An Bord Pleanála

Inspector's Report

ABP-314760-22

Development	Continued use and operation of the existing quarry including deepening of the quarry. The planning application was accompanied by an Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS).
Location	Knockbaun, Spink, Co. Laois.
Planning Authority	Laois County Council
Planning Authority Reg. Ref.	21700
Applicant(s)	Lagan Materials Ltd.
Type of Application	Permission
Planning Authority Decision	Grant Permission with Conditions
Type of Appeal	First & Third Party
Appellant(s)	1. Niall & Siobhan Headan, Ronan & Katie O'Reilly, Denise Brophy, Eamonn Brophy, Brendan Kehoe, Pat & Elisabeth Fitzpatrick

	2. Lagan Materials Ltd. (Applicant) Vs Condition No. 5(a)
Observer(s)	None
Date of Site Inspection	15th of March 2024
Inspector	Caryn Coogan

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1.0 Site Location and Description

1.1. The site is situated in Co. Laois in the townland of Knockbaun. This location is the southern part of the county, close to the Co. Kilkenny boundary. The site is known as 'Spink' quarry. It is located 10km east of Abbeyleix and 4km northwest of Swan village. It is an established quarry located on the southern side of the Regional Road R430, connecting of Abbeyleix to Swan. The national road network includes the N77 to the west and the N78 and N80 to the east, within 10km of the site.

1.2. The site occurs at a maximum elevation of 261m AOD along the southern site boundary and a minimum elevation of 214m AOD along the roadway i.e. northwestern site boundary. The general topgrapghy and site rise from east to west and north to south across a small footprint, as seen in the photos 24 and 25 from my site inspection.

1.3. The surrounding lands are mainly agricultural. There is a forestry plantation abutting the site to the south. There is a dispersed population of one-off houses and agricultural farmsteads in the area. The general topography of the area is rolling hills with the site situated on the northwestern margin of the Castlecomer plateau.

1.4. The site is **19.6Ha** and, as stated, it is an existing quarry, currently not in operation. Extraction has taken place at the western and central sections of the site. There are overburden mounds along the roadside boundary. There are stockpiles, settlement ponds, storage bays, a weighbridge, internal roads, a large lake and the quarry floor, as well as a hardstanding area, to the north of the site. The historical processing area is located in the northern section of the site.

1.5. The lands to the southeast are largely covered in scrub (Photo 24) visible on approach from east, (Carlow).

1.6. The site access is directly off the **Regional Road R340**. There is a large metal gate fronting the entrance (locked on the day of my inspection). The entrance is splayed with good sightlines east and west along the R340. The site is enclosed by a security fence. There is a large sign at the entrance stating 'Spink Quarry'.

1.7. There is sporadic rural housing along the roadside, however not directly opposite the quarry roadside boundary. There is no medium of high-density settlements close to the site, with the closest being Swan 3.5km form the site. The nearest dwelling is situated 175m from the western site boundary. The dwelling in built onto an inclining contour, with its rear elevation facing towards the quarry. There are overburden mounds visible from the property.

2.0 **Proposed Development**

2.1. The proposed development applied for consists of (as per revised site notice 19/07/2022) the continued use and operation of the existing quarry including deepening of the quarry.

- Extraction will be confined to the existing permitted quarry area (granted under P.A. Ref. 10/383) comprising an extraction area of c 14.5Ha within an overall application area of c.19.6ha.
- The development will include portacabin site office/ canteen, toilets, concrete batching plant and truck washdown facility, hydrocarbon interceptors, mobile crushing and screening plant, upgrading of water management system, provision of holding tank for wastewater and other ancillaries.
- The proposed quarry will utilise/ upgrade the existing in-situ quarry infrastructure, including site access, internal roads, storeroom, wheelwash, weighbridge, aggregate store bays, refuelling hard stand, water settlement pond system and other ancillaries.
- The planning application has been accompanied by an Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS).

2.2 The planning authority issued a request for further information on the 2nd of December 2021. The main items, but not all, requested include the following:

- Terminology of the EIAR is not consistent with EU Guidance documents (Directive 2011/92/EU as amended by 2014/52/EU), especially in regard to cumulative effects, it should not be limited to the site or quarrying activities, and to consider an additional development planning reference (21/694, which was subsequently withdrawn)

- Biodiversity: Surface water springs and outfalls to be clearly indicated Loss of habitats should be assessed in the context of nesting birds and other fauna. A full ecological assessment of the watercourse where discharge is to take place. Peregrine Falcons nest to be mapped. Justification for excluding sites outside of 15km.
- Land and Soil: Risks in handling hydrocarbons to be addressed. Baseline conditions on site of soils, subsoil and bedrock.
- Water (Chapter 7 of EIAR): A revised residual effects is required. There is inconsistency between the tables. Proposed surface water and groundwater monitoring programme. Confirmation of the proposed emission limit values for discharges to surface waters. Discharge locations to be identified. Clarification regarding available volume in the sump. A method statement to upgrade the existing discharge route to the east.
- Air Quality: Operational impacts are not clearly defined. Vehicle emissions has not been assessed.
- Noise and Vibration: The model used does not include concurrent activity in the east and west of the quarry. An assessment from a higher elevation is required to provide a worst-case scenario.
- Roads: Clarity is sought on the available capacities of the road network.
- All mitigation measures should be consolidated into a single section for ease of reference.
- Appropriate Assessment: Map of surface water outfalls. Exclusion of Natura 200 sites over 15km. In combination effects to be reconsidered.
- NIS: Should be revised to fully reference the hydrological/ hydrogeological assessments that were carried out in order to determine emission limit values and assimilative capacity of receiving watercourses.
- Submissions from Department of Environment, Climate and Communications, Inland Fisheries, Environmental Health Services and Third Party Submissions to be addressed.

2.3 Response to Further Information Received on 24th of May 2022, and revised notices received on 19th of July 2022. There was a robust response to the further information Appendix 01-10.

3.0 **Planning Authority Decision**

3.1. **Decision**

On the 9th of September 2022 Laois Co. Co. issued a Notification to Grant Planning Permission for the proposed development subject to 31No. standard quarry conditions.

No. 2 The permission authorises the extraction of 200,00 tonnes per annum.

The permission authorises he continued use and operation of the existing quarry *including the deepening of the quarry*. (my own emphasis)

No 3 The development to be carried out, completed and maintained in accordance with the EIAR and the NIS.

No. 4 Quarry permission for 29 years then it must be restored as outlined in the EIAR

No. 6 Hours of operation and opening.

No. 10 Dust emissions

No. 11 Noise

No. 12 Blasting

No. 13 Annual Environmental Audit

No. 15 Green House Gas monitoring programme

No. 22 Strengthening of the R430 for a distance of 100m

No. 29. Contribution of €217,500

3.1.1 The **First Party** has appealed the following.

Condition No.5 (a)

Excavation shall not take place below a level of at least 1metres above the highest seasonal water table level on the site. Water levels in the surrounding wells shall not be drawn down by the quarry activities and continuous monitoring of the water levels in the wells shall be carried out. Any abstraction from groundwater shall comply with the Local Government (Water Pollution) Act 1977, Register of Abstractions from Waters, Laois Co. Co. The planning authority shall, if necessary, determine additional monitoring wells to be provided by the developer.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The first Planning Report is Dated 01/12/2021: The following is a summary of the issues arising from the assessment:

- EIA was screened, with items of further information required on baseline studies on sites present soil and bedrock conditions, water, decommissioning phases inadequate, operational phases not clearly defined in terms of air quality, clarification of noise modelling, traffic predictions covering the entire life of the quarry
- NIS screening there is further information required on exclusion of sites beyond 15km, Freshwater Pearl water mussel to be correctly identified and accurately assess potential impacts, detail emergency response regarding fuel leakage, warning system reagridng suspended solids surpassing limits
- Applicant to review and respond to observations from the DOE, Inland Fisheries and the Environmental Health Service.
- The county development plan supports in principle the expansion of aggregates and concrete products, subject to environmental assessment and controls, and appropriate assessment.
- The EIAR does not adequately assess the likely signifigant environmental impacts and further information is required.
- The planning authority engaged the services of MKO Planning and Environmental Consultants to assist in the assessment of the case and they prepared the Further Information request.

