IAC Archaeology

ARCHAEOLOGICAL ASSESSMENT
AT
ADERRIG PHASE 3,
ADAMSTOWN, LUCAN,
COUNTY DUBLIN

LICENCE: 23E0092

ON BEHALF OF: QUINTAIN DEVELOPMENTS IRELAND LIMITED

I.T.M.: 701392, 733360

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DOCUMENT CONTROL SHEET

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ABSTRACT

IAC Archaeology has prepared this report on behalf of Quintain Developments Ireland Limited, to study the impact, if any, on the potential archaeological and historical resource of proposed residential development, which is located at Aderrig, Adamstown, Lucan, Co. Dublin (ITM 701392, 733360; OS Sheet 17). The assessment was carried out by David McIlreavy of IAC Archaeology under licence 23E0092 in response to a Request for Further Information by South Dublin County Council (Planning Reg.: SDZ22A/0014). Item 4 requested that a geophysical survey and programme of test trenching be carried out to inform an archaeological impact assessment of the proposed development.

The application site is divided into three construction parcels (Parcel 1, 2 and 3) and a compound area which are separated by the Celbridge Link Road. Only one area (c. 1ha) within the application site boundary, 'Parcel 3', was suitable for survey and test investigation due to significant previous ground disturbances associated with adjacent ongoing construction activity. Geophysical survey carried out in February 2023 by Ger Dowling (Licence No. 23R0043) did not record any anomalies of potential archaeological significance. Testing was carried out across the available area on 24th February 2023 using a mechanical excavator fitted with a flat grading bucket. Four trenches, measuring 360 linear metres, were excavated which did not reveal any archaeological remains. Furthermore, previous investigations to the immediate east, southeast and south have not identified any archaeological remains.

Given the condition of the site and the results of recent investigations there is no predicted adverse impact to the archaeological resource by the proposed development proceeding.

No further archaeological mitigation is recommended.

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1 INTRODUCTION

1.1 GENERAL

The following report details the results of a programme of archaeological testing undertaken at Aderrig, Adamstown, Lucan, Co. Dublin, prior to a proposed residential development (Figure 1 and 2, ITM 701392, 733360). This assessment has been carried out in response to a Request for Further Information by South Dublin County Council (Planning Reg.: SDZ22A/0014) to ascertain the potential impact of the proposed development on the archaeological resource that may exist within the proposed development area. A geophysical survey and programme of test trenching were requested to be carried out to inform the archaeological impact assessment. Testing was carried out by David McIlreavy of IAC Archaeology (IAC), on behalf of Quintain Developments Ireland Limited and under licence 23E0092, as issued by the National Monuments Service of the Department of Housing, Local Government and Heritage (DoHLGH).

Only one area within the application site boundary, designated as land 'Parcel 3' (shown on Figure 3), was suitable for survey and test investigation due to previous ground disturbances. Geophysical survey carried out in February 2023 by Ger Dowling (Licence No. 23R0043) did not record any anomalies of potential archaeological significance. Testing was carried out across the available area on 24th February 2023 using a mechanical excavator fitted with a flat grading bucket. A total of four trenches were mechanically investigated which measured 360 linear metres in total. No features of archaeological significance were recorded.

1.2 THE DEVELOPMENT

The proposed residential development lies within a 6.36ha site separated into two areas by the Celbridge Link Road. The south-western site (5.39 Ha) is generally bound to the east by Celbridge Link Road, to the south and west by undeveloped land and an electrical substation and to the north by the Tubber Lane Development Area. The north-eastern site (0.97 Ha) is generally bound to the east by the undeveloped Primary School site and Aderrig Park Avenue, to the south by Airlie Park Road West and the undeveloped Primary School site, to the west by Celbridge Link Road and the Tubber Lane Development Area and to the north by the Tubermaclugg Village Development Area.

The proposed development will principally consist of the construction of 207 residential units (Figure 2). The development will also include: vehicular junctions to access the development from Celbridge Link Road and Adamstown Way; internal road, cycle and footpath network; 314 car parking spaces; cycle parking; bin storage areas; public, communal and private open space areas, with balconies and terraces facing all aspects; hard and soft landscaped areas; boundary treatments; public lighting; 2 sub-stations; and all associated site and development works above and below ground.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 BACKGROUND

The proposed development area is located within the townland of Aderrig, Parish of Esker and Barony of Newcastle in Co. Dublin. The development area is divided into three 'construction parcels' (designated as Parcel 1, 2, 3) and a compound (Figure 3). The construction parcels (5.39Ha) are partially bounded to the east by the Celbridge Link Road, and to the north, south and west by largely undeveloped lands. The compound area (0.97Ha) is bounded to the east by Aderrig Park Avenue, to the south by Airlie Park Road West, to the west by the Celbridge Link Road and to the north by undeveloped land. The townland boundary between Aderrig and Tobermaclugg forms the northwest perimeter of the proposed development area.

There is one recorded monument within the study area (c. 250m), an earthwork (DU017-102) recorded c. 151m to the north of the development site and visible on the Google Satellite imagery. These images show that the Celbridge Link Road bisects the enclosure (Figure 3). In the wider environs an enclosure (DU017-092) is located c. 444 to the west and an earthwork (DU017-099) is located c. 500m to the south. Furthermore, a cluster of monuments associated with the Aderrig medieval parish church, including an ecclesiastical enclosure, a church, graveyard and field system (DU017-028001, DU017-028002, DU017-028003 and DU017-028004, respectively) are located c. 683m to the west.

Prehistoric Period

Mesolithic Period (7000–4000 BC)

The earliest extant evidence suggests that Ireland was first occupied during the Mesolithic period by communities that subsisted on hunting, fishing and foraging (Dowd and Carden 2016). The wider receiving environment is likely to have been visited by Mesolithic communities who used the River Liffey (flowing c. 2km to the west) as a routeway and as a food and materials resource. Excavations on the banks of the river at Cooldrinagh near Leixlip c. 2.1km to the northwest of the proposed development area revealed a large Mesolithic flint assemblage (DU017-079) within the body of a mound (DU017-075001) which was later identified as an 18th century landscape folly (Bennett 1995:052). Further assemblages of Mesolithic flints have been recorded during archaeological investigations carried out at the Leixlip Water Treatment Plant (WTP) (Bennett 1997:091; Bennett 2005:410; Bennett 2006:585), located c. 2km to the north of the development area. No remains dating to this period have been recorded in the vicinity of the proposed development area.

Neolithic Period (4000–2500 BC)

During this period communities became less mobile and their economy became based on the rearing of stock and cereal cultivation. The transition to the Neolithic was marked by major social change. Communities had expanded and moved further inland to more permanent settlements. This afforded the development of agriculture which demanded an altering of the physical landscape. Forests were rapidly cleared

and field boundaries were constructed. Pottery was also being produced, possibly for the first time.

The advent of the Neolithic period also provided the megalithic tomb. There are four types of tomb in Ireland, namely the Court Cairn, Portal, Passage and Wedge; of which the latter style straddles the Neolithic to Bronze Age transition. Archaeological remains dating to this period have been discovered at the site of the WTP at Cooldrinagh, c. 2.1km northwest. Two adjacent burial monuments were identified here (DU017-075 and DU017-079), consisting of a denuded passage tomb flanked to the east by a circular kerbed feature containing two cist burials and covered by cairn material (Bennett 2006:585). Due to the significance of the site, all investigations were carried out under ministerial consent, as they were judged to be National Monuments (Ref.: CO14, E002034). Some human remains were identified during the excavations, although both sites had suffered heavily from disturbance. The Neolithic passage tomb likely established a tradition for burial in the area, which led to the construction of the circular cairn with later probable Bronze Age cist burials.

Archaeological excavations in the wider area have also recorded Neolithic habitation in advance of the Grange Castle Business Park development c. 2.8km southeast in Kilshoge (Bennett 2001:438). No remains dating to this period have been recorded in the immediate vicinity of the proposed development area.

Bronze Age (2500–800 BC)

This period is marked by the use of metal for the first time. As with the transition from Mesolithic to Neolithic, the transition into the early Bronze Age was accompanied by changes in society. Megaliths were replaced in favour of individual, subterranean cist or pit burials that were either in isolation or in small cemeteries. These burials contained inhumed or cremated remains and were often, but not always, accompanied by a pottery vessel. As noted above the burial monument recorded at Cooldrinagh is likely to have continued to be used during the Bronze Age.

