

RECEIVED: 29/11/2024

11. CULTURAL HERITAGE

11.1 Introduction

This archaeological, architectural, and cultural heritage chapter was prepared by Tobar Archaeological Services Ltd. It presents the results of an archaeological, architectural and cultural heritage impact assessment of the Proposed Development. The purpose of this chapter is to assess the potential direct and indirect effects of the Proposed Development on the surrounding archaeological, architectural and cultural heritage landscape. The assessment is based on both a desktop review of the available cultural heritage and archaeological data and a field inspection of the Proposed Development area. An assessment of potential effects, including cumulative effects, is presented.

11.1.1 The Proposed Development

The Proposed Development includes for the construction of a soil inspection shed, refuelling area, settlement ponds, road improvements, drainage network and environmental berms. It also includes for the extraction, processing and washing of sand and gravel from an area measuring approximately 16.3 hectares (ha) which will allow for the extraction of approximately 1,428,571 tonnes of material. The development proposals also include for the infilling and restoration of an existing and future quarry void back to original land contour levels. It is proposed to fill the void with either inert soil and stone waste (imported inert greenfield and non-greenfield soils and stone, and river dredge spoil) which will be a soil recovery facility and require a waste management licence or soil and stone by-product.

The Proposed Development site EIAR study area and application boundary measures approximately 97.5 hectares.

The Proposed Development is described in further detail in Chapter 3 of the EIAR.

11.1.2 Location and Topography

The Proposed Development site comprises land in the townlands of Ballyquin More, Leitrim, Woodpark and Fahy More North, Co. Clare. It is located approximately 8 kilometres southwest of the town of Killaloe and 1.5 kilometres to the northwest of the village of Bridgetown, Co. Clare. The site comprises a quarry void area which has been used for sand and gravel extraction since c. 1954. The Grid Reference co-ordinates for the approximate centre of the site are X 562651, Y 669425 in Irish Transverse Mercator (ITM).

Land-use in the wider landscape comprises agriculture, forestry, quarrying and one-off housing. The site is bounded by agricultural land to the south and the west.

11.1.3 Statement of Authority

This chapter of the Environmental Impact Assessment Report (EIAR) has been prepared by Miriam Carroll of Tobar Archaeological Services Ltd. Miriam Carroll is a director of Tobar Archaeological Services Ltd. and graduated from University College Cork in 1998 with a Master's degree in Methods and Techniques in Irish Archaeology. Miriam is licensed by the Department of Housing, Local Government and Heritage (DHLGH) to carry out excavations and is a member of the Institute of Archaeologists of Ireland. She has been working in the field of archaeology since 1994 and has undertaken numerous projects for both the private and public sectors including excavations, site assessments (EIAR) and surveys.

11.1.4

Relevant Guidance and Legislation

Archaeological monuments are safeguarded through national and international policy, which is designed to secure the protection of the cultural heritage resource. This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention). This was ratified by Ireland in 1997.

Both the National Monuments Acts 1930 to 2004 and relevant provisions of the Cultural Institutions Act 1997 are the primary means of ensuring protection of archaeological monuments, the latter of which includes all man-made structures of whatever form or date. There are a number of provisions under the National Monuments Acts which ensure protection of the archaeological resource. These include the Register of Historic Monuments (1997 Act) which means that any interference to a monument is illegal under that Act. All registered monuments are included on the Record of Monuments and Places (RMP).

The Record of Monuments and Places (RMP) was established under Section 12 (1) of the National Monuments (Amendment) Act 1994 and consists of a list of known archaeological monuments and accompanying maps. The Record of Monuments and Places affords some protection to the monuments entered therein. Section 12 (3) of the 1994 Amendment Act states that any person proposing to carry out work at or in relation to a recorded monument must give notice in writing to the Minister (Environment, Heritage and Local Government) and shall not commence the work for a period of two months after having given the notice. All proposed works, therefore, within or around any archaeological monument are subject to statutory protection and legislation (National Monuments Acts 1930-2004).

The term 'national monument' as defined in Section 2 of the National Monuments Act 1930 means a monument *'the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto'*. National monuments in State care include those which are in the ownership or guardianship of the Minister for Arts, Heritage and the Gaeltacht. Section 5 of the National Monuments Act (1930) allows owners of other national monuments to appoint the Minister for the Arts, Heritage and the Gaeltacht or the relevant local authority as guardian of such monuments, subject to their consent. This means in effect that while the property of such a monument remains vested in the owner, its maintenance and upkeep are the responsibility of the State. Some monuments are also protected by Preservation Orders and are also regarded as National Monuments. National Monuments also includes (but not so as to limit, extend or otherwise influence the construction of the foregoing general definition) every monument in Saorstát Éireann to which the Ancient Monuments Protection Act, 1882, applied immediately before the passing of this Act, and the said expression shall be construed as including, in addition to the monument itself, the site of the monument and the means of access thereto and also such portion of land adjoining such site as may be required to fence, cover in, or otherwise preserve from injury the monument or to preserve the amenities thereof.

Under the Heritage Act (1995) architectural heritage is defined to include *'all structures, buildings, traditional and designed, and groups of buildings including street-scapes and urban vistas, which are of historical, archaeological, artistic, engineering, scientific, social or technical interest, together with their setting, attendant grounds, fixtures, fittings and contents...'* A heritage building is also defined to include *'any building, or part thereof, which is of significance because of its intrinsic architectural or artistic quality or its setting or because of its association with the commercial, cultural, economic, industrial, military, political, social or religious history of the place where it is situated or of the country or generally'*.

11.1.4.1

Granada Convention

The Council of Europe, in Article 2 of the 1985 Convention for the Protection of the Architectural Heritage of Europe (Granada Convention), states that *'for the purpose of precise identification of the*

monuments, groups of structures and sites to be protected, each member State will undertake to maintain inventories of that architectural heritage’. The Granada Convention emphasises the importance of inventories in underpinning conservation policies.

The NIAH was established in 1990 to fulfil Ireland's obligations under the Granada Convention, through the establishment and maintenance of a central record, documenting and evaluating the architectural heritage of Ireland. Article 1 of the Granada Convention establishes the parameters of this work by defining 'architectural heritage' under three broad categories of Monument, Groups of Buildings, and Sites:

- Monument: all buildings and structures of conspicuous historical, archaeological, artistic, scientific, social or technical interest, including their fixtures and fittings;
- Group of buildings: homogeneous groups of urban or rural buildings conspicuous for their historical, archaeological, artistic, scientific, social or technical interest, which are sufficiently coherent to form topographically definable units;
- Sites: the combined works of man and nature, being areas which are partially built upon and sufficiently distinctive and homogenous to be topographically definable, and are of conspicuous historical, archaeological, artistic, scientific, social or technical interest.

The Council of Europe's definition of architectural heritage allows for the inclusion of structures, groups of structures and sites which are considered to be of significance in their own right, or which are of significance in their local context and environment. The NIAH believes it is important to consider the architectural heritage as encompassing a wide variety of structures and sites as diverse as post boxes, grand country houses, mill complexes and vernacular farmhouses.

11.1.4.2 **Clare County Development Plan 2023-2029**

The Clare County Development Plan 2023-2029 (CCDP) was adopted by the Elected Members of Clare County Council at a Special Meeting on 9th March 2023. The CCDP came into effect 6 weeks from the date of adoption, on 20th April 2023. The relevant policies and objectives of Clare County Council regarding archaeology and built heritage were consulted in the CCDP and include the following:

11.1.4.2.1 **Architectural heritage including Industrial and vernacular heritage**

This section includes all relevant policies and objectives insofar as the Proposed Development is concerned.

‘CDP16.1 It is an objective of Clare County Council: a) To ensure the protection of the architectural heritage of County Clare through the identification of Protected Structures, the designation of Architectural Conservation Areas, the safeguarding of historic gardens, and the recognition of structures and elements that contribute positively to the vernacular and industrial heritage of the county; and b) To ensure that the archaeological and architectural heritage of the county is not damaged either through direct destruction or by unsympathetic developments. c) To support and promote architectural vernacular skills training and facilities in the county.’

‘CDP16.2 It is an objective of Clare County Council: a) To protect, as set out in the Record of Protected Structures, all structures, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social, or technical interest; and b) To review the Record of Protected Structures periodically and add structures of special interest as appropriate, including significant elements of industrial, maritime or vernacular heritage and any twentieth century structures of merit.’

‘CDP16.3 It is an objective of Clare County Council: To protect and preserve buildings and features of industrial heritage such as mills, bridges, lighthouses and harbours, amongst others. Proposals for refurbishment works to, or redevelopment/conversion of, these sites will be subject to a full architectural

and archaeological assessment together with an ecological assessment with respect to the presence of protected species.'

'CDP16.4 It is an objective of Clare County Council: a) To seek the retention, appreciation and appropriate revitalisation of the vernacular heritage of County Clare, in towns, villages and rural areas, by discouraging the replacement of good quality vernacular buildings with modern structures and by protecting vernacular buildings where they contribute to the character of an area or settlement and/or where they are rare examples of a structure type; b) To support proposals to refurbish vernacular structures that are in a sub-standard or derelict condition, provided that: I. Appropriate traditional building materials and methods are used to carry out repairs to the historic fabric; II. Proposals for extensions to vernacular structures are reflective and proportionate to the existing building and do not erode the setting and design qualities of the original structure which make it attractive III. Direction for the design is taken from the historic building stock of the area, though it can be expressed in contemporary architectural language; and (c) To ensure that visitor pressures from tourism associated with built and cultural heritage do not impact negatively on the capacity of local services (including water, waste water) or facilities such as car parking.'

'CDP16.7 It is an objective of Clare County Council: a) To advocate for greater financial assistance, including the Built Heritage Investment Scheme and the Historic Structures Fund, for the maintenance and improvement of architectural heritage in County Clare; b) To support community initiatives and projects regarding preservation, presentation and access to archaeological heritage and underwater cultural heritage, provided such are compatible with appropriate conservation policies and standards, having regard to the guidance and advice of The Department of Housing, Local Government and Heritage c) To provide advice and guidance to community groups, owners and occupiers with regards to the maintenance and repair of buildings and structures of architectural heritage importance and to promote initiatives by the Council, the Heritage Council, local communities, heritage property owners and other stakeholders pursuing the maintenance and improvement of the architectural heritage; and d) To undertake a risk assessment of the Archaeological and Architectural Heritage and Cultural Assets in the county to assess the vulnerability and the risk to the historical environment from the impacts of climate change and to help build resilience to these important assets.'

11.1.4.2.2 Archaeological Heritage

This section includes all relevant policies and objectives insofar as the Proposed Development is concerned.

'CDP16.8 It is an objective of Clare County Council: a) To safeguard sites, features and objects of archaeological interest generally; b) To secure the preservation (i.e. preservation in situ or in exceptional cases preservation by record) of all archaeological monuments included in the Record of Monuments and Places as established under Section 12 of the National Monuments (Amendment) Act, 1994, and of sites, features and objects of archaeological and historical interest generally; c) In securing such preservation, to have regard to the advice and recommendations of the Department of the Culture, Heritage and the Gaeltacht; d) To have regard to the government publication Framework and Principles for the Protection of the Archaeological Heritage 1999 in relation to protecting sites, features and objects of archaeological interest; and e) To advocate for greater financial assistance for the maintenance and improvement of features of archaeological interests in County Clare.'

'CDP16.9 It is an objective of Clare County Council: To protect and preserve archaeological sites discovered since the publication of the Record of Monuments and Places.'

'CDP16.10 It is an objective of Clare County Council: To protect the Zones of Archaeological Potential located within both urban and rural areas as identified in the Record of Monuments and Places.'

'CDP16.11 It is an objective of Clare County Council: To ensure that decisions relating to development (including infrastructure associated with broadband, telecommunications, renewable energy, major road/rail infrastructure, flood relief schemes and other services) which may have implications for

Recorded Archaeological Monuments/Sites, Zones of Archaeological Potential or undiscovered archaeology, are informed by an appropriate level of archaeological investigation undertaken by qualified persons and the case of flood relief schemes have regard to archaeological Guidelines for Flood Relief Schemes (DHLGH and OPW2022).'

'CDP16.12 It is an objective of Clare County 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: a) Promote awareness and the appropriate adaptation of Ireland's built and archaeological heritage to deal with the effects of climate change; b) 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; c) Undertake climate change vulnerability assessments for the historic structures and sites in its area, subject to resources and funding; d) Develop disaster risk reduction policies addressing direct and indirect risks to the built and archaeological heritage in its area; e) Develop resilience and adaptation strategies for the built and archaeological heritage in its area; f) 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.'

'CDP16.12 It is an objective of Clare County Council: a) To raise awareness of and improve practice in relation to archaeology in County Clare; and b) To promote the care and conservation of historic graveyards throughout the county. Within the lifetime of the Plan it is an objective to prepare conservation plans for a number of historical church and graveyard sites, with the objective of identifying necessary works required to address the decay of the fabric of the sites.'

'CDP16.13 It is an objective of Clare County Council a) To protect, preserve and promote the archaeological value of underwater archaeological sites in rivers, lakes, coastal, marine, intertidal and sub tidal environments; and b) To support the further exploration of the underwater archaeology of County Clare, including the San Marcos project, and any subsequent projects that may arise during the lifetime of this Plan.'

11.1.4.2.3 Cultural Heritage

This section includes all relevant policies and objectives insofar as the Proposed Development is concerned.

'CDP16.14 It is an objective of Clare County Council: (a) To conserve and enhance its cultural identity and enable access to both culturally-distinct areas and facilities for cultural experiences; (b) To advocate for investment in infrastructure and initiatives that develop the role of arts, heritage and culture and employment opportunities in these sectors in County Clare including funding streams outlined in 'Project Ireland 2040 Investing in our Culture, Language and Heritage 2018- 2027'; (c) To assist in the delivery of actions under arts, heritage and cultural strategies in the county; (d) To ensure that decisions relating to investment in arts, cultural and heritage infrastructure/facilities are informed by an appropriate level of environmental assessment; and (e) To develop a vibrant cultural and creative sector in County Clare as a key enabler of enterprise growth, innovation, regeneration, place-making and community development, health and wellbeing and support measures under Culture 2025, Creative Ireland Strategy 2017-2022 and the Action Plan for Rural Development.'

