

# Spink Quarry, Knockbaun, Abbeyleix, Co. Laois

## Spink Quarry

### Environmental Impact Assessment Report

#### Section 1

#### Introduction

2021



Part of the Breedon Group

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## 1 INTRODUCTION

### 1.1 GENERAL BACKGROUND

Projects likely to have significant effects on the environment *by virtue of their nature, size and location* are subject to the requirement for an Environmental Impact Assessment (EIA), prior to gaining development consent. The EIA is a systematic process undertaken to identify and evaluate the potential environmental impact of proposed projects. The EIA also seeks to consider alternatives and propose mitigation measures to ensure the development is carried out within recognised and accepted standards. Thus, the EIA is a dynamic process in which environmental consideration delivers significantly improved project configurations in respect of environmental protection and sustainability. The Environmental Impact Assessment Report (EIAR), which replaces the previous Environmental Impact Statement (EIS), is the new formal statement or document produced as a result of that process.

This EIAR pertains to the continued use and operation of an existing permitted quarry, the deepening of the quarry and the erection / operation of a concrete batching plant at Knockbaun, Spink, Co. Laois. The existing quarry is permitted under P.A. Ref. 10/383 which is for a 10 year period to work the quarry, plus two years for final re-instatement works, unless, prior to the end of the period, planning permission has been granted for its extension for a further period. The site occurs on a landholding of c. 19.6 ha, which is in the ownership of the applicant, Lagan Materials Ltd. (Lagan). Lagan is part of Breedon Group plc.

This EIAR accompanies a planning application submitted to Laois County Council by Lagan.

The quarry at Knockbaun, Spink, Co. Laois was previously owned by L. Behan & Sons Ltd. and commenced operations in 2003, following receipt of planning permission under planning Reg. Ref. 01/947 (An Bord Pleanála ref. PL11.130640). The quarry was acquired by Lagan in 2014, which is now the full owner of the freehold interest in the lands. The quarry produced a range of aggregates for construction use, including asphalt used in road construction. The annual extraction rate for the quarry was 300,000 to 350,000 tonnes per annum depending on market demand. Aggregates are not currently being extracted at the site, and the asphalt plant has been removed from the site. The applicant does not intend to resume asphalt production at the site.

The development will consist of the continued use and operation of the existing quarry including deepening of the quarry. Extraction will be confined to the existing permitted quarry area (P.A. Ref. 10/383) comprising an extraction area of c. 14.5 ha within an overall application area of c. 19.6 ha. The development will include provision of new site infrastructure, including portacabin site office, canteen, toilets, concrete batching plant and truck washdown facility, hydrocarbon interceptors, mobile crushing and screening plant, upgrading of the water management system, provision of holding tank for wastewater, and other ancillaries. The proposed development will utilise/upgrade the existing insitu quarry infrastructure, including site access, internal roads, storeroom, wheel wash, weighbridge, aggregate storage bays,

refuelling hard stand, water settlement pond system, and other ancillaries (Refer to Figure 1.3). Refer to Appendix 1 for a statement on **Need for Development**.

The EIAR and accompanying planning application are being submitted for consideration to Laois County Council, which is the competent authority for the proposed development. The application has been prepared and compiled under the supervision of John Sheils, (B.Eng. (Mining), MSCS, MRICS) on behalf of the applicant, Lagan. John Sheils is the principal of “J Sheils Planning & Environmental Ltd” (JSPE), a company that provides planning, environmental and valuation services and specialises in the areas of mineral extraction and inert waste management.

In addition to the studies within the EIAR carried out by J Sheils Planning & Environmental Ltd (JSPE), some additional technical studies have been carried out by independent consultants. These studies are incorporated within the EIAR, or are attached to the EIAR as appendices.

Laois County Council Planning Authority, Viewing Purposes Only

## 1.2 SITE LOCATION & DESCRIPTION

The quarry is located within the Townland of Knockbaun at Irish Transverse Mercator (ITM) Ref. E653400, N683050, c. 4 km northwest of Swan, c. 7 km south of Timahoe, c. 9.5 km east of Abbeyleix, c. 10 km north of Castlecomer, c. 13.5 km southwest of Stradbally, c. 16 km south of Portlaoise, and c. 19.5 km northwest of Carlow Town (See Figure 1.1 and Planning Drawing D01). The quarry is located on the southwest side of Regional Road R430, which connects the town of Abbeyleix to the west with the village of Swan the southeast. The site is situated in a wide bow in the R430 as it swings around the hill into which the quarry has been excavated.

The existing quarry is permitted under P.A. Ref. 10/383 which is for a 10 year period to work the quarry, plus two years for final re-instatement works, unless, prior to the end of the period, planning permission has been granted for its extension for a further period. The site occurs on a landholding of c.19.6 ha, which is in the ownership of the applicant, Lagan. Details with respect to the landholding, existing planning permission and proposed application area are shown on Figure 1.2 and planning drawing D02. To date, extraction has taken place in the northern and central sections of the quarry lands. The existing quarry comprises predominantly excavated or disturbed ground, with stockpiles of aggregate and areas of undisturbed ground. A section along the northern site boundary with the Regional R430 will remain undisturbed for biodiversity, protection of the Clogh Stream rising, and landscaping purposes. The historical processing area is located in the northwestern section of the site, with the aggregate storage bays and settlement pond system remaining in situ there.

Site infrastructure is located within the northern section of the site with a haulage route along the inside of the northern boundary from the site entrance to the processing area. The site entrance is located near the centre of the northern site boundary along the R430. The site is serviced by an existing secured, commercial style gateway with a tarmac apron and internal access road, which leads to the wheel wash and weighbridge. There is also a hard stand area for refueling located in this area. The landholding has c. 700 m frontage onto Regional Road R430. The northern boundary of the site is composed of hedgerow and landscaped berms, with sections of hedgerow and plant screening along much of the site boundary. The remaining boundaries of the landholding are bounded by coniferous forest and agricultural land. The existing site layout is shown by Figure 1.3 and Drawing D03.

The R430 to the site entrance is an unaligned single lane 6 - 7m single carriageway with 2 no. 0.5 -1 m sloping grass verges. At the site entrance there a right turning lane provided on the R430 on the west side of the entrance. The pavement is in good condition, however the line markings of the right turning lane require renewal.

The local roads in the immediate area are in general unaligned 5–6 m surface dressed single carriageways with 2 no. 1–2 m sloping grass verges. Overall carriageway widths are 7–9 m.

It is understood that during previous operations, water was pumped initially from the quarry sump to a series of four interconnected concrete settlement ponds in the southwestern and northwestern corners of the site. It is understood that water was then pumped uphill from the final settlement pond to an excavated pond adjacent to the site entrance. A small spring outflow from raised ground in the eastern half of the site follows the land gradients and is also

routed into this pond. The pond then overflowed to a second unlined pond from which it infiltrated to ground, under discharge licence ref. ENV2 WP 27. While there may be some unquantified infiltration to ground, it appears from visual observation that there is a surface water outflow from this area which continues eastwards via a ditch that runs along the southern side of the R430.

Since cessation of activities at the site, the lack of pumping has resulted in the sump filling with water. The sump water level is maintained via an overflow on its lower western side. The overflow water is routed via a series of settlement ponds. From here, water leaves through the northern edge of final settlement pond and subsequently flows westwards through a channel excavated between aggregate material. This channel continues westwards and directs quarry water into a roadside gully.

The site occurs at a maximum elevation of 261 m Above Ordnance Datum (AOD) along the southern boundary and a minimum elevation of 215 m AOD along the roadway (northeastern boundary). The general quarry floor area is at c. 225 m AOD. The surrounding lands are largely agricultural with varying degrees of intensity, with forestry plantation abutting the site to the southwest. The topography of the region is that of rolling hilly landscape with the site situated on the northwestern margin of the Castlecomer Plateau.

