

ARCHAEOLOGICAL ASSESSMENT AT FONTHILL ROAD NORTH/LUCAN NEWLANDS ROAD, CAPPAGH, CLONBURRIS, DUBLIN 22

LICENCE: 21E0084

ON BEHALF OF: KELLAND HOMES

I.T.M.: 706387/732508

LICENCEE: JOHN O'NEILL
AUTHORS: JOHN O'NEILL, MARC PIERA AND ROBERT HANBIDGE

REPORT STATUS: FINAL MAY 2021

IAC PROJECT REF.: J3735

DOCUMENT CONTROL SHEET

DOCUMENT TITLE	REV.	PREPARED BY	REVIEWED BY	APPROVED BY
		M. Piera and R. Hanbidge	J O'Neill	T Coughlan
	Archaeological Assessment at Fonthill Road North/Lucan Newlands Road,	Archaeological Assessment at Fonthill Road North/Lucan Newlands Road, 0	Archaeological Assessment at Fonthill Road North/Lucan Newlands Road, 0	Archaeological Assessment at Fonthill Road North/Lucan Newlands Road, 0 M. Piera and R. Hanhidge

ABSTRACT

IAC Archaeology has prepared this report on behalf of Kelland Homes, to study the impact, if any, on the archaeological and historical resource of a proposed residential development, which is located in the townland of Cappagh, which is situated within the Clonburris SDZ, west of the Lucan-Newlands Road, east of the Fonthill Road North, south of the Clondalkin Fonthill Railway, and north of the Cappaghmore residential estate (ITM 706387/732508; Figure 1). The report was undertaken by Marc Piera and Robert Hanbidge of IAC Archaeology under licence 21E0084 Archaeological testing was carried out as part of a pre-planning assessment for the site to inform a future planning application.

Archaeological testing was carried out over the course of one day on 22 March 2021 using a mechanical excavator fitted with a flat grading bucket. A total of 6 trenches (426 linear metres) were excavated which targeted the remaining greenfield areas that were not subject to an earlier program of archaeological testing (that was applied to a larger development zone). This program of archaeological testing focused on a smaller development area which will represent the first phase of a future planning application. One trench, trench 7 was not excavated as it was within the exclusion zone of an ESB Powerline crossed the site. Archaeological testing revealed no features or deposits of archaeological significance.

This current program of archaeological testing follows a previous programme of archaeological testing and metal detection which was carried out by John O'Neill of IAC Archaeology under licences 20E0390 and 20R0168. The 2020 testing program covered a much larger greenfield area but was focused along the route of the proposed roads infrastructure within the proposed wider development (O'Neill, 2020). This initial program identified three archaeological areas, one of which, AA3, is situated within the smaller area of this current proposed development area (Figure 3). AA3 consists of a single large pit identified in Trench 68 which contains charcoal and may represent a charcoal production pit. A similar charcoal production pit was also identified in AA2, located c. 290m to the west. AA1, located c. 325m to the west, is comprised of three undated pits with evidence of burning.

It is recommended that the feature identified as AA3 in 2020 testing (Licence Ref 20E0390) be preserved by record by means of archaeological excavation under licence to the NMS. An area measuring $10m \times 10m$ should be opened around the potential charcoal production pit feature that was identified in order to facilitate its preservation by record.

It is recommended that the removal of any vegetation and relevant works to expose structural remains associated with Cappagh House be subject to archaeological monitoring, within the bounds of any health and safety constraints. A written, photographic and measured survey of the ruins is required in order to produce plans and elevation records. Full archaeological monitoring during demolition is

Archaeological Assessment Licence No.: 21E0084

recommended, including a survey of the building footprint and a record of any buried remains associated with the structure.

It is recommended that all ground disturbances associated with the proposed development be monitored by a suitably qualified archaeologist. Any further mitigation will require approval from the National Monuments Service of the DoHLGH.

CONTENTS

ABSTRACT	
List of Figure	esiv
List of Plates	s
1 INTRODU	CTION 1
1.1 Gene	ral1
1.2 The D	Pevelopment1
2 ARCHAEC	LOGICAL AND HISTORICAL BACKGROUND
2.1 Back	ground/ Summary of Desktop Assessment
2.2 Sumr	nary of Previous Archaeological Fieldwork6
2.3 Carto	graphic Analysis7
2.4 Aeria	Photographic Analysis7
2.5 Topo	graphical Files8
3 ARCHAEC	LOGICAL TESTING9
3.1 Gene	ral9
3.2 Testir	ng Results9
3.3 Capp	agh House Ruin (plates 9-11)12
3.4 Concl	usions12
4 IMPACT A	SSESSMENT AND MITIGATION STRATEGY 13
4.1 Impa	ct Assessment13
4.2 Mitig	ation13
5 REFERENCE	CES
APPENDICES	
Appendix 1	Contextsi
Appendix 2	RMP Sites within the Surrounding Areaiii
Appendix 3	Legislation Protecting the archaeological Resourcev
Appendix 4	Impact Assessment & the Cultural Heritage Resource viii
Appendix 5	Mitigation Measures & the Cultural Heritage Resourcex
FIGURES	
PLATES	

LIST OF FIGURES

- Figure 1 Location of development and surrounding archaeological sites
- Figure 2 Plan of development
- Figure 3 Extracts from 1st and 3rd edition OS maps showing development area
- Figure 4 Plan of test trenches and previously excavated trenches
- Figure 5 Plan of test trenches showing features

LIST OF PLATES

Plate 11

Plate 1	Trench 1, facing south
Plate 2	Trench 2, facing north
Plate 3	Ditch C2.1 in Trench 2, facing west
Plate 4	Trench 3, facing north
Plate 5	Trench 4, facing east
Plate 6	Trench 5, facing west
Plate 7	Trench 6, facing west
Plate 8	Powerline in footprint of trench 7, facing east
Plate 9	View of front (east) elevation to Cappagh House, facing west
Plate 10	View of rear (west) elevation to Cappagh House,
	facing southeast

Side (north) elevation of rear block, facing south

1 INTRODUCTION

1.1 GENERAL

The following report details the results of a programme of archaeological testing undertaken at Cappagh, in a greenfield site situated within the Clonburris SDZ, west of the Lucan-Newlands Road, east of the Fonthill Road North, south of the Clondalkin Fonthill Railway, and north of the Cappaghmore residential estate, as part of a preplanning assessment for the site to inform a future planning application. This program of archaeological testing focused on a smaller development area which will represent the first phase of this future planning application. This assessment has been carried out to ascertain the potential impact of the proposed residential development on the archaeological resource that may exist within the proposed development area. The assessment was undertaken by John O'Neill of IAC Archaeology (IAC), on behalf of Kelland Homes Ltd and under licence 21E0084, as issued by the National Monuments Service of the Department of Housing, Local Government and Heritage (DoHLGH).