'CDP16.15 It is an objective of Clare County Council a) To facilitate further development of and extensions to museum, heritage centres and archives across the county; b) To ensure that the County Museum's collections and associated information are accessible to the public; c) To promote a wider appreciation and understanding of the unique natural, cultural and archaeological heritage of the County; d) To recognise and support the role of private and community facilities in making heritage

artefacts and information available to the public; and (e) To support the development of a network of community arts and cultural hubs.'

'CDP16.17 It is an objective of Clare County Council: a) To provide for the linguistic and cultural heritage of the county through the provision of support for organisations involved in the continued promotion and preservation of the Irish language and culture and the normalising of the use of Irish; b) To work in a positive and encouraging way to create and maintain a bilingual environment in the county, and to ensure the availability of opportunities for the use of spoken and written Irish. (c) To support the implementation of the Language Plan for the Irish Language Network in Ennis.

CDP16.18 It is an objective of Clare County Council To support and facilitate the gathering, recording, preservation and promotion of folklore and oral cultural heritage in the county and to work closely with groups such as Cuimhneamh an Chláir to realise their objectives.'

The undertaking of this Cultural Heritage assessment of the Proposed Development is in accordance with Clare County Council's aforementioned policies and objectives on archaeological, architectural and cultural heritage.

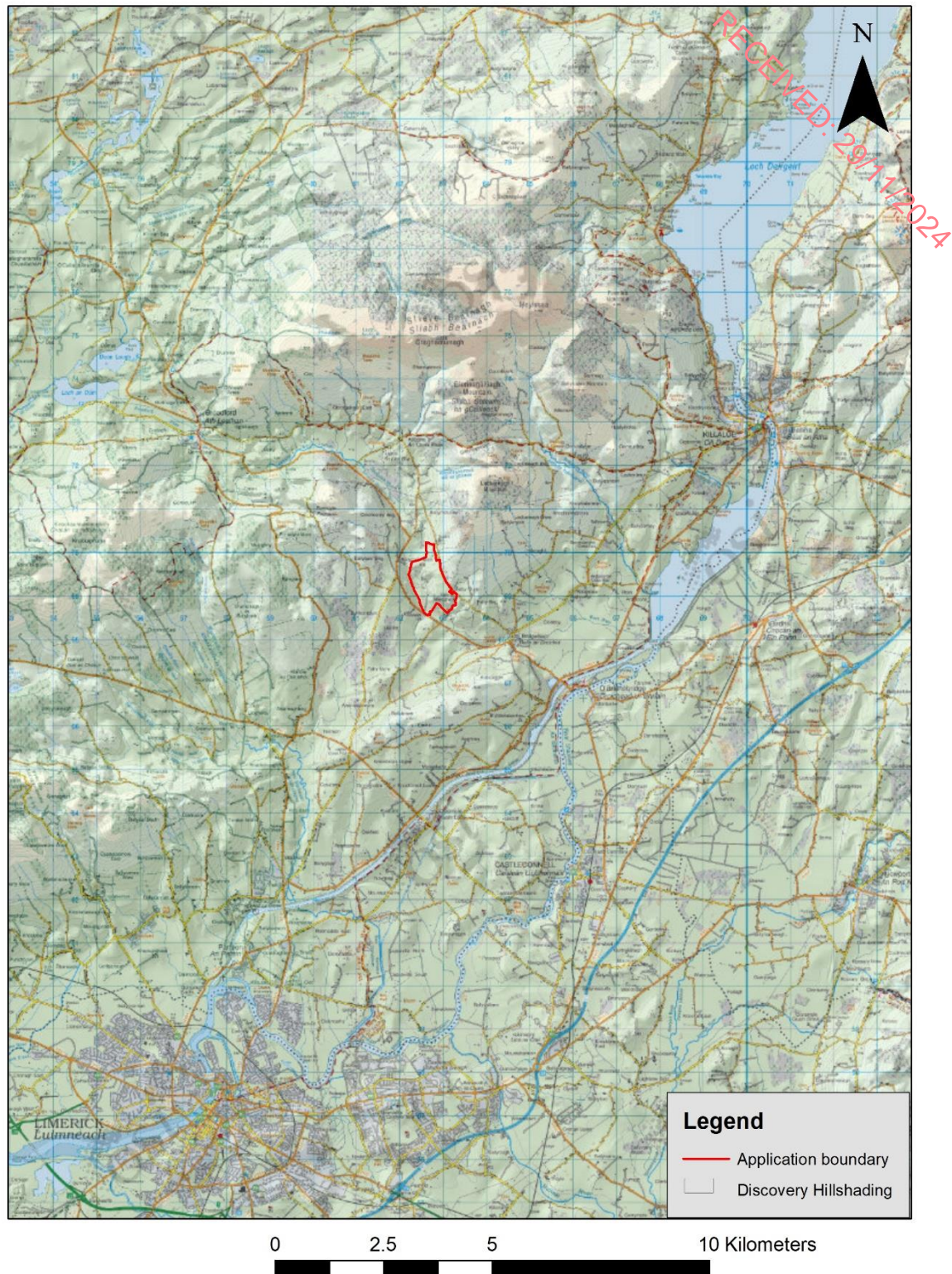


Figure 11-1: Site location map.

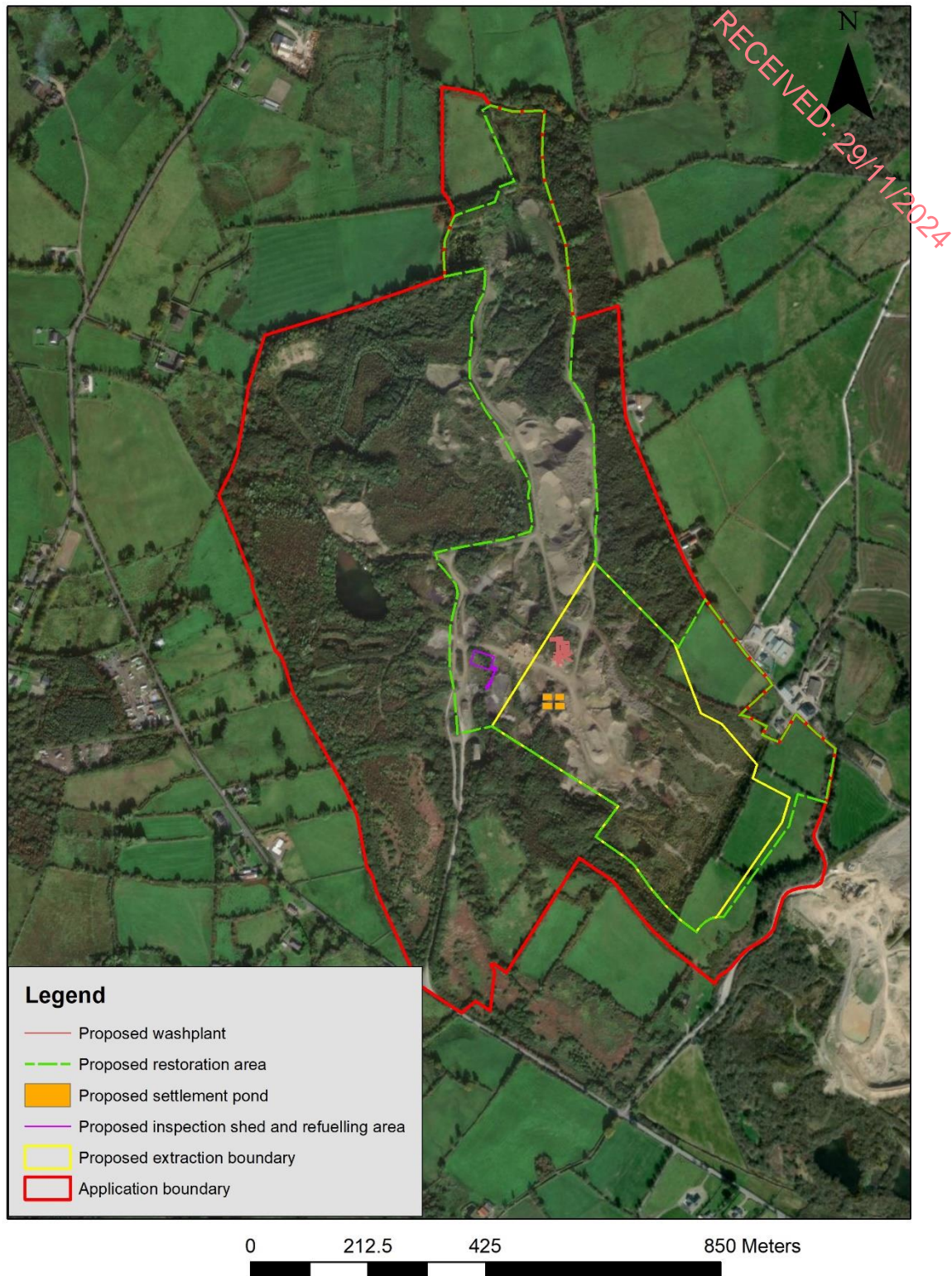


Figure 11-2: Proposed Development boundary on aerial background.

11.2

Assessment Methodology

The assessment of the archaeology, architecture and cultural heritage of the Proposed Development included geographic information system (GIS) mapping, desk-based research and field inspection.

11.2.1

Geographical Information Systems (GIS)

GIS is a computer database which captures, stores, analyses, manages and presents data that is linked to location. GIS is geographic information systems which includes mapping software and its application with remote sensing, land surveying, aerial photography, mathematics, photogrammetry, geography and tools that can be implemented with GIS software. GIS was used to manage the datasets relevant to the archaeological and architectural heritage assessment and for the creation of all the maps in this section of the report. This involved the overlaying of the relevant archaeological and architectural datasets on georeferenced aerial photographs and road maps (i.e. Economic and Social Research Institute (ESRI), where available). The integration of this spatial information allows for the accurate measurement of distances of a proposed development from archaeological and cultural heritage sites and the extraction of information on 'monument types' from the datasets. Areas of archaeological or architectural sensitivity may then be highlighted in order to mitigate the potential negative effects of a development on archaeological, architectural and cultural heritage.

11.2.2

Desktop Assessment

The following sources were consulted as part of the desktop assessment for the Proposed Development:

- The Record of Monuments and Places (RMP)
- The Sites and Monuments Record (SMR)
- National Monuments in State Care County Clare
- The Topographical Files of the National Museum of Ireland on www.heritagemaps.ie
- First edition Ordnance Survey maps (OSI)
- Second edition Ordnance Survey maps (OSI)
- Aerial photographs (copyright of Ordnance Survey Ireland (OSI))
- Excavations Database
- National Inventory of Architectural Heritage (NIAH)
- Record of Protected Structures

Each of these are discussed in the following sections.

11.2.2.1

Record of Monuments and Places, SMR and National Monuments

A primary cartographic source and base-line data for the assessment was the consultation of the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) for County Clare. All known recorded archaeological monuments are indicated on 6-inch Ordnance Survey (OS) maps and are listed in these records. The SMR/RMP is not a complete record of all monuments as newly discovered sites may not appear in the list or accompanying maps. In conjunction with the consultation of the SMR and RMP the electronic database of recorded monuments and SMRs which may be accessed at www.heritagedata.maps.arcgis.com was also consulted.

A review of all National Monuments in State Care and those subject to Preservation Orders was also undertaken as part of the assessment.

11.2.2.2 Cartographic Sources and Aerial Photography

The 1st (1840s) and 2nd (1900s) edition OS maps for the area were consulted, where available, as was OSI aerial photography.

11.2.2.3 Topographical Files - National Museum of Ireland

Details relating to finds of archaeological material and monuments in numerous townlands in the country are contained in the topographical files held in the National Museum of Ireland. In order to establish if any new or previously unrecorded finds had been recovered from the Proposed Development area these files were consulted for each townland within and adjacent to the same. Heritage Maps (www.heritagemaps.ie) also contains locational detail for Museum find spots.

11.2.2.4 Archaeological Inventory Series

Further information on archaeological sites may be obtained in the published County Archaeological Inventory series prepared by the Department of Culture, Heritage and the Gaeltacht. The archaeological inventories present summarised information on sites listed in the SMR/RMP and include detail such as the size and location of particular monuments, as well as any associated folklore or local information pertaining to each site. The inventories, however, do not account for all sites or items of cultural heritage interest which are undiscovered at the time of their publication. Many sites have been discovered since the publication of the Inventory Series, which have now been added to the Sites and Monuments Record.

11.2.2.5 Record of Protected Structures

The Record of Protected Structures for County Clare was consulted for the schedule of buildings and items of cultural, historical or archaeological interest. The digital dataset for Clare RPS was downloaded and added to the constraints mapping.

11.2.2.6 Excavations Database

The Excavations Database is an annual account of all excavations carried out under license. The database is available on line at www.excavations.ie and includes excavations from 1985 to 2024. This database was consulted as part of the desktop research for this assessment to establish if any archaeological excavations had been carried out within or near to the Proposed Development area.

11.2.2.7 National Inventory of Architectural Heritage (NIAH)

This source lists some of the architecturally significant buildings and items of cultural heritage and is compiled on a county by county basis by the Department of Culture, Heritage and the Gaeltacht. The NIAH database was consulted for all townlands within and adjacent to the study area. The NIAH survey has been published and the digital dataset was downloaded on to the base mapping for the Proposed Development (www.buildingsofireland.ie). The National Inventory of Architectural Heritage (NIAH) is a state initiative under the administration of the Department of Culture, Heritage and the Gaeltacht and established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999.

The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister for Culture, Heritage and the Gaeltacht to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS).

11.2.3 Field Inspection

The Proposed Development area was subject to a walk-over survey in June 2024. A photographic and descriptive record was made of the Proposed Development area and any features of interest therein.

11.2.3.1 Limitations Associated with Fieldwork

No limitations were encountered during the site walkover survey of the Proposed Development site and all areas were available for inspection.

