Proposed Sand & Gravel Pit and Inert Waste Facility

at

Coolaght, Kilmeague, Co. Kildare.

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

March 2024

Prepared by:

Quarry Consulting

In association with:

Blue and Green Ecology, AWN Consulting, Macro works, PMCE Consultants, Dr. Charles Mount, HydroEnvironmental

Prepared for:

Joseph Logan

QUARRY CONSULTING

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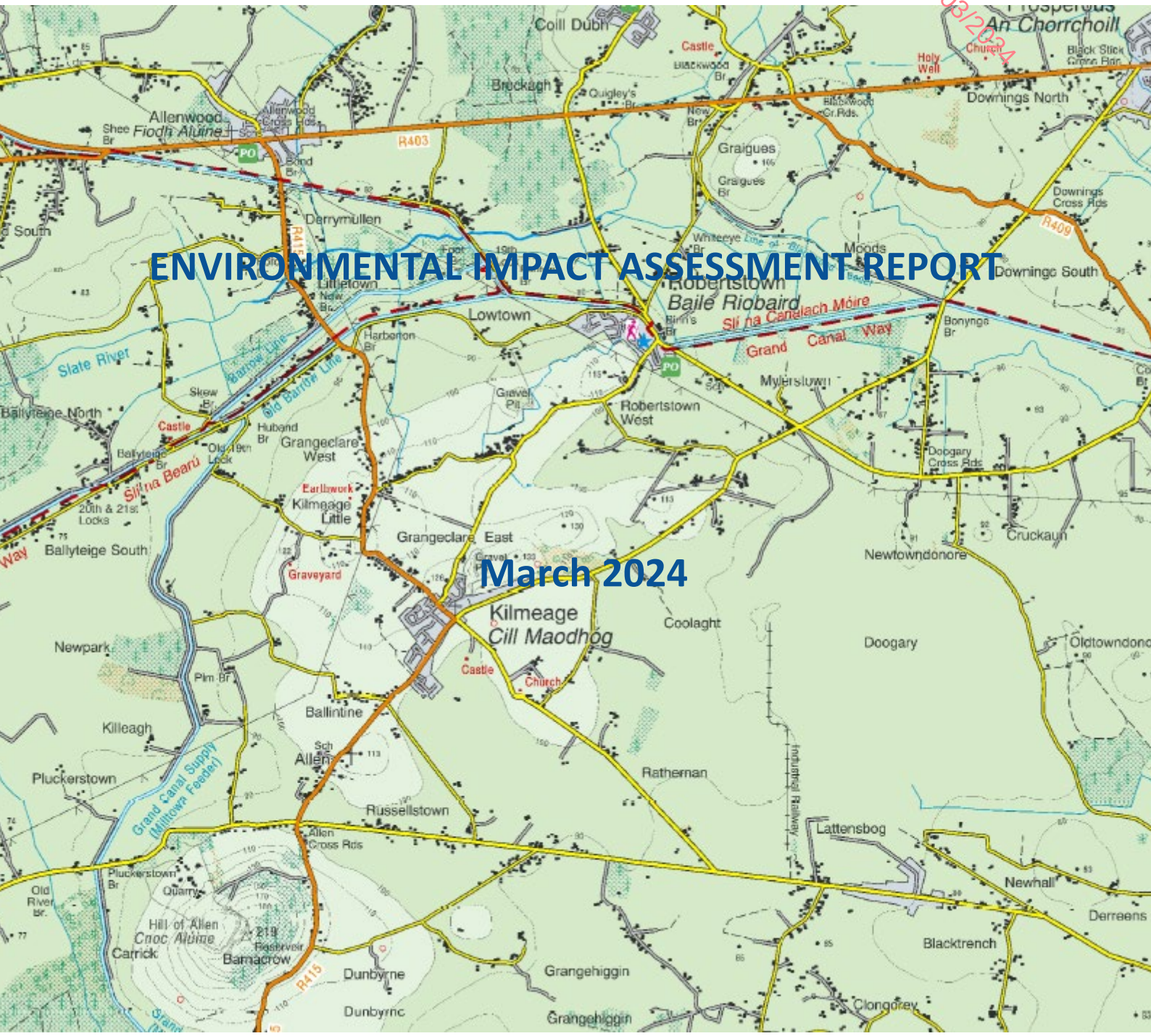