Test trenching was carried out in one day on 22 March 2021. This was carried out using a 13 tonne 360 degree tracked excavator, with a flat, toothless bucket, under strict archaeological supervision. A total of 6 trenches were mechanically investigated across the test area which measured 426 linear metres in total. One trench, trench 7 was not excavated as it was within the exclusion zone of an ESB Powerline crossed the site. The trenches targeted remaining greenfield areas that were not subject to an earlier program of archaeological testing (Licence No.: 20E0390 that covered a larger development zone). This earlier program of testing under licence no.: 20E0390 identified three archaeological areas, one of which, AA3, is situated within the smaller area of this Phase 1 development. AA3 consists of a single large pit identified in Trench 68 which contains charcoal and may represent a charcoal production pit.

Archaeological testing revealed no features or deposits of archaeological significance. The only feature of archaeological significance within this areas nis the potential charcoal production pit that was identified within AA3 that was discovered during the testing under licence 20E0390 in 2020.

1.2 THE DEVELOPMENT

The proposed development consists of the construction of 294 no. dwellings, crèche and retail / commercial unit, comprised of:

- 118 no. 2, 3 & 4 bed, 2 storey semi-detached and terraced houses;
- 104 no. 2 & 3 bed duplex units accommodated in 10 no. 3 storey buildings;
- 72 no. 1 & 2 bedroom apartments in 2 no. 4 & 6 storey buildings;
- 2 storey creche (c.500m²);
- 1 no. retail /commercial unit (c.150m²).

Access to the development will by via the permitted road network (under Ref. SDZ20A/0021) which provides access from the Ninth Lock Road to the east and the R113 (Fonthill Road) to the west. The proposed development will connect into the

permitted infrastructural works as approved under the Clonburris Strategic Development Zone Planning Scheme (2019) and permitted under Ref. SDZ20A/0021, with the proposed development connecting into the permitted surface water drainage attenuation systems i.e. 1 no. pond, 3 no. modular underground storage systems and 1 no. detention basin combined with modular underground storage systems. The proposed wastewater infrastructure will connect into a permitted foul pumping station and pipe network within proposed road corridors to facilitate drainage connections to future wastewater drainage infrastructure within the adjoining SDZ lands (including future Irish Water pumping station granted under SDZ21A/0006).

The proposed development also provides for all associated site development works above and below ground, public & communal open spaces, hard & soft landscaping and boundary treatments, surface car parking, bicycle parking, bin & bicycle storage, public lighting, plant (M&E), utility services & 4 no. ESB sub-stations.

This application is being made in accordance with the Clonburris Strategic Development Zone Planning Scheme 2019 and relates to a proposed development within the Clonburris Strategic Development Planning Scheme Area, as defined by Statutory Instrument No. 604 of 2015. An indicative layout is included in Figure 2.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 BACKGROUND/ SUMMARY OF DESKTOP ASSESSMENT

The proposed development is situated within the townland of Cappagh, parish of Clondalkin, and barony of Uppercross. The site itself was previously in use as agricultural pasture and comprises of three small fields: two fields to the western half and a larger field to the east. Mature hedgerows separate the fields. A hard-sanding area consisting of gravel and small stones is present to the north portion of eastern field below the railway. The overgrown ruin of Cappagh House is located in the southeastern corner of the site.

There are no archaeological sites within the area of this phase of the development; however, there three recorded monuments within 500m. These consist of an unclassified castle and three/four 16th/17th century cottages (DU017-032001-002) located c. 320m to the north in the grounds of the former Neillstown House, and a cropmark of an enclosure (DU017-036) located c. 400m to the west. Within the larger zoned area of the Clonburris SDZ, a third recorded monument; an enclosure DU017-035 is located c. 730m to the west-southwest of this development site. John O'Neill notes in his report for 20E0390, that there is potentially a fourth archaeological feature within the Clonburris SDZ area to the south-eastern section of the SDZ, adjacent to the canal. This is only visible as a cropmark on the 2008 Google Earth Imagery and consists of a possible double ditched enclosure, with a diameter of c. 28m.

Prehistoric Period

Mesolithic Period (c. 7000-4000BC)

Although recent evidence suggests there may have been a human presence in the southwest of Ireland as early as the Upper Palaeolithic (Dowd and Carden 2016), the earliest evidence for widespread settlement in Ireland dates to the Mesolithic period (6000–4000 BC). These communities subsisted on hunting, fishing and foraging with seasonal natural resources being of key importance. The most common evidence found to show the presence of Mesolithic communities at a site is scatters of worked flint, a by-product from the production of flint implements. The coastal areas of County Dublin have produced flint tools dating to the Mesolithic; and seasonal habitation sites have been interpreted through the discovery of shell middens along this coastline. There is no evidence for Mesolithic activity in the vicinity of the proposed development area to date.

Neolithic Period (c. 4000-2500BC)

During the Neolithic period (4000–2500 BC) communities became less mobile and their economy became based on agriculture. This transition was accompanied by major social change. Agriculture demanded an altering of the physical landscape, which meant forests were rapidly cleared and field boundaries constructed. There was a greater concern for territory, which contributed to the construction of large communal ritual monuments called megalithic tombs, which are characteristic of the period. A Neolithic house was discovered in the townland of Kishoge within

approximately 150 metres of the southern boundary of the SDZ Lands (Licence 01E0061), indicating that the wider landscape was occupied during the Neolithic period.

