



**LUAS B1 Sandyford to Cherrywood
Extension**

Archaeological Test Excavation

Brenanstown Site 2

06E214

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Cultural Resource Development Services Ltd.

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Project LUAS B1, Sandyford to Cherrywood Extension

Site Site 2
Townlands Brenanstown
Civil Parish Tully
County South County Dublin.

Nat. Grid Ref. Site 2 NGR 323100E, 223900N

Project Duration 1 Week
Excavation Start Date 14/08/2006
Report Date 20/09/2006

Report signed off by,



Donal Fallon MA
Project Manager, CRDS Ltd

Executive Summary

At the request of the Railway Procurement Agency, CRDS Ltd. have completed pre-development archaeological testing and resolution within a section of the development corridor for the proposed LUAS B1 line, in Brenanstown townland.

The Railway Procurement Agency ('RPA') has submitted an application for a Railway order for submission to the Minister for Transport under Section 37 of the Transport (Railway Infrastructure) Act 2001. The Railway Order, granted by the Minister, will authorise the RPA to provide for the construction, operation and maintenance of a light railway between Sandyford Industrial Estate and Cherrywood. This is a 7.6km extension to the existing Luas Green Line currently operating between St. Stephen's Green and Sandyford.

Archaeological pre-development testing was carried out within a stretch of the proposed route for the LUAS line extending between Lehaunstown road to South of the Laughlinstown River from Thursday 1 June 2006 to Friday 9 June 2006. A small number of potentially significant archaeological features were identified within this area during testing; these were designated Site 2. They were subsequently resolved during a second phase of works between Monday 14 August and Friday 18 August.

Pre-development testing consisted of the excavation of a centreline test trench along the entire length of the proposed corridor with offset trenches at 15m intervals extending to the full 30m width of the development corridor. The purpose of pre-development testing was the identification of any archaeological remains within the zone of development. Where potential archaeological features were identified within the test trenches a larger area was opened by machine to expose their full extent; they were then assigned 'site' numbers. Three site numbers were assigned to concentrations of archaeological features identified in Laughanstown and Brenanstown, Site 1 is located in Laughanstown. Site 3, in Brenanstown, is the subject of a separate report. The present report details the excavation of Site 2, also located in Brenanstown.

The features exposed in Site 2 were deemed to be of marginal archaeological significance; they were subject to further investigation and resolution under the existing testing licence (after appropriate consultation with the National Monuments Section). Further investigation indicated that the features were likely to be of natural origin and of no further archaeological significance. No further mitigation is recommended.

Summary of findings:

06E 214 Brenanstown Site 2

In the initial testing phase a rectangular area of roughly 14m by 16m was opened up to investigate possible archaeological activity noticed in the test trenches, (figure 3). Four features of potential archaeological significance were identified. Sections excavated through the feature's fills proved inconclusive. A further phase of investigation was undertaken after consultation with the National Monuments Section. The site area was then extended to 25m by 22m (figure 4) in the resolution phase, (figure 4) but no additional features were identified within this larger area.

A deep linear ditch cut, exposed extending across the western half of the site, proved to be a modern pipe trench upon further investigation. Towards the centre of the stripped area a small, shallow irregular cut was exposed. Its fill contained charcoal flecks and animal bone fragments. Upon further investigation this cavity was determined to be a natural depression. Another large irregular cut, initially interpreted as a deliberately cut pit, proved on further investigation to be a tree bowl of natural origin. A second linear cut, initially thought to be the western terminus of a ditch, was subsequently resolved as a root system of natural origin. All the features were fully excavated apart from the modern pipe trench. Further investigation was requested due to time restrictions in the initial testing phase. All the possible archaeological features originally exposed have now been resolved and proved to be of natural or modern origin, no further investigation is required.

1.1. Summary of mitigation: 06E214 Brenanstown Site 2

This site has proved to be of no archaeological significance and presents no barrier for future development. No further mitigation is recommended.

Introduction

1.2. Site location

Site 2 is located in the townland of Brenanstown, c. 250m to the south of Brenanstown Road, Co. Dublin, in the civil parish of Tully and the Barony of Rathdown, Site 2 (NGR 323100E, 223900N; See Figure 1). The route of the proposed development extends proximate to three sites listed in the Record of Monuments and places: a Portal Tomb c. 75-150m to the northeast of this section of the line (DU026:007: located to the north of a small stream), a mill site c. 300m to the west (DU026:0080) and an enclosure (DU026:006) to c. 200m the southwest.

1.3. Solid geology and soils

The geology of the area consisted of granite Bedrock overlain by late Pleistocene glacial tills, mainly grey brown podzolic soils.