Hydraulically, there is a divide through the centre of the site with the catchments of the River Clogh to the east and the River Owenbeg to the west. Both rivers are part of the River Nore Catchment. A tributary of the River Clogh rise in the vicinity of the site entrance, flows subparallel to the R430, and ultimately drains into the mainstream of the River Clogh near Swan. Two tributaries of the Owenbeg River, the Knockbaun and Garrintaggart, rise south and north, respectively, of the quarry and flow to the northwest to drain into the mainstream of the River Owenbeg c. 500 m from the site. The quarry was developed on the northeast flank of a prominent NW-SE oriented ridge, with elevations reaching 261 m AOD. Thus, the general topographical trend of the landholding is the lower land to the northwest and southeast.

The land in the wider area surrounding the quarry is typically agricultural land with dispersed farmsteads and sporadic ribbon development along roadsides. Land-use in the area consists of a patchwork of medium to small agricultural fields, which are predominantly held in pasture (CORINE Class 231), coniferous forest (312), transitional woodland scrub (324), and heterogeneous agricultural areas (243) (See Figure 11.6). Although pasture is the dominant land use in the wider area, there is a history of quarrying, with multiple active and disused/restored quarries in the wider area, particularly around Ballinakill and east of Swan.

Outside of the immediate environs of the urban areas of Abbeyleix and Castlecomer, and the rural villages of Ballyroan, Ballinakill, Timahoe and Swan, the settlement pattern in the area can be described as low-intensity rural settlement, with diffuse ribbon development closer Abbeyleix. Residential property in the area typically comprises one-off single residences and farmsteads along public roads and to a minor extent, along and at the end of lanes off the public roads. There are a number of residential dwellings located to the northwest of the site, particularly at Larkin's Cross, with the closest located c. 175 m west of the site. Similarly, there are widely scattered residences and farmsteads along all of the rural roads in the wider area.

The quarry is largely screened from views along the R430 with a prominent overburden mound screening the quarry from direct views from the northwest. There is open to partial views of the upper quarry face from the Local Roads L7792 and L77922 to the north (Refer to Figure 1.1).

More distant views are mostly obscured by intervening topography, mature hedgerows and forestry, particularly as most rural roads are lined with mature hedgerows that contribute to an enclosed landscape (See EIAR Figure 11.6).

Laois County Council Planning Authority, Viewing Purposes Only

## 1.3 LEGISLATION

### 1.3.1 ENVIRONMENTAL AND PLANNING & DEVELOPMENT LEGISLATION

As a member State of the EU, Ireland is required to transpose EU directives into Irish Law within specified periods of their enactment. The EIA process is covered by the EIA Directive (85/337/EEC), which has been amended three times, and more recently consolidated in the Directive 2011/92/EU. In particular, Annex I of the directive specifies projects requiring an EIA, whilst Annex II specifies those projects where the Member state decides on the thresholds in terms of project scale, as to whether an EIA is required.

Prior to 2000, the rules in respect of EIA contained in the various EC directives were brought into force by the European Communities (EIA) Regulations 1989 and the EC (EIA) (Amendment) Regulations, 1999 and the Local Government (Planning & Development) Regulations 1999. These were largely consolidated within the terms of Part X of the Planning & Development 2000 Act, and Part 10 and Schedules 5, 6 and 7 of the 2001 Planning and Development Regulations 2001 to 2021. Therefore, under Irish Law, proposed developments are required to comply with the Planning and Development Act 2000, as amended and related secondary legislation in the form of Statutory Instruments or Regulations. These pieces of legislation require an EIA to be conducted, typically by specialist consultants on behalf of the developer, before consent is given for projects likely to have significant effects on the environment by reason of their size, nature, or location.

The responsibility for the planning and environmental regulation of developments rests with the local authorities, the designated Competent Authority in this instance. These and An Bord Pleanála enforce compliance by attaching conditions relating to the environmental management of granted planning permissions. Licenses and permits may be required from local authorities where discharges, emissions or waste activities occur.

In respect of the Planning & Development Regulations S.I. No. 600 of 2001, Schedule 5, Part 1 specifies projects requiring an EIA (reflecting Annex I of the EIA Directive), and Schedule 5, Part 2 specifies those projects where the Member State decides on the thresholds in terms of project scale, as to whether an EIA is required (reflecting Annex II of the EIA Directive). Schedule 6 specifies information to be contained in an EIA, whilst Schedule 7 specifies the criteria used for determining Sub-Threshold projects, which for reasons of location and characteristics of the development and related impacts, require an EIA.

A new EIA Directive 2014/52/EU came into effect in 2014, which each Member State was required to have transposed into law by May 16<sup>th</sup>, 2017. The objective of the Directive (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. Directive 2014/52/EU was finally transposed into Irish Law and adopted on September 1<sup>st</sup>, 2018. The new European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) seek to transpose EIA Directive



2014/52/EU, and to give further effect to the 2011 Directive by means of extensive amendments to the existing planning legislation.

The amended Directive uses the term Environmental Impact Assessment Report (EIAR) for what was formerly referred to in Irish legislation as an Environmental Impact Statement (EIS).

In May 2017, the EPA published Draft Guidelines on the information to be contained in environmental impact assessment reports (EPA 2017). The Guidelines have been drafted with the primary objective of improving the quality of EIARs with a view to facilitating compliance (with the Directive). As new guidelines superseding the draft guidelines have not yet been published by the EPA, due consideration of the draft guidelines was taken with respect to the preparation of the EIAR.

Consideration has also been given to the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (DoHPLG 2018). The purpose of the new guidelines is to give practical guidance on procedural issues and the EIA process arising from the requirements of Directive 2014/52/EU and to assist with the achievement of a consistency of approach in the implementation of the Directive.

Laois County Council Planning Authority, Viewing Purposes Only

## 1.4 SCREENING

### 1.4.1 ENVIRONMENTAL IMPACT ASSESSMENT

An EIA is a systematic process to identify and evaluate the environmental impact of proposed projects, developments, and programmes, and is a key environmental policy instrument of the European Union (EU). The process requires proposed developments likely to have a significant impact on the environment to gain consent from the competent authority prior to proceeding with the project.

As stated above, in Irish Law, the principal Act under which EIA's are regulated is the Planning & Development Act, 2000, as amended. The Act consolidates previous Planning Acts and much of the Environmental Impact Assessment Regulations, where the latter is covered in Part 10 of the Act. In addition, secondary legislation consisting of Statutory Instruments or Regulations, made under the Planning & Development Act are also applicable.

Screening is the initial phase of the EIA process, whereby the proposed project is evaluated to determine if an EIA is required. Projects requiring EIA are listed in Part 1 and 2 of Schedule 5 of the Planning and Development Regulations (PDR) 2001 (S.I. No. 600 of 2001), as amended. Part 1 lists projects for which an EIA is obligatory under European law (specified in Annex 1 of the EIA Directive 2011/92/EU). In contrast, Part 2 lists projects for which an EIA is required, based on criteria and/or thresholds determined by the Member State, Ireland in this case (reflecting Annex II of the EIA Directive 2011/92/EU).

The development will consist of the continued use and operation of the existing quarry including deepening of the quarry. Extraction will be confined to the existing permitted quarry area (P.A. Ref. 10/383) comprising an extraction area of c. 14.5 ha within an overall application area of c. 19.6 ha. The development will include provision of new site infrastructure, including portacabin site office, canteen, toilets, concrete batching plant and truck washdown facility, hydrocarbon interceptors, mobile crushing and screening plant, upgrading of the water management system, provision of holding tank for wastewater, and other ancillaries. The proposed development will utilise/upgrade the existing in-situ quarry infrastructure, including site access, internal roads, storeroom, wheel wash, weighbridge, aggregate storage bays, refuelling hard stand, water settlement pond system, and other ancillaries.

