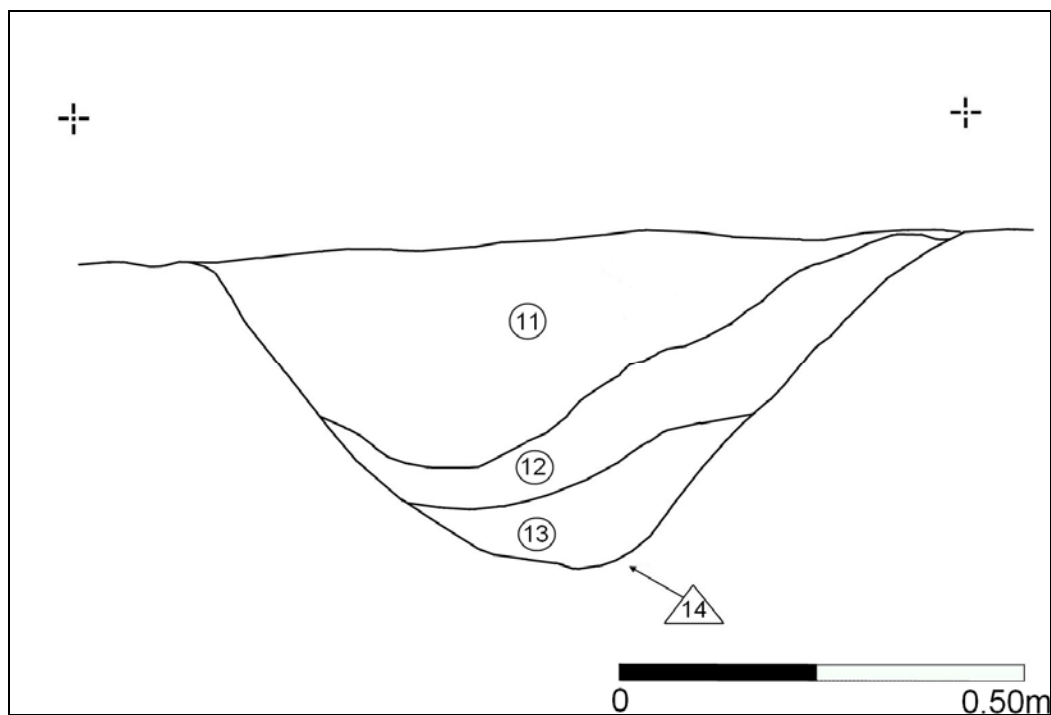


Figure 7: Box section 1, Linear III

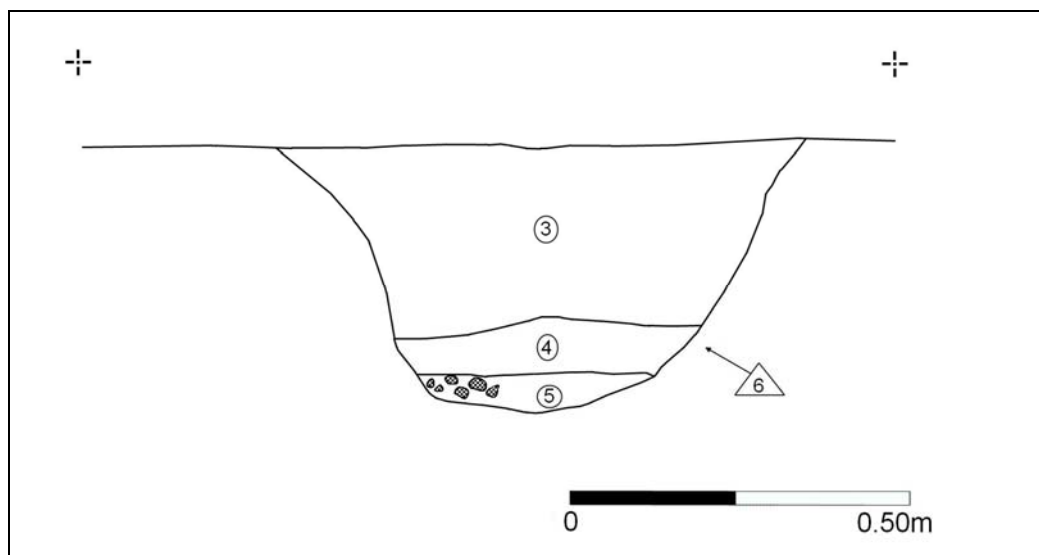


Figure 8: Box section 2

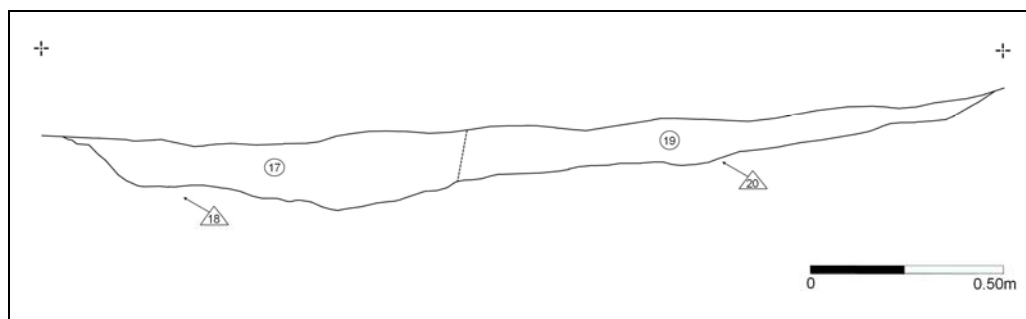


Figure 9: Box section 3, Linear I& VI

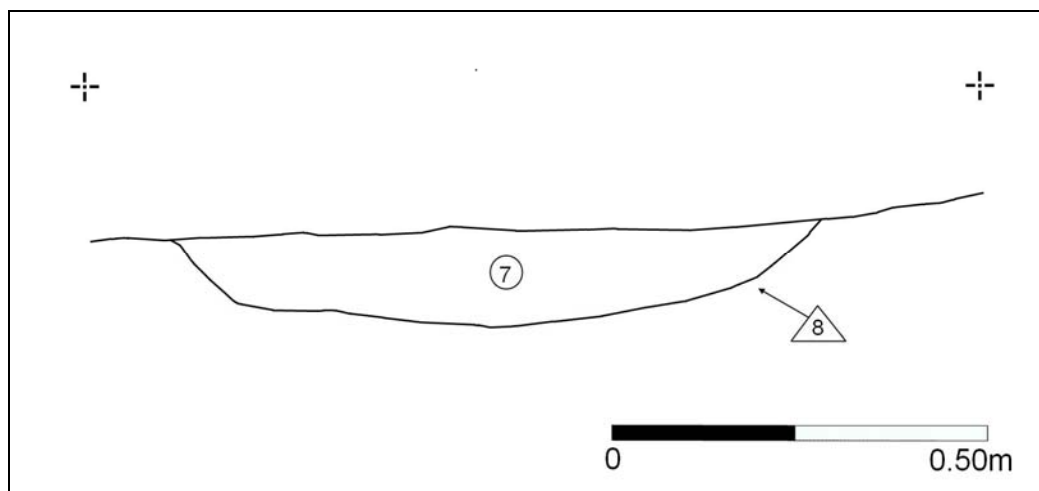


Figure 10: Box section 4, Linear VI

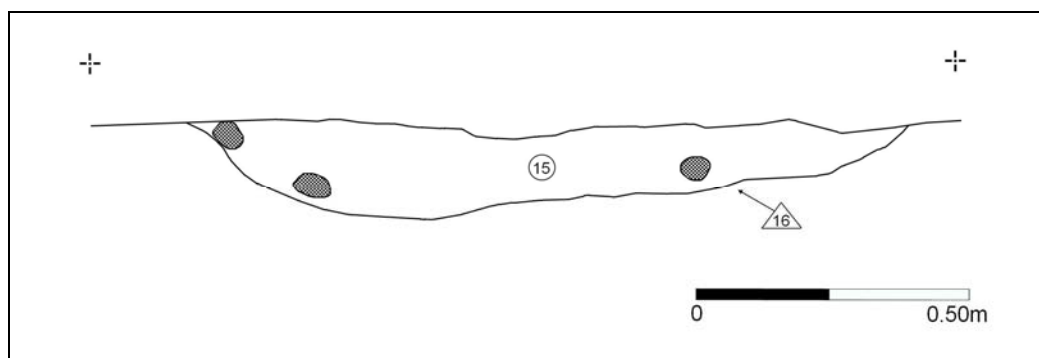


Figure 11: Box section 5, Linear V

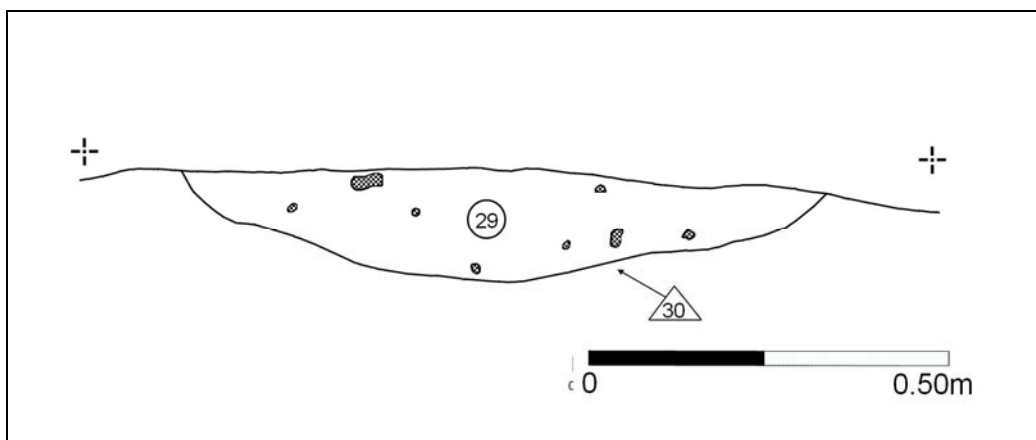