1.4. Characteristic of the proposed development

The Railway Procurement Agency ('RPA') has submitted an application for a Railway order for submission to the Minister for Transport under Section 37 of the Transport (Railway Infrastructure) Act 2001. The Railway Order, granted by the Minister, will authorise the RPA to provide for the construction, operation and maintenance of a light railway between Sandyford Industrial Estate and Cherrywood. This is a 7.6km extension to the existing Luas Green Line currently operating between St. Stephen's Green and Sandyford.

This report concerns pre-development resolution of a section of the LUAS corridor to the West of Laughanstown road and South of the Brennanstown road. The development corridor diverges from the pre-existing Harcourt Street Line (c. 22m width by 141m long) and is aligned northwest to southeast across a gently sloping field of pasture. The development footprint in this area encompasses c. 3102m². The area is currently undeveloped.

1.5. Purpose of assessment

Pre-development testing was undertaken to identify and determine the nature and extent of any archaeological deposits within the development corridor. The results of pre-development testing were intended to inform an appropriate mitigation strategy for the development. Features of potential archaeological significance identified during testing were fully exposed (where possible), assessed and recorded. Limited hand excavation was undertaken to clarify their depth and nature. The archaeological nature of features exposed in Site 2 could not be confirmed during testing; they were secured from further intrusion pending consultation with the National Monuments Section. Where no archaeological features were exposed trenches were excavated to the surface of natural soils.

2. Baseline Survey

2.1. Introduction

For the purpose of setting the proposed development within its wider archaeological and cultural heritage landscape, and to assess the archaeological potential of the site, a comprehensive paper survey of all available archaeological, historical and cartographic sources was undertaken.

2.2. Recorded archaeological sites and monuments

The Record of Monuments and Places was consulted for the relevant parts of Dublin. This is a list of archaeological sites known to the National Monuments Service. The relevant files for these sites contain details of documentary sources and aerial photographs, early maps, OS memoirs, OPW Archaeological Survey notes and other relevant publications. These were studied in the Sites and Monuments Records Office. All sites within a radius of c.1km of the proposed development were identified. These monuments are listed in Appendix 3.

2.3. Recorded archaeological finds

The topographical files in the National Museum of Ireland were consulted to determine if any archaeological artefacts had been recorded from the townland of Brenanstown. This is the National archive of all known finds recorded by the National Museum. It relates primarily to artefacts but also includes references to monuments and has a unique archive of records of previous excavations. Other published catalogues of prehistoric material were also studied for any reference to finds within Brenanstown: Raftery (1983 - Iron Age antiquities), Eogan (1965; 1993; 1994 - bronze swords, Bronze Age hoards and goldwork), Harbison (1968; 1969a; 1969b - bronze axes, halberds and daggers) and the Irish Stone Axe Project Database (Archaeology Dept., U.C.D.). There are no recorded finds from the townland.

2.4. Cartographic sources

Reference to cartographic sources is important in tracing land use development within the development area as well as providing important topographical information on sites and areas of archaeological potential. Primary cartographic sources consulted consisted of the Ordnance Survey 6" maps, first and later editions (T.C.D. Map Library). Earlier cartographic sources consisted of the Down Survey Barony map of c. 1655 (Government of Ireland 1980), Taylor's map of the Environs of Dublin dating from 1816 (Phoenix Maps), and the First Edition Ordnance Survey maps for County Dublin (Sheet 26; 1843).

2.5. Previous Excavations

The excavation bulletin website (www.excavations.ie) was consulted to identify previous excavations that may have been carried out within the study area. This database contains summary accounts of excavations carried out in Ireland from 1985. The available *Excavations* publications for 2002 and 2003 were also consulted (Bennett 2002, 2003). Details of previous excavations are listed in Appendix 4.

2.6. Historical research

Primary historical sources consulted, included the *Christ Church Deeds* (McEnery and Refausse 1999), the *Calendar of Archbishop Alen's Register 1172-1534* (McNeill 1950), *The first Chapter Act book of Christ Church Cathedral, Dublin 1574-1634* (Gillespie 1997) and *The Account Roll of the Priory of the Holy Trinity, Dublin, 1337-1346* (Mills 1890-91) and the *Civil Survey AD1654-56: Volume VII County of Dublin* (Simington 1945). The most useful secondary source consulted concerning the general history of the area was 'A much disputed land: Carrickmines and the Dublin marches' (O'Byrne 2003).

