



Farrimond MacManus Ltd

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**Archaeological Impact Assessment for a proposed mineral extraction site at
Aughnaclyffe Quarry and lands directly to the south of the existing quarry, in
the Townlands of Aghamore Upper and Derreenavoggy, County Longford.**

Planning Application Ref: Pre-Planning

30th January 2023 (revised 14th March 2023).

Commissioned by

Quarryplan

on behalf of

Lagan Materials Ltd, trading as Breedon Ireland.

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1. Introduction

- 1.1 This Archaeological Impact Assessment was prepared during January 2023 by Christopher Farrimond of FarrimondMacManus Ltd (with minor revisions in March 2023), having been commissioned by Quarryplan on behalf of Lagan Materials Ltd. trading as Breedon Ireland (the Applicant), and relates to a Planning Application for a proposed mineral extraction site at Aughnacliffe Quarry and lands directly to the south of the existing quarry, in the Townlands of Aghamore Upper and Derreenavoggy, County Longford.
- 1.2 The proposed development seeks to win and work the greywacke mineral resource which has been identified at the site, in a phased manner which includes extending workings at the existing quarry southwards, with a deepening of the existing quarry floor levels. Following the completion of extraction the site will be restored to create a waterbody and biodiverse habitats.
- 1.3 The statutory heritage authorities at the National Monuments Service of the Department of Housing, Local Government and Heritage (DHLGH) keeps a record of all known monuments and sites (the Record of Monuments and Places (RMP)). Consultation of these records has confirmed that there are a number of archaeological sites and monuments recorded within the general environs of the application site.
- 1.4 Given the location and nature of the Proposed Development Area (PDA), it is proposed that this Archaeological Impact Assessment (AIA) will have a particular focus on the archaeological sites and monuments and National Inventory of Architectural Heritage (NIAH) Structures which are evident in the surrounding area and is intended to provide the statutory heritage authorities in the Department of Housing, Local Government and Heritage (DHLGH) with additional information with specific regards to:
- the likely impact of development on the archaeological sites and monuments and Architectural Heritage / Protected Structures located within the boundaries, and in the immediate vicinity of, the proposed development;
 - the potential impacts of development on those known archaeological sites and monuments and Architectural Heritage / Protected Structures within its environs of National importance, and of local importance;
 - the preservation (either *in-situ* or by record) of any unrecorded archaeological remains which may survive within the proposed development area.
- 1.5 The following Archaeological Impact Assessment sets out the archaeological background of the proposed development area, assessing its archaeological potential, addressing the first two of the requirements outlined above, and includes a proposed methodology to provide for the preservation of archaeological remains *in-situ* or by record and to ensure full compliance with all statutory obligations, legislation and Planning requirements and policies and current best practice whilst undertaking the proposed development works.

1.6 Statement of Authority

- 1.6.1 This report was prepared during January 2023 by Christopher Farrimond of FarrimondMacManus Ltd, with minor revisions in March 2023.
- 1.6.2 Graduating in 1998 from Queen's University, Belfast, with a B.A. (Hons.) degree in Archaeology / Palaeoecology, Chris has over twenty years of post-graduate consultancy experience in all aspects of Cultural Heritage and Archaeological Management, i.e. devising appropriate archaeological management strategies in relation to developmental impact upon archaeological sites and monuments and the successful monitoring and managing of the implementation and completion of related management and mitigation strategies.
- 1.6.3 A Company Director of FarrimondMacManus Ltd. since 2005, and eligible to hold Archaeological Excavation Licences in both N.I. (since 2002) & R.O.I. (2003), Chris also has considerable experience in managing archaeological excavations, staffing and programmes of post-excavation works and reporting.

2. Legal and Statutory Policies Relating to the Protection of Cultural Heritage

2.1 The legal framework which provides for the protection of the archaeological and cultural heritage resource in Ireland consists of various national and international laws and policies. The National Monuments Acts 1930 – 2021 is central to this framework and provides for the protection of a number of categories of monuments;

- National monuments in the ownership or guardianship of the Minister or a local authority or national monuments which are subject to a preservation order;
- Historic monuments or archaeological areas recorded in the Register of Historic Monuments.
- Monuments or places recorded in the Record of Monuments and Places

2.2 The provisions of the National Monuments Act 1930 – 2021 were supplemented by the 1992 “European Convention on the Protection of the Archaeological Heritage” (commonly known as the ‘Valletta Convention’) which was ratified by Ireland in 1997, and provided for in the National Cultural Institutions Act 1997. The aim of the Convention is to ‘*protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study*’ (Article 1). The Convention provides the basic framework for policy on the protection of the archaeological heritage. The obligations on the State under the Convention include, but are not limited to:

- providing for statutory protection measures, including the maintenance of an inventory of the archaeological heritage and the designation of protected monuments and areas;
- the authorisation and supervision of excavations and other archaeological activities;
- providing measures for the physical protection of the archaeological heritage, including (as necessary) acquisition or protection by other means by public authorities of areas intended to constitute archaeological reserves, conservation and maintenance of the archaeological heritage (preferably *in-situ*), and the provision of appropriate storage places for archaeological remains removed from their original locations;
- providing for consultation between archaeologists and planners in relation to the drawing up of development plans and development schemes so as to ensure that full consideration is given to archaeological requirements;

2.3 The National Monuments Service of the Department of Housing, Local Government and Heritage (DHLGH) keeps a record of all known monuments and sites (the Record of Monuments and Places (RMP)). The term ‘*monument*’ was redefined by the National Monuments (Amendment) Act of 1987 as:

“any artificial or partly artificial building, structure or erection or group of such buildings, structures or erections, any cave, stone or other natural product... that has been artificially carved, sculptured or worked upon... any, or any part of any, prehistoric or ancient tomb, grave or burial deposit, or ritual, industrial or habitation site, any place comprising the remains or traces of any such building, structure or erection...”

but excluding

“any building or part of any building, that is habitually used for ecclesiastical purposes”.

- 2.4 Section 1 of the 1987 Act provides that the term *“historic monument”* *“includes a prehistoric monument and any monument associated with the commercial, cultural, economic, industrial, military, religious or social history of the place where it is situated or of the country and also includes all monuments in existence before 1700 A.D. or such later date as the Minister may appoint by regulations”.*
- 2.5 Under the Planning and Development Act 2000 (as amended) and associated Regulations, a planning authority must refer all planning applications, which might affect or be unduly close to any archaeological site, monument or feature, to the Minister for Housing, Local Government and Heritage.
- 2.6 When the owner or occupier of a property, or any other person proposes to carry out, or to cause, or to permit the carrying out of any work at or in relation to a Recorded Monument, they are required under Section 12 (3) of the 1994 Act to give notice in writing to the Minister two months before commencing that work. This time will allow the National Monuments Service to advise on how the work may proceed in tandem with the protection of the monuments in question.
- 2.7 While the owner or occupier or any persons proposing to carry out work at or in relation to a recorded monument is required under the National Monuments Act to give notice in writing to the Minister, it is the practice of the Department of Housing, Local Government and Heritage to accept referrals from planning authorities as fulfilling the notification requirements.
- 2.8 The Planning and Development Acts 2000 – 2018 (*as amended*) recognise that proper planning and sustainable development includes objectives for the protection of the archaeological heritage. Development plans may include such objectives and conditions relating to archaeology may be attached to individual planning permissions.
- 2.9 In addition to this, under the European Communities (Environmental Impact Assessment) Regulations 1989, Environmental Impact Statements (EIS) are required for various classes and sizes of development project to assess the impact the proposed development will have on the existing environment, which includes the cultural, archaeological and built heritage resources. These document’s recommendations are typically incorporated into the conditions under which the proposed development must proceed, and thus offer an additional layer of protection for monuments which have not been listed on the RMP.
- 2.10 *Architectural and Built Heritage*
- 2.10.1 The protection of the architectural and built heritage resource in Ireland is provided for in the Heritage Act 1995, the National Monuments (Misc. Provisions) Act 1999 and the Local Government (Planning and Development) Acts 2000-2018. Under the terms of the various elements of legislation a "Record of Protected Structures" (RPS) was compiled and produced within the Longford County Development Plan 2015-2021 and updated in the Longford County Development Plan 2021 – 2027 which came into effect on 30th November 2021. The Planning and Development Act, 2000, as amended, states that ‘a development plan shall include objectives for;

“the protection of structures, or parts of structures, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest”.

- 2.10.2 Part IV of the Planning and Development Act, 2000, as amended makes it a mandatory requirement that Development Plans include a Record of Protected Structures (RPS) and the RPS is included in Appendix 6 of the current Longford County Development Plan 2021 – 2027.
- 2.10.3 The National Inventory of Architectural Heritage (NIAH) is a state initiative, established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 to identify, record, and evaluate architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage.
- 2.10.4 NIAH surveys provide the basis for the recommendations of the Minister for Housing, Local Government and Heritage to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS). The published surveys are a source of information on the selected structures for relevant planning authorities. They are also a research and educational resource.
- 2.10.5 A Protected Structure is any structure which is included in the RPS. The purpose of the RPS under section 51 of the Planning and Development Act is to protect structures or parts of structures, which form part of the architectural heritage of the County or area and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. Each owner and occupier of a Protected Structure is legally obliged to ensure that the structure is preserved. Part 1 Section Two of the Planning and Development Act 2000 (as amended) defines a structure as;

“any building, structure, excavation, or other thing constructed or made on, in or under any land, or any part of a structure so defined”;

A protected structure or a proposed protected structure, includes

- i. The interior of the structure,
 - ii. The land lying within the curtilage of the structure,
 - iii. Any other structures lying within that curtilage and their interiors, and
 - iv. All fixtures and features which form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii)."
- 2.10.6 The purpose of including structures or parts of structures on the RPS is to ensure that any works which, in the opinion of the Council, have a material effect on the character of the structure require planning permission. This ensures that potential changes or alterations to the character of the structure would be carried out in such a way that the existing character is retained.
- 2.10.7 There are no protected structures as defined by current legislation situated within the boundaries of the proposed development site.

3. Site Location & Topography

- 3.1 The site is located at Aughncaliffe Quarry (**figures 1-2**). The quarry is located in the townland of Aghamore Upper, which lies c. 12km to the north-east of Longford town. The village of Aughnacliffe is located c. 3km to the northeast of the site, with the village of Ballinalee located c. 6km to the south.
- 3.2 The Application Site is c.36.8ha in size, with c.22ha of the site comprised of the existing quarry and associated overburden storage and landscaping areas (**figures 3-4**). The remainder of the site (c.15ha), located to the south of the existing quarry void, is comprised of lands in agricultural use. A cluster of farm buildings, under the ownership of the applicant is located along the southern boundary of the site.
- 3.3 The site is located in an undulating rural setting characterised by agricultural fields interspersed with blocks of forestry. There are a small number of residential properties located sporadically throughout the surrounding area. The Application Site itself is surrounded by agricultural fields on all sides, with boundaries comprised of hedgerows.
- 3.4 The topography across the northern part of the site is dictated by quarry workings to date, with ground levels ranging from c.162mAOD at the quarry entrance to c.141mAOD in the quarry floor. Previous overburden landforms are located at the eastern and western ends of the quarry void and have become vegetated and greened up over time. The eastern end of the quarry is used for the stockpiling of processed materials, with extraction works focussed in the western part of the quarry.
- 3.5 Levels across the southern part of the Application Site (the undeveloped agricultural lands) range from 159mAOD along the eastern boundary and 165mAOD along the western boundary, rising to c.178mAOD in the central part of the extension lands.
- 3.6 The Application Site is accessed via the existing and approved quarry entrance, located along the north-eastern boundary of the site, which provides access to a local road network, which ultimately connects to the R198 to the north and R194 to the south.
- 3.7 Access to the farm buildings in the southern part of the site is afforded via an un-named single lane road to the south east of the buildings.

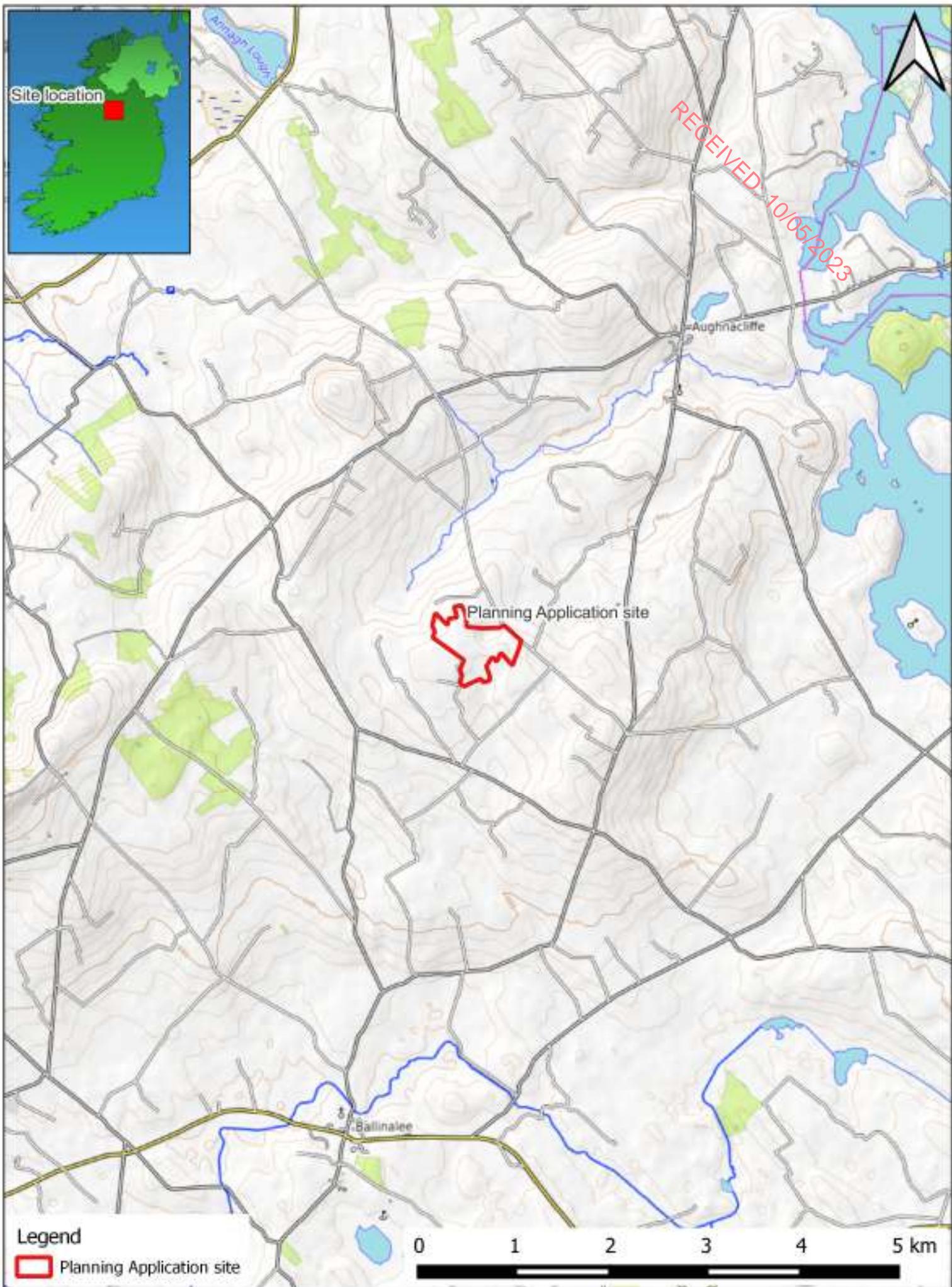


Figure 1: General location & extent of the Planning Application site
(Scale = 1:50,000 @ A4).

