

CHAPTER FIFTEEN CULTURAL HERITAGE

15.1 INTRODUCTION

This chapter of the Environmental Impact Assessment Report (EIAR) covers the cultural heritage assessment of the proposed development as described in Chapter 2.0. UNESCO define the term 'Cultural Heritage' as encompassing several aspects of tangible assets (*immovable*: archaeological sites and monuments, architectural heritage buildings; *movable*: artefacts; and *underwater*: shipwrecks and ruins) and intangible assets (e.g. folklore, oral tradition and language).

The chapter is accompanied by the following Appendices:

- 15.1 Photographic Record
- 15.2 Cultural Heritage Inventories
- 15.3 Figures
- 15.4 Previous Excavations.



The proposed development site (Phase 4) is part of a phased development proposal for a large greenfield area or Masterplan Site (MS). This MS is divided into seven different phases of delivery as detailed in Table 1.1 in Chapter 1.0 Introduction. The overall MS layout which illustrates the indicative layout of the subject site and adjoining lands in the ownership of the applicant is displayed on Figure 1.0 in Chapter 1.0 and full details of the proposed development phases are given in Chapter 2.0.

The study area takes a holistic approach and examines the wider MS area whilst focusing on any areas of significance within the proposed development site.

15.1.1 Relevant Guidance

The guidelines relevant to the assessment include the *Architectural Heritage Protection: Guidelines for Planning Authorities* (Department of Arts, Heritage and Gaeltacht 2011) and the *Framework and Principles for the Protection of Archaeological Heritage* (Department of Arts, Heritage, Gaeltacht and the Islands 1999). The assessment was also informed by the Environmental Protection Agency (EPA 2022) *Guidelines for Information to be Contained in EIAR* and the International Council on Monuments and Sites (ICOMOS 2011) *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*.

15.2 ASSESSMENT METHODOLOGY

The assessment was based on a programme of desktop research combined with a field survey of the MS in addition to advance archaeological testing of the Phase 1, Phase 2, Phase 3, Phase 4, Phase 5 (northern portion) and Neighborhood Centre areas and geophysical survey of the Phase 2 area. These programmes of archaeological investigations were carried out in order to identify any previously unrecorded features of archaeological, architectural, or cultural heritage significance likely to be impacted by the proposed development. The recorded and potential cultural heritage resource within a

study area encompassing the lands comprising the MS and surrounding lands extending for 1km in all directions, was assessed in order to compile a comprehensive cultural heritage context for the area.

The following presents an overview of the assessment studies and the methodology applied to determine the nature and significance of potential impacts on the cultural heritage resource.

15.2.1 Desktop Study

Documentary research on the recorded and potential cultural heritage resource within the study area was carried out in order to identify any recorded archaeological, architectural and other cultural heritage sites and features. This information has provided an insight into the diachronic development of the study area over time and also assisted in an evaluation of the potential presence of hitherto unrecorded cultural heritage sites or features within the proposed development site.

The principal sources reviewed for the assessment of the recorded archaeological resource were the Sites and Monuments Record (SMR) and the Record of Monuments and Places (RMP) maintained by the Department of Housing, Local Government and Heritage. The current Record of Protected Structures (RPS) and structures listed in the National Inventory of Architectural Heritage (NIAH) were reviewed in order to assess the designated architectural heritage resource within the study area.

Other sources consulted as part of the assessment included the following:

- *Development Plans:* The current *Limerick Development Plan 2022-2028* (adopted 17 June 2022) and *Clare County Development plan 2017-2023* (as varied) were consulted as part of this assessment. These publications identify buildings listed in the Record of Protected Structures and outline the respective Council's policies for the protection of the archaeological and architectural heritage resources.
- *Limerick Heritage Plan:* The Limerick Heritage Plan 2017-2030 is a non-statutory document that 'is intended to outline broad aims and objectives for the future development, protection, promotion, and maintenance of a very unique and valuable resource, that is, Limerick's heritage'.
- *Database of Irish Excavation Reports:* The Database of Irish Excavation Reports contains summary accounts of all archaeological excavations carried out in Ireland (North and South) from 1970 to present. Current data was accessed via www.excavations.ie in July 2023 and relevant entries are presented in **Appendix 15.4**.
- *Literary Sources:* Various published literary sources were consulted in order to assess the archaeological, historical, architectural heritage and folklore record of the study area and these are listed in Section 15.9 of this chapter.
- *Archaeological Survey of Ireland:* While there is no published archaeological inventory for counties Limerick or Clare, the National Monuments Service's online Historical Environment Viewer (www.archaeology.ie) presents inventory descriptions compiled by the Archaeological Survey of Ireland for a range of known archaeological sites within the county. All available inventory entries for sites located within the study area are included within **Appendix 15.2**.
- *Historic Maps:* The detail on historic maps sources can indicate the presence of past settlement patterns, including features of archaeological and architectural heritage significance that no longer have any surface expression. Available cartographic sources dating from the seventeenth-century onward were reviewed and relevant extracts are presented in **Appendix 15.3**.

- *Aerial/Satellite Imagery*: A review of available online aerial and satellite images of the study area was undertaken in order to ascertain if any traces of unrecorded archaeological sites were visible and to review the extent of development within the study area during recent decades and relevant extracts are presented in **Appendix 15.3**.
- *LiDAR Imagery*: The proposed development is within the coverage area of Office of Public Works (OPW) LiDAR data which has been published online by the Geological Survey Ireland. This form of imagery has the potential to reveal the presence of archaeological sites with low surface expressions and was reviewed as part of the assessment.
- *Irish Heritage Council: Heritage Map Viewer*: This online mapping source (www.heritagemaps.ie) is a spatial data viewer which collates various cultural heritage datasets sourced from, among others, the National Monuments Service, National Museum of Ireland, local authorities, the Royal Academy of Ireland and the Office of Public Works.
- *National Museum of Ireland Topographical Files*: These files comprise a written and digital database which records known information in relation to the discovery locations of Irish archaeological artefacts, including those held in the museum's collection. The files are archived in the museum's premises in Kildare Street, Dublin and were inspected as part of the desktop study. The archive contains one recorded artefact from the townland of Clonconane, a stone line sinker (NMI Reg. No. 1967:69) recovered during drainage work of marshy ground. The exact find location is unknown.
- *Irish National Folklore Collection*: Transcribed material from the National Folklore Collection archive has been digitised and published online at www.duchas.ie.
- *Placenames Database of Ireland*: This online database (www.logainm.ie) provides a comprehensive management system for data, archival records and place names research conducted by the State.
- *UNESCO designated World Heritage Sites and Tentative List*: There are two World Heritage Sites in Ireland (Brú na Bóinne and Sceilg Mhichíl) and a number of other significant sites are included in a Tentative List that has been put forward by Ireland for consideration in 2022¹. None of these are located within the environs of the proposed development.
- *Evolutionary Study Report on the Maritime, Military and Industrial Heritage of Limerick City and County*: This is an EU funded study of the maritime, military and industrial heritage of the shoreline of the Shannon Estuary from the border with Co. Kerry upriver to the border with Co. Tipperary undertaken by Limerick City & County Council. A review of the locations of heritage features recorded by this project was carried out as part of the assessment.

15.2.2 Site Inspection

A field survey of the MS was carried out to assess potential impacts on recorded heritage assets within or immediately adjacent to the proposed development site and to assess the site in terms of modern land use, vegetation cover and the potential for the presence of previously unrecorded archaeological sites or structures of architectural heritage interest. The field survey results are described within Section 15.3.3.6 of this chapter and extracts from the photographic record are presented in **Appendix 15.1**.

¹<https://www.worldheritageireland.ie/news/news-single-view/article/ministers-announce-new-world-heritage-tentative-list-for-ireland/?cHash=376a52892e7c00bd7825a9d98fe89068>

15.2.3 Archaeological Investigations

A programme of archaeological testing was undertaken across the proposed Phase 4 development site in February 2023. The archaeological testing (under licence 23E0091) comprised the excavation and evaluation of 11 no. of machine excavated test trenches with a combined length of 422m. A single archaeological feature, a burnt mound, was identified at the western portion of the site (see Section 15.3.3.7 below for details).

15.2.4 Methodology for Assessment of Impacts

The methodology used for the assessment of potential impacts has been informed by the Environmental Protection Agency (EPA 2022) *Guidelines for Information to be Contained in EIAR*, in accordance EIA requirements of codified EU Directive 2011/92/EU as amended by EU Directive 2014/52/EU, per current Planning Legislation, concerning EIA assessment: Planning and Development Act, 2000 (as amended) (Part X) and in Part 10 of the Planning and Development Regulations, 2001 (as amended).

The *Magnitude of Effect* is based on the degree of change, incorporating any mitigation measures, and is based on a consideration of the character, duration, probability and consequences (Table 15.1). The magnitude can be negative or positive and is ranked without regard to the value of the asset according to the following scale: High; Medium; Low and Negligible. The descriptions of magnitudes presented in Table 15.1 is based on guidance published in *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS 2011, 16-7).

Magnitude	Description
High	Most or all key archaeological or architectural materials affected such that the resource is totally altered Comprehensive changes to setting Changes to most or all key historic landscape elements, parcels or components; extreme visual effects; fundamental changes to use or access; resulting in total change to historic landscape character Major changes to area that affect Intangible Cultural Heritage activities or associations or visual links and cultural appreciation
Medium	Changes to many key archaeological or historic building materials/elements such that the resource is clearly/significantly modified. Considerable changes to setting that affect the character of the archaeological asset. Changes to the setting of a historic building, such that it is significantly modified. Change to many key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, considerable changes to use or access, resulting in moderate changes to historic landscape character. Considerable changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Low	Changes to key archaeological materials/historic building elements, such that the resource is slightly altered/slightly different. Slight changes to setting of an archaeological monument. Change to setting of a historic building, such that it is noticeably changed.

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Magnitude	Description
	Change to few key historic landscape elements, parcels or components; slight visual changes to few key aspects of historic landscape; slight changes to use or access; resulting in limited change to historic landscape character Changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Negligible	Very minor changes to key archaeological materials or setting. Slight changes to historic building elements or setting that hardly affect it. Very minor changes to key historic landscape elements, parcels or components; virtually unchanged visual effects; very slight changes to use or access; Very minor changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.

Table 15.1 Magnitudes of Effect on Cultural Heritage Assets

Value Assessment

While various legal designations exist for elements of the Irish cultural heritage resource (see Section 15.3.2), there are currently no formal criteria for grading the values of individual elements of this resource. The National Inventory of Architectural Heritage (NIAH) does apply a ranking system (Local, Regional and National) to structures included in that inventory and, while these rankings do not confer a graduated level of protection they have been utilised as a value indicator for NIAH-listed structures for the purpose of assessment.

Given the absence of formal criteria the evaluations used in this assessment have been informed by guidelines presented in the *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* (ICOMOS 2011). The evaluation of the values of cultural heritage assets is, therefore, not intended as definitive but rather as an indicator which contributes to a wider judgment based the individual circumstances of each asset. The application of values included a consideration of their legal designations (e.g., National Monuments), condition / preservation; historical significance, group value, rarity, visibility in the landscape, fragility/vulnerability and amenity value on a case-by-case basis. It is noted that archaeological monuments, whether extant or levelled, have the potential to possess sub-surface attributes, such as artefacts, human burials or other archaeological remains, that may possess values that cannot be discerned without recourse to archaeological excavation but are unlikely to be affected in the absence of direct negative impacts. The value of all known or potential assets that may be impacted by development are ranked according to the following scale as defined by ICOMOS: Very High; High; Medium; Low, Negligible, Unknown (Table 15.2). The values assigned to relevant cultural heritage assets within the area were determined following the completion of the desktop research combined with subsequent site inspections and are outlined in Section 15.3.3.8.

Value	Description
Very High	World Heritage Sites (including Tentative List properties) Sites, buildings or landscapes of acknowledged international importance Intangible associations with individuals or innovations of global significance
High	Nationally designated sites, buildings and landscapes of significant quality, rarity, preservation and importance Undesignated assets of the quality and importance to be designated

Value	Description
	Assets that can contribute significantly to acknowledged national research objectives Archaeological Landscapes with significant group value Intangible associations with individuals or innovations of national significance
Medium	Designated or undesignated assets that can contribute significantly to regional research objectives, including buildings that can be shown to have exceptional qualities in their fabric or historical associations Conservation Areas and historic townscapes containing buildings that contribute significantly to its historic character Intangible associations with individuals or innovations of regional significance
Low	Assets compromised by poor preservation and/or poor survival of contextual associations Assets of limited value, but with potential to contribute to local research objectives Historic Townscape or built-up areas of limited historic integrity in their buildings and settings Intangible associations with individuals or innovations of local significance
Negligible	Assets with very little or no surviving archaeological interest Landscapes little or no significant historical interest Buildings or urban areas of no architectural or historical note; buildings of an intrusive character
Unknown	Assets whose importance has not been ascertained
Potential	Buildings with some hidden (i.e., inaccessible) potential for historic significance

Table 15.2 Indicative Factors for Assessing the Value of Cultural Heritage Assets

The *Significance of Effects* is assessed based on a consideration of the Magnitude of the Impact (graded from High to Negligible, based on a consideration of character, duration, probability and consequences) combined with the Value (graded from High to Negligible, based on a consideration of significance/sensitivity) of the cultural heritage asset. The Significance of Effects can be described as Profound, Very Significant, Significant, Moderate, Slight, Not Significant or Imperceptible (Table 15.3 and Table 15.4).

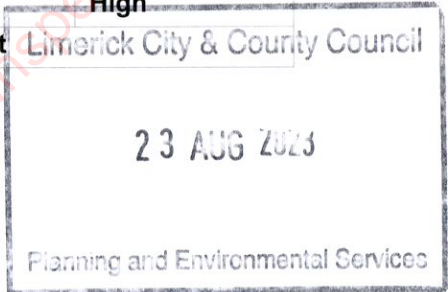
Significance	Description
Imperceptible	An effect capable of measurement but without significant consequences
Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences
Slight	An effect which causes noticeable changes in the character of the environment but without affecting its sensitivities
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends
Significant	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment
Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment

Significance	Description
Profound	An effect which obliterates sensitive characteristics

Table 15.3 Significance of Effects (per EPA EIAR Guidelines 2022)

Magnitude of Impact	High	Not Significant/ Slight	Moderate/ Significant	Significant/ Very Significant	Very Significant/ Profound
	Medium	Not Significant	Slight	Moderate/ Significant	Significant/ Very significant
	Low	Not Significant/ Imperceptible	Slight/ Not Significant	Slight	Moderate
	Negligible	Imperceptible	Not Significant/ Imperceptible	Not Significant/ Slight	Slight
		Negligible	Low	Medium	High
					Value/Sensitivity of the Asset
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Table 15.4 Significance of Effects Matrix (after EPA EIAR Guidelines 2022)



15.3 RECEIVING ENVIRONMENT

15.3.1 Site Area Description

The proposed MS comprises a parcel of agricultural land in the townland of Clonconane, County Limerick, close to the County Clare border and approximately 3.5km from Limerick City centre. The site, which is located to the north of the Old Cratloe Road is bounded by a mature hedge to the north and west. A map regression study suggests that its location comprised undeveloped agricultural land from the mid-seventeenth century until the mid-twentieth century. Aerial photographic images show that much of the site was part of a golf course in 1995 but had reverted back to agricultural usage by around 2000 and has mostly been used for grazing since then. Parallel east to west orientated linear trends evident in LiDAR images and on some aerial imagery suggest that the site have been used for tillage in the past and some of the landscaped features associated with the former golf course also retain surface expression. The site is located within a large field of moderate quality, undulating pastoral land. There is one recorded archaeological monument located within the Masterplan area. This is a children's burial ground LI005-007----, which comprises an overgrown area of approximate 20m diameter defined by a sub-circular earthen bank. This archaeological monument is outside the Phase 4 site, however, a portion of the Phase 4 redline boundary encroaches within the *Zone of Notification* (ZoN) surrounding the monument.

15.3.2 Legal and Planning Context

This section presents a concise summary of the legal and planning policy frameworks relevant to this assessment in order to provide a context for the statutory protection assigned to the cultural heritage resource. The management and protection of cultural heritage in Ireland is achieved through a framework of national laws and policies which are in accordance with the provisions of the Valetta Treaty (1995) (formally the European Convention on the Protection of the Archaeological Heritage, 1992) ratified by Ireland in 1997; the Granada Convention (1985) (formally the European Convention on the Protection of Architectural Heritage), ratified by Ireland in 1997; and the UNESCO Convention

for the Safeguarding of the Intangible Cultural Heritage, 2003, ratified by Ireland in 2015. The locations of World Heritage Sites (Ireland) and the Tentative List of World Heritage Sites submitted by the Irish State to UNESCO were reviewed and none are located within the environs of the study area.

The National Monuments Service (NMS), which is currently based in the Department of Housing, Local Government and Heritage, is responsible for the protection and promotion of Ireland's archaeological heritage.

The national legal statutes and guidelines relevant to this assessment include:

- National Monuments Acts 1930 (as amended)
- Heritage Act 1995 (as amended)
- National Cultural Institutions Act 1997
- The Architectural Heritage (National Inventory) and Historic Monuments (Misc) Provisions Act 1999
- Planning and Development Act 2000 (as amended)
- Department of Arts, Heritage and Gaeltacht 2011 *Architectural Heritage Protection: Guidelines for Planning Authorities*.
- Department of Arts, Heritage, Gaeltacht and the Islands 1999 *Framework and Principles for the Protection of Archaeological Heritage*

Relevant Legislation and Planning Policies

The National Monuments Act 1930 and its Amendments, the Heritage Act 1995 and relevant provisions of the National Cultural Institutions Act 1997 are the primary means of ensuring the satisfactory protection of archaeological remains. There are a number of mechanisms under the National Monuments Acts that are applied to secure the protection of archaeological monuments. These include the designation of National Monument status for sites of national significance, the Register of Historic Monuments (RHM), the Record of Monuments and Places (RMP), the Sites and Monuments Record (SMR), and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

Section 2 of the National Monuments Act, 1930 defines a National Monument as 'a monument or the remains of a monument, the preservation of which is a matter of national importance'. The State may acquire or assume guardianship of examples through agreement with landowners or under compulsory orders. Archaeological sites within the ownership of local authorities are also deemed to be National Monuments. The prior written consent of the Minister is required for any works at, or in proximity to, a National Monument or at sites which are subject to a Preservation Order. There are no National Monuments in State Care or sites assigned Preservation Orders located within the study area.