3. Archaeological and Historical Background (by Donal Fallon)

3.1. Prehistory (c. 7000 BC - AD 500)

A portal tomb (DU026:007 – a National Monument) is located between 75-100m to the north of the development corridor, and c. 200m northeast of the proposed compound site. Portal tombs generally consist of a sub-rectangular chamber flanked by a pair of tall portal stones, usually capped by a single capstone; the capstone of the portal tomb at Brenanstown has an estimated weight of 40-60 tons. The limited evidence to date suggests they date from the early Neolithic period - the fourth millennium BC (Waddell 1998, 88-92).

3.2. Early medieval period (c. AD 500 - 1170)

An enclosure listed in the Records of Monuments and Places (DU026:006) is located c. 200m to the south of the current development. This is marked on the 1st Edition Ordnance Survey map of 1837 and is likely to be a ringfort of early medieval date (appendix 3).

3.3. Late medieval and post medieval period (c. AD 1170 - 1900)

The townland of Brenanstown, was originally 'Baile na mBretnach' the town of the Welsh, and it has been suggested that Welsh colonists were well-established in this area sometime to 1169 (O'Byrne 2003, 231-2). Brenanstown was within the manor of Clonkeen, a possession of the Priory of the Holy Trinity (Christchurch) from prior to 1169 (O'Byrne 2003, 230, 237; McNeill 1950, 28). In 1326 Maurice Howell was holding the adjacent townlands of 'Carrickmayn' and 'Balybrenan' (Mills 1890-91, 195). The Howels, were a prominent landholding family of Welsh origin who appear to have been established in the area prior to 1169, but extinct by 1372 They were closely related to the Walshes, the other main landholding family of the area (O'Byrne 2003, 232, 241). In 1372 Brenanstown was leased to 'Thomas Walsch, Chaplain' on the condition that he 'build and maintain a stone house on the premises within four years' (McEnergy & Refausse 1999, 717).

From the late 13th century into the modern period the area surrounding Carrickmines was a disputed marchland. Its Welsh and Anglo-Norman settlers were subject to frequent attacks from the O'Byrnes and the O'Tooles of Wicklow. Maurice Howel held Carrickmines Castle, a substantial fortress central to the defence of the region, for much of the first half of the 14th Century. In this capacity he was responsible for the defence of the colonists and was retained by the Crown to act as guardian of the Leinster Marches. Despite his stewardship much of the area was laid waste by O'Byrne raids. Carrickmines was refortified in 1359, besieged by Gaelic forces the same year, relieved by the forces of the Earl of Ormond, garrisoned with a cavalry force in 1360 and was besieged twice more in the same century. By 1388 the castle was housing a standing cavalry force which carried out punitive raids into the lands of the Wicklow tribes. Carrickmines was in the possession of the Walsh family by 1400 and many of the possessions of the Howels appeared to have passed to the Walshes who held the Castle until the 17th Century (O'Byrne 2003, 237-241). The remains of the castle are located c. 1km to the west of the current development.

The *Down Survey* Barony map of 1655 marks, what appears to be a castle within the townland of Brenanstown, apparently some distance to the north of the river, and also depicts a structure or structures on the northern bank of the river. The Civil Survey of 1654-56 lists the townland as containing:

'one Castle Thatcht, a garden plot, one Tuckmill, one Come Mill' (Simington 1945, 276).

This section of the development is also c. 300m east of DU026:080 – the site of a watermill marked on the Down Survey (1655) and First Edition Ordnance Survey (1837) maps, which may be presumed to be one of the mills listed in the Civil Survey (Deery & Halpin 2005).

The Census of 1659 lists the townland as containing 18 adults, of whom four were 'English' including 'Valentine Wood gent' (Pender 1939, 381). In 1664 'Ballybrenan alias Brenanstowne' was leased to William Lightburne, and in 1679 to William Moreton, both officials of Christchurch (McEnery & Refausee 1999, 1643, 1824).

3.4. Archaeological significance of the sites

The development corridor extends adjacent to a number of recorded monuments, within an area densely settled during the Medieval period.

4. Archaeological Assessment

4.1. Methodology

After consultation with the National Monuments Section of the Department of the Environment, Heritage and Local Government the following strategy was agreed:

Much of the line of the LUAS in this section extends along the route of the pre-existing Harcourt Street Line: This will be subject to a separate licence application for archaeological monitoring. The area of the compound to the south of the line, and the section of the LUAS corridor which diverges from the Harcourt Street Line as far as the adjacent boundary to the south, and then across the road into the Laughanstown townland, was subject to pre-development testing.