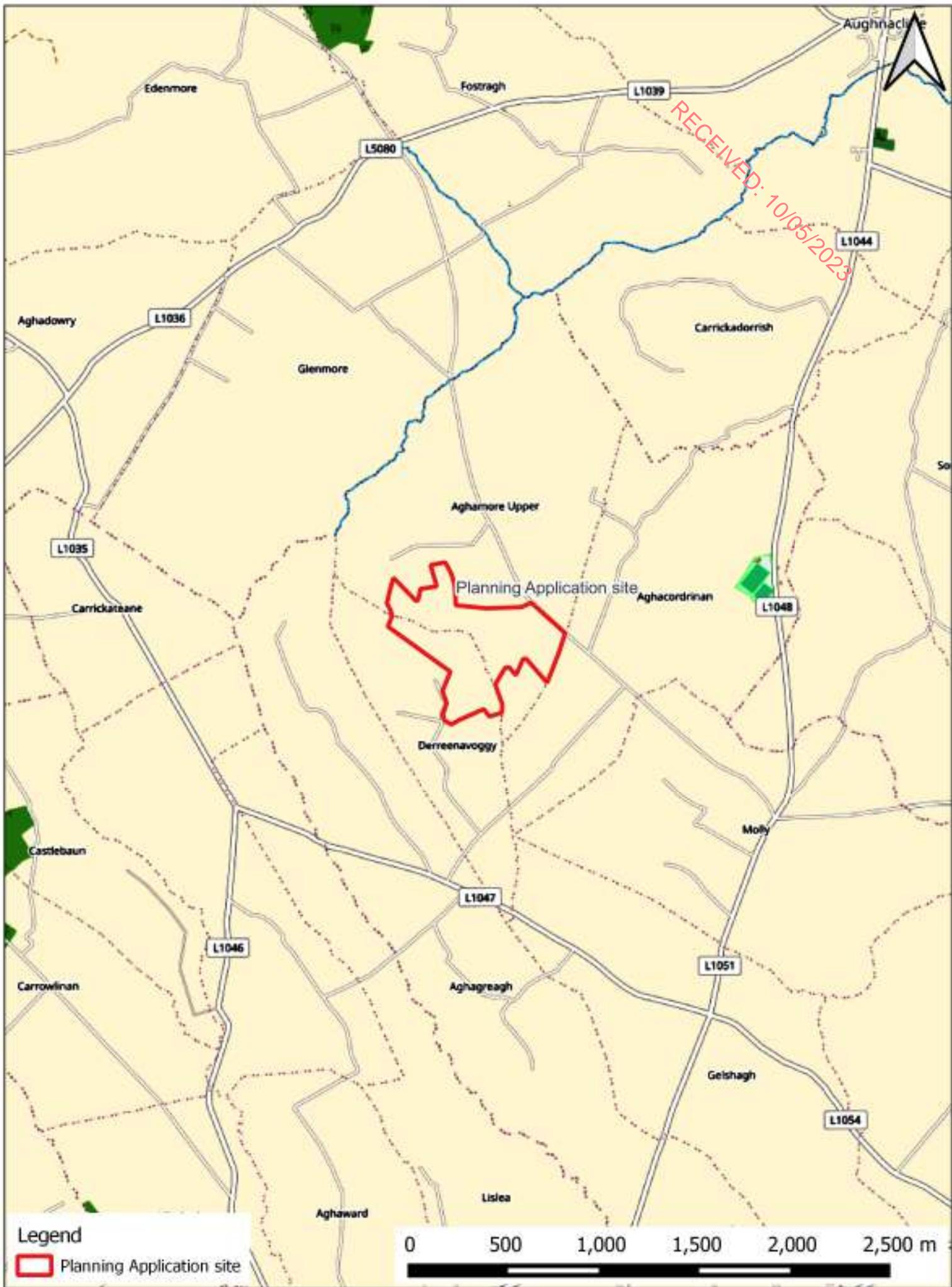


Figure 2: General location & extent of the Planning Application site (Scale = 1:25,000 @ A4).

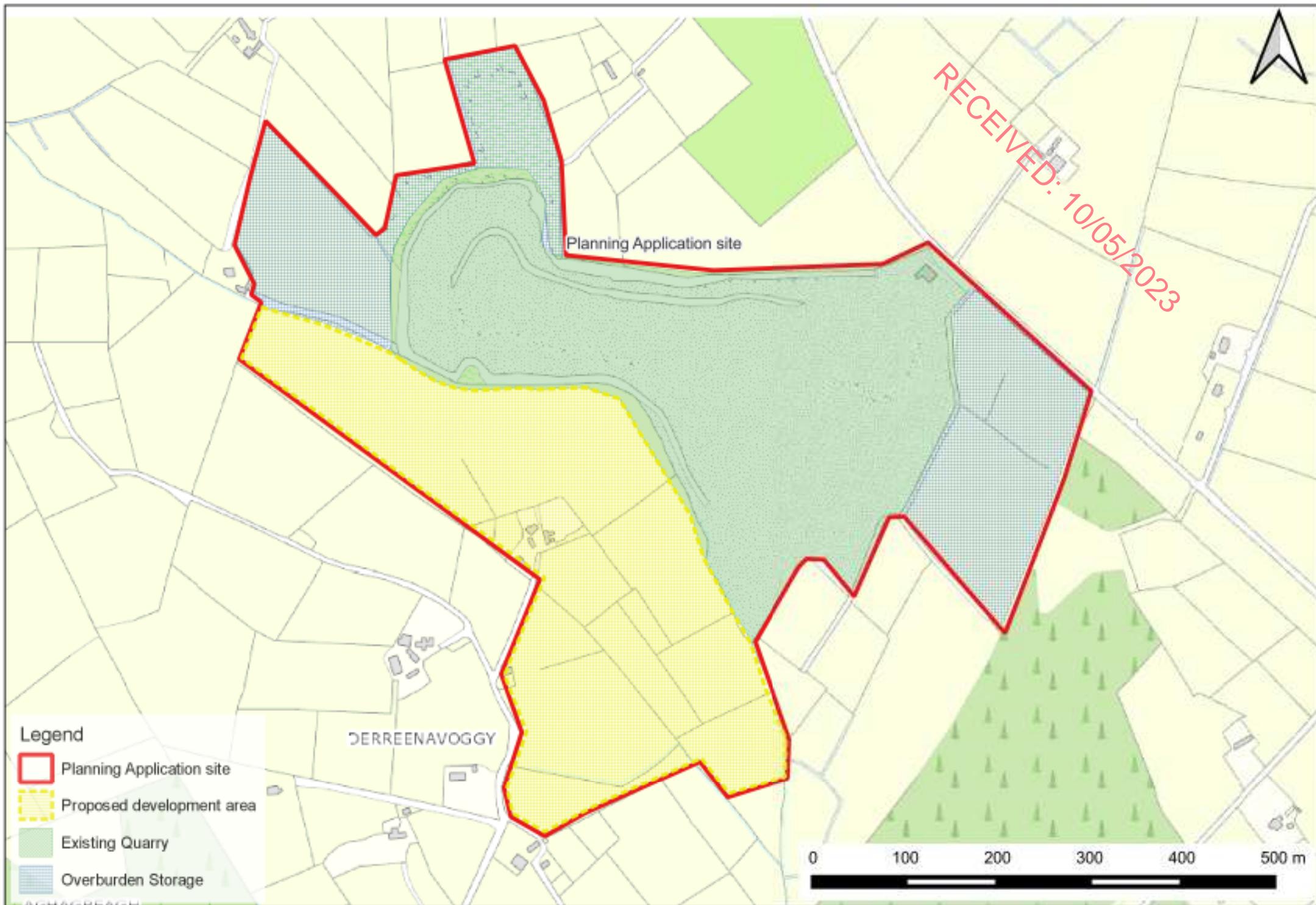


Figure 3: General layout and extent of the Planning Application site (Scale = 1:5,000 @ A4).

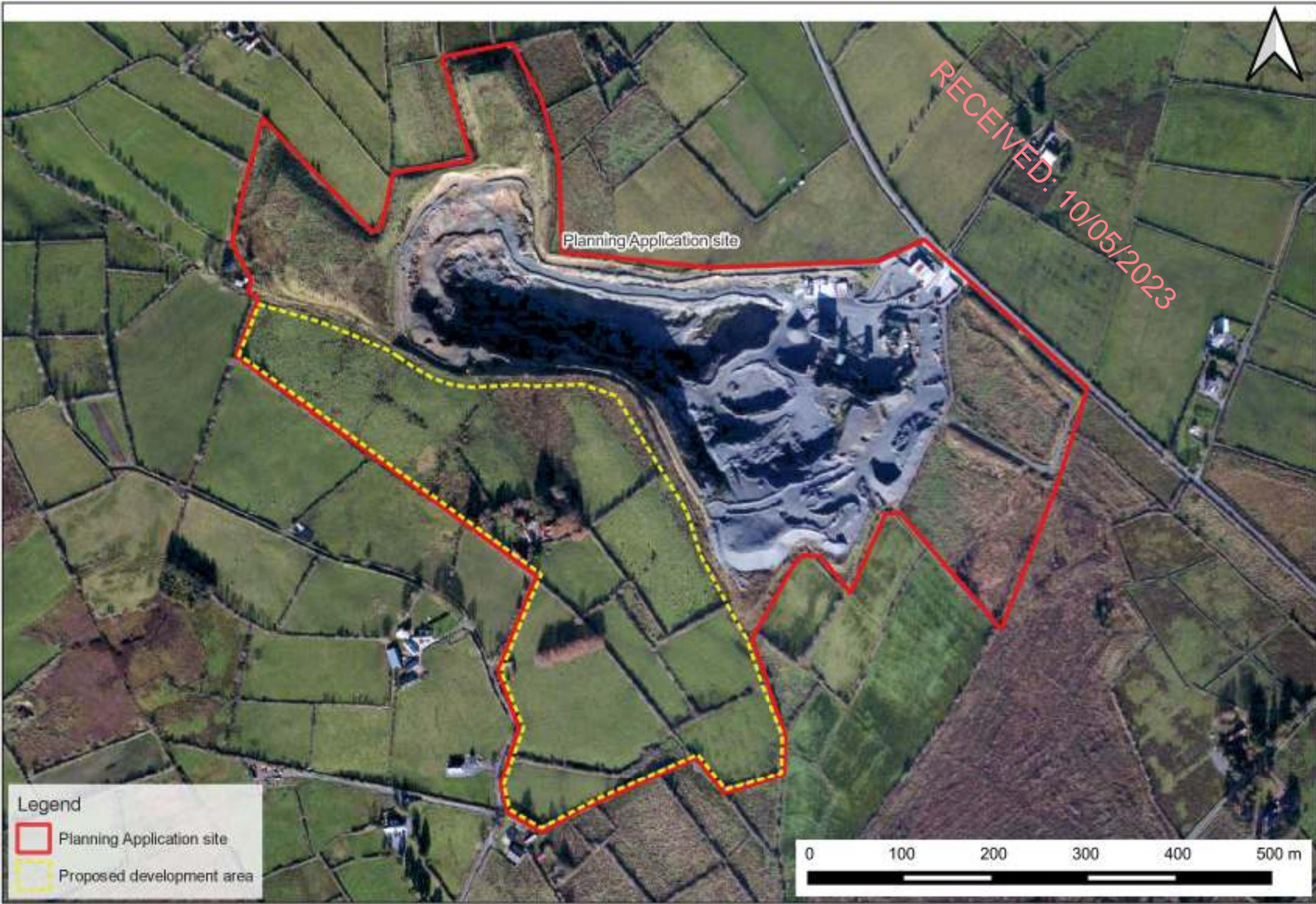


Figure 4: Aerial photograph showing layout and extent of the Planning Application site (Scale = 1:5,000 @ A4).

4. Planning History

- 4.1 Under the requirements of Section 261 of the Planning and Development Act 2000, the Planning Authority required the submission of a planning application and Environmental Impact Statement (EIS). The application was submitted with the following description of development:
- 4.2 *“Retention for development consequent to the provisions of Section 261 of the Planning and Development Act 2000. The Section 261 Registration Number of the subject site is Longford County Council QY/02. The development consists of the continuation of quarrying activities over an area of 11.8ha. The development also consists of the retention and continuation of quarrying activities over an area of 10.9ha at Aghamore Upper, Aghnacliffe, Co. Longford”.*
- 4.3 Planning permission was granted by Longford Co. Co. under the Permission Reference 07/831.
- 4.4 The planning permission details how the site will be worked across 4 phases, with overburden removed and stored in identified locations around the edge of the quarry void, with the quarry extended laterally to the northwest and deepened.
- 4.5 As shown on the approved final void design drawing, the extant planning permission permits extraction to a maximum depth of c. 108mAOD in the western part of the quarry void.
- 4.6 It is to be noted that the proposed development does not seek to extract to the maximum permitted depth currently consented at the quarry. Workings will be extended laterally and limited to a maximum depth of 114mAOD, instead of the c.108mAOD as consented at the quarry. The consented development allows for the de-watering of the site and the approved method of extraction is via drill and blasting. Both approved practices are proposed to continue.
- 4.7 The approved restoration scheme for the site is to allow for the creation of a waterbody with a proposed water level of 154mAOD, which would be created following the cessation of pumping.
- 4.8 The site benefits from a number of other planning permissions for development ancillary to the quarrying operations, namely:
- Ref 11384- permission granted for workshop, offices, crushing and screening plant on 10/09/1990;
 - Ref 11962- permission granted for concrete batching plant and tar batching plant on 07/08/1992; and
 - Ref 22/79- permission granted for installation and operation of a readymix concrete batching plant on 30/05/2022.
- 4.9 A planning application is also currently pending with Longford Co. Co. under the Application Reference 22/195 for the installation of an aggregate storage shed (area 902 m²) and partial realignment of existing private laneway.
- 4.10 The planning history above demonstrates that the principle of mineral extraction at the site is one which has been considered on a number of occasions and deemed to be acceptable at this location. The planning history also demonstrates that mineral extraction to depths greater than that proposed within this application have been considered acceptable, as has the concept of overburden storage landforms being created around the edge of the quarry void. Finally, the concept of the site being restored to form a waterbody has also been considered and found acceptable.

5. Proposed Development

5.1 The proposed development seeks to win and work the greywacke mineral resource which has been identified at the site, in a phased manner which includes extending workings at the existing quarry southwards, with a deepening of the existing quarry floor levels. Following the completion of extraction the site will be restored to create a waterbody and biodiverse habitats.

5.2 The development will be undertaken in phases. Each of the phases outlined below should be read in conjunction with the proposed development plans (Drawing Refs. 220912Dwg01 - 220919Dwg06) which show the extent of development at the end of each phase.

5.3 The proposed development will be undertaken across five main phases, with final restoration to follow:

- Phase 1- Establishment & Extraction
- Phase 2 – Lateral extension to south
- Phase 3 – Lateral extension to south & quarry deepening
- Phase 4 – Eastern lateral extension
- Phase 5 – Quarry deepening
- Final Restoration

5.4 Phase 1 – Establishment & Extraction

5.4.1 Phase 1 will firstly see the site establishment works as described above completed. This includes the demolition of the existing farm buildings and the construction of the earthen screening bund along the southern boundary of the site.

5.4.2 This phase of extraction will also see the north western part of the quarry deepened by an additional bench, to a depth of c.128mAOD. The quarry benches will be accessed via ramps excavated from the bedrock along the northern faces of the quarry void.

5.4.3 Mineral extraction will then progress southwards, with the eastern part of the extension area extended southwards to approximately align with the current extent of permitted workings in the western part of the quarry void. This lateral extension of works will see void extended southwards to a depth matching that of the current quarry floor (c.141mAOD).