Bronze Age Period (c. 2500-800BC)

The Bronze Age (2500–800 BC) was marked by the widespread use and production of metal for the first time in Ireland. As with the transition from Mesolithic to Neolithic, the transition into the early Bronze Age was accompanied by changes in society. The megalithic tomb tradition declined and ended in favour of individual, subterranean cist or pit burials that occur either in isolation or in small cemeteries. These burials contained inhumed or cremated remains and were often accompanied by a pottery vessel. It is noted a bronze axe head (IA/163/1996) is recorded in the topographical files of the National Museum as potentially originating from within the SDZ, although no detail as to the circumstance of the find is contained in the record.

Fulachtaí fia or burnt mound sites typically date to the Bronze Age and are amongst the most commonly found sites within the prehistoric landscape, with thousands recorded across the country. Such sites are often characterised by a horseshoe-shaped mound of heat-affected stone and charcoal, often associated with a trough and pits, and are located in close proximity to a water source or in areas where the water table is particularly high. They are often affected by agricultural activities such as ploughing and often survive only as irregular spreads of heat-affected stones and charcoal-rich material. Fulachtaí fia have traditionally been interpreted as cooking sites, however, alternative interpretations have been presented including brewing, tanning, dyeing and bathing. There are a number of fulachtaí fia recorded in the surrounding landscape. Within the SDZ, enclosure DU017-035 is described in the SMR file as follows: 'In field of rough pasture bordering the canal. An aerial photograph (FSI 1971/224-6) shows a horseshoe-shaped enclosure. No(t) visible at ground level.' This suggests that this enclosure may represent a fulacht fia or burnt mound.

Iron Age Period (c. 800BC – AD400)

The Iron Age (800 BC–AD 500) was traditionally seen as a period for which there was little evidence in comparison to the preceding Bronze Age and the succeeding early medieval period. However, development-led excavation in recent decades and projects such as the Late Iron Age and Roman Ireland Project have added significantly to our knowledge of the Irish Iron Age. In Europe, there are two stages to the Iron Age, the earlier Hallstatt and the later La Tène. While in Ireland, evidence of a Hallstatt phase is rare, and the La Tène phase is reflected strongly in the style of metalwork of this period. It is clear there was significant contact and interaction between the Continental Europe, Britain and Ireland at this time. There are no recorded sites of Iron Age date in the vicinity of the proposed development area.

Early Medieval Period (AD400-1100)

The early medieval period is portrayed in the surviving literary sources as entirely rural, characterised by the basic territorial unit known as a *túath*. Byrne estimates that there were likely to have been at least 150 kings in Ireland at any given time during this period, each ruling over his own *túath* (1973). It has been estimated that each

Archaeological Assessment Licence No.: 21E0084

túath comprised between 1,700 and 3,300 subjects, according to the most recent estimates placing the population of Ireland in the early medieval period between a quarter and a half a million people (Stout 2017).

During this turbulent period, defensive enclosures known as ringforts were constructed to protect farmsteads. The dating evidence suggests they were primarily built between the 7th and 9th centuries AD (Stout 1997, 22-31). Often sites recorded as enclosures represent denuded ringforts or similar sites. Enclosure (DU017-036) identified within the SDZ lands may represent a ringfort. Similarly, the enclosure identified recently from aerial photography may also represent a ringfort or similar early medieval site.

Medieval Period (AD1100-1600)

The first of the Anglo-Norman landings in Ireland took place in County Wexford in 1169, at the invitation of the former king of Leinster, Dermot MacMurrough Kavanagh. The Anglo-Normans, joined by 500 *Ui Chennselaig* men, took the Viking town of Wexford. Through a policy of military force and integration, the Anglo-Normans colonised much of the country.

A likely medieval rectangular moated site (DU017-038003) and adjacent church (DU017-038001) are located in the townland of Kilmahuddrick (Deansrath Park) c. 450m to the south of the SDZ lands. Moated sites are generally interpreted as Anglo-Norman farmsteads. A castle (DU017-032001) is recorded c. 100m to the east of the SDZ lands in the townland of Neilstown. In the Down Survey of c. 1655, this site is referred to as 'old castle' suggesting it is of medieval date. A number of further medieval features are noted in the wider landscape, suggesting the area flourished in the medieval period.

Post-medieval Period (AD1600-1900)

During the 18th and 19th centuries this area was typified by large manors with associated demesne landscapes and villages interspersed with medium-sized houses and farmsteads. The 18th century, a relatively peaceful period, saw the large-scale development of demesnes and country houses in Ireland. The large country house was often only a small part of the overall estate of a large landowner and provided a base to manage often large areas of land that could be located nationwide.

Lands associated with the large houses were generally turned over to formal gardens, which were much the style of continental Europe. Gradually this style of formal avenues and geometric gardens designs was replaced during the mid-18th century by the adoption of parkland landscapes — to be able to view a large house within a natural setting. Considerable constructional effort went into their creation – earth was moved, field boundaries disappeared, streams were diverted to form lakes and quite often roads were completely diverted to avoid travelling anywhere near the main house or across the estate. Several small demesnes are depicted on the first edition OS map of 1843, including Cappagh House, Rosebank, and Clonburris Cottage.

It is from this period that industrial engineering began having a prominent effect on the landscape and how it was modified. The most prominent feature within the landscape of the Clonburris SDZ is the Grand Canal which commenced construction in the area of Clonburris in 1756. The Grand Canal represents a significant technical feat of late 18th century engineering and crosses the SDZ lands for a distance of c. 3km. The 10th, 11th and 12th Locks and associated structures are present within this SDZ area.

The construction of the Great Southern and Western Railway Line which runs along the northern edge of this development area represents another significant piece of 19th century industrial infrastructure. The railway was built during the 1840s, the railway utilised a series of bridges and viaducts to carry a double track railway along its route6. The railway survives as an example of 19th Century engineering and is depicted as traversing the SDZ lands on the Griffith's Valuation maps of 1848 to 1864

2.2 SUMMARY OF PREVIOUS ARCHAEOLOGICAL FIELDWORK

A programme of archaeological testing and metal detection was carried out by the John O'Neill for IAC Archaeology under licences 20E0390 and 20R0168, along the route of roads within the proposed development and in the open fields to the west of the Fonthill Road North (O'Neill 2020). This identified three archaeological areas, one of which, AA3, is situated within the proposed development (Figure 3). This consisted of a single large pit identified in Trench 68 containing charcoal, representing a probable charcoal production pit. A similar charcoal production pit was also identified in AA2, c. 290m to the west. AA1, c. 325m to the west, comprised three undated pits with evidence of burning. No other features were identified by the testing within the study area.