Bronze Age remains are often identified during the course of predevelopment archaeological investigations, commonly in the form of burnt mounds or *fulacht fia*. These sites are located near water or in boggy terrain and generally survive as low mounds of charcoal-enriched soil mixed with an abundance of heat-shattered stones. Over 7,000 *sites* have been recorded in the country and hundreds excavated, making them the most common prehistoric monument in Ireland (Waddell 2022, 164). Often these sites have been ploughed out and survive as a spread of heat shattered stones in charcoal rich soil with no surface expression in close proximity to a trough. Although burnt mounds occur as a result of various activities that have been practised from the Mesolithic to the present day, those noted in close proximity to a trough are generally interpreted as Bronze Age cooking/industrial sites. Three examples were recorded in Ballybane and Grange townlands, c. 2.4km to the southeast along the Griffeen river (Bennett 2004:0602) and two more associated with a structure within the footprint of the Grange Castle Business Park c. 2.9km to the southeast (Bennett 2016:083; 2020:441). A further example (KD011-062) was recorded during

archaeological monitoring of topsoil stripping at Liffey Valley Business Park c. 2.4km to the northwest.

Archaeological investigations carried out c. 725m to the east of the proposed development area identified a small cluster of prehistoric hearths and domestic waste pits (Whitaker and Hanbridge 2021). Post-excavation analysis are ongoing and dating is as yet unconfirmed but it is probable that they relate to Bronze Age occupation.

Iron Age (800 BC-AD 500)

There is increasing evidence for Iron Age settlement and activity in recent years as a result of development-led excavations as well as projects such as LIARI (Late Iron Age and Roman Ireland). Yet this period is distinguishable from the rather rich remains of the preceding Bronze Age and subsequent early medieval period, by a relative paucity within the current archaeological record. The Iron Age in Ireland is problematic for archaeologists as few artefacts dating exclusively to this period have been found and without extensive excavation it cannot be determined whether several monument types, such as ring-barrows or standing stones, date to the late Bronze Age or Iron Age. It is likely that there was significant continuity in the Iron Age, with earlier monuments re-used in many cases. Archaeological investigation undertaken c. 2.9km to the southeast, in advance of a data center development, investigated a series of associated enclosures, dating from the Iron Age and early medieval periods (Licence 13E0471, Bennett 2016:083; 2020:440).

Early Medieval Period (AD400–1100)

The early medieval period is depicted in the surviving sources as an almost entirely rural based society. Territorial divisions were based on the *túath*, or petty kingdom, with Byrne (1973) estimating probably at least 150 kings in Ireland at any given time. This period, with a new religious culture and evolving technologies, saw significant woodland clearance and the expansion of grassland. A new type of plough and the horizontal mill were two innovations that improved agriculture and allowed for the population to increase. Consequently, from c. AD 500 onwards, the landscape became well settled, as evidenced by the profuse distribution of ringforts, a dispersed distribution of enclosed settlements, normally associated with various grades of well-to-do farming and aristocratic classes in early medieval Ireland (Stout and Stout 1997, 20).

The ringfort or rath is considered to be the most common indicator of settlement during the early medieval period. One of the most recent studies of early medieval settlement enclosures has suggested that there is potential for at least 60,000 such sites to have existed on the island (O'Sullivan et al. 2014, 49). One of the most common indicators of settlement during this period is the ringfort (Stout 1997). Ringforts were often constructed to protect rural farmsteads and are usually defined as a broadly circular enclosure delineated by a bank and ditch. Ringforts can be divided into three broad categories – univallate sites, with one bank or ditch; multivallate sites with as many as four levels of enclosing features and platform or raised ringforts, where the interior of the ringfort has been built up. These enclosed sites were intimately connected to the division of land and the status of the occupant.

There are three enclosures recorded within c. 1km of the study area (DU017-107, DU017-092, DU021-93), all of which were identified through aerial survey. An early church is recorded in Aderrig townland (DU017-028002), c. 725m to the northwest, situated within a circular raised graveyard (DU017-028003). It is thought that this may be associated with the remains of an early ecclesiastical enclosure (DU017-028001).

Medieval Period (AD1100–1600)

The piecemeal conquest by the Anglo-Normans of Ireland, which commenced in AD 1169, had a fundamental impact on the Irish landscape. The Anglo-Norman presence was strongest in the southeast of the country, and it is mainly in this region that land was carved up and granted to the Anglo-Norman lords who participated in the initially successful invasion. The introduction of the large motte and bailey castles by the Anglo-Normans was novel to the Irish landscape (Stout and Stout 1997), although these sites are predominantly found in Ulster and Leinster. The nearest motte to the area of proposed development is located c. 5km to the southwest at Newcastle.

These early fortifications were gradually replaced by stone castles, which continued to evolve in form and size over four centuries. The sites of several fortifications are known in the wider area, including Adams Castle (DU017-029), 1.5km to the southeast, Grange Castle (DU017-034), 2.7km to the southeast, and Nangor Castle (DU017-037), 3.6km to the southeast. Adamstown Castle was formally a three-storey tower house which was oblong in plan with a projecting turret and stepped crenelations (Ball 1906). The castle was demolished in the 1960's and is no longer visible above ground (SMR file).

The ecclesiastical site at Aderrig (DU017-028001-002), c. 725m to the west, was granted to St. Patrick's Cathedral in the 13th century. The earliest documentary reference to the church occurs in 1235 and it was still in use at the beginning of the 17th century (McNeill 1950, 78). An associated graveyard and field system is also present (DU017-028003-004).

The historical town of Lucan is located c. 2.2km northeast of the development area (DU017-019). The town did not appear to develop great economic importance and essentially it remained a manorial borough throughout this period. The street plan of the borough remained centred on one principle linear Main Street and the burgage plots stretch from this street back to the Liffey. Lucan Castle (originally located on the site of the present Lucan House) dates to the 13th century. Originally just a tall square tower, it had extensions added over the years, leaving it described as battlemented and irregular. Its first inhabitants were the DePeche family, who was followed by several others up to the Sarsfield and Vesey eras. It appears to have been dilapidated as far back as the Sarsfield days in 1616 when William Sarsfield bequeathed to his grandson, the tapestry on which the walls of the castle were hung (McDix 1897).

Upriver or the later bridge named Esker Bridge on the First Edition of the OSI 6-inch maps is located c. 2.5km to the northeast of the proposed development (DU017-078). According to Simington (1991, 134-6), the bridge is marked on Rocque's map as 'King John's Bridge', placing its construction between 1199 and 1216. Esker was part of a

demesne in the Liffey valley which Henry II annexed to the crown and which was organized under King John as a royal manor.

Post-medieval Period (AD1600-1900)

The ending of the Williamite Wars saw the beginning of a comparative politically calm era, which allowed the country's landowners the security to experiment with the latest styles of architecture without the need to refer to defensive matters. Initially, constraints on available resources resulted in mansions of a relatively modest scale and relatively plain appearance. However, as the Irish aristocracy's sense of security grew over the following decades, their greater access to wealth helped foster a shift towards more ostentatious buildings. Buildings of architectural heritage value in the vicinity of the proposed development area include Airlie House (NIAH 11204044) and Finnstown House (NIAH 11204046) situated c. 537m and 942m to the east respectively. Airlie House was built in c. 1840 and comprises a three-bay two-story structure, whereas Finnstown House is slightly later (c. 1865) and much larger. Finnstown also known as '*Fyan's Town'* originated from the Fyan family whose name derives from the Latin word '*paganus*' for 'countryman' or 'peasant' (Bunbury 2022). The Fyans were citizens of high importance in Dublin in the 15th and 16th centuries. John Fyan was Mayor of Dublin in 1472 and 1479, a time that coincided with the War of the Roses in England. Thomas Fyan was one of Henry VIII's city sheriffs in 1540 and the hospitality of Richard Fyan (Fiand), Mayorin 1549 and 1564, has been extolled by local chroniclers. By 1750, the area around Finnstown, served by the River Liffey, had become particularly desirable to the Ascendancy. Much of the surrounding land was given to the growing of fruit and vegetables that would be taken by barge on the Royal Canal to the Dublin markets (Bunbury, www.eneclann.ie).