The RMP was established under Section 12(1) of the National Monuments (Amendment) Act, 1994 and was based on the earlier SMR and RHM. It comprises lists and maps of all known archaeological monuments and places for each county in the State and all listed archaeological sites receive statutory protection under the National Monuments Act 1994. No works can be undertaken at their locations or within their surrounding Zones of Notification without providing two months advance notice to the NMS. There is one recorded archaeological site located within the boundary of the proposed development site (Masterplan area) which comprises a children's burial ground (LI005-007---) which will be preserved

in situ. Additionally, some portions of the proposed development site encroach into the archaeological Zone of Notification (ZoN) which surrounds a settlement cluster (LI005-039---) (Table 15.5 and Figure 15.3). Neither of these sites are National Monuments in State Care or are included in the current list of monuments that have been assigned Preservation Orders.

The *Limerick Development Plan 2022-2028* (adopted 17 June 2022) includes the following relevant objectives in relation to the protection of the archaeological resource within the county:

Objective EH O36 Preservation of the Archaeological Heritage *It is an objective of the Council to seek the preservation of all known sites and features of historical and archaeological interest. This is to include all the sites listed in the Record of Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act 1994. The preferred option is preservation in situ, or at a minimum preservation by record.*

Objective EH O37 Preservation of unrecorded/newly discovered Archaeological Heritage *It is an objective of the Council to protect and preserve the preservation in situ (or at a minimum by record) of all sites and features of historical and archaeological interest, discovered subsequent to the publication of the Record of Monuments and Places.*

Objective EH O39 Protection of the setting of Archaeological Monuments *It is an objective of the Council to ensure that no development shall have a negative impact on the character or setting of an archaeological monument.*

Objective EH O40 Proper procedures during the planning process *It is an objective of the Council to:*

- a) Ensure early engagement at preplanning stage is undertaken with the Local Authority Archaeologist to promote the 'preservation in situ' of archaeological remains and settings in development.*
- b) Adopt a policy of archaeological monitoring of developments where the scale and nature of such developments may, in the opinion of the Planning Authority, have a negative impact on previously unknown archaeological features/ artefacts.*
- c) Require the preparation of an Archaeological Heritage Assessment in cases where it is deemed that Archaeological Heritage would be affected by a proposed development (due to their location, size or nature). The report shall be prepared by a suitably qualified archaeologist on the archaeological implications, if any, of the proposed development either prior to a decision on a planning application or prior to commencement of development on site.*

Objective EH O43 Industrial Archaeology *It is an objective of the Council to:* a) Seek the preservation of buildings and infrastructure associated with former industrial sites;

b) Ensure detailed recording of these remains; promote knowledge and interpretation of these sites among the general public;

c) Support the work of the Interreg Atlantic Coast Area project, (MMIAH) The recovery and valorisation of Maritime Military and Industrial Heritage.

Objective EH O45 Raise public awareness and encourage active participation *It is an objective of the Council to generally raise public awareness of the archaeological and historic heritage and to assist and encourage active participation by the public, following consultation with National Monuments Service, in the conservation, consolidation and presentation of landmark sites, where this is appropriate and subject to available resources.*

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Objective EH O46 Heritage Plan 2017-2030 It is an objective of the Council to support the archaeological objectives in the Heritage Plan.

Objective EH O48 Assessment and Recognition of Archaeological Landscapes It is an objective of the Council to designate archaeological landscapes as part of an ongoing appraisal for Historic Landscape Characterisation of Limerick.

Objective EH O49 Climate Change Sectoral Adaptation Plan for Built and Archaeological Heritage It is an objective of the Council to support the Climate Change Sectoral Adaptation Plan for Built and Archaeological Heritage 2019, as published by the Department of Culture, Heritage and the Gaeltacht and any subsequent guidance or plans for dealing with climate change and archaeological heritage. The Council shall seek to:

- Promote awareness and the appropriate adaptation of Ireland's built and archaeological heritage to deal with the effects of climate change;
- Identify the built and archaeological heritage in Local Authority ownership and areas at risk from climate change including, but not necessarily restricted to, the Record of Monuments and Places, Protected Structures and Architectural Conservation Areas designated in the Development Plan;
- Undertake climate change vulnerability assessments for the historic structures and sites in its area, subject to resources and funding;
- Develop disaster risk reduction policies addressing direct and indirect risks to the built and archaeological heritage in its area;
- Develop resilience and adaptation strategies for the built and archaeological heritage in its area;
- Develop the skills capacity within the Local Authority to address adaptation/ mitigation/emergency management issues affecting historic structures and sites in order to avoid inadvertent loss or damage in the course of climate change adaptation or mitigation works.

The protection of architectural heritage is provided for through a range of legal instruments that include the Heritage Act 1995, the Architectural Heritage (National Inventory) and National Monuments (Misc. Provisions) Act 1999, and the Planning and Development Act 2000. The Planning and Development Act 2000 requires all Planning Authorities to keep a 'Record of Protected Structures' (RPS) of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. As of the 1st January 2000, all structures listed for protection in current Development Plans, have become 'protected structures'. Since the introduction of this legislation, planning permission is required for any works to a protected structure that would affect its character. A protected structure also includes the land and other structures within its curtilage. While the term 'curtilage' is not defined by legislation, the Architectural Heritage Protection Guidelines for Local Authorities (Department of Arts, Heritage and the Gaeltacht 2011), describes it as the parcel of land immediately associated with a structure and which is (or was) in use for the purposes of the structure. In addition, local authorities must provide for the preservation of places, groups of structures and townscapes of architectural heritage significance through designation of Architectural Conservation Areas (ACAs).

The National Inventory of Architectural Heritage (NIAH) was established to record architectural heritage structures within the State and while inclusion in the NIAH does not provide statutory protection listing in the inventory is a signifier of architectural heritage value and it is intended to advise local authorities on compilation of their Record of Protected Structures. The NIAH also includes a Survey of Historic Gardens and Landscapes which comprises a non-statutory, desk-based survey of such features.

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Details on the Protected Structures and NIAH-listed features within the study area are provided in Section 15.3.3.2 of this chapter.

The *Limerick Development Plan 2022-2028* (adopted 17 June 2022) presents a number of objectives to ensure the protection of the architectural heritage resource within the County and these include:

Objective EH O50 Work to Protected Structures It is an objective of the Council to:

- a) Protect structures included on the RPS from any works that would negatively impact their special character and appearance.
- b) Ensure that any development proposals to Protected Structures, their curtilage and setting, shall have regard to the *Architectural Heritage Protection Guidelines for Planning Authorities* published by the Department of the Arts, Heritage and the Gaeltacht.
- c) Ensure that all works are carried out under the supervision of a qualified professional with specialised conservation expertise.
- d) Ensure that any development, modification, alteration, or extension affecting a Protected Structure and/ or its setting, is sensitively sited and designed and is appropriate in terms of the proposed scale, mass, height, density, layout and materials.
- e) Ensure that the form and structural integrity of the Protected Structure is retained in any redevelopment and that the relationship between the Protected Structure and any complex of adjoining buildings, designed landscape features, or views and vistas from within the grounds of the structure are respected.
- f) Respect the special interest of the interior, including its plan form, hierarchy of spaces, architectural detail, fixtures and fittings and materials.
- g) Support the re-introduction of traditional features on protected structures where there is evidence that such features (e.g. window styles, finishes etc.) previously existed.
- h) Ensure that new and adapted uses are compatible with the character and special interest of the Protected Structure.
- i) Protect the curtilage of Protected Structures and to refuse planning permission for inappropriate development within the curtilage and attendant grounds, that would adversely impact on the special character of the Protected Structure.
- j) Protect and retain important elements of built heritage including historic gardens, stone walls, entrance gates and piers and any other associated curtilage features.
- k) Ensure historic landscapes and gardens associated with Protected Structures are protected from inappropriate development.

Objective EH O51 Energy Efficiency of Protected Structures It is an objective of the Council to have regard to the Department of Environment, Heritage and Local Government's publication on *Energy Efficiency in Traditional Buildings (2010)* and the Irish Standard IS EN 16883:2017 *Conservation of Cultural Heritage – Guidelines for Improving the Energy Performance of Historic Buildings (2017)* and any future advisory documents in assessing proposed works on Protected Structures.

Objective EH O52 National Inventory of Architectural Heritage (NIAH) It is an objective of the Council to review and update the RPS on foot of any Ministerial recommendations including the NIAH and any future updates. The Ministerial Recommendations, made under Section 53 of the Planning Act, will be taken into account when the Planning Authority is considering proposals for development that would affect the historic or architectural interest of these structures.

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Objective EH O53 Architectural Conservation Areas It is an objective of the Council to:

- a) Protect the character and special interest of an area, which has been designated as an Architectural Conservation Area (ACA) as set out in Volume 3.
- b) Ensure that all development proposals within an ACA be appropriate to the character of the area having regard to the Character briefs for each area.
- c) Ensure that any new development or alteration of a building within an ACA or immediately adjoining an ACA, is appropriate in terms of the proposed design, including scale, height, mass, density, building lines and materials.
- d) Seek a high quality, sensitive design for any new development(s) that are complementary and/or sympathetic to their context and scale, whilst simultaneously encouraging contemporary design which is in harmony with the area. Direction can also be taken from using traditional forms that are then expressed in a contemporary manner, rather than a replica of a historic building style.
- e) Seek the retention of all features that contribute to the character of an ACA, including boundary walls, railings, soft landscaping, traditional paving and street furniture.
- f) Seek to safeguard the Georgian heritage of Limerick.

15.3.3 Archaeological and Historical Context

There are a total of eight recorded archaeological sites located within the 1km study area and these are listed in Table 15.5 and mapped in Figure 15.3. There is one recorded archaeological site located within the boundary of the proposed development site and this comprises a children's burial ground (LI005-007---). Additionally, some portions of the proposed development site encroach into the archaeological Zone of Notification (ZoN) which surrounds settlement cluster (LI005-039---) (see Figure 15.4). This settlement was depicted on the seventeenth-century Down Survey Map (see Section 15.3.3.3), however, much of its location is now occupied by the Clonile and Shanrath housing estates. The children's burial ground (LI005-007----) is depicted on the first edition 6-inch Ordnance Survey (OS) map of 1844 with the inscription 'Crag Grave yd.' while the 25-inch OS map of 1902 labels it as 'Crag Grave Yard (disused).', indicating that it was no longer in active use by the start of the twentieth century. According to Ordnance Survey letters from 1840, "only children were being interred there" at that time, suggesting that the graveyard formerly acted as a more formal burial ground.

The six other recorded monuments located within the 1km study area surrounding the proposed development site comprise, a burial cairn (LI005-005----) located in Clondrinagh, enclosures (CL063-001---- & CL063-002----) located in the townlands of Pass and Gortgarraun in County Clare, Ballygrennan Castle (LI005-010----) and a historic bridge (LI005-038---- & CL062-049---) which traverses the Crompaun River (also named Meelick Creek) and connects the townland of Clonconane in County Limerick with Meelick in County Clare. The extant bridge dates to *circa* 1800, however, it may have been built on the site of the medieval bridge that is depicted on the seventeenth-century Down Survey map of the Barony of North Liberties. These archaeological sites are all located over 450m from the boundary of the proposed development site (Table 15.5).

Furthermore, there are two recorded archaeological sites located within the townland of Clonconane whose precise location is unknown. These sites consist of Clonconane Castle (LI005-058001-) and an associated deserted medieval settlement (LI005-058002-) which are depicted within the townland on the Down Survey mapping. However, it is unlikely that these sites are located within the subject lands as the Down Survey mapping depicts them as being located a significant distance to the west.

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Planning and Environmental Services

SMR No.	Class	Townland	ITM refs	Distance from development
CL062-049----	Bridge	Meelick (Bunratty Lower By.)	554143, 659507	c.515m east
CL063-001----	Enclosure	Pass	554694, 660102	c.560m north
CL063-002----	Enclosure	Gortgarraun	555364, 660352	c.900m northeast
LI005-005----	Cairn - burial cairn	Clondrinagh	554406, 658780	c.470m southwest
LI005-007----	Children's burial ground	Clonconane	554812, 659256	Within development site
LI005-010----	Castle - unclassified	Ballygrennan (Pubblebrien By.)	555963, 659858	c.940m northeast
LI005-038----	Bridge	Clonconane	554146, 659504	c.515m east
LI005-039----	Settlement cluster	Ballygrennan (North Liberties By.), Clonconane	555236, 659030	Outer edge of ZoN extends into development site

Table 15.5: List of recorded archaeological sites located within 1km of the overall development site

The following presents summary details of the main periods within the Irish archaeological record with references to the recorded archaeological sites located within the study area. The dating framework used for each period is based on *Guidelines for Authors of Reports on Archaeological Excavations* as published by the National Monuments Service (NMS).

Prehistoric Periods

Traditionally, the earliest recorded evidence for human settlement in Ireland dates to the Mesolithic period (7000–4000 BC) when groups of hunter-gatherers arrived on the island. However, recent evidence in the form of a butchered bear patella found in 'Alice and Gwendoline' Cave near Ennis in County Clare now suggests that humans were present in Ireland during the Palaeolithic period between 12,800 to 12,600 cal BC (Dowd and Carden 2016, 161). Similarly, re-examination of a reindeer bone fragment discovered in Castlepook Cave near Doneraile, County Cork revealed human butchery marks on the bone which was radiocarbon dated to 31,000 BC (Carden 2020), establishing human activity in Ireland more than 20,000 years earlier than previously thought. While these prehistoric settlers did not construct settlements or monuments that have left any above ground traces, their presence can often be identified by scatters of worked flint in ploughed fields.

The Neolithic period (*circa* 4000-2400 BC) began with the arrival and establishment of agriculture as the principal form of economic subsistence, which resulted in more permanent settlement patterns. As a consequence of the more settled nature of agrarian life, new site-types, such as more substantial rectangular timber houses and various types of megalithic tombs, begin to appear in the archaeological record during this period.

The Irish Bronze Age (*circa* 2400–500 BC) commenced with the arrival of metal-working techniques to the island and this technological advance resulted in the introduction of a new artefactual assemblage into the Irish archaeological record. This period was also associated with the construction of new monument types such as standing stones, stone rows, stone circles, barrows and *fulachta fia*. *Fulacht fia* translates as cooking places of the wild (or of deer), they are often interpreted as the remains of cooking sites and are the most numerous archaeological site type in Ireland, numbering some 7000

recorded examples. Radiocarbon dating of excavated examples has generally produced dates in the Bronze Age. A number of alternative interpretations have been forwarded as to the function of these archaeological sites, such as their potential uses as bathing, saunas, garment washing and dyeing, leather processing and even brewing sites (Hawkes 2015). One fulacht fia was identified during testing within the Phase 4 development boundary (Licence no. 23E0091).

A burial cairn (LI005-005----), revealed during pre-development archaeological investigations (Licence ref. 03E1144) in the townland of Clondrinagh, likely dates to the Bronze Age period. A partial excavation undertaken on the monument uncovered a circular mound, *circa* 23m in diameter and standing 1.5m above the surrounding field. It was found that the mound, or cairn, was made up of small and medium-sized stones to a depth of 1m. On the western side of the cairn, a combination of larger stones and the natural bedrock acted as revetting for the cairn material. On the old ground surface beneath the cairn, fragments of cremated human bone were found in a discrete deposit. No evidence for any cists or deposits of bone within the cairn was found in the limited area examined.

The arrival of iron-working technology in Ireland saw the advent of the Iron Age (600 BC – 400 AD). This period has been traditionally associated with a Celtic 'invasion' but this view is no longer widely accepted as recent archaeological evidence points instead to a gradual acculturation of the Irish Bronze Age communities following centuries of contacts with Celtic-type cultures in Europe. Relatively little has been traditionally known about Iron Age settlement and ritual practices until recent decades when the corpus of evidence has been greatly increased by the discovery of Iron Age sites during schemes such as bog-cutting and road construction projects.

Archaeological investigations (E4440) in advance of the proposed Coonagh – Knockalisheen Distributor Road in Counties Limerick and Clare revealed evidence of Bronze Age and Iron Age activity. Thirteen burnt stone spreads (four with possible troughs), a wooden trackway potentially contemporary with one of the burnt stone spreads, four burnt stone pits, two pits associated with charcoal production, a probable ring-barrow, two pits of unknown function and a curvilinear feature were all revealed. The discovery of these sites demonstrates a significant settlement pattern in the lands around the proposed development site during the later prehistoric periods.

Medieval and post-medieval periods

The early medieval period began with the introduction of Christianity and continued up to the arrival of the Anglo-Normans in the late twelfth century (*circa* 400–1169 AD). While the medieval period saw the emergence of the first phases of urbanisation around the larger monasteries and the Hiberno-Norse ports, the dominant settlement pattern was still rural-based and centred around enclosed farmsteads known as ringforts (earth/timber built) and cashels (stone built). Ringforts are one of the most numerous monuments in the Irish landscape, with some 45,000 recorded examples (Stout 1997, 53). These sites comprise broadly circular enclosures delimited by one or more concentric banks and ditches in the case of ringforts and drystone walls in the case of cashels. They were formerly known by the names ráth/lios/cathair/dún, which still form some of the most common place-name elements within the Irish landscape. The majority of excavated examples have produced evidence for the remains of timber houses, outbuildings and stockades as well as a variety of agricultural and craft activities such as grain processing and metalworking. An enclosure (CL063-002----) at Gortgarraun, located 900m northeast and enclosure (CL063-001----) located in the townland of Pass, County Clare, *circa* 560m to the north of the proposed development site, likely date to the early medieval period.

The following summary includes high-level information on the urban settlement of Limerick in order to provide a wider context for the study area during the period from the ninth century onward. The area of the proposed development is located in the Barony of the North Liberties. It is recorded in the Annals that in AD 744 the *Dál Cais* defeated the *Corcu Modruad*, occupying the latter's strategic lands in Clare which controlled the Shannon. Viking raiders first appeared on the Shannon circa AD 825. Although there are some references to a ninth-century settlement in Limerick, the permanent settlement appears to have been established in AD 922 by Tamar MacAilche on the island in the Shannon formed by the Abbey River. This island became known as *Inis Sibhton*, or *Inis an Ghaill Duibh*, later King's Island. The Viking town is still visible in the street pattern of the old city on King's Island. Viking Limerick allied with the Irish in Munster in AD 926 to repel an incursion from the Vikings of Waterford.