A centreline and offset testing strategy was adopted appropriate to a linear development. A centreline trench, 2m in width was excavated by a machine equipped with a graded bucket along the length of the development corridor. Offset trenches were excavated at right angles to the centreline trench every 15m extending to the boundaries of the 30m wide development corridor. Temporary construction compounds are to be located beside the main LUAS development corridor at a number of locations. These were also subject to pre-development archaeological testing. Where potential archaeological features were identified in the test trenches a sufficient area was opened to determine their extent within the development corridor. Each area of potential archaeology was assigned a Site number. The current report details the resolution of potential archaeological features exposed in Site 2, Brenanstown.

4.2. Results

Appendix 1 contains a tabular breakdown of the trenching results for Brenanstown. A brief summary of the potential archaeological features exposed in Site 2 is provided below. A more detailed description of features is provided in Appendix 2.

06E214 Brenanstown Site 2

The site was located c. 25m northwest of the road forming the townland boundary between Laughanstown (West) and Brenanstown. It is situated on a sloping undisturbed area of pasture. A rectangular area of c. 14m by 16m was initially opened up to investigate possible archaeological activity. The area was later increased to c. 25m by 22m. Four possible features were identified and sections were excavated within each (see figure 4 and photo plates 1 to 6). A linear cut (F111) was

exposed extending across the western half of the stripped area (15m in exposed length, 1.75 wide, 1.1m deep). Further investigation, confirmed this was a modern pipe trench. A small shallow cut (F105) was exposed in the eastern half of the site (1.21m long, 0.85m wide 0.14m deep). The fill contained within had inclusions of charcoal flecks and animal bone fragments, but its edges were poorly defined. Full excavation indicated that the feature was most likely a natural cavity with a later accretion of unrelated material contained within. A second larger irregular cut (F108; 1.5-75m diameter, 0.6m deep) contained a single sterile fill. Full excavation showed this was merely a tree bowl. Finally, a linear feature identified in testing was initially assumed to be the western terminus of a possible ditch (F103) (5m in exposed length, 1.26m wide, 0.78m deep). Further excavation clarified that this feature was simply the cavity created by a tree root. In summary all features identified within Site 2 were resolved as non-archaeological.

5. Potential Impact of the Proposed Development

No archaeologically significant features are present within Brenanstown Site 2, which would be impacted upon by the development.

6. Recommended Avoidance, Remedial or Reductive Measures

All features identified in Site 2 during pre-development testing have been resolved as non-archaeological. No further mitigation is recommended.

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- The Irish Stone Axe Project Database. Department of Archaeology: University College Dublin.
- Waddell, John 1998. *The Prehistoric Archaeology of Ireland*. Bray

Appendix 1: Brenanstown 06E214, Test Trenches

Trench No. Centreline	Orientation: North-West/South-East
Length: 180m	Width: 2m
Started this section of centreline trench across the road from Laughanstown. Depth on average was 0.90m. Noticed some possible features at the start of the trench and decided to open up an area to define the extent. See (Site #2)	
Trench No. Offset 1	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.50m. Possible linear feature noticed in the Southern trench, area opened up to define extent. (Site #2)	
Trench No. Offset 2	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.90m. Possible linear feature noticed in the Southern trench, area opened up to define extent. (Site #2)	
Trench No. Offset 3	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.80m. No features uncovered.	
Trench No. Offset 4	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.80m. No features uncovered.	
Trench No. Offset 5	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.80m. No features uncovered.	
Trench No. Offset 6	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.80m. No features uncovered.	
Trench No. Offset 7	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.80m. No features uncovered.	
Trench No. Offset 8	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.70m. No features uncovered.	
Trench No. Offset 9	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.70m. No features uncovered.	
Trench No. Offset 10	Orientation: North-East/South-West
Length: 30m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.50m. No features uncovered.	
Trench No. Offset 11	Orientation: North-East/South-West
Length: 15m	Width: 2m
This trench was dug the width of the c.p.o. Depth on average was 0.60m. No features uncovered.	