3.2.2 **Further Information Response**

There was a signifigant information submitted by the applicant in response to the further information. The response was received on the 24th of May 2022. New public notices were received on 19th of July 2022.

3.2.3 **Second Planning Report**

The second Planning Report was prepared on 7th of September 2022. It addressed the response to the Further Information items requested. Each item was considered in full. The third party concerns were also addressed in the comprehensive response including additional details required in respect of the submitted EIAR and NIS.

3.2.2. **Other Technical Reports**

Engineering Report (/04/11/2021)

- Access is from an existing entrance.
- Adequate sight distance of 180m in both directions shall be maintained.
- The applicant shall fully fund the cost of strengthening the R-430 for a distance of 100metres.
- All vehicles shall be covered leaving the site.

Water Services

- No objections subject to conditions

Roads Department

- The trees are to be cut back on the Swan side of the access to provide required 180m sightline.
- The strengthening of the R430 for 150m shall be funded.
- Advance signage
- Covering of vehicles
- All haulage to be kept to the regional and national roads.

3.3. Prescribed Bodies

Uisce Water: No objection

Geological Survey: Outlines the various GIS tools available to assess the case. The groundwater maps should be viewed. There are two aquifers classed as 'Locally Important Aquifer-Bedrock which is generally moderately productive' and ' Poor Aquifer – Bedrock which is generally unproductive'. There is a public water abstraction (Swan Water Supply Scheme) with a zone of contribution/ source protection area 1.5km from the proposed quarry.

Environmental Health Service (EHS) : No objection subject to conditions. Noise monitoring locations need to be clearly identified. Table 10.7 and Table 10.3 do not correspond and is inconsistent. There is insufficient information provided.

Inland Fisheries Ireland : The development is situated on the catchment boundary between the Owveg (Laois) 010 surface water body, which has an Ecological Status of Goodecological status of Good, and the Clough_010 river body to the east which also has an ecological status of good, is at risk. The values in Tables 7.32 and 7.33 for assimilative capacity, headroom and proposed discharge limits should be resubmitted. The available capacity has been overestimated and the suggested discharge limits need to be adjusted accordingly.

3.4. Third Party Objections/ Observations

There were a number of third-party objections to the proposed development who raised similar issues to those currently being assessed under this appeal. A summary of the concerns raised is bulleted below:

- The structure of neighbouring dwellings will be adversely affected by blasting of rock.
- Water supply is another major concern.
- Animals will be affected by blasting vibrations, in particular brood mares and dogs.
- The correct assessment of the planning application and environmental impacts

- Ongoing enforcements issues associated with the quarry.
- Noise and vibration
- National Monuments across the road form the quarry
- Air pollution
- Increased HGVs on the roads
- Devaluation of property
- Pollution of rivers
- Opening hours
- No bird survey
- Impact on the Nore Pearl Mussel

4.0 Planning History

4.1 According to the planning application documentation, the site was historically used for rock extraction by the local authority during the 1970s.

4.2 The following is a planning history associated with the site, prior to it's purchase by the applicant in 2014

Planning Ref.	Decision	Decision Date	Description
01/947 ABP.11.130640	Grant with Conditions	18/06/2003	Develop 18Ha of land for quarrying rock and a tarmacadam plant
08/729	Grant with Conditions	18/08/2008	Permission to alter Condition No. 16(1) of P.A. 01/947 to extend dust emission levels to a limit of 350mg/m2/day.
08/729 ABP 11.230622	Grant with Conditions	19/02/2009	Operating hours for the tarmacadam plant permitted to between 0600-1800 Monday-Friday and 0600 to 1400 on Saturdays Pumping operations permitted on a 24hour basis, seven days a week.

09/384	Extension of Duration	05/08/2009	Extension of duration of P.A. 01/947 for 2 years
10/383	**Grant with Conditions (10year period)**	**19/09/2011**	**Continued use of quarrying on an area of 16.79ha within an overall site area of 27.7ha, offices, weighbridge, laboratory, toilets, septic tank etc, plant and machinery, wheelwash, surface water drainage ponds. EIS included.**
11/1146	Extension of Duration	26/05/2011	Extension of duration of P.A. 01/947 with a condition to lodge as cash deposit of €50,000 to ensure compliance with Condition 24 of ABP 11.130640

5.0 Policy Context

5.1. National Policy

5.1.1 National Planning Framework (NPF) 2018

National Policy Objective 23 supports the development of the rural economy by supporting sustainable and economically efficient industries including extractive industries.

5.1.2 Climate Action Plan 2023

The Climate Action Plan (CAP) 2023 was adopted in December 2022 and follows a number of predecessors which arose following the declaration of a climate and biodiversity emergency by the Irish Government. The Plan seeks to identify how Ireland will achieve its 2030 targets for carbon emissions by sector and through a series of actions. The overarching requirement in the Climate Action Plan as they relate to electricity require transformational policies, measures and actions, and societal change to increase the deployment of renewable energy generation, strengthen the grid, and meet the demand for flexibility in response to the challenge. The Plan seeks to reduce the State's greenhouse gas emissions by 51% by 2030.

5.1.3 **The Climate Action and Low Carbon Development (Amendment) Act 2021**

The Climate Action and Low Carbon Development (Amendment) Act 2021 (Climate Act, 2021), commits Ireland to a legally binding 51% reduction in overall greenhouse gas emissions by 2030 and to achieving net zero emissions by 2050. As part of its functions the Board must, in so far as practicable, perform its functions in a manner that is consistent with the most recent approved climate action plan, most recent approved national long term climate action strategy, national adaptation framework, sectoral plans, furtherance of the national climate objective and the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.

5.1.4 **National Guidelines**

(i) **Quarries and Ancillary Activities** – Guidelines for Planning Authorities (2004). Refer to the essential role played by the extractive industry in the economic and social development of the State and recognise that minerals can only be worked where they occur. Set out guidelines for best practice and mitigation measures in respect of environmental effects.

(ii) **EPA Guidelines on Environmental Management in the Extractive Industry (2006).** Set out guidelines for environmental management of quarries.

5.2. **Development Plan**

5.1.1 **Laois County Development Plan**

The site is located within a Structurally Weak Rural Area.

9.5 MINING AND AGGREGATES

The Council recognises that the aggregate and concrete products industry contribute to the development of the national, regional and local economies by the proper use and management of natural resources for the benefit of the community and the creation of employment opportunities. These products are required as essential building materials in the social and economic development process including the provision of housing and infrastructure. Laois County Council will seek to safeguard these valuable resources for future extraction. The National Guidelines on Quarries and Ancillary Activities for Planning Authorities (DOEHLG, 2004) is the guiding

document against which applications for quarries and ancillary activities will be considered. Aggregate extraction can only take place where suitable aggregate resources exist; they are a ‘tied’ resource. It is considered, therefore, that planning policies should be carefully constructed to avoid adverse effects on aggregate resources and the related extractive industries and added value production that are essential for the built environment, infrastructure and future economic development.

