archaeology plan HERITAGE SOLUTIONS

Archaeological assessment at Lehaunstown Development, Laughanstown, Dublin 12



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23E0771

14/12/2023

AP23-35



PROJECT NAME

Archaeological assessment at Lehaunstown development, Laughanstown, Dublin 12

CLIENT Dun Laogaire Rathdown County Council, 2 Marine, Road, Dun Laoghaire, Dublin

PROJECT REF AP 23-35

RECORDED MONUMENT

EXCAVATION LICENSE 23E0771

DATE 14/12/23

PLANNING Pre-Planning

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ARCHAEOLOGICAL PLANNING CONSULTANCY ARCHAEOLOGICAL ASSESSMENT CULTURAL HERITAGE BUILT HERITAGE

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Section 1 Introduction

1.1 Report summary

This report details the results of an archaeological assessment of a site located in laughanstown (sometimes known as Lehaunstown) townland, Co. Dublin (hereafter referred to as the study area). It comprises a consideration of the archaeological background and history of the study area and the results of a programme of test trenching.

The desktop assessment demonstrated that the study area is located in an archaeologically rich landscape with a number of prehistoric and medieval archaeological monuments located in close proximity. In particular, the results of three previous archaeological excavations indicated that further archaeological remains associated with

those sites were likely to by found to the north, that is, in the study area.

The subsequent testing programme revealed a number of spreads of burnt material, most likely representing a single burnt mound or fulacht fia site, along with associated features such as metalled surfaces.

Based on the results of this assessment it is recommended that the archaeological site should be fully hand-excavated under excavation license from the National Monuments Service prior to any construction on the site. The aim of the excavation should be to completely excavate and remove all archaeological material from the site, and preserve it by record.



Below: Location of study area

1.2 Site Location

The study area is located in Laughanstown townland, Co. Dublin, centred on ITM 723608E, 723906N. Currently in pasture, it is bordered to the north and east by the boundaries with Brenanstown and Loughlinstown townlands. The Loughlinstown River runs along the eastern boundary. The southern and western boundaries consist of unmanaged hedgerows. The site slopes sharply upwards from the river at the east to form part of a broader ridge that runs north-south along the western side of the Loughlinstown River.

1.3 Development proposals

The development proposal comprises the construction of a new residential development of houses and apartments comprising 116 units in total with a mixture of surface and undercroft carparking. The units will address a new landscaped square that responds to the natural contours of the site. A new cycleway will be provided on site to link into the proposed Cherrywood greenway network.



Below: Proposed development plan



Above: Map of the proposed development with areas of archaeological potential indicated (red - high potential, yellow - moderate potential, green - low potential). North to right of image

Section 2 Archaeological Potential

2.1 Known monuments

The files of the Record of Monuments and Places were consulted for this desktop assessment. The RMP files form part of the National Monuments Service and are one of the primary repositories of information on the archaeological record. 23 known monuments are recorded within 750 metres of the study area, However, one of these (DU026-023) is a redundant record. Two of these recorded monuments (Tully Church and portal tomb) Brenanstown are National Monuments in state care (NMS 2009). The Zone of Archaeological Potential (ZAP) of the Military camp (DU026-127) extends into the study area from the south.

Military Camp (DU026-127)

The Loughlinstown military camp is the closest known site to the study area, its projected northern boundary extending into the study area from the south. This extensive camp was established in 1795 to defend Killiney Bay from a potential attack by French forces. Contemporary depictions of the camp demonstrate two rows of huts and tents located east of Tully church and west of the Loughlinstown River. Archaeological excavations in the area have demonstrated that the camp has left little in the way of archaeological features with the exception of a camp kitchen and middens (McQuade & Clancy 2005, 8).

Below: Map of known archaeological sites within 750 metres of the study area





Above: Taylor's 1816 map of Dublin indicating the approximate location of the Napoleonic war-era camp (DU026-127)

Church (DU026-023001)

Tully Church was an early diocesan centre known as Tulach na nEpscop (Hill of the Bishops). There were eight bishops associated with the church by the eighth century. The Church consists of a nave, probably eleventh century in date, and a chancel, probably a late twelfth or early thirteenth century addition. The church stands within an enclosure comprising a graveyard containing grave slabs, and is associated with two nearby high Crosses (DU026-023003 and DU026-023007). Tully church and associated monuments (DU026-023001 to -023020) are a National Monument in state care (National Monument No. 215).

Graveyard (DU026-023002)

Located within the inner enclosure surrounding Tully Church (DU026-023001), this graveyard contains eleven granite graveslabs of an early date (NMS).

High Cross (DU026-023003)

This road-side high cross stands c110m northwest of Tully church (DU026-023003). It is a plain granite ring-headed cross of tenth to eleventh century date. At a date after 1860 it was set into a cube-shaped base in its current location (Corlett & Condit 2013, 3).

High Cross (DU026-023004)

This high cross stands c85m west of Tully Church (DU026-023001) in a field. It is formed from carved granite with expanded terminals. The east face contains the carving of a figure with a full-length garment, both hands bent at the elbow and holding a crozier. The west face contains a weathered carving of a face. It is potentially twelfth century in date (Corlett & Condit 2013, 4).

Cross (DU026-023007)

O'Reilly (1901, 250) records that 'On a small hillock, immediately beside the cross (DU026-023004), are two large granite boulders, in each of which a deep, straight-sided, rectangular mortice, that evidently was made to receive a cross-shaft, has been sunk.' No trace of this second cross has been found to date (NMS).

Cross-inscribed stone (DU026-023008)

O'Reilly (1901, 142) records that 'lying beneath the chancel arch at Tully is a small, oval-shaped fragment of stone... which bears a cup, and beside that... an equal-armed incised cross'. The location of this stone is unknown (NMS).