Quarries are covered under Section 2 of Part 2, of Schedule 5 of the Planning and Development Regulations (PDR) 2001. Section 2 of Part 2 refers to "Extractive Industry"; specifically Clause (b) refers to "Extraction of stone, gravel, sand or clay, where the area of extraction would be greater than 5 hectares." Laois County Council considered that in accordance with the Planning & Development Act 2000 (as amended), the subject development is of a nature and scale such that it would require an Environmental Impact Assessment (EIA). Thus, as the operation exceeds the applicable threshold of 5 hectares, an EIA is required on the basis of Part 2 of Schedule 5 of the PDR 2001.

The Council also considered that due the nature of the development and its location in proximity to multiple Natura 2000 sites within 15 km, the proposed development would require an Appropriate Assessment (AA), in accordance with Article 6 of the Habitats' Directive and the DoEHLG Guidelines February 2010. The nearest site is the River Barrow

and River Nore SAC (Site Code 002162), which lies c. 1 km to the northwest at the River Owenbeg and 4 km to the southwest at the River Clogh. There are also the River Nore SPA (Site Code 004233), which lies c. 7.5 km to the southwest at its nearest point, the Lisbigney Bog SAC (Site Code 000869), which lies c. 9 km to the southwest, and the Ballyprior Grassland SAC (00256), which lies c. 10 km to the northeast (Refer Figure 11.4).

#### 1.4.2 APPROPRIATE ASSESSMENT

Appropriate assessment was introduced by the EU Habitats Directive as a way of determining during the planning process whether a project is likely to have a significant effect on one of the Natura 2000 sites so far designated (i.e., the candidate SAC's and SPA's), or their conservation objectives.

Article 6(3) states:

*“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives....”*

In the Irish context, this has been interpreted as a four-stage process. Firstly, a screening exercise (Stage 1) determines if a project could have significant effects on a Natura site. If it does or the situation is unclear a Natura Impact Statement (Stage 2) is provided to the planning or regulatory authority which then conducts an Assessment of the information supplied. Examples of significant effects are a loss of habitat area, fragmentation of the habitat, disturbance to species using the site and changes in water resources or quality. If such negative effects come to light in the assessment, alternative solutions are investigated by the proponent (Stage 3) and modifications made unless the project is deemed to be driven by ‘imperative reasons of overriding public interest’ in its current form. In this case Stage 4 then deals with compensatory action.

Screening for Appropriate Assessment (AA) was carried out with respect to the proposed development, and a copy of this report is included (Refer to Appendix 8). There are three SACs and one SPA within 15 km: (a) the River Barrow and River Nore SAC (Site Code 002162), which lies c. 1 km to the northwest at the River Owenbeg and 4 km to the southwest at the River Clogh; (2) the River Nore SPA (Site Code 004233), which lies c. 7.5 km to the southwest at its nearest point; (3) the Lisbigney Bog SAC (Site Code 000869) c. 9 km to the southwest; and (4) the Ballyprior Grassland SAC (00256) c. 10 km to the northeast.

The potential for significant adverse effects on the River Barrow and River Nore SAC (Site Code 002162) and the River Nore SPA (004233) is uncertain in the absence of control of potential pollution of discharge water during operation.

The proposed development will require a Water Management Plan to avoid potential impacts on the receiving environment of the Owenbeg and Clogh Rivers and the River Nore downstream.

In the absence of mitigation measures for the control of surface water discharge, it cannot be excluded, on the basis of objective information, that the proposed development, individually

or in combination with other plans or projects, will have a significant effect on a European site and as such Stage 2 AA is required. A copy of the Stage 2 Natura Impact Statement (NIS) is included in Appendix 9.

A Stage 2 NIS was also carried out in relation to the previous planning application P.A. Ref. 10/383 (Fogarty 2011) to ensure that the project, alone or in-combination with other plans or projects, would not have significant impacts on the integrity of the Natura 2000 sites within or adjacent to the project area, in view of the sites' conservation objectives. The NIS concluded that only one effect is likely to arise that would have significant impact on the integrity of Natura 2000 sites. This effect could occur by introducing water plants, that have the potential to be invasive, as part of the quarry's restoration plan, and thus must be mitigated.

The Planning Authority consequently included a planning condition No. 20, i.e.,

20. *The applicant shall ensure that no water plants are introduced to the flooded quarry when operations have ceased as part of the reinstatement plan for the site as recommended in the Natura Impact Assessment received by the Planning Authority on 14<sup>th</sup> of February, 2011.*

*Reason: To prevent the introduction of alien invasive species which may impact upon the integrity of the nearby River Barrow and Nore cSAC.*

The NIS has reviewed the predicted impacts arising from the Project and found that with the implementation of appropriate mitigation measures specifically with regard to surface water, significant effects on the integrity of the River Barrow and River Nore SAC and the River Nore SPA can be ruled out.

It is the conclusion of the NIS, on the basis of the best scientific knowledge available, and subject to the implementation of the mitigation measures proposed that the possibility of any adverse effects on the integrity of the European Sites considered in the NIS, or on the integrity of any other European Site (having regard to their conservation objectives), arising from the proposed development, either alone or in combination with other plans or projects, can be excluded beyond a reasonable scientific doubt.

## 1.5 SCOPING & CONSULTATION

Scoping should ensure that the constituent environmental studies of the EIA provide all of the relevant information, particularly with respect to: (1) significant impacts of the project; and (2) alternatives to the project. As such, the scoping process identifies the issues that are likely to be important during the EIA and eliminates those that are not. The information can be compiled through a formal process, whereby the competent authority is asked to consult with relevant agencies to draw up an opinion about the scope of the coverage required. More informal scoping can also be carried out to ensure that all relevant issues are identified and addressed to an appropriate level of detail.

Consultation for the purpose of an EIA provides an opportunity to solicit expertise and advice from a wide range of organisations and interested parties. Consultation has also taken place with sub-consultants appointed to prepare studies on specialised subjects. These include hydrogeologists, geologists, ecologists, traffic, and archaeological consultants.

### *Implementation of Directive 2014/52/EU*

The new EIA Directive 2014/52/EU came into effect in 2014 and was transposed into Irish Law and adopted on September 1<sup>st</sup>, 2018. The new European Union (Planning and Development)(Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) seek to transpose EIA Directive 2014/52/EU, and to give further effect to the 2011 Directive by means of extensive amendments to the existing planning legislation.

In May 2017, the EPA published Draft Guidelines on the information to be contained in environmental impact assessment reports (EPA 2017). The Guidelines were drafted with the primary objective of improving the quality of EIARs with a view to facilitating compliance (with the Directive). In August 2018, the Dept. of Housing, Planning & Local Government published Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (DoHPLG 2018). The purpose of the new guidelines is to give practical guidance on procedural issues and the EIA process arising from the requirements of Directive 2014/52/EU and to assist with the achievement of a consistency of approach in the implementation of the Directive.

The only new definition given in the amended Directive pertains to EIA (Article 1(2)(g) of the Directive), which is defined as a process consisting of:

1. The preparation of an environmental impact assessment report (EIAR) by the developer (Article 5(1) and (2) of the Directive);
2. The carrying out of consultations with the public, prescribed bodies and other Member States where transboundary effects have the potential to occur (Article 6 and, where relevant, Article 7 of the Directive);
3. The examination by the competent authority of the EIAR, any supplementary information provided, where necessary, by the developer (Article 5(3) of the Directive) and relevant information received through consultations with the public, prescribed bodies and any affected Member States (Articles 6 and 7 of the Directive);

4. The reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (3) above and, where appropriate, its own supplementary examination; and
5. The integration of the competent authority's reasoned conclusion on the significance of the effects into its decision to refuse or grant consent with conditions.