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QUARRY CONSULTING

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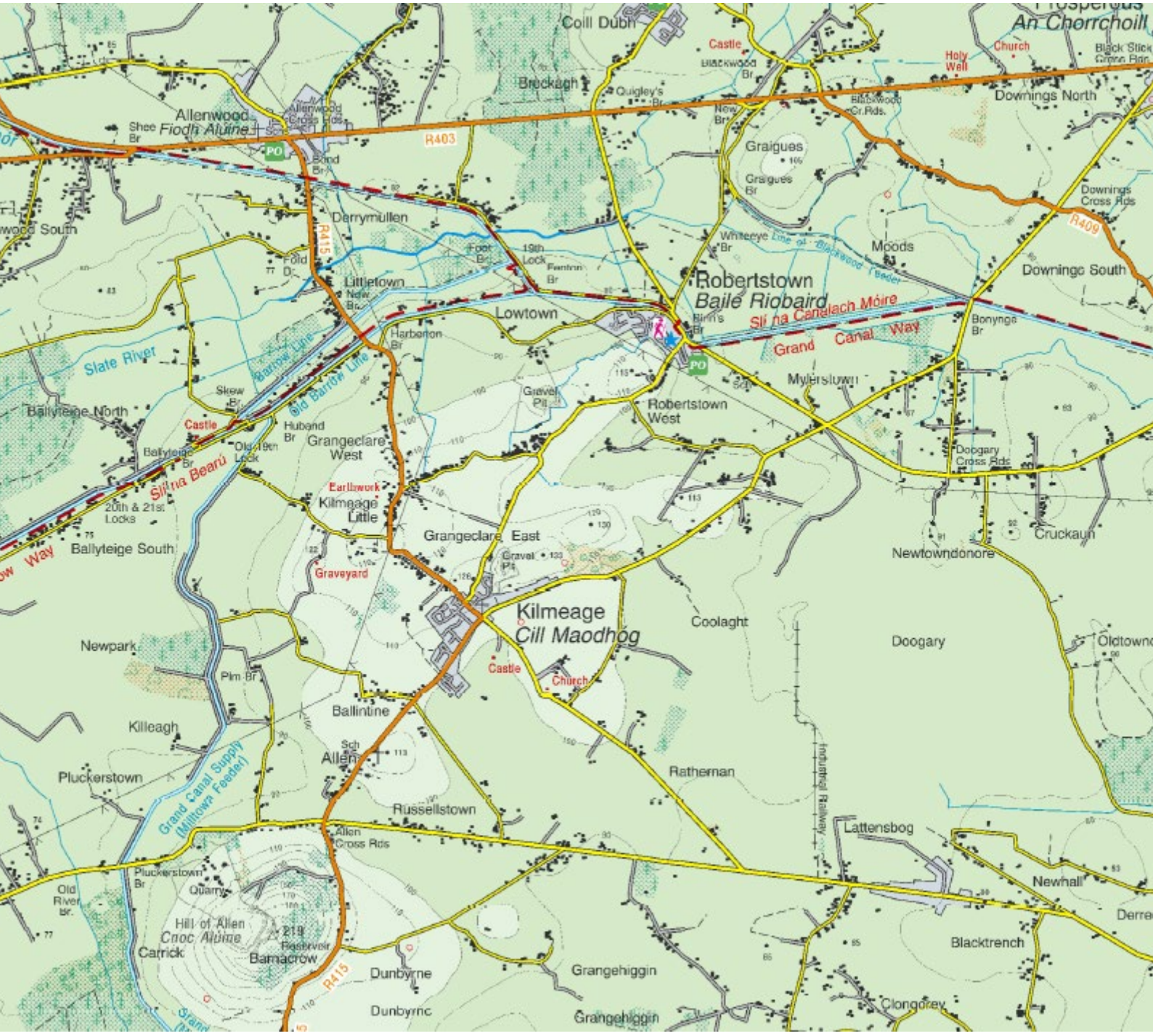
CHAPTER 1
INTRODUCTION



QUARRY CONSULTING

Table of Contents

CHAPTER 1: INTRODUCTION

Background

1.1 Mr. Joseph Logan (the applicant) is proposing to develop a proposed sand & gravel pit and soil recovery facility at Coolaght, Kilmeague, Co. Kildare.

1.2 This EIAR (Environmental Impact Assessment Report) is provided in accordance with the EU EIA Directive 2011/92/EU, as amended by EIA Directive 2014/52/EU and the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, in order to inform the consideration of the Application and provide the planning authority with the environmental Information that must be taken into account when determining the Application. All the land required for the Proposed Development (included within the Application site boundary) is referred to in this EIAR as 'the Site'. The Proposed Development is entirely within the administrative boundary of Kildare County Council (KCC) and the EIAR is being provided to KCC as part of a planning application seeking full planning permission.

1.3 This EIAR has been prepared by Quarry Consulting, with the support of other consultancy advisors. A list of the main contributors to this EIAR is provided in Section 1.41 below.

1.4 Key areas of information presented within this EIAR concern the nature and extent of the Proposed Development, the character of the receiving environment and likely interactions (cumulative impacts) between the two that could result in significant environmental impacts. Information presented on the receiving environment identifies the intrinsic value and importance of potential impact receptors.

The Applicant

1.5 The applicant, Mr Joseph Logan, is situated in County Kildare. The applicant intends to set up a sand and gravel pit at this site, supplying vital resources for the local construction industries.