Ecclesiastical enclosure (DU026-023009)

an oval enclosure defined on the east side by a

well-defined scarp and along the south by an earth-and-stone bank; this is likely to represent an element of the original ecclesiastical enclosure. Further evidence of two possible outer enclosures are visible as crop-marks on an aerial photo (OS 89877) with a radius of c. 70m and c. 140m respectively (Corlett 2014, 10).

Graveslab (DU026-023010)

One of eleven granite graveslabs recorded at Tully graveyard. This slab is tapered and has two vestigial arms protruding from the edges. It bears three groups of concentric circles on a central band with a herringbone pattern on either side (NMS 2015)

Graveslab (DU026-023011)

One of eleven granite graveslabs recorded at Tully graveyard (Swords 2009). This slab bears a Latin ringed cross in low relief on which are five cupmarks (NMS 2015).

Graveslab (DU026-023012)

One of eleven granite graveslabs located within the graveyard (DU026-023002). This slab is located to the west of the church and close to the gate. It bears faint traces of a Greek cross (NMS 2015).

Graveslab (DU026-023014)

One of eleven granite early grave slabs recorded at Tully graveyard. Only a portion of this slab survives. It was used as a lintel for the aumbry in the S wall of the chancel of the church (DU026-023001). The slab has rounded angles and tapering edges (NMS 2015).

Graveslab (DU026-023015)

One of eleven granite early grave slabs recorded at Tully graveyard (Swords 2009). This slab lies partly buried c. 3m E of the church gable (DU026-023001) (NMS 2015).

Graveslab (DU026-023016)

One of eleven granite early grave slabs recorded at Tully graveyard (Swords 2009). This is one of four slabs which are built into the arch of one of the east windows of Tully church (DU026-023001) (NMS 2015).

Graveslab (DU026-023017)

One of eleven granite early grave slabs recorded at Tully graveyard (Swords 2009). This is one of four slabs which are built into the arch of one of the east windows of Tully church (DU026-023001) (NMS 2015).

Graveslab (DU026-023018)

One of eleven granite early grave slabs recorded at Tully graveyard (Swords 2009). This is one of four slabs which are built into the arch of one of the east windows of Tully church (DU026-023001) (NMS 2015).

Graveslab (DU026-023019)

One of eleven granite early grave slabs recorded at Tully graveyard (Swords 2009). This is one of four slabs which are built into the arch of one of the east windows of Tully church (DU026-023001) (NMS 2015).

Graveslab (DU026-023020)

A granite block carved with a cross-in-circle in false relief. One long side and the two ends of the stone have been dressed to a straight edge whereas the other long side and the rear of the stone have been left rough (NMS 2015).

Burial ground (DU026-119)

Discoveries of skeletal material and a stone-lined grave had been recorded by the National Museum from a site known as 'Graves Moate' at Mount Offaly, Cabinteely. A pre-development assessment in 1995 discovered fourteen *in situ* burials of early medieval date, as well as a sherd of medieval pottery. Excavations at the site in advance of construction were undertaken in 1998 revealing a complex sequence of burial beginning at least in the fifthth or sixthth century AD, culminating sometime in around the eleventh or twelfthth century. At least 1553 individuals were uncovered (NMS 2015).

Fulacht fiadh (DU026-159)

Pre-development archaeological testing in 2003 revealed a fulacht fiadh on the east side of a stream (Elder 2003, 107).

Megalithic tomb - portal tomb (DU026-007)

located on the valley floor of a steep-sided glen close to a stream. A massive wedge-shaped granite roofstone covers a chamber and antechamber facing west. It rests on the two front portal stones and three side stones. A doorstone separates the main chamber from the antechamber. This portal tomb is a National Monument in state care (National Monument No. 291) (NMS 2015).

2.2 Previous excavations

Archaeological excavation within the study area

One programme of archaeological testing has been carried out within the study area.

23E0394

Test trenching was conducted by Chris Coffey under license 23E0394 in advance of the construction of a retention pond and associated access roads both within and adjacent to the study area. This testing was concentrated on the eastern half of the site, where four test trenches (T2 – T5) excavated from the edge of the were Loughlinstown River running partway up the steep slope located centrally in the study area. Two more test trenches were excavated within the study area concentrating on the routes of proposed access roads along the northern edge of the study area and at the site of a proposed new access point located on the eastern boundary (Coffey & Fowler 2023, 10-11).

In addition, four test trenches were excavated

outside the boundaries of the study area. These test trenches followed the route of a proposed access road which runs parallel to the southern edge of the study area (Ibid).

The test trenching programme revealed evidence of longstanding agricultural use of the study area, with field boundaries, drains, and a furrow being discovered within the test trenches located in the east of the study area. The test trenches located outside and to the southwest of the study area uncovered no features of interest. Overall, no archaeological features were discovered (Ibid, 11-12).

Excavations within 500 metres of the study area

Recent development in the surrounding area has led to a large amount of archaeological excavation taking place. Ten archaeological excavations have been undertaken within a 500 metre radius of the study area, a further 37 excavations have taken place within a one kilometre radius.





94E0201/97E0279

A programme of archaeological testing was carried out in order to assess the extent of the military camp (DU026-127) In advance of development of the Cherrywood strategic development zone. This testing programme revealed that the camp left a surprisingly sparse archaeological footprint. The lower sections of several middens were the main archaeological features to survive, Hut platforms and a gravelled road were also discovered, as well as burnt spreads (O'Donovan 1997).

98E0035

Excavation in advance of the construction of an Esso service station in Brenanstown townland to the north of the study area was undertaken from February to August 1998. This revealed a complex sequence of burial beginning at least in around the 5th or 6th century, culminating sometime in around the 11th or 12th century. At least 1553 individual burials were uncovered, along with numerous deposits of disarticulated remains and two charnel pits (Excavations.ie 2023a).