Gollierstown Bridge (NIAH 11208014) was built in c. 1780 crossing the Grand Canal, c. 1.1km to the south. C. 600m to the west Aderrig Farm house (NIAH 11204060) and outbuilding (NIAH 11204061) were built in c. 1820 and continue to function as such. Archaeological investigations undertaken in advance of the Adamstown Link Road, identified the remains of a post-medieval brick clamp site c. 1.9km to the southeast of the proposed development area (Elder 2005, licence 05E0477). Brick clamps, or kilns, were used to dry out the clay bricks, the final part of the brick-making process. Roundtree (2007, 65) notes that brick manufactory was being carried out in the Gollierstown area, with at least one trader transporting cargos along the Grand Canal to Dublin. In some cases, brickfields are illustrated and annotated as such on early maps (such as at Clondalkin); however, there is no cartographic record for them at Gollierstown or adjacent townlands. Regardless, the presence of the nearby brick clamp may tentatively indicate that brickmaking was established in this area.

2.2 SUMMARY OF PREVIOUS ARCHAEOLOGICAL FIELDWORK

A review of the Excavations Bulletin (1970–2023) has revealed that a number of investigations have been carried out within the surrounding environs, which are summarised below. Several programmes of archaeological testing and monitoring have been carried out in the immediate vicinity, although no archaeology has been identified as a result (Bayley 2021, licence 21E0249; Ní Cheallacháin 2023, licence 22E0945; Ní Cheallacháin & Murtagh 2021, licence 21E0073; Murtagh 2022, licence

22E0173; Bennett 2019: 321, licence 19E0074; Bennett 2008:363, licence 08E0197; Bennett 2019:321, 19E0074).

Pre-development archaeological test trenching carried out c. 530m to the southeast showed that the site had previously been stripped of topsoil and then infilled with displaced construction material (Ní Cheallacháin 2021). The depth of this material ranged from 0.6m to 1.9m and was comprised of a mix of clay and redeposited subsoils with inclusions of boulders, stones; and construction waste including plastic ties and sheets, electrical cables, and iron bars encased in concrete.

A site c. 664m to the east of the development had similarly been subject to significant ground disturbances and no archaeological remains were noted by the monitoring archaeologists (Bennett 2019:321, licence 19E0074).

Approximately 716m to the east pre-development archaeological investigations identified a small cluster of prehistoric features (Whitaker and Hanbridge 2021, licence 17E0477). The excavation revealed six pits comprising hearths or fire pits and associated features containing burnt debris and domestic waste such as flint artefacts, degraded pottery fragments and animal bone (burnt and unburnt). Other residual evidence of prehistoric activity in the general area was also present with several worked flint pieces found within the topsoil.

2.3 CARTOGRAPHIC ANALYSIS

A study of the cartographic resources has shown that the development site has remained as undeveloped rural land. The site is bordered by adjacent townlands of Tobermaclugg (northwest), Finnstown (east) and Gollierstown (south); the boundaries between which are depicted as tree-lined field boundaries.

Down Survey Maps of the Barony of Newcastle, c. 1655

The Down Survey maps were created as a means to identify land ownership and while they are often scant in detail, major topographical features and occasionally notable man-made landmarks are depicted. The proposed development area is placed within ‘Esker Parrish’ close to ‘Adamstowne’ depicted as being within ‘Unforfeited Land’.

John Rocque’s An Actual Survey of County Dublin, 1760 (Figure 4)

This map shows a more detailed depiction of the development area and its surroundings which is situated within four irregular fields. To the east of ‘Fines Town’ and ‘The Castle’ (Finnstown House). To the north lies the townland of Tobermaclugg and a spring (DU017-027) dedicated to St. John (Daly 1957, 18). To the west, the ecclesiastical site (DU017-028001-004) at Aderrig is depicted, adjacent to the county boundary between Dublin and Kildare. To the southeast ‘Castle Adams’ (DU017-029) is also shown to the north of the New Canal.

John Taylor’s Map of the Environs of Dublin 1816

This map does not provide great detail however it illustrates a stream found in proximity to the development area that connects to the Liffey River to the north.

'Fines Town' and 'The Castle' (Finnstown House) are now labelled as (Fyanstown Castle). There are no further changes of note from the previous mapping.

First Edition Ordnance Survey Map, 1839, scale 1:10,560 (Figure 4)

This is the first accurate historic mapping coverage of the area containing the proposed development which is within two irregularly-shaped fields contained within the northeast limit of Aderrig townland. The site is bordered by adjacent townlands of Tobermaclugg (northwest), Finnstown (east) and Gollierstown (south); the boundaries between which are depicted as tree-lined field boundaries. To the east, the demesne landscapes of St Helen's House and Finnstown House are depicted as well as several outbuildings that form part of the Finnstown House estate. The ordnance survey maps of 1871 and 1910 do not show any changes to the landscape from the previous mapping.

Ordnance Survey Map, 1910, scale 1:2,500

The proposed development site remains unchanged from earlier mapping. A new building has also been constructed c. 542m to the east and labelled as Airlie House that is surrounded by a garden. This country house was built in 1840 and still retains its original proportions and setting. Finnstown House is depicted c. 947m to the east.

2.4 AERIAL PHOTOGRAPHIC ANALYSIS

Inspection of the aerial photographic coverage of the proposed development area held by the Ordnance Survey (1995–2013), Google Earth (2008–2023), and Bing Maps revealed that the proposed development area has been subject to ground disturbances since 1995. From 1995 to 2017 Parcel 3 of the site and its environs remained as greenfield. Parcel 1 and 2, has consisted as scrub land and shows evidence of disturbance including the construction of an ESB substation and associated road. Construction has been carried out to the north and west of the development site since 2017. A cropmark depicting recorded monument (DU017-028003) is visible to the immediate north of Parcel 3 and the compound site which cut through the northeastern quadrant of the earthwork.

2.5 TOPOGRAPHICAL FILES

Information on artefact finds from the study area in County Dublin has been recorded by the National Museum of Ireland since the late 19th century. Location information relating to these finds is important in establishing prehistoric and historic activity in the study area. No stray finds are recorded from within the proposed development area or its immediate environs.

2.6 FIELD INSPECTION

A field inspection was carried out in January 2023 and sought to assess the proposed development area, its previous and current land use, the topography and any additional information relevant to the report (Plates 1-4). During the course of the field investigation the previous disturbances indicated in the satellite imagery of the past decade, were confirmed. The development areas have been divided into three parcels of land, Parcel 1, 2 and 3. The site compound is to be located to the northeast

of the development site within an area previously used as a site compound for earlier phases of work.

The inspection of Parcel 1 indicated that the development site has been disturbed in recent years, evidence of site clearance works and spoil heaps are visible across the inspection area. A road built for accessing the ESB substation to the west of the development site transects the site dividing Parcel 1 and 2. Parcel 2 shows significant evidence for disturbance and site clearance works, interspersed with areas of scrubland.

Parcel 3 to the north of the development site, is separated from Parcel 2 by a field boundary running southeast-northwest. The townland boundary between Aderrig and Tobermaclugg borders Parcel 3 to the northwest and comprises a mature line of trees and hedgerow along a water-filled ditch. Underground services are located along the eastern fence line of Parcel 3. Based on the baseline research and field inspection there is low potential for previously unidentified archaeological remains to survive within the bounds of the proposed development area.

Parcel 3 was the only area identified as suitable for geophysical survey and the archaeological testing programme detailed by this report.

2.7 SUMMARY OF GEOPHYSICAL RESULTS

A geophysical survey was carried out within Parcel 3 on the 16th February 2023 by Ger Dowling (Dowling 2023, Licence No. 23R0043; Figure 5). The investigation, comprising high resolution magnetic gradiometry, was implemented over an irregular-shaped area of rough pasture and covered an area of c. 1ha. in total size. Nothing of obvious archaeological or potential archaeological interest was identified by the survey.

Two linear responses noted running across the northern extent of the survey area were considered to be geological in nature. Multiple ferrous responses recorded within the same survey were considered to be related to modern disturbance.

3 ARCHAEOLOGICAL TESTING

3.1 GENERAL

Test trenching took place on 24th February 2023, using a 13 tonne 360 degree tracked excavator equipped with a flat, toothless bucket under strict archaeological supervision. No features of potential archaeological significance were recorded or investigated across the available test area.

A total of four trenches were excavated across the site, measuring 360 linear metres (Figure 6, Plates 5-8). Test Trenches 1-3 were oriented northeast-southwest, with Test Trench 4 oriented north-south.

The test trenches were excavated to determine, as far as reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains threatened by the proposed development. Test trenching was also carried out to clarify the nature and extent of existing disturbance and intrusions and to assess the degree of archaeological survival in order to formulate further mitigation strategies. These are designed to reduce or offset the impact of the proposed development scheme.