The arrival and conquest of large parts of Ireland by the Anglo-Normans in AD 1169 marks the advent of the late medieval period which continued until approx. AD 1550. This period saw the continuing expansion of Irish urbanisation as many of the port cities developed into international trading centres and numerous villages and towns developed as local or regional market centres. The below summary of the late medieval period includes high-level information on the urban settlement of Limerick in order to provide a wider context for the study area during this period.

In 1174, Domhnall Mór Ó Briain burned Limerick city to prevent it falling to the Normans. The city was finally captured in 1195, under Prince John and was granted a charter and mayor, Adam Sarvant (1197-98), and bailiffs were John Bambery and Walter White. King John's Castle was erected between 1200 and 1207, along with the original Thomond Bridge.

Prince John and his Norman Chief Justiciar, or solicitor, Myler Fitzhenry conferred 40 ploughlands (*seisreacha*) on the people of Limerick, each with its own castle. Twenty-four of these ploughlands were located south of the Shannon and sixteen to the north; these included several areas within the study area, such as Knock, Caherdavin, Shanabooley, Ballygrennan, Clonconane, Clondrinagh, and Moylish. A Limerick Corporation Inquisition of 1615 states that, "they were in the possession of Richard de Clare (of Bunratty) from the Kings of England as tenants of the Mayor and Corporation". In 1316, Edward Bruce, brother of King Robert I of Scotland, captured Limerick. The occupation was short lived and ended when Edward was killed in 1318 and the Scots were defeated. Construction of the town wall on King's Island, known as Englishtown, began in the fourteenth century and continued until the end of the fifteenth century. Irishtown, which developed on the other side of the Abbey River, was also enclosed by a wall. Limerick prospered as a port and trading centre; farm produce was exported and wine was imported from France and Spain. In 1497 and 1498 there were great famines, followed by plague in 1521 but the settlement recovered thereafter and a 1574 document prepared for the Spanish ambassador attests to the wealth of the city. By 1641, Limerick was the third largest city in Ireland, with a population estimated at about 3,500. In the fifteenth and sixteenth centuries - in common with other major Irish towns - Limerick became a virtual city-state, due to the breakdown of effective English rule throughout the country. While the city remained loyal to the Crown and conscious of its status as a Royal city, the Reformation created acute tensions between the citizens' conflicting allegiances to the Catholic Church and the Protestant English monarchy.

Limerick was besieged several times in the seventeenth century. In 1642, Irish Confederates seized King John's Castle. The city was besieged by Oliver Cromwell's army under Henry Ireton in 1651; after

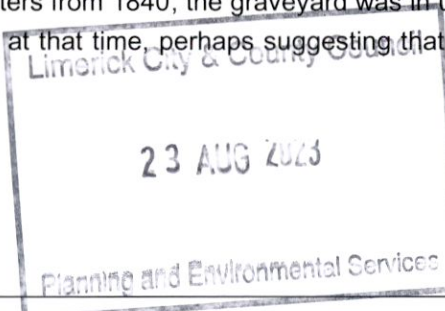
a blockade several months long Cromwellian forces retook the castle. Limerick was besieged during the Williamite Wars in 1690 and again in 1691, which ended with the signing of the Treaty of Limerick. These wars decimated both the population and the city. Ballygrennan Castle or Castle Park is located *circa* 850m to the northeast of the proposed development. It was built and occupied in 1620 by the O'Brien's of Thomond. In 1782 it became the property of the Ormsbys under the name of Blackland Castle, and lastly, in 1833, it became the property of Christopher Delmege who rebuilt large portions of the structure.

The post-medieval period (1550+) saw the development of high and low status stone houses throughout the Irish country. During this period any given settlement cluster is likely to have consisted primarily of single-storey thatched cottages with associated farm buildings while two-storey farmhouses became more common in the nineteenth century. The settlement cluster (LI005-039----) in Ballygrennan and Clonconane, Ballygrennan Castle (LI005-010----), located c.940m northeast of the overall development site and Clonconane Castle (LI005-058001-) and an associated deserted medieval settlement (LI005-058002-), which are depicted on the 17th century Down Survey mapping likely dates from this period. Although the ZoN for the settlement cluster (LI005-039----) extends into the proposed development site, much of its site is now occupied by the Clonile and Shanrath housing estates. A pit and a burnt spread were uncovered in this area during archaeological monitoring (Licence No. 98E0321) of the construction phase a housing development in 1998 (O'Rahilly1998). Archaeological test trenching (Licence No. 04E0851) and monitoring of a site on the opposite side of the Cratloe Road, did not reveal anything of archaeological significance at that location (Dunne 2004).

The eighteenth century was a period of growth and expansion for the city and environs of Limerick. The construction of public buildings and infrastructure projects were paid for with local taxes on trans-Atlantic trade. The medieval city walls and its 17 gates were for the most part pulled down in 1760. In 1733, George III approved the repair of the road from the North Liberties of Limerick, to Cratloe and Sixmilebridge. The road is now known as the Old Cratloe Road or Wood Road. Meelick Bridge (LI005-038---- and CL062-049----), which traverses the Crompaun River or Meelick Creek connecting the townland of Clonconane to Meelick in County Clare, may have been built on the site of the medieval bridge that is depicted on the seventeenth-century Down Survey map of the Barony of North Liberties.

In the nineteenth century prominent industries within the Limerick area included tanning, lace, flour milling, clothing, tobacco, brewing, papermaking and milk processing. Wellesley Bridge (later Sarsfield Bridge), connecting the city with the western side of the Shannon, was built in 1827, and Thomond Bridge was rebuilt in 1836. The Great Southern & Western Railway reached Limerick in 1848. While it is estimated that the Great Famine reduced the population of County Limerick by 70,000, the population of the city actually rose slightly, as people fled to the workhouses.

The children's burial ground (SMR LI005-007----) located within the boundary of the MS but outside of the subject development site is a site type often traditionally associated with the Famine period of the late 1840s. However, according to Ordnance Survey letters from 1840, the graveyard was in use prior to then when, "only children were being interred there" at that time, perhaps suggesting that the site formerly acted as a more formal burial ground.



15.3.3.1 Database of Irish Excavation Reports

The Database of Irish Excavation Reports contains summary accounts of archaeological investigations undertaken in the Republic of Ireland and Northern Ireland from 1969 to present (www.excavations.ie). A search of the townland of Clonconane, County Limerick and the surrounding townlands of Ballygrennan, Knock, Gortgarraun and Shannabooley, County Limerick and Clondrinagh, Meelick, Pass and Punchbowl, County Clare has revealed that 16 licensed archaeological investigations have taken place within these areas, with seven of these are associated the Coonagh – Knockalisheen Distributor Road (see Appendix 15.4 for details). Of these investigations, nine produced prehistoric material (one also produced medieval and post-medieval material), particularly associated with burnt mounds. A further six investigations produced no archaeological evidence and one provided evidence of ephemeral undated activity and nineteenth-century material.

Details on recent archaeological investigations within the MS are provided below (Section 15.3.3.7).

15.3.3.2 Architectural Heritage

There are two protected structures listed in the *Limerick Development Plan 2022-2028*, which are also listed in the National Inventory of Architectural Heritage (NIAH), located within the 1km study area surrounding the proposed development site and these comprise Meelick Bridge and Ballygrennan Castle (Table 15.6 and Figure 15.3). These structures are also recorded archaeological monuments and neither are located within 500m of the proposed development site.

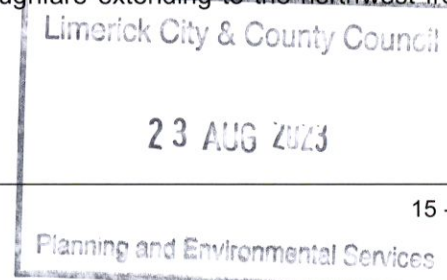
NIAH No.	RPS No.	Name	Townland	ITM refs	Distance from development
21900501	3308	Meelick Bridge	Clonconane	554143, 659507	c.515m east
21900502	3306	Castle Park	Ballygrennan	555963, 659858	c.940m northeast

Table 15.6: List of NIAH and Protected Structures located within 1km of the overall development site

15.3.3.3 Cartographic Review

The detail on historic cartographic sources demonstrates the nature of past settlements and land use patterns in recent centuries and can also highlight the impacts of modern developments and agricultural practices. This information can aid in the identification of the location and extent of unrecorded or partially levelled features of archaeological or architectural heritage interest. The cartographic sources examined for the study areas include the Down Survey map (surveyed in the 1650s) (see Figure 15.8), the first edition of the 6-inch OS maps (published in 1844) (see Figure 15.9) and the 25-inch OS maps (published in 1902) (see Figure 15.10).

The townland of Clonconane is referred to as 'Clonecanane' on the seventeenth-century Down Survey map. The area is located within the barony of the North Liberties; however, the survey also included it within the barony of Bunratty in County Clare. This maps clearly shows that the boundaries of the townland of Clonconane and the surrounding townlands were well established by the mid-seventeenth century. It is also clear that Pass Road was the main thoroughfare extending to the northwest from Limerick City.



A collection of buildings (settlement cluster LI005-039----) is shown on either side of Pass Road (circled in red on Figure 15.8). The road continues northwest-ward to Meelick Bridge (LI005-038----/ CL062-049----), which traverses the Crompaun River or Meelick Creek connecting the townland of Clonconane, County Limerick to Meelick in County Clare. The Down Survey map also depicts Clonconane Castle (LI005-058001-) and an associated deserted medieval settlement (LI005-058002-) within the townland of Clonconane. However, it is unlikely that these sites are located within the proposed development site as the Down Survey mapping depicts them as being located a significant distance to the west.

The area is referred to by its existing name 'Clonconane' on the first edition 6-inch OS map and on the subsequent 25-inch edition map. The Children's burial ground (LI005-007----) within the western portion of the proposed development site is referred to as '*Crag Grave Yard*' on both map editions, with the 25-inch map indicating that the graveyard was disused by 1902. An area marked 'Red Gate' is included in both the first edition 6-inch and the 25-inch OS maps to the southeast of the proposed development site and this may be a historical place name associated with the settlement cluster (LI005-039----). The recorded location of the settlement cluster is shown as undeveloped agricultural land on both of the OS maps. No potential unrecorded archaeological features are depicted within the proposed development site on either edition of the OS maps.

15.3.3.4 Review of Aerial, Satellite and LiDAR Imagery

A review of publicly accessible aerial, satellite and LiDAR sources published online by the Ordnance Survey of Ireland, Google, Bing Maps and the Geological Survey of Ireland (LiDAR) was undertaken in order to assess if any traces of potential unrecorded archaeological sites were visible within the proposed development site. A review of available aerial/satellite imagery for a variety of years from 1995 to 2022 indicates that the fields that comprise the overall development site have generally been in use as grazing land in recent decades. These images show that the portion of the overall development site that includes Phases 1, 3 and 4, and the Neighbourhood Centre and Creche was in use as a golf course during the 1990s but had reverted back to pasture by 2000. Part of the Phase 2 area contained a playing pitch in 1995, whilst the Phase 5 area continued to be used for agriculture. A number of landscaped features associated the golf course are visible on the reviewed images and these are not archaeological in origin. The recorded archaeological monument (children's burial ground LI005-007---) within the site is clearly visible on all reviewed images.

A series of parallel east to west orientated linear trends are evident in LiDAR images and on some aerial images are agricultural in appearance and indicates that fields within the proposed development site have also been used for tillage in the past (see Figure 15.7). No potential previously unrecorded archaeological features are visible within the proposed development site on any of the reviewed images.

15.3.3.5 Undesignated Cultural Heritage Assets

While encompassing the archaeological and designated architectural heritage resources, cultural heritage also includes various undesignated assets such as settlements, demesne landscapes, vernacular structures, townland boundaries, folklore, placenames and historical events.

The detail on the Down Survey maps indicates that the boundary of Clonconane townland was well established by at least the middle of the seventeenth century. A review of the historic OS maps revealed that the overall proposed development site is contained within Clonconane and there are no townland

boundaries located within the site. Townlands are the smallest unit of territorial divisions in the Irish landscape, and many may preserve early Gaelic territorial boundaries that pre-date the Anglo-Norman conquest. The layout and nomenclature of Irish townlands was recorded and standardised by the work of the Ordnance Survey in the nineteenth century. The Irish translations their names often refer to natural topographical features, but name elements may also indicate the presence of past human activity within the townland, e.g., dun, lios or rath indicate the presence of a ringfort while temple, saggart, termon or kill likely record an association with a church site. The proposed development site is located within the townland of Clonconane (*Cluain Canáin*) with the *cluain* meaning 'meadow/pasture' (www.loganim.ie). The townland is described by Mr John McMahon in the National Folklore Commission's Schools Collection as 'Conan's Meadow' (www.duchas.ie).

A review of the National Folklore Commission's Schools Collection² revealed that it contains a few mentions Clonconane townland. A reference to the townland collected by P. Nic Mhathghamhna for Meelick School from Mr John McMahon noted the following:

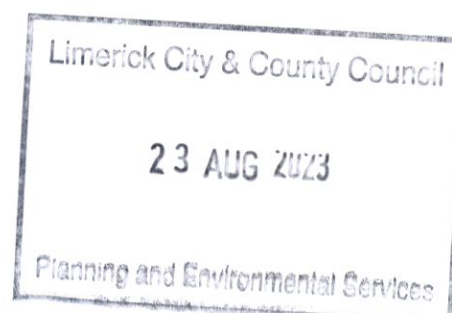
The houses are all slated now. The remains of a couple of the old thatched homes may still be seen. There were far more people in this townland long ago. Many of them settled down in America. McMahon is the principal name. There is only one man over seventy and he has not Irish. The land is rich and fertile. It is a great plain and it is good meadow-land.

15.3.3.6 Field Survey

The MS and its environs were inspected on 11 November 2021 and 14 November 2022 and the Phase 4 area was also inspected on 8 February 2023. The site was assessed in terms of historic landscape, land use, vegetation cover, presence and potential for undetected archaeological and architectural heritage sites/features. Weather conditions were dry and bright at the time of survey, and this provided excellent landscape visibility. No difficulties were encountered during topographical survey. The MS comprises a parcel of moderate to good quality, undulating pastoral land to the north of the Old Cratloe Road in the townland of Clonconane, County Limerick. The disused Children's burial ground (LI005-007---), is visible as a circular overgrown area defined by a *circa* 1m high earthen and stone bank, with frequent scrub and rush overgrowth and occasional trees. It is accessed via a gap in the bank and vegetation cover on the east side and the internal area of the burial ground is obscured by overgrowth.

The field surveys revealed the presence of a number of potential archaeological features that have low surface expressions, the morphology of which is similar to ring barrows and other circular burial and settlement sites. However, the detail on an OSI aerial image from 1995 shows that these correlate to the locations of landscaped features within a golf course and it is concluded that these features are, therefore, not archaeological in nature. No other surface traces of potential archaeological, architectural or cultural heritage features were noted during the field surveys and extracts from the photographic record are provided in Appendix 15.1.

² <https://www.duchas.ie/en>



15.3.3.7 Archaeological Site Investigations

Seven programmes of archaeological investigations, which comprised a combination of geophysical surveys and archaeological testing, have been undertaken for the various phases of the proposed development in recent years (Table 15.7).

Phase	Planning ref	Details
Phase 1	21/1800	A programme of archaeological test trenching was undertaken for Phase 1 Housing Development at Old Cratloe Road, Clonconane, County Limerick under Excavation Licence 22E0664 in September 2022. This programme involved the excavation of 40 no. trenches, totalling 1335 linear metres. Nothing archaeological was identified. (see Plate 15.9 & Figure 15.15)
Phase 2	22/817	<p>A geophysical survey of the Phase 2 area at Old Cratloe Road, Clonconane, County Limerick was undertaken under survey licence 22R0379 in November 2022. A number of anomalies of archaeological potential, including a u-shaped feature at the northern portion of the area were observed.</p> <p>A programme of archaeological test trenching, comprising the excavation of 18 no. test trenches across the Phase 2 area was undertaken in February 2023 under Excavation Licence 23E0034. Linear and curvilinear anomalies identified in the geophysical survey were ground-proofed during the testing programme.</p> <p>Archaeological material was identified in three of the trenches; Trenches 3, 4 and 7, while potential archaeological material was also identified in four trenches; Trenches 7, 8, 9 and 11.</p> <p>A semi-circular ditch, identified in the geophysics was targeted by Trenches 3 and 4 which were positioned to cross this anomaly. Portions of an infilled ditch, measuring between 3.5 to 4.5m in width were located on the three points indicated by the geophysics survey results.</p> <p>This feature bears all the hallmarks of a levelled ringfort, with an internal diameter of approximately 29m. Further features, consisting of four small pits or postholes were identified within the area enclosed by the curvilinear ditch close to the intersection of Trenches 3 and 4. Some linear features were also noted in Trench 3 (though these linear features may relate to later agriculture).</p> <p>It is believed that these features relate to early medieval activity and further mitigation in the form of preservation by record will be undertaken prior to construction activities associated with the proposed development. (see Plates 15.8, 15.10, 15.11, 15.12 & Figures 15.16, 15.18)</p>
Phase 3	22/959	<p>A programme of archaeological test trenching was undertaken in January 2023 under Excavation Licence 23E0018.</p> <p>A total of 32 no. trenches were excavated in the Phase 3 area. Archaeological material was identified in two of these trenches; Trenches 14 and 18. These areas of activity are located 55m apart.</p> <p>An oval-shaped pit was identified in Trench 14, measuring 1.5m x 1.25m in plan. The upper portion of this pit was truncated by a linear furrow, indicating that the pit pre-dated the agricultural activity represented by the furrow.</p> <p>Four small possible archaeological features were identified in Trench 18. These may represent three postholes and a stakehole. These were clustered within an area measuring 3.1m north to south and 1.5m east to west. A quadrant was investigated in one of these features and a cut with straight sides was noted, the fill of the feature included charcoal and possible flecks of burnt bone.</p>

Phase	Planning ref	Details
		Trenches 31 and 32 were within the zone of notification (but 20m from) the Children's Burial Ground LI005-0070000, but no related material was identified in those trenches. Further mitigation in the form of preservation by record will be undertaken prior to construction activities associated with the proposed development for the archaeological material uncovered during this phase. (see Plates 15.1, 15.13, 15.14, 15.15 & Figures 15.11, 15.12, 15.13, 15.14, 15.16, 15.18)
Phase 4	22/1114	A programme of archaeological test trenching was undertaken in February 2023 under Excavation Licence 22E0091. A total of 11 no. test trenches were excavated with a combined length of 422m. Ten trenches (T1-10) were excavated in their original locations with one 27m long trench (T4b) added to the original layout. The testing programme identified one archaeological feature, a burnt mound measuring a minimum of c.20m NNW-SSE by 8m E-W in Trench 4. The feature is located on a west facing slope near the western boundary of the site, immediately northeast of a pond. One c.27m long additional trench (4b) was excavated across Trench 4 in order to investigate the extent of the burnt mound. The full extent of the burnt mound to the south could not be identified since an overhead powerline meant that T4b could not be excavated for more than 8m in this direction. The burnt mound was not present within Trench 2. Further mitigation in the form of preservation by record will be undertaken prior to construction activities associated with the proposed development for the archaeological material uncovered during this phase. (see Plates 15.6, 15.16, 15.17, 15.18 & Figure 15.19)
Neighbourhood Centre	22/917	A programme of archaeological test trenching was undertaken in January 2023 under Excavation Licence 23E0016. Nothing archaeological was identified within this area. (see Plates 15.1, 15.6, 15.7, 15.19 & Figure 15.16, 15.20)
Crèche	N/A	No archaeological works required
Phase 5		A geophysical survey of the northern portion of the Phase 5 area (the southern portion proposed for a wet grassland is too wet for survey) was undertaken in January 2023 under survey licence 23R0025. A small number of anomalies of potential archaeology were identified. A programme of archaeological test trenching, targeting geophysical anomalies, was undertaken in February 2023 under Excavation Licence 22E0091. A total of 13 no. test trenches were excavated with a combined length of 422m. One archaeological feature, a possible posthole or small pit was identified in Trench 5 (see Plate 15.20 – 15.26 & Figures 15.21, 15.22)

Table 15.7: Results from archaeological investigations within the overall proposed development site

15.3.3.8 Summary

The review of the historic mapping indicates that the MS has been occupied by farmland since at least the early nineteenth century (and possibly as far back as the seventeenth century) and it has retained its agricultural character with only a slight alteration of field boundaries since the production of the historic OS maps.