00E0565

Test trenching carried out in Cherrywood townland in advance of construction of the second phase of the Science & Technology Park discovered no archaeological features (Ó'Neill 2001, 5).

03E1598

Monitoring of topsoil stripping immediately south of the study area in advance of the construction of an access road associated with the Tully Vale development discovered a series of archaeological pits and postholes. These features were distributed to the north of the stripped area and were interpreted as part of a larger site that extended northwards (McQuade 2003, 7).

04E0896

This excavation took place immediately west of test trenches excavated under license 03E1598. A number of pits containing charcoal were distributed to the north of the excavated area, indicating a possible area of archaeological activity to the north (Phelan 2004, 8)

Below: Archaeological excavations within a 1 kilometre radius of the study area



06E0944

Archaeological testing in advance of the construction of the LUAS line took place to the west of the study area in 2006. This excavation uncovered evidence for two prehistoric structures dating to the Neolithic and/or Bronze Ages and modern activity associated with the eighteenth century military camp and agricultural activity. Finds included lithic artefacts as well as modern military cap badges and musket shot (Fallon 2006).

16E0526

Archaeological testing in advance of a proposed residential development identified probable Bronze Age cremation burials and a post-medieval brick clamp in Brenanstown townland to the north of the study area (Duffy & Whitty 2016, 14).

E04640

Archaeological testing in advance of the Tully Park development in 2016 uncovered evidence of the eighteenth century military camp, as well as a number of Fulacht Fiadh or burnt mound features (McIlreavy & Tobin 2016).

19E0275

Excavation to the northeast of Tully church uncovered evidence of a structure associated with a large amount of Late Neolithic/Early Bronze Age pottery, as well as medieval pottery sherds probably associated with tully church (excavations.ie 2023b)

Summary

A number of archaeological excavations in close proximity to the study area have revealed that this is an archaeologically rich location; the broader landscape contains the remains of archaeological sites from multiple periods from the Neolithic to the Modern period. Of particular note are the findings of three archaeological excavations (03E1598, 04E0896, and 06E0944), these three excavations uncovered evidence of Neolithic and Bronze Age activity to include both settlement and funerary activity within 200 metres of the study area.

2.3 Topographical Files

The topographical files of the National Museum of Ireland record a large number of stray finds in Laughanstown townland including late eighteenth and early nineteenth century coins, tokens, buttons, and pottery associated with the military camp (DU026-127). Further finds from this townland include medieval pottery sherds found in the fields surrounding Tully church, as well as flint flakes, a flint scraper, and a quern stone. The neighbouring townland of Loughlinstown to the east produced a find of a flint blade in addition to finds of human remains associated with the Medieval burial ground at the site known locally as 'Graves Moate', which was excavated in 1998 (Topographical files 2023).

Below: Table of stray finds recorded in Laughanstown and surrounding Townlands (NMI 2023)

NMI NO.	SimpleName	Townland	FindPlace
1975:247	Pottery	LAUGHANSTOWN	N/A
1981:10	Pottery	LAUGHANSTOWN	Tully churchyard
1989:18	Strap tag	LAUGHANSTOWN	Field, surface of ploughsoil
1989:23	Scraper	LAUGHANSTOWN	N/A
1989:24.1	Flint	LAUGHANSTOWN	N/A
1989:24.2	Flake	LAUGHANSTOWN	N/A
1989:24.3	Flake	LAUGHANSTOWN	N/A
1989:24.4	Flake	LAUGHANSTOWN	N/A
1989:24.5	Chunk	LAUGHANSTOWN	N/A
1989:25	Pottery	LAUGHANSTOWN	N/A
1991C1:127	Harness fitting	LAUGHANSTOWN	N/A
1991C1:128	Object	LAUGHANSTOWN	N/A
1991C1:129	Button	LAUGHANSTOWN	N/A
1991C1:130	Button	LAUGHANSTOWN	N/A
1991C1:131	Button	LAUGHANSTOWN	N/A
1991C1:132	Mould	LAUGHANSTOWN	N/A
1991C1:133	Mould	LAUGHANSTOWN	N/A
1991C1:134	Handle	LAUGHANSTOWN	N/A

NMI No.	SimpleName	Townland	FindPlace
1995:1981	Coin	LAUGHANSTOWN	N/A
1995:1982	Coin	LAUGHANSTOWN	N/A
1995:1984	Coin	LAUGHANSTOWN	N/A
1995:1985	Coin	LAUGHANSTOWN	N/A
1995:1995	Token	LAUGHANSTOWN	N/A
1995:27	Token	LAUGHANSTOWN	Napoleonic camp
1995:28	Token	LAUGHANSTOWN	Napoleonic camp
1995:29	Token	LAUGHANSTOWN	Napoleonic camp
1995:30	Token	LAUGHANSTOWN	Napoleonic camp
1995:31	Token	LAUGHANSTOWN	Napoleonic camp
1995:32	Token	LAUGHANSTOWN	Napoleonic camp
1995:33	Coin	LAUGHANSTOWN	Napoleonic camp
1995:34	Coin	LAUGHANSTOWN	Napoleonic camp
1995:35	Coin	LAUGHANSTOWN	Napoleonic camp
1995:36	Coin	LAUGHANSTOWN	Napoleonic camp
1995:37	Button	LAUGHANSTOWN	Napoleonic camp
1995:38	Button	LAUGHANSTOWN	Napoleonic camp
1995:39	Button	LAUGHANSTOWN	Napoleonic camp
1995:40	Button	LAUGHANSTOWN	Napoleonic camp
1995:41	Button	LAUGHANSTOWN	Napoleonic camp
1995:42	Mount	LAUGHANSTOWN	Napoleonic camp
1995:43	Object	LAUGHANSTOWN	Napoleonic camp
1995:44	Mount	LAUGHANSTOWN	Napoleonic camp
1999:132.1	Pottery	LAUGHANSTOWN	Field beside Tully Church
1999:132.2	Pottery	LAUGHANSTOWN	Field beside Tully Church
1999:132.3	Pottery	LAUGHANSTOWN	Field beside Tully Church
1999:132.4	Pottery	LAUGHANSTOWN	Field beside Tully Church
1999:132.5	Pottery	LAUGHANSTOWN	Field beside Tully Church
2012:261	Quern	LAUGHANSTOWN	Heronford Lane
1957:350	Human remains	LOUGHLINSTOWN	N/A
1967:137	Blade	LOUGHLINSTOWN	N/A
1991:40:00	Human remains	LOUGHLINSTOWN	N/A