A review of the Excavations Bulletin (1970–2020) has revealed that no previous archaeological investigations have taken place within the proposed scheme. A programme of testing near Neillstown House (DU017-032001/2) identified a badly disturbed human burial orientated east-west (Licence 16E0409 Ext., Bennett 2017:342). No other archaeological remains were encountered.

The six investigations tabulated below did not encounter anything of archaeological significance within the study area of the proposed development.

LICENCE	REFERENCE	DISTANCE FROM SITE
07E0298	Bennett 2007:428	Immediate west
02E1821	Bennett 2002:0496	c. 320m southeast
02E1764	Bennett 2002:0672	c. 335m north-northeast
03E1164	Bennett 2003:471	c. 370m south-southeast
10E0410	Bennett 2011:176	Various
10E0410	Bennett 2010:235	Various

TABLE 1: Archaeological investigations that failed to identify archaeological features

2.3 CARTOGRAPHIC ANALYSIS

From the earliest available historic mapping, the SDZ area is depicted as largely undeveloped agricultural lands.

Down Survey map, Barony of Newcastle, c. 1655

An old castle is depicted beside a house on the Down Survey map, Barony of Newcastle, c. 1655 to the north of the site. This may represent the unclassified castle and cottages (DU017-032001/2) recorded at Neillston House or Rowlagh Castle (DU017-067) further to the north. No features are marked in the area of the proposed development.

John Rocque's, Map of the County of Dublin 1760

The Grand Canal is visible in Roque's map of 1760 as 'New Canal' to the south. A small demesne is present within the proposed development called 'Cappoh'. The small demesne of 'Nell Town' is marked to the north, there are no signs of the old castle (DU017-032001/2) on this map. 'Rowlough Castle' (DU017-067) is marked further to the north.

John Taylor's map of the environs of Dublin: 1816

By the time of Taylor's map of 1816 Rosebank demesne is depicted to the south of the site and Moorfield demesne is marked to the north.

First Edition Ordnance Survey Map, 1843, scale 1:10560 (Figure 3)

The first edition OS map of 1843 is the first to accurately depict the proposed development area. The demesne and structures of Cappagh House are situated in the southeast quadrant of the site, the remainder of the site consists of four open fields. A sunk fence forms the northern boundary of Cappagh demesne.

Ordnance Survey Map, 1906-09, scale 1:2500 (Figure 3)

The demesne of Cappagh House has significantly diminished by the 25-inch mapping of 1906–9. The site is situated within three open fields. The Great Southern and Western Railway has now been constructed to the immediate north of the site and Rosebank to the south has been replaced by Cappaghmore. There are no changes of note on the 1935-8 OS map.

2.4 AERIAL PHOTOGRAPHIC ANALYSIS

Inspection of the aerial photographic coverage of the proposed development area held by the Ordnance Survey (1995-2013), Bing Maps (2020), and Google Earth (2008-2020) has been carried out. This revealed that the proposed development has been made up of three open fields since the 1995 OS coverage and that the northeast portion of the site was subject to previous disturbance, where topsoil appears to have been removed and a hard-standing area installed. No previously unknown archaeological features were identified.

2.5 TOPOGRAPHICAL FILES

Information on artefact finds from the study area in Dublin has been recorded by the National Museum of Ireland since the late 18th century. Location information relating to these finds is important in establishing prehistoric and historic activity in the study area. No detail is recorded for this development area of the SDZ lands on the online map viewer (www.heritagemaps.ie). However, it is noted a bronze axe head (IA/163/1996) is recorded in the topographical files of the National Museum as potentially originating from within the SDZ, although no detail as to the circumstance of the find is contained in the record.

3 ARCHAEOLOGICAL TESTING

3.1 GENERAL

Test trenching took place on 22 March 2021, using a 13 tonne 360 degree tracked excavator equipped with a flat, toothless bucket under strict archaeological supervision. Any investigated deposits were preserved by record. This was by means of written, drawn and photographic records.

A total of 6 trenches were excavated across the site measuring 426 linear metres (Figures 4 & 5, Plates 1-8). Trenches 1-3 were located in the northwestern field and were orientated north-south. A portion of this northwestern field has already been developed into a car-parking area that serves Fonthill Railway Station. In the eastern field, Trench 4 was orientated northwest-southeast. This area of the eastern field where Trench 4 was located, is disturbed due to the presence of a hard standing area which has been present there since at least 2008 according to Google Earth Imagery dated 7/2008. Trench 6 was positioned in the centre of the remaining portion of this eastern field and was orientated west-east. Trench 5 was also located in this eastern field. An exclusion zone to an ESB Powerline (running east-west across the site) to the south reduced the length of Trench 5. Trench 7 could not be excavated due to the presence of this exclusion zone along the ESB Powerline.

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 consisted of mostly of mid-brown sandy clay but varied to a dark brown silty clay to Trenches 5 and 6 in the eastern field. Depth varied between 0.4 and 0.5m.

There was some variation in the subsoil between grey clay, greyish brown and yellowish-brown silty clays which feature bands of yellow silty clay and patches of light brown clay. A contrasting grey sandy clay gravel with bands of yellow brown gravel was recorded to Trench 6.

TRENCH 1 (Plate 1)

LENGTH	100m		
DEPTH	0.5m		
WIDTH	1.8m		
ORIENTATION	North-south		
STRATIGRAPHY FR	OM PRESENT GROUND LEVEL		
0.0-0.45m	Topsoil: a mid-brown sandy clay		
0.45-0.5m	Subsoil: a stony grey clay mixed with bands of yellow silty clay		

ARCHAEOLOGICAL FEATURES

Nothing of archaeological significance identified.

NON-ARCHAEOLOGICAL FEATURES

5 linear ditches and 5 smaller linear features mostly orientated east/west were identified in the trench. The ditches measured 2m wide and varied in depth from 0.05-0.5m. Modern pottery was retrieved from ditch (C1.3). These may represent field boundaries or shallow drainage channels. The smaller linear features varied in width from 0.4-1.1m and were very shallow (0.05-0.15m deep). These linear features may represent small drainage channels or agricultural furrows.