5.4.4 Non-commercially viable and out of specification material resultant from the processing of the mineral will be placed in lands to the west and south of the quarry void. The material will be graded to create a shallow outer slope. The material will then be topped with stripped top soils and overburden and planted with the prescribed woodland mix.

5.5 Phase 2 – Lateral extension to south

5.5.1 The second phase of the quarry development will see the quarry extend laterally to the south. The various quarry benches will continue to be accessed via the ramps along the northern faces and additional ramping along the western faces.

5.5.2 Non-commercially viable and out of specification material will continue to be placed and graded in the southern eastern part of the site with area where the material will be deposited, gradually extending closer to the quarry

void. Overburden will be stripped on a campaign basis and will be placed on top of the previously placed material. By this phase, the outer slopes of the landforms and screening bund along the southern boundary will have 'greened up' and planting will have begun to grow.

5.6 Phase 3 – Lateral extension to south & quarry deepening

5.6.1 The third phase of the quarry development will see the quarry extend laterally to the south and the quarry floor deepened to result in a maximum quarry floor depth of 114mAOD in the south western part of the quarry void. The various quarry benches will continue to be accessed via the ramps along the northern faces and additional ramping along the western faces.

5.6.2 Non-commercially viable and out of specification material will continue to be placed and graded in the southern eastern part of the site with the area where the material will be deposited gradually extending closer to the quarry void. As per the previous phase, overburden will be stripped on a campaign basis and will be placed on top of the previously placed material. Previously placed material in western part of the site will have 'greened up' by this phase and will be integrating back in to the local landscape.

5.7 Phase 4 – Eastern lateral extension

5.7.1 Phase 4 will see the quarry extension area extend to its maximum eastern lateral extents. The faces developed in Phases 2 and 3 will be extended eastwards and the deepest sinking at 114mAOD created in Phase 3 will also be extended eastwards. Overburden stripping in this phase will be limited to only a small remaining area with this material used to finalise the landform to the south east of the void. By the end of this phase the quarry extension will have reached its full proposed lateral extents and the surrounding landform will be completely 'greened up' and planting well established.

5.8 Phase 5 – Quarry deepening

5.8.1 Phase 5 will see the deepest sinking of the quarry floor extended eastwards. All development within this phase of the development will be within the disturbed footprint and no overburden removal is required. The development will result in a quarry floor at 114mAOD which will be accessed via the ramping system established in the previous phases of the development.

5.9 Final Restoration

5.9.1 Following the completion of mineral extraction, the site will be restored in accordance with the submitted restoration concept produced by Mullin Design Associates in consultation with the Applicant's Ecologist (Woodrow); Hydrologist (BCL Hydro); and Geo-technical Engineers (Quarrydesign).

5.9.2 All vehicles, plant and equipment related to the proposed development will be removed. Following the cessation of the de-watering operation, groundwater levels will rebound to see a water body (lake) formed with a water level of c.154mAOD.

5.10 **For the purposes of this report, it is assumed that ground disturbance will be undertaken throughout the full extent of the lateral extension area of the Planning Application site which will be referred to as the "Proposed Development Area".**

6. The Archaeology of the Wider Area: Historical Background

6.1 The following background is a brief summary of the archaeology and history of the general area of the development, which is designed to put the results of the investigations into their archaeological and historical context.

6.2 Mesolithic (7,500 – 4,500 BC)

6.2.1 The earliest evidence of human activity in Ireland comes from the Mesolithic Period, for which evidence begins around 7,500 BC. The people were hunters and gatherers, living by catching wild animals, birds and fish and collecting wild fruit, nuts and shellfish. They exploited local outcrops of flint and chert to manufacture characteristic microliths (to form composite implements), Larnian blades and butt-trimmed (Bann flake) tools.

6.3 Neolithic (4,500 – 2,500 BC)

6.3.1 The Neolithic Period began around 4,500 BC with the arrival of farming, introducing cattle and cereals such as wheat and barley into the Irish landscape. The introduction of a settled agricultural regime allowed some industrial specialisation (flint mining, polished stone axe production), the establishment of long-lasting settlements and the erection of megalithic tombs. Pottery was produced for the first time and exploitation of the flint resource continued for the manufacture of tools with a flint factory found at Black Mountain in the Belfast Hills. However, there was also a change in the type of tools used from that of the preceding Mesolithic period; the most notable of which were the range of flint scrapers and hunting tools such as leaf-and lozenge-shaped flint and chert arrowheads and polished stone axes for woodworking. A good example of this range of pottery and stone tools was retrieved from a passage tomb at Kiltierney (SMR No. FER154:002) which was excavated by Laurence Flanagan in 1969.

6.3.2 Substantial houses and settlements were constructed and, while many such sites have been discovered in the last 10 years, none of those have been in the region under discussion. Neolithic settlements leave little or no trace on the ground surface and are therefore difficult to spot outside excavation. In recent years, the requirement for archaeological supervision during topsoil stripping on green field sites has uncovered substantial Neolithic settlements. Visual indicators are the burial and ritual monuments such as standing stones and are generally a good indication of prehistoric activity in an area. Archaeological activity in the area is demonstrated through the Neolithic period, from about 4000 to 2500BC, by the presence of megalithic tombs and other funerary sites. These Megalithic tombs, built of large stones, are some of the most prominent sites in the landscape and several types are to be seen in the general area with the Passage Tomb and Henge at Ballynahatty, Belfast a particularly impressive example.

6.4 Bronze Age (2,500 – 500BC)

6.4.1 The beginning of the Bronze Age, around 2,500 BC, was marked by the appearance of new types of pottery (Beakers, Food Vessels and Urns) and by the introduction of metallurgy (working with gold and bronze). The first metal objects were made initially from copper. Indeed, excavations at Rosse Island, Killarney, Co. Kerry,

have revealed the earliest copper mines found to date in the British Isles. Refinement of this technology led to the introduction of bronze, itself a copper alloy, with bronze objects found within Irish contexts including weapons (axes, swords, spearheads and halberds), knives and decorative objects such as cauldrons and jewelry. Gold working also developed throughout this period with particularly fine examples of high status objects such as torcs, lunulae and bracelets being produced. Flint tools (arrowheads, spearheads, knives and scrapers) continued to be used, however, throughout the period.

- 6.4.2 Much of the evidence relating to the Bronze Age comes from burial sites. The burials themselves may be either cremation or inhumation in type and were often placed within a simple pit or sometimes in a more complex stone lined cist, although wedge tombs also date from this period. The burials were often accompanied by grave goods, most commonly consisting of small decorated pots known as food vessels, although grave goods may also include semi-precious stones, jewelry or weaponry.
- 6.4.3 In the Later Bronze Age, cremation in pits or occasionally within small circular barrows (circular ditch surrounding a low central mound), became the more dominant burial type. Grave goods are less frequently associated with these burials. Stone circles are probably the best-known monuments of the Bronze Age. Standing stones are sometimes assigned a Bronze Age date and may mark burials of the period.
- 6.4.4 Settlement sites of the Bronze Age are being revealed at a dramatic rate in recent years; the houses generally leave no visible traces on the surface. The evidence for house structures from the Bronze Age suggests that the majority were circular in plan, with south or east facing entrances, and occasionally, porches. Their roofs were probably conical and thatched, supported by internal posts or load-bearing walls. Generally, hearths were external to the houses.
- 6.4.5 Many artificial islands, or crannogs, also date to this period; composed of brushwood, timbers and stone, they are found in small lakes and areas of drained and reclaimed land. The most numerous monuments of the period, however, are *fulachta fiadh*, or burnt mounds, composed of charcoal, ash and fire-cracked stones; thought to be cooking places, they often have hearths, troughs and wood-lined pits associated with them. The majority of these sites have no upstanding remains and are usually revealed at the topsoil-stripping stage of archaeological investigations.
- 6.4.6 Large defensive hilltop enclosures / hillforts, sometimes associated with settlements, and located in prominent positions also appear in the archaeological record for the Late Bronze Age.

6.5 Iron Age (500BC – 500AD)

- 6.5.1 Evidence of human activity and settlement in the Iron Age is surprisingly sparse, though more sites are gradually being discovered. However, the evidence so far uncovered suggests that circular houses continue to have been used, while cremation burials in simple pits or small ring barrows remained the dominant burial type.
- 6.5.2 Important Iron Age sites include Navan Fort and the Dorsey, both large earthworks in County Armagh. As the name indicates, it was during this period that the manufacture and use of iron and steel tools, weapons and other artefacts first took place, though the tradition of pottery production apparently disappeared.

6.5.3 The Iron Age period is also associated with the arrival of the Celts in Ireland from mainland Europe and although a Celtic language became established on the island, evidence for a large scale invasion or migration has yet to be identified in the archaeological record.

6.6 Early Christian / Early Medieval (500AD – 1177AD)

6.6.1 In Northern Ireland the term 'Early Christian' is used to refer to the period from about 500AD to the Anglo-Norman invasion of east Ulster in 1177, though it is being increasingly referred to as the Early Medieval period. Monuments from this period are the most numerous in the landscape, with tens of thousands in the whole of Ireland. These include raths and souterrains, cashels, further crannogs, promontory forts, unenclosed settlements and ecclesiastical sites.

6.6.2 The most plentiful of these are raths, which were farmsteads enclosed by banks and ditches. The total number of raths found across Ireland is estimated to be around 30 – 40,000, though this is probably an underestimate.

6.6.3 Many of the destroyed sites listed as enclosures in the SMR are probably the remains of raths disturbed by agricultural improvement schemes. Raths are generally circular or oval but vary in size and in the number of enclosing banks and ditches. A typical rath would be delineated by a bank 35m – 40m in diameter with an outer ditch, though variations of this include a platform rath, a raised rath, bivallate and trivallate raths. Excavations have dated raths to 500 - 1100AD and have uncovered houses of wattle, plank, stone, mud or sod, sometimes with a series of outbuildings within their interior.

6.6.4 Cashels are enclosures in rocky upland areas, of similar date and function as raths but with stone-built walls instead of banks and ditches.

6.6.5 Associated with such sites are souterrains. Abundant in County Antrim, they are underground structures most commonly made by digging open trenches, lining them with boulders to form dry-stone walls, and then roofing them with large stone lintels before covering with soil. Due to the removal of associated upstanding remains, many souterrains are found with no obvious accompanying settlement; these are difficult to anticipate prior to their exposure.

6.6.6 As is clear from the name, this period saw the introduction of Christianity, and subsequently literacy into Ireland and, therefore, the start of the historic period. There are several hundred ecclesiastical sites of the period within Northern Ireland, varying greatly in size and state of preservation. Some are occupied by modern churches, some are still used for burial, some have been completely destroyed.

6.6.7 While the earliest church organisation was diocesan, monastic organisation developed from the 6th and 7th centuries. These monastic buildings ranged greatly in size and complexity depending on the services offered to the local community - ministering, education, hospital, hospitality and shelter. The earliest buildings were often constructed from timber and can only be recovered during careful excavation. Stone churches, often built over earlier foundations, generally date from the 9th century and can be associated with stone carved crosses, bullaun stones, round towers and water mills.

6.7 Late Medieval (1177AD – 1603AD)

6.7.1 The Late Medieval period in Ireland began with the Anglo-Norman invasion in 1169-70, and in Northern Ireland by the conquest of east Ulster by John de Courcy in 1177. Although Antrim and Down were quickly subdued and settled, there was no expansion further west at the time and gradually the frontier was pushed back. The Anglo-Normans introduced new types of structures, prominent among which were mottes (flat-topped earthen mounds), stone castles and further monastic foundations. Fortifying their position, stone castles, tower houses and keeps were constructed as important military and administrative centres.

6.8 Post Medieval (1603AD – 1750AD)

6.8.1 The Post-Medieval period was dominated by the Plantation of Ulster. After the Flight of the Earls in 1607, large tracts of Counties Antrim, Down and Londonderry were granted by the Crown to English and Scottish settlers in 'Proportions' of land of 1,000, 1,500 or 2,000 acres, on condition that the holders were able to build strong houses and enclosures. These in turn acted as the nucleus for the growth of towns.

6.8.2 In the late 16th and early 17th centuries, Elizabeth I and James I tried to control the rebellious native Irish aristocracy by confiscating their lands and dividing it among new settlers - planters, brought specifically over from Scotland and England. The plantation period saw the introduction of strong houses and enclosures to house the new settlers in their unfamiliar and potentially hostile surroundings. Town defences were usually provided by earthen ramparts, stone walls and enclosing ditches

6.8.3 Although there had been earlier plantations throughout Ireland which had succeeded in confiscating land and grafting on a new aristocracy, the Plantation of Ulster in 1609 was comprehensive. The six Counties of Armagh, Fermanagh, Coleraine, Cavan, Tyrone and Donegal were all systematically planted. Land was allocated to a series of 'Undertakers', landlords who undertook to bring in Scottish and English colonists, settle them in fortified villages, house them and arm them. Land was also granted to 'Servitors', soldiers who had served the Crown in the wars of the 1590s as a reward for their loyalty.

7. Desk Based Assessment

7.1 Sites and Monuments Record

- 7.1.1 Within the County there are over 1,700 archaeological sites and monuments identified and recorded in the Record of Monuments and Places (RMP), including 380no. Monuments recorded on the Register of Historic Monuments and 6no. Monuments in the ownership or guardianship of the State or the Local Authority (**Appendix 3**).
- 7.1.2 Of these sites, there are 10 no. Monuments protected under Preservation Orders (**Appendix 4**), 57 no. Monuments of Archaeological, Historical and Cultural Interest (**Appendix 5**) and 2 no. specific archaeological sites of specific importance (**Appendix 6**) within the County.
- 7.1.3 None of the Monuments in the ownership or guardianship of the State or the Local Authority, Monuments protected under Preservation Orders or Monuments of Archaeological, Historical and Cultural Interest within the County are located within 3km of the boundaries of the Planning Application area.
- 7.1.4 Consultation of the SMR database indicate that the proposed development area (PDA) is situated within an archaeologically rich landscape with fourteen (14no.) archaeological sites recorded within a 3km radius study area of the proposed development site (**figure 5; Table 1; Appendix 1**).
- 7.1.5 The earliest site within the study area dates to the Prehistoric period and comprises a Stone row in Lettergonnell townland, some 2.4km to west of the Planning Application site (**LF005-012----**). Situated atop a drumlin in pasture, the monument comprises a row of four, widely-spaced, upright stones, aligned northeast – southwest and measures 14.1m in overall length. The stones are known locally as the “*Croppies’ Graves*”, i.e. reputed burial places for the insurgents of the 1798 rebellion.
- 7.1.6 The most predominant site type identified within the 3km study area is the Early Medieval Ringfort – Rath of which there are 13 sites in varying states of repair and visibility within the landscape. Rath sites within the study area are located in the townlands of Aghadowry (**LF005-013----**), Castlebaun (**LF005-019----**), Aghnacliff (**LF006-016----**), Carrickadorrish (**LF006-028----**), Aghacordrinan (**LF006-029----**), Sonnagh (**LF006-030----** & **LF006-031----**), Molly (**LF006-053----**), Aghakeeran (**LF006-054----**), Aghaward (**LF009-006----**), Lislea (Granard By.) (**LF009-007----**), Aghagreagh, Gelshagh (**LF010-001----**) and Aghakilmore, Gelshagh (**LF010-002----**).
- 7.1.7 None of the sites are located within the boundaries of the PDA or within its more immediate vicinity with the closest sites to the proposed development area (**LF006-028----** & **LF006-029----**) approximately 1.3km northeast of the PDA and it is not currently anticipated that the proposed development shall have a significant adverse impact upon any previously recorded archaeological Site or Monument, or its setting.