The Down Survey map depicts a cluster of buildings within the environs of the proposed development and the Archaeological Survey of Ireland have established a Zone of Notification around this settlement

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cluster (LI005-039----) which extends slightly into the southern end of the proposed development site. There is no evidence of any features associated with this settlement cluster on any of the later OS maps or recent aerial images and much of the location of the settlement cluster is now occupied by modern housing.

The children's burial ground (LI005-007----) within the boundary of the MS but located outside of the subject application Phase 3 site is depicted on the historic OS maps and is clearly visible as a sub-circular feature on all reviewed aerial images. In addition, extant remains of this site were noted during field surveys carried out as part of this assessment and it survives as a heavily overgrown enclosed feature that is not accessible to the public.

While the desktop studies and field surveys did not identify other potential archaeological or architectural heritage features within the proposed development site, a number of previously unrecorded archaeological features were identified during recent archaeological site investigations (Table 15.7).

There are a total of six other recorded archaeological monuments located within the 1km study area surrounding the overall development site and none of these are located within 450m of its boundary (Table 15.5). There are also two Protected Structures located within the 1km study area around the proposed development site and neither of these are located within 500m of its boundary (Table 15.6). These known cultural heritage assets comprise features of medium-high values and their current condition and indicative values, as well as potential sensitivities to indirect impacts of a visual nature, have been assessed based on their locations, classifications, designations, inventory descriptions and reviews of historical maps and modern aerial/satellite images. It should be noted that all archaeological sites, including levelled examples, have the potential to possess sub-surface features, artefacts, human burials and other archaeological remains, that may be of High or Very High values. However, this cannot be ascertained without recourse to archaeological excavation, and these are attributes unlikely to be subject to effects in the absence of direct impacts.

15.4 DESCRIPTION OF EFFECTS

This section of the chapter deals specifically with the Phase 4 area within the overall proposed development as shown in Figure 15.2.

15.4.1 Construction Effects

There are no recorded archaeological sites within the application site Phase 4 area, although a small portion of the area encroaches into the ZoN around the children's burial ground (LI005-007----) (Figure 15.3). This archaeological site is clearly defined on the ground and will not be directly impacted by the construction phase of the proposed Phase 4 development. There are no other extant recorded monuments within the Phase 4 area and therefore, the construction phase will have no predicted impact on the known archaeological resource.

A programme of archaeological test trenching was undertaken across the Phase 4 area in February 2023 and one previously unrecorded feature of archaeological potential, a fulacht fia, was uncovered within the western portion of the area (Table 15.7). While a full archaeological excavation, including post-excavation analyses, is required to ascertain if the feature is archaeological in origin, construction

phase ground excavation works at its location will result in permanent, direct, negative effects on the feature and this will require mitigation.

There are no designated architectural heritage structures or undesignated structures of architectural heritage interest located within the Phase 4 area. There are two designated architectural heritage structures within the surrounding 1km study area, both of which are located more than 500m from the Phase 3 area (**Table 15.6**). The construction phase of the proposed development will have no predicted impact on designated or undesignated structures of architectural heritage interest.

There are no undesignated vernacular structures, demesne lands or townland boundaries located within the Phase 4 area and no intangible attributes, such as historical or folklore associations, were noted during the assessment. The construction phase will, therefore, have no predicted impacts on the undesignated cultural heritage resource.

15.4.2 Operational Effects

The overgrown children's burial ground (LI005-007----) will be visible from the southern portions of the Phase 4 development and, therefore, the proposed development will have a slight, indirect, permanent, negative effect on the setting of this recorded monument.

The location of the recorded settlement cluster (LI005-039---) to the east of the proposed development retains no surface remains and much of its location is occupied by modern housing. The operational phase will, therefore, result in no predicted impacts on the location or setting of this levelled site.

There are a total of six other recorded archaeological monuments located within the 1km study area surrounding the overall development site and none of these are located within 450m of its boundary (Table 15.5). There are also two Protected Structures located within the 1km study area around the proposed development site and neither of these are located within 500m of its boundary (Table 15.6). Given the distance of these constraints from the proposed development, no operational phase impacts on their settings are predicted.

15.5 LIKELIHOOD OF SIGNIFICANT EFFECTS

15.5.1 'Do-Nothing' Effects

A 'Do Nothing Scenario' will see the continued preservation of recorded and potential cultural heritage features within the study area and will not result in any predicted significant effects on the cultural heritage resource.

15.5.2 Construction Effects

No potential significant construction phase effects on the cultural heritage resource have been identified.

15.5.3 Operational Effects

No potential significant operational phase effects on the cultural heritage resource have been identified.

15.5.4 Cumulative Effects

The Phase 4 development is part of a larger proposed development that includes a number of contiguous phases of development within the Masterplan area. There is one recorded archaeological site children's burial ground (LI005-007---) within the overall Masterplan area and the archaeological *Zone of Notification* (ZoN) which surrounds settlement cluster (LI005-039---) also extends within the Masterplan area. The development has been designed to avoid any direct impacts on the children's burial ground (LI005-007---), which will be preserved *in situ* as a greenspace within the Masterplan area. An Archaeological Management Plan for this monument, which contains mitigation measures to protect and enhance this archaeological site during the operational phase of the entire Masterplan area, including Phase 4, has been submitted to Limerick City and County Council (Planning Ref. 21/1800) (see Section 15.6.2.1). The archaeological *Zone of Notification* (ZoN) which surrounds settlement cluster (LI005-039---) also extends within the eastern end of the Masterplan area. This settlement cluster is depicted on a seventeenth-century cartographic source but is not present on nineteenth-century OS mapping and its recorded location is now occupied by modern housing. No sub-surface traces of the settlement cluster were identified during the various phases of archaeological investigation completed within the Masterplan area. There are no other recorded archaeological sites located within 450m of the overall development area.

Areas containing previously unrecorded features of archaeological potential have been identified during site investigations in the Phase 2, Phase 3, Phase 4 and Phase 5 areas of the overall Masterplan area. Potential impacts on these potential archaeological features will be ameliorated by a programme of archaeological excavation (preservation by record). A small number of archaeological sites were identified during works on the Coonagh - Knockalisheen Distributor Road, part of which bisects the Masterplan area. These archaeological sites were excavated and recorded as part of that scheme.

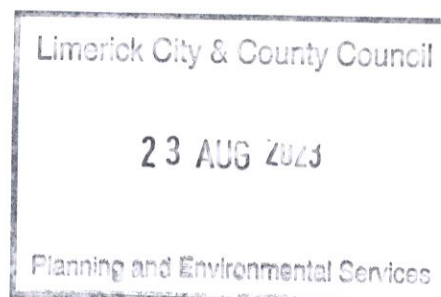
Following the implementation of the operational phase measures to protect and enhance the children's burial ground (LI005-007---) (see Section 15.6.2.1) and the full systematic archaeological excavation of the potential archaeological features identified within the Masterplan area, the Phase 4 development is not predicted to result in any significant cumulative effects on the archaeological resource. There are no designated architectural heritage structures located within 500m of the Masterplan area and no potential undesignated examples, or other features of cultural heritage interest, have identified within its boundary or its close environs. It is, therefore, concluded that the proposed Phase 4 development will not result in any predicted significant cumulative effects on these elements of the cultural heritage resource.

15.6 REMEDIAL & MITIGATION MEASURES

15.6.1 Construction Phase

15.6.1.1 Mitigation by Avoidance / Design

The children's burial ground (LI005-007---) located within the Masterplan area will be preserved *in situ* as an undeveloped greenspace and is outside the Phase 4 area. A 20m buffer from the outer edge of the monument will be established prior to any construction works commencing within the site.



15.6.1.2 Mitigation by Prevention

The 20m buffer around the children's burial ground (LI005-007---) will be fenced-off with Harris fencing prior to the commencement of construction to protect the site during the course of works. This fence shall remain in place until all development works have been completed. The fencing will be erected under archaeological supervision and no construction related activities, such as machine movements, dumping of spoil or storage of materials will occur within the fenced-off area.

15.6.1.3 Mitigation by Reduction

Archaeological investigations have identified the existence of one previously unrecorded feature of potential archaeological origin within the Phase 4 area. As preservation *in situ* of the identified feature of archaeological potential is not a viable option within the proposed development, this feature will be preserved by record through a programme of archaeological excavation and recording under licence from the National Monuments Service (NMS) in the Department of Housing, Local Government and Heritage.

The archaeological excavations will involve the stripping of topsoil from appropriate areas around the identified archaeological feature within the development site and this will be carried out under the constant supervision of a suitably qualified archaeologist. The stripped area will include at least 10m of clearance from the edge of the archaeological feature to the edge of the excavation. The supervised topsoil stripping will be undertaken using a mechanical excavator fitted with a toothless bucket which will remove the topsoil down to the uppermost archaeological layer or the surface of natural subsoil in areas where no archaeological material is present. A systematic programme of manual archaeological excavation of all revealed features of archaeological potential will then be carried out in accordance with the method statement submitted to the NMS as part of the licence application process. This will include the manual excavation of all identified archaeological features, the compilation of written, drawn and photographic records, the retrieval of archaeological objects and a programme of environmental sampling.

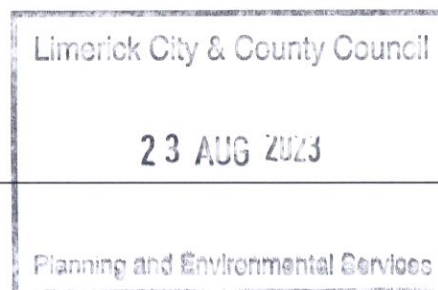
The archaeological excavations will be undertaken in advance of the main construction works in the relevant areas in order to allocate adequate time to appropriately excavate and record the archaeological deposits/features.

Following the completion of excavations, a post-excavation phase of works, involving analysis, reporting and dissemination to the relevant authorities will be undertaken off site. The level of the post-excavation analysis and reporting will be commensurate with the level of archaeology excavated on site.

15.6.2 Operational Phase

15.6.2.1 Mitigation by Avoidance / Design

There are no recorded archaeological sites located within the Phase 4 area, although a small portion of the area encroaches into the ZoN around the children's burial ground (LI005-007----). This archaeological site is clearly defined on the ground and will not be directly impacted by the proposed Phase 4 development which has been designed to avoid this recorded monument and it will be preserved *in situ* within a greenspace area.



An Archaeological Management Plan for the Phase 1 area (Planning Ref. 21/1800) was submitted to Limerick City and County Council. This included mitigation measures to manage and protect the children's burial ground (LI005-007----) during the operational phase which will also apply for the operational phase of Phase 4 and these are as follows:

- A policy of minimal change shall be adopted with regard to the existing features of the archaeological monument. The existing site is surrounded by bushes and thick bramble and these shall be retained to define the perimeter of the monument. Any non-woody shrubs around the perimeter of the monument shall be pruned/removed by hand during routine maintenance. Maintenance involving minimal change will help the site to retain its current character, ensure that the archaeological monument remains inviolate and that the plant and animal ecosystems that have developed naturally on the monument are not unnecessarily disturbed.
- The site will be framed by a buffer of wildflower meadow around its periphery, which will be subject to bi-annual maintenance, which will include strimming/cutting of vegetation using hand tools. Material will be removed from the site to a designated dumping site located outside the 20m buffer around the monument. Any wind-blown modern plastics or other debris identified within the site during routine maintenance shall be collected and removed to an appropriate facility. No burning of materials shall occur.
- Routine bi-annual maintenance shall include monitoring the condition of the monument and its surrounds and the identification of evidence of inappropriate usage or anti-social behaviour.
- Interpretive signage shall be erected approximately 20m from the exterior edge of the feature (outside the buffer surrounding the monument). The signage shall include a description of the site as provided by the Archaeological Survey of Ireland and a generic explanation of the monument type.

15.6.2.2 Mitigation by Prevention

Following the implementation of the mitigation measures presented in Section 15.6.2.1, no mitigation measures by prevention will be required to maintain the children's burial ground (LI005-007----).

15.6.2.3 Mitigation by Reduction

Following the completion of the archaeological mitigation measures presented in Section 15.6.1.3, it is concluded that no further mitigation measures by reduction will be required during the operational phase.

15.7 RESIDUAL EFFECTS

15.7.1 Construction Phase

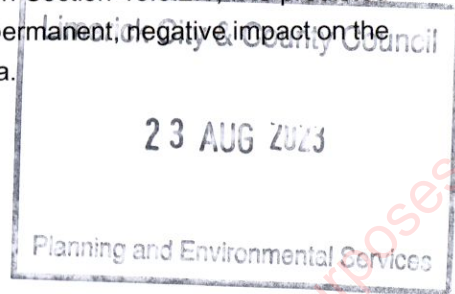
The mitigation measures presented in Section 15.6 will result in the appropriate recording of the previously unrecorded features of archaeological potential identified during recent site investigations within the Phase 4 area by a full archaeological excavation. This shall result in a high magnitude of impact, albeit ameliorated by the creation of a full and detailed archaeological record, the results of which shall be disseminated. This shall result in a potential moderate range of significance of effect in the context of residual impacts on the unrecorded archaeological resource.

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15.7.1 Operational Phase

Following the implementation of the mitigation measures presented in Section 15.6.2.1, it is predicted that the Phase 4 development will result in a not significant, indirect, permanent, negative impact on the setting the children's burial ground located within the Masterplan area.



15.8 MONITORING

15.8.1 Construction Phase

There are a number of obligatory processes to be undertaken as part of applications to the National Monuments Service for licences to carry out archaeological excavations and these will allow for monitoring of the successful implementation of mitigation measures. A detailed method statement stating the proposed strategy for the pre-construction archaeological excavations will accompany the submitted licence application which will clearly detail the extent of the archaeological works and outline the processes to be enacted to excavate and record all identified archaeological materials. A preliminary report on the archaeological excavations will then be submitted to the National Monuments Service, the National Museum of Ireland and the Planning Authority which will clearly describe the results of all archaeological works in written, mapped and photographic formats. Following the completion of all required post-excavation analyses, including environmental, artefact studies and dating, a final report on the excavations will be submitted to the above bodies.

15.8.1 Operational Phase

All required onsite archaeological excavation mitigation measures will be enacted prior to and during the construction phase and, therefore, no cultural heritage mitigation measures requiring monitoring are predicted during the operational phase of the proposed development. The Archaeological Management Plan for the Phase 1 area proposed "Routine bi-annual maintenance shall include monitoring the condition of the monument and its surrounds and the identification of evidence of inappropriate usage or anti-social behaviour". The proposed measures to protect the children's burial ground (LI005-007---) will also apply for the operational phase of Phase 4.