TRENCH 2 (Plates 2 & 3)

IKLINCII Z (FIA			
LENGTH	82m		
DEPTH	0.5m		
WIDTH	1.8m		
ORIENTATION	North-south		
STRATIGRAPHY FR	OM PRESENT GROUND LEVEL		
0.0-0.45m	Topsoil: a mid-brown sandy clay		
0.45-0.5m	Subsoil: a stony greyish brown silty clay		
ARCHAEOLOGIC	AL FEATURES		
Nothing of archa	eological significance identified.		
NON-ARCHAEOL	OGICAL FEATURES		
2 ditches and 2	smaller linear features were recorded (Plate 3). Modern pottery was observed in the		

fill of two of these features and they are likely associated with drainage or agricultural furrows.

TRENCH 3 (Plate 4)

KENCH 3 (Fla	te 4)		
LENGTH	70m		
DEPTH	0.5m		
WIDTH	1.8m		
ORIENTATION	North-south		
STRATIGRAPHY FR	OM PRESENT GROUND LEVEL		
0.0-0.45m	Topsoil: a mid-brown sandy clay		
0.45-0.5m	Subsoil: a stony greyish brown silty clay with patches of light brown clay		
ARCHAEOLOGIC	AL FEATURES		
Nothing of archa	eological significance identified.		
NON-ARCHAEOLO	OGICAL FEATURES		
3 linear ditches ditches.	and 2 linear features were recorded. Modern pottery was observed within the		

TRENCH 4 (Plate 5)

LENGTH	58m		
DEPTH	0.45m		
WIDTH	1.8m		
ORIENTATION	West-east		
STRATIGRAPHY FR	OM PRESENT GROUND LEVEL		
0.0-0.40m	Topsoil was previous removed with a deposit of gravel and small stones laid down		
0.40-0.45m	Subsoil: a stony yellowish-brown silty clay		
ARCHAEOLOGICA	AL FEATURES		
Nothing of archa	eological significance identified.		
NON-ARCHAEOLO	OGICAL FEATURES		

One linear ditch orientated northeast/southwest was recorded in which modern pottery was observed. The area was disturbed, and the original topsoil was already removed.

TRENCH 5 (Plate 6)

LENGTH	23m The original proposed trench length was not fully achieved due to an exclusion zone to accommodate a ESB Network powerline that crossed the field east/west.		
DEPTH	0.5m		
WIDTH	1.8m		
ORIENTATION	West-east		
STRATIGRAPHY FR	OM PRESENT GROUND LEVEL		
0.0-0.45m	Topsoil: a dark brown silty clay		
0.45-0.5m	Subsoil: a stony yellowish-brown silty clay		
ARCHAEOLOGICA	AL FEATURES		
Nothing of archa	eological significance identified.		
NON-ARCHAEOL	OGICAL FEATURES		
No features were	e observed.		

TRENCH 6 (Plate 7)

IKENCH O (Pla	te /)		
LENGTH	93m		
DEPTH	0.4m		
WIDTH	1.8m		
ORIENTATION	West-east		
STRATIGRAPHY FR	OM PRESENT GROUND LEVEL		
0.0-0.35m	Topsoil: a dark brown sandy clay		
0.35-0.4m	Subsoil: a grey sandy clay gravel with bands of yellowish brown gravel.		
ARCHAEOLOGICA	AL FEATURES		
Nothing of archa	eological significance identified.		
NON-ARCHAEOLO	DGICAL FEATURES		
	furrows were recorded. The ditch measured $1.35m$ wide by $0.3m$ deep and was filled by mixed with stones and inclusions of shells.		

TRENCH 7 could not be excavated due to the presence of an exclusion zone along the ESB Powerline which crossed site on an east-west orientation (Plate 8).

Archaeological Features

Testing did not identify anything of archaeological significance

Non-Archaeological Features

Some of the ditches which were identified in Trenches 1-3 in the northwestern field followed a similar east/west orientation. Ditches C1.1, C2.3 and C3.2 are all on the same alignment and are likely to be the same ditch that traverses these three trenches. Ditches C1.4, C2.1 (Plate 3) and C3.4 also to trenches 1-3 represent the same feature, a ditch which runs across the field. Modern pottery was observed in the fills to both of these ditches which indicates a modern date for both of these features These ditches may represent modern field boundaries.

3.3 CAPPAGH HOUSE RUIN (PLATES 9-11)

A visual inspection of the Cappagh house was carried out on 22 of March 2021. Access to the roofless ruin is restricted due to dense vegetation and ivy growth obscures a full view of the structure's elevations and form. The building comprises of a two-storey main block built c.1830 with gabled side (north and south) elevations and a central multi-bay two-storey rear block attached to rear (west) elevation with later extensions creating a T-shaped plan. Originally there would have been a pitched roof with chimney stacks surmounting both gable side elevations to main house and to original rear (west) elevation of rear block. The walls are rendered and survive to their full height. A square-headed door, window and possible carriage arch openings are present to side (north) elevation of rear block and are currently blocked by concrete breeze blocks to ground floor levels. There is an attached single-storey outbuilding to side (north) elevation of main house.

There is an enclosed yard to the rear of the house with the rear block of the house forming southern boundary and ruinous outbuildings forming western boundary. It is enclosed to the north and east by a stone wall with an entrance to the east adjacent main house. The site is still surrounded by mature trees which would have formed part of the estate landscaping.

An examination of the historic maps also confirms the transforming layout of Cappagh House. The OS First Edition 6" Map 1843 (Figure 3) shows Cappagh House as having a T-shaped plan with western range to the enclosed yard formed by an outbuilding. The remaining sections of the yard are enclosed by walls. A gap between the western range of the enclosed yard and the rear block o the main house, provided direct access from the yard area to a probable rectangular garden or lawn area that is also enclosed to the south side of the house. The later OS 25" Map 1906-09 (Figure 3) shows the southern range of the enclosed yard is at a full extent linking the western range to the rear block of the main house and closing off access to the garden/lawn.