The DoHPLG 2018 Guidelines state that the environmental impact assessment must identify, describe, and assess the direct and indirect significant effects of the project on specified environmental factors (Article 3(1) of the Directive). These factors include changes from the 2011 Directive, the most notable being the replacement of 'Human Beings' by 'Population and Human Health', the addition of 'Land' and the replacement of 'Flora and Fauna' by 'Biodiversity with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC' (the Habitats and Birds Directives). The significant effects on these environmental factors must include the expected significant effects arising from the vulnerability of the project to the risks of major accidents and/or disasters that are relevant to the project (Article 3(2) of the Directive).

The DoHPLG 2018 Guidelines give the key amendments introduced by the 2014 Directive as follows:

- The refinement of environmental factors to be considered in the assessment process – resource efficiency, climate change, population and human health, biodiversity and disaster risk prevention and management;
- Strengthening of the procedures for screening, particularly through the introduction of new information requirements to be provided by the developer (Annex IIA) and revised selection criteria to be used by the competent authority in making a determination (Annex III) (Schedule 7A and 7, respectively, as inserted by article 97 of S.I. No. 296 of 2018);
- Expansion of the information to be included in the EIAR (formerly known in Ireland as EIS) (Annex III of Directive) (Schedule 6, as substituted by article 97 of S.I. No. 296 of 2018);
- Requirement that the EIAR must be prepared by competent experts and for the competent authority to have, or have access to, sufficient expertise to examine the EIAR;
- Expansion of the information to be included in a development consent decision including a requirement for a 'reasoned conclusion' to be incorporated into the decision in respect of the significant effects of the project on the environment;
- Requirements to inform the public and to make relevant environmental information publicly accessible through electronic means and in a timely fashion during the assessment process and at the time of the decision; and
- Requirement for monitoring of significant adverse effects resulting from the construction and operation of a project.

The Directive requires that information provided by the developer in an EIAR shall include a description of the reasonable alternatives studied by the developer. These are reasonable alternatives that are relevant to the project and its specific characteristics. The developer must

also indicate the main reasons for the option chosen taking into account the effects of the project on the environment (Article 5(1)(d) of Directive). Reasonable alternatives may relate to matters such as project design, technology, location, size, and scale (Annex IV (2) of Directive).

The information to be provided by the developer must, at least, address the matters detailed in Article 5(1)(a) to (f) of the Directive as follows:

1. A description of the project comprising information on the site, design, size, and any other relevant features of the project;
2. A description of the likely significant effects of the project on the environment;
3. A description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;
4. A description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;
5. A non-technical summary of the information referred to in points (a) to (d);
6. Any additional information specified in Annex IV of the Directive/Schedule 6 to the 2001 Regulations, as amended, relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected.

An informal scoping exercise has been carried out in order to identify the range of impacts that may be associated with the proposed development, the likely concerns of local residents and landowners, and to assess the information and detail that is required to be included within the EIAR. Consultations were held with professional staff from the Laois County Council as part of the scoping process.

### 1.5.1 CONSULTATION

A meeting between the project team and Laois County Council took place by way of virtual video conference call on the 11th of February 2021. The proposed development was presented by the Project Team Leader and EIAR coordinator Mr. John Sheils, J Sheils Planning & Environmental Ltd., to representatives from Laois County Council's Planning (Mr. David O'Hara), Roads (Mr. Patrick Murphy) and Environment (Mr. Liam Rabbitte). Representatives from Lagan's Property Management and Environmental Management sections were in attendance, as was Dr. Pamela Bartley of Hydro-G.

Laois County Council responded to the pre-planning information and presentation on the day with feedback relating to the existing conditions of the current planning permission for the site (P.A. Ref. 10/383) and considerations for ongoing compliance with road safety, as well as contributions from the Environment representative.

At the end of the meeting, Hydro-G raised questions regarding any information on file at Laois County Council related to monitoring information in respect of the Discharge Licence (ENV2 WP27) and direction regarding Laois County Council's position on the streams and rivers rising in the immediate vicinity of the site. The Environment Section representative at the pre-

planning meeting referred Hydro-G to their colleague Ann Marie Callan for surface water and Discharge Licence queries. Refer to EIAR Section 7.2.3 for further details of consultations.

The planner outlined their requirements with respect to preparation of the EIAR, and that the EIAR should be prepared in light of the EPA's guidance documents on EIAR (Refer to Section 1.6 below).

A pre-consultation document was also issued to the following NGOs and stakeholders between 21<sup>st</sup> & 25<sup>th</sup> May 2021 (Refer to Table 1.1 and Appendix 4 for responses).

**Table 1.1 List of Statutory Consultees Contacted and Response**

Consultee	Address	Email	Response
<b>Minister for Culture, Heritage, and the Gaeltacht</b>	c/o The Manager, Development Applications Unit (DAU) Department of Culture, Heritage and the Gaeltacht Newtown Road, Wexford, Y35 AP90	manager.dau@chg.gov.ie	No
<b>Geological Survey of Ireland (GSI)</b>	Geoheritage & Planning Programme, Beggars Bush, Haddington Road, Dublin 4, D04 K7X4	GSIPlanning@gsi.ie	Yes
<b>Health Service Executive (HSE)</b>	Mr Andrew Sulley, Environmental Health Services Ennistymon Health Centre, Ennistymon, Co. Clare V95 W681	By Post	No
<b>Inland Fisheries Ireland</b>	Inland Fisheries Ireland South Eastern River Basin District Anglsea Street, Raheen, Clonmel, Co. Tipperary E91 RD25	susan.sayers@fisheriesireland.ie	No
<b>An Taisce</b>	The Tailor's Hall, Back Lane, Dublin 8, D08 X2A3	planning@antaisce.org	Acknowledged
<b>Irish Water</b>	Spatial Planning, Irish Water HQ Offices Colville House 24-26 Talbot Street Dublin 1	By Post	No

A door-to-door survey of third-party wells in the area was initially carried out on 18<sup>th</sup> March 2021. This initial well survey was tentatively carried out during Level 5 Covid-19 restrictions and several residents urged caution and expressed a preference for a re-visit following the lifting of lockdown restrictions. A follow-up survey was carried out on 30<sup>th</sup> May 2021. Details of the well survey are provided in Table 7.9. John Fennell, Lagan Planning & Environmental



Officer also made contact with various well owners and landowners in the area during the course of the well survey.

Hydro-G consulted with the GSI Groundwater Section querying the availability of updated information regarding the Swan PWS, and while the scheme was more recently reviewed, they have not changed the mapping (Taly Hunter Williams, pers. comm. 2021).

Given the level of discussion with stakeholders, including identifying the issues and emphasis that are likely to be important during the EIA, it was not considered necessary to formally request a written opinion (“scoping”) on the information to be contained in the EIAR in accordance with Section 173 of the Planning and Development Act 2000, as amended. Consultation by a developer with the wider public during preparation of an EIAR tends to be used where the affected population may be very large and/or difficult to identify (EPA 2017), which however, was not the case here.

Following this scoping exercise, it is recognised that some issues have the potential for greater impact than others. Within the EIAR, these impacts and their mitigation will be given priority.

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## 1.6 FORMAT OF ENVIRONMENTAL IMPACT ASSESSMENT REPORT

The EIAR consists of a systematic analysis and assessment of the potential effects of a proposed project on the receiving environment.