Like many forms of development, extractive industries have the potential to cause harm to the environment, heritage and the landscape if not appropriately designed and managed. However, aggregates are a necessary resource and are of great importance to the economy and society. In addition, well managed and designed quarry sites minimise environmental effects. There is also the potential for habitat creation through the restoration of quarry sites following the cessation of operations. The following National Guidelines (as may be superseded and/or updated) should be complied with: • Environmental Management(EPA 2006); • Quarries and Ancillary Activities: DOECLG Guidelines 2004); • Environmental Code(ICF 2006); • Geological Heritage Guidelines(ICF & GSI 2008); • Archaeological Code of Practice((ICF & DOECLG 2009); • Sections 261 & 261A Planning and Development Acts 2000 – 2013.

Map 9.1: Quarrying Sites in County Laois

10.4.4.1 Noise Action Plan

Laois County Council adopted the 2019-2022 Noise Action Plan in 2019, which is in accordance with Environmental Noise Regulations (SI 140 of 2006). The aim of the plan is to avoid, prevent and reduce, on a prioritised basis the harmful effects, including annoyance due to the long term exposure to environmental noise. This Noise Action Plan 2019 has been prepared by Laois County Council to address environmental noise from major roads with more than three million vehicles per annum. The action planning area covers the M7, M8, N80, N77 and sections of the R445. It also covers the major rail line between Hazelhatch and Portarlington within the functional area of Laois. It is a follow up to the 2014 Noise Action Plan which addressed environmental noise from roads with more than three million vehicles per annum and the 2008 Noise Action Plan which addressed environmental noise from roads with more than six million vehicles per annum.

Noise Pollution Policy Objectives

ES 43 Require an assessment of impact of the developments on noise levels, having regard to the provisions of the Environmental Protection Agency (EPA) Acts 1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning applications.

ES 44 Support the implementation of the Noise Directive 2002/49/EC and associated Environmental Noise Regulations 2006.

ES 45 Ensure that relevant planning applications comply with the provisions of any Noise Action Plan or noise maps relating to the area.

ES 46 Restrict development proposals causing noise pollution in excess of best practice standards

ES 47 Regulate and control activities likely to give rise to excessive noise, other than those activities which are regulated by the EPA.

ES 48 Ensure new development does not cause an unacceptable increase in noise levels affecting noise sensitive properties. Proposals for new development with the potential to create excessive noise will be required to submit a construction and/or operation management plan to control such emissions.

ES 49 Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate.

5.3. Natural Heritage Designations

The site is not located within or adjacent to a Natura 2000 site. The following European sites are located within 15km or the Potential Zone of Influence of the proposed development.

Site Code	Site Name	Distance (km)
00869	Lisbigney Bog SAC	8.8
002162	River Barrow and River Nore SAC	1.04
002256	Ballyprior Grassland SAC	10.14

004233	River Nore SPA	8.51

5.4. EIA Screening

The application for the proposed development includes an Environmental Impact Assessment Report (EIAR). It is submitted on the basis that the proposed development comprises the quarrying of stone from an overall extraction area of c.19.6ha and warrants EIA as it exceeds the 5ha threshold set out in paragraph 2 of Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended.

6.0 The Appeal

6.1. Grounds of Appeal

There are two types of appeals submitted for consideration , a number of Third Party appeals against the planning authority's decision to grant planning permission for the development and a First Party Appeal against Condition 5(a).

6.2 Third Party Appeal

The third-party appellants are as follows:

Ronan and Katie O'Reilly,

Denise Brophy,

Eamonn Brophy,

Brendan Kehoe,

Pat and Elisabeth Fitzpatrick.

Niall and Siobhan Headen

Three of the appellants made written appeals within one overall appeal. Some of the issues raised throughout all the third party appeal submissions are broadly similar in content. I will summarise each of the lengthy appeal, however I will try to avoid undue repetition. Their grounds of the appeal are outlined under a number of headings as per their submission.

APPEAL SUBMISSION NO.1 RONAN & KATIE O REILLY

6.2.1 ***Distance***

Laois Co. Co. failed to take into account the fact that their family residence is 175metres from the proposed quarry site. Under planning reference 9965 planning permission was granted for a dwelling at Eir Code R32 E197. Mr. Larry Behan applied for a quarry at Spink in 2001, under planning reference 01947. He purchased the house and site at Eir code R32 E197, and the field between the residence and the quarry, which meant the quarry, the field and the dwelling became one lot.

The dwelling was used as offices for the quarry.

The quarry and the dwelling went up for auction in 2024 by a vulture fund. The lots were split into two parts. The quarry was sold as one lot, and the house and agricultural land was sold as another. By doing this is rendered the planning permission for the quarry redundant. Planning permission was granted for a dwelling at R32 E197 when there was no concern for a quarry.

6.3 ***Quality of Life***

Their family residence is 175metres from the proposed quarry site. They have a young family, 11month old and a 27month old. One child has autism and has signifigant sensory processing issues. There were concerns expressed regarding the child's quality of life. This information was sent by email and due to the extreme personal nature it was not included in the objection. This serious health concern was not taken into consideration by the planning authority.

There are letters attached from her occupational therapist and psychologist outlining the impact a grant of permission for the quarry would have on the quality of their child's life. All children, especially special needs children, have a right to live comfortably in their own homes. The house and the garden are the child's safe place, and granting planning permission for a quarry only 175m from her would take that away from her. Laois Co. Co. granting planning permission for the proposed development, demonstrates the council do not understand the needs of a child with autism, GDD and sensory processing issues, nor do they care about them. As parents they should not have to fight to have a quiet and safe home for their child.

Due to the close proximity, their mental and physical health will be hugely impacted upon. Particular concern relates to blasting, and other issues such as noise, dust and traffic.

The granting permission for this quarry in such close proximity to their home is in breach of Article 8 of the European Convention of Human Rights which provides a right to respect for ones private and family life. In fact section 9 highlights how the appellants have the right for their private life not be impacted upon by environmental issues, which the quarry falls under.

6.4 ***Blasting***

Laois Co. Co. are aware of a court case against Lagan Materials Ltd regarding flying rock being ejected outside of the danger zones at one of their quarries in Wales. The flying rock from the blasting landed approximately 270metres away, punctured the roof of an occupied work shed and put a hole in a skylight. The appellant's dwelling is 175metre from the quarry. They are extremely concerned for their safety, and they have a young family within the 'danger zone'. This quarry should not be allowed to re-open, and Lagan group should not be allowed to quarry there given they have openly pled guilty to such severe safety breeches. We do not understand how Laois Co. Co. permitted the quarry to blast within 175m of their homes knowing about the court case and putting their lives at risk.

There will be structural damage to their home. Laois Co. Co. have failed to consider this in their planning conditions. All the applicants say that their home is 'under a hill'.

6.5 ***Water***

There has been little consideration of the impact on their water supply. They have made a considerable financial; investment into their water supply since purchasing the dwelling. They were not happy when a representative from the applicants group came to test their water and they requested an independent assessor. They were told they would have to pay for their own assessor. Also Ms Pamela Bartley has worked on many projects with this group. They have no faith in the results. The testing of their water was just a box ticking exercise, they did not have the correct equipment on site to check the levels of their water.

6.6 ***Property Value***

They purchased their property in 2017 when the quarry was not in use and flooded. The house has improved in value since purchasing. The reopening of the quarry within 175m of their home will seriously devalue their home. The value could decrease by 30% according to auctioneers. The price and the interest would be reduced.

6.7 ***Operational Hours***

The planning permission includes a condition stating the quarry will operate from 07:00 to 18:00 hours Monday to Friday and between 07:00-14.00 on Saturdays. The appellants will be awoken from the moment the quarry opens. Their daily lives will be disrupted 6 days a week. We do not see how this condition will limit the impact on their lives. Laois Co. Co. will renege on this condition. Under planning reference number 08729 the quarry opened from 5:00-20:00 Monday to Friday and 05:00 to 14:00 on Saturdays. The community of Spink have zero faith in Laois Co. Co. to enforce the conditions.