3.4 CONCLUSIONS

The combined results of the 2020 test trenching and the current phase of assessment suggests that there is low archaeological potential for large scale features. The current phase of assessment did not identify any additional areas of archaeology within the development area. The presence of sherds of modern pottery within the field ditches and linear features, indicates that these are relatively recent features. These may represent forms of land modification and improvement works possibly associated with water management and field drainage. The orientation of many of these features conforms to the orientation of field boundaries as depicted on the historic maps and to the upstanding hedgerows which currently divide the fields up.

The only feature of archaeological significance within this area, is the potential charcoal production pit which was identified within AA3 that was discovered during the testing under licence 20E0390 in 2020. The feature was located with Trench 68m and consisted of a single large pit (C68.1) that is capped with clay and contains moderate amounts of charcoal.

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

- Ground disturbances associated with the construction of the future residential
 development will have a direct and negative impact on the previously
 identified Archaeological Area 3. Given the nature and extent of the remains,
 the archaeological site is considered to possess local significance only.
 Impacts, prior to the application of mitigation, are considered to be
 moderately negative.
- The existing remains of Cappagh House and associated structures will be impacted by the development which currently include for its demolition. The demolition of Cappagh House is covered under granted permission SDZ20A/0021.
- There may be direct and negative impacts on small or isolated archaeological feature or deposits that have the potential to survive beneath the current ground level, outside of the footprint of the excavated test trenches. This will be caused by ground disturbances associated with the proposed future development. Impacts, prior to the application of mitigation, have the potential to range from moderate to significant negative.

4.2 MITIGATION

Prior to the commencement of construction, the identified archaeological area will be subject to preservation by record. These works will be carried out under licence to the DoHLGH and full provision will be made available for the excavation and analysis of the remains.

- It is recommended that the feature identified as AA3 in 2020 testing (Licence Ref 20E0390) be preserved by record by means of archaeological excavation under licence to the NMS. An area measuring 10m x 10m should be opened around the potential charcoal production pit feature that was identified in order to facilitate its preservation by record.
- It is recommended that the removal of any vegetation and relevant works to
 expose structural remains associated with Cappagh House be subject to
 archaeological monitoring, within the bounds of any health and safety
 constraints. A written, photographic and measured survey of the ruins is
 required in order to produce plans and elevation records. Full archaeological

13

monitoring during demolition is recommended, including a survey of the building footprint and a record of any buried remains associated with the structure.

• It is recommended that all ground disturbances associated with the proposed development be monitored by a suitably qualified archaeologist. If any features of archaeological potential are discovered during the course of the works further archaeological mitigation may be required, such as preservation in-situ or by record. Any further mitigation will require approval from the National Monuments Service of the DoHLGH.

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, Housing, Local Government and Heritage.

5 REFERENCES

- Chartered Institute for Archaeologists. 2014a. Standards & Guidance for Field Evaluation.
- Chartered Institute for Archaeologists. 2014b. Standards & Guidance for Archaeological Excavation.
- Chartered Institution of Field Archaeologists. 2014c. Standards & Guidance for an Archaeological Watching Brief (Monitoring).
- Dowd, M., Carden, R., 2016. 'First evidence of a Late Upper Palaeolithic human presence in Ireland.' Quaternary Science Reviews 139: 158-163.
- Department of Arts, Heritage, Gaeltacht and the Islands. 1999a. Framework and Principles for the Protection of the Archaeological Heritage. Government Publications Office, Dublin.
- Department of Arts, Heritage, Gaeltacht and the Islands. 1999b. *Policy and Guidelines on Archaeological Excavation*. Government Publications Office, Dublin.
- Environmental Protection Agency. 2017. *Draft Advice Notes on Current Practice (in the preparation of Environmental Impact Statements)*. Government Publications Office, Dublin.
- Environmental Protection Agency. 2017. Draft Guidelines on the Information to be Contained in Environmental Impact Statements. Government Publications Office, Dublin.
- National Monuments Service, Department of Housing, Local Government and Heritage. *Sites and Monuments Record*, County Dublin.
- National Museum of Ireland. Topographical Files, County Dublin.
- O'Neill, J. 2020 Archaeological Assessment at Clonburris Little, Cappagh, Kishoge, and Grange, Clondalkin Dublin 22 (Clonburris Strategic Development Zone) Licence: 20E0390 and 20R0168 Unpublished Report by IAC Archaeology on behalf of Clonburris Infrastructure Limited
- Stout, G. and Stout, M. 1997 Early Landscapes: from Prehistory to Plantation. In F.H.A. Aalen et al. (eds), *Atlas of the Irish Rural Landscape*. Cork. Cork University Press.
- Stout, M. 2017 Early Medieval Ireland 431-1169. Bray. Wordwell.

CARTOGRAPHIC SOURCES

Sir William Petty, Down Survey Map of the Barony of Uppercross 1655

John Rocque's An Actual Survey of County Dublin, 1760

John Taylor's Map of the Environs of Dublin, 1816

John Rocque's Exact survey of the city and suburbs of Dublin, 1756 (city 1760)

Ordnance Survey maps of County Dublin 1843 and 1906-9

ELECTRONIC SOURCES

www.archaeology.ie - DoHLGH website listing all SMR/RMP sites with aerial photographs

www.excavations.ie - Summary of archaeological excavation from 1970-2020.

www.heritagemaps.ie – The Heritage Council web-based spatial data viewer which focuses on the built, cultural and natural heritage around Ireland and off shore.