SMR No.	Site Type	General Period	Protection	Townland(s)	Irish Grid ref. (IG)	ITM Grid ref. (ITM)	Located (?)	Distance from PDA (m)
LF005-012----	Stone row	Prehistoric	Undefined	Lettergonnell	221079 285877	621025 785893	Yes	2435
LF005-013----	Ringfort - rath	Early Christian	Undefined	Aghadowry	222159 286893	622105 786908	Yes	1547
LF005-019----	Ringfort - rath	Early Christian	Undefined	Castlebaun	222547 284308	622493 784324	Yes	1700
LF006-016----	Ringfort - rath	Early Christian	Undefined	Aghnacliff	225491 288372	625436 788387	Yes	2610
LF006-028----	Ringfort - rath	Early Christian	Undefined	Carrickadorrish	225390 286947	625336 786962	Yes	1408
LF006-029----	Ringfort - rath	Early Christian	Undefined	Aghacordrinan	225454 286797	625399 786812	Yes	1348
LF006-030----	Ringfort - rath	Early Christian	Undefined	Sonnagh	226093 286771	626038 786786	Yes	1865
LF006-031----	Ringfort - rath	Early Christian	Undefined	Sonnagh	226357 286859	626302 786875	Yes	2140
LF006-053----	Ringfort - rath	Early Christian	Undefined	Molly	225682 284882	625627 784898	Yes	1539
LF006-054----	Ringfort - rath	Early Christian	Undefined	Aghakeeran	226793 284969	626738 784985	Yes	2528
LF009-006----	Ringfort - rath	Early Christian	Undefined	Aghaward	223446 282573	623392 782589	Yes	2882
LF009-007----	Ringfort - rath	Early Christian	Undefined	Lislea (Granard By.)	224190 283011	624136 783027	Yes	2440
LF010-001----	Ringfort - rath	Early Christian	Undefined	Aghagreagh, Gelshagh	224507 284012	624453 784028	Yes	1529
LF010-002----	Ringfort - rath	Early Christian	Undefined	Aghakilmore, Gelshagh	225942 283451	625887 783467	Yes	2714

Table 1: Recorded Sites and Monuments (SMR) sites within 3km of the Planning Application Area.

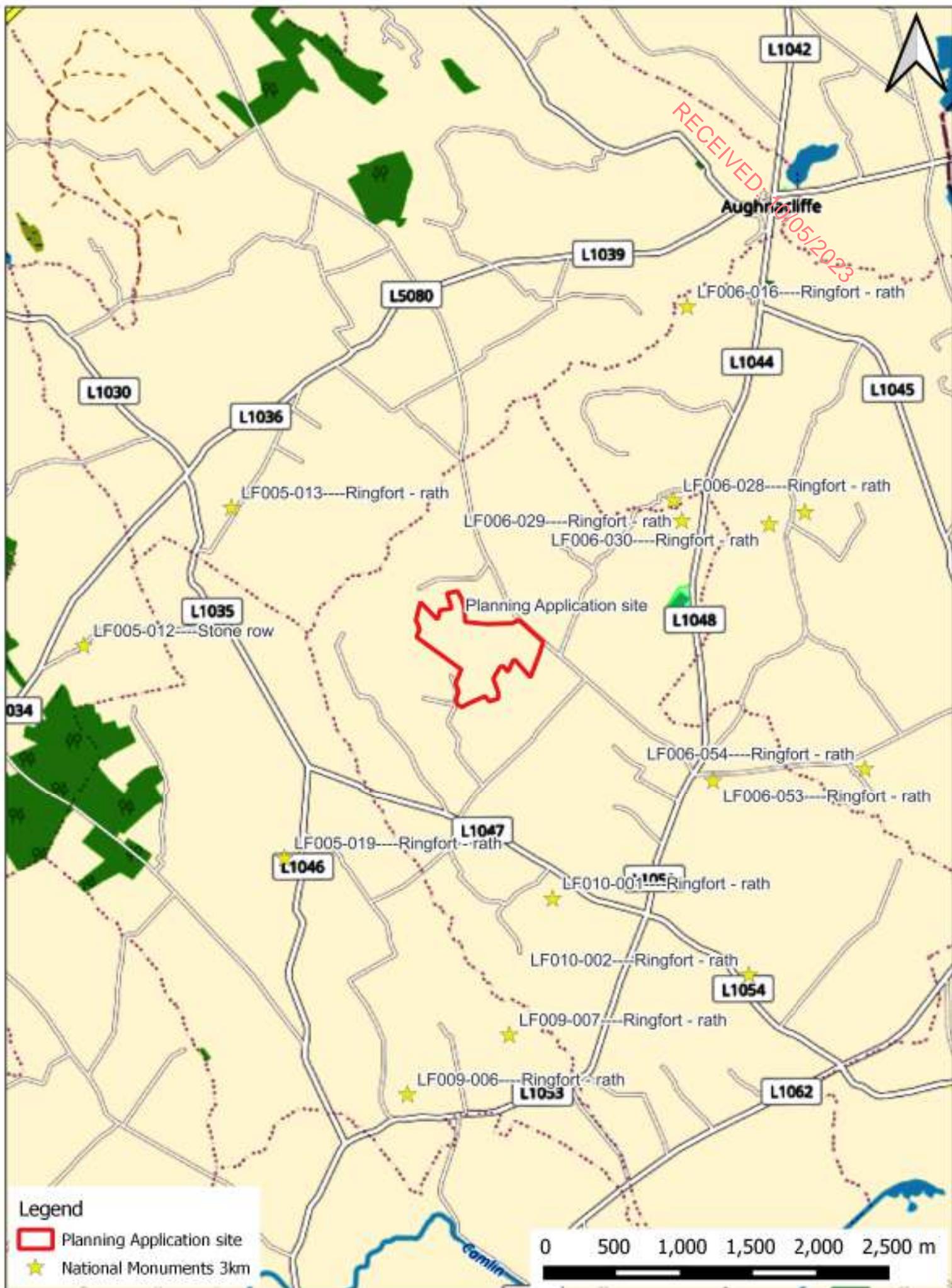


Figure 5: Recorded archaeological Sites & Monuments within c.3km of the Planning Application site
 (Scale = 1:35,000 @ A4).

7.2 Previous Archaeological Excavations

7.2.1 The Database of Irish Excavation Reports¹ was consulted during the preparation of this report and whilst no archaeological investigations have taken place within the boundaries of the PDA or in the immediate vicinity, there have been three archaeological investigations within the wider landscape (**Table 2**).

7.2.2 None of the three excavations within the wider vicinity uncovered archaeological remains.

Licence No.	Location	Author	ITM	Purpose of Investigation	Results of Investigation
08E0982	2009:549 - Aghnacliff, Longford (Sites and Monuments Record No.: LF006-017)	Shane Delaney, Irish Archaeological Consultancy Ltd	E 626213m, N 788833m	Testing was undertaken at Aghnacliff, Co. Longford, prior to the proposed five villages waste water sewerage scheme. Test-trenching was undertaken on 13 and 19 January 2009. A total of seven trenches were mechanically investigated across the greenfield site of the proposed wastewater-treatment works with a further trench being excavated along the section of pipeline within the archaeological constraint for an enclosure site, LF006-072. This trench was located within an existing roadway. The site of the proposed treatment works is bound to the north by a fast flowing river and is located c. 40m north-west of a large portal tomb (LF006-017) but outside of the constraint area. Nothing of archaeological significance was uncovered during the programme of testing.	No archaeological significance.
04E1018	2004:1044 - Cleenrah, Longford (Sites and Monuments Record No.: SMR 6:2)	Finn Delaney, Dominic Delany & Associates	E 625619m, N 790135m	Excavations at a development site in Cleenrah, Aghnacliffe, Co. Longford, took place on 27 July 2004. The site is situated on an east-facing slope overlooking Leebeen Lough. Two ringforts (SMR 6:1 and 6:3) and a portal tomb (6:4) are located within 500m of the site. The existing building is built across the western half of an enclosure. All that remains of the monument is a low scarp with slight remains of an earthen bank and a vague suggestion of a fosse. The scarp and slight bank are visible to the east of the house along the edge of a circular gravel driveway. The proposed extension to the north of the house measures 5m by 5.5m and extends across an existing level gravel drive. The projected line of the existing enclosure bank runs through the north-east corner of the extension. The majority of the extension then will lie on the interior of the partially destroyed enclosure. The extension will be built on a strip foundation with very little ground reduction necessary within the limits of the foundation trenches. Three short trenches were excavated along the line of the proposed strip foundations. Nothing of any archaeological significance was noted in any of the trenches. One modern feature was noted in Trench 1, which was possibly the remains of a disused sewage tank associated with the present house.	Enclosure: No archaeological significance.
03E0188 (Phase I) and 03E1023 (Phase II)	2003:971 - Newhall, Kildare	Mary Henry, Mary Henry Archaeological Services Ltd	E 619227m, N 786301m	Monitoring of topsoil-stripping was carried out in two phases, during the spring and autumn of 2003, of a greenfield site 2km south of Naas town. The site is being developed for light industrial/commercial activities. Several ploughed-out field boundaries, all of which were extensions of existing boundaries of the surrounding fields, were identified. Numerous field drains were uncovered, all dating to the mid- and late 20th century. Part of the site was dominated by peaty topsoil. The area where the peat occurred was bounded by a stream. A fulacht fiadh is located in the adjoining field. However, no such monument type was revealed in the course of monitoring the peaty part of the site.	No archaeological significance.

Table 2: List of Archaeological Investigations which have taken place within the wider landscape of the PDA

¹ <https://excavations.ie/> (visited 11/01/2023)

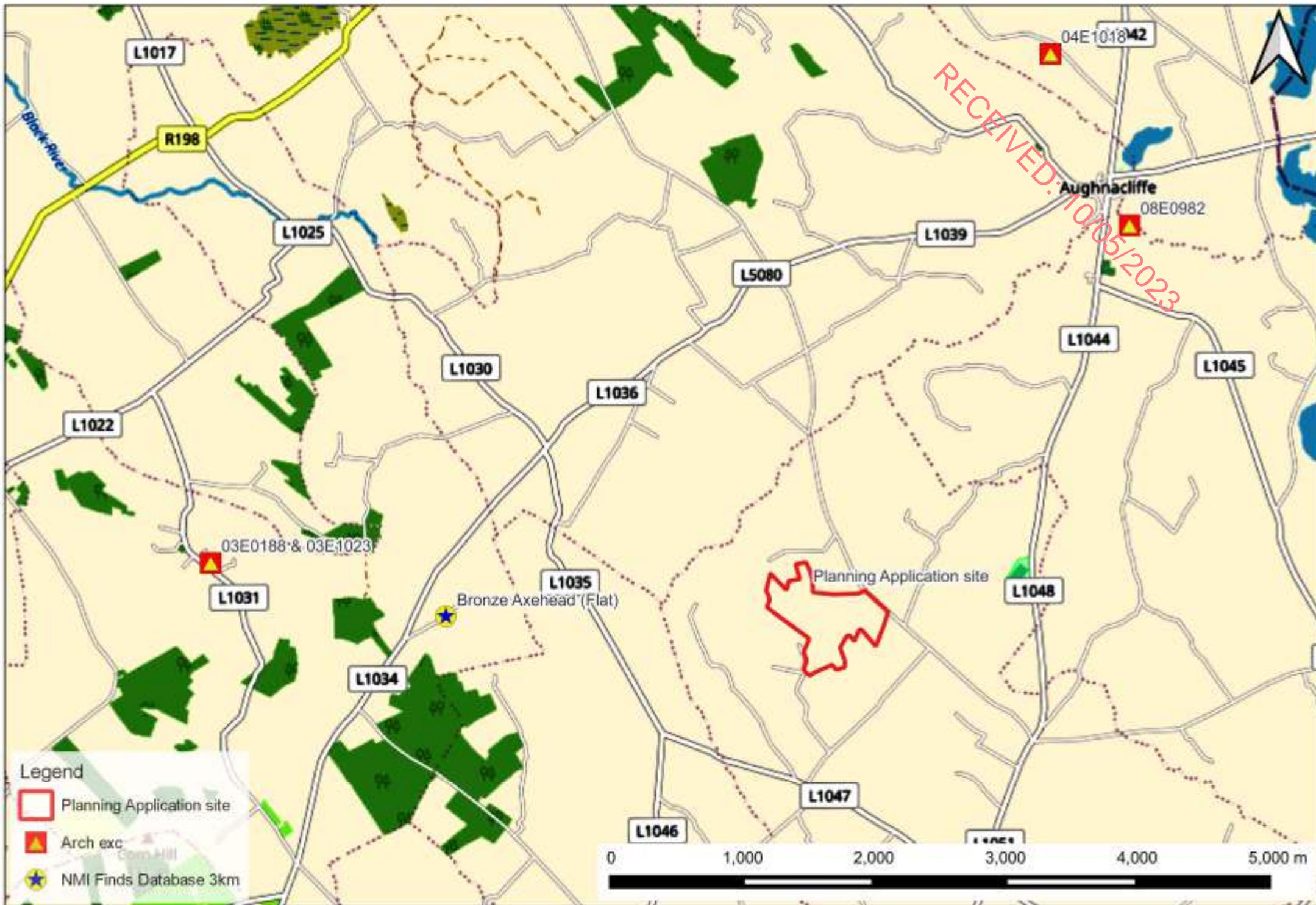


Figure 6: Archaeological investigations & findsspots in the National Museum of Ireland: Finds Database within the wider landscape (Scale = 1:35,000 @ A4).

7.3 National Inventory of Architectural Heritage (NIAH)

7.3.1 The National Inventory of Architectural Heritage (NIAH) was consulted and all historic / heritage buildings within c.3km of the proposed development site were noted to assess the impact of the proposed development on historic / heritage buildings in the surrounding area (**Table 3; figure 7; Appendix 2**).

7.3.2 Although there are seven historic / heritage buildings of regional importance recorded within the study area including Dillon's Bridge (**13400512**) and Scoil Náisiánta Naomh Muire (**13400604**), none of the abovementioned buildings are located within the boundaries of the PDA or in the immediate vicinity and it is not currently anticipated that the proposed development shall have a significant adverse impact upon any historic / heritage building, or its setting.

Reg. No.	Name	Townland	Date	Value	Original Use	ITM	Distance from the PDA (m)
13400509	-----	Aghadowry	1880 - 1900	Regional	Post Box	621832 786988	1827
13400511	-----	Lislea	1880 - 1900	Regional	House	622679 785036	1156
13400512	Dillon's Bridge	Voggy, Gelshagh Derreena	1840 - 1870	Regional	Bridge	624114 784458	1034
13400514	-----	Aghamore Upper, Glenmore	1850 - 1870	Regional	Bridge	623797 787262	966
13400604	Scoil Náisiánta Naomh Muire	Molly	1880 - 1885	Regional	School House	625372 785079	1228
13400902	-----	Kiltyclogh	1780 - 1820	Regional	House	622553 782786	2931
13401001	-----	Gelshagh	1880 - 1900	Regional	Post Box	625159 783913	1938

Table 3: NIAH Buildings within 3km of the Planning Application site

7.4 Topographical Files of the National Museum of Ireland

7.4.1 The Topographical Files of the National Museum of Ireland², including the National Museum of Ireland: Finds Database (2010) were consulted in order to establish the presence or absence of portable finds in the 32 townlands located within the 3km study area of the PDA.

7.4.2 Portable finds were identified in a single townland within the 3km study area surrounding the PDA, comprising a Bronze Axehead identified in Lettergonnell townland, at least 1.7km west of the PDA.