11.2.3.2 Previous Work Carried out on the Site

An archaeogeophysical survey of a portion of the Proposed Development site was carried out under detection device licence 23R5028 in January 2024 (Dowling, 2024). The survey was undertaken in the greenfield portions of the site towards the south-east side of same within an area proposed for future extraction and restoration. The results of the survey are summarised as follows:

‘The investigation, comprising high resolution magnetic gradiometry, was implemented over several adjoining pasture fields and covered an area of approximately 3.5 hectares. The survey revealed a number of anomalies of potential archaeological interest, including a possible circular feature and a series of potential pits/spreads. Features associated with former agriculture and land division in recent centuries were also identified.’

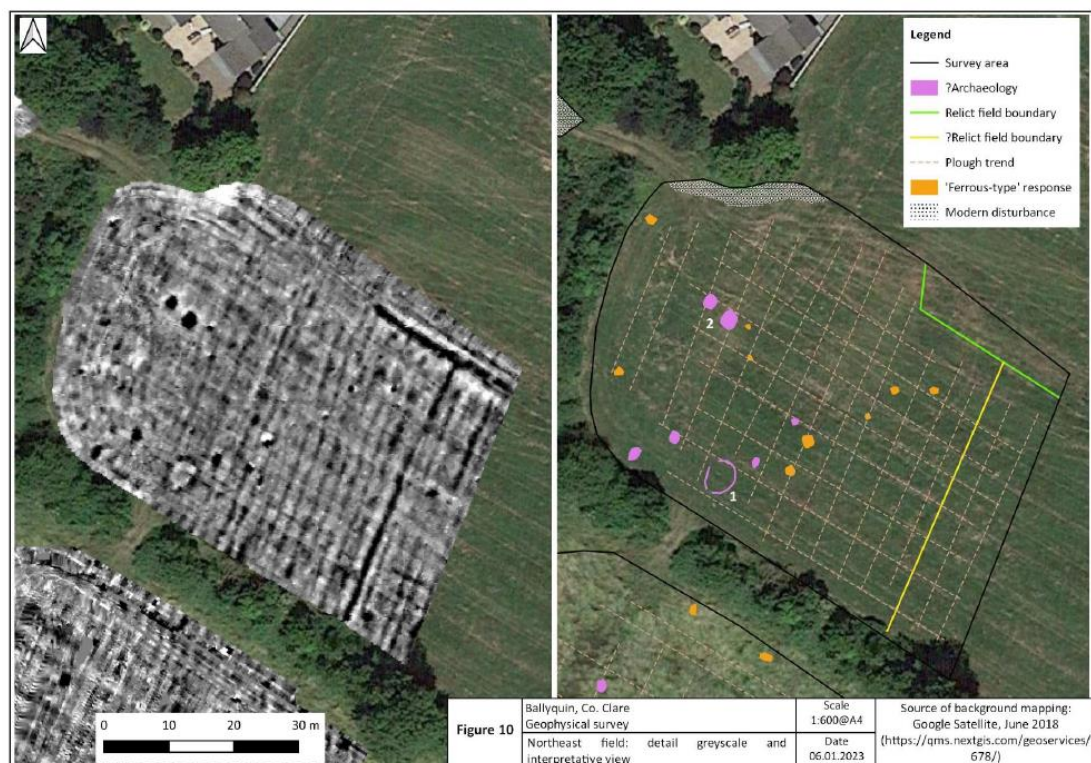


Figure 12. Northeast field: detail greyscale and interpretation view.

Figure 11-3: Extract from geophysical survey report showing potential archaeological anomalies in northeast field.



Figure 11. Southern field: detail greyscale and interpretation view.

Figure 11-4: Extract from geophysical survey report showing potential archaeological anomalies in southern field.

11.2.4 Assessment of Likely Significant Effects

The likely effects on the existing archaeological, architectural and cultural heritage environment are assessed using the criteria as set out in the *Guidelines on the Information to be contained in Environmental Impact Assessment Reports* (EPA, 2022). The following terminology is used when describing the likely effects of the development from a Cultural Heritage perspective.

11.2.4.1 Types of Effect

- Direct effects arise where an archaeological heritage feature or site is physically located within the footprint of the development whereby the removal of part, or all of the feature or site is thus required.
- Indirect effects may arise as a result of subsurface works undertaken outside the footprint of the development, secondary environmental change such as a reduction in water levels and visual effects.
- Cumulative effects arise when the addition of many effects create a larger, more significant effect.
- Residual effects are the degree of environmental changes that will occur after the proposed mitigation measures have been implemented.

11.2.4.1.1 Magnitude of Effects (Significance)

- Profound: Applies where mitigation would be unlikely to remove adverse effects. Reserved for adverse, negative effects only. These effects arise where an archaeological site is completely and irreversibly destroyed.
- Very Significant: An effect which by its character, magnitude, duration or intensity significantly alters most of the sensitive aspect of the environment.

- Significant: An effect which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment. An effect like this would be where part of a site would be permanently impacted upon, leading to a loss of character, integrity and data about an archaeological site.
- Moderate: A moderate effect arises where a change to an archaeological site is proposed which though noticeable, is not such that the integrity of the site is compromised and which is reversible. This arises where an archaeological site can be incorporated into a modern day development without damage and that all procedures used to facilitate this are reversible.
- Slight: An effect which causes changes in the character of the environment which are not high or very high and do not directly impact or affect an archaeological site.
- Not Significant: An effect which causes noticeable changes in the character of the environment but without significant consequences.
- Imperceptible: An effect on an archaeological site capable of measurement but without noticeable consequences.

11.2.5 Methodology for the assessment of effects on visual setting (indirect effects)

Those cultural heritage assets that are considered in this assessment are detailed below Table 11-1 with the relevant distances.

While direct physical effects to a site or monument can easily be assessed in quantitative terms, the assessment of effects on setting can be subjective and as such is a matter of qualitative, professional judgement and experience. The distances below used in the assessment of effects on setting are regarded as appropriate and are based on professional judgement.

Table 11-1: Cultural Heritage Assets considered according to sensitivity

Cultural Heritage Asset	Sensitivity	Distance Considered
National Monuments (State Ownership and Preservation Order Sites)	High	5km of Proposed Development site boundary
Recorded Monuments, RPS	Medium	2km of Proposed Development site boundary
NIAH structures	Low	2km of Proposed Development site boundary
Undesignated sites, if relevant	Low	Within EIAR site boundary

11.3 Existing Environment

11.3.1.1 Archaeological Heritage

Archaeological heritage includes National Monuments, sites which are subject to a Preservation Order, sites listed in the RMP/SMR and newly discovered archaeological sites. Each of these are addressed in the following sections.

11.3.1.1.1 National Monuments

National Monuments are those recorded monuments which are in the ownership / guardianship of the Minister for Culture, Heritage and the Gaeltacht (DCHG). They are frequently referred to as being in 'State Care'. Sites which are subject to Preservation Orders are also considered in the same category as National Monuments as the prior written consent of the Minister is required for any works at or in proximity to such monuments.

No National Monuments or those subject to a Preservation Order are located within the Proposed Development site boundary or in close proximity to same. The nearest national monument is located over c. 7.9km to the north-east and comprises St Molua's church in Killaloe (Nat Mon No. 279) (Figure 11-5).

The church in Killaloe (Nat Mon 279) is described on the Historic Environment Viewer (HEV) as follows:

CL045-033015 : Church (present location) : SHANTRAUD

Description: Originally located on Friar's Island, Co. Tipperary, on the River Shannon (TN025-022001-) until its removal and re-erection in the grounds of Killaloe RC church in 1929. St. Molua's oratory (built around the 10th/11th century) was moved due to flooding of the River Shannon by the ESB for the Ardnacrusha power station. The church was called after St Molua of Clonfert-mulloe (Co. Laois) who is said to have had a church in the Killaloe district and who died in the early 7th century. Present remains consist of a nave (ext. dims. nave 5.57m N-S; 8.2m E-W; wall T 0.8m) and chancel (4.2m N-S; 4m E-W; wall T 1.05m) church, the nave of which is the earlier building with the chancel being added later (Leask 1930, 130-35), as revealed when the church was being moved to its present location. The nave walls are constructed with uncoursed cyclopean sandstone masonry while the chancel walls are constructed with roughly squared stones of smaller size. The chancel has a single-light round-headed E window with stepped sillstone and unusual flat-headed doorway in the S wall. The round-headed chancel arch has curious jambstones which are not flush with the chancel arch and project inwards. The triangular-shaped stone chancel roof is bonded with lime mortar and is well preserved. The nave walls are poorly preserved and only survive several courses high with a poorly preserved trabeate doorway in the W wall. Excavations at Friar's Island prior to the removal of the church revealed that the church was constructed on a stone platform enclosed by a possible cashel with a revetment wall of unknown purpose. A second stone platform (22ft (6.71m) N-S; 50ft (15.25m) E-W) was located to the S of the church and eleven skeletons were uncovered under or close to the foundations of the N wall of the church (Macalister 1929, 16-24). The stone-roofed chancel of this church may have been constructed to house some relic of St. Molua, an earlier saint than St. Flannan who probably lived in the 8th century (Harbison 2005, 72). St. Molua's church is a National Monument in State Care, no. 279.

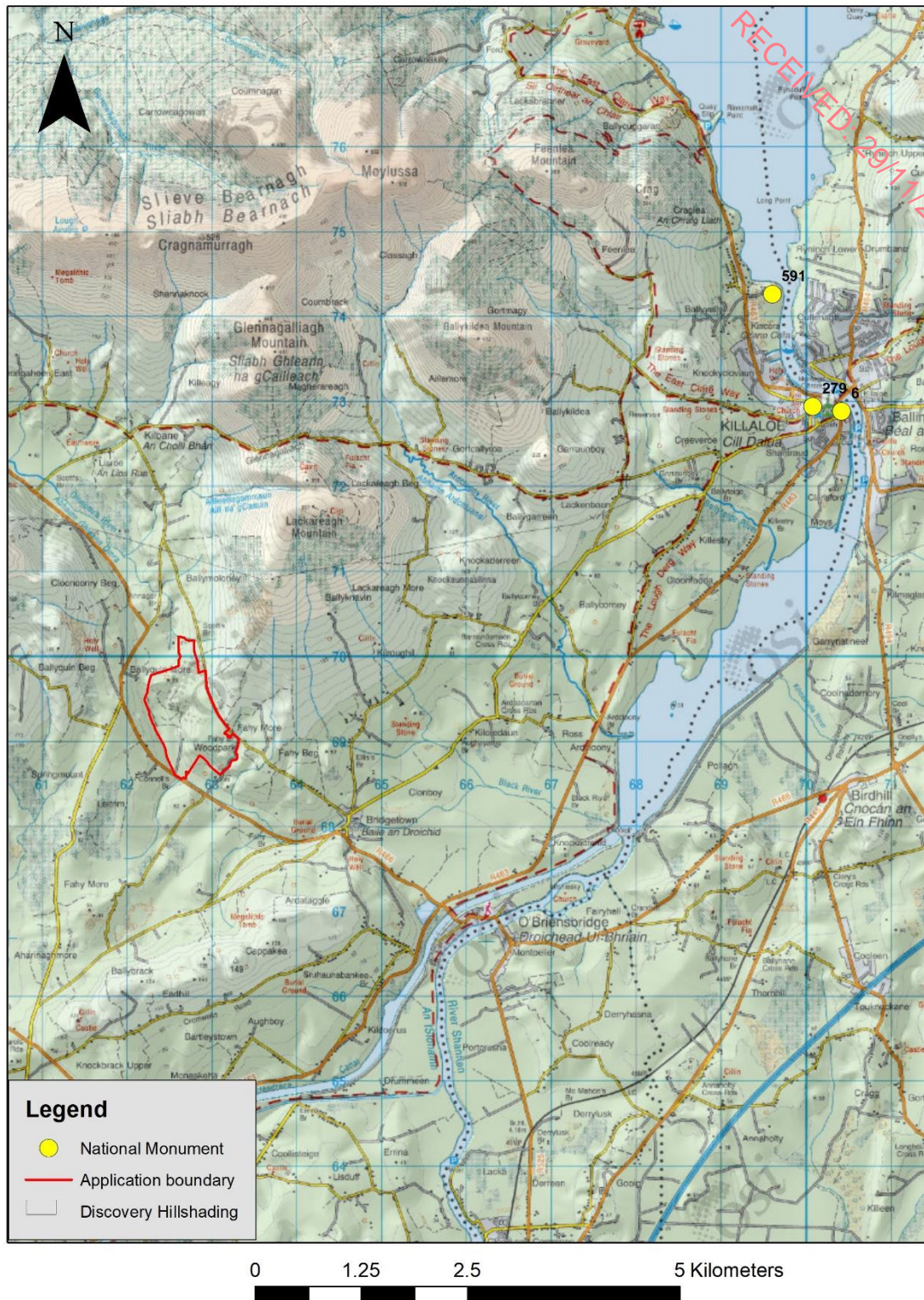


Figure 11-5: Nearest National Monument 279 in relation to the Proposed Development boundary.

11.3.1.1.2 Recorded Monuments

Three recorded monuments, CL044-073— Enclosure, CL044-074— Enclosure and CL044-078— Enclosure, are located within the Proposed Development boundary. A total of twenty-nine monuments are located within 2km of the Proposed Development boundary and include the three monuments listed above. They are shown on Figure 11-6 and are listed in Table 11-2 below. Of the monuments located outside the Proposed Development boundary, eight are located within 500m of same and are highlighted in Table 11-2.

Table 11-2: Recorded monuments within 2km of the Proposed Development site boundary.