www.googleearth.com - Satellite coverage of the proposed development area

www.bingmaps.com - Satellite coverage of the proposed development area

APPENDICES

APPENDIX 1 CONTEXTS

CONTEXT NO.	TRENCH NO.	DESCRIPTION
C1.1	1	Ditch orientated west-east. It was 2.3m wide and at least more than 0.3m deep. It was a mid grey silty clay with inclusions of charcoal. A modern pottery was observed. Interpreted as a modern field boundary. Probably the same as C2.3 and C3.2.
C1.2	1	Ditch orientated west-east. It was 1.1m wide and 0.05m deep. Filled by a yellowish brown silty clay.
C1.3	1	Ditch orientated west-east. It was 2m wide and 0,25m deep. Filled by a sterile light grey silty clay.
C1.4	1	Ditch orientated west-east. It was 2.2m wide and 0.3m deep. Filled by a sterile light grey plastic silty clay. Probably same as C2.1 and C3.4. Interpreted as a field boundary
C1.5	1	Ditch orientated west-east. It was 1m wide and 0.15m deep. Filled by a gravely mid grey silty clay.
C1.6	1	Ditch orientated west-east. It was 2.1m wide and 0.4m deep. Filled by mid grey sandy clay mixed with gravel.
C1.7	1	Ditch orientated west-east. It was 2m wide and 0.12m deep. Filled by mid grey sandy clay.
C2.1	2	Ditch orientated west-east. It was 2.1m wide and 0.6m deep. Filled by mid grey silty clay. A modern pottery was observed. Interpreted as a modern field boundary. Probably same as C1.4 and C3.4.
C2.2	2	Ditch orientated west-east. It was 1m wide and 0.25m deep. Filled by mid grey silty clay. A piece of Blackware pottery was observed into the fill. Modern ditch.
C2.3	2	Ditch orientated west-east. It was 2.2 m wide and 0.25m deep. Filled by grey silty clay. Interpreted as a modern field boundary. Probably the same as C1.1 and C3.2.
C3.1	3	Linear feature running north-south along the south end of the trench. It was recorded 25m long, 0.6m wide and 0.08m deep. Filled by sterile yellowish brown silty clay. Interpreted as a furrow.
C3.2	3	Ditch orientated west-east. It was 2m wide and 0.25m deep. Filled by a mid grey silty clay. Interpreted as a modern field boundary. Probably same as C1.1 and C2.3.
C3.3	3	Ditch orientated west-east. It was 1.4m wide and 0.2m deep. Filled by mid grey silty clay. A modern pottery was observed on the fill.
C3.4	3	Ditch orientated west-east. It was 2.1m wide and at least 0.2m deep. Filled by a mid grey silty clay. Interpreted as a modern field boundary. Probably as same as C1.4 and C2.1.
C4.1	4	Ditch orientated northeast-southwest. It was 2m wide and at least 0.2m deep. Filled by a mid brown silty clay. A modern pottery was observed into the fill. Interpreted as a modern field boundary.
C6.1	6	Ditch orientated north-south. It was 1.35m wide and 0.35m deep. Filled by a grey silty clay with stones and shells. Interpreted as a field boundary.
C6.2	6	Linear feature orientated north-south. It was 0.6m wide and 0.2m deep. Filled by a light brown silty clay with occasional stone at

		bottom. Interpreted as a small drain or agricultural furrow.
C6.3	6	Linear feature orientated north-south. It was 0.58m wide and 0.19m deep. Filled by a light brown silty clay with stones at the bottom. Interpreted as a small drain or agricultural furrow.

APPENDIX 2 RMP SITES WITHIN THE SURROUNDING AREA

SMR NO.:	DU017-032001
RMP STATUS:	Scheduled for inclusion in the next revision of the RMP
TOWNLAND:	Neillstown
PARISH:	Clondalkin
BARONY:	Uppercross
I.T.M.:	706498/732931
CLASSIFICATION:	Castle Unclassified
DIST. TO SITE:	c. 311m
DESCRIPTION:	The castle was marked on the Down Survey (1655-6) map, approximately on the site of Neillstown House which was formerly located N of the present 9th lock on the Grand Canal. Described in the Civil survey (1654-6) as 'the ruins of an old castle', (Simington 1945, 292). The site has been built on. Not visible at ground level.
REFERENCE:	www.archaeology.ie/SMR file

SMR NO.:	DU017-032002
RMP STATUS:	Scheduled for inclusion in the next revision of the RMP
TOWNLAND:	Neillstown
PARISH:	Clondalkin
BARONY:	Uppercross
I.T.M.:	706498/732931
CLASSIFICATION:	House - 16th/17th century
DIST. TO SITE:	c. 311m
DESCRIPTION:	LBall (1906,118) mentions three or four cottages associated with the castle (DU017-032001-). These may be the 'three or four cabins' which are mentioned in the Civil Survey(1654-6). The are has been built on. Not visible at ground level.
REFERENCE:	www.archaeology.ie/SMR file

CLASSIFICATION:	Enclosure
I.T.M.:	705409/ 732272
BARONY:	Uppercross
PARISH:	Clondalkin
TOWNLAND:	Clonburris Little
RMP STATUS:	Scheduled for inclusion in the next revision of the RMP
SMR NO.:	DU017-035

SMR NO.:	DU017-036
RMP STATUS:	Scheduled for inclusion in the next revision of the RMP
TOWNLAND:	Cappagh

PARISH:	Clondalkin
BARONY:	Uppercross
I.T.M.:	705830/ 732592
CLASSIFICATION:	Enclosure
DIST. TO SITE:	c. 404m north
DESCRIPTION:	Situated in rough pasture on fairly level ground N of a stream. An aerial photograph taken in 1971 (FSI 206/5/4) shows a cropmark of an elongated oval enclosure (est. dims. NE-SW c. 34m; NW-SEc.22m). Not visible at ground level.
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 Culture, Heritage and the Gaeltacht) 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 Arts, Heritage, Gaeltacht and the Islands) 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 Arts, Heritage, Gaeltacht and the Islands 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

Archaeological Assessment Licence No.: 21E0084

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, 2016–2022

It is the policy of the Council to 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.

HCL2 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.

HCL2 Objective 2:

To ensure that development is designed to avoid impacting on archaeological heritage that is of significant interest including previously unknown sites, features and objects.

HCL2 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.

HCL2 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.

HCL2 Objective 5:

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

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.