Townland	Find Number	Find Type
Lettergonnell	P.1949:57	Bronze Axehead (Flat)

Table 4: The Portable finds identified in townlands located within the 3km study area of the PDA

² <https://www.heritagemaps.ie/>

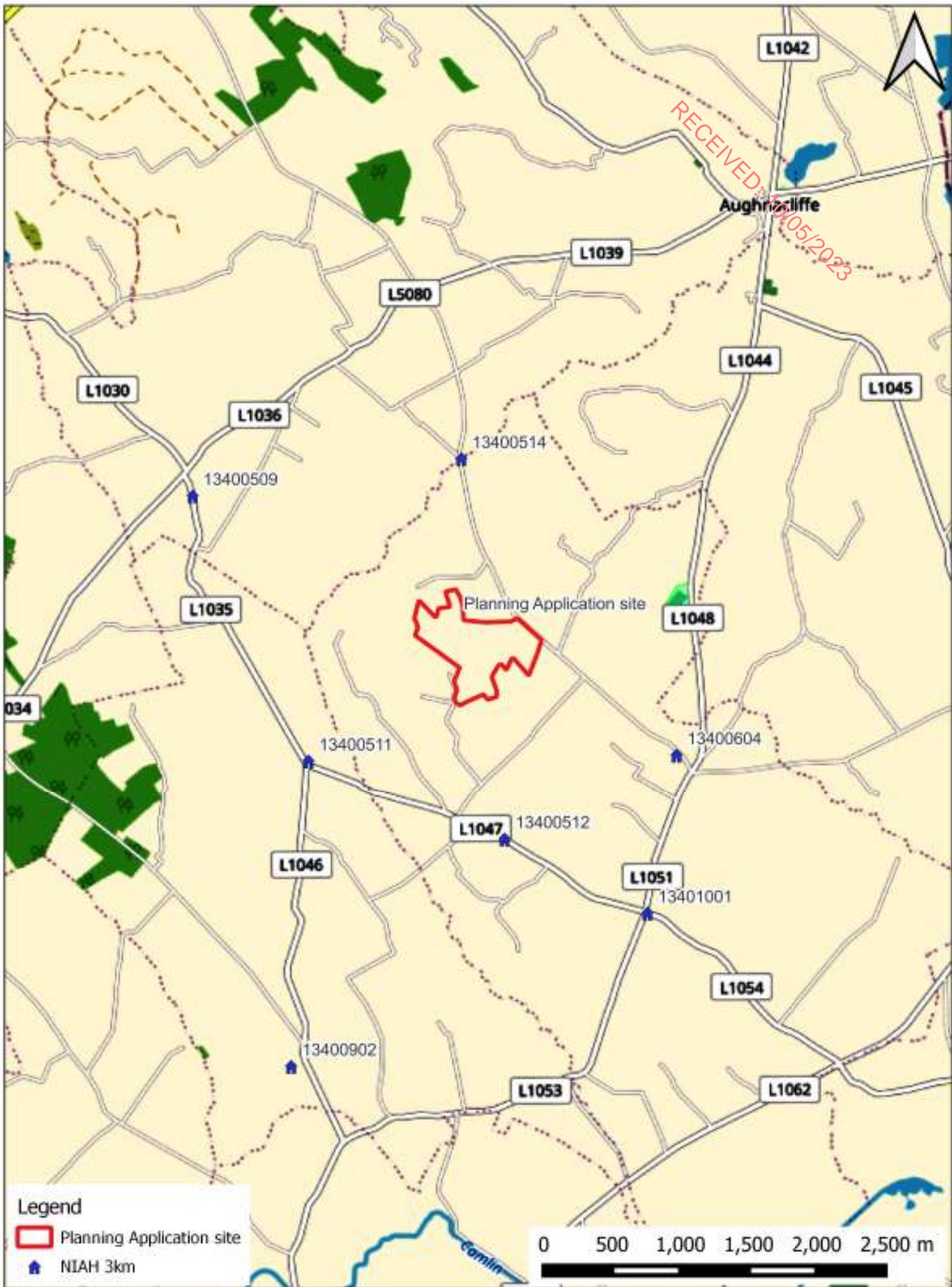


Figure 7: Historic / heritage buildings within c.3km of the Planning Application site (Scale = 1:35,000 @ A4).

7.5 Historic Maps

- 7.5.1 Historic editions of the Ordnance Survey Ireland (O.S.I.) maps for the area were consulted to identify cartographic references for land use within the boundaries and immediate vicinity of the proposed development site (**figures 8-10**).
- 7.5.2 On each of the historic editions of the O.S.I. maps, the PDA is shown as located within a rural agricultural landscape. On the 6" map of 1829-41 (**figure 8**) the area of the proposed development is depicted as spanning a large area of open green field across two townlands. Parts of the site boundaries are defined by field boundaries. Several structures and associated access laneways are depicted within the boundaries of the Planning Application site, although the majority are located within the area of the existing quarry rather than within the boundaries of the proposed extension to quarrying / PDA. However, two small buildings are depicted within the central portion of the PDA, accessed by a laneway extending roughly north – south to west and with several associated small parcels of land in the immediate vicinity. It is likely that the two buildings and associated lands represent a small farm.
- 7.5.3 On the O.S.I. 25" map of 1897-1913 (**figure 9**) there has been significant agricultural field division apparent within the wider landscape and within the boundaries of the PDA. Moreover, the buildings shown within the central portion of the PDA on the earlier map appear to have been replaced by structures c.25-30m to southwest (i.e. west of the access laneway) likely forming a small farm complex.
- 7.5.4 On the Sites & Monuments Archaeological Constraints map of 1913 (**figure 10**) the PDA appears much as on the slightly earlier edition, although some small expansion of the farm complex is apparent.
- 7.5.5 No previously unrecorded heritage features are shown within the boundaries of the PDA or within its immediate vicinity on any of the available historic editions of the Ordnance Survey mapping in addition to the buildings and features described above.

8. **Current Site Conditions / Aerial Photography**

- 8.1 Modern aerial photography from 2022 was consulted in order to establish the modern land use of the proposed development site and identify any potential archaeological features located within the site boundaries.
- 8.2 Inspection of the aerial photography from 2022 confirmed that between the last edition O.S.I. historic map in 1913 and the aerial photograph in 2022, the proposed development area had not undergone any significant development although the remainder of the Planning Application area had obviously undergone extensive development associated with the Aughnacaliffe Quarry.
- 8.3 Examination of the aerial photographs did not reveal any obvious potential archaeological features within the boundaries of the proposed development site.

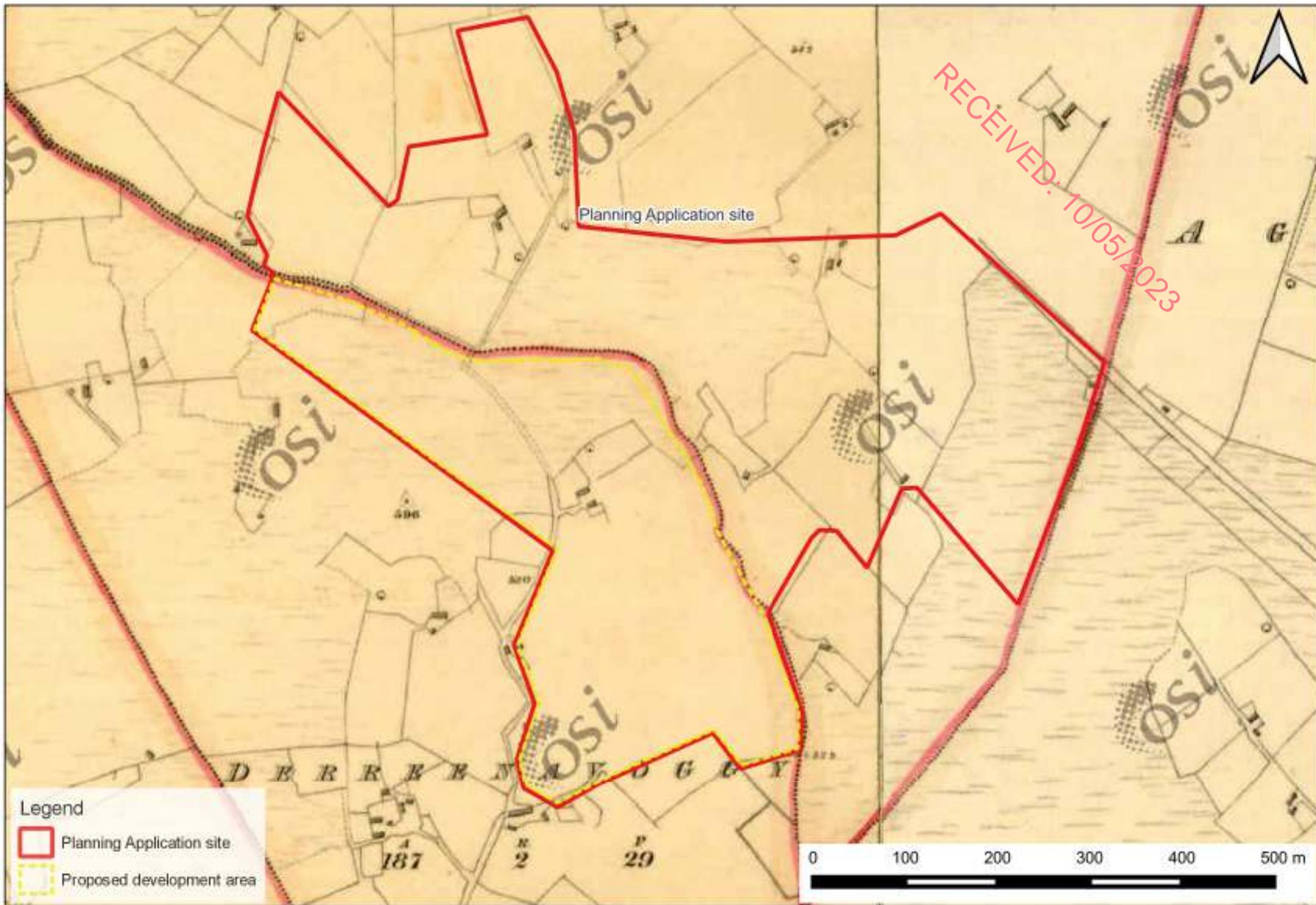


Figure 8: Historic 6" Ordnance Survey map c.1829-41 showing historic lanuse within the boundaries of the site (Scale = 1:5,000 @ A4).

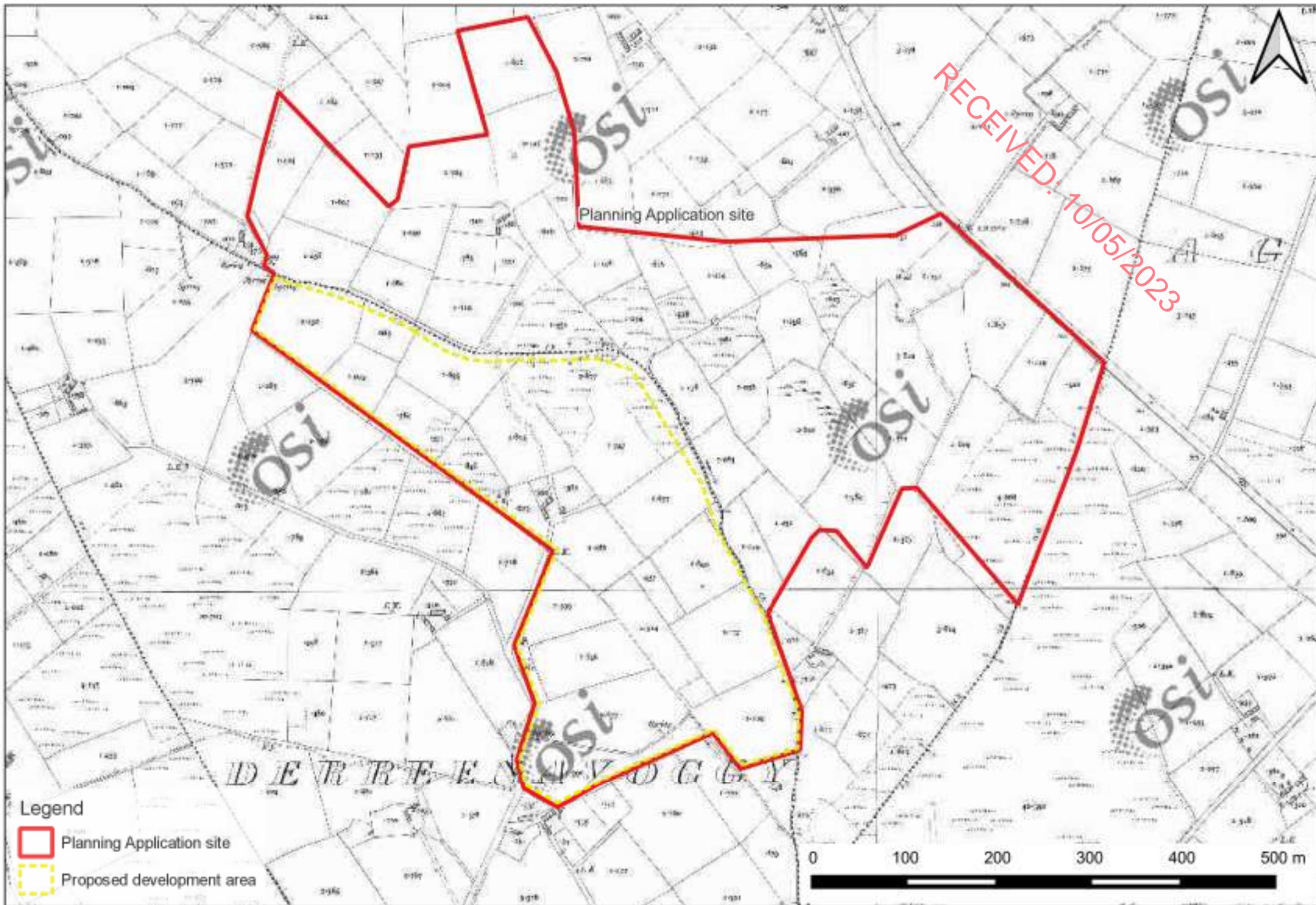


Figure 9: Historic 25" Ordnance Survey map c.1897-1913 showing historic landuse within the boundaries of the site (Scale = 1:5,000 @ A4).

9. Archaeological Potential

9.1 The assessment of the topographic potential and the examination of the type, density and distribution of archaeological sites within that landscape give rise to the identification of the archaeological potential of any given landscape. These areas of archaeological potential may be indicated given their:

- close proximity to recorded archaeological monuments (as depicted on the SMR / RMP maps)
- close proximity to newly identified potential archaeological sites.

9.2 *Summary of Findings- Desk Based Assessment*

9.2.1 Consultation of the SMR records maintained by The National Monuments Service of the Department of Housing, Local Government and Heritage (DHLGH) revealed that the site is located within an archaeologically sensitive landscape, with 14 known archaeological sites being located within c.3km of the proposed development site.

9.2.2 None of the above sites or monuments located within 3km of the PDA are located within the boundaries of the site or within its more immediate vicinity and it is not currently anticipated that these or any other previously recorded archaeological sites or monuments will be negatively impacted upon by the proposed development works.

9.2.3 The National Inventory of Architectural Heritage (NIAH) was also consulted, and all Buildings located within 3km of the proposed development site noted to assess the impact of the proposed development on historic / heritage buildings in the surrounding area.

9.2.4 There are seven historic / heritage buildings located within 3km of the PDA and none are located less than 900m from the PDA. It is therefore not currently anticipated that the historic / heritage buildings will be negatively impacted upon by the proposed development works.

9.2.5 In addition, consultation of the Topographical Files of the National Museum of Ireland identified the findspot of a Bronze Axe within Lettergonnell townland, although no findspots are located in the townlands in which the PDA is located.

9.2.6 No other recorded or previously unrecorded archaeological or heritage features were identified through consultation of the historic editions of the Ordnance Survey Ireland (OSI) maps for the area, which were consulted to identify cartographic references for land use within the boundaries and immediate vicinity of the proposed development site.