2.4 Industrial heritage

The survey of industrial heritage notes two sites of interest. Just outside the northwestern boundary of the study area, a recessed opening is located in the boundary wall that runs along the south side of Lehaunstown Lane. This opening was built into the wall to allow public access to a well or spring after the road was realigned in the late nineteenth and early twentieth century. While no holy well traditions are known to be associated with this location, the close proximity to Tully church means that such associations cannot be ruled out (DLRCC 2021a, 103).

A gate pier of granite is located to the west of the study area at the site of the crossing of the Dublin to Wicklow railway with Lehaunstown Lane. This gate pier would have been part of the original nineteenth century rail crossing infrastructure (Ibid).

Below: Holy well structure built into late nineteenth/early twentieth century wall. Lehaunstown Lane





Above: Down Survy map of Rathdown Barony with study area outlined in blue (NB north to bottom of image)

2.5 Cartographic background

The earliest cartographic source available, the Down Survey (1655), does not depict any structures within the study area on the Parish map. However, the Baronial map of Rathdown demonstrates the density of the medieval and early modern fortifications in the area: The site is surrounded by the castles and tower houses of Lehaunstown, Loughlinstown, Brenanstown, Carrickmines, and leopardstown.

A greater level of detail can be observed on the eighteenth century map of the environs of Dublin by John Rocque, which shows that the study area lies within an agricultural landscape of enclosed fields. Taylor's 1816 map shows the study area lying to the northern edge of the late eighteenth

Below: Extract from Rocque's 1757 map of Dublin showing approximate site location (NB north to right of image)





Above: Extract from Duncan's 1821 map showing apprximate site location

century military camp's extent. This map also depicts the eastern portion of the site, closest to the Loughlinstown River, as at least partially forested. This map also notes the nearby Brenanstown portal tomb (DU026-007), described as a 'Cromlech'. By the time of the first Ordnance survey map (1847), the boundary of the study area has taken the shape that it remains in currently. Few observable changes occur on maps throughout the nineteenth century, with the 25-inch edition of the OS maps (1909), noting that the eastern edge of the site is liable to flooding.

Below: Extract from the first edition Ordnance survey map (surveyed 1830s) showing site outline broadly coterminous with midnineteenth century field boundaries





Above: Aerial imagery of study area. compare with OS map above (Google Earth 2023)

2.6 Aerial and satellite imagery

Aerial and satellite imagery demonstrate little change since imagery became available. The only change visible in comparison with earlier map imagery is the presence of a modern dwelling and garden constructed in the northwest corner of the field. This property is not part of the study area.

The study area remains in use as pasture. No potential archaeological features were identified on aerial imagery.

2.7 Historical background

Mesolithic Period

Mesolithic activity in the wider landscape is demonstrated by the recovery of a flint microliths and blades in the ploughsoil during archaeological excavations in 2004 (Seaver 2004, 9). Although relatively ephemeral, this evidence demonstrates that Mesolithic peoples were active in the area in some capacity.

Neolithic

A number of Neolithic monuments and sites are located in the surrounding landscape. Brenanstown portal tomb (DU026-007) lies on the north bank of the Shanganagh river c400 metres uphill from the study area. Within Laughanstown townland itself evidence for this period comes from a Wedge tomb which produced a polished stone axehead (Seaver & Keeley 2002, 112-114). Excavations in the Tully Vale development to the southeast and excavations along the LUAS line to the southwest of the study area produced evidence for Late Neolithic habitation including structures, pottery, quern stones, and stone tools (Bennett 2006, 668).

Bronze Age

Recent development within the Cherrywood SDZ has produced a large amount of evidence for Bronze Age activity in the area. Four Bronze Age cremations were discovered to the south of the study area (Gowen 1997, 14-18). These cremations may be associated with a settlement evidenced by structures, saddle querns, and further cremation burials excavated further south at the M50

junction (Seaver & Keely 2006, 78-94). A scatter of probable Bronze Age cremation burials were also discovered to the north of the study area in Brenanstown townland (Duffy & Whitty 2019).

In the wider landscape, a ring barrow and associated cremation burials and a structure dating to the Bronze Age were discovered in Cherrywood townland c800 metres to the south of the study area (Bennett 1999, 169). A number of Fulachta fiadh or burnt mound sites are also located in the area. Although these sites can date from the Neolithic to the Medieval periods, a majority date to the Bronze Age.

Iron Age

Recent excavations in the landscape surrounding the study area have produced evidence for domestic life during the Iron Age: archaeological excavation in advance of the construction of the M50 motorway in Carrickmines Great townland to the northwest of the study area produced evidence of a large circular building, metalworking, and cereal production (Ó'Drisceoil 2007, 5-28). To the south of the study area an Early Iron Age ringditch and a Late Iron Age enclosed inhumation cemetery were discovered in Cherrywood townland.

Early Medieval period: Ecclesiastical Centre

Evidence for continuous occupation of the area continues into the Early Medieval period. The large cemetery in Loughlinstown (DU026-119), to the north, was in continuous use between the fifth/ sixth and twelfth centuries, indicating a continued importance of the area over a long period.