RMP NO.	CLASS	ITM E	ITM N	TOWNLAND
CL044-055—	Enclosure	560855	670083	BALLYQUIN BEG
CL044-056—	Enclosure	561538	670505	CLOONYCONRY BEG
CL044-057—	Ritual site - holy well	561690	670061	BALLYQUIN BEG
CL044-058—	Enclosure	561813	670151	BALLYQUIN BEG
CL044-059—	Enclosure	561828	670629	CLOONYCONRY BEG
CL044-061—	Enclosure	562369	670488	BALLYQUIN MORE
CL044-062—	Enclosure	562892	671060	BALLYMOLONEY
CL044-063—	Enclosure	563086	671987	BALLYMOLONEY
CL044-064—	Enclosure	564035	669909	FAHY BEG
CL044-067—	Enclosure	564343	670231	BALLYKNAVIN
CL044-070—	Enclosure	560709	669881	CAPPANASLISH
CL044-071—	Enclosure	560899	668751	CAPPANASLISH
CL044-072—	House - 16th/17t	562115	669894	BALLYQUIN MORE

RMP NO.	CLASS	ITEM E	ITEM N	TOWNLAND
	h century			
CL044-073—	Enclosure	562412	669801	BALLYQUIN MORE
CL044-074—	Enclosure	562423	669622	BALLYQUIN MORE
CL044-075—	Enclosure	562745	668313	FAHY MORE SOUTH
CL044-076—	Enclosure	562880	668652	WOODPARK (Tulla Lower By.)
CL044-077—	Enclosure	562982	669697	BALLYMOLONEY
CL044-078—	Enclosure	563072	668723	WOODPARK (Tulla Lower By.)
CL044-079—	Enclosure	563430	668301	FAHY MORE NORTH
CL044-080—	Enclosure	563647	669062	FAHY MORE NORTH
CL045-052001-	Children's burial ground	564918	670181	KILROUGHIL
CL045-052002-	Bullaun stone	564877	670175	KILROUGHIL
CL045-053—	Standing stone	565233	669332	KILROUGHIL
CL053-018—	Enclosure	563328	667247	ARDATAGGLE
CL053-020—	Megalithic tomb - wedge tomb	563378	667077	ARDATAGGLE
CL053-021—	Enclosure	563922	667354	ARDATAGGLE
CL053-022—	Burial ground	564021	667921	FAHY BEG

RMP NO.	CLASS	ITM E	ITM N	TOWNLAND
CL054-002—	Ritual site - holy well	564628	667751	ARDATAGGLE

Of the three recorded monuments located within the Proposed Development boundary, two (CL044-073— and CL044-074—) are situated towards the north end of same, over 200m to the west of the proposed restoration area. They are not located within the footprint of the latter, the proposed extraction area or any other proposed infrastructure (settlement ponds, inspection sheds, etc). Both monuments comprise enclosures. The northernmost monument (CL044-073—) is described on the HEV (see below), however, a description for CL044-074— is not currently available on line. The Archaeological Survey of Ireland (ASI) files for this and other nearby monuments were consulted, however, no descriptive information pertaining to the enclosure is located therein.

CL044-073— : Enclosure : BALLYQUIN MORE

Description: Listed as 'Enclosure' in the SMR (1992) and the RMP (1996) it was represented on the 1st ed. OS 6-inch map as a circular tree-filled enclosure partly protruding from a wooded area. It had been entirely removed by quarrying prior to 1995.

Compiled by: Paul Walsh

Date of upload: 12 August 2015

This monument is depicted on the first edition OS map as a circular area adjacent to a strip of woodland, and indeed is depicted as being wooded itself. On the later second and last edition maps the enclosure is depicted as a sub-circular area projecting from the aforementioned strip of woodland. As the monument description refers to, the enclosure has been removed by quarrying activities.

CL044-074— : Enclosure : BALLYQUIN MORE

No information available.

This monument is not shown on the first edition OS map but is depicted as a hachured sub-circular area on the second and last edition maps. A review of the available aerial imagery for the area would suggest that this monument has also been removed by quarrying activity.

CL044-078— : Enclosure : WOODPARK (Tulla Lower By.)

No information available.

The third monument within the Proposed Development boundary CL044-078— also comprises an enclosure. A description for the monument is not currently available online or in the ASI files. It is depicted on all editions of the historic mapping as a hachured sub-circular area and is named 'Ardpatrick'. The monument is located in pasture c. 30m south of the proposed extraction area and proposed restoration area. While it is located within the Proposed Development boundary no works are proposed for this area and a 30m buffer zone will be put in place from the outer extent of the monument.

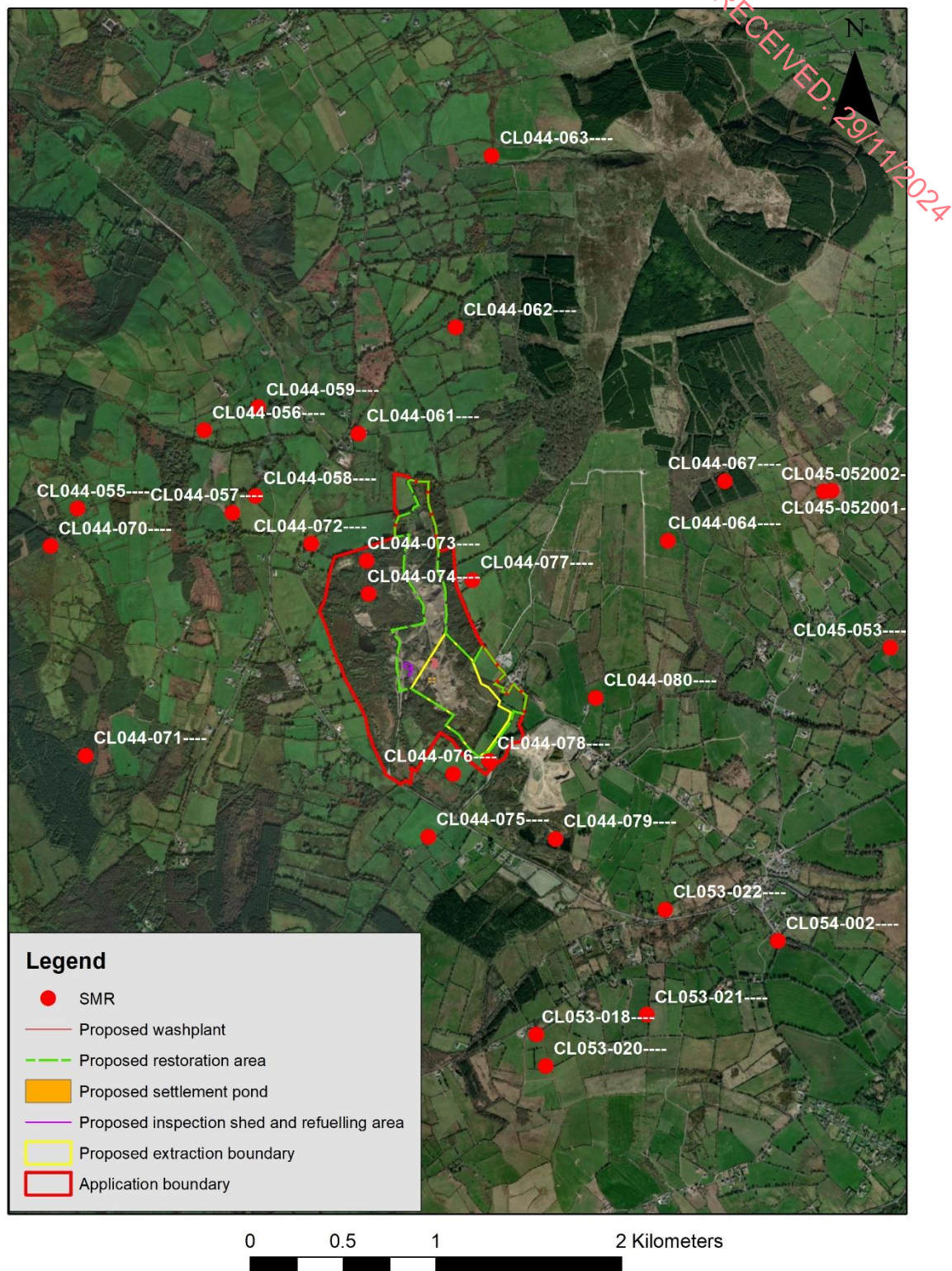


Figure 11-6: Recorded monuments within 2km of the Proposed Development boundary.

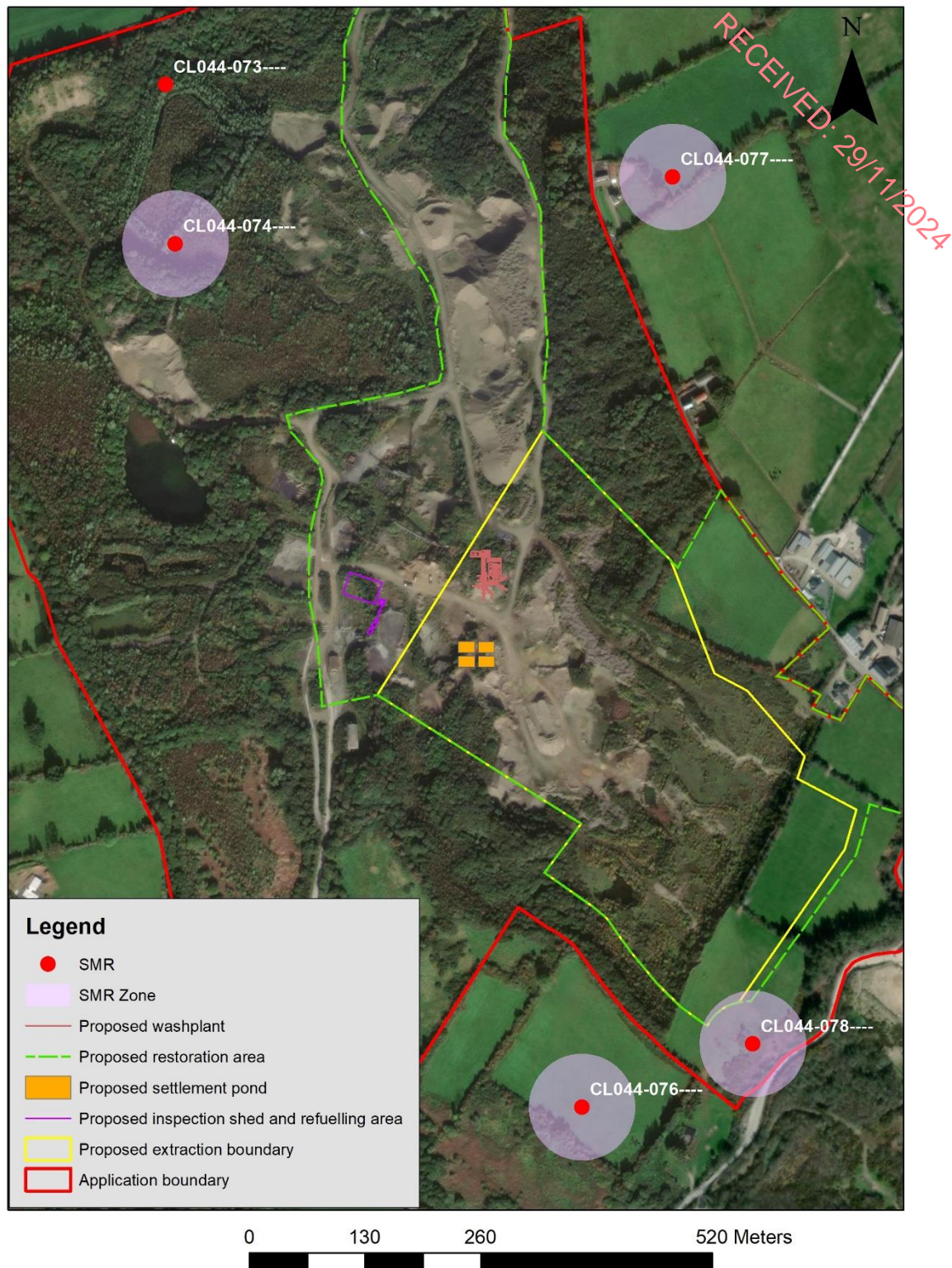


Figure 11-7: Recorded monuments within and adjacent to the Proposed Development boundary.

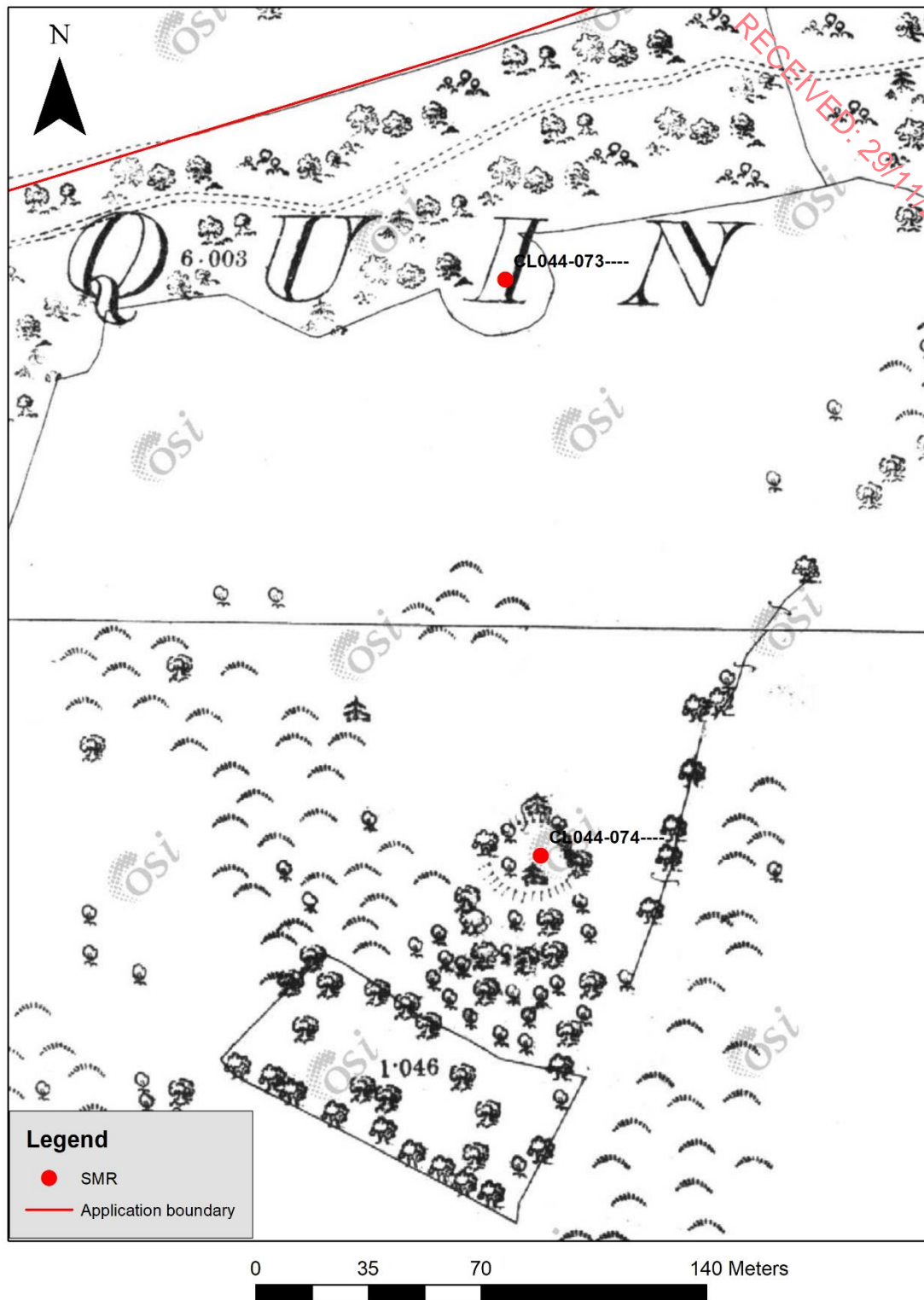


Figure 11-8: Enclosures CL044-073— and CL044-074— on second edition OS background.