Figure 12: Box section 6, Linear II

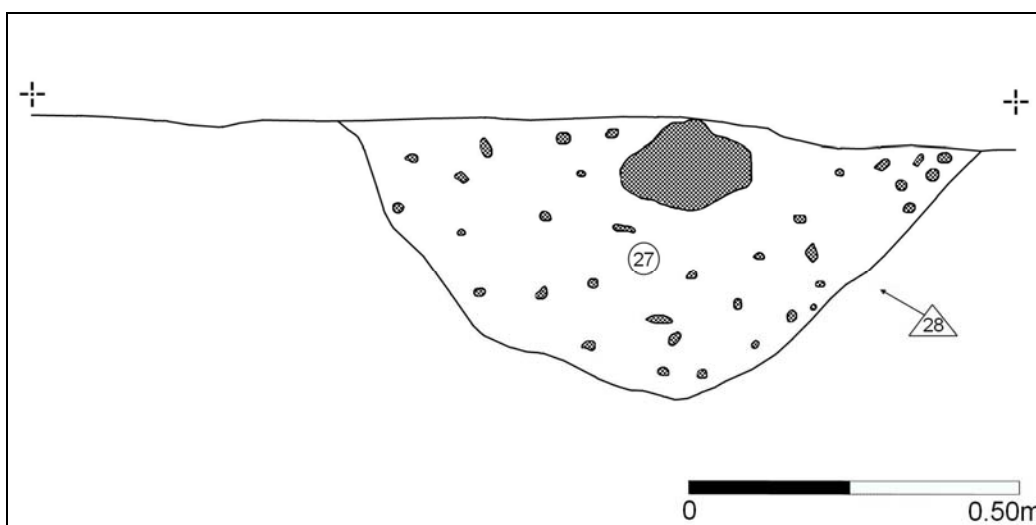


Figure 13: Box section 7, Linear III

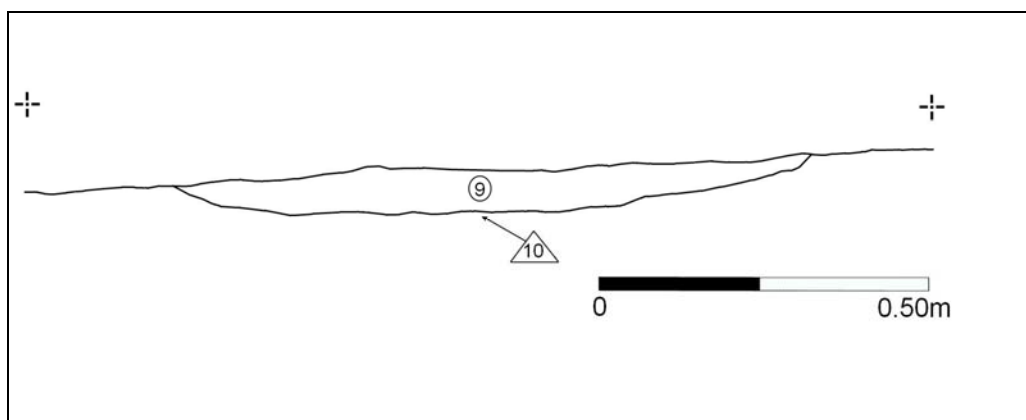


Figure 14: Box section 8, Linear I

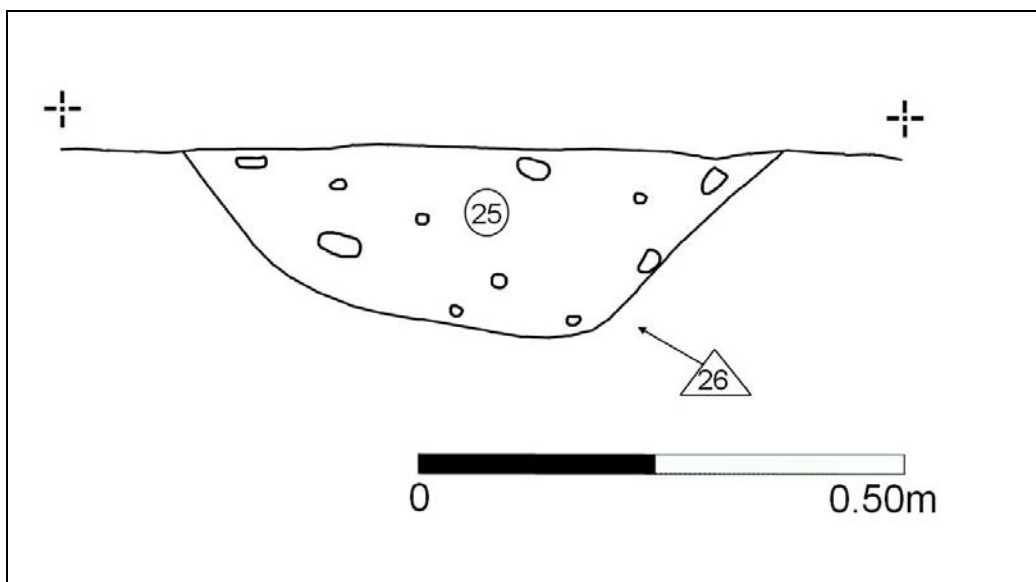


Figure 15: Box section 9, Linear IV

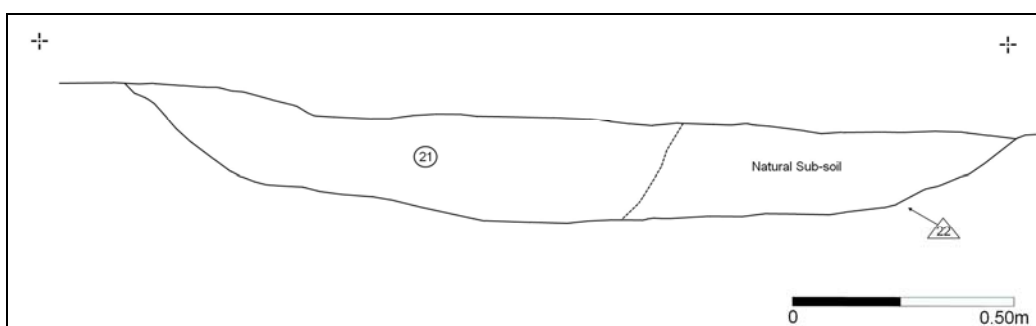


Figure 16: Box section 10, Linear I

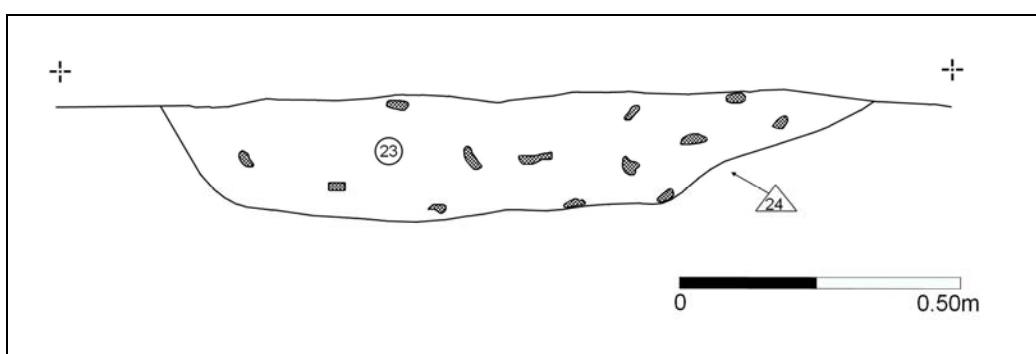


Figure 17: Box section 11