Appendix 2: Brenanstown 06E214, Site 2 Feature Register

F. No	Feature Type	Period	Max. Length	Max Width	Max Depth	Feature Description	Feature Interpretation
100	Deposit	Modern	25 m	22 m	0.10 m	Homogenous sod layer exposed across full extent of excavation. Very mixed soil mainly silty clay with sand inclusions. Roots. Grass. Moderate amount of pebbles and stones.	Sod layer related to cultivation.
101	Topsoil Deposit	No period	25 m	22 m	0.20 m	Homogenous topsoil layer exposed across full extent of excavation. Very mixed soil mainly silty clay with sand inclusions. Roots. Grass. small amount of pebbles and stones	Ploughsoil layer related to cultivation.
102	Natural	No period	25m	22 m	-	Natural consists of two types of natural. The main one is light yellow brown silty clay with sand inclusions. The other one is mid brown to dark brown with large amount of stones and gravel.	Natural subsoil deposit across extent of excavation.
103	Fill for ditch F104	unknown	1.50 m	1.26 m	0.78	The fill consists of light brown yellow compact silty sand, containing few pebbles. No charcoal. dry and well sorted .Very sterile fill.	Fill of natural root system/ depression
104	Cut for ditch F103	unknown	5 m	1.26 m	0.78 m	Curvi-Linear feature running East-West. 5 metres length.	Cut of natural root system/ depression
105	Fill for pit F106	unknown	1.21 m	0.85 m	0.14 m	The fill consists of mid to dark brown silty sand. Plastic, dry and moderately sorted. It contains a few charcoal flecks, in the upper part essentially. There is also a few flecks of decayed animal bones.	Fill of natural hollow/ depression.
106	Cut for pit	unknown	1.21 m	0.85 m	0.14 m	F106 is a "teardrop" shaped small and shallow pit, oriented North-South. The feature was half sectioned. It contains only one fill for the moment. In profile, the cut is shallow with a gradual break of slope top and concave base. The edges of the feature are not very well defined.	Cut of natural hollow/ depression
107	Fill for pit F 108	unknown	1.75 m	1.50 m	0.20 m	Upper fill of F108. The fill consists of a mid brown sandy clay that turns grey in colour when dry. Dry, plastic and well sorted. The fill is also compact and sterile.	Fill of natural tree-bowl
108	Cut for pit	unknown	1.75 m	1.50 m	0.60 m	F108 is a sub-circular possible pit, oriented East-West. The feature was half sectioned. It contains two fills, F107 and F110. Both fills are sterile and contain no find yet.	Fill of natural tree-bowl
109	Fill in ditch F104	unknown	0.20 m	0.06 m	0.38 m	The fill consists of a linear layer of silty sand on the northern edge of the feature F104. The colour is yellow white. It is friable, dry, well sorted and contains a moderate amount of decayed stones. No other inclusion.	Fill of natural root system/ depression

F. No	Feature Type	Period	Max. Length	Max Width	Max Depth	Feature Description	Feature Interpretation
110	Fill of ditch F108	unknown	1.75 m	1.50 m	.40 m	The fill consists of compact, light yellow silty sand with few decayed stones. Dry, well sorted and sterile. No charcoal and no find.	Fill of natural root system/ depression
111	Fill of modern ditch F112	Modern	15.0 m	1.75 m	1.10 m	The fill consists of a very mixed soil with silt, organic materials, mortar, stones... At the base of the fill, a modern pipe in situ was uncovered. A very large amount of modern finds was uncovered: glass, cans, metal objects, wares...	Backfill in a modern trench for pipeline.
112	Cut for ditch	Modern	15.0 m	1.75 m	1.10 m	Modern ditch running across the whole site. A part of it was uncovered. One test trench was dug where the ditch meets the end of site. A very large amount of modern finds and a modern pipe in situ were uncovered	Cut for Modern trench of pipeline.

Appendix 3: Recorded Archaeological Sites and Monuments from the Study Area

The recorded archaeological sites within the vicinity of townlands of the proposed development are listed below, all noted in the Record of Monuments and Places for South County Dublin. The monuments are listed in a standard format as follows:

List of Recorded Monuments

Mon. No.	Inv. No.	ngr x	ngr y	Townland	Classification
Description					

DU026:080		32249 32250	22396 22395	Brennanstown/Carrickmines	Watermill site
Both sites are marked on the 1837 Ordnance Survey map as the 'Site of an Ancient Mill'. The site is also marked on the Down Survey Map of 1655. Ordnance Survey letters (1837) include sketches which show foundations of rectangular buildings and a feature marked as an 'Old Quern' a series of enclosures are marked to the south of these.					

DU026:007		32290	22419	Brennanstown	Megalithic Tomb
Portal tomb (National Monument) with portal stones, each 1.53m in height, and a full door-stone. The tomb comprises a portico, a chamber and a suggestion of another chamber at the rear. The capstone is very large and roughly square, estimated weight 40-60 tons.					

DU026:006		32278	22378	Laughanstown	Earthwork
Marked 'Enclosure' on first edition of Ordnance Survey 1837. This is likely to have been a ringfort-type earthwork and therefore approximately 30-50m in diameter with a surrounding area of interest of approx. 20m.					