Appended to the submissions:

- Quarry for Sale listing August 2014
- Their original objection to Laois Co. Co.
- Further submission to Laois Co. Co. regarding their daughter
- Details of a case regarding the applicant in Wales
- Photographs
- Downloads from internet regarding pearl mussels, newspaper articles, correspondence and amongst other items, extracts from the planning application.

APPEAL SUBMISSION NO.2 EAMONN BROPHY

- The original objection to the proposed development is attached. He resides 500m from the development site and 700metres from the quarry. His house was built in 1979 and it had no problems until blasting started at the quarry.

As a resident of the county he expects the same quality of life as other residents.

- His water is another major concern. Condition 5 c states that if a water supply is compromised the quarry operator shall take whatever measures necessary for the provision of an adequate supply to replace the affected supply.
- His horses will be adversely affected also. He breeds for the Sport Horse industry. Pregnant animals can feel the vibrations and pressure from the blasting more than their owners and this can have a detrimental impact. There is no consideration given whatsoever to equines and the animals will be grazing within 500m of the quarry.
- The redevelopment is not necessary and it will have a major adverse impact on the residents of the area.
- There will be inadequate supplies of raw materials for concrete, therefore most of the materials will have to be imported from other quarries creating a massive carbon footprint.

APPEAL SUBMISSION NO.3 NIALL & SIOBHAN HEADEN

The planning authority must assess the planning merits of the planning application in accordance with the Planning and Development Act, 2000. The planning authority must form and record a view on the environmental impacts of the development, considering the EIAR furnished by the applicant. The planning authority has a responsibility under the Habitats Directive. The assessment must contain complete, precises and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned. The development must be assessed for compliance with the Water Framework Directive.

- The impact of the proposed development on their home has reached minimum severity. The intensity and duration of the proposed development, in such proximity to their home, may result in physical and mental health issues, and are very important factors for consideration of the final decision. Articles 8 and Article 1 of Protocol 1 of ECHR require this.

- In terms of the operating hours, 07:00-18.00 , what time would the quarry commence if trucks start leaving at 7am. There is no transparency on the working hours, it appears to be the quarry will open as the industry requires for 29years to include maintenance on Sundays. All these loading and batching operations throughout the night include safety equipment, lighting, reversing sirens and do not lend themselves to rural living.
- There are concerns that the applicant will obtain planning permission and will sell the site. The new owner may not have an understanding of the conditions or the EIAR and proceed to blame the previous operator and LCC for not recording or enforcing conditions. There will be no accountability. A new landlord may walk away from the site after discovering its unfeasible due to water ingress, leaving the environment with two lake type bodies of stagnant water.
- The applicant refers to the prominent overburden mound as screening quarry views form the north-west. The mound of overburden was not authorised under previous planning permissions. It is unauthorised and unenforced, and they have complained to the planning authority about it on several occasions. The material is loose and piled upon a rock hill. This could slide onto the R430. Refer to unauthorised development files UD1657/UD1857/UD2157 and Appendix 1 picture from their home.
- The applicant states in alternatives that marine aggregates are currently being mined in the UK but they are still seeking a 29year planning permission for blasting and deepening on site in Spink. Surely a company the size of Lagan will be involved in alternatives in future.
- The applicant states there is only one Peregrine Falcon on site however it is believed there are two breeding pairs that have set up home onsite.
- The applicant states the extraction methods will not change. During the previous quarrying after blasting two diggers with rock breaking hammerhead would continuously hammer boulders to reduce the size to fit into the crusher. There is no mention of this operation in the application. This caused unacceptable noise nuisance to their home and their second home is 211mtres from the site boundary, the noise will render it unrentable.

- Blasting: They are concerned about blasting only 500metres from their house and it is rented out only 211metres from the site boundary. The issues arising are water discolouration that occurs 4-5days after blasting, contaminating the drinking water and heating system. Both of dwellings contain frontline works on shift work (night duty and weekend), sleep deprivation could occur from the ongoing works during the day. Potential loss of tenants, results in loss of property value and income. Their home residence at R32R2 C9 has a private water supply and it is only 438metres from the quarry.
- The applicant states there is a 50metre buffer from the R430, the current wheel wash and weighbridge were not built in accordance with the initial planning granted. They site unauthorised 20metres from the R430therefore not in line with the application.
- Water: The open pit is flooded since previous attempts to quarry failed due to the volume of water entering the pit daily. During the summer it is a mecca for parties. These concerns have been raised with the county council. There is no calculation of the volume of water in the flooded quarry. There is no depth for sump 2 as is onsite. There are no records of the water on site on the planning authority's files. There were problems managing the water on site. Therefore the hydrologist did not have the facts necessary to carry out a correct assessment for the site. The applicant also states the Owenbeg River is 1.04km from the site, however it is in fact 500metres form the site. The applicant plans to pump sump 2v into the road drain at a maximum of 1450m3 daily. The Nore Pearl Mussel does not tolerate acidic conditions which can be found in stagnant pools in sandstone quarries.
- The appellants have lost trust in Laois Co. Co. with their mismanagement and failure to record and retain information on this site to protect our homes and basic human needs i.e. water. See appendix 12 - 30

6.8 **First Party Appeal**

The applicant accepts all of the conditions attached to the Notification of the Grant of Permission issued by Laois Co. Co. except the first sentence of Condition No. 5 which relates to the restriction on excavation to at least 1metre above the highest seasonal water table level on site.

A response to this element of the condition has been prepared by Dr, Pamela Bartley of Hydro-G, who also assisted in the preparation of the Water Chapter in the EIAR. Her hydrological impact assessments on quarries located within SAC settings, and each of the quarries which are of regional importance, contain to successfully manage their discharge under licence for many years. Many of these quarries are significantly below the water table and remain compliant with statuary law. The response is detailed and is summarised below.

6.8.1 The sentence at the start of Condition No. 5 '***Excavation shall not take place below a level at least 1metre above the highest seasonal water table level on the site',*** makes no sense, is impracticable and has no scientific or legal justification.

The condition is considered to be unreasonable because the existing quarry has already been developed at a depth below the water table, including groundwater dewatering and discharge to surface waters subject to licence to discharge to surface water as required under Section 4 of the *Local Government (Water Pollution) Act, 1977.*

The planning application was accompanied by a comprehensive Water Chapter submitted as part of the EIAR, and extensive replies were submitted as part of the Further Information process. The EIAR Water Chapter included:

- One hundred pages of information relating to the baselines environment and evaluation of the possible impacts. Site investigations included surveys of soil and bedrock , core drilling of rock and subsequent water well drilling and testing of different geological formations across the site. All evidence produced indicated the quarry could be further excavated at depth with no potential impact by the proposed quarry dewatering.
- Fifty pages (of the 100) of the Water Chapter were dedicated to the detailing of all site investigations and the necessary mathematical analyses. The results of drilling, geophysics and pump testing were used in order to deduce a volume of water that would arise from the aquifer and calculate impact. A heavily safety factored dewatering amount of 1,453m3/ day was evaluated. No impact was envisaged on either local well users or the receiving environment.