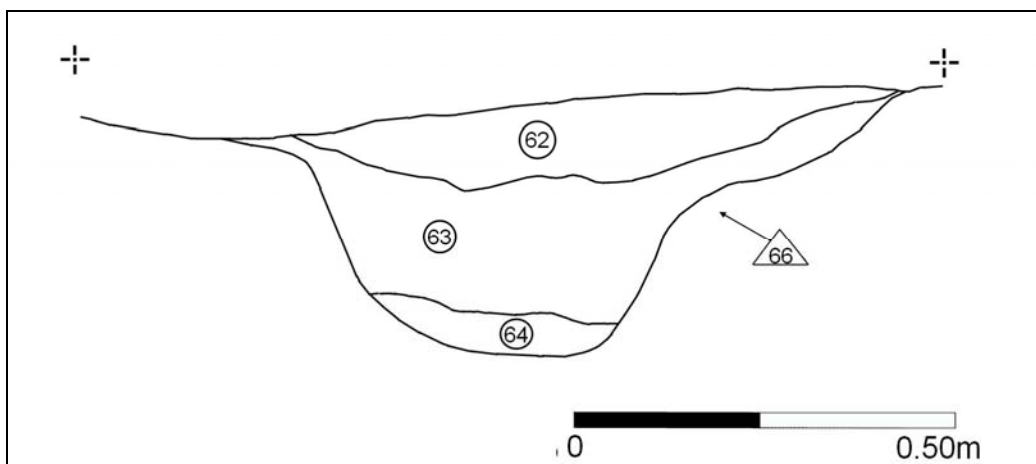


Figure 18: Section drawing, Linear VII

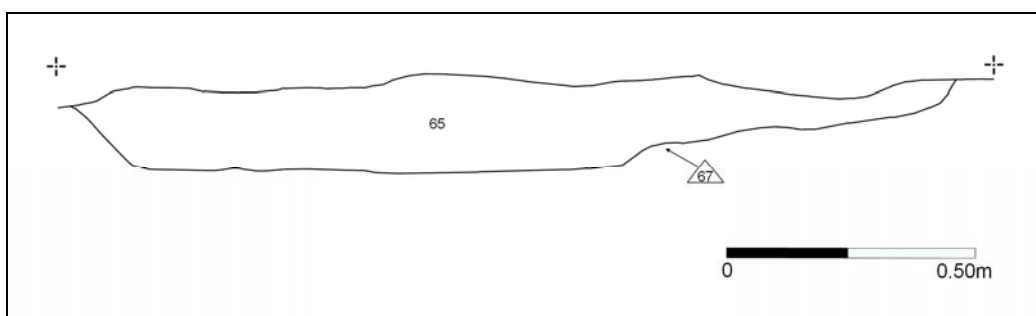


Figure 19: Section drawing, Linear VIII

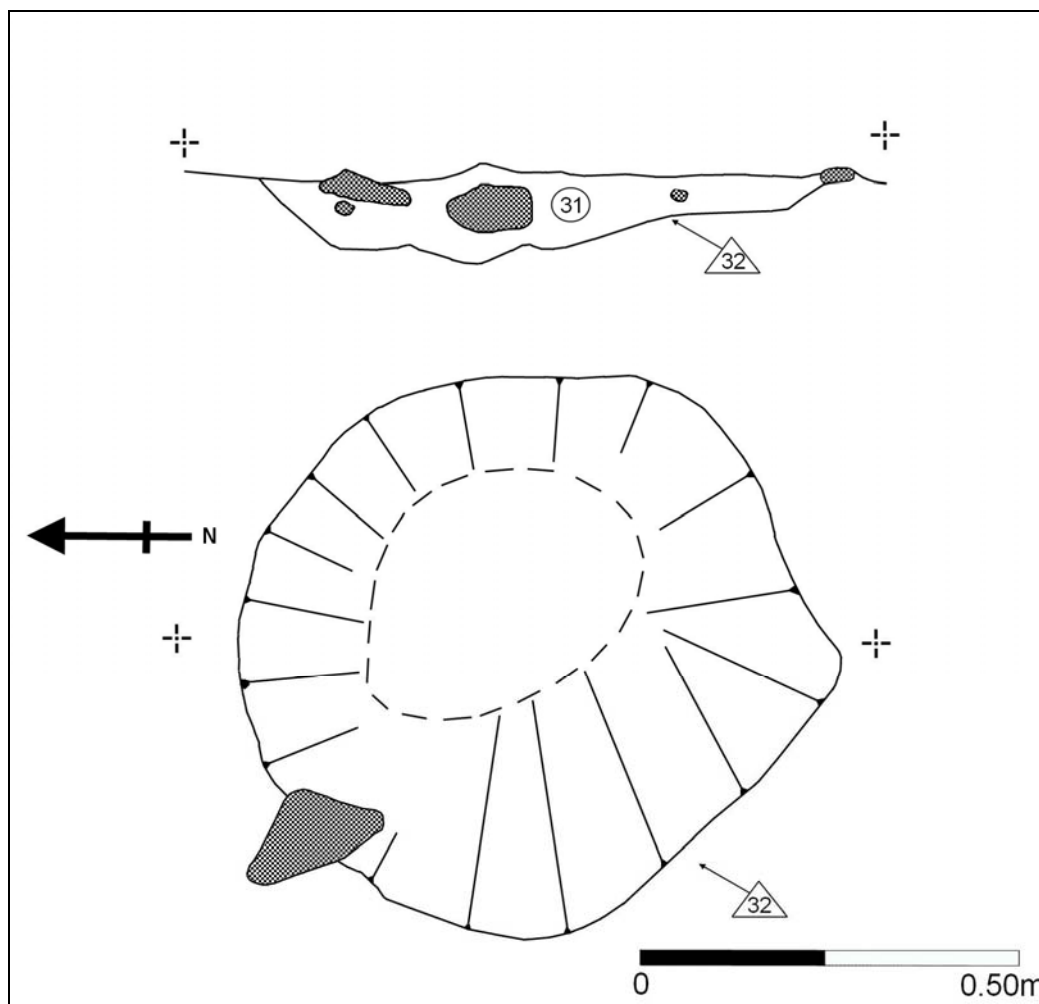


Figure 20: Post-excavation plan and section drawing of C32 in Area 1

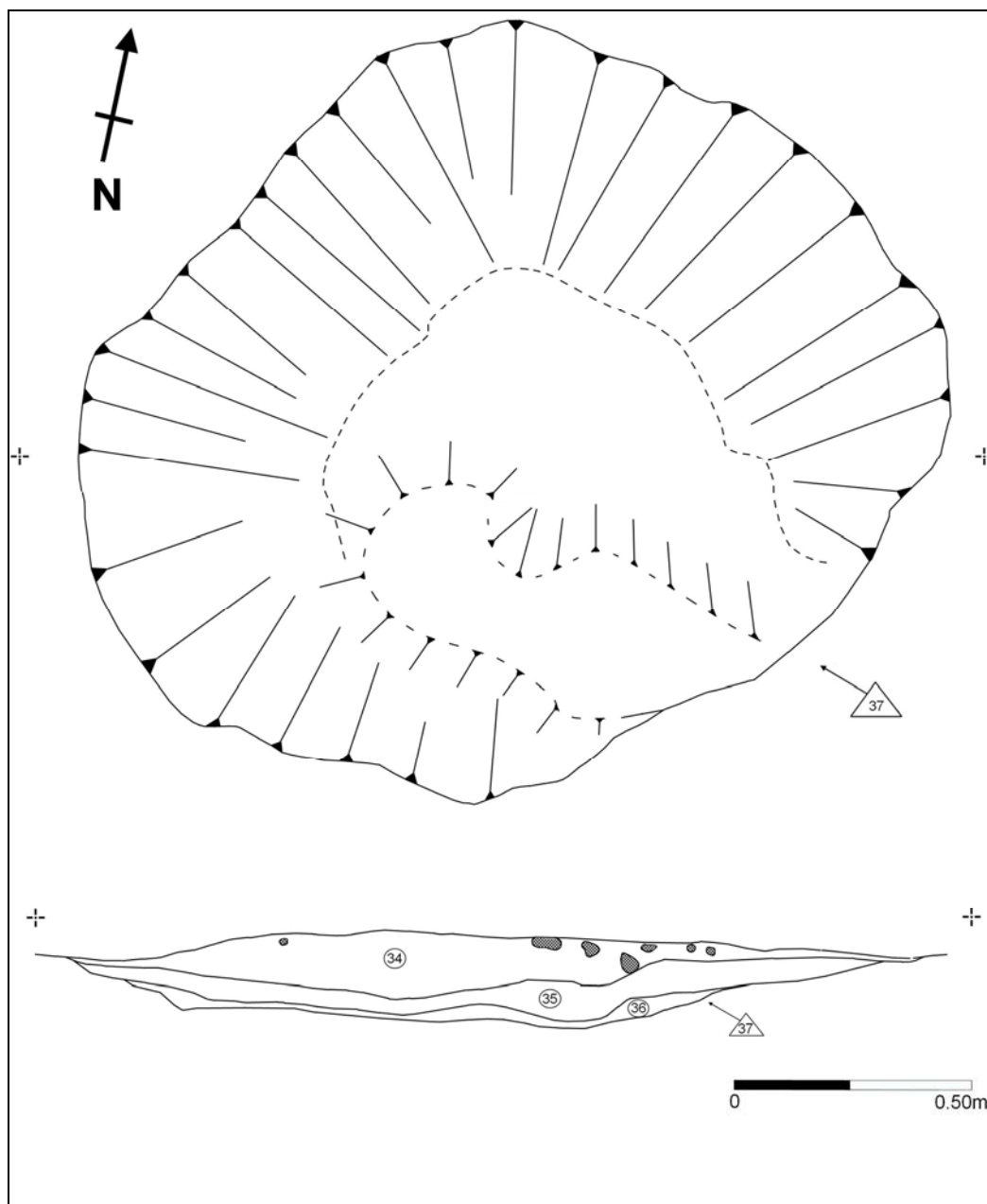


Figure 21: Post-excavation plan and section drawing of C37, charcoal production pit, in Area 2