15.9 REFERENCES

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APPENDIX 15.1: PHOTOGRAPHIC RECORD



Plate 15.1 Aerial view with main development area, facing northwest



Plate 15.2 Drone photo of the Children's burial ground (LI005-007---), facing south

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Plate 15.3 View of the Children's burial ground (LI005-007---), facing north from Old Cratloe Road



Plate 15.4 View of former golf course feature, facing north

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Plate 15.5 Drone view of former golf course feature, facing northeast



Plate 15.6 Drone view of Clonconane, facing northeast from Old Cratloe Road

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Plate 15.7 Drone view of Clonconane, facing southwest



Plate 15.8 Drone view of Phase 2 area, Clonconane, facing east

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Plate 15.9 Drone view of Phase 1 area, Clonconane following test trenching, facing north



Plate 15.10 Infilled ditch in west of Trench 3 (Phase 2 area), facing west

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Plate 15.11 Infilled ditch in west of Trench 3 (Phase 2 area), facing west



Plate 15.12 Pit containing charcoal and burnt bone within Trench 7 (Phase 2 area), facing southwest

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Plate 15.13 Aerial image of closed trenches in the Phase 3 area, facing northeast



Plate 15.14 Pit in Trench 14 (Phase 3 area)

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Plate 15.15 Potential features in Trench 18 (T18) (Phase 3 area)



Plate 15.16 Trench 4 (T4) facing east
(Phase 4 area)



Plate 15.17 T4 facing north-northwest
(Phase 4 area)



Plate 15.18 T4 extension (Phase 4 area)



Plate 15.19 Trench 11 (Neighbourhood Centre), facing west. Considerable disturbance was noted in the area of a historic quarry



Plate 15.20 View of potential feature in Trench 5 (Phase 5 area)

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Plate 15.21 View of geophysical survey of the Phase 5 area, January 2023



Plate 15.22 View of proposed wet grassland habitat (Phase 5 area), facing southwest

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Plate 15.23 View of proposed wet grassland habitat (Phase 5 area), facing southwest



Plate 15.24 View of proposed wet grassland habitat (Phase 5 area), facing northeast

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Plate 15.25 View of proposed pond location within wet grassland habitat (Phase 5 area)



Plate 15.26 View of ground conditions in northern portion of proposed wet grassland habitat (Phase 5 area), facing southeast

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Plate 15.27 Trench 5 facing northeast, C003 in foreground (Phase 5 area)

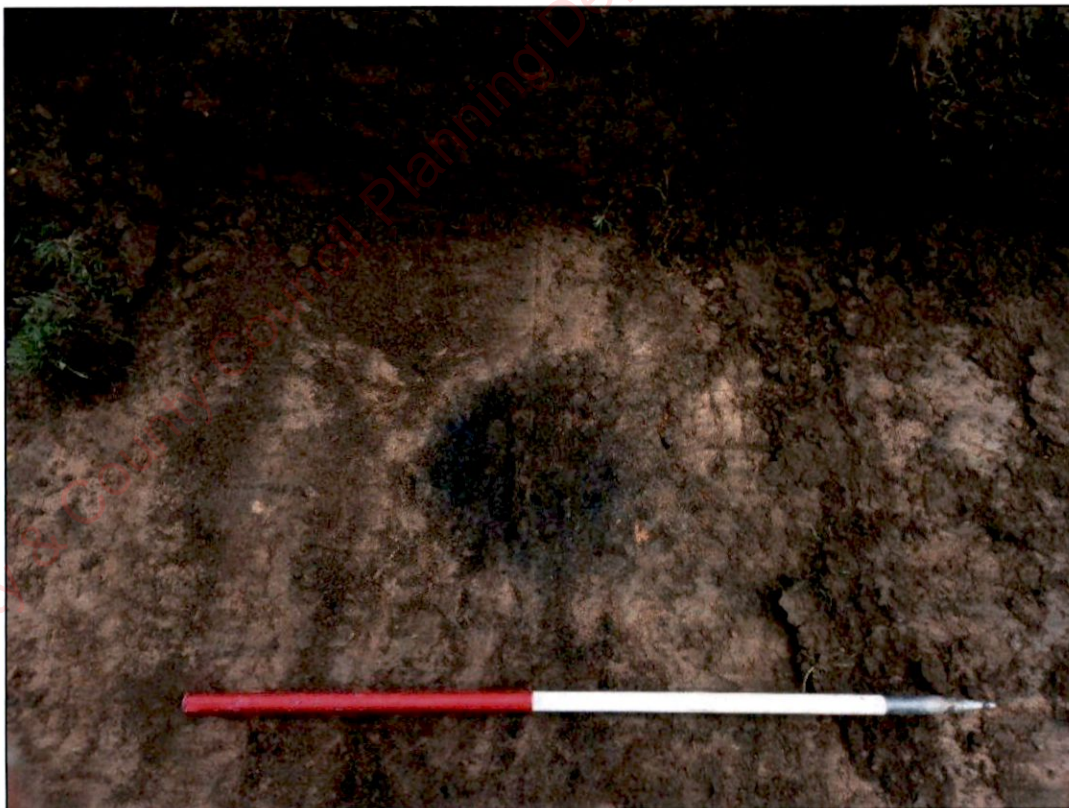


Plate 15.28 Close up of feature C003 in Trench 5 facing northeast (Phase 5 area)

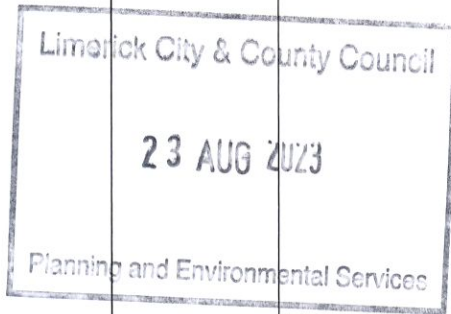
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APPENDIX 15.2: CULTURAL HERITAGE INVENTORIES

Inventory of Archaeological sites within the 1km Study Area

SMR No.	Class	Townland	Description
LI005-005----	Cairn - burial cairn	Clondrinagh	<p>Scheduled for inclusion in the next revision of the RMP: Yes</p> <p>Description: Situated on a rise, in the lowlying floodplain of the river Shannon. A flat-topped circular mound (diam. 23m; H 1.5m) with a near vertical gradient on the N side and more gentle gradients at S and W. The site was partially archaeologically excavated in advance of road construction works. Prior to archaeological investigation, the site consisted of a circular mound (diam. c. 23m; H 1.5m). In 2003 archaeological test excavation was carried out by Florence Hurley under licence No. 03E1144. Two hand-dug trenches, one on the W edge of the mound (7m by 1m) and one on top of the mound (2m by 2m), were excavated. These confirmed that the mound, or cairn, was made up of small and medium-sized stones (D 1m). A combination of larger stones and natural bedrock acted as revetting on the western side of the cairn. Fragments of cremated human bone were found in a discrete deposit on the old ground surface beneath the cairn. No evidence for any cists or deposits of bone within the cairn was found in the limited area examined. No external ditch was present.</p>
<div data-bbox="210 763 657 1057" data-label="Image"> </div>			
LI005-007----	Children's burial ground	Clonconane	<p>Scheduled for inclusion in the next revision of the RMP: Yes</p> <p>Description: Burial ground known locally as 'Crag Grave Yard' described in 1840 as following; 'There is an old burial place in the townland of Cluain Chanáin (Cloon conan) about two miles to the north of the city in the parish of St. Munchin to the north of the city of Limerick, but only children are now interred in it' (OSL Vol. 1, 57). Outline of circular-shaped burial ground (approx. diam. 20m) visible today on Digital Globe aerial photographs.</p>
LI005-038----	Bridge	Clonconane	<p>Scheduled for inclusion in the next revision of the RMP: Yes</p> <p>Description: Meelick Bridge which traverses the Crompaun River or Meelick Creek connecting</p>

SMR No.	Class	Townland	Description
			the townland of Clonconane to Meelick in County Clare may have been built on the site of the medieval bridge that is depicted on the 17th century Down Survey map of the Barony of North Liberties (Hib. Reg.). Cross referenced with CL062-049----
LI005-039----	Settlement cluster	Ballygrennan (North Liberties By.), Clonconane	<p>Scheduled for inclusion in the next revision of the RMP: Yes</p> <p>Description: On low-lying pasture, in the angle of Cratloe Road and Galtee Avenue. Site of Castle Park castle (LI005-010----) lies c. 1km to NE. Shown as a cluster of dwellings either side of the road out of Limerick City on the Down Survey barony map of the North Liberties (Hib. Reg.). The name Red Gate is depicted on the 1840 OS 6-inch map, c. 65m NW and may be of some significance (O' Rahilly 1998). A pit and a burnt spread were uncovered from this area during archaeological monitoring (License No. 98E0321) for a development in 1998 (ibid). Area is now occupied by Clonile and Shanrath housing estates. Archaeological test trenching (License No. 04E0851) and monitoring of a site directly on the opposite side of the Cratloe Road, proved negative for archaeology (Brewer February 2004; Dunne July 2004).</p>
CL063-001----	Enclosure	Pass	<p>Scheduled for inclusion in the next revision of the RMP: Yes</p> <p>Description: The Archaeological Survey of Ireland (ASI) is in the process of providing information on all monuments on The Historic Environment Viewer (HEV). Currently the information for this record has not been uploaded.</p>
CL062-049----	Bridge	Meelick	<p>Scheduled for inclusion in the next revision of the RMP: Yes</p> <p>Description: The Archaeological Survey of Ireland (ASI) is in the process of providing information on all monuments on The Historic Environment Viewer (HEV). Currently the information for this record has not been uploaded.</p>
CL063-002----	Enclosure	Gortgarraun	Scheduled for inclusion in the next revision of the RMP: Yes



SMR No.	Class	Townland	Description
			Description: The Archaeological Survey of Ireland (ASI) is in the process of providing information on all monuments on The Historic Environment Viewer (HEV). Currently the information for this record has not been uploaded.
LI005-010----	Castle - unclassified	Ballygrennan (Pubblebrien By.)	<p>Scheduled for inclusion in the next revision of the RMP: Yes</p> <p>Description: Ballygrennan Castle or Castle Park described by Westropp (1906-7, 81) as following; '1610 David McCanney owned the C[astle]. of Parck (Inq. Chan., Car. I., 29). 1631 Pardon to Simon Fanning for alienation of the C[astle]. of Park in the County of the City (Pat R.). 1655 Ballygrenane C[astle]. (Petty 63)'. Castle depicted as a tower house type structure on the Down Survey map of the North Liberties in Limerick (Hib. Reg.).</p> <p>Castle Park (NIAH Reg. No. 21900502) described in the Ordnance Survey Field Name Books for St. Munchins parish as following; 'The former name of this edifice was Castlepark, and it was built and occupied in 1620 by the O'Brien's of Thomond. In 1782 it became the property of the Ormsbys under the name of Blackland Castle, and lastly, in 1833, it became the property of Christopher Delmege Esq. who improved and rebuilt the greater portion of it. it is a splendid edifice, 4 story high, overlooking the Shannon' (OSNB Parish of St. Munchin, 1542).</p>

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Inventory of Architectural Heritage sites within the 1km Study Area

NIAH No.	RPS No.	Class	Description
21900501	3308	Bridge	<p>Single-arched humpback road bridge, built c. 1800, over the River Cropaun or Meelick Creek. Rubble limestone and sandstone walls. Extended to north elevation. Red brick voussoirs to round-headed arch.</p> <p>This solidly built road bridge is indicative of the skill of early nineteenth-century craftsmen. The bridge forms a pleasing silhouette in the landscape.</p>
N/A	3306	Christ The King Roman Catholic Church	<p>Circular church opened in 1985, designed by John and Nuala Kernan</p>
21900502	3306	Castle Park House	<p>Detached five-bay two-storey country house, built c. 1750, comprising floating pediment to front (south) elevation, full-height canted bay to east elevation having extension adjoining remodelled tower house to east with crenellated curtain wall. Two-bay four-storey extension to rear (north) elevation. Now in disuse. This substantial house, attributed to Francis Bindon, displays characteristic features of his work such as the lunette resting on the Venetian window's keystone. Built in different phases, the house retains its eighteenth-century façade with earlier fabric to the rear elevation. Castle Park is distinguished by its finely carved limestone dressings, which are indicative of the skill of eighteenth-century craftsmen. Battlements were added in the nineteenth century, when the castle style of architecture was in vogue.</p>

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Figure 15.2 Location of Site in Context of Masterplan site outlined in blue with the Phase 4 area outlined in green

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Figure 15.3 Recorded archaeological sites (as recorded by ASI) within 1km of the Masterplan site, including proposed wet grassland habitat in blue (Source: Government of Ireland, Historic Environment Viewer)

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Figure 15.4 Recorded archaeological sites that interact with the Masterplan site
(Source: Government of Ireland, Historic Environment Viewer)

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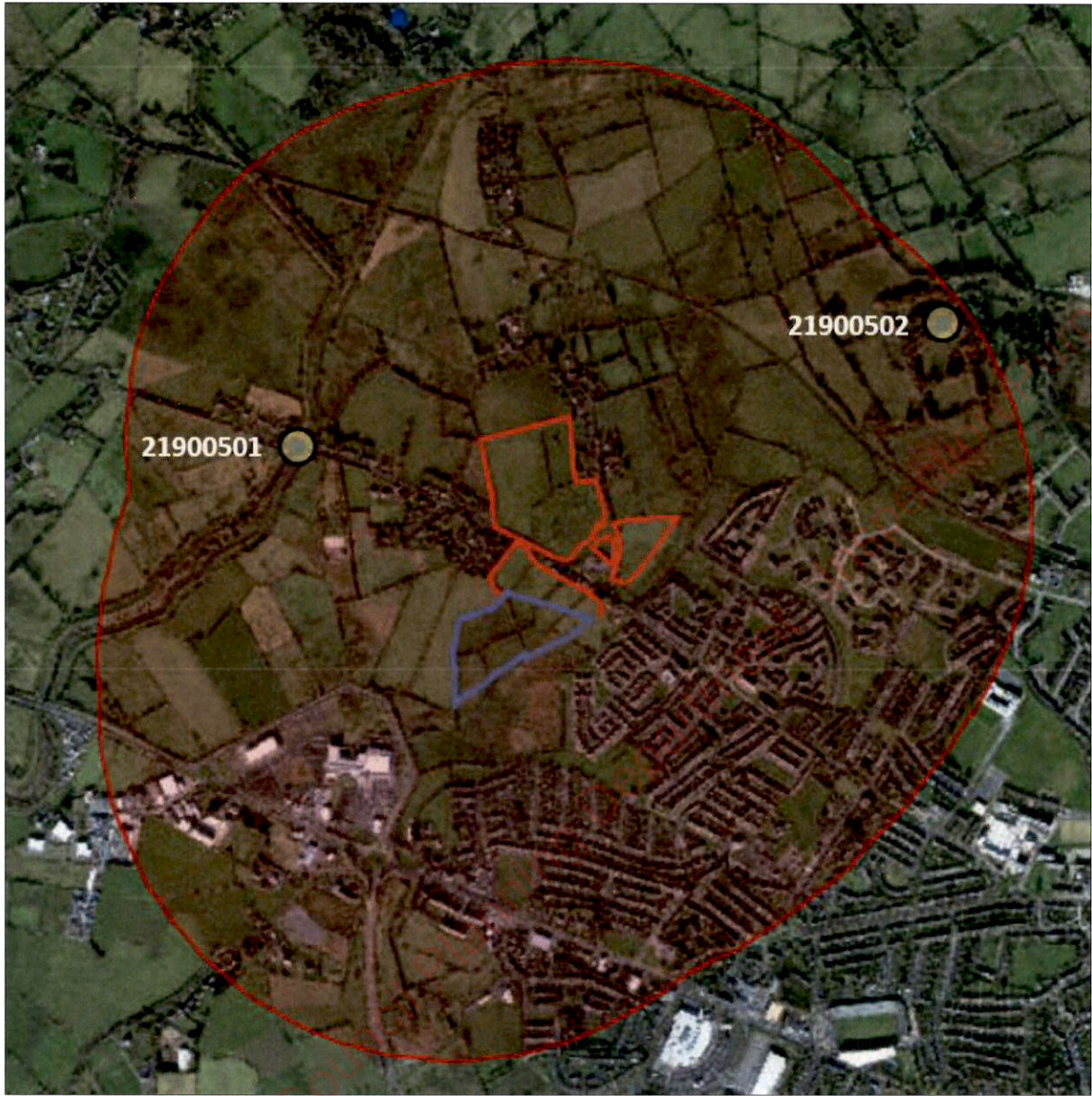


Figure 15.5 NIAH sites within 1km of the Masterplan site, including proposed wet grassland habitat in blue
(Source: Government of Ireland, Historic Environment Viewer)

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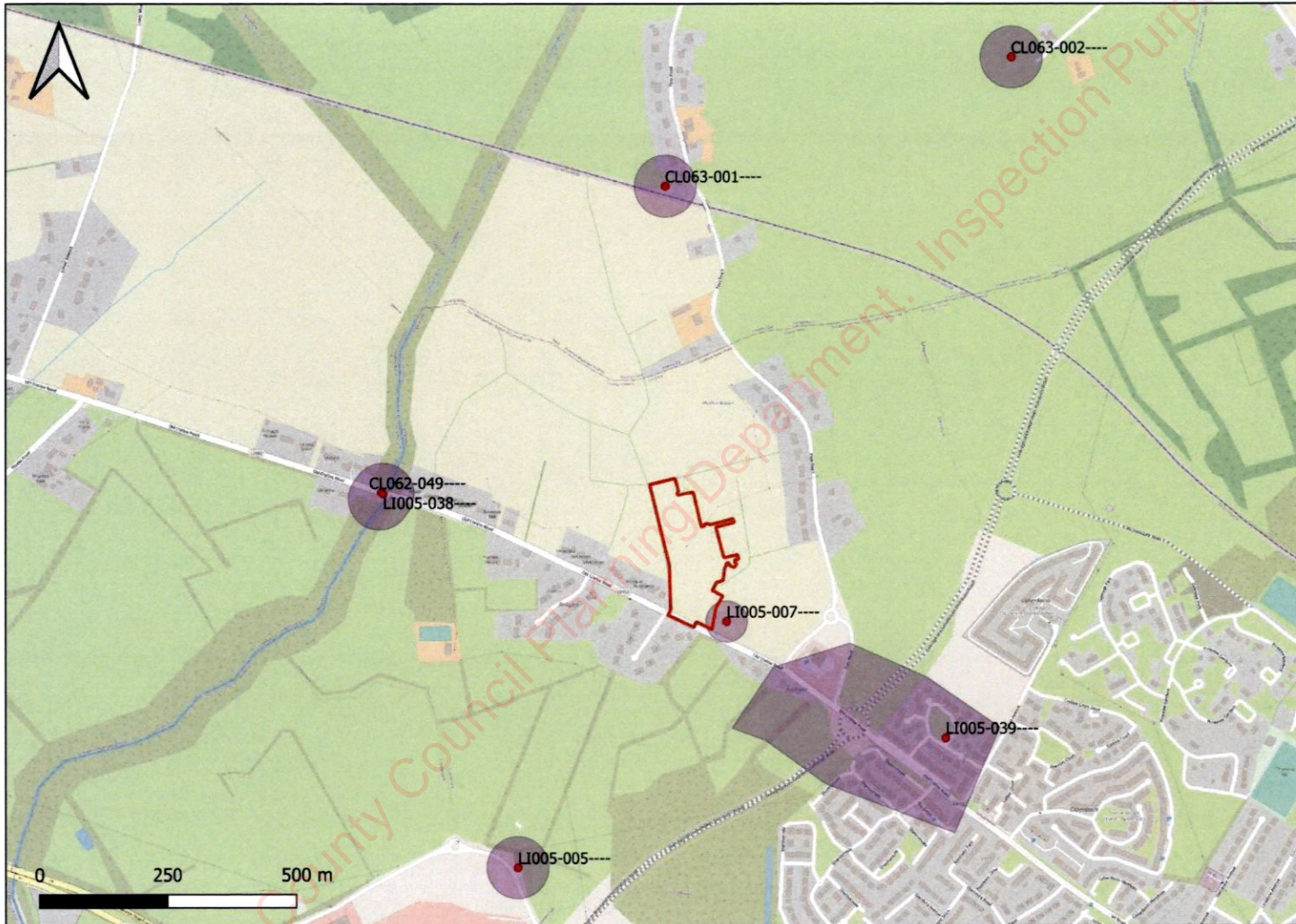