The format and scope of this document has been produced having regard to:

- Schedule 6 and 7 of Planning & Development Regulation 2001 (S.I. No. 600 of 2001), as amended;
- Laois County Development Plan (2017-2023);
- Guidelines on the Information to be contained in Environmental Impact Statements, Environmental Protection Agency (EPA 2002, and New Revised Draft 2017); and
- Advice Notes on Current Practice (in the preparation of Environmental Impact Statements) (EPA 2003, and New Revised Draft 2015).

The EIAR takes into account these and other Government and commonly accepted standards and guidelines that affect various aspects of the proposed development. The provisions of the revised EIA Directive 2014/52/EU, as transposed into Irish Law by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018), and the above revised draft guidance issued by the EPA, were taken into account during preparation of the EIAR.

National Guidelines on Quarries and Ancillary Activities (2004) have been issued by the Department of Environment, Heritage and Local Government (DoEHLG). These guidelines set out typical planning conditions and suggest environmental limits which may be imposed subsequent to any planning consent. Due consideration has been given within the EIAR to comply with best practice mitigation measures set out in Chapter 3 of these guidelines. In this regard detailed best practice mitigation measures which will be implemented on site are described within the relevant sections of the EIAR.

Environmental Management in the Extractive Industry (Non-Scheduled Minerals) Environmental Management Guidelines (2006) have also been produced by the EPA. These guidelines are intended to provide general advice and guidance in relation to environmental issues to practitioners involved with the planning, design, development, operation and restoration of quarry developments and ancillary facilities.

In order to ensure transparency and public awareness of the environmental implications of development decisions, an EIAR is required to contain a non-technical summary according to Article 94 of the PDR 2001 (S.I. No. 600 of 2001). Clause 94(C) specifies "a summary in non-technical language of the information" required to be contained in the EIAR by the preceding clauses 94(a) and 94(b). Thus, the non-technical summary includes descriptions of the project, existing environment, impacts and mitigation measures, as well as graphic elements such as location map, site layout plan, etc. Furthermore, the non-technical summary is written in a format and language that can be understood by persons without the appropriate technical background.

## 1.7 OBJECTIVES OF ENVIRONMENTAL IMPACT ASSESSMENT REPORT

Formal environmental assessment enables the environmental effects which may be caused by a development to be systematically identified and evaluated. The EIAR presents the results in a manner that enables the importance of the predicted effects, and the scope for modifying or mitigating these effects, to be properly evaluated by the relevant decision-making body prior to deciding with respect to development consent.

This EIAR seeks to provide an objective analysis of the possible environmental effects resulting from the continued operation of the quarry at Knockbaun. These effects are assessed against a comprehensive checklist of relevant environmental criteria. The EIAR then systematically evaluates the positive and negative impacts of the project on both natural and human environments.

The overall aims of the EIAR are:

- To provide relevant and complete environmental information to all project stakeholders, including the general public, in a self-contained and comprehensive document;
- To identify and provide objective analysis of the potential effects of the proposed development on the existing environment, so as to inform the competent authority and other interested parties in the decision-making process;
- To describe available measures to mitigate, either by avoidance, reduction or remediation, any environmental effects that may be identified;
- To assess the likely effectiveness of the mitigation measures, and the acceptability of residual effects; and
- To provide a framework for the ongoing monitoring of residual environmental effects.

The EIAR is intended to be a self-contained document which addresses all of the potential environmental issues that may arise as a result of the proposed development.

## 1.8 LAYOUT OF ENVIRONMENTAL IMPACT ASSESSMENT REPORT

The EIAR has been prepared in accordance with 'Draft Guidelines on the information to be contained in Environmental Impact Statements' published by the Environment Protection Agency. The draft version of these guidelines was published in 2017. The EIAR also takes into account 'Draft Advice Notes on Current Practice in the preparation of Environmental Impact Statements published in 2015. While the 2015 draft version of the guidance document was intended for consultation purposes only, the guidance documents do incorporate the expected provisions of the new law and are thus being used as an interim measure until the new guidance is published. Practitioners are expected to adhere to the guidance while preparing EIARs, for applications made on or after May 16<sup>th</sup>, 2017. In addition, the policies contained within the Laois County Development Plan (2017-2023) have been considered and taken into account.

The EIAR has been prepared using the "Grouped Format Structure", where each topic is examined as a separate section referring to the existing environment, the proposed development, impacts and mitigation measures.

The report is sub-divided into a number of sections as follows:

**Section 1** sets out general introductory comments concerning the project and a brief explanation of the aims and format of the EIAR. It also identifies the various consultees and professional consultants who have contributed to this EIAR and any difficulties encountered in preparation of the EIAR.

**Section 2** describes reasonable alternative project locations, layouts, designs, processes, etc. that were considered with regards to their environmental effects.

**Section 3** describes the details and nature of the proposed development and introduces some of the potential environmental effects that may result. It also details any proposed or anticipated growth of the development and possible associated projects.

**Sections 4 to 15** provide detailed information on all aspects of the existing environment, identifies potential impacts on the environment by the proposed development, and recommends mitigation measures to avoid, reduce or remedy these impacts. They are grouped under the following sections:

4. Population & Human Health
5. Biodiversity
6. Land, Soils and Geology
7. Water
8. Climate
9. Air
10. Noise & Vibration
11. Landscape
12. Cultural Heritage

13. Material Assets

14. Roads & Traffic

15. Interaction of the Foregoing (This section is an examination of any interaction between impacts identified in the previous sub-sections).

The associated references, plates and figures are provided at the end of each section, while appendices are provided at the end of the EIAR.

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## 1.9 THE PROJECT TEAM

The EIAR has been prepared by J Sheils Planning and Environmental Ltd. (JSPE). JSPE were commissioned on behalf of the client, Lagan, to prepare the EIAR in respect of the proposed development at Knockbaun. The principal, John Sheils B.Eng. (Mining), Dip. Environ. Prot., MSCSI, MRICS, MIEI, MIQ, is a chartered minerals surveyor and mining engineer with a postgraduate diploma in environmental protection. He has also attained professional membership status of the Institute of Quarrying (MIQ).

Mr. Sheils is former chairman of the Minerals Surveying Professional Group of the Society of Chartered Surveyors Ireland (SCSI). He is also former chairman of the Committee of the Extractives Industries Division within the Institution of Engineers of Ireland (IEI). He represented the IEI on the steering committee for New Safety, Health and Welfare at Work (Quarries) Regulations 2006 and associated guidelines. He was technical advisor to the Planning and Environmental Committee of the Irish Concrete Federation (ICF) between 1996 and 2004. He was also a senior project team member responsible for the development of the “Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals)” Environmental Protection Agency (2006).

Mr. Sheils has written several papers and given numerous presentations on subjects relating to mineral planning, environmental management and health and safety to the mining and quarrying industries. He has presented a number of lectures on Environmental Management Systems, EIS, Occupational Health, Noise & Vibration monitoring to ACP Countries in the Caribbean and is co-author of “Code of Environmental Practice Mining Projects”, a guide produced for Centre for the Development of Enterprise (CDE), an institution of the ACP Group of States.

Mr. Sheils has over 30 years’ experience in the extractives industries in Ireland, U.K and Africa across a broad range of disciplines and areas including mineral exploration, mining, opencast coal mining, quarrying and inert waste. He also has 30 years’ experience in the compilation of planning applications and the preparation of Environmental Impact Assessment Reports (EIARs) for quarry developments.

A list of the other experts who contributed to the individual sections of the EIAR is given in Table 1.2, which shows which factors and topics they covered. Their qualifications, experience and any other relevant credentials are provided below.