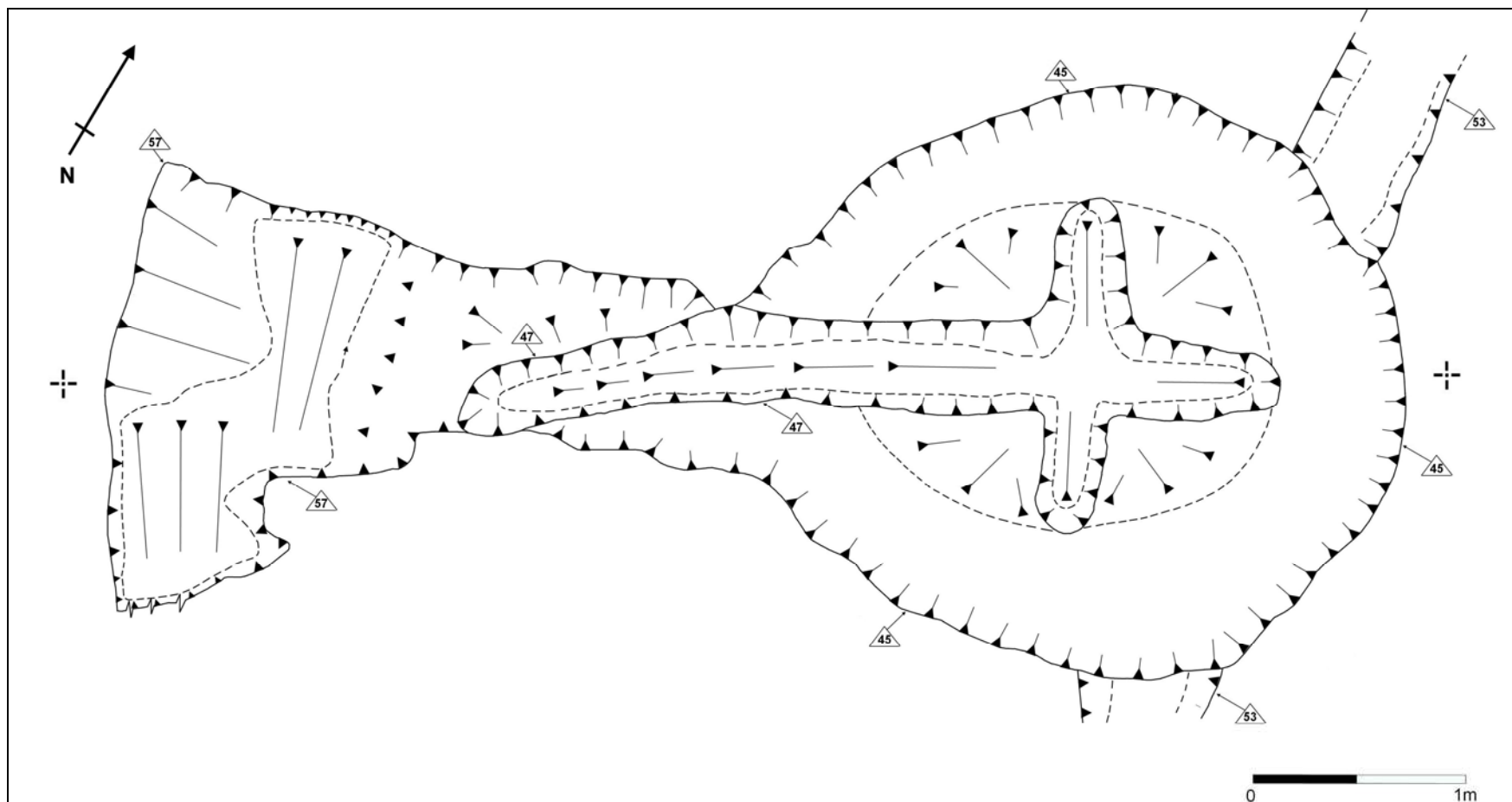


Figure 22: Post-excavation plan of kiln



Figure 23: Mid-excavation section of kiln chamber

9. Plates



Plate 1 Area of Field 1. From NNW



Plate 2 Parallel linear features noted in the Field 1. That was interpreted as modern furrows. From NNW



Plate 3 Potential archaeological feature investigated in southern part of Field 1, and proven to be of no archaeological significance. From SSW