Figure 11-9: Extract from HEV showing CL044-073— and CL044-074— on 1996-2000 MapGenie aerial background.

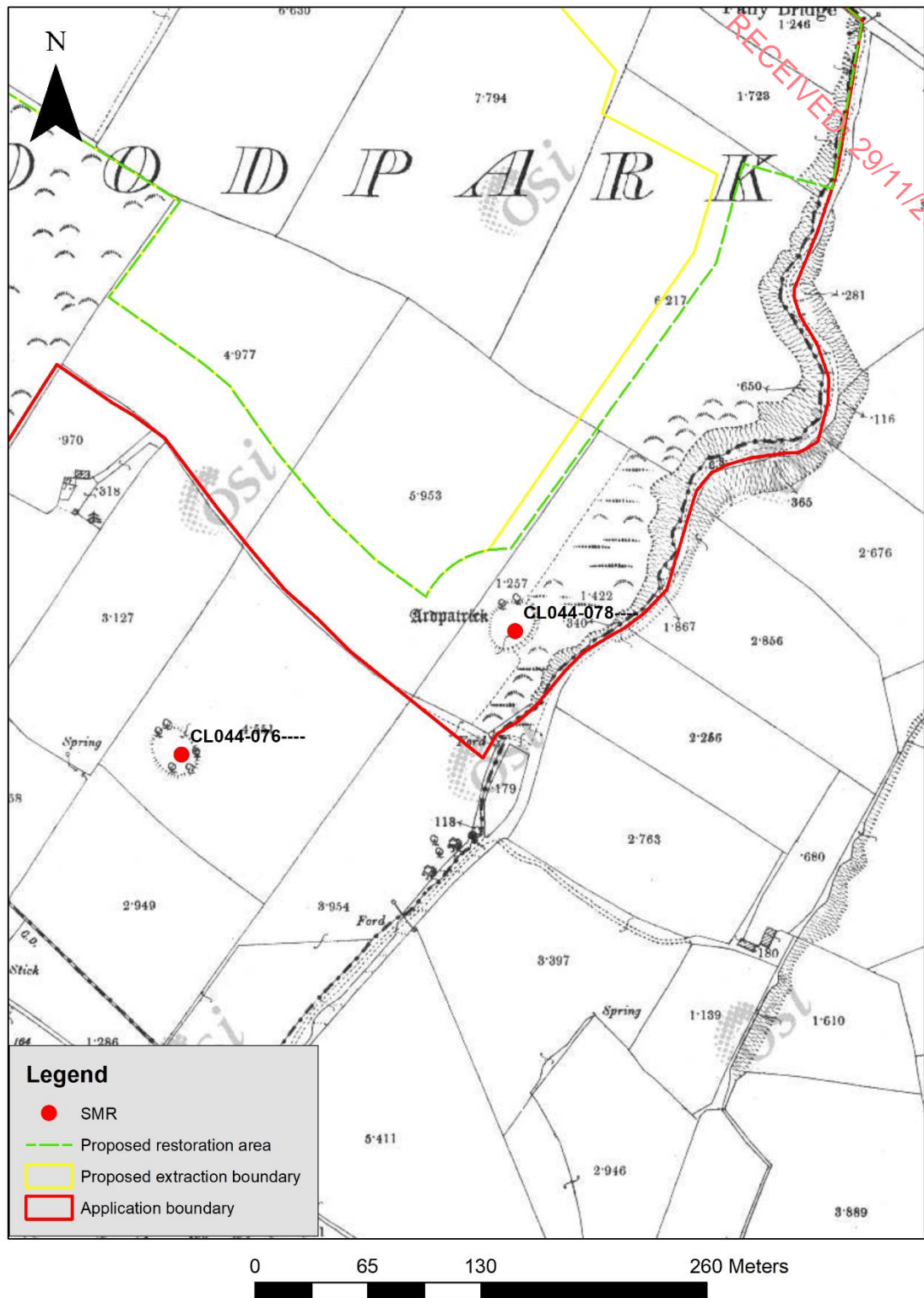


Figure 11-10: Enclosure CL044-078— on second edition OS background.

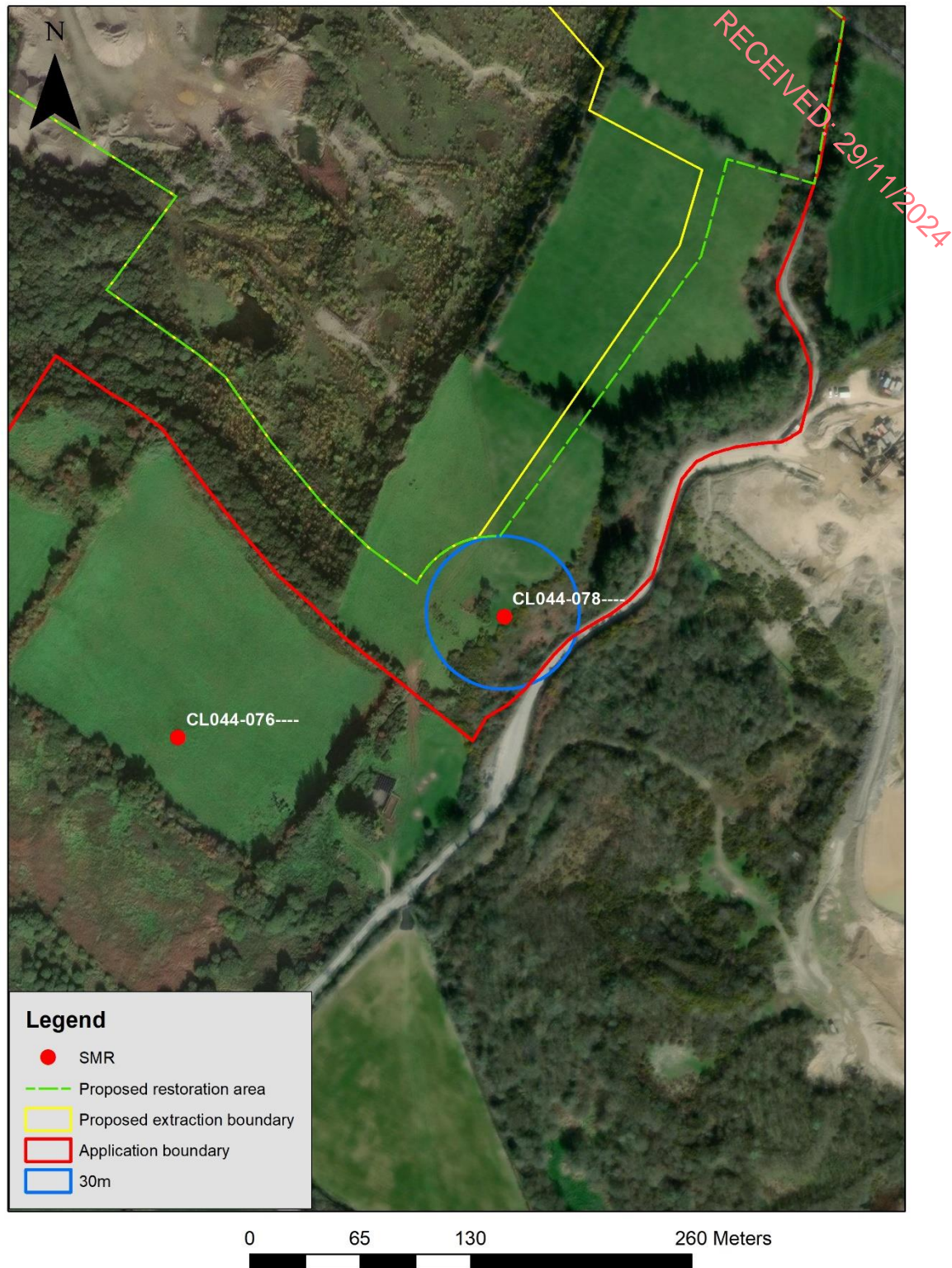


Figure 11-11 CL044-078— with 30m buffer.

11.3.1.1.3 Results of Field Inspection

No previously unrecorded above-ground monuments or items of cultural heritage merit were noted within the Proposed Development site during the walk-over survey. A photographic record was made of the Proposed Development area which predominantly comprised the existing quarry pit and the adjacent fields into which the proposed extraction and restoration area extends. A photographic record of the Proposed Development is presented in Appendix 10-1.

11.3.1.1.4 Excavations Database

The database of excavations carried out in Ireland (www.excavations.ie) was consulted for any such licensed work which took place on or adjacent to the Proposed Development site. No entries were returned.

11.3.1.1.5 Topographical Files of the National Museum of Ireland

The topographical files of the National Museum of Ireland on www.heritagemaps.ie were consulted for archaeological finds from the townlands within or adjacent to the Proposed Development boundary.

No such find spots are recorded for the townland of Woodpark or adjacent townlands, with the nearest find spot, comprising a bones and pottery, being c.2.7km to the south-east.

National Museum Point: Bones; Pottery

Name IA/150/86


Object Type Bones; Pottery

11.3.1.2 Architectural and Cultural Heritage

A number of documentary and cartographic sources were utilised in order to ascertain the potential for the presence of architectural /cultural heritage features on or within the area of the Proposed Development. The RPS and NIAH for County Clare were downloaded onto the base mapping for the project in order to ascertain if any such structures were located on or adjacent to the Proposed Development site. Cultural heritage includes items such as buildings, farmhouses, gates, bridges, piers, and stone field boundaries.

11.3.1.2.1 Protected Structures

No Protected Structures subject to statutory protection are located within the Proposed Development site boundary. The nearest protected structure is located c. 580m to the north-west and comprises Glenomra House (RPS Ref. 427). The house is described in the Clare RPS as follows:

RPS No.: 427	Name: Glenomra House	NGR: 161902 ; 170212	
NIAH No.: N/A	Area: Bridgetown	Map: Volume 2	
Structure: House	Townland: Ballyquin More	Map reference: 18	
Date: 1910-1915	Summary description: Detached derelict single-storey dormer five-bay architect designed, Edwardian house, c.1912. Two central chimneys, advanced wings to central section flanking open "porch". Gabled extension to left at rear. Ornate carved panelled entrance hall and fireplace.		
In use as: Not inhabited			
Additional Use: N/A	Categories of special interest: Architectural, Detail/Design		
Historical Use: Residence			
Rating: Regional			

It should be noted that the Protected Structure Ref. 427 is different to the Glenomra House which is indicated and named on the second and last editions of the historic OS maps a short distance north-west of the Proposed Development boundary, and is associated with the historic garden named Ballyquin House (see below).

Further Protected Structures are located in the village of Bridgetown c. 1.5km to the south-east and are also included in the NIAH (see below).

11.3.1.2.2 NIAH structures and Historic Gardens

No structures or items listed in the NIAH are located within the Proposed Development site boundary. The nearest NIAH structures comprise a bridge (NIAH Reg. 20404518) and a church (NIAH Reg. 20405405) which are located c. 1.5km to the south-east of the Proposed Development boundary in the

village of Bridgetown. They are also included in the RPS (Ref. 190 and 172, respectively) and are described on www.buildingsofireland.ie as follows:

NIAH Reg. 20404518 CLONBOY, Bridgetown, CLARE

Description

Double-arch rubble stone road bridge over river, built c. 1850, with cut-stone voussoirs and V-cutwaters.



Plate 11-1: Bridge NIAH Reg. 20404518. (Photo courtesy of www.buildingsofireland.ie).

NIAH Reg. 20405405 Saint Thomas's Catholic Church, ARDATAGGLE, Bridgetown, CLARE

Description

Freestanding Roman Catholic church, built c. 1980, with four-bay side elevations having projecting flat-roofed porches and sacristy. Possibly incorporating fabric of earlier building. Pitched artificial slate roofs. Rendered walls. Full-height window openings with sloping sills and leaded glass. Half-height window with pointed arch to gable. Glazed timber doors to porches with sidelights. Retaining interior features. Rendered boundary walls. Graveyard to site with grave markers from c. 1850 to present.



Plate 11-2: Saint Thomas's Catholic Church, Reg. 20405405 (Photo courtesy of www.buildingsofireland.ie).