3.2 TESTING RESULTS

Topsoil (C1) across the available test area was recorded as a dark brown clay silt ranging from 0.4-0.45m in depth. Subsoil was recorded as variable, in the main consisting of a mid-dark orange clay with frequent stone inclusions. Bands of a dark grey clay with frequent stone inclusions were recorded across all test trenches.

No features of potential archaeological significance were recorded. A number of field drains of various morphologies including unlined, stone filled dendritic and stone line box style, were recorded across Test Trenches 1-3 (Plates 9-12). All of the drainage features are considered to be of at least 19th century provenance.

TRENCH 1 (Plate 5)

LENGTH	120m
DEPTH	0.0m – 0.4m
WIDTH	2m
ORIENTATION	Northeast-southwest
STRATIGRAPHY FROM PRESENT GROUND LEVEL	
0.0–0.4m	Topsoil
0.4m	Subsoil cut by modern land drains.
ARCHAEOLOGICAL FEATURES	
No archaeology found.	

TRENCH 2 (Plate 6)

LENGTH	100m
DEPTH	0.0m – 0.37m

WIDTH	2m
ORIENTATION	Northeast-southwest
STRATIGRAPHY FROM PRESENT GROUND LEVEL	
0.0–0.37m	Topsoil
0.37m	Subsoil cut by modern land drains.
ARCHAEOLOGICAL FEATURES	
No archaeology found.	

TRENCH 3 (Plate 7)

LENGTH	80m
DEPTH	0.0m – 0.42m
WIDTH	2m
ORIENTATION	Northeast-southwest
STRATIGRAPHY FROM PRESENT GROUND LEVEL	
0.0–0.42m	Topsoil
0.42m	Subsoil cut by modern land drains.
ARCHAEOLOGICAL FEATURES	
No archaeology found.	

TRENCH 4 (Plate 8)

LENGTH	60m
DEPTH	0.0m – 0.45m
WIDTH	2m
ORIENTATION	North-south
STRATIGRAPHY FROM PRESENT GROUND LEVEL	
0.0–0.45m	Topsoil
0.45m	Subsoil
ARCHAEOLOGICAL FEATURES	
No archaeology found.	

3.3 CONCLUSIONS

In response to a request for further information archaeological testing and geophysical survey were carried out within the previously undisturbed plot of land (Parcel 3) in the application site boundary. No features of potential archaeological significance were recorded as a result of these investigations. Previous archaeological investigations in the lands bordering the proposed development area have likewise indicated no archaeological remains. Given the considerable ground disturbances in the remaining section of the proposed development (including a former construction compound) it is considered that there is no potential for any previously unrecorded remains to survive within its footprint.

4 IMPACT ASSESSMENT AND MITIGATION STRATEGY

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological resources potentially affected. Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping; disturbance by vehicles working in unsuitable conditions; and burial of sites, limiting access for future archaeological investigation.

4.1 IMPACT ASSESSMENT

- With the exception of one area (Parcel 3, measuring c. 1ha) the lands within the proposed development area have been subject to significant previous ground disturbances associated with adjacent ongoing construction activity and were deemed unsuitable for further investigation. Geophysical survey and test trenching did not reveal any features of archaeological potential within the undisturbed parcel of land (Parcel 3). Furthermore, previous investigations to the immediate east, southeast and south have not identified any archaeological remains. Given the condition of the site and the results of the recent investigations there is no predicted adverse impact to the archaeological resource by the proposed development proceeding.

4.2 MITIGATION

We recommend the following actions in mitigation of the impacts above.

- No mitigation is recommended.

It is the developer's responsibility to ensure full provision is made available for the resolution of any archaeological remains, both on site and during the post excavation process, should that be deemed the appropriate manner in which to proceed.

Please note that all recommendations are subject to approval by the National Monuments Service of the Heritage and Planning Division, Department of Housing, Local Government and Heritage.

5 REFERENCES

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APPENDICES

APPENDIX 1 CONTEXTS

CONTEXT NO.	TRENCH NO.	DESCRIPTION
1	All	Topsoil – dark brown clay silt.
2	All	Subsoil - mid-dark orange clay with frequent stone inclusions. Bands of a dark grey clay with frequent stone inclusions were recorded throughout the test area.

APPENDIX 2 RMP SITES WITHIN THE SURROUNDING AREA

SMR NO.:	DU017-102
RMP STATUS:	Yes
TOWNLAND:	Tobermaclugg
PARISH:	Esker
BARONY:	Newcastle
I.T.M.:	701400, 733725
CLASSIFICATION:	Earthwork
DIST. TO SITE:	c.151m north
DESCRIPTION:	In grassland. Cropmark of polygonal-shaped area (dims. c. 46m N-S x 24m E-W) defined by a wide ditch visible on OSi Bluesky orthoimage taken 2018. Faint traces of cropmark visible on Digital Globe orthoimage taken between 2011-13 and clearly visible on Google Earth orthoimages. Google Earth orthoimage taken 04/04/2021 shows the construction of a road that has cut across the NE quadrant of the cropmark.
REFERENCE:	www.archaeology.ie/ SMR File

SMR NO.:	DU017-092
RMP STATUS:	Yes
TOWNLAND:	Aderrig
PARISH:	Esker
BARONY:	Newcastle
I.T.M.:	700895, 733526
CLASSIFICATION:	Enclosure
DIST. TO SITE:	c. 444m west
DESCRIPTION:	A sub-circular enclosure visible as a crop mark on an aerial photograph (SMR file; pers. comm. Tom Condit, 11 March 2015). The north-eastern perimeter was reflected in a field boundary shown on the OS maps, now removed.
REFERENCE:	www.archaeology.ie/ SMR File

SMR NO.:	DU017-028001
RMP STATUS:	Yes
TOWNLAND:	Aderrig
PARISH:	Esker
BARONY:	Newcastle
I.T.M.:	700597, 733416
CLASSIFICATION:	Ecclesiastical enclosure
DIST. TO SITE:	c. 683m west
DESCRIPTION:	An aerial photograph (CUCAP, BDI 46) shows a bank with external fosse enclosing an oval area (dims. L 70m, Wth 50m) around the perimeter of

	the church (DU017-028002-). A possible inner bank with opening in the S is also visible on the photograph. These features can be identified on the ground as an artificially raised area.
REFERENCE:	www.archaeology.ie/ SMR File

SMR NO.:	DU017-028002
RMP STATUS:	Yes
TOWNLAND:	Aderrig
PARISH:	Esker
BARONY:	Newcastle
I.T.M.:	700584, 733421
CLASSIFICATION:	Church
DIST. TO SITE:	c. 683m west
DESCRIPTION:	Situated on an artificial rise within an enclosure (DU017-028001-). This medieval parish church is one of those confirmed to the Archbishop of Dublin after the Anglo-Norman Conquest and in the first half of the 13th century was granted to St. Patrick's Cathedral. The earliest documentary reference to the church occurs in 1235 (Mc Neill 1950, 78). The church was still in use at the beginning of the 17th century (Ball 1906, 61-12). It consists of a plain rectangular building with an undivided nave and chancel which is overgrown (ext. dims. L 12.12, Wth.6.23m). It is built of roughly coursed masonry with packing stones in the interstices and dressed sandstone quoins. There are two putlog holes in the N wall c. 1m from ground level. There are diametrically opposed doorways at the W end of the nave. The S doorway (Wth 1m) has a pointed segmental arch with a rebate and draw bar hole present, N doorway is damaged. Interior is lit by a slit ope in W gable, the N portion of the E window splay survives (Ní Mharcaigh 1997, 263-264).
REFERENCE:	www.archaeology.ie/ SMR File McNeill, C. (ed.) 1950 Calendar of Archbishop Alen's Register c. 1172-1534. Dublin. Royal Society of Antiquaries. Ní Mharcaigh, M. 1997 The medieval parish churches of south-west County Dublin. Proceedings of the Royal Irish Academy 97C, 245-96.