Plate 4 Field 2 prior to topsoil stripping. From SW



Plate 5 Field 3 (Southern portion) prior to topsoil stripping. From NW



Plate 6 Field 2 & 3 (Southern portion) after topsoil stripping. From S



Plate 7 Field 3 (Northern portion) after topsoil stripping. From NE



Plate 8 Portion of Fields 2&3. Picture showing the nature of the subsoil.
From SW

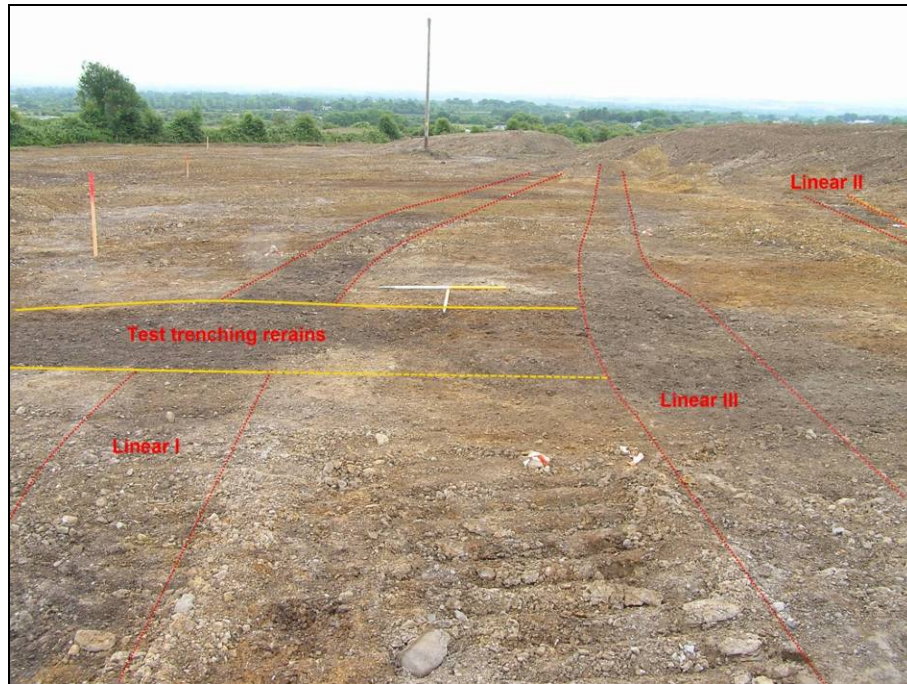


Plate 9 One of test trenching boxes in relation to linear features. From E



Plates 10 Linear features I-III. From SW



Plate 11 Linear feature I. From SW



Plate 12 NE portion of linear feature I. From SW



Plate 13 Linear feature II. From SW



Plate 14 NE portion of linear feature II. From NE



Plate 15 Linear feature III. From SW



Plate 16 Linear feature IV. From SE



Plate 17 Linear features V & VI in relation to Linear features I-III.
From NNW

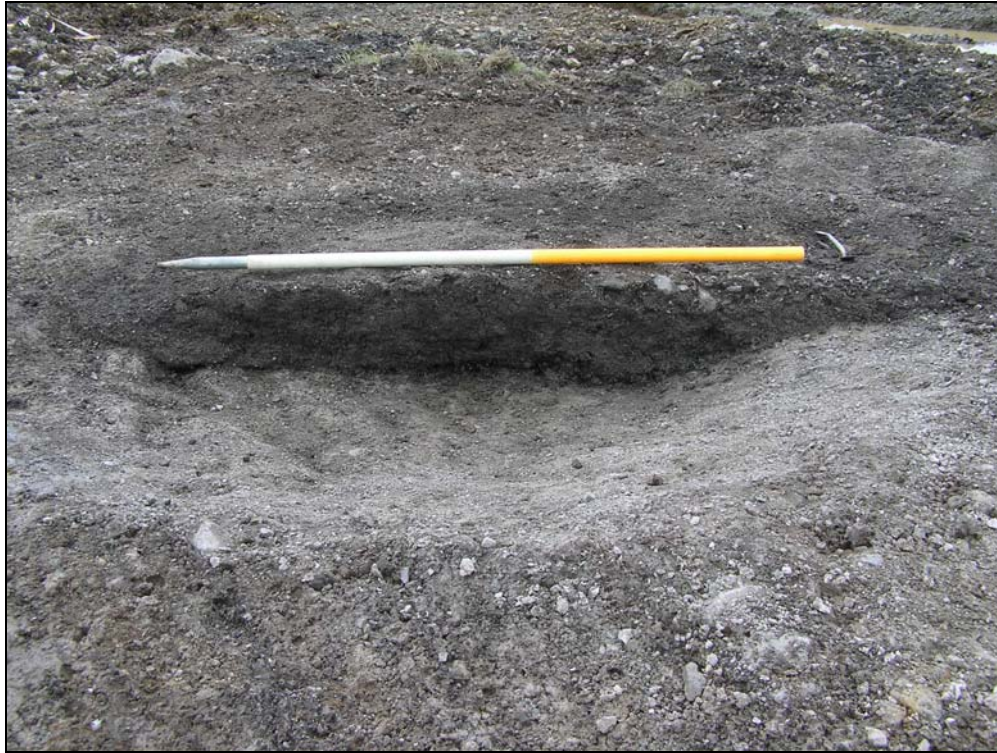


Plate 18 Charcoal pit in the SW part of the Field 2. From SW

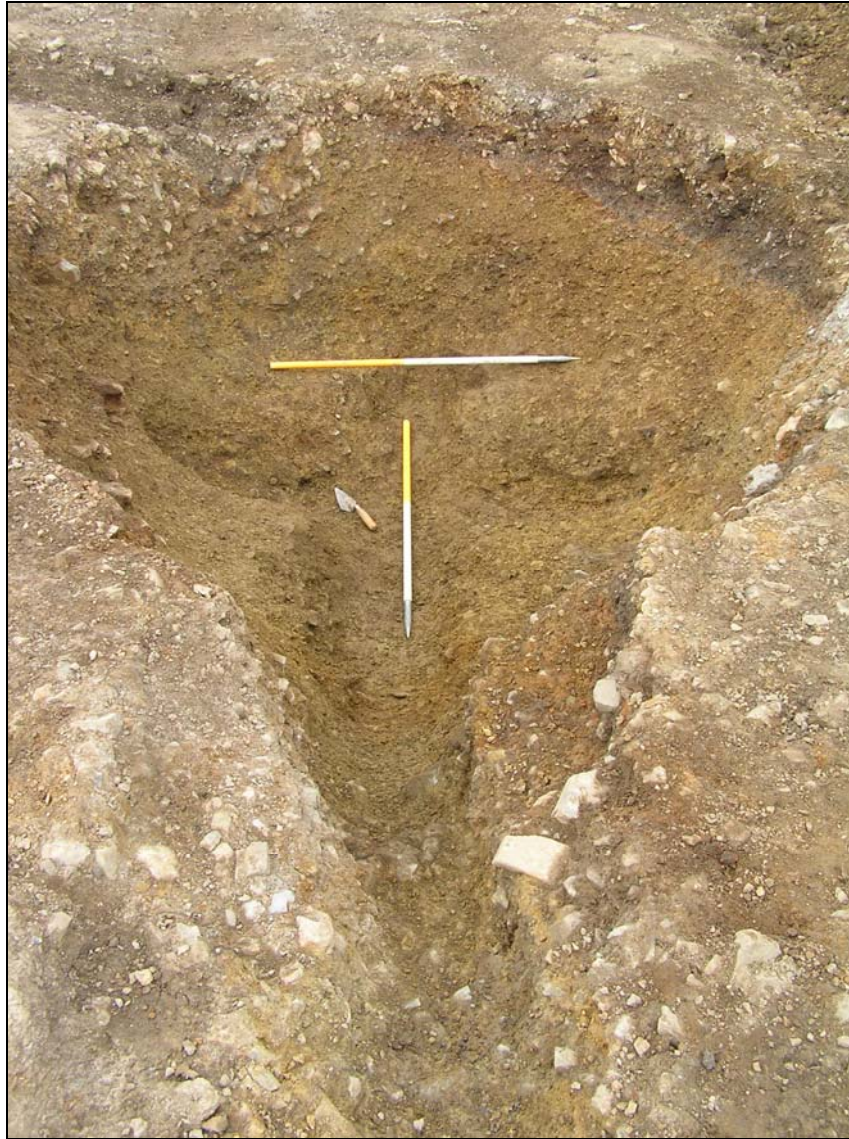


Plate 19 Limekiln feature. From SSW



Plate 20 Limekiln feature. From SE



Plate 21 Field 4 before topsoil stripping. From NE



Plate 22 Field 4 after topsoil stripping. From SW



Plate 23 Field 5 before groundwork. From NNE



Plate 24 Field 5 after completed the topsoil stripping. From SSW



Plate 25 Linear feature VII noted in Field 5. From SW

Appendix 1 Stratigraphic report of excavation of limekiln and charcoal production pit