1.6 In addition to the sand and gravel operation, the applicant plans to leverage the proposed facility to provide a soil recovery facility, making it a dual-purpose site. The company will accept soil and stones for import from external sources. This material will be washed (if required), processed, and sorted to be reused in various applications such as construction fill, topsoil, and sub-base materials, supporting the circular economy and reducing the need for virgin aggregate materials.

1.7 Additionally, the imported soil and stones will play a crucial role in site restoration efforts. Once sand and gravel extraction is complete in a particular area of the pit, the imported material will be used to fill and restore the area. This strategy not only ensures a steady supply of restorative materials but also facilitates the progressive rehabilitation of the site.

1.8 Through these innovative practices, Joseph Logan aspires to become a model for sustainable sand and gravel operations. With an emphasis on recovery and restoration, the applicant strives to balance its economic activities with its environmental responsibilities.

1.9 Upon securing the necessary planning approvals and licences / permits, Joseph Logan will commence operations. The company is committed to executing its business activities responsibly, focusing on sustainability, and fostering positive relationships with the local community and stakeholders.

The Application Site

1.10 The site is located in the townland of Coolaght, Kilmeague, Co. Kildare, situated approximately 900m northeast of the centre of Kilmeague village. The site is 8.8km north of Newbridge and 11km northwest of Naas (see Planning Drawing 1).

1.11 Access to the site is provided from the L7081 local road, which joins the R415 at a t-junction in the centre of the village of Kilmeague, 1.3km southwest of the site. In the vicinity of the site, the L7081 comprises a single carriageway road with an 80km/hr speed limit.

1.12 The surrounding landscape is rural in character, consisting of a mix of pasture and arable land, with extensive areas of low grade agricultural land and bog in the wider area. The latter has predominately been cutover. The wider area also includes several examples of quarries and sand and gravel pits, the nearest of which is situated 440m west of the site at Kilmeague village – refer to EIAR Chapter 5: Figure 5.1.

1.13 Residences within the general area are typically centred around the villages of Killmeague, Robertstown and Allen, though there are also examples of one-off rural houses and ribbon development along the local road network. The nearest properties to the site are situated on the southern site boundary. The nearest property to the north is situated approximately 400m distant in Grangeclare East. The site is physically and visually separated from the properties in Kilmeague village by a wooded area immediately to the west.

1.14 There are no water features in the vicinity of the site. The nearest water course is the Grand Canal, which flows in an east-west direction through Robertsown, approximately 1.3km northeast of the site. The River Liffey flows through Newbridge and is fed by a number of streams to the south of the application site, the closest of which is IE_EA_09L011050, which is approximately 1.7km to the southwest.

1.15 The site itself is broadly triangular in shape comprised of mixed (predominately deciduous) woodland that was planted between 2002 and 2004. Levels within the site rise from approximately 100m OD (Ordnance Datum) in the south to 130m OD in the north-west. Beyond the site the landscape comprises a line of low hills that form part of the Chair of Kildare which interrupt the continuity of the Kildare plains. High points in the surrounding landscape include 219m OD at the Hill of Allen, 223m OD at Grange Hill and 233m OD at Dunmurry Hill to the southwest of the application site.

Previous Planning Application

1.16 On the 20th November 2020 a planning application for *'Deforestation of part of the lands comprising of 16.53 hectares of mixed broadleaf forest for conversion to agricultural land': (*Plan File Ref. No. 20/1152) was refused by Kildare Co. Co. for 3 no. reasons. In summary, the reasons for refusal were as follows:

- **Contravention of Natural Heritage Policies:** The project is in conflict with policies aimed at preserving the county's natural heritage, specifically policy NH1, which supports the conservation of natural features such as woodlands, hedgerows, and wetlands. The development's extensive deforestation and loss of habitats would adversely impact biodiversity and the character of the natural landscape, undermining efforts to maintain and enhance the county's natural heritage.
- **Adverse Impact on Green Infrastructure:** The development violates green infrastructure policies, particularly policy GI8, which emphasizes the protection and management of local green networks for their biodiversity and landscape character

value. The proposed deforestation would significantly diminish the area's green infrastructure and carbon storage capacity, negatively affecting the landscape's character and the region's climate change mitigation efforts.

- **Insufficient Environmental Assessment Details:** The application lacks comprehensive environmental assessments, including an Environmental Impact Assessment Report, Appropriate Assessment/Natura Impact Statement, and specific studies on ecological, archaeological, traffic, hydrological, and geological impacts. This absence of detailed information hinders the ability to fully understand and mitigate the development's potential impacts on the local and wider environment.