SMR NO.:	DU017-028003
RMP STATUS:	Yes
TOWNLAND:	Aderrig
PARISH:	Esker
BARONY:	Newcastle
I.T.M.:	700587, 733434
CLASSIFICATION:	Graveyard
DIST. TO SITE:	c. 683m west
DESCRIPTION:	Situated on an artificial rise within an enclosure (DU017-028001-) in flat, low-lying ground.The graveyard is unfenced with two gravestones outside

	the SW corner of the ruined medieval church (DU017-028002-) one of which dates to 1733 the other 1820.
REFERENCE:	www.archaeology.ie/ SMR File

SMR NO.:	DU017-028004
RMP STATUS:	Yes
TOWNLAND:	Aderrig
PARISH:	Esker
BARONY:	Newcastle
I.T.M.:	700549, 733421
CLASSIFICATION:	Field System
DIST. TO SITE:	c. 683m west
DESCRIPTION:	A series of enclosures are visible as crop marks along the west and southern boundaries of the ecclesiastical enclosure (DU017-028001-). These may represent the remains of a field system associated with the ecclesiastical site (SMR file; pers. comm. Tom Condit, 11 March 2015).
REFERENCE:	www.archaeology.ie/ SMR File

SMR NO.:	DU017-099
RMP STATUS:	Yes
TOWNLAND:	Aderrig
PARISH:	Esker
BARONY:	Newcastle
I.T.M.:	700853, 733007
CLASSIFICATION:	Earthwork
DIST. TO SITE:	c. 500m south
DESCRIPTION:	In grassland 440m SE of ecclesiastical site (DU017-028001-). Cropmark of a sub-circular shaped area (diam. c. 36m) defined by a ditch with possible entrance gap at NE with possible semi-circular-shaped annexe to SE visible on OSi Bluesky orthoimages taken 2018
REFERENCE:	www.archaeology.ie/ SMR File

APPENDIX 3 LEGISLATION PROTECTING THE ARCHAEOLOGICAL RESOURCE

PROTECTION OF CULTURAL HERITAGE

The cultural heritage in Ireland is safeguarded through national and international policy designed to secure the protection of the cultural heritage resource to the fullest possible extent (Department of Arts, Heritage, Gaeltacht and the Islands 1999, 35). This is undertaken in accordance with the provisions of the *European Convention on the Protection of the Archaeological Heritage* (Valletta Convention), ratified by Ireland in 1997.

THE ARCHAEOLOGICAL RESOURCE

The *National Monuments Act 1930 to 2014* and relevant provisions of the *National Cultural Institutions Act 1997* are the primary means of ensuring the satisfactory protection of archaeological remains, which includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A National Monument is described as 'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto' (National Monuments Act 1930 Section 2). A number of mechanisms under the National Monuments Act are applied to secure the protection of archaeological monuments. These include the Register of Historic Monuments, the Record of Monuments and Places, and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

OWNERSHIP AND GUARDIANSHIP OF NATIONAL MONUMENTS

The Minister may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

REGISTER OF HISTORIC MONUMENTS

Section 5 of the 1987 Act requires the Minister to establish and maintain a Register of Historic Monuments. Historic monuments and archaeological areas present on the register are afforded statutory protection under the 1987 Act. Any interference with sites recorded on the register is illegal without the permission of the Minister. Two months notice in writing is required prior to any work being undertaken on or in the vicinity of a registered monument. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

PRESERVATION ORDERS AND TEMPORARY PRESERVATION ORDERS

Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site

illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

RECORD OF MONUMENTS AND PLACES

Section 12(1) of the 1994 Act requires the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Minister for Housing, Local Government and Heritage) to establish and maintain a record of monuments and places where the Minister believes that such monuments exist. The record comprises a list of monuments and relevant places and a map/s showing each monument and relevant place in respect of each county in the state. All sites recorded on the Record of Monuments and Places receive statutory protection under the National Monuments Act 1994. All recorded monuments on the proposed development site are represented on the accompanying maps.

Section 12(3) of the 1994 Act provides that 'where the owner or occupier (other than the Minister for Housing, Local Government and Heritage) of a monument or place included in the Record, or any other person, proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such a monument or place, he or she shall give notice in writing to the Minister of Housing, Local Government and Heritage to carry out work and shall not, except in case of urgent necessity and with the consent of the Minister, commence the work until two months after giving of notice'.

Under the National Monuments (Amendment) Act 2004, anyone who demolishes or in any way interferes with a recorded site is liable to a fine not exceeding €3,000 or imprisonment for up to 6 months. On summary conviction and on conviction of indictment, a fine not exceeding €10,000 or imprisonment for up to 5 years is the penalty. In addition they are liable for costs for the repair of the damage caused.

In addition to this, under the *European Communities (Environmental Impact Assessment) Regulations 1989,* Environmental Impact Statements (EIS) are required for various classes and sizes of development project to assess the impact the proposed development will have on the existing environment, which includes the cultural, archaeological and built heritage resources. These document's recommendations are typically incorporated into the conditions under which the proposed development must proceed, and thus offer an additional layer of protection for monuments which have not been listed on the RMP.

THE PLANNING AND DEVELOPMENT ACT 2000

Under planning legislation, each local authority is obliged to draw up a Development Plan setting out their aims and policies with regard to the growth of the area over a five-year period. They cover a range of issues including archaeology and built heritage, setting out their policies and objectives with regard to the protection and enhancement of both. These policies can vary from county to county. The Planning

and Development Act 2000 recognises that proper planning and sustainable development includes the protection of the archaeological heritage. Conditions relating to archaeology may be attached to individual planning permissions.

South Dublin County Council Development Plan 2022-2028

South County Dublin contains a large number of buildings, structures and sites of architectural, historic and/or artistic importance, in addition to numerous archaeological sites. This significant archaeological and architectural heritage is a valuable resource adding to the historical and cultural character of the County. The Development Plan contains policies which are intended to ensure the protection of this heritage. Village Design Statements can be utilised as a tool to guide development in smaller centres. It should be noted that archaeological sites and archaeological zones of interest are identified by a recorded monument reference number on the land use zoning maps. The recorded monument reference numbers are taken from the Record of Monuments and Places for Dublin, published by Department of the Environment, Heritage and Local Government.

Policy NCBH13: Archaeological Heritage
Manage development in a manner that protects and conserves the Archaeological Heritage of the County and avoids adverse impacts on sites, monuments, features or objects of significant historical or archaeological interest.

NCBH13 Objective 1:
To favour the preservation in-situ of all sites, monuments and features of significant historical or archaeological interest in accordance with the recommendations of the Framework and Principles for the Protection of Archaeological Heritage, DAHGI (1999), or any superseding national policy document.

NCB13 Objective 2:
To ensure that development is designed to avoid impacting on archaeological heritage including previously unknown sites, features and objects.

NCBH13 Objective 3:
To protect and enhance sites listed in the Record of Monuments and Places and ensure that development in the vicinity of a Recorded Monument or Area of Archaeological Potential does not detract from the setting of the site, monument, feature or object and is sited and designed appropriately.

NCBH13 Objective 4:
To protect and preserve the archaeological value of underwater archaeological sites including associated features and any discovered battlefield sites of significant archaeological potential within the County.

NCBH13 Objective 5:
To protect historical burial grounds within South Dublin County and encourage their maintenance in accordance with conservation principles.

Adamstown Strategic Development Zone (SDZ) Planning Scheme 2014

This Planning Scheme aims to create sustainable communities rather than just housing developments. The Scheme was prepared with regard to best practice in the planning and design of new urban communities. This is a holistic approach that integrates:-

Conservation: To protect and ensure the appropriate use of historic structures, built heritage and archaeological features.

APPENDIX 4 IMPACT ASSESSMENT & THE CULTURAL HERITAGE RESOURCE

POTENTIAL IMPACTS ON ARCHAEOLOGICAL AND HISTORICAL REMAINS

Impacts are defined as 'the degree of change in an environment resulting from a development' (Environmental Protection Agency 2003: 31). They are described as profound, significant or slight impacts on archaeological remains. They may be negative, positive or neutral, direct, indirect or cumulative, temporary or permanent.

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological and historical resources potentially affected. Development can affect the archaeological and historical resource of a given landscape in a number of ways.

- Permanent and temporary land-take, associated structures, landscape mounding, and their construction may result in damage to or loss of archaeological remains and deposits, or physical loss to the setting of historic monuments and to the physical coherence of the landscape.

- Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping and the passage of heavy machinery; disturbance by vehicles working in unsuitable conditions; or burial of sites, limiting accessibility for future archaeological investigation.

- Hydrological changes in groundwater or surface water levels can result from construction activities such as de-watering and spoil disposal, or longer-term changes in drainage patterns. These may desiccate archaeological remains and associated deposits.

- Visual impacts on the historic landscape sometimes arise from construction traffic and facilities, built earthworks and structures, landscape mounding and planting, noise, fences and associated works. These features can impinge directly on historic monuments and historic landscape elements as well as their visual amenity value.