Tully church further demonstrates the density of occupation of this area during the Early Medieval period. As an important ecclesiastical centre from at least the eighth century, it may have been associated with the large ringfort and associated structures, grain drying kilns, and field system excavated in Glebe townland to the south. This settlement occupied the site of an earlier cemetery, dating to between the fifth and seventh centuries (Corlett & Condit 2013, 5).

Tully church retained its importance for centuries; being transferred to the control of Christchurch by the Norse kings of Dublin in the late twelfth century, and soon thereafter to the control of the Augustinian Friary of the Holy Trinity in Dublin after the Anglo-Norman conquest (Ibid). The church was remodelled with a chancel in the early thirteenth century (Ní Mharcaigh 1997, 249). Evidence of its local power can be found in the Down Survey map (1656), which locates Tully church at the centre of its own parish, which included laughanstown, Brenanstown, Glenamuck, Cherrywood, Carrickmines, and Leopardstown. This Early Modern Parish probably reflected the power of the church in the local area extending back to the Medieval period (Corlett & Condit 2013, 3).

The area also provides rare evidence for Norse settlement in Ireland outside of large towns and cities: At the site of the same Early Medieval settlement in Glebe townland discussed above, a structure in the style of ninth/tenth century Norse longhouse was excavated, producing finds of a Norse whalebone plaque as well as ring pins and amber (O'Neill 1999, 9). Further evidence for Norse settlement in the area can be found in the name Loughlinstown (from Irish Lochlind – Scandinavia) (Ibid, 10).

Medieval Pale defence

After the Anglo-Norman conquest a network of fortifications including ditches and castles was set up to defend the lands held by Anglo-Norman lords known as the Pale. Carrickmines Castle was constructed in the late thirteenth century as part of the earliest defensive network to protect one of the favoured routes by the raiding parties of the O'Byrne lords of Wicklow (O'Byrne 2002, 14). Carrickmines Castle was in the possession of the Howel family for most of the Medieval period, but, with Kilgobbin castle and Dalkey, along Carrickmines Castle was the possession of the Walsh family by 1400, whose wealth from Dalkey port was used to pay for the reinforcement of the defences of Carrickmines Castle (Ibid, 15). The constant low-level warfare and raiding into Dublin continued in the Late Medieval and into the Early Modern period (Ball 1906, 134; Curtis 1930, 147), and the English Crown gave grants in 1429 and 1537 for the construction of castles, leading to the construction of the smaller fortified Tower Houses in the surrounding area. Lehaunstown house was originally constructed as a Tower House, and there were additional Tower Houses at Loughlinstown and Brenanstown, less than a kilometre from the study area (Clare 2005, 25) These were probably the fortifications and residences of the Walshes'

military sub-tenants.

Loughlinstown military camp

The large military camp that encompassed most of the eastern half of Laughanstown townland and into part of Cherrywood townland was established in response to the Militia Act of 1793 (Murray 1944, 22). This act aimed to raise a 16,000 strong militia, 500 from each county, in order to provide a trained security force within Ireland (Ibid).

The camp began construction in 1795 and consisted of wooden huts, a rarity at a time when soldiers were typically housed in tents, with a ring-shaped communal cooking pit (McQuade & Clancy 2005, 8). The first units to garrison the camp were the Westmeath militia, Drogheda militia, Downshire militia and the Perthshire fencibles. Though it was broken up in 1799 and the garrison dispersed to other posts, the camp provided a popular destination for civilians from the surrounding area, who gathered to watch the military practice maneuvers, or to attend the public breakfasts and balls held by the officers of the camp (Ibid). Multiple excavations have found that little trace of the camp remains, having been removed by deep ploughing in the two centuries since it ended its life as a military post.

2.8 Placename evidence

Logainm.ie, the placenames database of Ireland, shows that the townland name has been recorded as both Laughanstown and Lehaunstown, with Laughanstown being the official version as recorded in the townlands of Ireland database. Both Laughan- and Lehaun- are anglicisations of the Irish 'Lochan', a small lake or pool (Logainm.ie)

Section 3 Site Inspection

A site inspection was carried out on 11/06/2023 in dry weather after a period of heavy rain. The southern, western, and northern edges of the site are bordered by unmanaged hedgerows, at the east, the border of the site is formed by the course of the Loughlinstown River. At the northwest corner of the site an area of fencing divides the site from a modern dwelling (not part of the study area). The site was covered in long grasses. The eastern area of the site was composed of uneven ground with a gentle slope from both north and south toward the centre of the site, at which point a steep slope of roughly 45° drops down to a small strip of flat, marshy ground bordering the river. Four archaeological test trenches had been excavated and backfilled in this area of the site, running from the river bank westwards for a distance of c100 metres, partway up the steep slope.



Above: View north along west border of study area

Below: View from southern border of study area showing sloping ground to east. IAC test trenches visible



No archaeological features were identified during the course of this site inspection; however, the density of the vegetation made such identification extremely difficult.



Above: View south along western boundary of site

Below: View eastwards from western border of site



Section 4 Testing

Introduction

The testing programme took place over six days, from the 16th to 22nd November 2023, under license number 23E0771. The aim of the testing programme was to assess the potential archaeology present in the western half of the site (the eastern half having been testing by IAC earlier in 2023 under licence 23E0394). The weather was mixed, but dry conditions overall.

Initially ten test-trenches were planned covering 10% of the site area, however due to the restricted site access which allowed a machine size of only 8 tonnes, and the very deep topsoil, only seven trenches were completed, covering c. 7% of the site.

Methodology

Using a mechanical excavator, dig intercrossing test trenches were excavated in a grid to the depth of the natural subsoil or top of any archaeological features, to identify any archeology that may be present.

• The upcast topsoil was investigated for artefacts, using a metal detector where appropriate

Any features that were found were tested

• All archaeological features were recorded with written, drawn and photographic records

• Any artefact found during testing has been retained

• All test trenches excavated have been backfilled

Topsoil

Topsoil consisted of mid-brown silty clay of medium compaction, and measured between 0.20-0.90m in thickness across the area tested.