1. Results of Excavation

The following is a discussion of the nature, stratigraphic relationships and interpretations of archaeological contexts identified during the excavation and summarised in the main text of the report. Archaeological contexts which are deposits or fills are numbered within curved brackets, e.g. C(10), whilst cuts are numbered within square brackets, e.g. C[20]. This phase of the excavation was carried out as an extension of licence 07E0474 issued to excavate the ringfort and related features known as site AR016 during the scheme. It should be noted that the context numbers issued for this post-monitoring phase of the excavation start again at 1, rather than continuing on from those issued in the original report.

This oversight should not create any difficulties because of the lack of artefacts from the kiln and pit features. However, care should be taken by any future reader or researcher when working on this material to differentiate between the results of the two phase if making any comparative statements or comments.

In total 67 contexts were identified during the excavation of the entire site including a series of linear features which were excavated separately. 26 contexts were identified and excavated which had a direct association with the kiln, all contexts identified on the site including natural strata and voided contexts associated with natural processes; and cultural contexts are summarized in the table that follows:

Table 1: Summary of Natural and Cultural Site Strata and Features

Context Designation	Context / Feature Type
C(1), C(2)	Natural site strata
C58-61	Voided contexts, natural features and fills
C[57], C(55), C(56)	Cut and fills of pit abutting kiln flue
C[45], C(38), C(39), C(40), C(41), C(42), C(43), C(44), C(48), C(54)	Kiln chamber cut and fills
C[47], C(46), C(49), C(50), C(51),	Kiln flue cut and fills
C[53], C(52)	Linear feature (truncating kiln chamber)
C(3), C(4), C(5), C[6], C(7), C[8], (9), C[9], C(10), C(11), C(12), C(13), C[14], C(15), C[16], C(17), C[18], C(19), C[20], C(21), C[22], C(23), C[24], C(25), C[26], C(27),	Contexts associated with linear features and pits excavated separately

C[28], C(29), C[30], C(31), C[32], C(33), C(62), C(63), C(64), C(65), C[66], C[67]	
C[37], C(36), C(35), C(34)	Charcoal pit cut and fills

2. Natural Strata and Voided Contexts

2.1 Post-Depositional Disturbance

The site was located on an agricultural field used as pasture. Earthmoving to improve drainage and ploughing had occurred on site.

2.2 Topsoil Layer C(1)

Topsoil was grey brown silty clay and varied from 0.05m to 0.4m thick, pockets of re-deposited boulder clay were present within the topsoil.

2.3 The Natural Subsoil C(2)

Topsoil was underlain by grey clay with mineral staining and iron panning, C(33). This was quite shallow and had a thickness of 0.10-0.23m. This level was then underlain by natural clays in various colours—yellow, orange, grey, cream, and brown. This wide variation in natural subsoil's over a limited geographical area is synonymous with surface drift glaciations resulting from the last ice age. In the local area, the natural subsoil was a yellow gravelly clay. The natural subsoil was designated C(2) on site.

2.4 Voided Contexts

Voided contexts associated with this site are limited to four; C58-61.

These were originally identified as possible archaeological features, however, further investigation confirmed that they were naturally occurring variations in the sub-soil.

3. Archaeological Contexts

Archaeological features found during this phase of excavation total three and include the kiln, one linear feature which truncated the kiln's chamber and one charcoal pit. The total number of archaeological contexts associated with the above features was 30, comprising 5 cuts and 23 deposits or fills excluding natural strata.

3.1 Excavation of the kiln C[45], C[47] and truncating linear feature C[53]

The kiln excavated consisted of a chamber C[45], a flue C[47] and a truncating linear C[53] which truncated the chamber on the eastern side.

C[47] was the cut of the kiln's flue which was cross-shaped in plan with the western "arm" of the cross being significantly longer than the other three. It possessed rounded corners throughout and measured 4m in length, 1.62m in width and it had a maximum depth of 0.46m. The break of slope at the top was gradual and the sides were steep and near vertical in places. The break of slope at the base was not perceptible and the base varied throughout; in the SW it rapidly sloped towards the NE, in the NE it gradually sloped towards the SW (centre), in the NW it gradually sloped towards the SE (centre),. In the SE it gradually sloped towards the NW (centre). C[47] possessed a total of five fills; C(38), C(46), C(49), C(50) and C(51).

C(46) was the primary fill in C[47]. It was dark brown in colour and of soft compaction with a plastic texture. It consisted of silty clay with very frequent large stone (0.20 x 0.10 x 0.06m), occasional charcoal and lime chunk inclusions. The stones appeared to be positioned along the southern edge of the flue creating a line. It possessed a maximum depth of 0.26m. No finds were retrieved from this context. C(46) was visible in all section locations excavated.

C(51) was located below C(50). It was mid brown/orange in colour and of loose compaction. It consisted of sandy clay mixed with burnt orange clay. It contained very frequent small stone inclusions averaging 0.03m in diameter and measured 0.25m in width and had a maximum depth of 0.15m. No finds were retrieved from this context. C(51) was visible only on the SE of the flue.

C(49) was located above C(46). It was mid brown in colour with small dark patches and was of compact compaction. It consisted of clayey sand with very frequent small stone and charcoal inclusions. Its depth varied from 0.02-0.16m. No finds were retrieved from this context. C(46) was visible only on the NW of the flue.

C(50) was located above C(46) and C(51). It was white in colour and it varied in compaction from soft-compact. It consisted of lime with very frequent angular stones the largest of which measured 0.18 x 0.02m. It had a maximum depth of 0.08m. No finds were retrieved from this context. C(50) was visible only on the SE of the flue.

C[45] was the cut of the kiln's chamber and was circular in plan with no corners. It measured 2.70m N-S and 3m E-W and possessed a maximum depth of 1.30m. The break of slope at the top was sharp and the sides were very steep. The break of slope at the base was not perceptible and the base was concave. A cross-shaped flue C[47] was located at the base of the chamber. C[45] possessed nine fills; C(38), C(39), C(40), C(41), C(42), C(43), C(44), C(48) and C(54), it was also truncated by C[53].

C(42) was the primary fill in C[45]. It was dark grey in colour and of soft compaction with a plastic texture. It consisted of silty clay to gravely silty clay with very frequent large stone, charcoal, lime and lime stone inclusions. It measured 1.65m in length, and had a maximum depth of 0.70m. The large stone inclusions within C(42) were centrally positioned along the flue located beneath it. One find was retrieved from C(42); Find #1, animal bone. C(42) was visible at all section locations excavated.

C(43) was located along the sides of C[45] but was not present on the base. It was red/orange in colour and was very compact. A burnt oxidised clay with frequent sub-angular burnt stone inclusions. These stones were at times relatively large measuring 0.15 x 0.10 x 0.09m and they were tightly packed giving a thickness of 0.20m along the sides at the top of C[45] and gradually becoming thinner towards the base. No finds were retrieved from this context. C(43) was visible at all section locations excavated.

C(44) was located above C(42) on the SW portion of the chamber. It was mid brown/grey in colour and of compact compaction. It consisted of gravely and sandy clay with very frequent dark yellow and orange burnt clay flecks. It possessed frequent small angular (0.07m) stone inclusions with an occasional larger (0.10m) stone present. It measured 0.90m in length, and had a maximum depth of 0.16m. No finds were retrieved from this context. C(44) was visible only in the SW of the chamber, it was not present at other section locations excavated.