- Landscape measures such as tree planting can damage sub-surface archaeological features, due to topsoil stripping and through the root action of trees and shrubs as they grow.

- Ground consolidation by construction activities or the weight of permanent embankments can cause damage to buried archaeological remains, especially in colluviums or peat deposits.

- Disruption due to construction also offers in general the potential for adversely affecting archaeological remains. This can include machinery, site offices, and service trenches.

Although not widely appreciated, positive impacts can accrue from developments. These can include positive resource management policies, improved maintenance and access to archaeological monuments, and the increased level of knowledge of a site or historic landscape as a result of archaeological assessment and fieldwork.

PREDICTED IMPACTS

The severity of a given level of land-take or visual intrusion varies with the type of monument, site or landscape features and its existing environment. Severity of impact can be judged taking the following into account:

- The proportion of the feature affected and how far physical characteristics fundamental to the understanding of the feature would be lost;
- Consideration of the type, date, survival/condition, fragility/vulnerability, rarity, potential and amenity value of the feature affected;
- Assessment of the levels of noise, visual and hydrological impacts, either in general or site specific terms, as may be provided by other specialists.

APPENDIX 5 MITIGATION MEASURES & THE CULTURAL HERITAGE RESOURCE

POTENTIAL MITIGATION STRATEGIES FOR CULTURAL HERITAGE REMAINS

Mitigation is defined as features of the design or other measures of the proposed development that can be adopted to avoid, prevent, reduce or offset negative effects.

The best opportunities for avoiding damage to archaeological remains or intrusion on their setting and amenity arise when the site options for the development are being considered. Damage to the archaeological resource immediately adjacent to developments may be prevented by the selection of appropriate construction methods. Reducing adverse effects can be achieved by good design, for example by screening historic buildings or upstanding archaeological monuments or by burying archaeological sites undisturbed rather than destroying them. Offsetting adverse effects is probably best illustrated by the full investigation and recording of archaeological sites that cannot be preserved *in situ*.

DEFINITION OF MITIGATION STRATEGIES

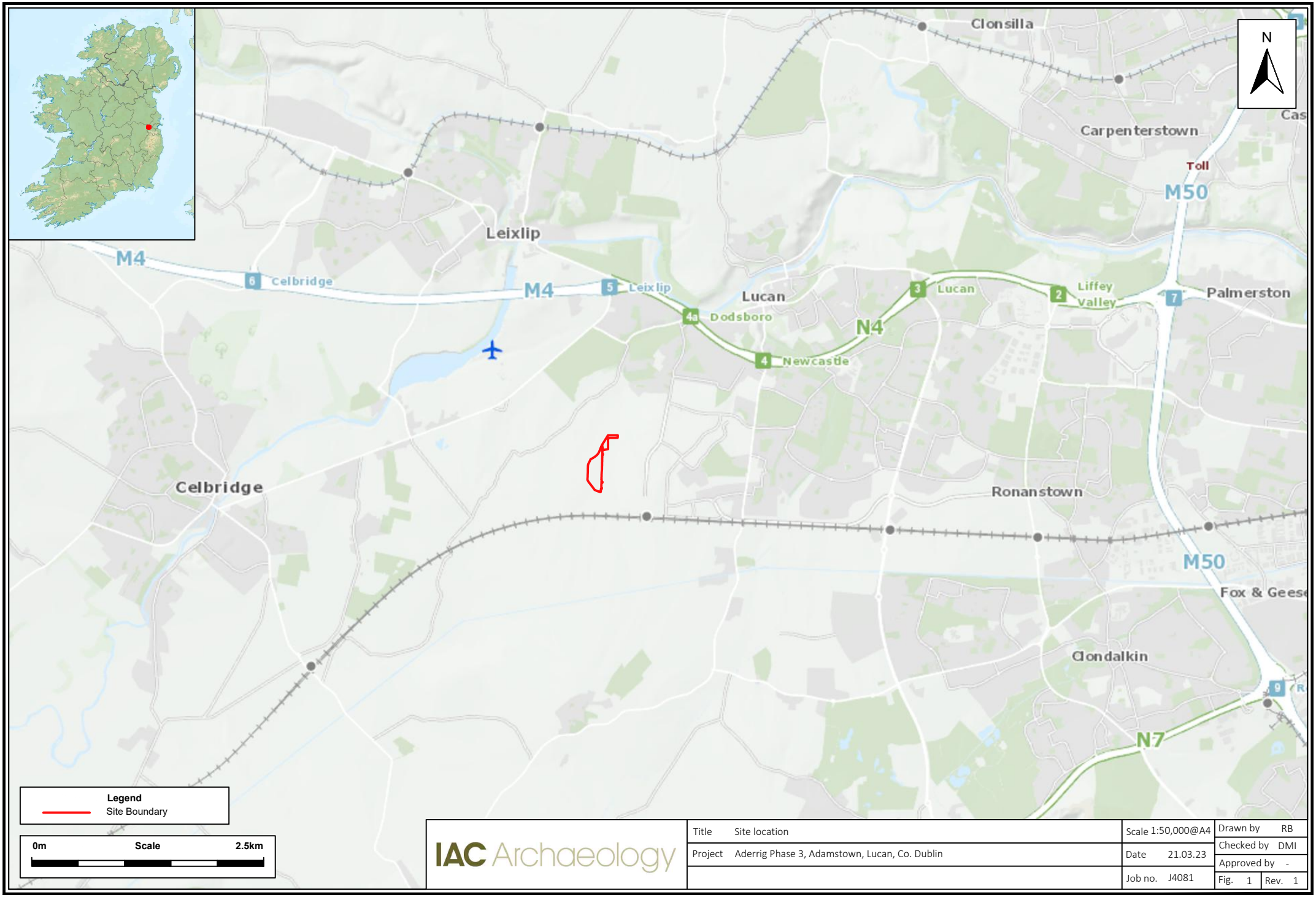
ARCHAEOLOGICAL RESOURCE

The ideal mitigation for all archaeological sites is preservation *in situ*. This is not always a practical solution, however. Therefore, a series of recommendations are offered to provide ameliorative measures where avoidance and preservation *in situ* are not possible.

Full Archaeological Excavation involves the scientific removal and recording of all archaeological features, deposits and objects to the level of geological strata or the base level of any given development. Full archaeological excavation is recommended where initial investigation has uncovered evidence of archaeologically significant material or structures and where avoidance of the site is not possible (CIfA 2014b).

Archaeological Test Trenching can be defined as 'a limited programme... of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land or underwater. If such archaeological remains are present test trenching defines their character and extent and relative quality' (CIfA 2014a).

Archaeological Monitoring can be defined as a 'formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons within a specified area or site on land or underwater, where there is possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive' (CIfA 2014c).


Clonsilla
Carpenterstown
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M50
Leixlip
M4
6 Celbridge
M4
5 Leixlip
Lucan
4a Dodsboro
4 Newcastle
N4
3 Lucan
2 Liffey Valley
7 Palmerston
Celbridge
Ronanstown
M50
Fox & Gees
Clondalkin
9
N7
N
Legend
Site Boundary
0m
Scale
2.5km
IAC Archaeology
Title Site location
Project Aderrig Phase 3, Adamstown, Lucan, Co. Dublin
Scale 1:50,000@A4
Date 21.03.23
Job no. J4081
Drawn by RB
Checked by DMI
Approved by -
Fig. 1
Rev. 1