9.2.7 Based solely on the desk top study, the PDA can be assessed to be of moderate archaeological potential based solely upon its location within a wider archaeological landscape and its relatively undeveloped nature.

9.3 *Summary of findings – Topographic Assessment: interpretation of the archaeological landscape*

9.3.1 Consideration of the topographic setting of any proposed development is fundamental in the interpretation of the archaeological landscape of a given area. Three topographical characteristics may be considered as of archaeological importance within the landscape setting:

- High ground / elevated areas: These may be deemed as being of archaeological potential given their prominence in the local landscape. Numerous examples of the importance of areas of high / elevated land are recorded within the archaeological record, with specific emphasis upon early Christian defensive sites (i.e., raths / forts), prehistoric funerary (i.e., Barrows / Megalithic tombs) and ritual (i.e., prehistoric enclosures) sites.
- Areas in proximity to river courses: These areas may be deemed as being of archaeological potential given their ease of access to both natural resources such as water, food, and water energy (i.e., mills).
- Areas in proximity to lakes / coastal areas: As with those areas in proximity to river courses, these may also be deemed as being of archaeological potential due to their ease of access to water and food sources.

9.3.2 The Application site is located within a relatively elevated area within an undulating rural setting with numerous loughs and rivers within the wider landscape: the access to loughs and rivers provides ease of access to natural resources such as water and food. While there are no loughs located within 3km of the PDA, a reasonably significant watercourse is located c.400m to northwest of the site.

9.3.3 The proposed development site could therefore be considered as being located within an area of moderate archaeological potential given its topographical setting.

9.4 *Summary of Findings – Site Conditions*

9.4.1 An analysis of the current site conditions confirmed that the PDA is located within an area of historically low development, remaining green field in nature.

9.4.2 However, no obvious above ground archaeological features were identified within the area of the proposed development site during the examination of the existing site conditions or aerial photography.

9.4.3 The analysis of the site conditions would therefore suggest a moderate potential for the survival of archaeological remains within the area of proposed lateral extension to quarrying given its relatively undeveloped nature.

9.4.4 The remainder of the Application Site is comprised of an existing, permitted quarry and due to its nature, has no potential for the survival of archaeological remains.

10. Assessment of Archaeological Impact of the Development

10.1 Criteria for assessing the Archaeological Impact

- 10.1.1 Under Planning and Development legislation, the Minister for Housing, Local Government and Heritage is a statutory consultee in relation to potential impacts of any proposed development on the archaeological heritage. This allows the Minister to recommend that archaeological conditions be attached to grants of planning permission or recommend refusal of planning permission by the planning authority to ensure the protection of the archaeological heritage.
- 10.1.2 National Monuments Service provides expert advice from an archaeological perspective to planning and other relevant authorities in respect of individual planning, development applications and other projects and plans.
- 10.1.3 While carrying out its role in the planning process National Monuments Service, on behalf of the Minister, makes every effort to ensure that developmental impacts on the archaeological heritage are mitigated.
- 10.1.4 More information on archaeology and its interaction with the planning system can be found in booklet [Archaeology and the Planning Process³](#).
- 10.1.5 No nationally accepted standard method of evaluation and assessment is available for the assessment of impact significance upon archaeological / historic remains (cultural heritage). Archaeological Impact of the proposed development is assessed from a baseline which is based upon the situation that would exist if the proposed development scheme were not pursued. Previous **Sections 7 and 8** therefore form the baseline survey for this assessment.
- 10.1.6 The framework for identifying the archaeological impact of any development and the cultural heritage of archaeological remains uncovered during the development are governed by the legislation outlined in **Section 2** of this report. The criteria for assessing the impact include period, rarity, documentation, group value, survival / condition, fragility / vulnerability, diversity and potential.
- 10.1.7 This information, in conjunction with various other legal and statutory policies (*as outlined above in Section 2*) and with professional judgement, is used to assess the value of archaeological sites and monuments within a development. The approach to assessing the Cultural Heritage Value is presented in **Table 5** below.

³ <https://www.archaeology.ie/sites/default/files/media/publications/archaeology-planning-process-pl13.pdf>

Archaeological Impact Assessment for a proposed mineral extraction site at Aughnacliffe Quarry and lands directly to the south of the existing quarry, in the Townlands of Aghamore Upper and Derreenavoggy, County Longford. (Planning Application Ref: Pre-Planning).

Value	Examples
Very High	<ul style="list-style-type: none"> World Heritage Sites; Assets of acknowledged international importance; Other buildings of recognized international importance; Historic landscapes of international sensitivity, whether designated or not.
High	<ul style="list-style-type: none"> Undesignated sites/features of schedulable quality and importance; Buildings recorded in the NIAH; Undesignated structures of clear national importance; Designated & undesignated historic landscapes of outstanding interest.
Medium	<ul style="list-style-type: none"> Sites/features that contribute to regional research objectives; Unlisted buildings that can be shown to have exceptional qualities in their fabric or historical association; Historic townscape or built-up areas with historic integrity in their buildings, or built settings; Designated special historic landscapes and undesignated historic landscapes of regional sensitivity.
Low	<ul style="list-style-type: none"> Undesignated sites/features of local importance; 'Locally Listed' buildings and unlisted buildings of modest quality in their fabric or historical association; Historic landscapes whose sensitivity is limited by poor preservation and/or poor survival of contextual associations or with specific and substantial importance to local interest groups.
Negligible	<ul style="list-style-type: none"> Assets with very little or no surviving archaeological interest; Buildings of no architectural or historical note; buildings of an intrusive character; Landscapes with little or no significant historical interest
Unknown	<ul style="list-style-type: none"> Archaeological sites/features where the importance of the resource cannot be ascertained; Buildings with some hidden (i.e., inaccessible) potential for historic significance.

Table 5: Determining cultural heritage value

10.1.8 The magnitude of the potential impact is assessed independently for each individual site as well as its cultural heritage value. The impact categories are outlined in **Table 6** below.

Magnitude	Criteria
Major	Change to most or all key archaeological/historic building/historic landscape elements, such that the resource is totally altered. Comprehensive or total changes to setting.
Intermediate	Changes to many key archaeological/historic building/historic landscape elements, such that the resource is clearly modified. Considerable changes to setting.
Minor	Changes to key archaeological/historic building/historic landscape elements, such that the asset is slightly altered. Slight changes to setting.
Negligible	Very minor changes to elements or setting.
No Change	No change.

Table 6: Determining Magnitude of impact

Significance of Impact	Magnitude of Potential Impact				
	Major	Intermediate	Minor	Negligible	No change
Very high	Very Large	Large/Very Large	Moderate/ Large	Slight	Neutral
High	Large/Very Large	Moderate/ Large	Slight/ Moderate	Slight	Neutral
Medium	Moderate/ Large	Moderate	Slight	Neutral/ Slight	Neutral
Low	Slight/ Moderate	Slight	Neutral/ Slight	Neutral/ Slight	Neutral
Negligible	Slight	Neutral/ Slight	Neutral/ Slight	Neutral	Neutral

Table 7: Significance of impact

Impact Significance	Criteria
Very Large	<p>Cultural heritage features assigned this level of impact significance will represent key factors in the decision making process.</p> <p><i>Adverse</i> – Features of high/very high value which are partially damaged; sites of high/medium value which are almost wholly damaged or destroyed. Mitigation measures will have had minimal effect in reducing the significance of impact.</p> <p><i>Beneficial</i> – These effects will virtually restore a site or its setting and re-establish its significance.</p>
Large	<p>These effects are considered to be very important in the decision making process. These effects are important at a national level and to statutory bodies.</p> <p><i>Adverse</i> – These effects will damage assets or their setting, so that their integrity or understanding is destroyed or severely compromised. This will result in a resource that can no longer be appreciated or understood. Mitigation measures may not deal appropriately with all aspects of the impact.</p> <p><i>Beneficial</i> – These effects will halt rapid degradation or erosion of cultural heritage features or result in significant restoration of setting.</p>
Moderate	<p>These effects are likely to be important to considerations, but not key factors, in the decision making process. However, cumulative effects may raise the overall significance of impact. These impacts are likely to be important at a regional level.</p> <p><i>Adverse</i> – These effects will damage cultural heritage assets, or their setting, so that their integrity or understanding is compromised but not destroyed. Adequate mitigation measures can be specified.</p> <p><i>Beneficial</i> – These effects are likely to result in the halting of degradation or erosion of heritage assets or result in the restoration of characteristics features or setting so that understanding and appreciation is improved.</p>
Slight	<p>These effects are unlikely to be critical factors in the decision making process but are likely to be important factors in the design of a project. These effects are important at a local level.</p> <p><i>Adverse</i> – the proposals will damage cultural heritage assets, or their setting, so that their integrity or understanding is diminished but not compromised.</p> <p><i>Beneficial</i> – the proposals will stabilise cultural heritage assets or enhance their setting, so that their integrity is maintained or understanding is improved.</p>
Neutral	<p>No effects upon cultural heritage or the effects are negligible. There is no conflict with or contribution to policies for protection of heritage resources.</p>

Table 8: Significance of level of Impact

10.1.9 The two sets of criteria, for both the cultural heritage value and the magnitude of the impact, are therefore combined to determine the significance of the impact, as laid out in **Table 7**.

10.1.10 The significance of the impact can be either beneficial or adverse (**Table 8**). In general, a beneficial impact would involve the preservation of archaeological or historical remains *in-situ* and through record. An adverse impact would be the destruction of archaeological or historical remains.

10.2 Assessment of Archaeological Impact: Previously Identified Cultural Heritage Features.

10.2.1 The Application site lies within an area of archaeological / historical potential, with several archaeological sites and monuments being recorded within a 3km radius.

10.2.2 However, none are located within the boundaries of the PDA or within its immediate vicinity and it is not anticipated that the proposed development works shall have an adverse impact upon any previously recorded heritage feature or its setting.

10.2.3 The significance of the level of impact of the proposed development (**figure 9**) in relation to recorded monuments in the surrounding area can therefore be considered neutral for sites within the wider landscape around the proposed development area.

Register	Cultural Heritage Receptor	Assessment of significance	Value	Magnitude	Significance of Impact
SMR	LF005-012----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF005-013----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF005-019----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF006-016----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF006-028----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF006-029----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF006-030----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF006-031----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF006-053----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF006-054----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF009-006----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF009-007----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF010-001----	Contribute to regional research objectives	Medium	No Change	Neutral
SMR	LF010-002----	Contribute to regional research objectives	Medium	No Change	Neutral
NIAH Structures	13400509	Listed Building of Regional Importance	High	No Change	Neutral
NIAH Structures	13400511	Listed Building of Regional Importance	High	No Change	Neutral
NIAH Structures	13400512	Listed Building of Regional Importance	High	No Change	Neutral
NIAH Structures	13400514	Listed Building of Regional Importance	High	No Change	Neutral
NIAH Structures	13400604	Listed Building of Regional Importance	High	No Change	Neutral
NIAH Structures	13400902	Listed Building of Regional Importance	High	No Change	Neutral
NIAH Structures	13401001	Listed Building of Regional Importance	High	No Change	Neutral

Table 9: Assessment of Impact of proposed development upon existing known archaeological sites, monuments & heritage features.

10.3 Previously Unidentified / Potential Archaeological Remains

- 10.3.1 Previous archaeological investigations associated with development works within Ireland have highlighted the potential for subsurface archaeological remains associated with both prehistoric and historic activity to be adversely impacted upon during development works such as those carried out during development for housing, infrastructure and commercial development.
- 10.3.2 The desk-based assessment suggests that the PDA is located within an area of moderate archaeological potential considering its location within an archaeological landscape with several known sites within the study area, though none are located within the boundaries of the PDA itself.
- 10.3.3 Whilst the majority of the PDA has remained undeveloped, in that no modern structures are known to have been constructed within the boundaries of the site other than the small farm complex within the central portion of the site along its southern boundary, the likelihood of preservation of any such features, remains or deposits which may have been located within the PDA should be considered as high.
- 10.3.4 The proposed development seeks to win and work the greywacke mineral resource which has been identified at the site, in a phased manner which includes extending workings at the existing quarry southwards, with a deepening of the existing quarry floor levels. Following the completion of extraction, the site will be restored to create a waterbody and biodiverse habitats.
- 10.3.5 The value of potential archaeological deposits remains unknown, however, the magnitude of impact of the proposed development works upon any such previously unidentified remains can be considered as likely to be major. Should sub-surface archaeological remains survive within the site boundaries within areas of proposed development works, any invasive groundworks associated with quarrying will have an adverse impact upon previously unidentified sub-surface archaeological remains.
- 10.3.6 Therefore the proposed works associated with the current proposal could be considered as likely to have a large impact upon any archaeological deposits which may survive below the ground surface, as any such remains would be likely to be physically impacted upon.
- 10.3.7 As this is an unknown impact (the depth and presence of sub-surface archaeological remains is unknown, but is a possibility), the significance of the impact cannot be accurately interpreted without greater certainty regarding the presence or absence and nature of archaeological features, remains or deposits which may survive within the boundaries of the PDA.
- 10.3.8 Given the nature of the works associated with the current development proposal and the potential impact of such works upon any previously unrecorded archaeological remains which may survive *in-situ* within the PDA, it is recommended that archaeological mitigation measures are implemented in line with planning policy guidelines and statutory heritage requirements.
- 10.3.9 It is therefore recommended that a programme of archaeological monitoring of topsoil stripping at the proposed development will be required as part of development works at the site. It is recommended that any topsoil stripping associated with this proposed development should be carried out under the supervision of a suitably qualified archaeologist under licence to the DHLGH.