One historic garden associated with Ballyquin House is located a short distance to the north-west of the Proposed Development boundary in the townland of Ballyquin More. The structure was named Ballyquin House on the first edition OS map but was later named Glenomra, not to be confused with the Protected Structure 'Glenomera House' (RPS Ref. 427) which is located further to the north-west in Ballyquin Beg. The gardens associated with Ballyquin House (later Glenomra) are located in the townland of Ballyquin More and the demesne associated with the house, is depicted as a shaded area on the first edition OS map. The north-west portion of the Proposed Development site is located within the demesne, with the existing quarry occupying much of this area. The garden is depicted on the first edition OS map as a laid out rectangular area immediately south-west of the house. The garden is still extant by the later second edition OS map and a 'sun dial' is indicated within same. By the last edition the garden features are no longer depicted and Glenomra House is named but described as 'in Ruins'.

The site of a 17th century house at this location is a recorded monument CL044-072— (see Section 11.3.1.1.2 above). The ASI file for this monument does not provide any detailed description other than 'partly 17th C – now demolished'.

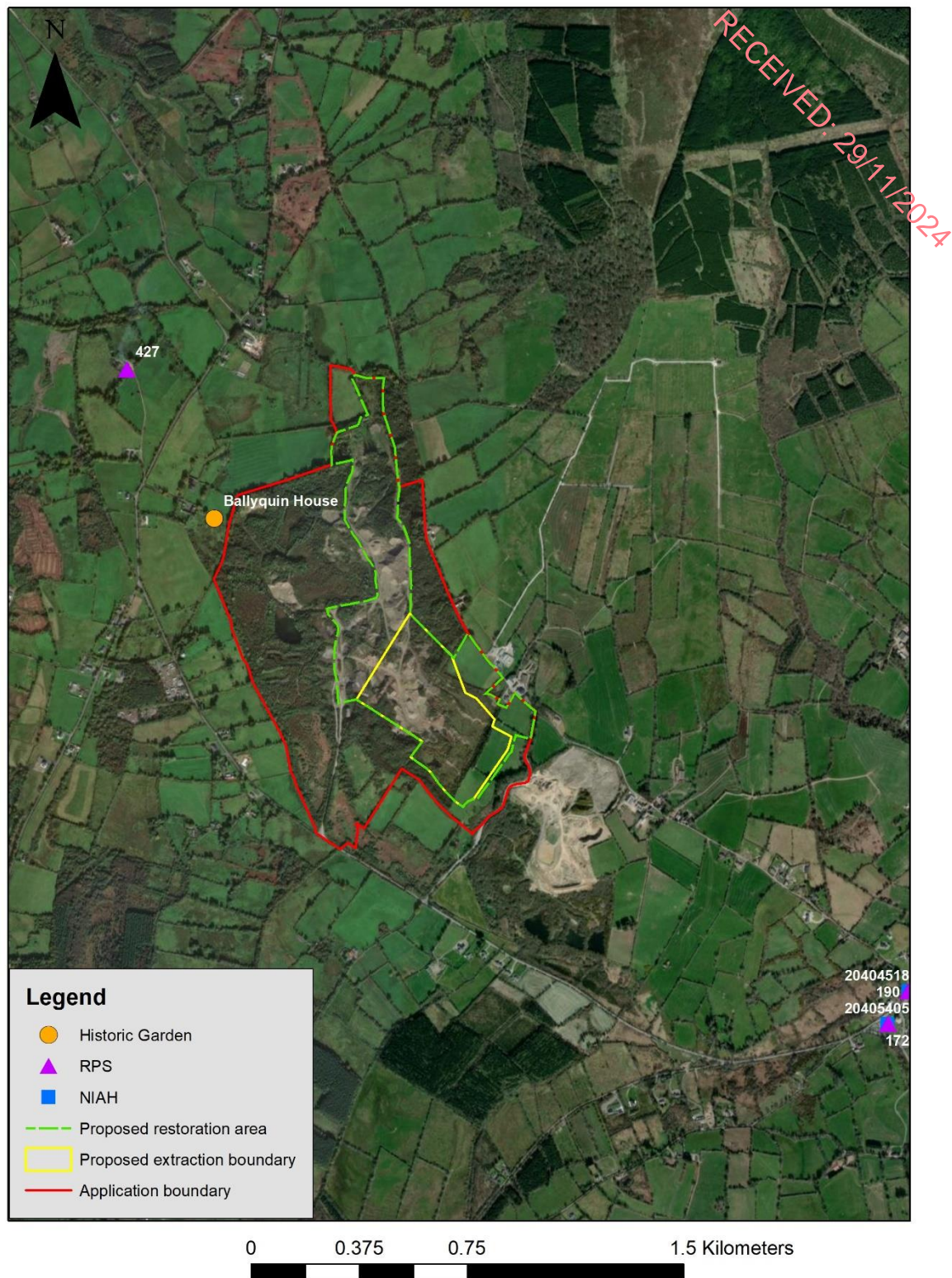


Figure 11-12: Proposed Development in relation to nearest RPS and NIAH structures and historic gardens.

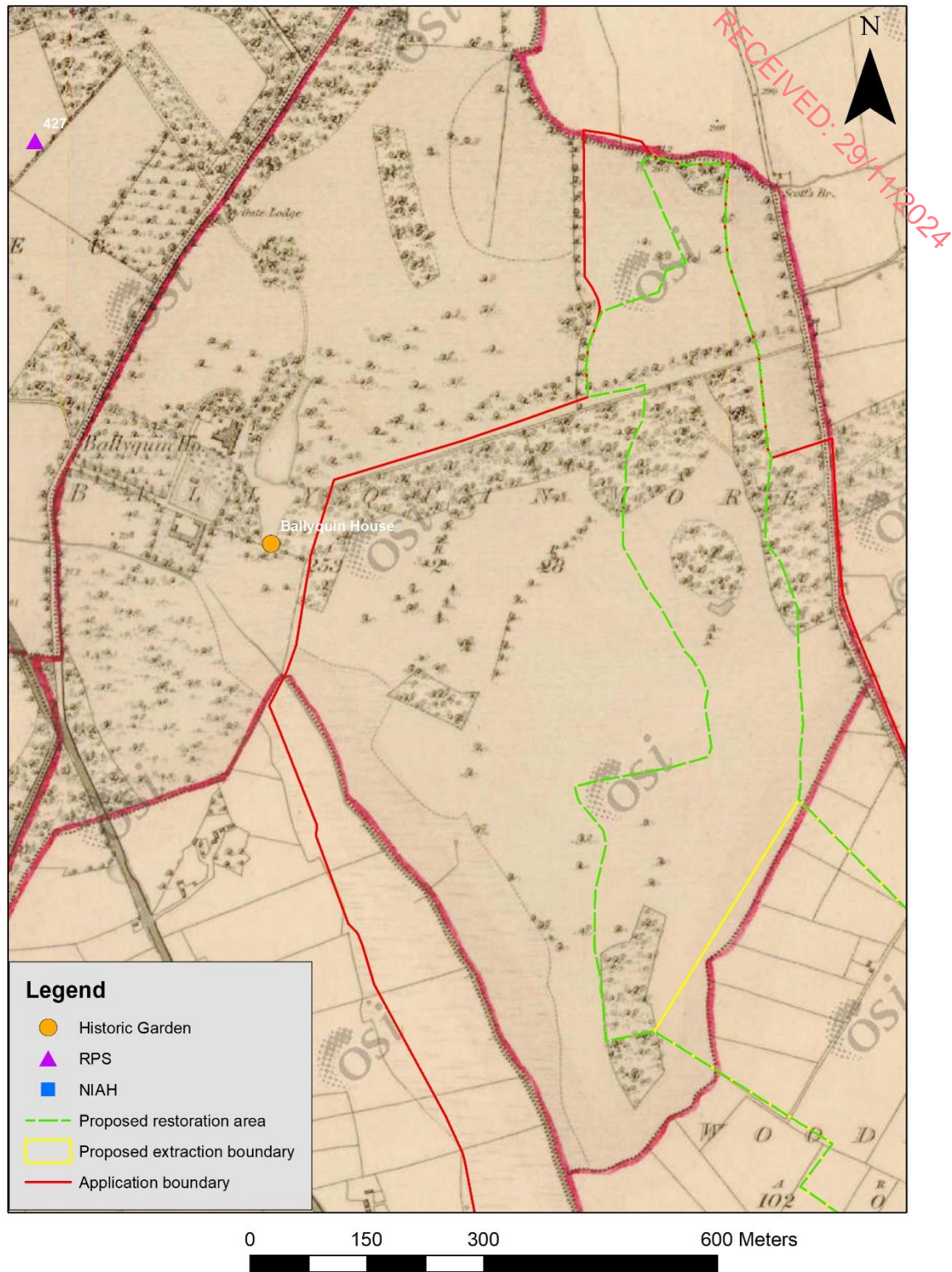


Figure 11-13: Northern portion of Proposed Development boundary on first edition OS background showing Ballyquin House and its associated garden and demesne (shaded).

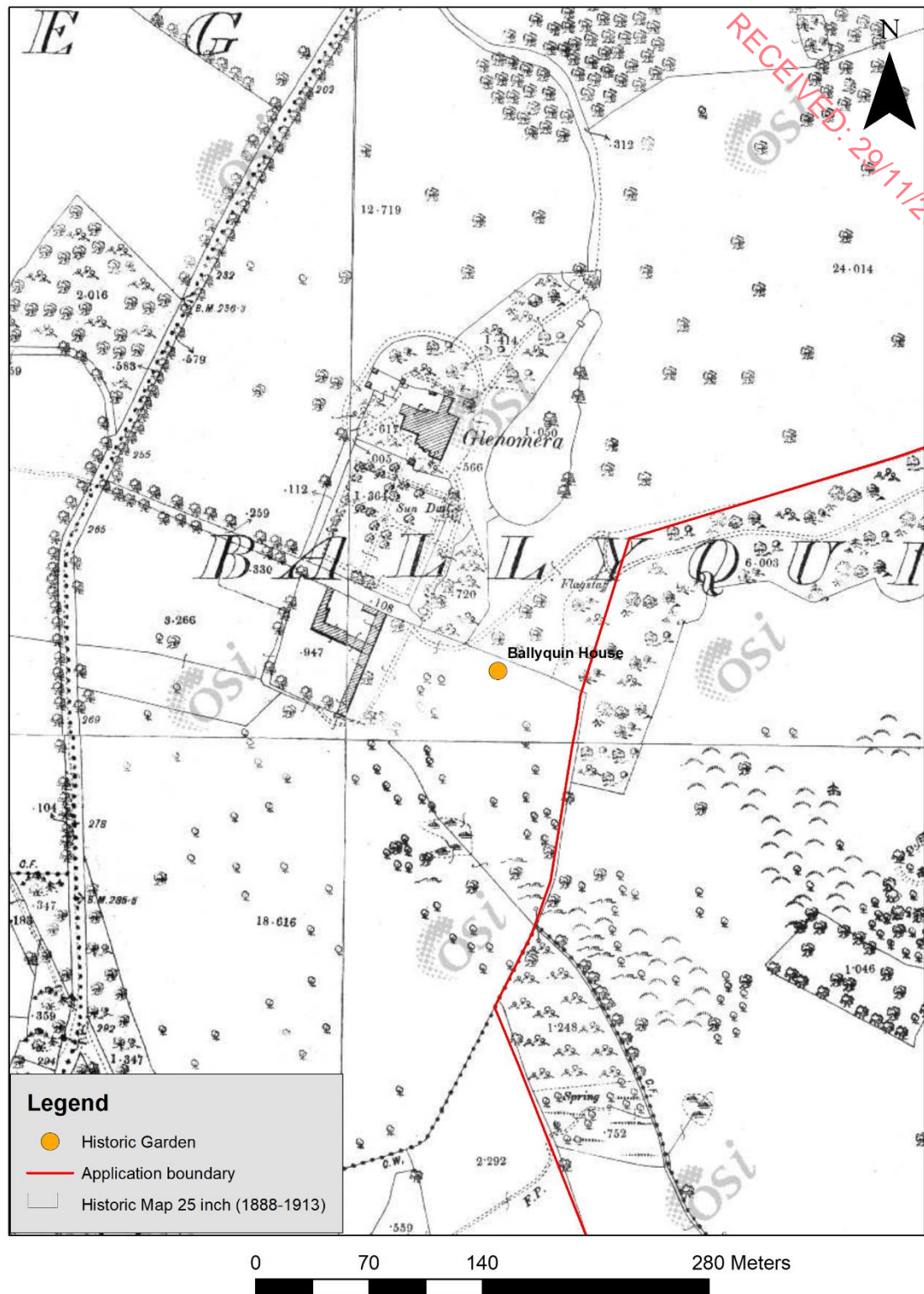


Figure 11-14: Historic garden at Ballyquin (house now renamed Glenomera) on second edition OS background.