Subsoil

The subsoil consisted of stony gravelly clay with variations in colour between orangey brown and grey, and contained frequent weathered stone.



Test Trench 1

L: 66m W: 1.50m D: 0.3- 0.85m

Test trench 1 contained no features except a stone-filled field drain running from east to west and a modern water pipe.







Above: South-facing photograph of TT1

Test trench 2 L: 71m W: 1.50m D: 0.30 - 0.85m

Four features were identified in this trench. The trench consistently filled with water, indicating the proximity of a water source, which would be typical of a burnt mound (see discussion below).

F1 was a light greyish-brown spread of silty clay. F2 was a burn spread, consisting of dark mottled brown and black sandy clay with frequent medium burnt stone. F3 was the southernmost burnt feature in this trench, consisting of dark grayish black silty clay with white flecks and light brown mottling and frequent medium stone. F4 was field drain.







Above: South-facing pre-ex photo of F1, F2, and F3

Below: North-facing pre-ex photo of F2



Test trench 3

L: 71m W: 1.50m D: 0.30 - 0.85m

Three features were identified in this trench. F5 a potential metalled surface (surface made of densely packed small stones), F6 a NW/SE-running linear feature with a pale grey spread of sandy clay, and F7 a small field drain.



Above: North-facing pre-ex photo of F6

Below: South-facing photo of TT3





Above: Mid-ex photograph of possible metalled surface F5



Above: North-northwest-facing section of possible linear feature $\ensuremath{\mathsf{F6}}$



Above: South-southeast-facing section of field drain F7

Test trench 4

L: 116mm W: 1.50m D: 0.30 - 0.90m

This trench contained F4, a stone drains also running through TT2, running west to east. No other archaeological features were identified in this trench.



Below: South-facing photograph of TT4

Below: North-facing photograph of TT4



Test trench 5 L: 153m W: 1.50m D: 0.30 - 0.85m

This trench was orientated in an east west direction starting from TT1, measuring 153m in length, 1.50m in width and 0.30-0.90m in depth. During the excavation five potential features were identified. F8 a burnt spread, F9 a burnt spread deposit, F10 a large boulder, F11 a NW/SE drain, and F12 a possible metalled surface (surface made of densely packed small stones).



Above: West-facing shot showing F8 and F9

Below: Possible brooch found in topsoil of TT5



Below: West-facing photo of possible metalled surface F12



Above: East-facing shot showing F10





Above: West-facing photo of TT5 showing F8 and F9

Below: West-facing photo of TT5 showing F12



Below: East-facing photo of TT5 showing stone drain F11



Test trench 6 L: 91m W: 1.50m D: 0.40 - 0.90m

This trench had an east- west orientation starting from TT1, measuring 93m in length, 1.50m in width and 0.40-0.90m in depth. However, due to site constraints this trench was not excavated to the full length as initially proposed. Eight potential features were identified. F13 a sandy clay deposit, F14 a drain running N/S, F15 a density of rocks and stones, F16 a silty grey deposit, F17 a large grey silty deposit, F18 a very large boulder, F19 a furrow, F20 and F21 burnt mound deposits, and F22 a possible trough sealed by the burnt mound.



Above: South-facing photo of large boulder F18

Below: East-facing photo of burnt mound material F20







Below: East-facing photo showing F18, F19, F20, and F21





Above: Closeup photograph of F20



Below: West-facing photograph of burnt mound material F21 with possible sealed trough F22

Test trench 7 L: 83m W: 1.50m D: 0.30- 0.90m

This trench was located at the eastern most extent of the testing site, to investigate the undulations of the ground that were observed during the site inspection. No archaeology was identified in TT7. However, due to the presence of an engineering device which was obscured by grass, this trench deviated slightly from the set-out design, leaving a 5m exclusion zone around the device.

Below: North-facing photo of TT7





Above: South-facing photo of TT7

Description of features

F1

A pale greyish-brown spread or fill of silty-clay measuring 2.3m, min. 1.5m in width, and unknown depth, north of the burnt spread, in TT2. 0.40 below topsoil and either sitting on or cut into natural subsoil. It was not tested.

F2

A pit filled with burnt spread material in TT2. One investigatory slot was hand-excavated in this feature, and the pit measured 2.5 m in length (n/s), 1.50m in width and at least 0.60m in depth. Cut into natural subsoil, sloping up at the east and continuing with increasing depth to the west.

The lower fill of F2 comprised a dark greyish-black sandy-clay with frequent medium stone and moderate small and large stone, moderate charcoal inclusions and two sherds of probable bronze age pottery [D:0.4m]. The upper fill comprised a mid greyish-brown sandy-clay with frequent medium stone and moderate small and large stone and moderate charcoal inclusions. [D:0.55m].

F3

The southernmost burnt spread within TT2, located approximately 5m south of F2, consisting of similar dark grayish black silty clay with white flecks and light brown mottling and frequent medium heat affected stone. Two test slots were excavated at either end of the feature, measuring 9.6m n/s and 0.40-0.50m in depth. This feature is consistent with burnt mound material.

F4

A stone drain running e-w across the trench, immediately north of F3 measuring 1m in width and 0.35m in depth and unknown length, 0.40-0.60m below topsoil across trenches 1-4.

F5

A NNW/SSE Linear in TT3. 0.6 below topsoil is a pale grey brown sandy-clay, cut into natural subsoil. This linear intersects with light grey, brown spread to the north. The linear measuring 1.85 in length, 0.35m in width with a depth of 0.25m.

F6

A metalled surface (a surface made of densely

packed small stones) was located at the northernmost extent of TT3, sealed below a deposit of pale grey silt 0.40m below topsoil. The silt spread measured 1.5m min in width and c. 2m in length. The silt spread was tested in two locations and the metalled surface was identified below it, under 0.10-0.20m thickness of silt. The metalled surface overlay natural subsoil.