Raymond E. Healy B.Sc., M.Sc., Dip. GIS, Dip. Sust. Dev., Research Geologist, contributed to several sections of the EIAR. Mr. Healy formerly operated the consulting firm Minorettek in Winnipeg, Manitoba, Canada, where he held the professional designation of P.Geo. He has over twenty years’ experience in applied mineralogy, mining, and exploration geology. He holds an M.Sc. in Geology (1991), a Diploma in GIS from DIT (2012) and a Specialist Diploma in Environmental Sustainability from NUIG (2013). He is the author of multiple scientific papers and scientific communications in refereed scientific journals, monographs, and conference proceedings, as well as technical reports, and has substantial experience in the preparation of multiple sections of EIS/EIARs since 2013.

The Moore Group is a multi-disciplinary environmental, planning and heritage resource management consultancy. They were retained to undertake the ecological assessment of the site and preparation of the Biodiversity section of the EIAR (Refer to Section 5). They also carried out a screening (Stage 1) for Appropriate Assessment and preparation of a follow on Natura Impact Statement (Stage 2) (Refer to Appendices 8 and 9, respectively).

This work was carried out by Ger O'Donohoe, Environmental Manager (Moore Group), Consultant Ecologist. He has over 25 years' experience as an environmental consultant with particular experience in the management and planning of Environmental Impact Assessments. He graduated from GMIT in 1993 with a B.Sc. in Applied Aquatic Sciences, and subsequently worked in environmental consultancy while completing an M.Sc. in Environmental Sciences, graduating from Trinity College, Dublin in 1999. He joined the Moore Group in 2002. He has extensive experience in freshwater and marine ecology and in terrestrial habitat surveying and mapping. In addition to freshwater and marine ecology, Ger has carried out bat and mammal surveys.

His primary role in Moore Group is as Principal Ecologist in the management and compilation of Environmental Impact Assessment Reports and undertaking Ecological Impact Assessments (EclA/Biodiversity Assessment/Habitat Surveys) of the terrestrial and aquatic environments of any particular development.

Ger has excellent knowledge of Environmental Legislation, Planning and Policy. He has extensive experience in freshwater and marine ecology and in terrestrial habitat surveying and mapping.

Dr. Charles Mount is a Ph.D. level qualified archaeologist and EIAR consultant with more than 25 years' experience of Irish archaeology and cultural heritage.

Dr. Charles Mount is a graduate of University College Dublin with an M.A. and Ph.D. in Archaeology, and a professional diploma in EIA and SEA management. He also holds an M.B.A. in Management from the Open University. He has worked in a variety of heritage and management roles and has prepared more than 80 cultural heritage assessments for Environmental Impact Assessments. He has worked in both the State and industrial sectors and has extensive experience of the commissioning and management of all types of archaeological services from desk-based reports to test and full excavations and geophysical surveys. He is capable of assessing impacts on archaeology and cultural heritage at all stages of land use planning and development from site selection, through EIAR to planning condition compliance. Dr. Mount provides Project Archaeology Services to the Irish Concrete Federation (ICF), Bord na Mona, and a range of private sector organisations, and is responsible for implementing the ICF Code of Practice. Refer to EIAR Cultural Heritage Section 12.

Section 14, Traffic, was prepared by Tony J. McNulty B.Eng. F.I.E.I., chartered engineer. Tony was previously a Mayo County Council senior engineer and has 40 years' experience in road design, construction & maintenance, preparation of traffic management and safety plans, and traffic sections of Environmental Impact Assessments.

Section 7, Water, of the EIAR was prepared by Hydro-G & Envirologic Ltd. Dr. Colin O'Reilly (Envirologic) & Dr. Pamela Bartley (Hydro-G) worked jointly on this project.

Pamela Bartley is a water focused civil engineer with 22 years' experience of field based practice in borehole drilling, groundwater monitoring and resource evaluation. Her primary qualification is a Diploma in Water and Wastewater Technology at Sligo RTC. She then completed her primary degree in Civil Engineering at Queens University, Belfast, followed by an M.Sc. in Environmental Engineering, and then a field-based hydrogeologically focused Ph.D. within the School of Civil Engineering at Trinity College Dublin. Her key areas of work are groundwater development from large scale water supply boreholes, hydrogeological assessment of quarries, and the evaluation of discharges to groundwater and surface waters.

Envirologic is an environmental consulting practice established in 2010. It has key competencies in hydrogeology (groundwater) and hydrology (surface water). Expertise is delivered to a varied customer base in both the private and public sectors. The practice offers a wide range of solutions to meet client specific needs and to satisfy environmental and planning legislation. Dr. Colin O'Reilly is the founder of the company. Colin has over 15 years of professional experience as a hydrogeologist, coupled with a doctorate degree (awarded by the Centre for Water Resources Research, School of Architecture, Landscape and Civil Engineering, University College Dublin) and academic research at the postdoctoral level.

Enfonic Ltd has a wealth of experience in all manner of acoustic related projects. Established in 2002, they are a leading independent acoustic consultancy with offices in Dublin and London. Their team of consultants provide specialist advice through all project stages; from planning to detailed design and compliance assessment. They specialise in the environmental and architectural fields, in particular wind turbine noise, impact assessments for planning, architectural design, traffic noise assessment, construction noise & vibration, industrial compliance, and complaint investigations. Their team has a breadth of knowledge and experience in a wide variety of applications. Their survey engineers are all qualified with certificate or diploma level accreditation from the Institute of Acoustics. They provided input with respect to noise modelling for the proposed quarry development at Knockbaun. JSPE carried out attended noise monitoring and preparation of Section 10, Noise & Vibration, of the EIAR.



**Table 1.2 List of Expert Contributors by Section of the EIAR**

Section	Section	Contributing Experts
1	Introduction	John Sheils & Raymond Healy
2	Alternatives	John Sheils & Raymond Healy
3	Description of Proposed Project	John Sheils & Raymond Healy
4	Population & Human Health	John Sheils & Raymond Healy
5	Biodiversity	Ger O'Donohoe, Moore Consulting
6	Land, Soils & Geology	Raymond Healy & John Sheils
7	Water	Dr. Colin O Reilly (Envirologic) & Dr. Pamela Bartley (Hydro-G)
8	Climate	John Sheils
9	Air	John Sheils
10	Noise & Vibration	John Sheils & Enfonic
11	Landscape	John Sheils & Raymond Healy
12	Cultural Heritage	Dr. Charles Mount
13	Material Assets	John Sheils & Raymond Healy
14	Roads & Traffic	Tony McNulty
15	Interactions of the Foregoing	John Sheils & Raymond Healy

## 1.10 APPLICANT

The applicant, Lagan Materials Limited ('Lagan'), is part of Breedon Group plc. Breedon is a public company with ordinary shares traded on the Alternative Investment Market (AIM). Breedon is a leading construction materials group in Britain and Ireland. The company employs approximately c. 3,600 people, and operates 2 cement plants, 70 quarries, 40 asphalt plants, 200 ready-mixed concrete plants, 9 concrete and clay products plants, 4 contract surfacing businesses, 6 import/export terminals and 2 slate production facilities.

Breedon trades in the Republic of Ireland as Lagan Materials Ltd., a fully-integrated aggregates and downstream products business headquartered in Dublin. It comprises all Breedon's construction materials and contracting services businesses (aggregates, asphalt, ready-mixed concrete, bitumen, contract surfacing highway maintenance, civil engineering, and airfield construction) in the Republic of Ireland.

Lagan and the wider Breedon Group are fully committed to sustainability and social responsibility. This commitment is one of the six pillars of the company's growth strategy, which was announced in their most recent Annual Report. In September 2020, Breedon committed to achieving net zero carbon emissions by 2050.

The company has a "Sustainability Working Group", which aims to ensure that the company can sustain long-term success, ensuring positive social, environmental and/or economic impact through their actions and activities.