C(41) was located above C(42) and C(44). It was dark brown in colour and of very soft compaction with a plastic texture. It consisted of silty clay with very occasional small stone inclusions. It measured 1.54m in length, and had a maximum depth of 0.14m. No finds were retrieved from this context. C(41) was visible only in the SW of the chamber, it was not present at other section locations excavated.

C(48) was located above C(42) on the SW portion of the chamber. It was mid brown in colour with frequent small yellow patches dispersed throughout and was of loose

compaction. It consisted of very gravelly clay (80% gravel) with small stones ranging in size from 0.01-0.02m in diameter, no other inclusions were apparent. It measured 0.90m in length, and had a maximum depth of 0.17m. No finds were retrieved from this context. C(48) was visible in all the section locations excavated.

C(40) was located above C(42) in the NW portion of the chamber and above C(41) in the SW. It was dark grey/brown in colour and of soft compaction with a plastic texture. It consisted of sandy clay with occasional patches of orange clay, charcoal flecks and frequent angular stone inclusions averaging 0.07 x 0.03 x 0.05m in size. Two patches of C(54) were located within C(40). It measured 2.25m in length, and had a maximum depth of 0.34m but was more concentrated in the SW area of the chamber. No finds were retrieved from this context. C(40) was visible in all section locations excavated.

C(54) was located at two locations within C(40) in the NW portion of the chamber. It was grey/yellow and orange in colour and was of loose compaction. It consisted of very gravelly clay with medium stones ranging in size from 0.05 x 0.03 x 0.04m – 0.07 x 0.05 x 0.03m, no other inclusions were apparent. The first of area of C(54) measured 0.18m in length and it had a maximum depth of 0.13m. The second measured 0.48m in length and had a maximum depth of 0.07m. No finds were retrieved from this context. C(54) was only visible in the NW portion of the chamber.

C(39) was located directly below C(38). It was mid grey/brown in colour and of compact compaction. It consisted of sandy gravelly clay with frequent orange clay flecks. It contained frequent medium/large stone inclusions and it measured 2.36m in length, and had a maximum depth of 0.34m. No finds were retrieved from this context. C(39) was visible in all section locations excavated.

C(38) was the uppermost fill in C[45] and at some locations in C[47]. It was dark brown in colour and of compact compaction. It consisted of silty clay with frequent lime, sand and decayed stone inclusions ranging in size from 0.01-0.20m in diameter. It also contained orange burnt clay flecks and it measured 2.84m N-S, 3m E-W and it had a maximum depth of 0.30m. No finds were retrieved from this context. C(39) was truncated by C[53] and it was visible in all section locations excavated.

C[53] was the cut of a linear feature which truncated C[45] on its eastern edge. It was a U-Shaped cut which possessed one fill C(52). It measured 1.83m in length, 0.52m in width and it had a maximum depth of 0.21m. The break of slope at the top was sharp

and the sides were gradual and concave at the ends, however they were steep in the location of the chamber. The break of slope at the base was not perceptible and the base was concave. It was orientated N-S.

C(52) was the single fill in C[53]. It was dark brown in colour and of loose compaction. It consisted of sandy/gravelly clay with very frequent angular stone inclusions ranging in diameter from 0.03-0.15m. It measured 1.83m in length, 0.52m in width and it had a maximum depth of 0.21m. No finds were retrieved from this context.

3.2 Pit abutting kiln

A large pit C[57] was located immediately west of the kiln. This pit possessed one cut and two fills; C(56) and C(55).

C[57] was the cut of a large pit which was uneven but was roughly rectangular in plan with both the W and S corners at 90° and the N and E were very uneven. It measured 1.60m W-E and 2m N-S and it possessed a maximum depth of 0.24m. The break of slope at the top was sharp on the N and S and more gradual on the E and W. The sides were steep on the N, SW, S and SE and more gradual elsewhere. The break of slope at the base was not perceptible and the base was concave and uneven sloping slightly towards the S. C[57] Possessed two fills C(55) and C(56).

C(56) was the primary fill in C[57]. It was light grey and red in colour and of soft compaction with a plastic texture. It consisted of ash and burnt clay with frequent small stones and occasional charcoal fragments. It measured 1.60m W-E and 2m N-S and it possessed a maximum depth of 0.08m. No finds were retrieved from this context.

C(55) was the secondary and uppermost fill in C[57]. It was dark brown in colour and almost black in places and of soft compaction. It consisted of silty clay ash with frequent small stones and occasional larger stone inclusions. It also contained frequent large charcoal fragments and lime chunks. It measured 0.90m SW-NE and 1.60m NW-SE and it possessed a maximum depth of 0.15m. No finds were retrieved from this context.

3.3 Charcoal production pit C[37]

One pit feature was identified in possible association with the kiln. Also located in Area 2 it was positioned to the W of the kiln and pit C[57].

C[37] was a possible charcoal production pit which possessed three fills, C(36), C(35) and C(34). It was uneven but roughly circular in plan with no corners and it measured 1.67m N-S, 1.81m E-W and had a maximum depth of 0.19m. The break of slope at the top was gradual. The sides were generally gradual and the break of slope at the base was not perceptible and the base was concave in the northern area and uneven in the southern.

C(36) was the primary fill in C[37]. It was black in colour and of soft compaction with a plastic texture. It consisted of silty clay, ash and burnt clay with infrequent charcoal fragments. It measured 1.10m in diameter and it possessed a maximum depth of 0.025m. No finds were retrieved from this context.

C(35) was the secondary fill in C[37]. It was medium grey in colour and of loose compaction. It consisted of gravely silty clay with frequent small stone and angular stone inclusions. It measured 1.50m in diameter and it possessed a maximum depth of 0.07m. No finds were retrieved from this context.

C(34) was the uppermost fill in C[37]. It was very dark grey almost black in colour and of loose compaction. It consisted of clay and silty clay with frequent small angular stone inclusions with occasional larger stones present in the western area. It measured 1.80m E-W, 1.70m N-S and it possessed a maximum depth of 0.17m. No finds were retrieved from this context.

4. Conclusions

Monitoring of the area between CH2800 and CH3370 took place in June-July 2009. Within that zone 9 linear features, a charcoal production and a limekiln were identified. Most of those discoveries were located in Fields 2 and 3. The linear features were the remains of early modern field boundaries, the relict feature of the early enclosure landscape of the 18th century, and the limekiln was from the same period. They form part of a cluster of small-scale industrial activity that was part of the movement to improve agriculture and society in general at this time. Another part of this cluster was found during the excavations at AR016 in the next field to the north and the latest section is still extant the form of an upstanding limekiln and quarry from the late 19th century located on the eastern boundary of Field 4.

6. Context Register

(Contexts associated and relevant to the excavation report appendix are highlighted. Other contexts refer to linear features mentioned in the main text)

Context	Type	Description	Date	Initials
1	Topsoil	Topsoil	02/07/09	DF
2	Natural	Natural subsoil	02/07/09	DF
3	Fill	Upper ditch fill, linear feature II	02/07/09	DF
4	Fill	Ditch fill, linear feature II	02/07/09	DF
5	Fill	Basal ditch fill, linear feature II	02/07/09	DF
6	Cut	Cut of linear Box 2	02/07/09	DF
7	Fill	Fill of linear	02/07/09	DF
8	Cut	Cut of shallow linear	02/07/09	DF
9	Fill	Linear fill, Box 8 feature I	03/07/09	DF
10	Cut	Cut of shallow linear	03/07/09	DF
11	Fill	Fill of linear, Box 1	03/07/09	FF
12	Fill	Fill of linear	03/07/09	FF
13	Fill	Fill of linear	03/07/09	FF
14	Cut	Cut of linear feature 2	03/07/09	FF
15	Fill	Fill of linear, Box 5	03/07/09	FF
16	Cut	Cut of shallow linear, Box 5	03/07/09	FF
17	Fill	Fill of linear, Box 3	03/07/09	FF
18	Cut	Cut of linear, Box 3	03/07/09	FF
19	Fill	Fill of linear, Box 3	03/07/09	FF
20	Cut	Cut of linear, Box 3	03/07/09	FF
21	Fill	Fill of linear, Box 10, feature I	03/07/09	FF
22	Cut	Cut of linear, Box 10, feature I	03/07/09	AP
23	Fill	Fill of linear, Box 11, feature VII	03/07/09	AP
24	Cut	Cut of linear, Box 11, feature I	03/07/09	AP
25	Fill	Fill of linear, Box 9, feature IV	06/07/09	AP
26	Cut	Cut of linear, Box 9, feature IV	06/07/09	AP
27	Fill	Fill of linear, Box 7, feature III	06/07/09	AP
28	Cut	Cut of linear, Box 7, feature III	06/07/09	AP
29	Fill	Fill of linear, Box 6, feature II	06/07/09	AP
30	Cut	Cut of linear, Box 6, feature II	06/07/09	AP
31	Fill	Pit in Area 1	06/07/09	AP