1.17 The new proposal by Mr. Joseph Logan introduces a comprehensive and multifaceted strategy for the development, significantly diverging from the previous application that primarily sought the removal of woodland. The key differences are as follows:

- **Inclusion of Sand and Gravel Extraction:** Central to the new proposal is the initiation of sand and gravel extraction operations, targeting the proven (refer to EIAR Chapter 3 & 7) deposits within the site. This shift towards resource extraction demonstrates a strategic pivot from merely removing woodland to harnessing the local geology for supplying essential materials to the construction industry. This addition marks a substantial change in the project's scope and objectives, aiming to contribute economically while managing environmental impacts.
- **Dual-Purpose Site for Soil Recovery:** Expanding its operational scope, the revised proposal includes a soil recovery facility, transforming the site into a dual-purpose operation. This innovative approach supports the circular economy by recycling soil and stones, reducing the demand for virgin aggregate materials and highlighting a significant enhancement from the initial woodland removal plan / conversion to agricultural uses.
- **Strategic Site Restoration Using Imported Materials:** An aspect of the proposal is the use of imported soil and stones for the restoration the site back to original ground level, and ultimately back to woodland.
- **Detailed Environmental Assessment:** Unlike the previous application, the current application is accompanied by an Environmental Impact Assessment report and Appropriate Assessment. Mitigation measures and environmental monitoring methods are proposed to address a range of potential impacts, including dust, noise, water management, and biodiversity, offering a robust framework for mitigating environmental impacts and enhancing sustainability.
    - The applicant commissioned an arborist to undertake a tree survey of the existing woodland on the site. A copy of the tree survey report is provided Appendix 2.1 of this EIAR.
    - The applicant commissioned a Forest Management consultant to survey the woodland to confirm the species mix. A copy of a map showing the tree species breakdown is provided in Appendix 2.2.

1.18 In essence, the current proposal by Mr. Joseph Logan is materially different from the earlier application, with the inclusion of sand and gravel extraction as a pivotal component. By adopting advanced operational techniques, incorporating a soil recovery facility, emphasizing progressive site restoration back to a more suitable woodland the revised

proposal aims to establish a responsible and economically viable development that aligns with environmental conservation objectives.

The Proposed Development

1.19 The development will consist of the following:

- The removal of woodland, vegetation and overlying soils & subsoils;
- the extraction of sand and gravel on a phased basis from an area of c. 8.65 ha to a final floor level at 95 m OD;
- the infilling of the lands using inert waste on a phased basis following the extraction of sand and gravel;
- the restoration of the lands back to original ground level and the establishment of native woodland planting;
- all related ancillary development and associated site works including processing (crushing, screening and washing) and stockpiling of materials; installation of infrastructure for the management of water on site; provision of landscaped screening berms and all other related activities;
- Provision of a site office, toilet (portaloo), canteen, weighbridge, wheelwash and site entrance.

1.20 The proposed development is within an overall application area of c. 13.2 hectares and is for a total period of 34 years (the sand and gravel extraction operational period is for 20 years and the importation of materials for restoration is for a further 14 years).

1.21 The Proposed Development will include for the importation of ca. 2,000,000 m^3 (or ca. 3.2 million tonnes) of inert soil and stone material to restore ground gradients to similar levels prior to sand and gravel extraction i.e. current ground levels.

1.22 The application is made in accordance with the requirements of the Planning and Development Regulations 2001-2015 (as amended).

1.23 Part of the proposed restoration element of the development will require a waste licence from the Environmental Protection Agency.

1.24 As the proposed development will involve the felling or removal of trees, the developer must obtain a Felling License from the Department of Agriculture, Food and the Marine before trees are felled or removed. Initial consultation has been received from the Department in this regard – refer to Appendix 2.3.

1.25 Further details on The Proposed Development are provided in Chapter 3.

Need for an EIAR

1.26 Environmental Impact Assessment (EIA) is a process undertaken for certain types of development. It provides a means of drawing together the findings from a systematic analysis of the likely significant environmental effects of a scheme to assist local planning authorities, statutory consultees and other key stakeholders in their understanding of the impacts arising from the development.

1.27 The European Union's 1985 EIA Directive (85/337/EEC) was amended by Directives 97/11/EC, 2003/35/EC and 2009/31/EC, and the Directive and its amendments were codified in 2011 by Directive 2011/92/EU.

1.28 The current Directive 2014/52/EU amends the 2011 codified Directive but does not replace it. This amending Directive was transposed into national planning consent procedures in September 2018 through the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018).

1.29 The Department of Housing, Planning and Local Government (currently the Department of Housing, Local Government and Heritage) published the following in the draft Guidelines for Planning Authorities and An Bord Pleanála in relation to carrying out Environmental Impact Assessment, (August 2018):

'The objective of Directive 2011/92/EU, as amended by Directive 2014/52/EU, is to ensure a high level of protection of the environment and human health, through the establishment of minimum requirements for environmental impact assessment (EIA), prior to development consent being given, of public and private developments that are likely to have significant effects on the environment.'