Figure 15.6 Recorded archaeological sites (red dots) and their ZoNs (shaded purple) located within approximately 1km of the Phase 4 area

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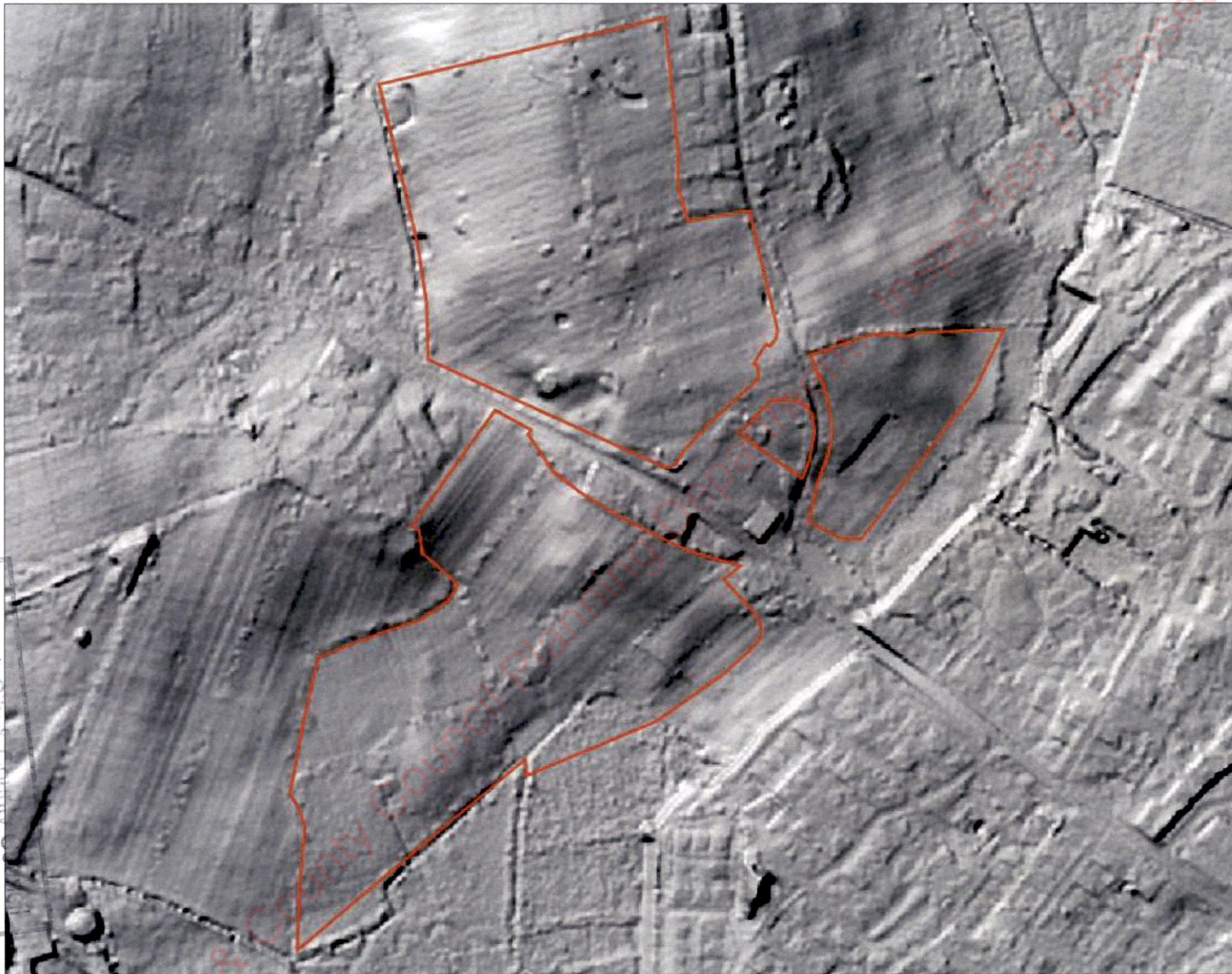


Figure 15.7 LiDAR image, showing the Masterplan site (Source: Geological Survey of Ireland - Open Topographic Data Viewer)

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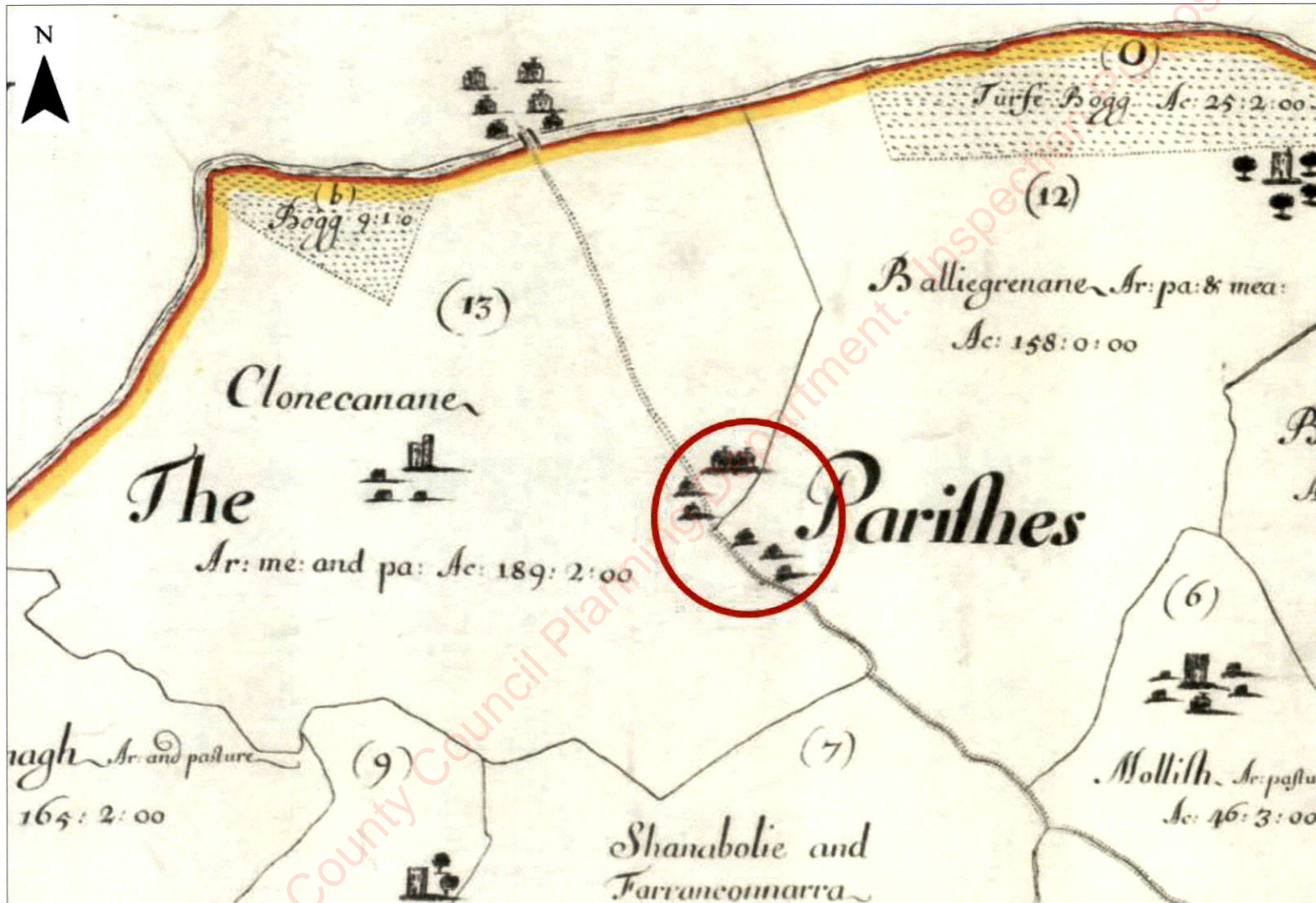


Figure 15.8 Extract from the Down Survey map of barony of the North Liberties, with the settlement cluster circled in red (Source: Trinity College Dublin)

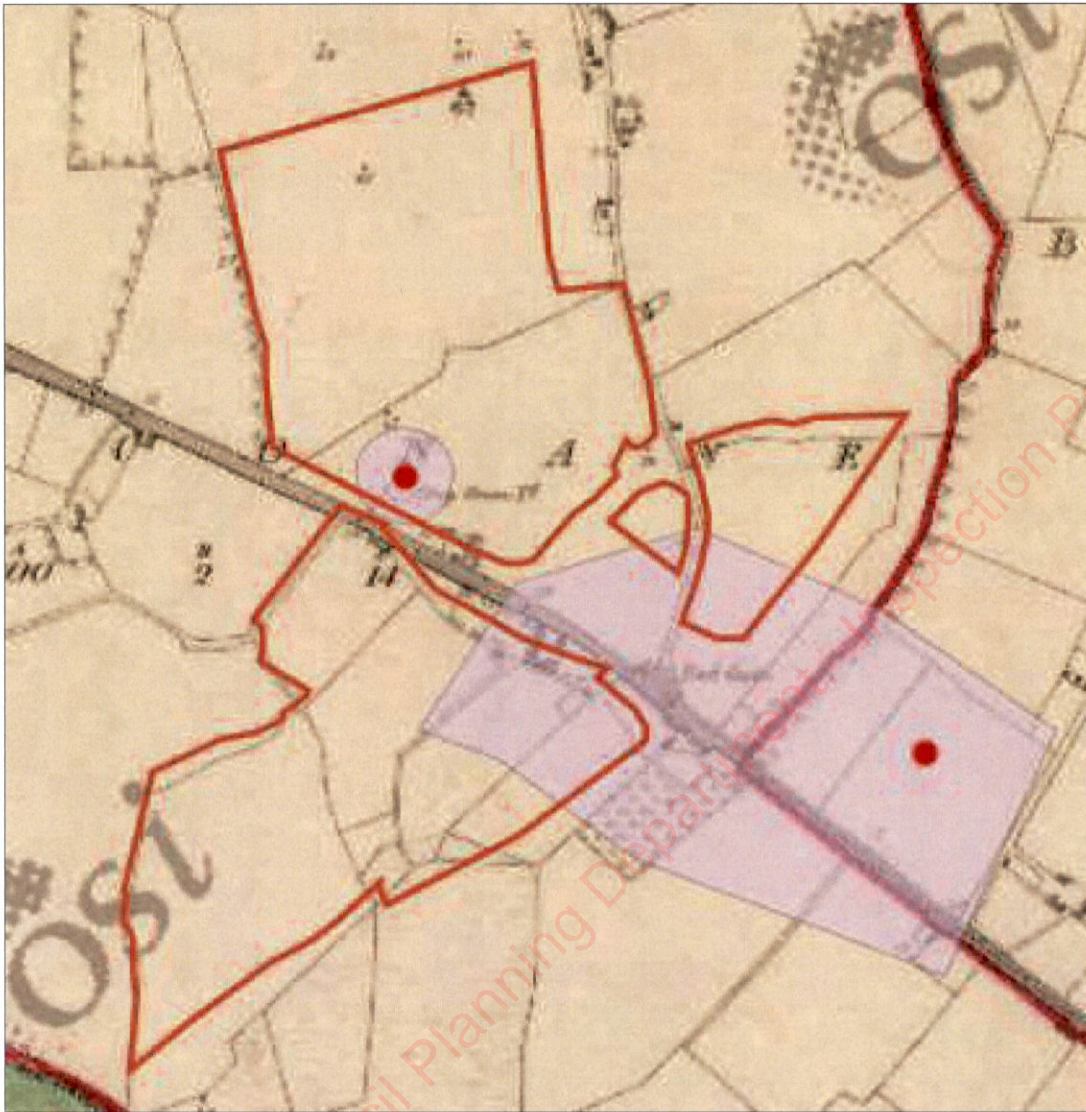


Figure 15.9 Extract from the first edition 6-inch OS map with the boundary of the Masterplan site outlined in red (Source: Ordnance Survey of Ireland)

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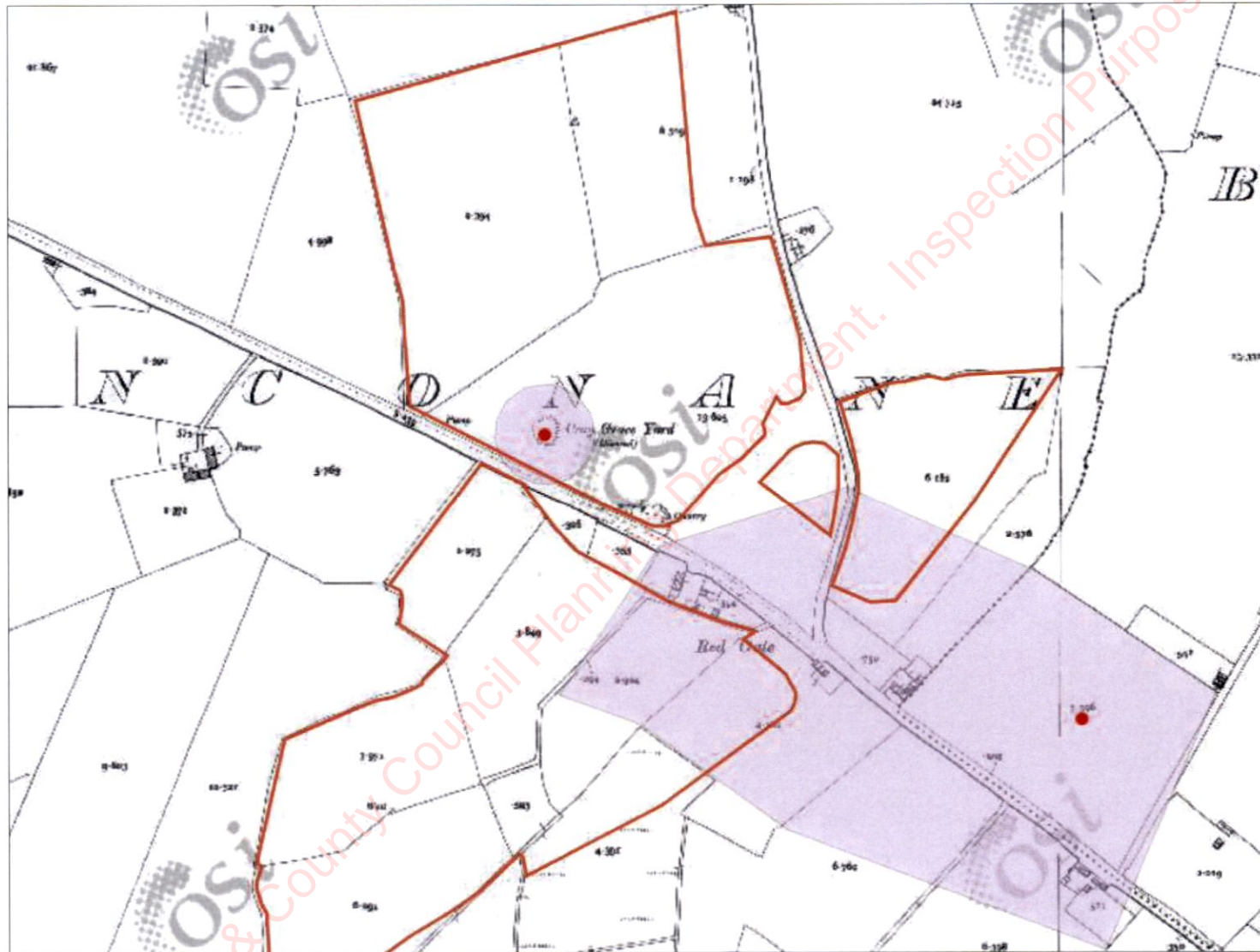


Figure 15.10 Extract from the 25-inch OS map with the boundary of the Masterplan site outlined in red
 (Source: Ordnance Survey of Ireland)

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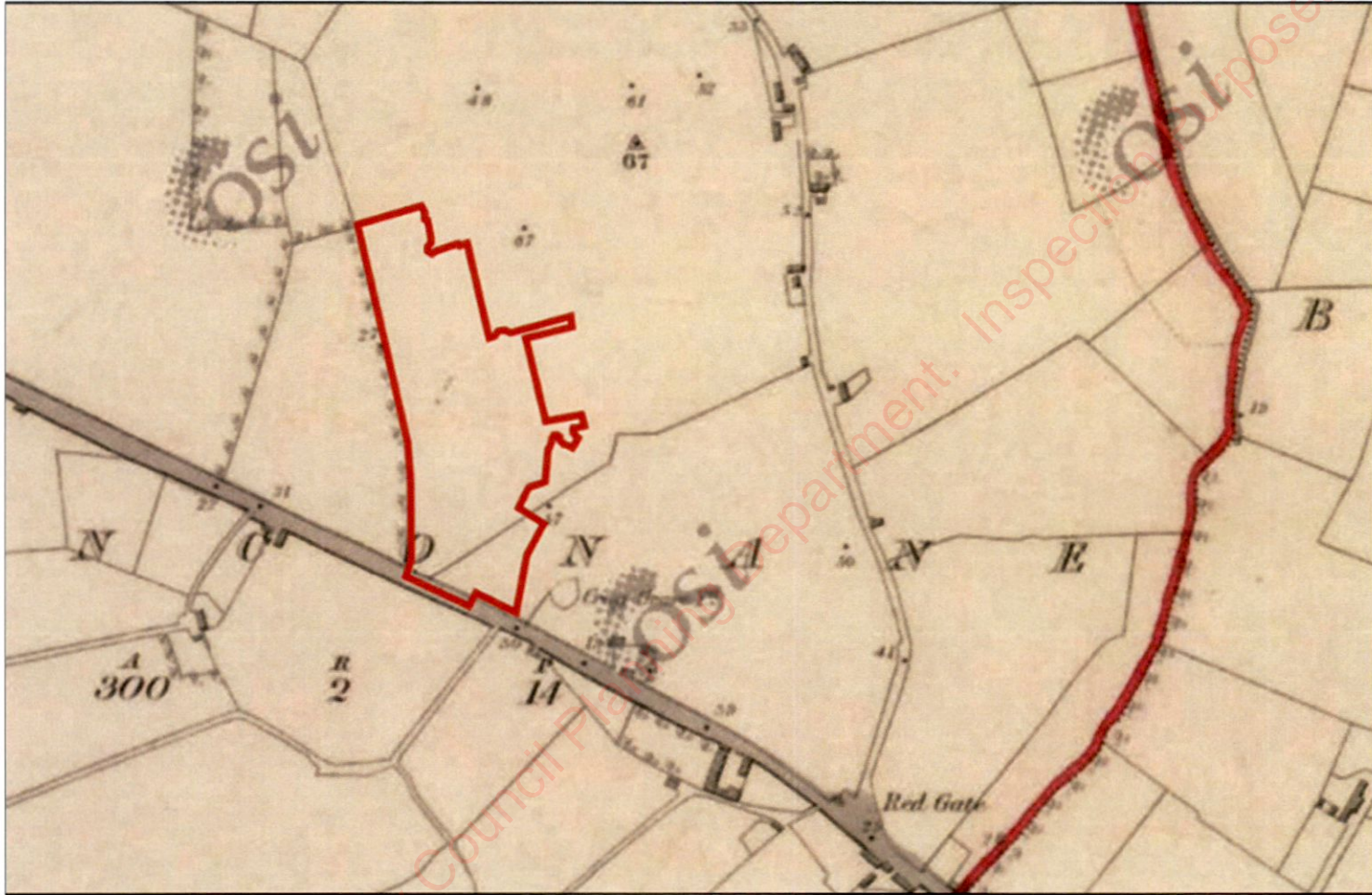