Context	Type	Description	Date	Initials
32	Cut	Cut of pit in Area 1	07/07/09	AP
33	Fill	Fill in E edge of pit in Area 1	07/07/09	AP
34	Fill	Upper fill in charcoal pit in Area 2	07/07/09	AP
35	Fill	Middle fill in charcoal pit in Area 2	07/07/09	AP
36	Fill	Fill in charcoal pit in Area 2	07/07/09	AP
37	Cut	Cut of charcoal pit in Area 2	07/07/09	AP
38	Fill	Fill in kiln chamber	09/07/09	AP
39	Fill	Fill in kiln chamber	09/07/09	AP
40	Fill	Fill in kiln chamber	09/07/09	AP
41	Fill	Fill in kiln chamber	09/07/09	AP
42	Fill	Fill in kiln chamber	09/07/09	AP
43	Fill	Fill in kiln chamber	09/07/09	AP
44	Fill	Fill in kiln chamber	09/07/09	AP
45	Cut	Cut of kiln chamber	09/07/09	AP
46	Fill	Fill in kiln flue	09/07/09	AP
47	Fill	Fill in kiln flue	09/07/09	AP
48	Fill	Fill in kiln chamber	10/07/09	AP
49	Fill	Fill in kiln flue	10/07/09	AP
50	Fill	Fill in kiln flue	10/07/09	AP
51	Fill	Fill in kiln flue	10/07/09	AP
52	Fill	Fill of linear feature that cuts kiln	13/07/09	AP
53	Cut	Cut of linear feature that cuts kiln	13/07/09	AP
54	Fill	Fill in kiln chamber	13/07/09	AP
55	Fill	Fill in pit associated with kiln	15/07/09	AP
56	Fill	Fill in pit associated with kiln	15/07/09	AP
57	Cut	Cut of pit associated with kiln	15/07/09	AP
58-61	VOID	Void numbers	15/07/09	AP
62	Fill	Fill of linear feature VIII in Area 6	17/07/09	AP
63	Fill	Fill of linear feature VIII in Area 6	17/07/09	AP
64	Fill	Fill of linear feature VIII in Area 6	17/07/09	AP
65	Fill	Fill of linear feature VIII in Area 6	17/07/09	AP
66	Cut	Cut of linear feature VIII in Area 6	17/07/09	AP
67	Cut	Cut of linear feature V in Area 6	17/07/09	AP

7. Sample Register

(Samples associated and relevant to this excavation report appendix are highlighted)

Sample	Context	Description	Date	Initials
1	3	Soil sample from linear feature	02/07/09	DF
2	4	Soil sample from linear feature	02/07/09	DF
3	5	Soil sample from linear feature	02/07/09	DF
4	7	Soil sample from linear feature	02/07/09	DF
5	9	Soil sample from linear feature	03/07/09	FF
6	11	Soil sample from linear feature	03/07/09	FF
7	12	Soil sample from linear feature	03/07/09	FF
8	13	Soil sample from linear feature	03/07/09	FF
9	15	Soil sample from linear feature	03/07/09	FF
10	17	Soil sample from linear feature	03/07/09	FF
11	19	Soil sample from linear feature	03/07/09	FF
12	21	Soil sample from linear feature	03/07/09	FF
13	23	Soil sample from linear feature	06/07/09	AP
14	25	Soil sample from linear feature	06/07/09	AP
15	27	Soil sample from linear feature	06/07/09	AP
16	29	Soil sample from linear feature	06/07/09	AP
17	31	Soil sample from pit in Area 1	07/07/09	AP
18	33	Soil sample from pit in Area 1	07/07/09	AP
19	34	Soil sample from pit in Area 2	07/07/09	AP
20	35	Soil sample from pit in Area 2	07/07/09	AP
21	36	Soil sample from pit in Area 2	07/07/09	AP
22	38	Soil sample from chamber	13/07/09	AP
23	39	Soil sample from chamber	13/07/09	AP
24	40	Soil sample from chamber	13/07/09	AP
25	41	Soil sample from chamber	13/07/09	AP
26	42	Soil sample from chamber	13/07/09	AP
27	43	Soil sample from chamber	13/07/09	AP
28	44	Soil sample from chamber	13/07/09	AP
29	48	Soil sample from chamber	14/07/09	AP
30	46	Soil sample from flue	14/07/09	AP
31	49	Soil sample from flue	14/07/09	AP
32	50	Soil sample-lime from flue	14/07/09	AP
33	51	Soil sample-lime from flue	14/07/09	AP
34	52	Soil sample-linear feature cutting kiln	14/07/09	AP

Sample	Context	Description	Date	Initials
35	54	Soil sample chamber	14/07/09	AP
36	42	Soil sample from bottom of chamber	15/07/09	AP
37	55	Soil sample from pit associated with kiln	15/07/09	AP
38	56	Soil sample from pit associated with kiln	17/07/09	AP
39	42	Soil sample from bottom of chamber	17/07/09	AP
40	42	Soil sample from bottom of chamber	17/07/09	AP
41	42	Animal bone	17/07/09	FF
42	Lime	All fills	10/07/09	FF
43	62	Soil sample from linear feature	17/07/09	FF
44	63	Soil sample from linear feature	17/07/09	FF
45	64	Soil sample from linear feature	17/07/09	FF
46	65	Soil sample from linear feature	17/07/09	FF

8. Drawing Register

(Contexts associated and relevant to this report are highlighted)

Drawing	Context	Description	Date	Initials
1	6	Linear feature	02/07/09	DF
2	8	Linear feature	02/07/09	DF
3	10	Linear feature	03/07/09	DF
4	14	Linear feature	03/07/09	FF
5	16	Linear feature	03/07/09	FF
6	20	Linear feature	03/07/09	FF
7	22	Linear feature	03/07/09	FF
8	24	Linear feature	06/07/09	AP
9	26	Linear feature	06/07/09	AP
10	28	Linear feature	06/07/09	AP
11	30	Linear feature	06/07/09	AP
12	32	Pit in Area 1, W facing section	07/07/09	AP
13	32	Post-ex of pit in Area 1	07/07/09	AP
14	37	Charcoal pit in Area 2, N facing section	07/07/09	AP
15	37	Post-ex of pit in Area 2	07/07/09	AP
16	45	Kiln- Section A-B1	09/07/09	AP
17	47	SW section of flue	09/07/09	FF
18	45	SE section of kiln	09/07/09	AP
19	45	SW section of kiln	09/07/09	AP

Drawing	Context	Description	Date	Initials
20	47	SW section of kiln	10/07/09	FF
21	45	NW section of kiln chamber	13/07/09	AP
22	53	NW of truncating linear	13/07/09	FF
23	45	NE section of kiln chamber	13/07/09	AP
24	57	Plan of kiln	16/07/09	AP
25	57	SE section of pit associated with kiln	16/07/09	AP
26	62	Linear feature	17/07/09	FF
27	65	Linear feature	17/07/09	FF
28	57	Post-ex of kiln	17/07/09	AP
29	57	Post-ex of kiln-chamber and flue	17/07/09	AP