F7

A small north-south field drain 0.50m below topsoil and cut into natural subsoil, measuring 4.3m in length, 0.3 in width and 0.2 in depth. Filled with a mid grey, brown gravelly clay.

F8

A layer of burnt spread material which was visible in section in the south facing section in slot 1 of TT5, 0.60 below topsoil and appears to be cut into natural subsoil. It measured c. 6m in length. However, the feature was not fully investigated as it was constantly submerged underwater. It is probable that F8 is the western extent of the burnt mound (F3) material found in TT2.



Above: South facing section of Test Trench 5 showing F6

F9

A burnt spread that can be seen in the north facing section in slot 2 of TT 5. Consisting of dark grey and black sandy clay approximately 10m in length, 0.10-0 .20m in depth and approximately 0.30m-0.50m below topsoil and over natural subsoil.

F10

A very large boulder 0.30m below topsoil and over natural subsoil at the intersection of slot 3 of TT5 and TT3 that is most likely natural. No sign of working. Smaller than the boulder F18. It measured c..80m by .50m in size.

F11

A modern stone drain running NW/SE across the easternmost extent of TT5. 0.50 below topsoil and measuring 0.60 in width and extending at least 2m towards the eastern edge of the TT5.

F12

A possible metalled surface (a surface made of densely packed small stones), located 1m west of the eastern edge of TT5. 0.55m below topsoil and measuring 1.5m north-south. There does not appear to be any other archaeological feature this far east of the tested site, and this feature may be of natural origin.

F13

A sub-angular feature filled with densely packed yellowish clay in TT6, 0.55m below topsoil and appears to be cut into natural subsoil. Further investigation would be needed to determine if this is archaeological and not just a variation in the natural or natural deposit.

F14

A stone drain running in a north south direction across TT6, 0.45m below the topsoil and 1m wide and at least 2m in length.

F15

Is a deposit of concentrated stones of many sizes located 1m east of F14, 0.45m below topsoil and over subsoil, measuring 0.60 x 0.40m. Unclear if archaeological.

F16

A light grey silty clay deposit 0.55m below the topsoil and appears to be cut into subsoil, measuring at least 1.5m in width. F16 is possibly a natural deposit but needs further excavation.

F17

A large sub oval feature, 0.60m below the topsoil, which is cut in natural subsoil and filled with a light grey sandy silt, measuring at least 7m in length and at least 0.50m in width, the northern extent goes beyond the limit of TT6. Further excavation is required to determine if this is archaeological.

F18

An extremely large boulder 0.20m below the topsoil at the intersection between TT2 and TT6. Measuring 1.0m in length 0.70m width and at least

0.40m in depth and is possibly related to the burnt mound material (F2) in TT2 immediately to the west that yielded two sherds of bronze age pottery.

F19

A furrow running NW/SE across slot 2 of TT6. Linear in shape, 0.40m below the topsoil, cutting through the burnt mound material (F2). Filled with a singular reddish-brown clay and measuring 0.25m in width and 0.20 in depth with a surface extent of at least 3m in length (the northwest extent has been cut away by TT2).

F20

A dense band of of stones within the black and grey burnt mound material (F2) which extends at least 25m across slot 2 of TT6 but no further.

F21

A spread of burnt mound material consisting of black and grey sandy clay approximately 0.50m blow topsoil and over natural subsoil, measurement e/w 1.50 with a depth between 0.10-.0.30m at the north side with sharp decrease at the south end, sealing over the possible cut for a trough, F22.



Above: West facing section of F21 an F22

F22

F22 appears to be the cut of a trough with vertical sides sealed 0.40m under F21 and cut into natural subsoil. A thin layer of black organic material along the edge of the cut may represent a decomposed organic lining, such as wood.

Discussion

In conclusion, of the seven trenches that were tested, only four yielded any definite archaeological features (TT2, 3, 5 and 6), mainly to the western extent of the tested site. No definite archaeological features were found in the other trenches.

Twenty-two features were identified overall. Eight of these were demonstrated to be archaeological orign and most likely form a single burnt mound site and associated activity including a trough, drains, metalled surfaces and pits.

Five features were demonstrated to be non-archaeological in origin (modern field drains and furrows).

The remaining nine features are potentially archaeological and will require further investigation.

A relatively large area between the eastern edge of

Below: Layout of Test Trenches with location of features indicated

TT4 and TT7, measuring c. 46m x 100m across, was not tested and will need to be archaeologically monitored in case the archaeology extends into this area.





Above: Layout of Test Trenches superimposed on satellite imagery of the study area (north to right of image)

Section 5 Discussion and Recommendations

5.1 Discussion

The desktop assessment demonstrated that the study area is located in an archaeologically rich landscape with a number of prehistoric and medieval archaeological monuments located in close proximity. Additionally, the Zone of Archaeological Potential (ZAP) of the late eighteenth century military encampment (DU026-127) extends into the southern part of the site. The topographical files of the National Museum of Ireland record a large number of finds from Laughanstown townland, including coins, tokens, and buttons from the period of time when this camp was active.

Recent development has led to a number of archaeological excavations taking place within 500 metres of the study area. These excavations have all uncovered evidence of human activity. Of particular significance are the findings of three archaeological excavations (03E1598, 04E0896, and 06E0944), these excavations uncovered evidence of Neolithic and Bronze Age activity including both settlement and funerary activity within 200 metres of the study area. The authors of these reports all reported that they inferred the presence of further archaeological features in the area to the north of the sites that they excavated (i.e. in the region of the study area).

The archaeological testing has identified a burnt spread sealing at least one trough, and an associated metalled surface, linear features and pits. The archaeological remains extend across the western third of the site, which corresponds to the high-lying part of the site. Bronze Age pottery was identified within the spread near a large boulder in the centre of the spread. The location of the archaeological remains are shown in red in the image below.