IAC Archaeology

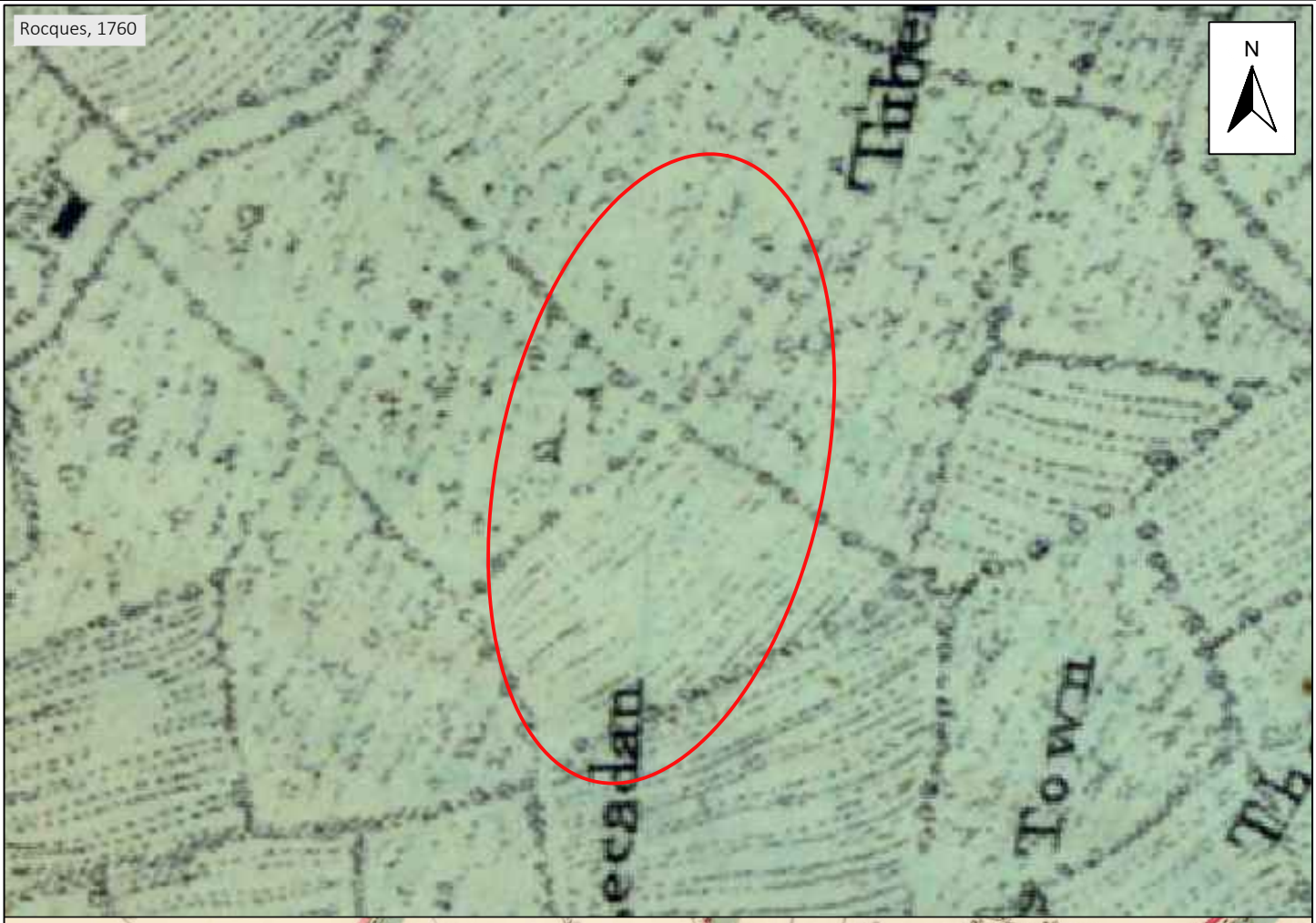
Title	Plan of proposed development	Scale	1:2000@A4
Project	Aderrig Phase 3, Adamstown, Lucan, Co. Dublin	Date	21.03.23
		Job no.	J4081

Drawn by RB
Checked by DMI
Approved by -
Fig. 2 Rev. 1

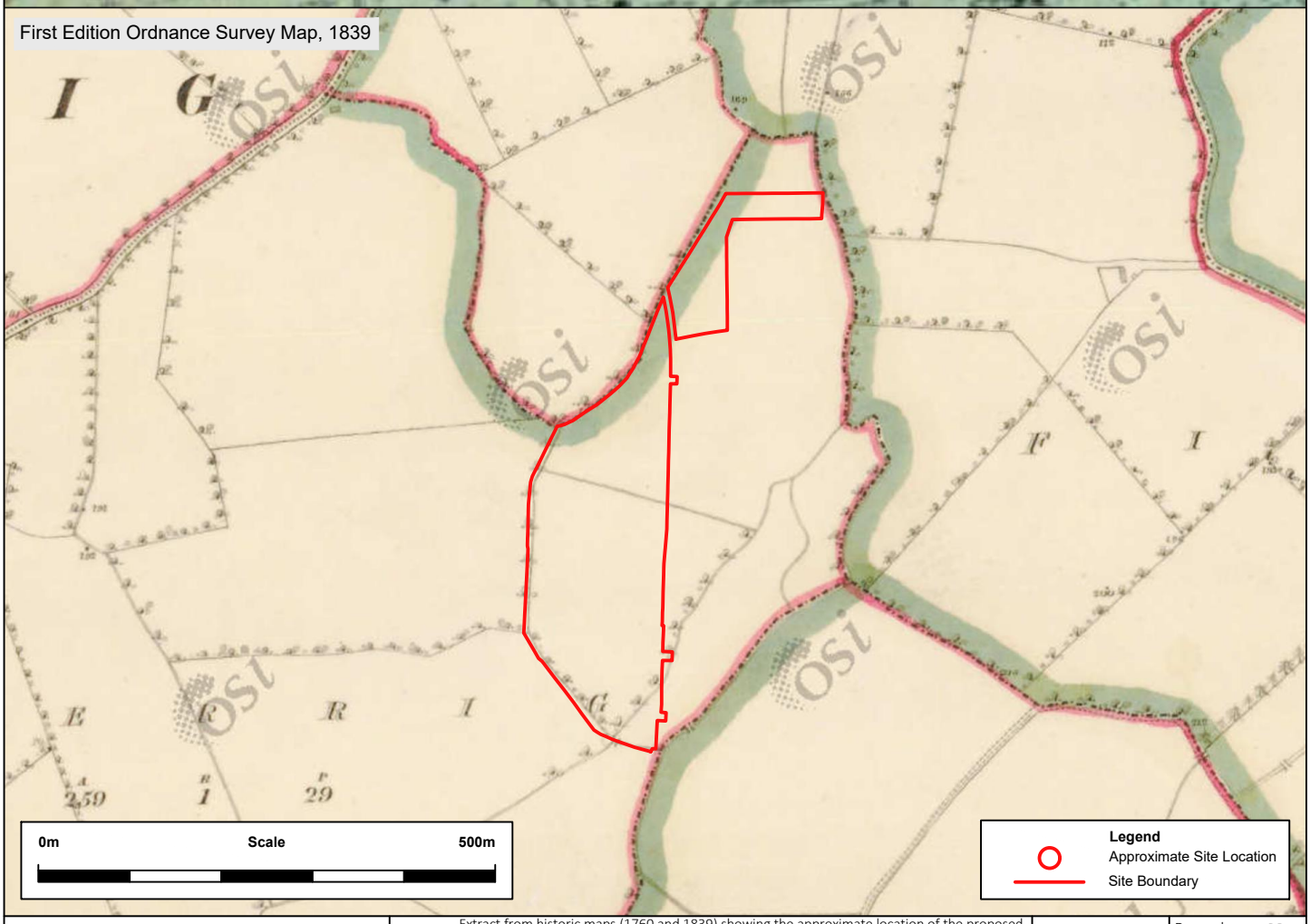
IAC Archaeology

Title	Extract from Google Earth (2022) showing recorded archaeological sites and area available for geophysical survey and testing (Parcel 3)	Scale 1:10,000@A4	Drawn by RB
Project	Aderrig Phase 3, Adamstown, Lucan, Co. Dublin	Date 21.03.23	Checked by DMI
		Job no. J4081	Approved by -
			Fig. 3 Rev. 1