11. Conclusions and Recommendations⁴

- 11.1 The proposed development seeks to win and work the greywacke mineral resource which has been identified at the site at Aughnaclyffe Quarry and lands directly to the south of the existing quarry, in the Townlands of Aghamore Upper and Derreenavoggy, County Longford.
- 11.2 Development will be undertaken in a phased manner which includes extending workings at the existing quarry southwards, with a deepening of the existing quarry floor levels. Following the completion of extraction the site will be restored to create a waterbody and biodiverse habitats.
- 11.3 The Application Site is c.36.8ha in size, with c.22ha of the site comprised of the existing quarry and associated overburden storage and landscaping areas. The remainder of the site (the Proposed Development Area) (c.15ha), located to the south of the existing quarry void, is comprised of lands in agricultural use. A cluster of farm buildings, under the ownership of the applicant is located along the southern boundary of the site.
- 11.4 Consultation of the heritage databases has confirmed that the proposed scheme lies within an area of archaeological / historical potential, with fourteen archaeological sites and monuments and seven NIAH structures recorded within a 3km radius.
- 11.5 However, none of the sites or heritage assets are located within the boundaries of the PDA and none are located within the immediate vicinity of the site. Therefore, it is not anticipated that the proposed development works shall have a significant adverse impact upon any previously recorded heritage feature or its setting.
- 11.6 The desktop study has confirmed that the site is located within an area of moderate archaeological potential given the location of the proposed development area within a wider archaeological landscape.
- 11.7 However, the current proposal is for the extension of a greywacke mineral quarry within the boundaries of the site (the Proposed Development Area) and site restoration. Substantial invasive groundworks will be required, which have the potential to adversely impact upon any previously un-recorded sub-surface archaeological remains which may survive within the PDA boundaries.
- 11.8 While there remains moderate – high potential for archaeological remains to survive within the site boundaries, their exact location, nature and extent remains uncertain.
- 11.9 Statutory legislation and Planning Policies relating to Culture & Heritage allow for the granting of permission for development which will affect sites known to contain archaeological remains, whereupon the Minister will impose conditions to ensure that appropriate measures are taken for the identification and mitigation of the archaeological impacts of the development, including where appropriate the completion of a licensed excavation and recording of remains before development commences.
- 11.10 Given that there is the potential for archaeological remains to survive within the site boundaries, but these are an unknown, it is recommended that archaeological mitigation measures are implemented in line with planning policy guidelines and statutory heritage requirements. The following recommendations are proposed as part of such investigations:

⁴ All recommendations are subject to discussions with and the approval of the relevant heritage authorities in DHLGH / NMI. *Archaeological Impact Assessment for a proposed mineral extraction site at Aughnaclyffe Quarry and lands directly to the south of the existing quarry, in the Townlands of Aghamore Upper and Derreenavoggy, County Longford. (Planning Application Ref: Pre-Planning).*

11.11 Archaeological Mitigation: Development led Investigations

- 11.11.1 Topsoil stripping at the proposed development will be required as part of development works at the site. It is therefore recommended that any topsoil stripping associated with this proposed development should be carried out under the supervision of a suitably qualified archaeologist under licence to the DHLGH.
- 11.12.1 Prior to applying for the archaeological licence, the archaeologist should prepare a Method Statement / Archaeological Programme of Works for submission with the Licence Application to the Department of Housing, Local Government and Heritage (DHLGH).
- 11.12.2 It normally takes approximately 4 weeks to obtain approval of the archaeological licence necessary to undertake on-site works.
- 11.12.3 It is recommended that the developer / contractor allow sufficient time prior to the undertaking of site-works for the preparation and submission of the Method Statement / Archaeological Programme of Works, for the submission of the necessary Licence Application and the issuing of the Licence.
- 11.12.4 Preservation *in-situ* of any archaeological remains is to be preferred, however in instances where *in-situ* preservation may not be appropriate the most appropriate mitigation strategy would therefore be through a policy of preservation through record, i.e., archaeological excavation and recording, in line with current planning policy guidelines.
- 11.12.5 It is recommended that sufficient time be allowed within the development programme for the undertaking of any archaeological excavation / recording which may be required.
- 11.12.6 Once the Licence is in place, the archaeologist will monitor all groundworks (including site preparation, excavation and grading works) within the boundaries of the development area in order to identify any archaeological remains or deposits which may survive *in-situ*.
- 11.12.7 Should extensive archaeological remains be identified during archaeological monitoring, their treatment will need to be discussed and agreed with the relevant authorities in DHLGH.
- 11.12.8 It is recommended however that any archaeological deposits uncovered during the course of pre-development works that cannot be preserved *in-situ* undergo preservation through record (i.e., archaeological excavation and recording).
- 11.12.9 Should no archaeological material be uncovered during the course of monitoring of topsoil stripping, it may be possible in consultation with DHLGH to allow the associated phase of development works to proceed with no further archaeological requirement.
- 11.12.10 It is recommended that the developer allow sufficient time within the development programme for the carrying-out of any archaeological excavation / recording which may be required.

11.12 Post Development / Post Excavation Investigations

11.11.1 Once all of the required fieldwork is completed, post-excavation analysis and the production of a report outlining the findings and results of archaeological excavations (*if undertaken*) will be required under both planning and licencing conditions.

11.11.2 It is recommended that a full timetable and costing of post excavation requirements are produced and agreed between archaeologist and developer, with timetables and post excavation methodologies to be submitted to DHLGH. This should ideally be carried out in the final stages of on-site archaeological attendance.

Appendix 1: Sites and Monuments Record.

Recorded Archaeological Sites & Monuments within c.3km of the PDA

*** Unless otherwise stated, all descriptions below were derived from the 'Archaeological Inventory of County Longford compiled by Patrick F. O'Donovan and Elizabeth FitzPatrick (Dublin: Stationary Office, 1995). In certain instances, the entries have been revised and updated.***

SMR	Description	Townland(s)	ITM_E ITM_N
LF005-013----	Ringfort - rath	Aghadowry	622105 786908
<p>On a SE-facing slope in pasture. Depicted as a circular enclosure with the designation 'Fort' on the 1837 ed. of the OS 6-inch map. A report in 1976 (SMR file) described the monument as a raised subcircular area (c. 53m NNE-SSW; c. 47m ENE-WSW) enclosed by a substantial bank of earth and stone with a wide deep external fosse and a possible original entrance at SE. It has since been almost completely destroyed by quarrying. All that survives is a very small portion of the interior (max. dim. 3m) which is enclosed by a wide low bank of earth and stone (Wth c. 4.5-6m; H 0.1-0.6m) from NE-S-W. Because the bank is heavily overgrown with scrub it is unclear whether the original feature has been augmented by upcast from the quarry. A low, poorly defined rise marks the circuit of the remainder of the perimeter. The fosse is not visible at ground level and the present entrance is at SE.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 26 August 2011</p>			
LF005-012----	Stone row	Lettergonnell	621025 785893
<p>On top of a drumlin in pasture. A row of four, widely-spaced, upright stones, aligned NE-SW, measures 14.1m in overall length. The first stone (H 0.6m; Wth 0.27m; T 0.27m), at the NE end of the row, leans to the W. Stones piled around its base are probably field-clearance debris. The second stone (H 0.75; Wth 0.5m; T 0.3m), also leaning to the W, stands 4.25m to its SW. The third stone (H 0.66m; Wth 0.35m; T 0.3m) stands 3.7m from the previous one and its axis is transversely set to that of the row. There are some stones, again possibly field clearance, piled immediately to its W, including a stone (H 0.3m; Wth 0.5m; T 0.2m) set an angle; the function of the latter stone is unknown. The fourth stone (H 0.55m; Wth .4m; T 0.25m) stands 4.9m to the SW. The stones are known locally as the 'Croppies' Graves', i.e. reputed burial places for the insurgents of the 1798 rebellion. During land reclamation extensive ground disturbance was undertaken in this area. However, the rise upon which the monument is located was not disturbed but the pathway into the field was renovated and widened; its scarp edge is immediately adjacent to the upright at the SW end of the row. There is a low scarp c. 2m to the E of the stones and running parallel to them; the function of this feature is unknown.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 1 March 2012</p>			
LF006-016----	Ringfort - rath	Aghnacliff	625436 788387
<p>On a low rise in pasture. A raised circular area (33m E-W; 30.5m N-S) enclosed from NW-N-SSE by a wide low bank of earth and stone (Wth 4.7-7.2m; H 0.6-0.75m) and elsewhere defined by a scarp (H 1.4-2.1m). There is no trace of a fosse. A report in 1990 (SMR file) suggested that the original entrance was probably at S.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 26 August 2011</p>			

LF006-028----	Ringfort - rath	CARRICKADORRISH	625336 786962
<p>On a slight rise in gently undulating hilly pasture land. Depicted as a circular enclosure with the designation 'Fort' on the 1837 ed. of the OS 6-inch map. Described in 1976 (SMR file) as small subcircular enclosure defined by a substantial earthen bank with an external fosse. A number of gaps were visible in the bank but a causewayed one at NW appeared to mark the original entrance. Vague traces of cultivation ridges were evident within the interior. The monument was levelled in 1990 and is not visible at ground level.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 14 November 2012</p>			
LF006-029----	Ringfort - rath	Aghacordrinan	625399 786812
<p>On a SSE-facing slope in pasture. An oval-shaped mound of earth and stone (34.2m E-W; 28.1m N-S) is delimited by a relatively steep scarp (H 0.4-1.5m) from NW-N-ESE, elsewhere it is less well defined, a wide, shallow fosse (Wth 4.7m; D 0.6m), a very wide, high, bank (Wth 8.5m; H 2.3m), a second narrow, shallow fosse (Wth 1.8m; D 0.3m) and a wide, low outer bank (Wth 4.2m; H 0.6m). The outer bank has been modified and incorporated into a field boundary from SE-S-WNW. The original entrance is not recognisable. The perimeter is very overgrown with scrub rendering satisfactory inspection impossible.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 14 November 2012</p>			
LF006-030----	Ringfort - rath	Sonnagh	626038 786786
<p>On a SW-facing slope in pasture. Depicted as a circular enclosure with the designation 'Fort' on the 1837 ed. of the OS 6-inch map. A report in 1976 (SMR file) recorded a raised circular area (diam. c. 26m) enclosed by a low bank of earth and stone with an external fosse. The original entrance was probably at E. The monument has since been levelled but is clearly visible as a cropmark on an OSI aerial photograph (SMR file).</p> <p>Compiled by Patrick F. O'Donovan Date of upload: 5 December 2012</p>			
LF006-031----	Ringfort - rath	Sonnagh	626302 786875
<p>National Monument No. 598. On top of a drumlin ridge in upland area overlooking Lough Gowna to the E. A raised circular area (diam. 46m) enclosed by a low bank of earth and stone (Wth 5.8-6m; H 0.5-0.9m) at NE and from SSE-S-WSW, and elsewhere defined by a scarp (1.2-2m) with a wide, deep intervening fosse (Wth 6.7m; D 0.85-1.5m) and a very wide, high outer bank (Wth 8.5m; H 1.9m). The outer face of the latter has been modified and incorporated into a field boundary. A break (Wth 4m) in the inner bank at SSE may mark the original entrance. There is a spring well at E.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 26 August 2011</p>			
LF006-054----	Ringfort - rath	Aghakeeran	626738 784985
<p>On an E-facing slope in pasture. A raised circular area (diam. 31.5m) enclosed by a substantial bank of earth and stone (Wth 3-3.8m; H 0.75-0.95m) from SE-S-N and elsewhere defined by a scarp (H 0.7-1.4m). A report in 1975 (SMR file) recorded a wide, shallow, external fosse, which is not visible at ground level. The original entrance is not recognisable.</p>			

Compiled by: Patrick F. O'Donovan			
Date of upload: 22 November 2011			
LF006-053----	Ringfort - rath	Molly	625627 784898
<p>On a steep E-facing slope in pasture. A raised circular area (diam. 33m) enclosed by a low bank of earth and stone (Wth 5.5-6.5m; H 0.6-1m) with an external fosse (Wth 4.5m; D 0.2m), which is identifiable only from NNW-N. A break (Wth 5m) in the bank at SE may mark the original entrance.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 26 August 2011</p>			
LF005-019----	Ringfort - rath	Castlebaun	622493 784324
<p>On a terrace on a S-facing slope overlooking a stream. A raised oval area (40.5m N-S; 32m E-W) enclosed from WSW-W-NNW by a low bank of earth and stone (Wth 4m; H 0.3-0.5m) and by a scarp (H 0.8-1.7m) from NNW-N-NNE, and from SE-S-SW. Elsewhere a natural scarp defines the monument. There is no trace of a fosse. The original entrance is not recognisable.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 26 August 2011</p>			
LF010-001----	Ringfort - rath	Aghagreagh,Gelshagh	624453 784028
<p>On a shelf of level ground at the base of a SW-facing slope. A raised circular area (diam. c. 29m) enclosed by a partially denuded, wide, low bank of earth and stone (Wth 3.2-7.8m; H 0.55-1.15m) with a wide, shallow, intervening fosse (Wth 6.7-7.2m; D 0.1-0.6m), which is identifiable only from W-N-SE, and an outer bank (Wth 6-7.2m; H 0.6-1.5) from W-WNW and at SE. A report in 1978 (SMR file) speculated that a blocked-up break in the inner bank at N with an accompanying causeway across the fosse may have represented the original entrance.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 22 November 2011</p>			
LF010-002----	Ringfort - rath	Aghakilmore,Gelshagh	625887 783467
<p>On a SE-facing slope in pasture. A raised circular area (diam. 36m) enclosed by a low bank of earth and stone (Wth 4-6m; H 0.2-0.8m) with a wide, deep, intervening fosse (Wth 6m; D 0.45-1.5m) and an outer bank (Wth 5.8m; H 0.2-0.8m) from N-NE-E. The original entrance is not recognisable. The interior slopes steeply from NW to SE.</p> <p>Compiled by: Patrick F. O'Donovan Date of upload: 22 November 2011</p>			
LF009-007----	Ringfort - rath	Lislea (Granard By.)	624136 783027
<p>On a SSE-facing slope in pasture. Depicted as a small enclosed tree plantation on the 1837 ed. of the OS 6-inch map. A raised oval area (45.5m NNE-SSW; 39m WNW-ESE) enclosed by a wide bank of earth and stone (Wth 3.8-5.2m; H 0.2-1.2m) with a wide, deep, steep-sided, flat-bottomed, partially waterlogged fosse (Wth 3.2-c. 5m; D 0.6-1.1m). At the outer lip of the fosse is a narrow, low bank (Wth 0.3m; H 0.3m). This is the remains of a disused field boundary that may have been fashioned from a pre-existing outer bank. A break in the bank (Wth. 1.7m) with accompanying causeway across the fosse (Wth c. 2m; H 0.7m) at N marks the original entrance. The interior is</p>			

overgrown with trees, bushes and scrub.

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LF009-006----	Ringfort - rath	Aghaward	623392 782589
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National Monument No. 530. On a S-facing slope. A short distance to the W is a small stream. A raised circular area (diam. 30m) enclosed by a substantial bank of earth and stone (Wth 3.6-8.5m; H 0.6-1.7m) with a wide, deep, partly waterlogged, external fosse (Wth 4.5-7.5m; D 0.2-1.9m). The fosse has been infilled from SSE-S-SW and from WSW-NW-N. The original entrance is not recognisable. (Wilson 1899, 67-8)

Compiled by: Patrick F. O'Donovan Date of upload: 26 August 2011

Appendix 2: National Inventory of Architectural Heritage (NIAH).

Recorded Historic Buildings within c.3km of the PDA:

Reg No.	Name	Townland	Date	Value	Original Use	ITM
13400509	-----	Aghadowry	1880 - 1900	Regional	Post Box	621832 786988
<p>Description: Wall-mounted cast-iron post box, c. 1890, with 'VR' royal cipher and raised crown motif. Raised 'Post Office' lettering to letter flap. Foundry mark to base, now illegible. Set into rendered pier set into rendered boundary wall outside of a two-storey house (not in survey). Located along road in the rural landscape to the southeast of Ballinamuck, just to the southeast of a rural crossroad junction.</p> <p>Appraisal: An attractive item of street furniture that represents an early surviving artefact of mass-produced cast-iron ware. The modest design of the box is enhanced by the royal cipher (identifying the reign of Queen Victoria between 1837 - 1901) and the crown motif, which enliven the appearance of this otherwise functional object. Many pre-independence post boxes were simply painted green and retained their royal insignia but are now becoming an increasingly rare sight and are worthy of retention as historical artifacts. It was probably made by W.T. Allen and Company of London (1881 - 1955), who were responsible for many of the late-Victorian and Edwardian post boxes in North Leinster. Such cast-iron post boxes are becoming increasingly rare throughout Ireland, and are replaced with mild steel and aluminum models. It is located just to the south of a rural crossroad junction, a logical site for a post box.</p> <p>http://www.buildingsofireland.ie/niah/images/survey_specific/fullsize/13400509_1.jpg</p> <p>http://www.buildingsofireland.ie/niah/search.jsp?type=record&county=LF&regno=13400509</p> <p>NIAH Survey of County Longford 2005 HISTORICAL, SOCIAL, TECHNICAL</p>						
13400511	-----	Lislea	1880 - 1900	Regional	House	622679 785036
<p>Description: Detached four-bay two-storey house, built c. 1890, having porch to front elevation (southeast) and recent single-storey lean-to extension to the east elevation. Hipped slate roof with overhanging eaves and rendered chimneystacks. Roughcast rendered walls with painted rendered plinth course. Square-headed window openings with two-over-two timber sliding sash windows having painted concrete sills and rendered reveals. Recent porch to front with square-headed opening having modern door with modern glazed surround. Three-bay single-storey outbuilding to southeast having pitched corrugated-metal roof. Painted render over rubble stone masonry walls. Square-headed window openings with timber fittings. Square-headed opening with timber battened door. Set back from in own grounds at prominent road junction to the east of Drumlish. Site bounded by field ditch to the south and southeast, with rendered gate piers (on square-plan) and sweeping rendered boundary walls to the west of site.</p> <p>Appraisal: Although extended, this simple house retains much of its original structure and character. Its form and massing is typical of many modest almost vernacular late nineteenth-century farmhouses that can be found throughout rural Ireland. It survives in good condition and retains much of its early fabric, including two-over-two pane timber sash windows. The outbuilding and yard to southeast form part of a working farm. The house is prominently sited at a road junction, and forms a handsome roadside feature in the rural landscape to the east of Drumlish.</p> <p>http://www.buildingsofireland.ie/niah/images/survey_specific/fullsize/13400511_1.jpg</p> <p>http://www.buildingsofireland.ie/niah/search.jsp?type=record&county=LF&regno=13400511</p> <p>NIAH Survey of County Longford 2005 ARCHITECTURAL</p>						

13400512	Dillon's Bridge	Voggy, Gelshagh Derreena	1840 - 1870	Regional	Bridge	624114 784458
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Description: Single-arch road bridge over tributary of the Camlin River, built c. 1860. Segmental-headed arch with dressed limestone block-and-start voussoirs (V-jointed). Squared and dressed limestone rubble construction to barrel and abutments. Block-and-start quoins to corners of abutments. Coursed rock-faced masonry to spandrel walls, projecting battered rock-faced piers to either side of central arch. Rock-faced capstones over piers. Projecting dressed string course at deck/road level, incorporating piers. Coursed rock-faced masonry parapets with rock-faced coping over. Rubble stone wing walls to ends of parapets. Located to the east of Drumlish and to the southeast of Ballinamuck.