1.30 The amended EIA Directive prescribes a range of environmental factors which are used to organise descriptions of the environment and these factors must be addressed in the EIAR. Article 3(1) of the amended Directive states that:

The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors:

a) population and human health;

b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;

c) land, soil, water, air and climate;

d) material assets, cultural heritage and the landscape;

e) the interaction between the factors referred to in points (a) to (d).

EIA is mandatory for certain types of projects and for other projects that meet or exceed thresholds as set out in Annexes I and II of the Directive (and Part 1 and Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended).

1.31 For certain projects, and for others meeting or exceeding the thresholds outlined in Annexes I and II of the Directive (and Part 1 and Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended), an EIA is obligatory.

1.32 Paragraph 19 of Part 1 of Schedule 5 states that the following form of development requires an EIA

"Quarries and open-cast mining where the surface of the site exceeds 25 hectares.

1.33 Paragraph 22 relates to changes or extensions. It states:

"Any change or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any set out in this Annex."

1.34 Paragraph 2 of Part 2 of Schedule 5 refers to extractive industry and part (b) of that section states that the following requires an EIA:

"Extraction of stone, gravel, sand or clay, where the area of extraction would be greater than 5 hectares."

1.35 Paragraph 11 of Part 2 of Schedule 5 states that the following form of development requires an EIA

> *(b) Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule.*

1.36 In addition, paragraph 13(a) of Part 1 requires EIA in respect of:

"Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension refer to in Part 1) which would:-

i. result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule and

ii. result in an increase in size greater than –

25 per cent, or

an amount equal to 50 per cent of the appropriate threshold,

whichever is the greater.

1.37 The proposed development relates to the extraction of sand and gravel. The proposed extraction area of the sand pit is greater than 5 hectares. On this basis the extraction area of the quarry exceeds the area stated under Part 2, and an EIAR is therefore required.

1.38 As the planned annual soil waste intake to the planned waste recovery facility at Coolaght Sand and Gravel Pit will exceed the threshold limit of 25,000 tonnes per annum, there is a requirement for EIA and an EIAR under Part 2 of Schedule 5.

EIAR Document and Chapter Structure

1.39 The findings of the EIA are set out in this EIAR and comprise the following chapters as presented in Table 1.1. The methodology used within the EIAR is outlined in Chapter 2.0 (Scoping and Methodology). The responsible parties examining the respective topic areas have also been provided in Table 1.2. The EIAR was completed by a project team led by Quarry Consulting, who also prepared a number of the chapters.

1.40 A Non-Technical Summary (NTS) accompanies the EIAR and provides a summary of the key findings of the EIA in non-technical language.

Table 1-1: EIAR Chapter Structure

EIAR Chapter	Chapter Title	Responsibility
1.0	Introduction	Quarry Consulting
2.0	Scope & Methodology	Quarry Consulting
3.0	Project Description	Quarry Consulting
4.0	Alternatives	Quarry Consulting
5.0	Population & Human Health	Quarry Consulting

6.0	Biodiversity	Green and Blue Ecology
7.0	Land, Soils & Geology	Hydro Environmental
8.0	Hydrology and Hydrogeology	Hydro Environmental
9.0	Climate	Quarry Consulting
10.0	Air Quality	Quarry Consulting
11.0	Noise & Vibration	AWN Consulting
12.0	Visual & Landscape	Macroworks
13.0	Traffic	PMCE
14.0	Heritage	Dr. Charles Mount
15.0	Material Assets	Quarry Consulting
16.0	Interactions	Quarry Consulting
17.0	Mitigation & Monitoring	Quarry Consulting

EIA Project Team

1.41 The members of the team and their respective inputs are presented in Table 1.2. In accordance with EIA Directive 2014/52/EU, we confirm that lead specialists involved in the preparation of the EIAR are fully qualified and competent in their respective field. Each has extensive proven expertise in the relevant field concerned, thus ensuring that the information provided herein is complete and of high quality.

Table 1-2: EIA Project Team

Discipline	Specialist	Qualifications	Accreditations	Years of Professional Experiencee
Introduction; Scope and Methodology; Project Description; Population and Human Health; Climate; Air Quality; Interactions.	Peter Kinghan (Quarry Consulting)	Geo-Surveying (Diploma) Mineral Surveying and Resource Management (BSc Hons) Environmental Engineering (Post Graduate Diploma)	Member of the Society of Chartered Surveyors Ireland Member of the Royal Institute of Chartered Surveyors UK	23