Rocques, 1760

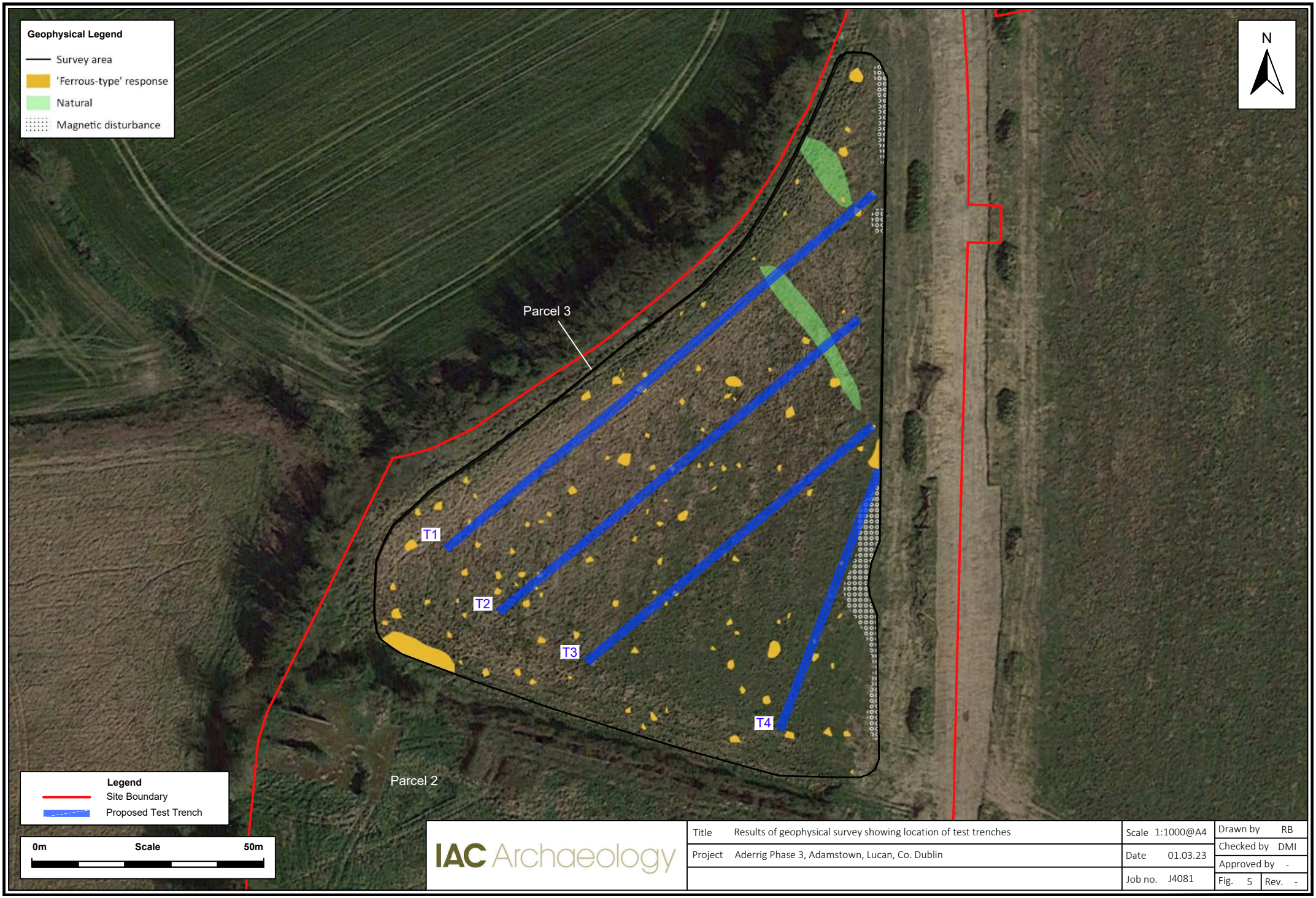


First Edition Ordnance Survey Map, 1839



IAC Archaeology

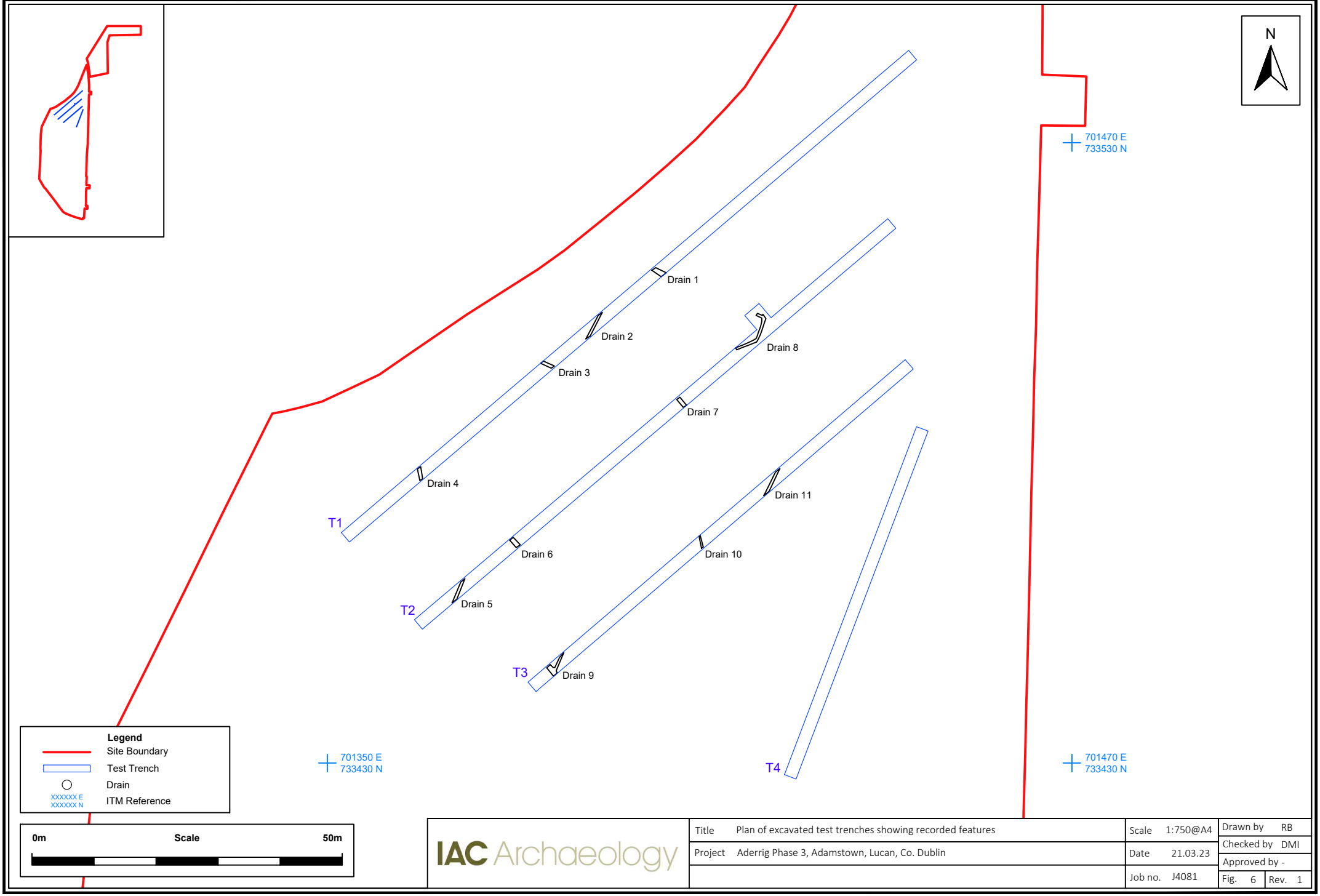
Title	Extract from historic maps (1760 and 1839) showing the approximate location of the proposed development area	Scale 1:7500@A4	Drawn by RB
Project	Aderrig Phase 3, Adamstown, Lucan, Co. Dublin	Date 21.03.23	Checked by DMI
		Job no. J4081	Approved by -
			Fig. 4 Rev. 1



IAC Archaeology

Title	Results of geophysical survey showing location of test trenches	Scale	1:1000@A4
Project	Aderrig Phase 3, Adamstown, Lucan, Co. Dublin	Date	01.03.23
		Job no.	J4081

Drawn by	RB
Checked by	DMI
Approved by	-
Fig. 5	Rev. -



IAC Archaeology

Title	Plan of excavated test trenches showing recorded features	Scale	1:750@A4
Project	Aderrig Phase 3, Adamstown, Lucan, Co. Dublin	Date	21.03.23
		Job no.	J4081

Drawn by RB
Checked by DMI
Approved by -
Fig. 6 Rev. 1

Plate 1: Parcel 1, facing south

Plate 2: Parcel 1, facing west-northwest

Plate 3: Parcel 2, facing north

Plate 4: Parcel 3, facing northwest towards townland boundary

Plate 5: Test Trench 1, facing northeast

Plate 6: Test Trench 2, facing northeast

Plate 7: Test Trench 3, facing northwest

Plate 8: Test Trench 4, facing north

Plate 9: Test Trench 3 showing land drain, facing northeast

Plate 10: Test Trench 2 showing land drain network, facing southwest

Plate 11: Test Trench 1 showing box-style stone-lined drain, facing north

Plate 12: Test Trench 1 showing unlined subsoil-cut drain, facing northeast