The term fulacht fiadh refers to a monument type that was involved in pyrolithic technology – or the heating of stones. A better term for this site type is

burnt mound (Hawke 2018). Burnt mounds are the most numerous type of archaeological site in Ireland, with recent indications suggesting over seven thousand (Hawkes 2018, 2). They comprise three elements: a mound or spread of heatshattered stones, a minimum of one trough, and a minimum of one hearth. They are always found close to a water source or where one is not located nearby, wells, cisterns, or man-made watercourses are usually present. The stones were heated in the hearth, and then transferred to a trough of water in order to heat that water. The troughs are then cleared out for subsequent use and the unusable shattered stones discarded. There are several theories as to the function of these sites including cooking (O'Kelly 1954; Hawkes 2018), brewing (Quinn & Moore 2009), bathing (Lucas 1965; Ó Drisceoil 1988), and processing of materials (Denvir 1999; Brown et al 2016). Radiocarbon and other dating systems have shown that burnt mound sites were used from the Neolithic period, with Cherryville 7, Co. Kildare, dating to 4219-3714 BC, being one of the earliest reliably-dated burnt mound sites in the country (Hawkes 2018, 122).

It has been suggested that burnt mound sites were used into the medieval period (post-400 AD), based on early literary accounts of burnt mounds and pyrolithic processes. However, an analysis of radiocarbon dates of the corpus of excavated burnt mound sites revealed that examples dating to the medieval period were not securely dated (Hawkes 2018, 135). It is now believed that these sites were not used after the Iron Age and that the references to them in early texts may relate to preserved folk memories of a site type that had long gone out of use (Danaher 2007, 37).

The majority of excavated burnt mound sites have been dated to the Bronze Age (2200 – 700 BC). Some sites were used over hundreds of years, for example at Ballyglass West, Co. Galway, which was used from 1740-1618 BC to 1125-978 BC (Hawkes 2018, 145). Others are suggested to have been returned to or re-used after an interval, such as at Knockaphunta, Co. Mayo (McGlade 2020, 15), where a burnt mound site was returned to and new a new trough created three hundred years after the earlier trough had gone out of use.

A noted above, burnt mounds are always located near a water source, and are frequently located on low-lying marshy ground. At Laughanstown the burnt mound is situated on a ridge of higher ground that falls away very steeply to the east. The deepest part of the mound is nestled in a shallow east-west-running valley which likely held a former stream running into the Loughlinstown River, which runs along the eastern site boundary, similar to the existing Carrickmines Stream a short distance to the north.

No archaeological features were identified in a separate testing programme in the eastern half of the site (23E0394, Coffey & Fowler 2023), on the lower lying ground, and it may be that in the prehistoric period the Loughlinstown River was larger, and its valley undesirable for occupation.

The Laughanstown burnt mound forms part of a wider prehistoric landscape of Neolithic and Bronze Age settlement and funerary activity found within 200m of the development site (McQuade 2003, 7; Phelan 2004, 8; Fallon 2006; 03E1598, 04E0896, and 06E0944) described in the archaeological background section of this report.

Almost no evidence for the late eighteenth century Loughlinstown military camp (RMP DU026-127) was identified, despite the favourable location of the development site on high land with exceptional views eastwards. This supports McQuade and Clancy's (2005, 8) conclusions that the camp has left little in the way of archaeological features with the exception of a camp kitchen and middens. Two artefacts found in the topsoil may derive from the military camp: a sherd of North Devon sgraffito pottery, which dates to c. 1730-1830, and a possible metal brooch or weapon /armour attachment.

5.2 Impact assessment

The development proposal comprises the construction of a new residential development of houses and apartments comprising 116 units in total with a mixture of surface and undercroft carparking. This development is concentrated in

the west of the site, in the area where testing has identified archaeological features and with the highest potential for further archaeological remains.

Preserving the archaeological site below a residential development is not realistic, as the remains are extensive, relatively shallow and delicate, and fencing them off from site construction and development would shut off site access and the viability of future development of this land.

The following section details a programme of full archaeological excavation and preservation by record. This would fully mitigate any any potential impacts on the archaeological site.

5.3 Recommendations

The desktop survey and testing programme have identified an area with confirmed archaeological remains, and an area with a high potential for archaeological remains (indicated in red and yellow on the below image respectively).

The archaeological site (red) should be fully handexcavated under excavation license from the NMS prior to any construction on the site. Ideally this would take place as part of an enabling works package prior to the main construction contract being commenced.

The topsoil in the area of archaeological potential (yellow) should be stripped under archaeological supervision. The aim of the excavation should be to completely excavate and remove all archaeological material from the site, and preserve it by record.

The enabling works contract should include the creation of a site compound and welfare facilities, secure site access allowing access for 20-tonne machinery and cabins, car parking, and the full archaeological excavation of the identified burnt spread site.

In addition, the enabling contract could also include any necessary pre-construction groundworks in the lower-lying eastern third of the site where no archaeological evidence was identified, and archaeological monitoring of topsoil reduction in the centre of the site. Drainage and other pre-construction works could also take place in the western part of the site during the enabling works programme, where these do not negatively impact the archaeological excavation.

An adequate period of time should be given to the archaeological excavation to allow for all archaeological works to be complete prior to the construction contract starting. An adequate excavation and post-excavation budget should also be provided. Previous archaeological excavations at burnt mound sites have demonstrated the critical importance of a robust environmental strategy to be put in place prior to the excavation, and the excavation budget must include provision for environmental sample processing and analysis, including radiocarbon dating.

All recommendations are subject to approval of the National Monuments Service.



Above: Map of the proposed development with areas of archaeological potential indicated (red - high potential, yellow - moderate potential, green - low potential). North to right of image

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