The company recently published new policy statements covering the key pillars of sustainability including Environment, Biodiversity, Social Responsibility, Health, Safety & Wellbeing and Responsible Resource Use. The policy statements are enclosed in Appendix 5.

## 1.11 ANY DIFFICULTIES IN COMPILING SPECIFIED INFORMATION

No major difficulties arising from either deficiencies in technology, knowledge or expertise were encountered in the preparation of the EIAR. The contents of an EIS from 2009 (produced by Trinity Green of Clonfert, Kilcock, Co. Kildare), which accompanied a prior planning application in relation to the quarry at Knockbaun, ensured a considerable volume of relevant data was available.

The EIAR has been prepared by consultants with considerable experience in the compilation of planning applications and the preparation of Environmental Impact Assessment Reports (EIAR's) for quarry developments (Refer to Section 1.9).

## 1.12 REFERENCES

- DoECLG (1989-2006). *European Communities (Environmental Impact Assessment) Regulations, 1989 to 2006*. Dept. of the Environment, Community and Local Government (DoECLG), Dublin, Ireland. [Available at Irish Statute Book, Office of the Attorney General <http://www.irishstatutebook.ie/home.html>]
- DoECLG (2010). *Planning and Development Acts 2000 (S.I. No. 30 of 2000), as amended*. Dept. of the Environment, Community and Local Government (DoECLG), Dublin, Ireland. [Available at Irish Statute Book, Office of the Attorney General <http://www.irishstatutebook.ie/home.html>]
- DoECLG (2001). *Planning & Development Regulation 2001 (S.I. No. 600 of 2001), as amended*. Dept. of the Environment, Community and Local Government (DoECLG). [Available at Irish Statute Book, Office of the Attorney General <http://www.irishstatutebook.ie/home.html>]
- DoHPLG (2018). *European Union (Planning & Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018)*. Dept. of Housing, Planning & Local Government (DoHPLG), Dublin, Ireland. [Available at Irish Statute Book, Office of the Attorney General <http://www.irishstatutebook.ie/home.html>]
- DoHPLG (2018). *Guidelines for Planning Authorities and An Bord Pleanála on Carrying Out EIA*. Dept. of Housing, Planning & Local Government (DoHPLG), Dublin, Ireland.
- DoEHLG (2004). *Quarries and Ancillary Activities – Guidelines for Planning Authorities*, Dept. of the Environment, Heritage and Local Government (DoEHLG), Dublin, Ireland. [Available at <http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/>]
- EPA (2002). *Guidelines on the Information to be contained in Environmental Impact Statements*. Environmental Protection Agency (EPA), Johnstown Castle, Co. Wexford, Ireland, 33 p. [Available at <http://www.epa.ie/pubs/>]
- EPA (2003). *Advice Notes on Current Practice (in the preparation of Environmental Impact Statements)*. Environmental Protection Agency (EPA), Johnstown Castle, Co. Wexford, Ireland, 140 p. [Available at <http://www.epa.ie/pubs/>]
- EPA (2015). *Advice Notes on Current Practice for preparing Environmental Impact Statements*. Draft. Environmental Protection Agency (EPA), Johnstown Castle, Co. Wexford, Ireland.
- EPA (2017). *Guidelines on the Information to be contained in an Environmental Impact Assessment Report, Draft*. Environmental Protection Agency (EPA) Johnstown Castle, Co. Wexford, Ireland.
- Fogarty, P. (2011) *Natura Impact Assessment of Planning Application for Retention of Quarrying Activities at Knockbaun, Spink, Co. Laois*. Openfield Ecological Services, Dublin, Ireland.

Green, T. (2009) *Environmental Impact Assessment for Development Works at Spink Quarry Spink, Co. Laois*. Clonfert, Kilcock, Co. Kildare, Ireland.

Laois County Council (2017). *Laois County Development Plan (2017-2023)*. Laois County Council, Portlaoise, Co. Laois, Ireland. [Available at <https://laois.ie/departments/planning/development-plans/draft-laois-county-development-plan-2017-2023/>]

Law Reform Commission (2016). *Planning and Development Act 2000, Revised: Updated to July 2021: Unofficial Consolidation*. Law Reform Commission, Dublin, Ireland.

### Internet Sources

<https://laois.ie/departments/planning/> Planning Dept., Laois County Council

<http://www.epa.ie/> Environmental Protection Agency

[http://ec.europa.eu/environment/eia/index\\_en.htm](http://ec.europa.eu/environment/eia/index_en.htm) European Commission, Environmental Impact Assessment

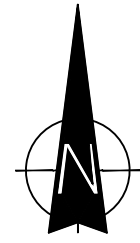
<https://www.google.ie/maps> Google Maps

<http://www.irishstatutebook.ie/home.html> Irish Statute Book, Office of the Attorney General

Laois County Council Planning Authority, Viewing Purposes Only

1.13 FIGURES

Laois County Council Planning Authority, Viewing Purposes Only



**Legend**

- █ Application Area (c. 19.6 ha)
- █ L7800 Local Roads

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**NOTES:**

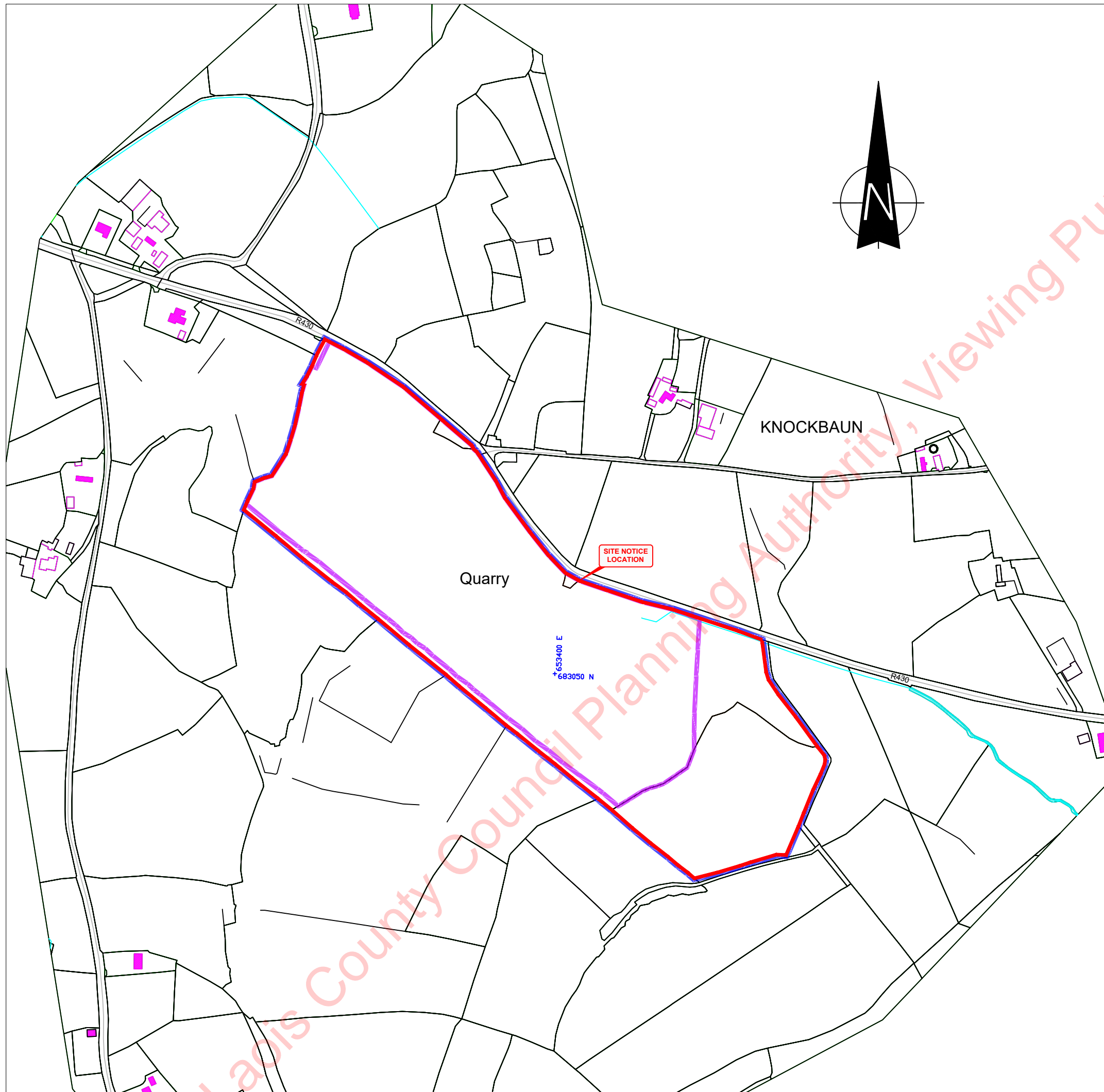
1. All Dimensions in metres (m)
2. Elevation Levels - metres Above Ordnance Datum (mAOD)
3. Extract from 1:50,000 OSI Discovery Series Map No. 60 & 61