- The ground at the site was drilled using a site investigation rig, which was followed up with water well boreholes specifically drilled to enable actual pump testing. The breath of testing at Spink quarry is a rarity in EIARs. The result was signifigant and comprehensive ground investigations were completed and a robust mathematical assessment enabled a conclusion in the EIAR section 7.5.8.1.
- The studies found the upgradient wells have abstracted their water supply in advance of waters arriving at the quarry. This means that the quarry must dewater the volume of water remaining after these local users abstract their own water. Downgradient groundwater users will be adequately supplied by the catchments around their own wells.
- All required information and analysis were provided in order to demonstrate that the receiving surface waters could accommodate the envisaged discharge of waters arising from the site. A maximum amount of dewatering volume was inputted to the DoEHLG Guidance formulae for the low flow condition, and the resultant concentrations were deemed compliant with the Surface Water Regulations and Birds & Habitats Regulations. The EPA confirmed the mathematical approach was the correct approach to the Inland Fisheries.
- There was quantification of the amount of rainfall runoff that would arise on site and the additional amount that would arise from the excavation of rock. Water management systems, including the floor sump and settlement lagoons were designed and specified for the stated volume of water that would arise at the site from rainfall, runoff and groundwater inflow.

6.8.2 The Planner's Report on file demonstrate an understanding of the dewatering process from the EIAR and the amounts are greater than rainwater runoff. The planner also reviewed in detail the further information responses and concludes the proposal is justified. However on page 59 of the Planner's Report under the sections entitled '*Reasoned Conclusions of Signifigant Effects'* the statement is at complete odds with the Planner's own review and statements. The concluding comment is not relatable to the corresponding pages of the Planner's Report, and neither is it a summary of the information presented in the EIAR and the Further Information

Report. For example ‘no discharge to surface watercourse’ is something that can only happen in a gravel quarry. The rain that falls on hard rock has to discharge somewhere.

It is possible that the first line of Condition 5(a) was included by error. This type of wording is associated with a sand and gravel pit, and is not one applied to a hard rock quarry that is already below the water table level.

6.8.3 The Water Chapter detailed many springs in the surrounding area, indicating the groundwater is close to the grounds surface. The impact assessment and mitigation measures presented adequately dealt with protecting the integrity of the hydrogeological resource (natural groundwater springs) and the sources (local domestic wells). Condition No. 14 of the permission relates to groundwater monitoring. The planning authority has given consideration to both groundwater dewatering and monitoring of the quarry water discharge. These discrepancies suggest the first sentence of Condition 5(a) was not intended. The sentence does not make sense in light of the information presented in the EIAR and associated documentation.

6.8.4 ***Other Considerations***:

The following conditions show a clear contradiction with respect to Condition No. 5(a).

Condition 2(a) states the permission includes deepening the quarry which would require further development below the groundwater table and for the provision of necessary upgrading of the water management system including a water settlement pond system.

Condition No.4(a) as stated in the EIAR section 3.2.2.4 (Duration of Permission) the proposed development is required for a duration of 29years in order to extract the known resource. The council has granted planning permission for this duration. Table 3.2 in the EIAR shows the reserves (3.7million tonnes) of high quality Clay Gall Sandstone within the western and eastern quarry areas and these will be sterilised by the imposition of Condition 5(a) by restricting the development to 1m above the highest seasonal water table level on the site.. The Overlying Coolbaurn Formation (siltstones and mudstones with occasional sandstone) are not considered

economically viable to work on their own without access to the underlying Clay Gall Sandstone.

6.8.5 It is proposed to deepen the quarry at Spink to a level only c.190m AOD, yet the Planner's Report on file in respect of Landscape refers to the continuance of use of the quarry within the existing quarry extraction void and deepening by 20metres to a level of 108m OD, which clearly does not relate to the proposed development.

Laois Co. Co. appointed MKO Planning and Environmental Consultants to review the EIAR and their assessment informed the further information request. MKO were involved in the assessment of the further information as per pages 60 and 61 of the Planner's Report, yet the two MKO reports have not been made available on file. Therefore the applicant cannot fully understand how the disconnect happened between the assessment of the EIAR and the understanding of its findings to the Contradictory Reasoned Conclusions.

6.8.6 ***Conclusions***

The Board is requested to remove the first sentence of Condition 5(a) accordingly.

6.2. Applicant's Response To the Third Party Appeals

The location of the relevant appellants residence/ properties have been indicated on Figure 1 of the Further Information submission.

6.2.1 *Ronan & Katie O'Reilly*

Distance to Residence:

Planning permission was granted for the dwelling in 1999 (Ref: P.A. Ref. 99/65)). Mr Behan (former quarry owner) acquired the property and applied for retention of a number of alterations under Ref No. 04/77.

The property was identified as a residential property under planning permissions Re. 01/947 (Pl11.130640) and P.A. 10/383. The property was identified as the applicants house 150metres northwest of the site boundaries. It is evident Laois Co. Co. and Larry Behan gave due consideration to the dwelling during the various planning applications associated with the quarry.

The appellants have submitted auctioneer details on the sale of the property from 2014. The quarry property was put on the market in 3No. lots by a vulture fund. The advertisement stated the quarry had planning permission for continuance of use for ten years from 2011. The property was sold in two lots. The appellants claim that by splitting the property, the house became a residence and the permission on the quarry was rendered redundant. This is not the case.

The agricultural lands were purchased with the dwelling. Although the distance from the quarry to the dwelling is 175m, future extraction in the western quarry area will be confined to the current quarry floor and at least 255metres from the residence.

Quality of Life :

The dwelling is separated from the quarry by a ridge. The residence is at 210m AOD and the quarry area is at 225m, and the regarded overburden mound is at 238AOD. The ridgeline will significantly attenuate any noise arising from the quarry. A computer-based prediction model has been prepared to quantify the noise levels from the proposed development. The worst-case scenario suggests none or low adverse impact is likely at the residence.

The appellants residence also directly adjoins the R430 Regional Road and some of the existing measured ambient noise levels at the property exceed the predicted levels from the development. The appellants have made no reference to the proximity to the R430 and the existing noise levels. They have also made no reference to existing farm developments and windfarms. Their appeal is biased against the quarry development.

Noise arising from the development can be kept to a minimum by the implementation of good design, effective operation and management measures which are deemed to be best practice.

As detailed in the EIAR and Condition No. 11(a), the proposed development can operate within the proposed working hours and comply with the EPA Recommended General Noise Limit Criteria (EPA 2016).

In relation to Air Quality Condition 10(a) includes the dust recommendations over a 30 day period, and they shall be kept within the specified limits. The proposed development will not exceed an annual output of 350,000 tonnes, however the

average output will be closer to 200,000 tonnes. The concrete batching plant will produce up to 15,000m3 per autumn. This is considerably smaller than what previously operated at the location.

The volume of traffic generated by the proposed development can be absorbed by the available capacity of the adjoining roads. The volume of traffic generated by the quarry will result in an increase in daily vehicle flow of 94-142 or an increase of 6.4-10% along the R430 based on 3 different quarry production scenarios. The existing road network can absorb the traffic from the development. There are no adverse impacts predicted in terms of road and traffic.

Blasting

In respect of a court case in Wales reagridng flyrock, Lagan Materials is part of the Breedon Group, but no flyrock case has been brought against Lagan Materials Ltd within the Irish jurisdiction.

Blasting at Spink will be carried out by a certified shotfirer (Irish Industrial Explosives) in accordance with the relevant regulations. A consequence of blasting is ground vibration measured at peak particle velocity and air overpressure measured at the noise level of air blast. Blast monitoring will be carried out at agreed residences within the area. Ground vibration and air overpressure will be measured for each blast.

The EPA Publication on IPC licencing has stated peak particle velocities measured in any three orthogonal directions at a receiving location. There will be a blasting notification in place. Condition No. 12 relates to blasting and vibration. The rock face will be fragmented using standard blasting techniques, while ensuring the safety of persons and property. EIAR Section 10.6.12 outlines the blasting mitigation measures. Blasting will occur once a month, and it will result in a momentary impact. There were consultations with a number of sensitive receptors adjacent to the site. The notification implies a leaflet drop the week before the blast, and a telephone message to state the time of the blast on the day of the blast.