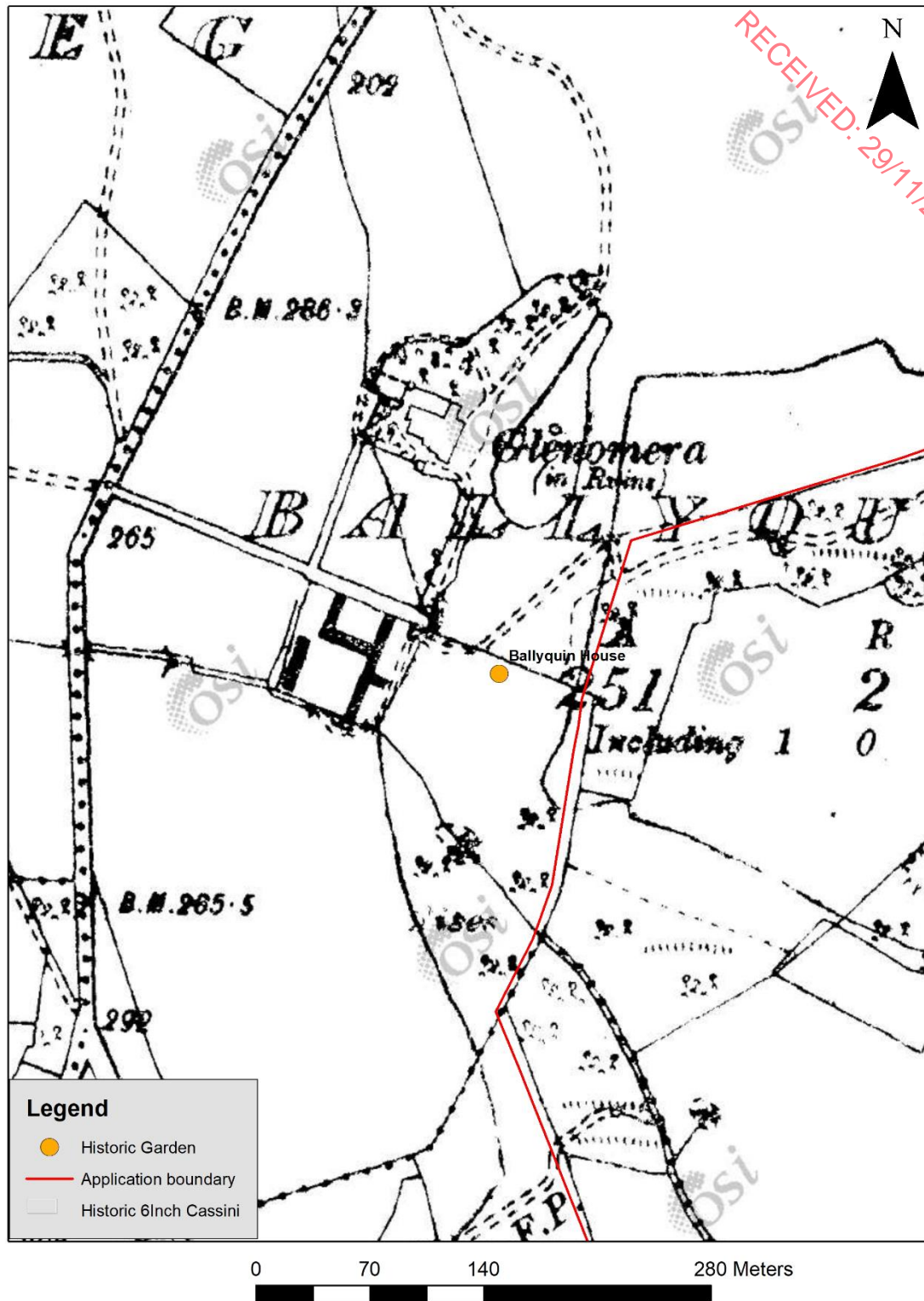


Figure 11-15: House and garden as depicted on later Cassini 6-inch background.

11.3.1.2.3 Cartographic Evidence

The available historic Ordnance Survey maps were consulted for any items of cultural heritage merit that may be located within the Proposed Development site.

1st and 2nd Edition OS maps

The Ordnance Survey came to Ireland in 1824 in order to carry-out a precise admeasurement of the country's 60,000 or so townlands as a preliminary to the larger task of reforming Ireland's local taxation system. The townland boundaries were demarcated by a Boundary Commission, and the Ordnance Survey had the task of measuring them. In addition to boundaries the maps are truly topographical in content. Drawn at the large scale of six inches-to-one-mile (1:10,560) it was important to mark all buildings, roads, streams, placenames, etc, that were required for valuation purposes. Ultimately the maps were used as a basis for the rateable valuation of land and buildings in what became known as Griffith's Valuation. Working from north to south, the survey began in Antrim and Derry in 1829 and was completed in Kerry in 1842. It was published as thirty-two county maps between 1832 and 1846, the number of sheets per county varied from 153 for County Cork to 28 for Dublin, each of the 1,994 sheets in the series depicting an area 21,000 by 32,000 feet on the ground. Each county was projected on a different central meridian and so the maps of adjacent counties do not fit neatly together at the edges. Map content stops at the county lines.

The First Edition

The early Ordnance Survey maps are an unrivalled source for the period immediately before the Great Irish Famine (1847-50) when the population was at the highest level ever recorded in Ireland.

As outlined above, the first edition map (1829-41) for the Proposed Development site depicts the northern half of same as being located within the demesne for what was then named Ballyquin House (Figure 11-13). Much of the south-eastern portion of the site is depicted as land divided into fields for agricultural purposes (Figure 11-16). The recorded monuments discussed in Section 11.3.1.1.2 are also shown on this edition and/or the later second edition (Figure 11-8 and Figure 11-10).

The Second Edition

The second edition 25 inch map (1897-1913) also depicts the south-eastern portion of the Proposed Development site as divided into fields. The lands further to the north-west are depicted as largely open scrub with strips of forestry also present at the north and north-east (Figure 11-17).

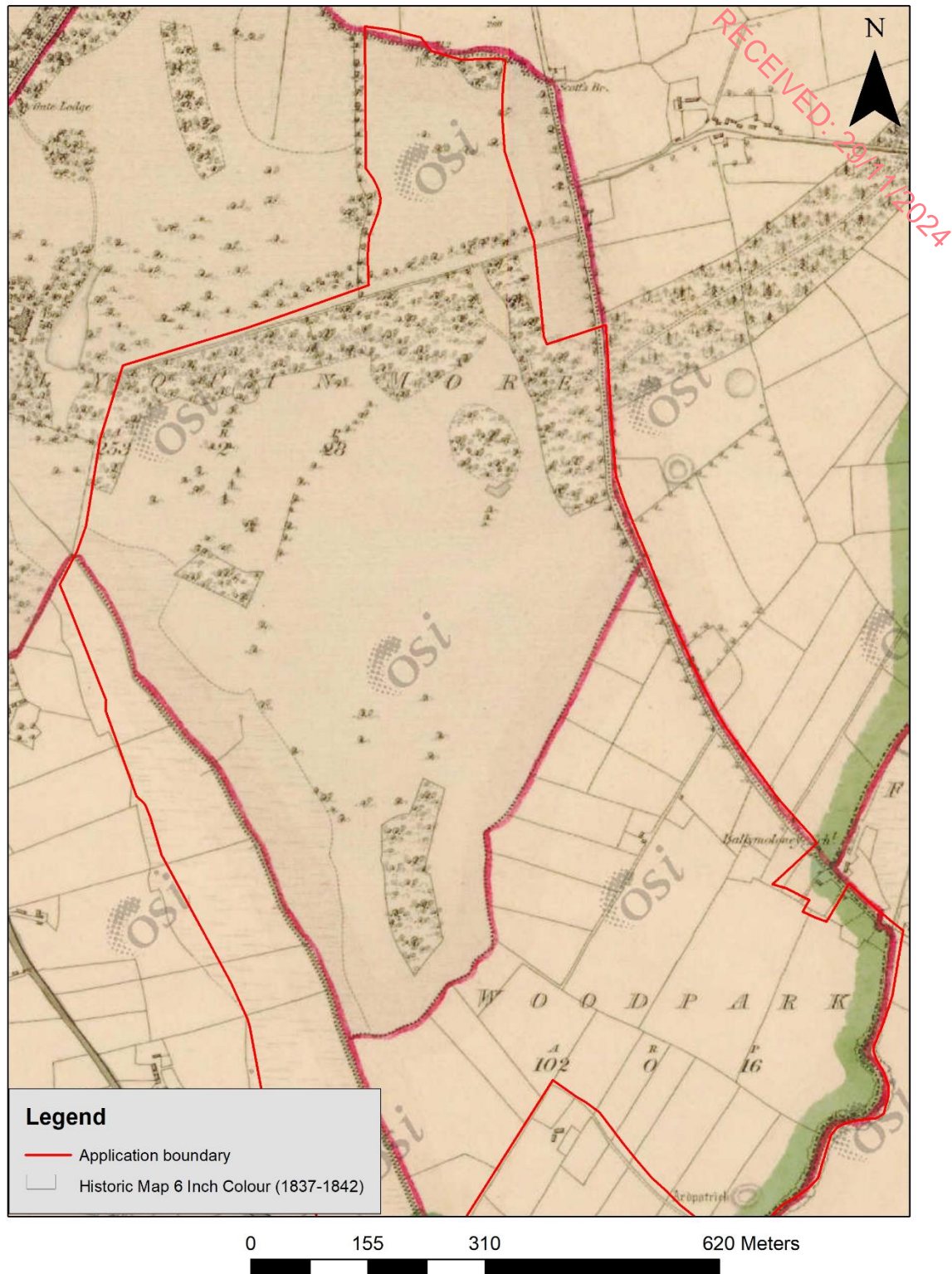


Figure 11-16: Proposed Development boundary on 1st edition OS background.

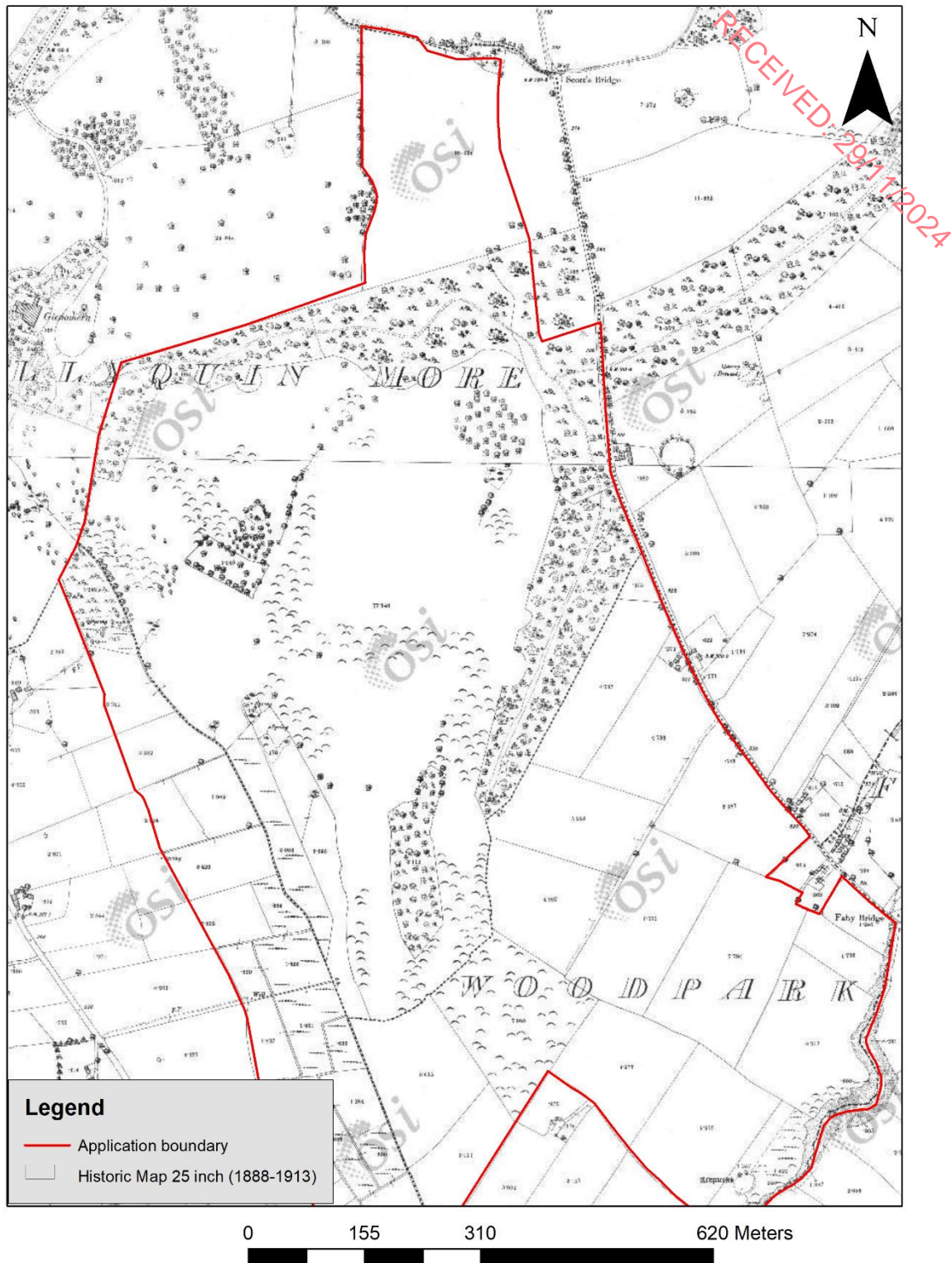


Figure 11-17: Proposed Development boundary on 2nd edition OS background.

11.3.1.2.4 Townlands and Administrative Boundaries

Townlands and administrative boundaries may indicate the presence of archaeological features within a development site. Administrative counties are subdivisions of pre-established counties which were formed for administrative purposes in the nineteenth and twentieth centuries. Baronies are administrative units larger than civil parishes and originally established as the primary subdivision of counties by the British administration in Ireland. Irish baronies which were formed at the time of the

Norman conquest were usually named either after Irish territories, or from places which had been of importance in pre-Norman times. Irish baronies came into existence at different periods. The division of Ireland into counties and baronies was a process which continued down to the reign of James I. The original baronies in Ireland were the domains of the Norman barons; in the final stage of development they were divisions of counties created merely for greater convenience of administration. The word barony is of feudal origin, and was applied to a tenure of a baron, that is, of one who held his land by military service, either directly from the king, or from a superior feudal lord who exercised royal privileges. The origin of the Irish barony (a division of land corresponding to the English hundred) is to be found in the grants of lands which were made to the barons of Leinster and the barons of Meath (Liam Price, 'Ráith Oinn', Éigse VII, lch. 186-7). Civil parishes are administrative units larger than townlands and based on medieval ecclesiastical parishes. Civil parishes, modern Catholic parishes and Church of Ireland parishes may differ in extent and in nomenclature. Counties are administrative units larger than baronies and originally established by the British administration in Ireland between the twelfth and the seventeenth centuries. Some of these were subsequently subdivided into smaller administrative county units.

Townlands are the smallest land units which were determined and established in the Irish administrative system in the first half of the nineteenth century. Many of the townlands were in existence prior to that. Townland names are a valuable source of information, not only on the topography, land ownership and land use within the landscape, but also on its history, archaeological monuments and folklore. Logainm.ie was utilised to ascertain the origin of the townland names within the Proposed Development site.