Figure 15.11 Extract from the first edition 6-inch OS map with the boundary of the Phase 4 area outlined in red (Source: Ordnance Survey of Ireland)

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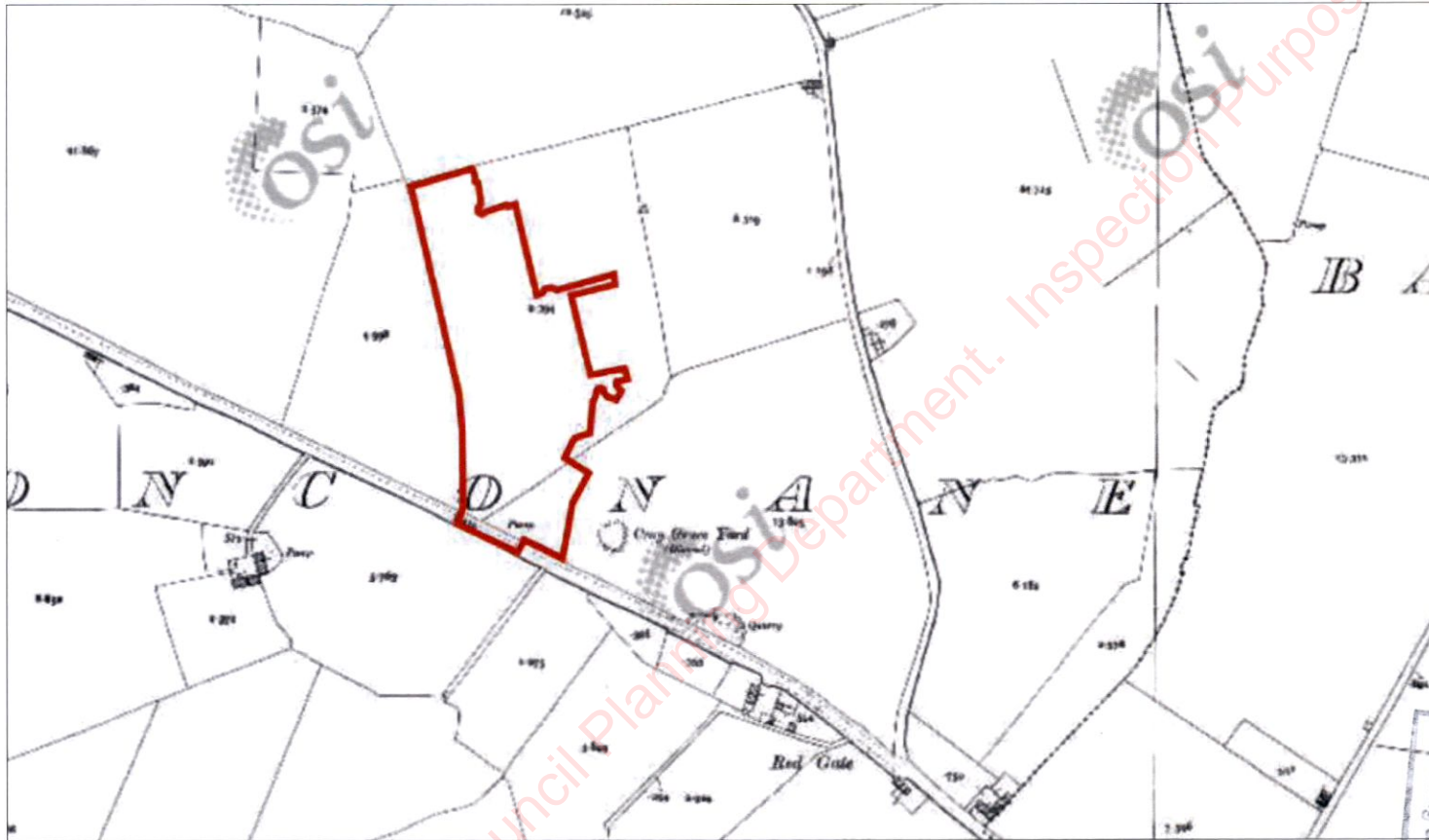


Figure 15.12 Extract from the 25-inch OS map with the boundary of the Phase 4 area outlined in red
(Source: Ordnance Survey of Ireland)

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Figure 15.13 Aerial image from 1995 showing the Phase 4 area outlined in red
(Source: Ordnance Survey of Ireland)



Figure 15.14 Aerial image from 2013-2018 showing the Phase 4 area outlined in red
(Source: Ordnance Survey of Ireland)

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Figure 15.15 Location of test trenches excavated across the Phase 1 area

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Figure 15.16 Location of test trenches excavated across the Phase 2, Phase 3 and Neighbourhood Centre areas

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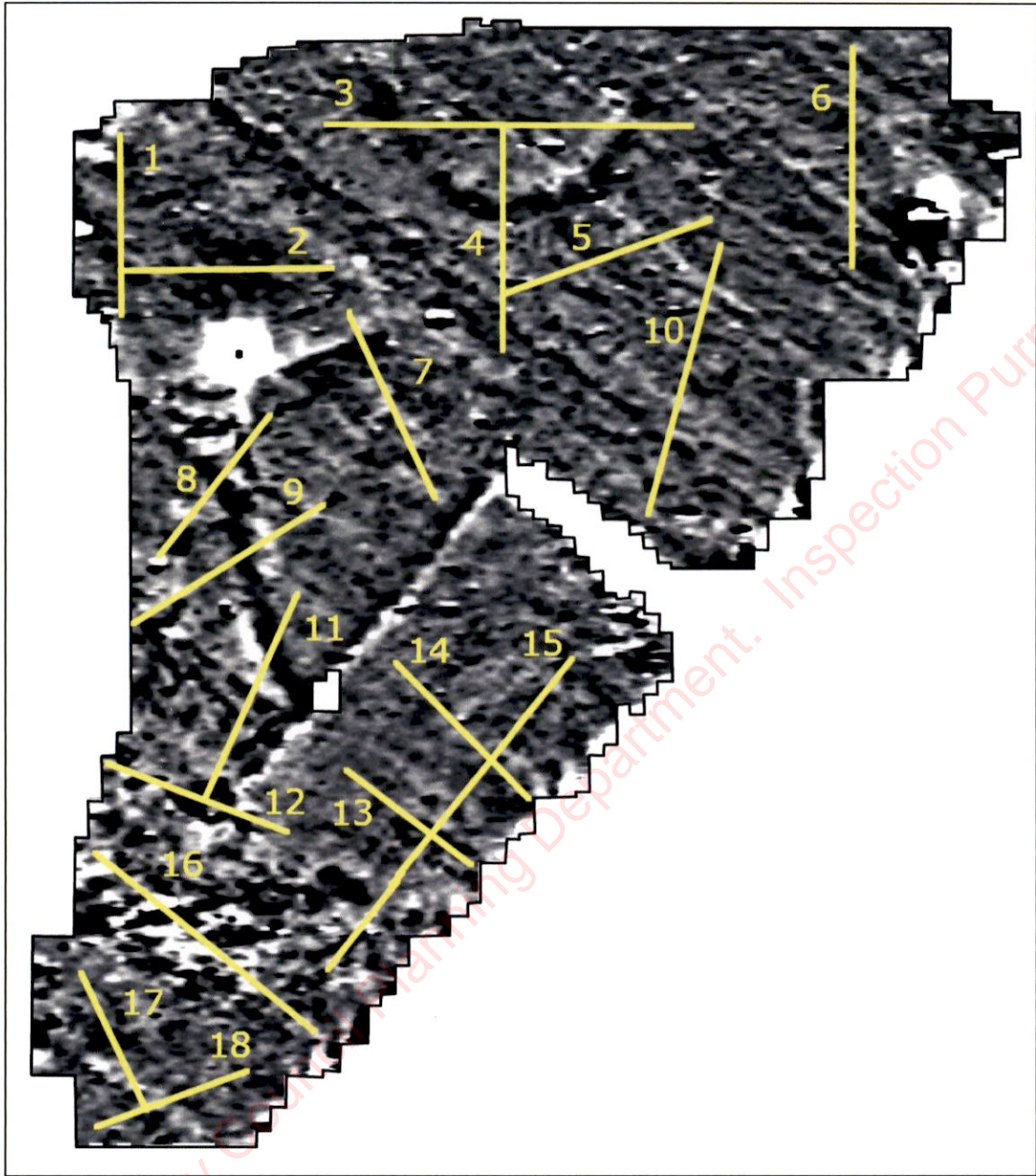


Figure 15.17 Test trench layout for Phase 2, over greyscale image from geophysical survey

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Figure 15.18 Location of test trenches excavated across the Phase 3 area with potential archaeological features circled in black

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Figure 15.19 Location of test trenches excavated across the Phase 4 area with potential archaeological feature circled in black

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Figure 15.20 Location of test trenches excavated across the Neighbourhood Centre area

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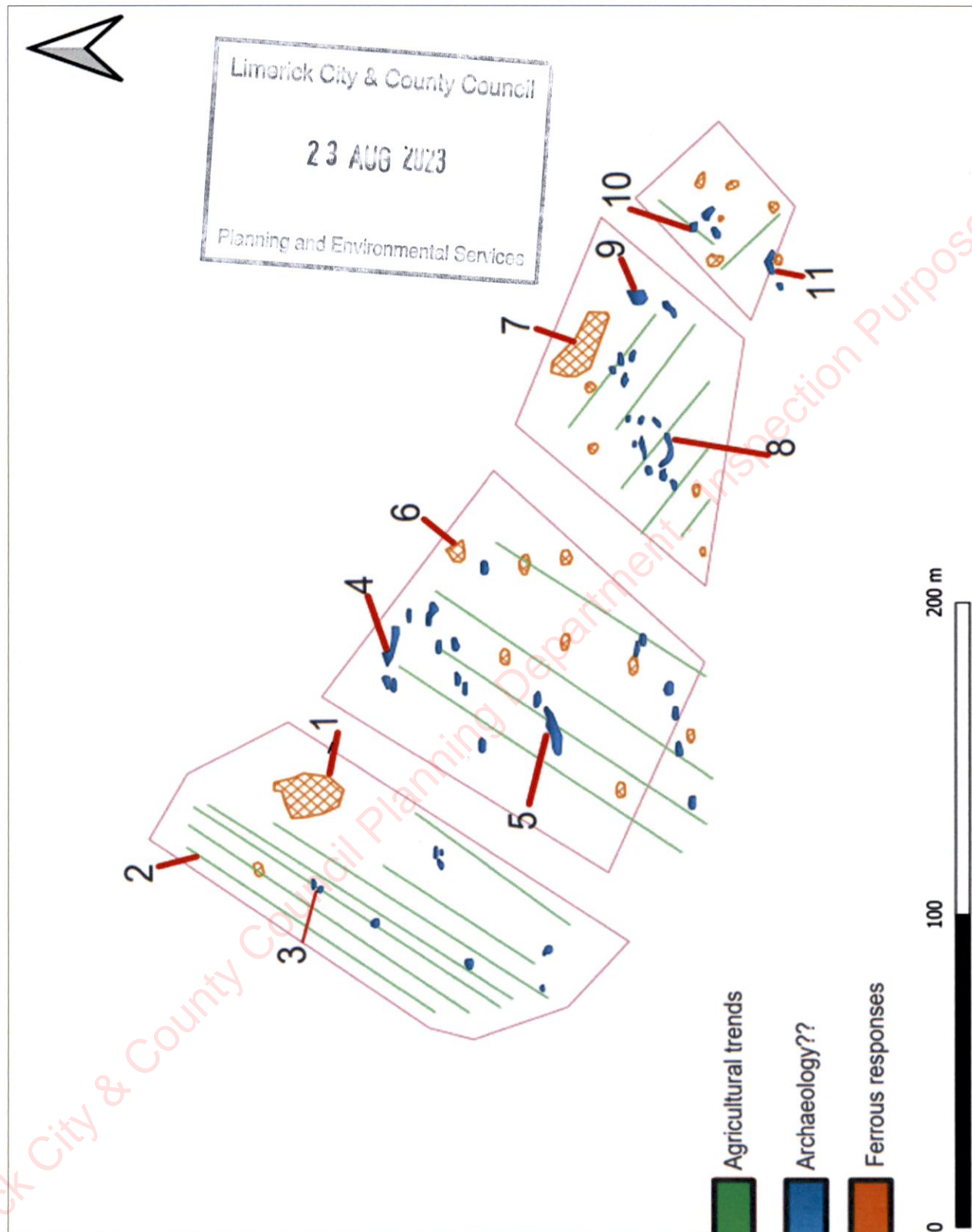


Figure 15.21 Interpretive map from geophysical survey of the Phase 5 area



Figure 15.22 Greyscale image from geophysical survey of the Phase 5 area

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Figure 15.23 Location of test trenches excavated across the Phase 5 area with potential archaeological feature circled in black

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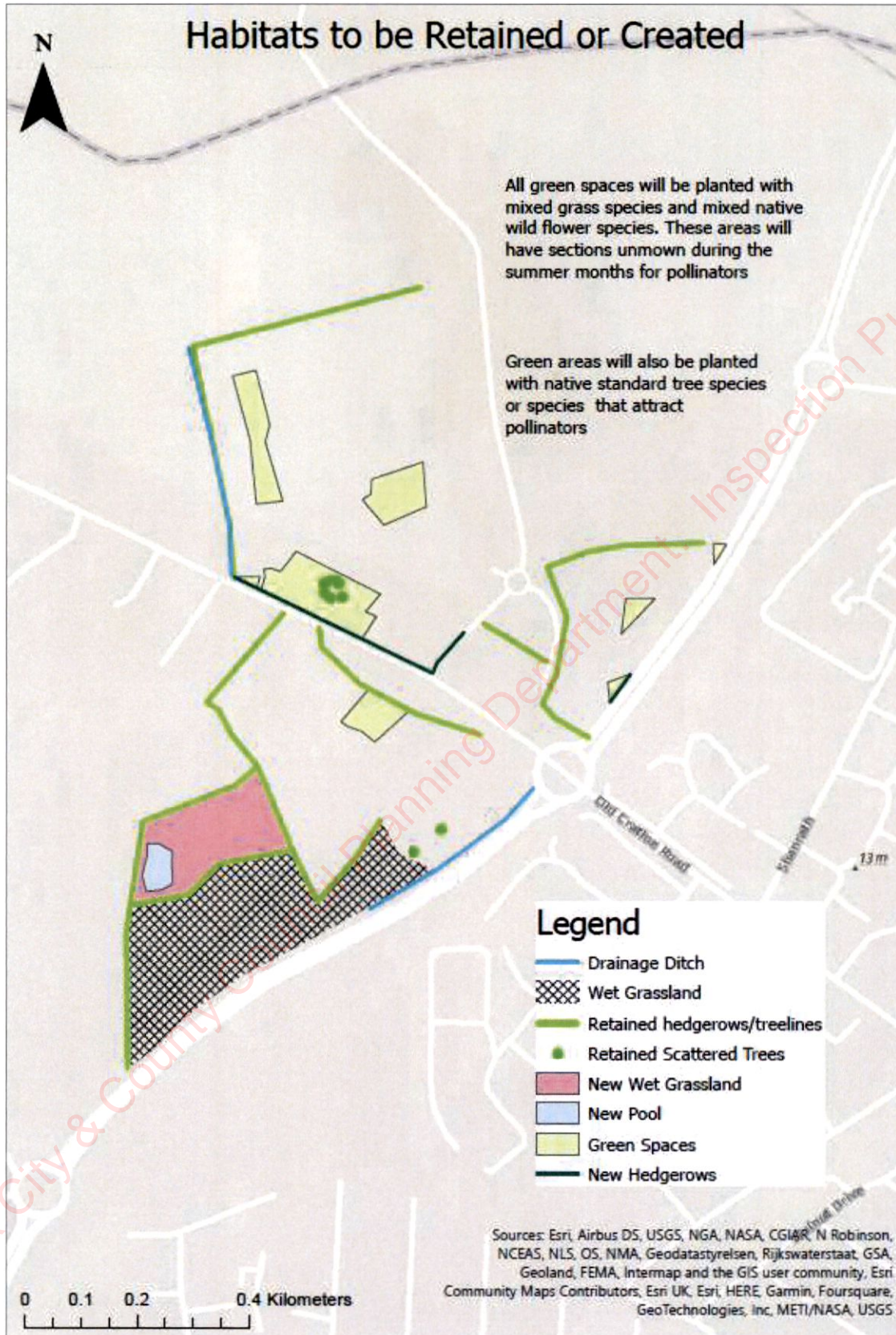


Figure 15.24 Habitats to be retained or created, including a proposed new wet grassland and pond in the Phase 5 area