Appendix 4: Previous Excavations

Previously published archaeological excavations in the area from 1969 to 2003 (www.excavations.ie) are summarised below. These are listed in a standardised format as follows:

List of excavations:

Townland Site type Author (Publication)	Year: Excavation No. National Grid
Description	

List of excavations:

BRENNANSTOWN, CABINTEELY Brick making facility SMR 26:119 Stuart D. Elder, The Archaeology Company, Birr Technology Centre, Mill Island, Birr, Co. Offaly, for Irish Archaeological Consultancy Ltd.	2003: 03E 1494. National Grid 32374 22453
<p>Testing was carried out between 8 and 11 September 2003 on an 11.5-acre site in Brennanstown, Cabinteely, in advance of a residential development comprising 230 dwelling units.</p> <p>The method of testing employed was a series of long strip trenches, excavated mechanically, with perpendicular offshoots at regular intervals, to cover an area of approximately 3700 m². Due to a propensity of services towards the eastern site boundary, it was not possible to test in this location.</p> <p>Testing revealed a brick-making facility, measuring approximately 625m², within the footprint of the proposed underground carpark, and a fulacht fiadh of 8-10m in diameter on the eastern side of the stream. The former site will be directly affected by the development, whereas the latter site will not be impacted upon.</p> <p>It was recommended that the brickworks site be excavated in advance of construction, and that monitoring of the eastern entrance and footpaths be undertaken.</p>	

BRENNANSTOWN, CABINTEELY Post-medieval brick clamp SMR 26:119 Brian Halpin, IAC, 8 Dungan Terrace, Dun Laoghaire, Co. Dublin	2003: 03E 1681 National Grid 809590 130523
<p>This site was excavated from 13 to 25 October 2003 in advance of the construction of a large housing development. The site was the levelled remains of a post-medieval brick clamp. It was located in a greenfield site on relatively flat ground on a slight rise in the natural topography approximately 400m west of the Loughlinstown/Cabinteely River. The site was characterised by a long linear feature running 33.75m north-south by 8.25m. This feature contained almost continual rows or columns containing different fills, which were the result of firing activities within the clamp which would have produced a fairly high number of rough bricks in a relatively short time. Although there is no visible above-ground remains of the clamp itself, the columns of scorching and remnant brick debris scattered throughout the site are clearly visible. The area surrounding the site was cleaned back by mechanical digger and no further evidence of brick deposits or associated structures was encountered.</p> <p>The clamp is believed to have been constructed in a fairly simple fashion. A shallow concave depression/pit was laid out on a fairly level area. This was filled with large amounts of wood for burning. It is believed to have been gorse, which was readily available on the surrounding hillsides and was known to have been used in clamps in the Dublin area. Interspersed throughout the columns of brick was a dedicated column of coke specially prepared and</p>	

placed within the columns of brick due to its unique ability for sustained burning after the heat from the underlying wood had lost its intensity. The coke inclusions would continue burning for an extended period of time and eventually be transformed into a very hard concrete/slag-like material when the fuel completed its firing cycle. The coke, being close to the columns of brick, would in some instances have brick burnt into its fabric, so that it was difficult to distinguish entirely between the coke and the remnant brick. Although these columns were well defined and visible at the surface, the true nature of the site was revealed below the surface with a series of exploratory trenches excavated by hand through the length and width of the site.

Trench 1 ran north-south (1m by 36m) through the length of the site from surface to subsoil. Trench 2 ran east-west (1m by 10m) through the width of the site from the surface to the subsoil.

As the clamp was by its very nature an inefficient way to make bricks, there would inevitably have been a high degree of brick loss within the structure. This was the result of highly fluctuating degrees of heat in the clamp at two specific points. The edges of the clamp would realise too little heat, which would not see the bricks thoroughly fired, rendering them of little use. At the centre of the clamp the great concentration of heat would render the bricks into one permanent mould, which would again be of no use.

Upon removal of the bricks, which are believed to have numbered roughly between 3-5000, the feature was then abandoned, as it was usually only made for one specific building project and not for long-term manufacture such as would be seen in a brick kiln. The sample of brick remaining, while poorly made and discarded as a viable building material, does provide a good example of the brick which was manufactured in the clamp. The bricks retain their traditional rectangular shape, with dimensions of 0.24m by 0.1m by 0.07m. It would appear that the bricks, although maintaining a uniform size, were not machine-moulded, as they were very rough-hewn with poor tempering material of silica flecks with small- and medium-sized gravel and with possible coke inclusions, which would help the brick to self fire in the heating process. There are no maker's Q marks on any of the bricks.

There were nine finds recovered from the site, of which eight are from the 18th and 19th century, which is believed to be the date of this site. These included partially corroded iron nails, a clay-pipe stem, an unidentified metal object and several fragments of modern ceramics. A flint side scraper was also recovered. This find is believed to be from a prehistoric period and was mixed in with the feature, bearing no relationship to it. All the finds were recovered from the surface. No finds were recovered from within the clamp itself.