The development of the western quarry area below the surrounding ground levels and the direction of blasting will be away from the O'Reilly residence. The O'Reilly residence will be at least 575metres from the eastern quarry development. The

applicant is confident the proposed development can operate within accepted noise and vibration thresholds.

The applicants have also raised concerns about structural damage due to blasting. A comprehensive study by the US Bureau of Mines in the late 1970s determined vibration values will in excess of 50mm/s are necessary to produce structural damage to residential type structures. The onset of cosmetic damage can be associated with lower vibration levels. Further publications by the same board indicate that no damage has occurred in any of the published data vibration levels less than 12.7mm.sec.

There are many outstanding issues cracks appear in properties:

- Fatigue age in wall coverings
- Drying out of plaster finishes
- Shrinkage and swelling in wood
- Chemical changes in mortar, bricks, plaster
- Structural overloading
- Differentials in foundation settlement

The weakest parts of most structures that are exposed to air overpressure are windows, with prestressed windows that may crack at around 150dB with most occurring at 170dB.

Routine Blasting operations can generate air pressure levels closest to property of around 120dB. The blasting will be carried out in accordance with Condition No. 12, whereby it is stipulated that air overpressure values at sensitive locations in excess of 125dB max peak.

Water

Dr. Bartley is a water focused civil engineer with 24 years field experience in groundwater, surface water and wastewater. She is considered an expert hydrogeologist by Irish Water and diverse competing quarry companies. The planning application was accompanied by a comprehensive water chapter as part of the EIAR, and there were extensive clarifications submitted as part of the further

information process, which provided a robust quantification of the hydrological and hydrogeological setting at Spink.

The potential radius of influence upon completion works at Spink illustration 7.12 in the EIAR does not extend beyond the western quarry boundary in the direction of the appellants dwelling. There are no active groundwater receptors that may be at risk of impact form groundwater drawn down within 350m of the centre of the sump. No potential nor potential impact on local wells is predicted.

Property Value

Laois Co. Co. originally used the lands for rock extraction which ceased in the 1970s. Mr. Behan operated the quarry from 2003 for several years. There is a history of quarrying on the site. Lagan purchased the site in 2014, prior to the O'Reilly's buying the adjacent property in 2017. There was a valid planning permission in place at the time of purchased in 2017.

The development will be controlled and regulated in accordance with the scheme as outlined in the EIAR through continued environmental monitoring and by planning conditions imposed. Lagan Materials Ltd have a group wide Environmental Management System including a EMP which will be implemented at Spink. This is included in Appendix 10 of the EIAR.

Operational Hours

Condition No. 6 specifies the hours of operation of the quarry. This is in line with the Planning and Development Guidelines for Quarries DoEHLG 2004. An early start up is required for the pouring of concrete associated with the construction industry. There is no basis for the contention that trucks will be queuing outside their premises which is over 640metre from the quarry entrance.

Closing Date for Submissions/ Responses

The newspaper notice was as per Article 35(1)(a)(v) of the Regulations 2006. The five week period relates to the fact the application was accompanied by an EIAR. The final date for submission of an observation was 22/08/2022. The appellants made one submission received by the planning authority on 2nd of August 2022 and this was given due consideration by the planning authority.

6.2.2 ***Eamonn Brophy***

Blasting

The issue of blasting has already been covered as above.

Water

The issue of water has already been covered above.

The potential radius of influence upon completion of works is illustrated in Figure 7.12 and does not extend beyond the forestry lands to the south of the quarry development. There are no active groundwater receptors that may be at risk of impact from groundwater drawn down within that last 350m of the centre of the sump. No potential for drawdown nor potential for impact on local wells is predicted.

Also, given the standoff distance of 700m from the site and the use of best professional practice in the deisgn and execution of blasting, the appellants well is expected to be unaffected by ground vibrations.

Horses

The issues of blasting has been summarised above. As stated Lagan has developed a comprehensive notification system prior to any blasting. Whilst the procedures are tailored towards residential properties, they will provide sufficient warning to landowners such as Mr. Brophy. The Blast Notification Procedure can be altered on request should any alterations need to be implemented, subject to agreement from Laois Co. Co.

The appellant's property is located on the far side of the ridge into which the quarry has been excavated. This ridge line will significantly attenuate any noise arising from the quarry towards this property.

As stated previously, the quarry can operate within the acceptable vibration thresholds such as horses grazing in paddocks at a stand off distance of 500metres from the quarry should be unaffected by ground vibrations due to blasting.

Spink Picnic Area

The picnic area is 250metres northwest of the quarry site and is sheltered behind the ridge into which the quarry has been excavated. The south east boundary of the picnic area is lined with mature trees that provide visual screening of views towards the quarry. There is no visual impact is antiscipated.

The picnic area adjoins the R430 Regional Road and some existing measured ambient noise levels at the picnic area (n2) due to passing traffic already exceed the predicted levels.

On the morning of the intended blast a mobile sign will be placed in the Spink Picnic area, to inform the public of blasting.

Concrete Raw Materials

The average output of the proposed development will be close to 200,00 tonnes per annum of aggregates. The concrete batching plant will produce 15,000m3 of ready-mix per annum. Only cement and fine aggregates sand will be imported to the site for use in the manufacture of concrete. This equates to 1,000 movements per annum or about one trip per hour in the working day. There is a clear need for Laois Co. Co. to make provision for the long-terms supply of aggregates. Aggregate products are generally low unit value. The most signifigant cost is transportation and as a result most quarries typically operate within a 25km to 50km radius of their market. The quarry is needed for the continued economic growth of Laois-Carlow-Kilkenny region. The location has the benefit of good access to regional and national road network. These products provide essential building materials in the process of social and economic development, including the provision of housing, schools, factories and infrastructure.

6.3.3 ***Niall and Siobhan Headen***

The appellants reside 425m north of the quarry site (property No. 1 on Figure 1), but also rent a property 200metre west of the site (property No. 8).

It should be noted that in response to the Further Information (Item 15) the applicant was asked to address 7No. third party submissions (including Mr. Headens) with particular reference to blasts, groundwater wells, integrity of overburden mounds, distance to residence in relation to Headens property and clarification of extraction methodology including use of hydraulic rock breakers. A comprehensive response was submitted to address the third party's concerns. It is considered through the submission of a comprehensive planning application, EIAR and NIS, the matters raised by the appellants have been satisfactorily addressed by the planning authority.

The appellants claim the planning authority has four distinct tasks when assessing this form of planning application. Laois Co.Co. has fulfilled all four tasks with a high level of scientific scrutiny and rigor particularly with respect to biodiversity and water.

In response to the 10 point submission on the planning file:

Point 1

The appellant commenced construction of their dwelling (P.A. Ref. 05/103) at Clenagh in 2005, when the quarry was in full operation. In addition, the quarry was far more substantial in 2005 than what is currently proposed. Consideration has been given to the appellants through the planning application process.

The Laois County Development recognises the necessity for quarries and they can only take place where there is suitable aggregate. Three policies are stated, RUR8, RUR9 and RUR11. The development will be controlled and regularised in accordance with the scheme as outlined in the EIAR, through continued environmental monitoring and by planning conditions.

Point 2

The hours of operation has been discussed. The conditioned hours of operation are in line with Planning and Development Guidelines for Quarrying and Ancillary Activities DoEHLG in 2004. There is no ambiguity associated with Condition No. 6 of the decision to grant permission. Lagan does not use reverse sirens, their vehicles have CCTV and proximity sensors.