The Proposed Development is located within the townlands of Ballyquin More, Woodpark and Leitrim. Ballyquin More refers to the large townland or homestead of 'Quinn' while Woodpark may be derived from the field of the wood. No specific meaning is provided on www.logainm.ie for Leitrim, however, it is likely to be derived from the Irish Liatroim which refers to the grey ridge.

11.4

Likely Effects and Associated Mitigation Measures

11.4.1

Construction Phase Potential Effects (Indirect)

Indirect effects, in terms of archaeology, architectural and cultural heritage are considered to be those effects which happen away from 'the site'. This includes effects on visual setting of any cultural heritage assets in the wider landscape. Since these effects are only possible once development is operational, they are considered operational effects and are therefore discussed in Section 11.4.3 below. No indirect effects were identified which would occur at the construction stage.

11.4.2

Construction Phase Potential Effects (Direct)

Direct effect refers to a 'physical impact' on a monument or site. The construction phase of a development may consist of earthmoving activities such as topsoil removal in advance of quarrying. This may have a number of potential negative effects on the known and potential archaeological heritage. These are outlined below with the suggested mitigation measures.

11.4.2.1

National Monuments

No National Monuments are located on or in close proximity to the Proposed Development site, therefore no direct effects to such monuments will occur.

11.4.2.2 Recorded Monuments

Pre mitigation effect

Three recorded monuments, CL044-073— Enclosure, CL044-074— Enclosure and CL044-078— Enclosure, are located within the Proposed Development boundary. Both CL044-073— and CL044-074— are no longer extant having been removed as a result of previous quarrying activity. No direct effects to the monuments can occur therefore as they have been wholly removed.

Enclosure CL044-078— is located in pasture c. 30m south of the proposed extraction area and proposed restoration area. While it is located within the Proposed Development boundary no works are proposed for this area and a 30m buffer zone from the outer extent of the monument has been designed into the proposed extraction and restoration area boundaries. No direct effects to the monument will therefore occur. While no effects are identified the following mitigation is proposed in the interest of the future preservation of the monument.

Proposed mitigation measures

- A 30m buffer zone will be established around recorded monument CL044-078— Enclosure prior to the commencement of any ground works associated with the Proposed Development should it proceed.
- The buffer will comprise durable post-and-wire fencing with 'Keep Out' signage.
- The requirement for the buffer zone will form part of the Construction and Environmental Management Plan for the Proposed Development.

Residual Effect

None identified.

Significance of Effects

None identified.

11.4.2.3 Newly Recorded Archaeological Sites

No above-ground newly recorded sites were noted during the walk-over survey of the Proposed Development area. No potential direct effects to this resource are therefore identified.

11.4.2.4 Sub-surface Archaeological Potential

Pre mitigation effect

The Proposed Development site comprises an existing quarry and greenfield areas around the perimeter of same at the east and south-east. A portion of the proposed extraction and restoration area extends into the two fields over which geophysical survey was carried out. The survey identified the presence of potential archaeological anomalies which may represent the remains of sub-surface archaeological sites or features.

In general, the greenfield nature of this portion of the Proposed Development site and the presence of nearby recorded monuments also increases the potential for the presence of sub-surface archaeology within the proposed extraction and restoration area. Sub-surface archaeological sites or features, if present within the Proposed Development site, may be directly affected by construction phase activities

such as topsoil removal and extraction/quarrying works. The effect is likely to be significant, negative and permanent.

Proposed mitigation measures

- Pre-development archaeological testing of the greenfield portions of the proposed extraction area will be carried out under licence from the National Monuments Service.
- The testing will generally test the proposed extraction area and also target the potential archaeological anomalies detected by the geophysical survey.
- A report on the testing will be compiled on completion of the work and submitted to the relevant authorities.
- Further mitigation such as preservation in situ (avoidance), preservation by record (excavation), buffer zones and/or archaeological monitoring of topsoil removal may be required depending on the results of the testing.

Residual Effect

Any archaeological sites/features, if detected, during testing will be preserved by record (archaeologically excavated) or preserved in-situ (avoidance) and therefore a full record made of same. In this regard, the potential effect after the implementation of the mitigation measures is likely to be Slight.

Significance of Effects

The construction stage groundworks have the potential to affect sub-surface archaeological features, if present. The overall significance of effects will be Slight.

11.4.2.5 Architectural Heritage

Architectural heritage sites and features of cultural heritage potential including historic gardens in the vicinity of the Proposed Development were considered in this report. No Protected Structures or NIAH structures are located either within or immediately adjacent to the Proposed Development. No direct effects to such structures will therefore occur.

11.4.2.5.1 Protected Structures

No Protected Structures are located within the Proposed Development site therefore no direct effects to this resource are identified.

11.4.2.5.2 Structures Listed in the NIAH and Historic Gardens

No structures listed in the NIAH are located within the Proposed Development site therefore no direct effects to same are identified. One historic garden associated with Ballyquin House is located a short distance outside and to the north-west of the Proposed Development boundary. The existing quarry and portions of the proposed extraction and restoration areas are located within the demesne associated with the house and garden. Quarrying activities have already taken place within the demesne which is now much altered from its original state as depicted on the first edition OS map. No demesne features are depicted within the proposed extraction area therefore direct effects to same will not occur. The original formally laid out historic garden is located outside the Proposed Development boundary therefore direct effects to this will also not occur.

11.4.2.5.3

Features of Local Cultural Heritage Merit (Direct effects)

No items of local cultural heritage merit were identified within the Proposed Development site either as a result of the walk-over survey or from a review of the available historic mapping. No potential direct effects to this aspect of the Cultural Heritage resource are therefore identified.

11.4.3

Operational Phase Potential Effects (Indirect)

Indirect effects are where a feature or site of archaeological, architectural heritage merit or their setting is located in close proximity to a Proposed Development. Indirect effects here are mainly concerned with effects on setting of cultural heritage sites.

Effects on settings of sites may arise when a development is proposed immediately adjacent to a recorded monument or cluster of monuments. While the Proposed Development may not physically effect a site, it may alter the setting of a monument or group of monuments. There is no standardised industry-wide approach for assessing the degree of effect to the setting of a monument. For purposes of assessing visual effect on setting, the uniqueness of the monuments, the potential interrelationships of monuments, the inter-visibility of monuments, visual dominance and whether a setting is altered or unaltered can be used to assess visual effect. The nature and dominance of the Proposed Development is also taken into consideration and the topography within which the development is located.

11.4.3.1 **National Monuments**

No National Monuments are located on or within close proximity to the Proposed Development. The nearest national monument is located over c. 7.9km to the north-east and comprises St Molua's church in Killaloe. The distance of this monument from the Proposed Development is such that effects to the setting of the church will not occur.

11.4.3.2 **Recorded Monuments**

The potential indirect effects are assessed, not by visiting individual sites on private land, but rather assessing the nature and type of the monuments (levelled/extant), dominant/low-visibility, the distance of the monument from the Proposed Development and therefore the likely potential effect on the setting of the monument. Monuments that are levelled or with very little remaining surface trace are not capable of having their 'visual setting' affected and therefore indirect effects on such monuments are Imperceptible.

Three recorded monuments, CL044-073— Enclosure, CL044-074— Enclosure and CL044-078— Enclosure, are located within the Proposed Development boundary. CL044-073— and CL044-074— no longer have any above-ground remains having been removed through previous quarrying activities. No indirect effects on these monuments as a result of the Proposed Development will therefore occur. The third monument CL044-078— is located in pasture to the south-east of the existing quarry but also no longer has any above-ground remains. While the proximity of the proposed extraction area will further alter the setting of this monument, the potential effect is regarded as Imperceptible given that the monument is no longer upstanding.

A total of twenty-nine monuments are located within 2km of the Proposed Development boundary and include the three monuments discussed above. Those monuments within 500m of the Proposed Development boundary largely comprise enclosures and a 16th-17th century house CL044-072— which is no longer extant. The enclosures may be regarded as low-visibility monuments and a review of the available aerial photography would suggest that some have no surface remains. They are also separated from the Proposed Development site by intervening field boundaries. The immediate setting of these monuments will not be affected, however, a change to their wider setting may occur as a result of the Proposed Development.

Pre-mitigation effect

Given the distance of the Proposed Development from the nearest monuments referenced above and their low visibility nature no effect to their immediate setting will occur. A change to their wider setting is acknowledged but is regarded as Not Significant. The effect to the wider setting of the monuments is also regarded as reversible as the proposed extraction area will be restored to agricultural land once the extraction phase of the project is completed.

Proposed mitigation measures

It is not possible to provide a mitigation measure which would alleviate this potential effect.

Residual Effect

Since no mitigation measures are being proposed the residual effect will be Not Significant.

Significance of Effects

The overall significance of effects will be Not Significant.

11.4.3.3 Protected Structures and NIAH sites

No Protected Structures subject to statutory protection are located within the Proposed Development site boundary. The nearest protected structure is located c. 580m to the north-west and comprises Glenomra House (RPS Ref. 427). No structures or items listed in the NIAH are located within the Proposed Development site boundary. The nearest NIAH structures comprise a bridge (NIAH Reg. 20404518) and a church (NIAH Reg. 20405405) which are located c. 1.5km to the south-east of the Proposed Development boundary in the village of Bridgetown.

One historic garden associated with Ballyquin House is located a short distance to the north-west of the Proposed Development boundary in the townland of Ballyquin More. The Proposed Development is partially located within the demesne originally associated with the house while the formally laid out garden is located outside the Proposed Development boundary. A review of the available historic mapping shows that the original features of the historic garden are no longer extant and the connection between the demesne lands and the house (also no longer extant) has been significantly altered through the change of land use and quarrying activity over the past number of years. Given the location of the garden outside the Proposed Development site, the poorly preserved remains of same, and the presence of the existing quarry between the garden and the proposed quarry extension no effects to its setting as a result of the Proposed Development are identified.

11.4.3.4 Features of Local Cultural Heritage Merit

No features of local cultural heritage merit are located on or within the immediate vicinity of the Proposed Development site, therefore effects to the setting of such features will not occur.

11.5 Cumulative Effects

Cumulative effect is defined as 'The addition of many small effects to create one larger, more significant, effect' (EPA 2022). Cumulative effects encompass the combined effects of multiple developments or activities on a range of receptors. In this case, the receptors are the archaeological monuments and architectural/cultural heritage sites in the vicinity of the Proposed Development. The potential cumulative effects between the Proposed Development and the other projects described in Chapter 2 of this EIAR, hereafter referred to as the other projects, have been considered in terms of

effects on archaeology and cultural heritage. The majority of the other project comprise one-off rural dwelling houses. No potential cumulative effects as a result of the Proposed Development and those other projects are identified.

The proposed site boundary for this Proposed Development is located within the red-line boundary of the permitted Fahy Beg Wind Farm. The Wind Farm shares the proposed red-line boundary except for the proposed extraction boundary and the southeastern area of the proposed site boundary. The following Fahy Beg Wind Farm infrastructure will be located within the red-line boundary for the Proposed Development: site entrance, 38kV substation and associated grid connection route, two passing bays, two temporary construction compounds, and existing and new access tracks. Potential direct effects identified at the construction stage of the Proposed Development are those which may occur to hitherto unknown sub-surface archaeological finds, features or deposits. This potential effect was identified as being permanent, negative and significant. After the mitigation measures are implemented, however, these potential effects will be Slight. The overall significance of effects is therefore Slight. A similar potential construction stage effect could be identified for Fahy Beg Wind Farm since groundworks could impact on hitherto unknown archaeological, finds, features or deposits or other cultural heritage assets. In this regard there could potentially be a cumulative effect when the Proposed Development is added to the wind farm site. Mitigation measures seek to alleviate such negative effects if not remove the effect altogether and therefore there will be no significant cumulative effects on sub-surface remains. If the mitigation measures prescribed in this EIAR are implemented then significant cumulative direct effects to unknown sub-surface archaeology will not occur, regardless of the other projects.

Indirect effects to the wider setting of recorded monuments within 2km of the Proposed Development was also considered. Given the distance of the Proposed Development from the nearest monuments discussed in Section 11.4.3.2 above and their low visibility nature no effect to their immediate setting will occur. A change to their wider setting is acknowledged but is regarded as Not Significant. The effect to the wider setting of the monuments is also regarded as reversible as the proposed extraction area will be restored to agricultural land once the extraction phase of the project is completed. When considered cumulatively with the adjacent proposed Fahy Beg Wind Farm there is potential for cumulative effects to the wider setting of recorded monuments, however, no significant effects are identified and no potential cumulative effects to the immediate setting of such monuments will occur.

11.6

Conclusion

This chapter comprises an assessment of the potential effect of a proposed quarry extension and restoration at Ballyquin More, Leitrim, Woodpark and Fahy More North, Co. Clare on the Cultural Heritage resource. Cultural Heritage includes archaeology, architectural heritage and any other tangible assets. The assessment was based on comprehensive desktop research and field inspection of the Proposed Development area.

Three recorded monuments are located within the Proposed Development site, two of which have been removed from previous quarrying activity. The third monument is located c. 30m to the south of the proposed extraction and restoration area and will not be directly affected by the development proposals. It also has no above-ground remains therefore potential visual effects are regarded as Imperceptible. No Protected Structures, NIAH structures or historic gardens are located within the Proposed Development boundary. The historic garden associated with Ballyquin House (no longer extant) is located a short distance outside of and to the north-west of the Proposed Development boundary. A portion of the proposed extraction area and a significant portion of the proposed restoration area are located within the demesne associated with the house. No demesne features are located within the Proposed Development boundary and the link between the demesne and the house is no longer extant given the change of use of the demesne lands in the subsequent decades. No direct or indirect effects to the historic garden are identified. A potential direct effect to sub-surface archaeological sites or features, should they exist within the Proposed Development site, is noted. Mitigation in the form of pre-development archaeological testing of the proposed extraction area

including targeted testing of the potential archaeological geophysical anomalies is recommended, with the results of same informing any further mitigation which may be required, such as preservation in situ, archaeological monitoring, etc. Any potential direct effects to the archaeological resource will be effectively mitigated through the implementation of the recommended mitigation measures.

RECEIVED: 29/11/2024