Discipline	Specialist	Qualifications	Accreditations	Years of Professional Experiencee
		Geographic Information Systems (Certificate) Business Management (MSc) Environmental Sustainability (Currently studying)		
Population and Human Health; Climate; Air Quality.	Rory Brickenden (Quarry Consulting)	Geoscience (BSc Hons) MEngSc Water, Waste & Environmental Engineering (currently studying)		2
Material Assets; Interactions; Planning	Irene Curran (Quarry Consulting)	Environmental Science (BSc Hons) Town and Country Planing (MSc Dist) Field Ecology (Diploma)	Chartered member of the Royal Town Planning Institute	20
Biodiversity	Steve Judge (Blue and Green Ecology)	Countryside Management / Environmental Management and Monitoring (BSc Hons)	Member of the Chartered Institute of Ecology and Environmental Management	19
Land, Soils and Geology; Hydrology and Hydrogeology	David Broderick (HydroEnvironmental)	BSc, H. Dip Env Eng, MSc	P.Geo	17
Noise and Vibration	Mike Simms (AWN Consulting)	BE and MEngSc in Mechanical Engineering	Institute of Acoustics and of the Institution of Engineering and Technology.	20

Discipline	Specialist	Qualifications	Accreditations	Years of Professional Experiencee
Visual and Landscape	Richard Barker (Macro Works)	MLA, PG Dip Forestry, BA Env	Corporate Member Irish Landscape Institute	15+
Traffic	Aly Gleeson (PMCE Consultants)	BSc Masters Civil Engineering	Chartered Member of Engineers Ireland	20
Heritage	Charles Mount (Dr. Charles Mount Archaeology and Cultural Heritage)	M.A. Archaeology Ph.D. Archaeology Dip. EIA & SEA Management	MIAI Member of the Discovery Programme	25+

Description of EIAR Study Team's Background and Experience

Quarry Consulting

1.42 Quarry Consulting is an environmental consultancy that includes in their team a Chartered Mineral Surveyor, Chartered Geomatics Surveyor, Geo-Scientist and Chartered Town Planner. The team have extensive experience in project managing planning applications and coordinating Environmental Impact Assessments for a range of energy, extractive and waste related developments.

Green and Blue Ecology

1.43 Steve Judge is a professional ecologist with 19 years experience in environmental and ecological consultancy working for a large number of clients from both the private and public sectors throughout the United Kingdom and Ireland. Projects include: industrial and housing development, mining and minerals, waste management, flood defence, energy and renewables.

1.44 Highly experienced in undertaking Environmental Impact Assessment (EIA) and Ecological Impact Assessment (EcIA), Appropriate Assessments (Stage 1 and Stage 2), habitat and species surveys, and in the design and implementation of ecological mitigation strategies for a wide range of habitats and species.

1.45 Specialist in Ecology of freshwater systems that includes experience of eco-hydrology, wetland creation, biological water quality assessments, water level management plans and condition assessments of riparian features and structures.

Hydro-Environmental Services

1.46 Hydro-Environmental Services (HES) are a specialist hydrological, hydrogeological and environmental practice that delivers a range of water and environmental management consultancy services to the private and public sectors across Ireland and Northern Ireland. HES was established in 2005, and our office is located in Dungarvan, County Waterford.

1.47 Their core areas of expertise and experience include hydrology and hydrogeology. They routinely complete impact assessments for land soils and geology, hydrology and hydrogeology for a large variety of project types.

AWN Consulting

1.48 AWN Consulting is a multidisciplinary consultancy offering specialist design advice, expert witness and litigation support in respect of a wide range of engineering and environmental disciplines.

Macro Works

1.49 Macro Works is a leading consultancy firm specialising in visual impact analysis and visual impact graphics. Macro Works has considerable experience in areas such as wind energy developments, civil engineering projects and the extractive industry. Macro Works hosts a dedicated team of professionals to fulfil the key roles within their operations, including Landscape and Visual Impact Assessment, geographic information systems (GIS) and photo-simulation.