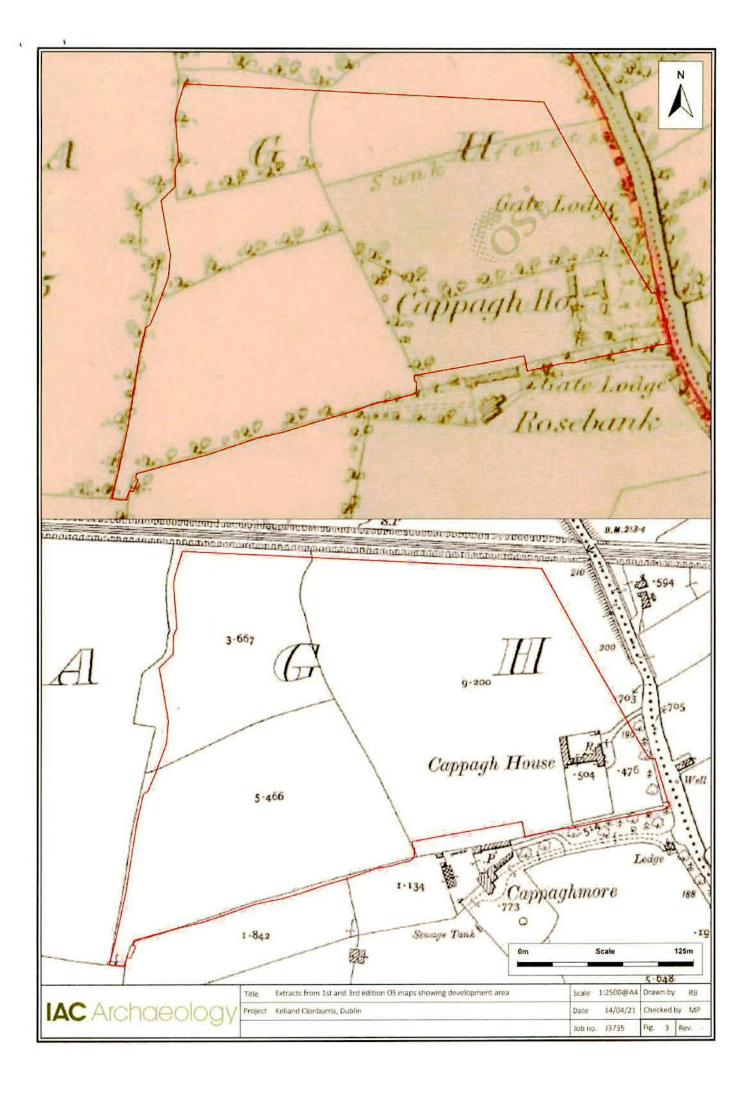
Full Archaeological Excavation involves the scientific removal and recording of all archaeological features, deposits and objects to the level of geological strata or the base level of any given development. Full archaeological excavation is recommended where initial investigation has uncovered evidence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

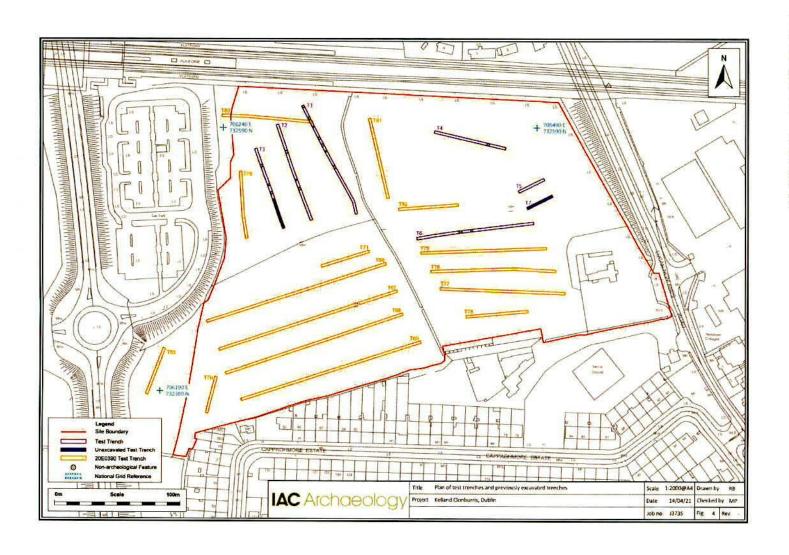
Archaeological Test Trenching can be defined as 'a limited programme... of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land or underwater. If such archaeological remains are present 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)









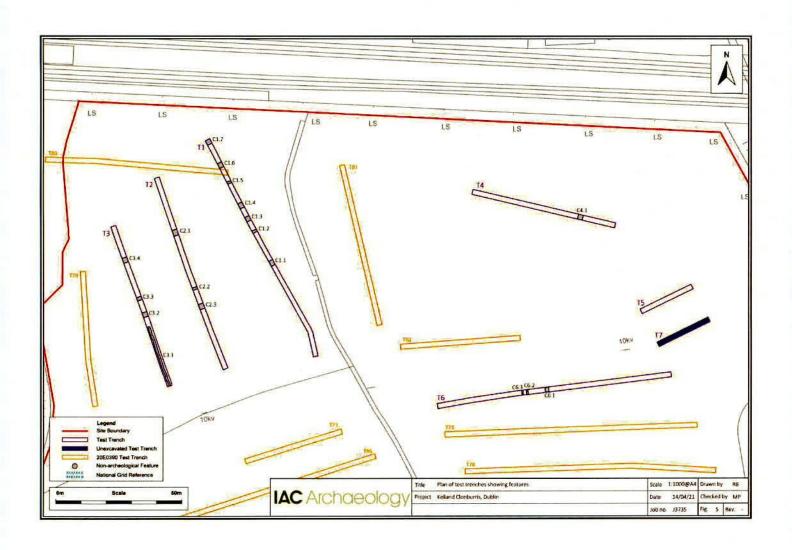




Plate 1 Trench 1, facing south



Plate 3 Ditch C2.1 in Trench 2, facing west



Plate 2 Trench 2, facing north



Plate 4 Trench 3, facing north



Plate 5 Trench 4, facing east



Plate 7 Trench 6, facing west



Plate 6 Trench 5, facing west



Plate 8 Powerline in footprint of trench 7, facing east



Plate 9 View of front (east) elevation to Cappagh House, facing



Plate 10 View of rear (west) elevation to Cappagh House, facing southeast



Plate 11 Side (north) elevation of rear block, facing south

Fonthill Road North/ Lucan-Newlands Road, Cappagh, Clonburris, Dublin 22 Archaeological Assessment Licence No.: 21E0084

IRISH ARCHAEOLOGICAL CONSULTANCY LTD

PLATES