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Figure No: 1	Client: RPA
Title: Site Location	Drawn By: AJ
Job No: 679	Date: September 2006



Figure 1: Site Location Map (extract from OS Discovery Series Sheet 50)



KEY

- Test trench —
- Testing Area ■
- CPO
- Compound area

Site: 3A & 3B
 Licence no.: 06E214
 CRDS Ref. no.: 679

Client: R.P.A.
 Drawn by: NL
 Date: August 2006



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Figure 2

SCALE 1:5000



Figure 2: Location of site within RPA Development

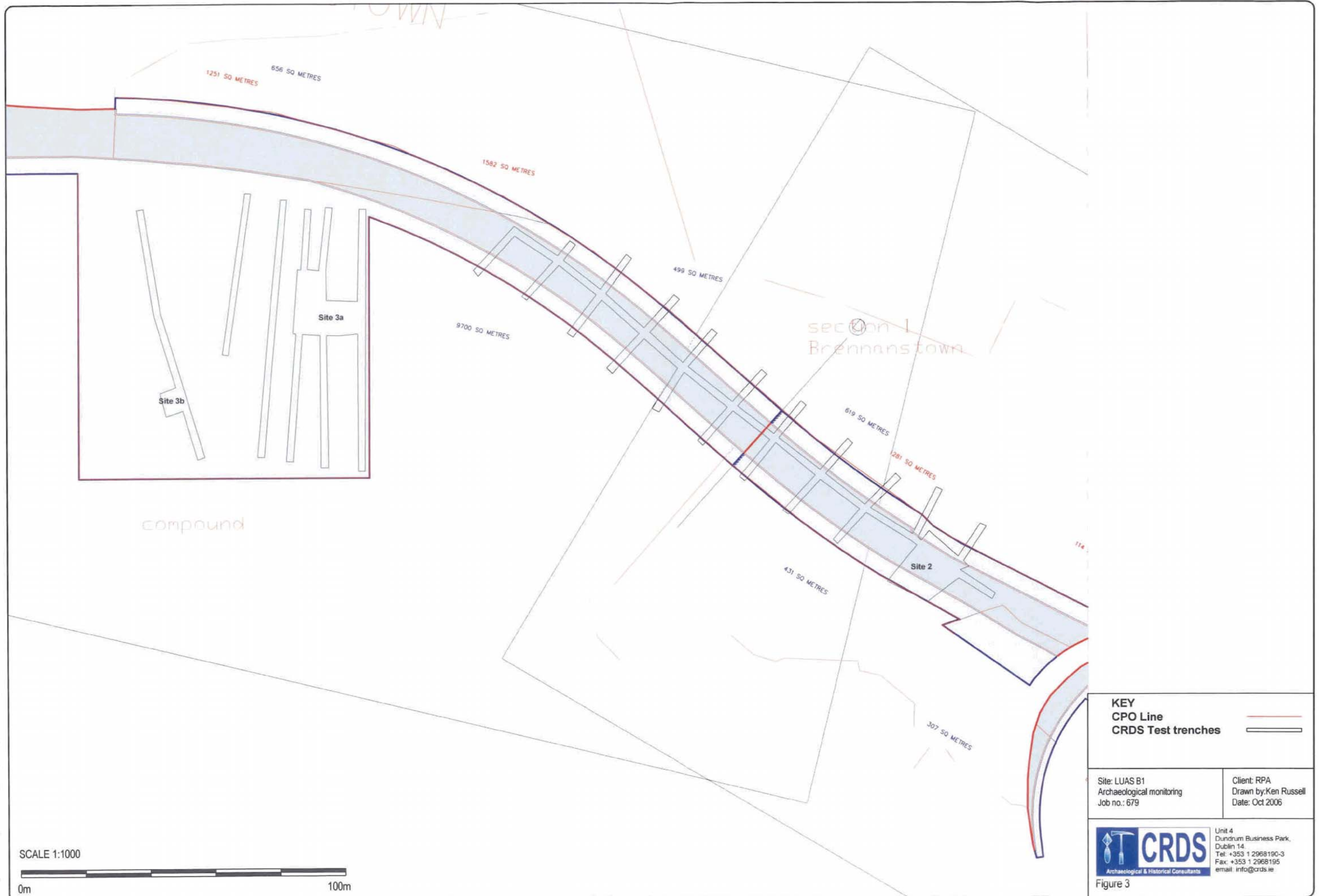