PMCE Consultants

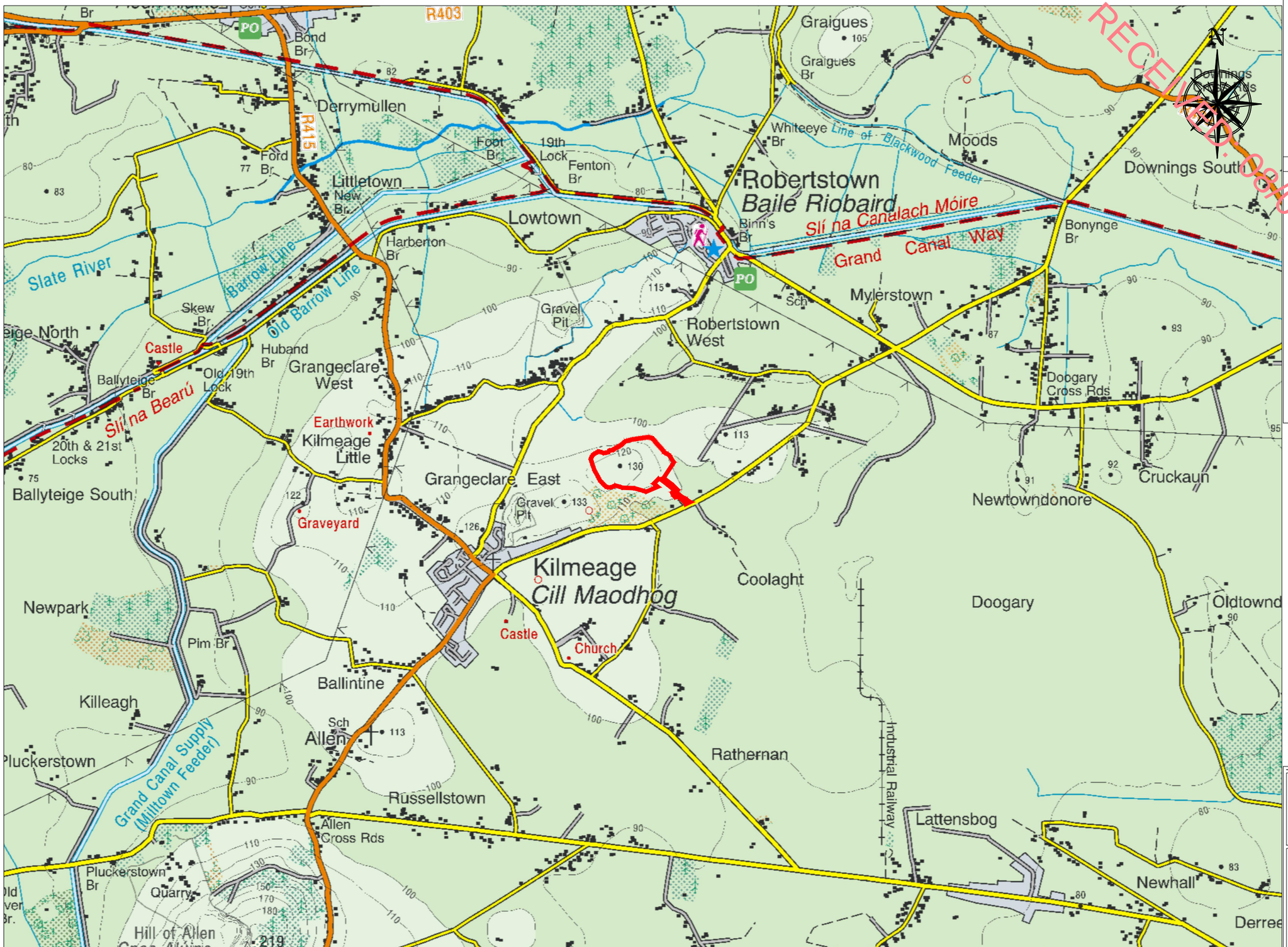
1.50 PMCE is an engineering consultancy which focuses on providing expert independent engineering advice in relation to Road Safety Engineering (Road Safety Audits, Historical Collision Analysis and Road Safety Inspections), Road Planning & Design and Traffic Analysis & Assessment. PMCE has extensive experience in Traffic Analysis and in preparing Traffic & Transportation Assessments (TTA), including planning applications and environmental impact assessments relating to proposed developments, continuation of existing operations, or for applications for licences in relation to various development types.

Dr. Charles Mount

1.51 Dr. Charles Mount is an Archaeologist with more than 30 years' experience of archaeology, cultural heritage and project management. He has extensive experience of environmental impact assessment gained over the last 30 years in a wide range of industries in the private and semi-state sectors including energy, extractive, waste, water, residential, transport and agri-food. Dr. Mount is a member of the Institute of Archaeologists of Ireland and the Discovery Programme. He is a graduate of University College Dublin with an M.A, and Ph.D. in Archaeology and has completed the UCD Diploma course in EIA and SEA Management.

FIGURES

03.03.FIGURE 1.1 SITE LOCATION.FINAL.dwg



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Metres 1:25,000

RECEIVED: 08/03/2024

NOTES

1. Extract from Ordnance Survey Discovery Series Mapping - Map No. 2620, 2622, 2820, 2822;
2. Ordnance Survey Ireland Licence No. CYAL50187128 (c) Ordnance Survey Ireland / Government of Ireland;

LEGEND

APPLICATION AREA (c. 13.2 Ha.)