**JSPE**  
31 Athlumney Castle,  
Navan, Co Meath  
Phone: 046 9073997  
Email: johnsheils@jspe.ie  
Web: jspe.ie

J SHEILS PLANNING & ENVIRONMENTAL LTD

CLIENT	<b>Lagan Materials Ltd</b>
DRAWING	<b>Site Location Map</b>
LOCATION	<b>Knockbaun, Spink, Co. Laois</b>

Drawn by	<b>John Sheils</b>	Scale	<b>1:50,000</b>
Checked by	<b>John Sheils</b>	Job No.	<b>JSPE 280</b>
Date	<b>03/02/2021</b>	Figure No.	<b>1.1</b>
		Rev.	<b>00</b>



**Legend**

- Application Area (c. 19.6ha)
- Planning Permission (P.A.Ref. 10/383) Extraction Area (c.14.5 ha)
- Landholding (c. 19.6 ha)
- +
- Irish Transverse Mercator (ITM) geographic coordinates
- Residence

Description:  
 =====  
 Digital Cartographic Model (DCM)  
 Publisher / Source:  
 =====  
 Ordnance Survey Ireland (OSi)  
 Projection= IREN95\_Irish\_Transverse\_Mercator  
 Centre Point Coordinates:  
 =====  
 X,Y= 653298.007049,683091.199631  
 Reference Index:  
 =====  
 Map Series | Map Sheets  
 1:5,000 | 4236  
 Data Extraction Date:  
 =====  
 Date= 03-Feb-2021

- NOTES:**
1. All Dimensions in metres (m)
  2. Elevation Levels - metres Above Ordnance Datum (mAOD)
  3. For Planning Purposes Only. Do not scale for setting out.

**Scale 1:5,000**



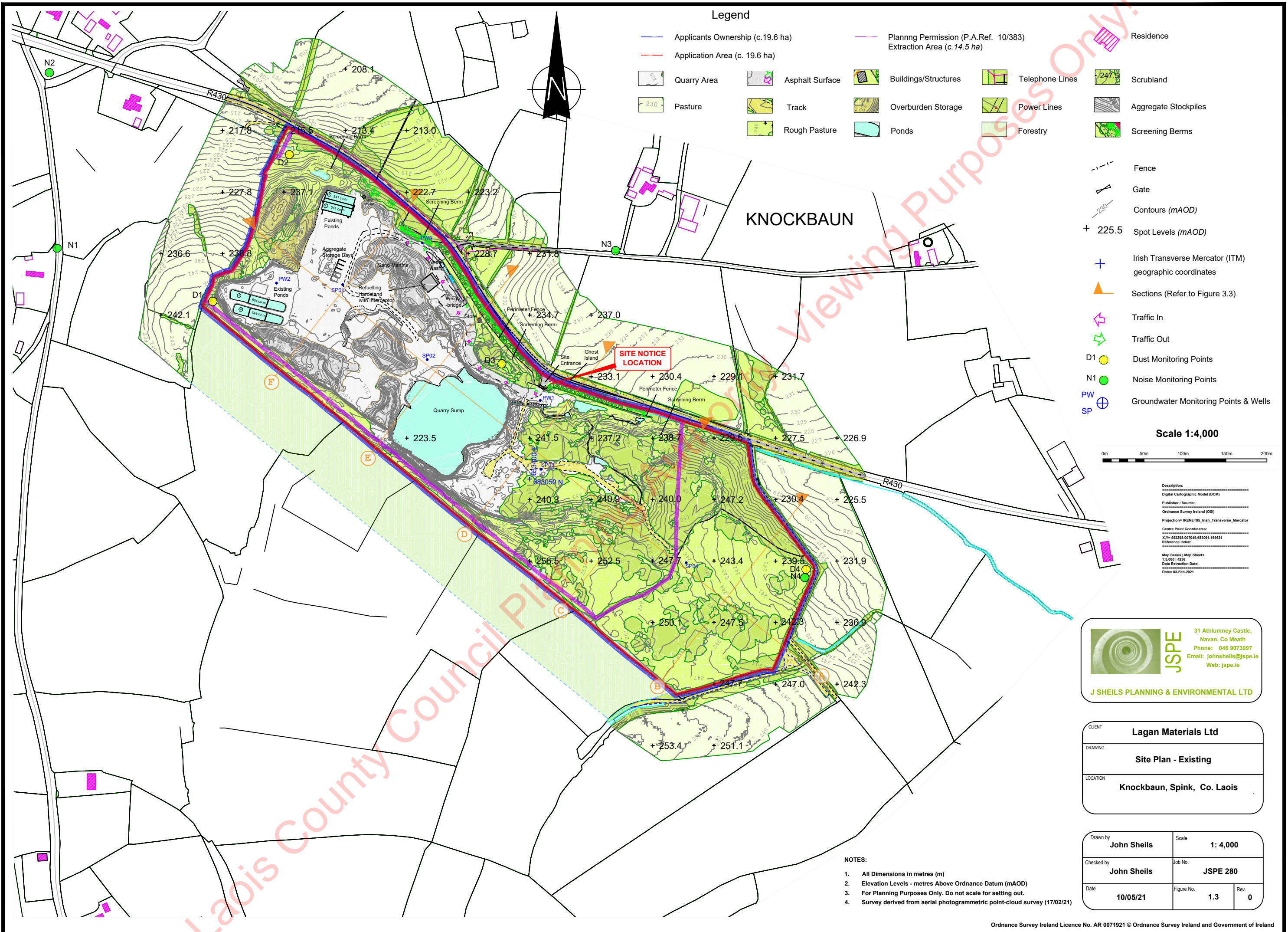
Ordnance Survey Ireland Licence No. AR 0071921  
 © Ordnance Survey Ireland and Government of Ireland

CLIENT	<b>Lagan Materials Ltd</b>
DRAWING	<b>Application Area Map</b>
LOCATION	<b>Knockbaun, Spink, Co. Laois</b>

31 Athlumney Castle,  
 Navan, Co Meath  
 Phone: 046 9073997  
 Email: johnsheils@jspe.ie  
 Web: jspe.ie

**J SHEILS PLANNING & ENVIRONMENTAL LTD**

Drawn by <b>John Sheils</b>	Scale <b>1:5,000</b>
Checked by <b>John Sheils</b>	Job No. <b>JSPE 280</b>
Date <b>03/02/2021</b>	Figure No. <b>1.2</b> Rev. <b>00</b>



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