Figure 3 :LUAS B1 line showing CRDS test trenching at Brennanstown

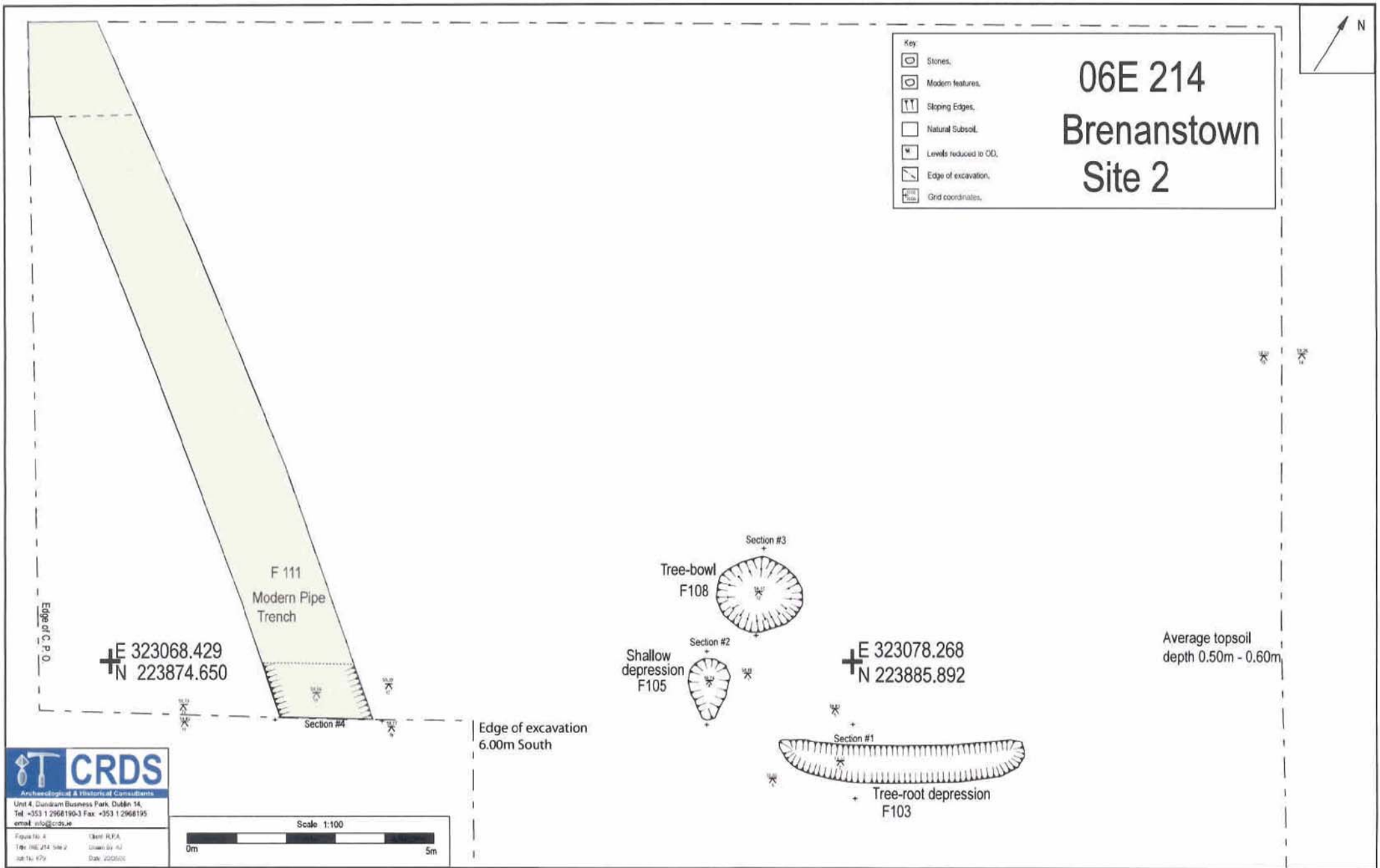


Figure 4: Post excavation plan of Brenanstown 06E214, Site 2.



Plate 1: 06E 214 Brenanstown, Site 2
Tree-bowl Features. Facing North.



Plate 2: 06E 214 Brenanstown, Site 2
Tree-bowl Features. Facing West.



Plate 3: 06E 214 Brenanstown, Site 2
General site shot. Facing South West.



Plate 4: 06 E 214, Brenanstown, Site 2, Modern pipe trench. Facing South East.



Plate 5: 06 E 214, Brenanstown, Site 2, Small shallow depression Facing East.



Plate 6: 06 E 214, Brenanstown, Site 2, Tree-bowl, facing West.