QUARRY CONSULTING

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Chartered Mineral Surveyor
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JOSEPH LOGAN

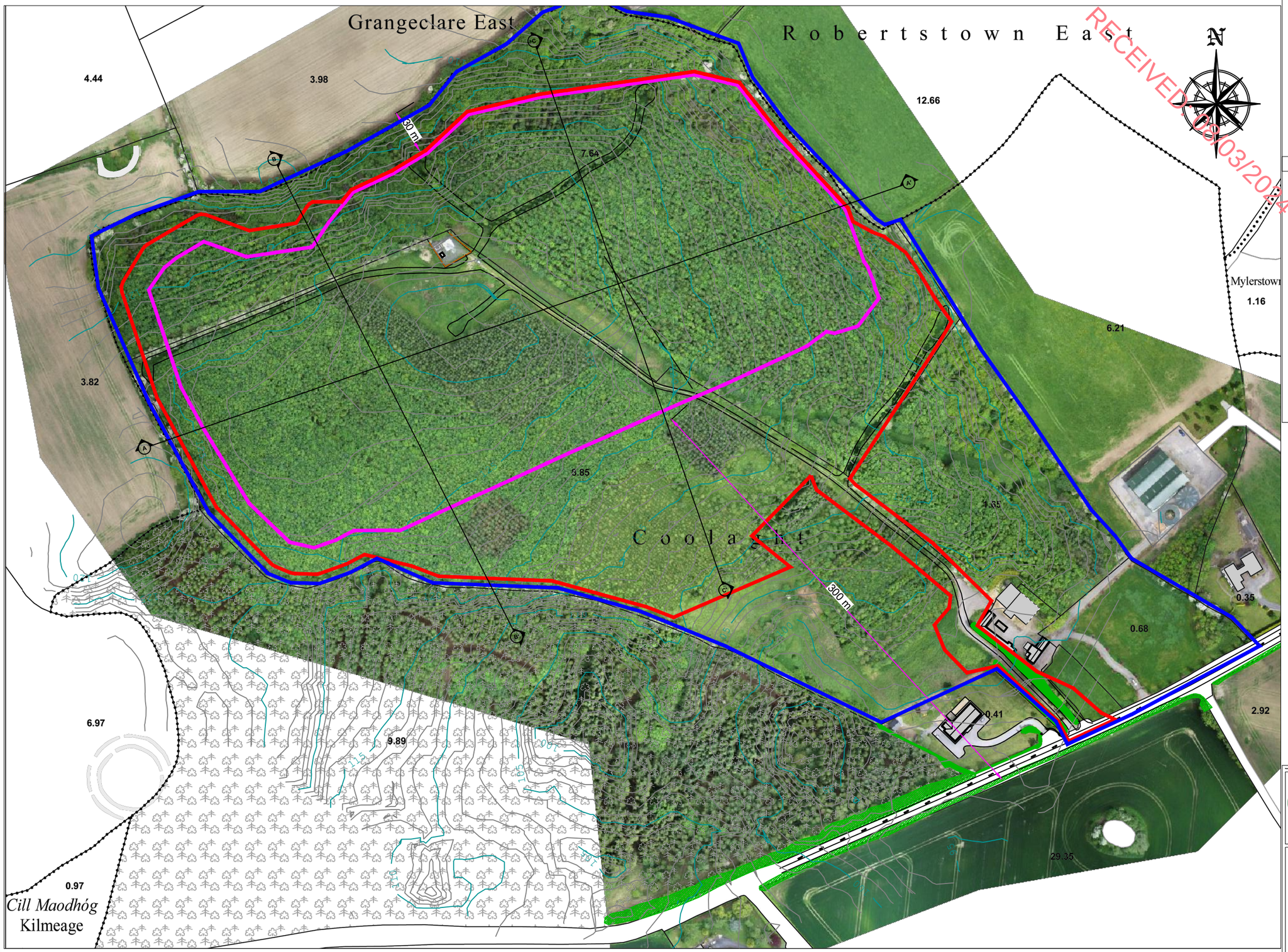
PROPOSED SAND AND GRAVEL PIT
COOLAGHT TOWNLAND, KILMEAGUE
CO. KILDARE

SITE LOCATION

FIGURE 1.1

Scale	Date
1:25,000	MARCH 2024

03.03.FIGURE 1.2.EXISTING SITE LAYOUT.FINAL.dwg



NOTES

1. Extract from Ordnance Survey 25 Inch Mapping - Map No. 3445-D;
2. Ordnance Survey Ireland Licence No. CYAL50187128 (c) Ordnance Survey Ireland / Government of Ireland;
3. Topographical Survey Data from Drone Survey completed in May 2023;
4. All points are coordinated relative to Irish Transverse Mercator (ITM);
5. All elevations are relative to Malin Head.

LEGEND

- LAND OWNERSHIP AREA (c. 19.25 Ha.)
- APPLICATION AREA (c. 13.2 Ha.)
- PROPOSED EXTRACTION AREA (c. 8.65 Ha.)
- CROSS SECTION LOCATIONS REFER TO FIGURE 2.2

0 80m 200

Metres 1:2500

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JOSEPH LOGAN

PROPOSED SAND AND GRAVEL PIT
COOLAGHT TOWNLAND, KILMEAGUE
CO. KILDARE

EXISTING SITE LAYOUT

FIGURE 1.2

Scale 1:2,500

Date MARCH 2024