Appraisal: This bridge shows evidence of highly skilled craftsmanship in its stonemasonry, particularly in the dressed block-and-start voussoirs and to the coursed rock-faced masonry to the spandrel walls, piers and parapets. The contrast between the dressed limestone voussoirs to the arch and the rock-faced masonry creates an interesting visual effect. This bridge has an unusually high arch, which adds to its engineering and technical merit. Its robust construction suggests that he may have been built by the Board of Works, who built a great many bridges throughout Ireland in the mid-nineteenth century, and particularly between c. 1847 - 60. This appealing structure adds historic interest to its pleasant rural location, and is an integral element of the built heritage of north County Longford. It (probably) replaced an earlier bridge at this site (indicated on 1838 Ordnance Survey first edition six-inch map). The bridge serves as a reminder of the quality of the engineering and local craftsmen's skills in the mid-nineteenth century.

http://www.buildingsofireland.ie/niah/images/survey_specific/fullsize/13400512_1.jpg

<http://www.buildingsofireland.ie/niah/search.jsp?type=record&county=LF®no=13400512>

NIAH Survey of County Longford 2005 ARCHITECTURAL, TECHNICAL

13400514	-----	Aghamore Upper, Glenmore	1850 - 1870	Regional	Bridge	623797 787262
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Description: Single-arch road bridge, built c. 1860, over unnamed river/stream flowing into Lough Gowna to the east. East parapet recently damaged and now partially collapsed. West parapet possibly rebuilt c. 1920. Round-headed arch having rock-faced dressed limestone voussoirs with dressed margins. Rock-faced limestone masonry to abutments; squared rubble limestone masonry to barrel. Squared rubble limestone and rock-faced limestone to spandrel walls. Concrete coping over parapet walls. Flight of concrete steps to the southeast side of bridge. Located to the northeast of Drumlish.

Appraisal: A robustly-built small-scale bridge, of mid nineteenth-century appearance, which is a pleasing feature in the rural landscape to the north County Longford. Although the east parapet has been heavily damaged by a recent crash, this bridge retains its early form and character. The good quality heavily rock-faced masonry is a typical feature of the many bridges built throughout Ireland by the Board of Works during the mid-to-late nineteenth century, and particularly between c. 1847 - 60, suggesting that they may have been responsible for its construction. This bridge is similar in form to a number of other bridges in north County Longford, which suggests that it was built as part of a general drainage and/or bridge building programme.

http://www.buildingsofireland.ie/niah/images/survey_specific/fullsize/13400514_1.jpg

<http://www.buildingsofireland.ie/niah/search.jsp?type=record&county=LF®no=13400514>

NIAH Survey of County Longford 2005 ARCHITECTURAL, TECHNICAL

13400604	Scoil Náisiánta Naomh Muire	Molly	1880 - 1885	Regional	School House	625372 785079
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Description: Detached eight-bay single-storey former school, dated 1884, having flat-roofed four-bay single-storey hall to centre of front elevation (northeast), and later gabled dormer windows to the north pitch of roof. Now in use as house. Pitched natural slate roof with two brick chimneystacks, pitched artificial slate roofs to dormers, with timber bargeboards. Painted rendered walls over rendered plinth with carved limestone plaque to flat-roofed extension reading 'Scoil Muire Scoil Naisiúnta'. Square-headed window openings with six-over-six pane timber sliding sash windows, having sandstone sills. Square-headed openings with timber casement windows to dormers. Square-headed door openings to side elevations of flat-roofed projection (northwest and southeast sides), having half-glazed timber battened doors. Set back from road in elevated site to the northwest of Granard, close to rural crossroad junction. Rendered boundary walls, timber vehicular gate to entrance. Cut stone plaque to entrance reading 'St. Mary's National School 1884' to boundary wall.

Appraisal: Although now converted for use as a private house, this interesting former national school retains much of its early character and form. Like many early national schools, this has a symmetrical plan. Its form suggest that it was originally built as a two classroom school, possibly with separate classrooms for boys and girls as was common practice at the time of construction. The school retains many original features that enhance the façade and add a patina of age such as the slate roof, timber sash windows and the carved limestone plaques, one with Gaelic script. This plaque was probably moved from its original location after the flat-roofed extension was constructed. The school was probably built to standard plans prepared by the Office of Public Works, and is of social importance as one of the earliest educational buildings still extant in the area. It possibly has historical associations with Pádraic Colum (1881 – 1972), a noted literary figure who spent his youth in this part of County Longford and wrote about the Molly area in some of his works.

http://www.buildingsofireland.ie/niah/images/survey_specific/fullsize/13400604_1.jpg

<http://www.buildingsofireland.ie/niah/search.jsp?type=record&county=LF®no=13400604>

NIAH Survey of County Longford 2005 ARCHITECTURAL, SOCIAL

13400902	-----	Kiltyclogh	1780 - 1820	Regional	House	622553 782786
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Description: Detached four-bay single-storey thatched house, built c. 1860, having single-bay flat-roofed porch to the front elevation (south), single-bay single-storey extension attached to the east gable end, and two-bay single-storey extension to the rear (north). Pitched thatched roof (straw) with ropework to ridge and having two rendered chimneystacks. Smooth rendered walls to front elevation, now covered with vegetation, with pebbledashed walls to rear and side elevations. Square-headed window openings with one-over-one pane timber sliding sash windows having painted stone sills, blocked window to west gable apex. Square-headed door opening to modern porch with glazed timber door. Outbuilding to the southwest having a pitched corrugated-metal roof, painted rubble stone walls and square-headed openings with battened timber doors. Set back from road in own grounds to the north of Ballinalee. House approached from the east by long tree-lined approach avenue. Gateway to the east comprising a pair of smooth rendered gate piers (on square-plan) having wrought-iron gates.

Appraisal: Although extended, this thatched house retains its original charm and much of its salient fabric. Modest in scale and form, this house exhibits the simple and functional form of traditional/vernacular building in Ireland. Of particular significance is the survival of the thatched roof, which is now rare in County Longford. This building is set back from the road, at a right-angle to the road alignment, which is a characteristic feature of the Irish vernacular. This building faces to the south to avail of the natural heat of the sun - Irish vernacular buildings are often sited to take advantage of local topography (natural shelter from prevailing winds etc.). This building appears to date to the second half of the

nineteenth century (Ordnance Survey first edition six-inch map 1838), and it is possible the single-storey rubble stone outbuilding to the southwest of the present house was an earlier domestic dwelling to site. The simple decorative wrought-iron gates to the entrance add to the appeal of this building, which is an important element of the built heritage of the local area.

http://www.buildingsofireland.ie/niah/images/survey_specific/fullsize/13400902_1.jpg

<http://www.buildingsofireland.ie/niah/search.jsp?type=record&county=LF®no=13400902>

NIAH Survey of County Longford 2005 ARCHITECTURAL, TECHNICAL

13401001	-----	Gelshagh	1880 - 1900	Regional	Post Box	625159 783913
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Description: Cast-iron post box, c. 1890, with 'VR' royal cipher and raised crown motif to head and raised 'Post Office' lettering to letter flap. Foundry mark to base, now illegible. Set into modern blockwork pier, adjacent to rural crossroad junction at Gelshagh. Located to the northeast of Ballinalee.

Appraisal: An attractive item of street furniture that represents an early surviving artefact of mass-produced cast-iron ware. The modest design of the box is enhanced by the royal cipher (identifying the reign of Queen Victoria between 1837 - 1901) and the crown motif, which enlivens the appearance of this otherwise functional object. Many pre-independence post boxes were simply painted green and retained their royal insignia but are now becoming an increasingly rare sight and are worthy of retention as historical artifacts. It was probably made by W.T. Allen and Company of London (1881 - 1955), who were responsible for many of the late-Victorian and Edwardian post boxes in North Leinster. This post box is sited at a prominent crossroads, relocated to a modern breeze block pier, and is still in service providing an important amenity for the local community.

http://www.buildingsofireland.ie/niah/images/survey_specific/fullsize/13401001_1.jpg

<http://www.buildingsofireland.ie/niah/search.jsp?type=record&county=LF®no=13401001>

NIAH Survey of County Longford 2005 HISTORICAL, SOCIAL, TECHNICAL

Appendix 3: National Monuments in the ownership or guardianship of the State or Local Authority in Co. Longford.

Site	Site type	RMP Number	Monument Number	Status / Land Ownership
Aghaward	Ringfort	LF009-006	630	State ownership
Corlea – Cloonbrean	Bog Trackway	LF022-058	677	State ownership
Granard -Moatfield	Motte & Bailey	LF010-080001 LF010-080002 LF010-080003 LF010-080004	263	State Guardianship
Inchcleraun	Early Monastery	LF021-048001	91	State ownership
Larkfield	Ringfort	LF006-021	640	State ownership
Sonnagh	Ringfort	LF006-031	598	State ownership

Appendix 4: Monuments protected under Preservation Orders in Co. Longford.

No. of Order	Monument	Townland	O.S. Map	Date Order
1/64	Ringfort	Dring	6	13/02/64
2/78	Ringfort	Bawn, Killoe	9:5	22/06/78
3/79	Monastic Enclosure	Aghafad	13:12	08/03/79
4/83	Stone Circle	Cloughchurnel	11	27/04//83
4/85	Ringfort	Feraghfad	14:9:5	02/04/85
5/81	Monastic Cashel	Inchcleraun	21:14	30/10/81
5/85	Ringfort	Feraghfad	14:9:5	02/04/85
6/73	Deserted Town Site	Granard Kill	10:12	11/05/73
6/85	Ringfort	Feraghfad	14:9:5	02/04/85
10	Dolmen & associated standing stones	Aughnacliffe	6	05/01/33

Appendix 5: Monuments of Archaeological, Historical and Cultural Interest in Co. Longford.

Map	Townland	Site	Description	Grade
1	Aughnacliffe	Cromlech	Good Condition – preservation order no. 10/1933	A
2	Cleenrath	Diarmuid & Grainne's bed	Well preserved	A
3	Melkagh	Diarmuid & Grainne's bed	Well preserved	A
4	Cartronbore	Standing Stone		B
5	Creevy	Standing Stone		B
6	Cartronbrack	Standing Stone		A
7	Dalystown	Standing Stone		B
8	Aughnagarron	Druids Altar	Remains of Megalithic tomb	C
9	Cartronbore	Druids Circle		A
10	Cloughumal	Druids Circle		B
11	Corboy	Moated house site	Preservation order no. 7/72	A
12	Breany	Ringfort	Triple rampart	A
13	Clonfin	Ringfort		B
14	Dring	Ringfort	Preservation order no. 1/1964	A
15	Toneymore North	Ringfort		A
16	Higginstown	Ringfort		B
17	Granardkille	Old Town of Granard	Site of Medieval Town	A
18	Glen	Moat		B
19	Moatfield	Moat of Granard	National Monument no. 263	A
20	Lissardowling	Moat Rampart	Allegedly O'Farrell site	A
21	Bawn Killoe	Ringfort	Preservation Order	A
22	Park Place	Doonphilip	Mound	C
23	From Lough Kinale to Lough Gowna	Dun Clai (Black Pig's Dyke)	Linear earthworks	A
24	Bawn Mountain	Mound	Raised circular area	B
25	Lisnagrish	Moataward	Possible ringfort	A
26	Ballinakill	Abbey (in ruins)	Early Church site	C
27	Killeen	Caldragh Stone	Cross in centre of ringfort	B
28	Cashel	Church (in ruins)	Early Church site	C
29	Iniscleraun (Lough Ree)	Templedermot	National monument no. 91	A
30	Inchmore (Lough Gowna)	Abbey & church (in ruins), Columbcille's Stone	Remains of early and later churches	A
31	Legan	Stone	Ballaun Stone	B

32	Legan	Lady Well Chapel (site)	Inscribed stone built into surrounding wall	-
33	Abbeyshrule	Cross	Early Cross	A
34	Ardagh	Pedestal of Cross	Base of cross	C
35	Abbeyderg	Abbey (in ruins)	c 13 th century Augustinian abbey	A
36	Abbeylara	Abbey (in ruins)	Cistercian Abbey	A
37	Abbeyshrule	Abbey (in ruins)	13 th century Cistercian Abbey	A
38	Clondra	Abbey (in ruins)	Late medieval Church	A
39	Moatfarrell	Church (in ruins)	Medieval Church site	B
40	Saint's Island	Church (in ruins)	Site of Augustinia Church	B
41	Ballinalee	Bully's Acre	Burial Ground	C
42	Derrydarragh	Altar	Mass Rock	C
43	Derrynagallia	Altar	Mass Rock	C
44	Agharra	Burial ground	-	-
45	Abbeyderg	Tomb Megalithic	-	-
46	Lisardowling	Moat	-	-
47	Ballymahon	Courthouse	-	-
48	Ballinalee	Forge	-	-
49	Ballymacormack	Abbey	-	-
50	Ballinamore	Burial Ground	-	-
51	Gurteen	Old School Building	-	-
52	Rathcline	Building Feature	-	-
53	Forgney	Hill of Forgney, Forgney Church	-	-
54	Castlerea	Castle (in Ruins)	-	-
55	Mornin	Castle (in Ruins)	-	-
56	Rathcline	Castle	-	-
57	Ballinamuck	Battlefield site 1798	-	-

Appendix 6: Archaeological sites of specific importance in Co. Longford.

Within the County there are 2 no. specific archaeological sites of specific importance as follows:

Site	Additional
Corlea Bog Trackway	One of the most significant archaeological heritage sites and assets in the County is Corlea Bog Trackway. The Visitor Centre located on the site conserves an Iron Age bog road, which was built in the year 148 BC across the surrounding bogland. The oak road is one of the largest of its kind to have been uncovered in Europe. Inside the visitor centre building, an 18-metre stretch of preserved road is on permanent display.
Granard – Norman Motte	In 2018 supported by the local authority and Fáilte Ireland, a new visitor and interpretative centre was opened in the town of Granard in the northeast of the County, which celebrates Ireland's highest Norman motte built in 1199. The centre which has a large appeal range, is particularly focussed on school going age and is to be developed further in the future with the development of an interpretative park.