Point 3

Lagan are part of the Breedon Group and have policies in place in respect of Social Responsibility (Appendix 5 of the EIAR). They have a history of acting responsibly and in an ethical manner. The planning permission is attached to the land/ property and not the applicant. Lagan are fully committed to complying with the requirements of both the existing and any future planning permissions relating to the site.

Point 4

As included in the response to the further information, section 15.3, the existing western overburden mound slopes are regraded from 1:1 to 1:5 and the height is reduced by 4metres to mitigate visual impact on the landscape. The working scheme was prepared by a qualified mining engineer. The standard criteria were

applied to face height and slopes, standoffs to site boundaries, etc (Refer to EIAR Section 3.3.1.2). Excavations at the site will be subject to Safety, Health and Welfare at Work (Extractive Industries) Regulations 1997.

The entrance gates will be locked outside of working hours, with appropriate warning signs on site boundaries at various locations. Any litter observed will be removed from the site. A licenced waste collection contractor will remove any office/ canteen waste requiring recovery/ disposal to a waste management facility.

Point 5

As stated in the EIAR section 2.1.2 aggregates in the construction industry are generally won from hard rock quarries, sand and gravel pits. In the long term the extraction of sand and gravel from marine sources may be implemented as terrestrial sources become depleted. Today, marine aggregates are dredged from the seabed in the UK, and are used largely in the production of concrete. There are no marine aggregates been exploited in Ireland. Marine aggregates will not replace a high PSV aggregate used for producing high quality surface dressing chip, as at Spink Quarry. The nearest deep-water ports to Spink are Dublin and Rosslare, which is feasibly too far from Laois.

Point 6

Lagan is familiar with operating a number of quarries with breeding Peregrine Falcons. Site data from a fully functioning quarry with blasting has shown that a nesting couple fledged a chick in 2021. The issues are raised in the EIAR and FI response. The falcon will not be affected by the proposed development. There was a falcon encountered nesting on the cliff face of the southwestern area of the quarry. There have been measures to be incorporated into the EIAR to ensure the bird is not negatively impacted upon, particularly during the breeding/ nesting season..

Point 7

The blast design takes into consideration blast optimisation to ensure fragmentation to a size that reduces/ alleviates the requirement for secondary breakage and to produce block sizes that can be handled by the excavator and primary crusher (EIAR Section 3.3.3.5). It is not economically viable for the operator to be carrying out

secondary breakage which would result in downtime and loss of production. The use of a rock breaker is considered to be exceptional and will be carried out between 10am and 4pm Monday to Friday. Reducing the noise at source is the most effective way to minimise noise.

Point 8

The blast management practice at Spink Quarry will reduce mitigation measures, outlined in the EIAR. Blasting will typically occur once per month and will result in a momentary impact not unlike a thunderclap. Lagan have developed a comprehensive blast notification procedure at Spink Quarry, which will notify the residents of the susceptible residences. The blasting procedures proposed have been listed previous in the responses to the appeal.

The appellants live in a residence at Clenagh C. 425m north of the quarry site (property No. 1 on Figure 1), but also rent out a property 200m west of the site (Property No. 8). The standoffs to the future extraction area in the western quarry area as opposed to the quarry boundary are 300m and 600m to properties No.s 8 and 1. The development of the quarry in the western area involves deepening of the quarry below the surrounding ground levels and the direction of blasting will be away from both Headens properties. Blast monitoring will be carried out at agreed residences. Ground vibration and air overpressure measurements will be undertaken at the nearest susceptible residences in the area. The results obtained will be used to ensure compliance with conditions. The proposal can be operated within the accepted noise and vibrations thresholds.

Many domestic properties have cracks that may be wrongly attributed to blasting activities. The appellants property can be included in the blast monitoring programme for the quarry to demonstrate that the levels of clast vibration are well within the accepted thresholds for blast vibration. The issue of water and third party wells have been addressed. The potential radius of influence upon completion works is illustrated in Figure 7.12 of the EIAR and does not extend beyond the western quarry boundary in the direction of the appellants house (Property 9 on Figure 1). There are no active groundwater receptors that may be at risk of impact form groundwater drawn down within that 350m radius of the centre of the sump. No potential for drawdown nor potential for impact on local wells is predicted.

Point 9

As stated in section 3.3.3.6 Extraction Design & Phasing, in respect of protecting the river systems to the east of the site. The proposed quarry makes provision for a 50m buffer zone set back from the boundary with the R430 Regional Road. There will be no quarrying or no activity in this area.

Point 10

The statement that the quarry has never been flooded refers to fluvial or pluvial flooding of the lands as recorded by CFRAM mapping. Clearly as the quarry was excavated below the water table and being inactive, hence not being actively dewatered, the water level within the quarry void will rebound.

The quarry failed due the financial crisis of 2008 and the collapse of the construction industry in Ireland.

The applicant acknowledges that the Owenbeg River is within 500m. The reference in the EIAR to a distance 10.4km refers to the River Barrow and River Nore SAC and not the mainstream of the Owenbeg River nor its first order tributaries and wet ditches.

The existing sump will be replaced by, not supplemented with a second sump as the extraction progresses and becomes deeper to the southeast. Further clarification regarding the sump was provided with RFI Response 4.7 and 13.2, also refer to Condition No. 20.

In response to the submission by Inland Fisheries Ireland, a full and comprehensive ecological assessment of local watercourses including the watercourse to which the waters from the proposed operations will be discharged has been prepared by Ger Morgan (Refer to RFI Response Appendix 2.2) The report concluded that all the streams surveyed as part of the assessment have water quality and habitats compatible with at least moderate to good fisheries status including trout and lamprey in the smaller channels and salmon also on the Owenbeg. Water management and discharge have been designed with cognisance of the enacted Irish Regulations concerning groundwater, surface water, birds, habitats and pearl mussels. There are no predicted adverse effects on local or downstream biodiversity, flora or fauna as a result of the proposed development, given the

inclusion of workable industry standard mitigation measures, which will be monitored to ensure continued efficacy.

Other Matters

A number of disjointed references were raised by Mr. Headen in the appendices accompanying his submission. There are addressed below.

- The Inland Fisheries query was resolved during the FI process. The EPA clarified for the IFI that the approach taken by the hydrogeologists with respect to determination of the Emission Limit Values was in accordance with the Department Guidance. The ELV's can be further addressed as part of the proposed licence to discharge to surface water as required under Section 4 of the Local Government (Water Pollution) Act 1977.
- A peregrine falcon conservation management plan was provided as part of the RFI Response.
- The appellants lives 425m north of the site which is considered to be a considerable and signifigant standoff distance from the quarry. Noise prediction models show that the quarry can continue to operate within acceptable thresholds. The applicant has established an environmental monitoring programme for the quarry site. The programme allows for ongoing monitoring at the quarry site. It allows for ongoing monitoring of emissions from the site, including noise and dust, thereby assisting in ensuring compliance with the agreements of the regulations.
- The existing overburden mounds are to be regraded from 1:1 to 1:5 and the height reduced by 4m to mitigate impact on the landscape. This will reduce the height of the screening berm to c238m AOD which is in keeping with the ridgeline forming the western boundary of the site. The properties at noise sensitive locations NSL 1 and NSL 2 are well below this level and afforded substantial potential from the whole of the natural hillside between the quarry lands and these properties and as such the reduction in heights will not have an appreciable effect on noise propagation.