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APPENDIX 15.4: PREVIOUS EXCAVATIONS

Location	Licence	Summary
Clonconane, County Limerick	04E0851	<p>Planning permission was granted for the construction of 200 houses and ancillary works at Clonconane. The north section of the development site is within the zone of archaeological potential of a possible settlement site.</p> <p>Phase 1 of archaeological works consisted of monitoring of topsoil removal at the northern end of the site. Phase 2 consisted of the excavation of 57 test-trenches over the area of the rest of the site. The trenches were excavated on the footprint of the house sites and access roads. The topsoil was removed to an average depth of 0.3-0.5m. The topsoil was a mid-brown clay and contained occasional sherds of modern pottery and glass. The subsoil consisted mainly of mid-orange/brown silty clay with frequent limestone outcrops. No evidence of archaeological activity was recorded.</p>
Knock, Clonconane and Ballygrennan townlands, County Limerick Clondrinagh, Monabraher and Ballynanty More, County Clare	E4440	<p>Test trenching on the route of the proposed Coonagh – Knockalisheen Distributor Road in Counties Limerick and Clare revealed thirteen burnt stone spreads (four with possible troughs), four burnt stone pits, two pits associated with charcoal production, a probable ring-barrow, two pits of unknown function and a curvilinear feature (?barrow, ?house). See below Nos 84, 382-4, 391-2 and 399 (E4452-8).</p>
Clonconane, County Limerick	E4455	<p>Clonconane 1 was located on the proposed Coonagh – Knockalisheen Distributor Road. Six burnt stone spreads, pits and two wooden structures were excavated over six areas.</p> <p>The burnt stone spread in Area A measured 4.3m by 2.5m, was 0.03m deep and was composed of dark brown clayey silt with frequent charcoal and heat-affected stone inclusions.</p> <p>In Area B the burnt stone spread was similarly composed and measured 4.4m by 4.2m and was 0.07-0.1m deep.</p> <p>In Area C a wooden trackway, a post-and-stake structure and two burnt stone spreads were excavated. The trackway and post-and-stake structure were located adjacent to one of the burnt stone spreads, but it was not apparent during excavation if the three were contemporary. They were then covered by clay and a second burnt stone spread was located on top of the clay.</p> <p>The wooden trackway measured 3.05m long orientated from the south-west to the north-east and was 1.82m wide; the north-western edge had collapsed into a natural sink hole. The trackway was composed of 19 horizontal timbers and five vertical posts/stakes. The horizontal timbers consisted mostly of roundwoods and at least three</p>

Location	Licence	Summary
		<p>split timbers in a poor to moderate condition. The posts and stake were located at the corners of the surviving horizontals.</p> <p>A post-and-stake structure formed a distinct square, 1.9m by 1.41m, adjacent to the trackway. Three of the four posts were supported by a stake. The posts and stakes were roundwoods, were wholly converted and had numerous facet marks. The posts were uniform in size being between 0.12-0.15m in diameter. The stakes were worked into pencil points and had a diameter of 0.06m and 0.08m.</p> <p>To the east of the wooden structures was a burnt stone spread, composed of loose mid greyish black peaty silt with frequent heat-shattered stone and charcoal, measured 10m by 5.02m and was 0.17m thick.</p> <p>The burnt stone spread located over the clay may be an ex situ deposit. The spread was blackish dark grey silty peat with frequent heat-shattered stone and charcoal flecks measuring 4.84m by 3.42m and 0.18m thick.</p> <p>Area D contained a single burnt stone spread of moderately compact dark brownish black sandy silt with frequent burnt stone and charcoal flecking. The spread measured 7.9m by 6.1m and was between 0.7-0.8m thick.</p> <p>There was a single pit in Area E, ovoid in plan, concave with a flattish base, measuring 1.9m by 1m and 0.27m deep. The single fill was soft black peaty silt with frequent charcoal and heat-shattered stone.</p> <p>Area F contained a large burnt stone spread, c. 23m in diameter. The spread was made up of two in situ manmade burnt stone deposits, redeposited natural, an up-casted burnt stone material, a collapsed/washed down burnt stone deposit, disturbance from a probable drain cutting and a layer of burnt stone mixed with topsoil.</p> <p>No cut features were uncovered under the main body of the burnt stone spread, however two pits were recorded to the north of the spread. The only feature recorded under the spread was a natural depression that appeared to have been modified as a fire pit. The base of the depression was filled with a charcoal-rich deposit. Both pits were oval and flat based containing a single fill of dark brownish black peaty silt with frequent charcoal and heat-shattered stone. The pits measured 1.8m by 1.3m and 0.24m deep and 1.52m by 1.03m and 0.23m deep.</p>
Clonconane, County Limerick	E4456	<p>Clonconane 2 was located on the proposed Coonagh – Knockalisheen Distributor Road. A charcoal production pit and a deposit were identified at the site. The pit measured 1.8m by 1.4m with a depth of 0.4m. The base of the pit was fire reddened and contained a basal deposit of charcoal 0.13m thick which was sealed by a deposit of dark brown silty clay. A furrow cut through the pit. The deposit was located close to the pit and measured 5.25m by 1.5-2.9m and 0.05m thick. The deposit is likely to be a by-product of the</p>

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Location	Licence	Summary
		charcoal production. The charcoal production pit extended beyond the limit of the road scheme.
Clonconane/ Ballynanty More/ Monabraher, County Limerick	E4502	Following the main phase of testing in 2012 (E4440), test trenching took place in several previously inaccessible areas on the route of the proposed Coonagh – Knockalisheen Distributor Road in County Limerick. No additional archaeological features, deposits or artefacts were revealed.
Clondrinagh and Clonconane, Limerick	17E0392	<p>Monitoring was requested by Limerick City and County Council during the advance works stage of the construction of the new northern distributor road in Limerick city. A full archaeological presence was maintained during the initial phase of the peat and topsoil removal on a section of the road scheme extending from the Coonagh roundabout on the Ennis road terminating at the Cratloe road, in Clonconane townland. The route travels through part of the River Shannon flood plain and the Crampaun River lies to the west of the road scheme. Pre-development testing of the entire route was undertaken by TVAS (Ireland) over 2012-2013 and several archaeological sites were identified and excavated. The nearest archaeological monument is a burial cairn (L1005-005) located 190m to the west of the road scheme. Groundworks were mostly undertaken in wet low-lying marshy ground where the peat deposits had an average depth of 2m and reached a maximum depth of 3.5m in the central portion of the wayleave. Monitoring was also undertaken on higher ground close to the Cratloe Road. The topsoil here varied from 0.35-0.42m in depth and two pits were exposed and excavated close to where this section of the road scheme terminated at the Cratloe road. They appeared on the surface as localised spreads of dark sediment containing occasional charcoal. Pit(C2) measured 0.45m north-south by 0.49m and was 0.2m deep. The sides of the pit were steep and straight, and the base was flat and uneven. It was filled with dark brown/black moderately compacted silt with frequent charcoal flecks and clay inclusions. The entire contents of the pit were sieved but no further finds or organic matter were recovered.</p> <p>Pit (C5) was located 0.5m north of the previously described pit. It was oval in plan measuring 0.84m north-south by 0.7m with a maximum depth of 0.37m. The pit contained two fills: a lower fill of black charcoal-enriched silt with some clay (C4) measuring 0.18m in depth and an upper layer of clay (C3), measuring 0.1m in depth which sealed the lower fill. A single cow tooth was recovered from the base of the pit. This was submitted to Queen's University Radiocarbon laboratory in Belfast but there was insufficient collagen in the tooth to enable a date to be obtained.</p> <p>No further features or finds of archaeological significance were uncovered.</p>

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Location	Licence	Summary
Clondrinagh, County Limerick	03E1078	<p>Monitoring of topsoil-stripping in the vicinity of an enclosure (SMR 5:5) was requested by Dúchas. The monument is near the northern edge of a large site being developed as a shopping complex at Clondrinagh, on the Ennis Road in Limerick. As virtually all the site is low-lying, the levels are being raised by approximately 2-3m across the site using imported soil, rubble and stone. Large-scale earthmoving and topsoil-stripping had been carried out on most of the site over the previous two years, with limited archaeological involvement.</p> <p>Monitoring was requested for the small amount of topsoil-stripping remaining. This was in the field containing the monument, in the northern part of the site. An examination of some of the areas already stripped was also requested, to determine if any archaeological remains were present. No archaeological remains were noted.</p>
Clondrinagh, County Limerick	03E1144	<p>Testing of an 'enclosure' was requested by the developer. The monument, which lies near the northern edge of a large site being developed as a shopping complex, is on the route of one of the main distributor roads, which will give access to the complex and will also allow the development of lands to the north of the site. Both the developer and Dúchas sought further information on the nature of the monument, in order to develop a suitable mitigation strategy. The possibility of rerouting the road was limited by the location of the monument on the edge of the site and the design and financial implications of routing the distributor road further south into the site.</p> <p>The monument is listed as an enclosure in the RMP, based on cartographic evidence. It is in fact a circular mound, c. 23m in diameter and standing 1.5m above the surrounding field. Small bushes and trees are present along its northern, eastern and southern edges.</p> <p>Testing was carried out, with the excavation of two hand-dug trenches, one on the western edge of the mound (7m by 1m) and one on the top, in the centre of the mound (2m by 2m). These found that the mound, or cairn, is made up of small and medium-sized stones to a depth of 1m. On the western side of the cairn, a combination of larger stones and the natural bedrock acted as revetting for the cairn material. On the old ground surface beneath the cairn, fragments of cremated human bone were found in a discrete deposit. No evidence for any cists or deposits of bone within the cairn was found in the limited area examined. There was no external ditch.</p> <p>The nature of the site and the presence of cremated bone indicate that the monument is a prehistoric burial cairn. This appears to utilise a small area of higher ground caused by an outcrop of bedrock in an otherwise low-lying boggy area. A mitigation strategy has not yet been finalised.</p>

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Location	Licence	Summary
Clondrinagh, Ennis Road, County Limerick	05E0304	Four test-trenches were excavated in advance of the redevelopment of a halting site. No features or finds of archaeological significance were revealed.
Clondrinagh, County Limerick	93E0085	Four cuttings were made on the site of a proposed warehouse adjacent to the monument. The site was found to have been infilled with c. 1m of modern rubble which overlay a "blue mud", presumably of estuarine origin. Nothing of archaeological interest noted.
Clondrinagh, County Limerick	01E1000	The digging of foundation trenches for two industrial units was monitored because of proximity to SMR 5:45, a possible medieval settlement to the north of the area. Nothing of archaeological significance was uncovered in the monitoring of this development.
Gortgarraun, County Clare	E4457	Gortgarraun 1 was located on the proposed Coonagh – Knockalisheen Distributor Road. The excavation revealed a fulacht fiadh with two trough pits and three smaller burnt stone spreads. A Palaeolithic channel was also recorded across the site. The fulacht fiadh measured 7.2m by 5.8m with a depth between 0.08m to 0.1m. The first trough pit measured 1.3m by 0.88m and 0.14-0.17m deep, was sub-rectangular in shape and contained a basal fill that was more charcoal-rich than the fulacht fiadh material. Two flat stones were located in the base of the pit. The second trough pit was 1.48m by 1m and 0.1-0.28m deep, also sub-rectangular in shape and contained a single deposit of charcoal-rich silty sand with occasional heat-shattered stone. The three smaller burnt stone spreads were much degraded and measured 2.6m by 2.1m and 0.02m deep; 4m by 1.5-2m and 0.03-0.06m deep and 4.38m by 2.67m and 0.06-0.24m deep.
Ballygrennan 1 County Limerick	E4452	Ballygrennan 1 was located on the proposed Coonagh – Knockalisheen Distributor Road. The excavation revealed a burnt stone spread, c. 20m in diameter, with a trough pit and pit. The burnt stone spread was subsequently cut by a field drain before being inundated with between 1-2m of rubble. The trough pit was centrally located under the burnt stone spread. The pit was sub-rectangular in plan and measured 3.5m by 1.4m and was 0.36m deep. The single fill was black silty clay with frequent large angular heat-shattered stones and charcoal. A very black charcoal-rich deposit may represent burning adjacent to the south-eastern side of the trough. The south-western edge of the trough was cut by a pit. This pit was sub-circular with near vertical sides and measured 2.8m by 1.88m and 0.88m deep. The pit naturally filled with water and contained charcoal-rich fill with a high density of heat-shattered stone. The trough pit was centrally located under the burnt stone spread. The pit was sub-rectangular in plan and measured 3.5m by 1.4m and was 0.36m deep. The single fill was black silty clay with frequent large

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Location	Licence	Summary
		<p>angular heat-shattered stones and charcoal. A very black charcoal-rich deposit may represent burning adjacent to the south-eastern side of the trough. The south-western edge of the trough was cut by a pit. This pit was sub-circular with near vertical sides and measured 2.8m by 1.88m and 0.88m deep. The pit naturally filled with water and contained charcoal-rich fill with a high density of heat-shattered stone.</p>
<p>Ballygrennan 2 County Limerick</p>	<p>E4453</p>	<p>Ballygrennan 2 was located on the proposed Coonagh – Knockalisheen Distributor Road. The excavation revealed a burnt stone spread with two pit troughs, a shallow burnt stone spread and pit, an enclosure ditch, 29m in diameter, and post-medieval ditches/drains.</p> <p>The burnt stone spread was an obviously truncated, likely by modern ploughing, 'horse shoe'-shaped fulacht fiadh. The spread extended an area of 6.47m by 5.66m, the larger side of the 'horse shoe' being 3.39m wide, and 0.11m at its deepest.</p> <p>Two trough pits were located beneath the spread; Pit 1 was under the north 'arm' of the spread and Pit 2 was centrally located. Pit 1 was an irregular oval shape; it sloped in from the eastern side, had a concave base and measured 2.3m by 1.4m and was 0.95m deep. The basal fill was sticky light grey sandy silt with occasional heat-affected stone and charcoal. The main fill was soft greyish black sandy silt containing heat-shattered stone and charcoal and was 0.4m thick. A deposit of brownish grey silty clay sealed the pit. Pit 2 was a sub-rectangular in plan, with steeply sloped sides and a flat base, measuring 1.95m by 1.2m and 0.6m deep. The basal fill was moderately compacted brownish black clayey silt with much charcoal. The main fill was the same as that of Pit 1 but contained many heat-shattered stones and was 0.45m thick.</p> <p>Two trough pits were located beneath the spread; Pit 1 was under the north 'arm' of the spread and Pit 2 was centrally located. Pit 1 was an irregular oval shape; it sloped in from the eastern side, had a concave base and measured 2.3m by 1.4m and was 0.95m deep. The basal fill was sticky light grey sandy silt with occasional heat-affected stone and charcoal. The main fill was soft greyish black sandy silt containing heat-shattered stone and charcoal and was 0.4m thick. A deposit of brownish grey silty clay sealed the pit. Pit 2 was a sub-rectangular in plan, with steeply sloped sides and a flat base, measuring 1.95m by 1.2m and 0.6m deep. The basal fill was moderately compacted brownish black clayey silt with much charcoal. The main fill was the same as that of Pit 1 but contained many heat-shattered stones and was 0.45m thick.</p> <p>The enclosure ditch was dug into the brow of a slope in the field, following the natural inclination of the ground from east to west. The majority of the enclosure was located within the road take. The circular ditch had an internal diameter (north-south) of 29m, enclosing an</p>

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		<p>approximate area of 790m², and a north-facing break in the ditch. The sides of the cut were very steep, particularly around the edge of the natural slope, the base was very gently rounded, and was between 1-1.5m wide on average and was deepest along the western side at 0.9m and shallowest at the southern and northern sides at 0.5m. Evidence of a possible internal bank was noted in a single fill recorded in the base and internal side of the cut. There were two drains opened contemporarily with the ditch.</p> <p>Extensive ploughing was also noted meaning that no internal features survived. Two linear features cut the top of the enclosure to the north and south.</p>
Ballygrennan 3 County Limerick	E4454	<p>Ballygrennan 3 was located on the proposed Coonagh – Knockalisheen Distributor Road.</p> <p>A burnt stone spread with a trough pit and a second trough pit were identified at the site. The burnt stone spread measured 7.8m by 4.5m with a depth between 0.05-0.3m. The centrally located pit measured 2.5m by 1.1m and 0.45m deep, was oblong in shape and contained a basal fill that was darker than the main spread material. The second trough pit was 2.6m by 1.1m and 0.47m deep, also oblong in shape, and contained a single deposit of burnt stone.</p>
Ballygrennan County Limerick	98E0321	<p>The site, on the north-eastern side of the Old Cratloe Road, was bordered to the south-east by Galtee Avenue, originally a road leading to a farm, now defining the western limits of a housing estate. To the north-western side it was defined by the townland boundary, and to the north-eastern by a field boundary. On the earlier maps there was a north-east by south-west subdivision of the field. The eastern field was slightly elevated; the western one, low-lying and prone to flooding, was, along the western and northern boundaries, permanently marshy. A possible settlement (Down Survey maps) was marked partly on this side of the western boundary.</p> <p>The topsoil-stripping of the area of the proposed development was monitored. With the exception of a localised spread of burnt stone and a pit/ditch, which it was not possible to date, there was no trace of any activity pre-19th century, and this consisted mainly of attempts to drain the land. The area where the 'possible settlement' was allegedly situated was particularly prone to flooding. The level ground on this part of the site, together with the high level of the impermeable clay, has resulted in a total lack of natural soakage. If there had been a settlement it is more likely that it was either on the higher ground to the east or outside the area of the proposed development, i.e. to the west or south.</p>
Phase 1 Housing Development,	22E0664	<p>A programme of archaeological test trenching was undertaken for Phase 1 Housing Development at Old Cratloe Road, Clonconane, County Limerick under Excavation Licence 22E0664. The works were carried out over a period of four days between Thursday 1st and</p>

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Location	Licence	Summary
Clonconane, County Limerick		Tuesday 6 th September 2022. A total of 40 no. linear trenches (T1 - T40) were excavated under archaeological supervision across the footprint of the area proposed for development and within the boundaries of the subject site. All trenches were located within agricultural land which is currently used as pasture. A total of 1335 linear metres were excavated at different locations within the area proposed for development using a tracked 360° mechanical excavator fitted with a toothless grading bucket operating under strict supervision by the licensee. The excavated spoil from all trenches was also systematically inspected to assist with artefact retrieval. Nothing archaeological was identified.

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