- Condition 10 C) can be amended to read All vehicles associated with the haulage of aggregates and other materials to an from the site shall be enclosed or securely sheeted to prevent dust emissions.
- Condition No. 119b) can be reworded to include the word ‘independent’ noise consultant.
- The appellant has quired certain noise levels in the conditions without making clear what he is referring to. The noise propagation modelling undertaken by Enfonics was based on using an average rating of 11 dBA for the crushing and screening plant at source. The operator has to comply with Condition 11(a). he later mistakenly refers to the limit prescribed in Condition 11 9a) when referencing Condition 12(c) . These parameters are not the same. Condition No. 12 (c) states the air overpressure is measured as the noise level of ‘air blast’ (i.e. dB(Lin)) and this condition is in accordance with the EPA guidance ‘Integrated Pollution Control Licencing – Guidance Notes for Noise in Relation to Scheduled Activities’ The Guidance states the blasting should not give rise to air overpressure values at sensitive locations which are in excess of 125dB(Lin) max peak. Airblast is properly measured and described as linear peak air overpressure. Modern blast-monitoring equipment is capable of measuring peak overpressure in terms of unweighted decibels.
- The site has been secured by the applicant and there will be a barrier system in place.
- The access road to the quarry I 9m with a 2m high palisade double entry gateway.
- The appellant is concerned about an emergency plan. The HGV are restricted by condition to the national secondary and regional road network. The relevant section in the EIAR is 14.6.2. As regards the €100,000 security bond been considered insufficient. Condition No. 31 states the development bond.

6.3. **Planning Authority Response**

There was no response form the planning authority to the appeals.

7.0 Assessment

7.1. There are two appeals:

(i) A third party appeals against Laois Co. Co's decision to grant permission for the development, and

(ii) First Party appeal against Condition 5(a).

I intend examining the third-party appeals first. Most of their concerns relate to issues associated with the EIAR section of this report. Then I will examine the applicant's appeal relating to section of one condition 5(a) included of the planning authority's decision.

7.2 Having regard to the foregoing and having examined the application details and all other documentation on file, including all of the submissions received in relation to the appeal, and inspected the site on 15th of March 2023, and having regard to relevant policies and guidance, I consider that the main issues in this appeal are as follows:

Planning Assessment

- Policy context and need.
- Principle of the development
- Inadequate supply
- Visual Impact
- The Peregrine Falcon

Environmental Impact Assessment

- Legislation Introduction
- Consideration of Reasonable Alternatives
- Description of Project
- Population and Human Health

- Biodiversity
- Lands, Soil and Geology
- Water
- Climate
- Air Quality
- Noise and Vibration
- Landscape
- Cultural Heritage
- Material Assets
- Traffic/ Roads

Appropriate Assessment

Potential for effects on conservation objectives of River Barrow and River Nore SAC.

Adequacy of NIS

Cumulative effects

7.3 I wish to comment briefly on a number issues raised in the appeals by the Third Parties prior to addressing the salient planning and environmental issues:

- Alleged breaches of quarrying/ blasting regulations elsewhere – Parties to the appeal refer to breaches of quarrying regulations in respect of blasting operations at a quarry in Wales by the parent group. This matter lies outside this jurisdiction and the scope of the appeal.
- Alleged breaches of Articles 8 and 9 of the European Convention of Human Rights. I examined the wording of both articles and I consider this legislation is beyond the remit of this planning appeal and An Bord Pleanala.
- The concern that the applicant will sell the site if the planning permission is granted, there will be no accountability on enforcing planning conditions, which were not enforced on the previous quarry owner. It is submitted the applicant could walk away from the site leaving stagnant water on the site and

environmental issues. It is my opinion, the planning permission is associated with the site and not the applicant. The enforcement of the planning conditions is a matter for the planning authority.

- A number of third-party appellants considered the planning authority had failed to address their initial submissions. However, I have examined the relevant Planning Report on File. The planning authority's letter requesting Further Information dated 2nd of December 2021, Item 15, whereby the applicant was advised there were 7No. third party objections to the proposed development and the applicant was invited to comment on issues raised in the submissions received. A detailed response to the concerns raised was addressed by the applicant in the further information received at the planning office on the 24th of May 2022. In my opinion, the planning application comprehensively addressed the concerns of the third parties original submission in the additional information relating to the EIAR and AA, in particular regard to the water supply issue.

7.4 **Policy Context and Need**

7.4.1 Construction and physical infrastructure is a vital part of our economy. The construction industry requires a strong continuous supply of vital raw materials in this instance signifigant reserves of aggregates. The National Planning Framework 2040 and the National Development Plan 2018-2027 recognise the need for a steady and adequate provision of aggregate supplies. National Policy Objective 23 support the development of the rural economy:

Facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.

7.4.2 In accordance with Section 9.5 of the Laois County Development Plan 2021-2017, I refer to Section 9.5 of the Plan. Local planning policies recognise the importance the extractive industries contribute to the economy through the proper use and

management of natural resources in the county for the benefit of the community. The following policies are of note:

RL 14 *Support in principle the expansion of the aggregates and concrete products industry which offers opportunity for employment and economic development generally subject to environmental , traffic and planning considerations and ensure that any plan or project associated with extractive industry is subject to Appropriate assessment screening in compliance with the Habitats Direction and subsequent assessment as required , applicants for planning permission shall have regard to the GSI-ICF Quarrying Guidelines.*

RL 15 *To secure the long-term supply of value-added products (such as concrete products and asphalt, which are often, but not always, produced in conjunction with aggregate extraction.*

RL 16 *To support the necessary role of the extractive industries in the delivery of building materials for infrastructural and other development and to recognize the need to develop extractive industries for the benefit of society and the economy; RL* ***RL17*** *Support in principle the processing of minerals to produce cement, bitumen or other products in the vicinity of the source of the aggregate, where the transport network is suitable to reduce trip generation.*

The subject quarry is included on the Laois County Development Plan Map 9.1 Quarries and Minerals.

7.4.3 Having regard to the policies of the County Development Plan, which recognise the important role that mineral extraction plays in the County, as set out in the National Planning Framework, 2018 and to acknowledgement that the site is an existing quarry, I am satisfied that there is a current policy context for construction growth in County Laois and associated with this a likely demand for aggregates. I consider therefore that the applicant is therefore entitled to bring forward the application for proposed development and for it to be considered on its merits.

7.4.4 One of the third party's argued their dwelling which is 175m from the subject quarry, originally formed an integral part of the quarry. According to their submission, their dwelling was originally used as office for the quarry. In 2014 a vulture fund sold the quarry site and the dwelling site separately. They claim selling both lots separately has made the permission for the quarry redundant. I do not agree with this

statement. The quarry is a separate standalone entity both in planning terms and legal terms. The proposed development as presented, complies with the statutory notices submitted with the planning application, i.e. *the continued use and operation of the existing quarry including deepening of the quarry. Extraction will be confined to the existing permitted quarry are (P.A. Ref 10/383) comprising an extraction area of c. 14.5ha within an overall application area of 19.6Ha.* The appeal file states the subject residence was owned by the former quarry owner (Mr. Behan), and planning permission was granted for the dwelling house under planning reference 99/65. The property has been identified in the planning application and taken into consideration in the EIAR, and due consideration was given to the residential use of the property. Under the previous permission relating to Spink Quarry, Ref. 10/383 the permitted extraction area was 100metres from the dwelling in question. The separation distance is now 175metres to the site boundary and future extraction on the western axis of the quarry will be confined to the quarry floor and 225m from the residence. The environmental issues associated with the proximity of the dwelling house to the western boundary of the quarry site are considered in greater detail later in the report. I conclude the sale of both landuses/ property separately does not impact on the planning status of the quarry.

7.5 **Principle of the Development**

7.5.1 The quarry is an existing quarry that has an existing permission under Planning Reference 10/383. The footprint of the extraction area, overburden mounds, settlement pods, internal roads exists at Spink. The quarry is an established use. Under this current proposal Lagan Materials' Ltd are applying to continue the quarrying use of site for 29 years, then restore the site. A more detailed description of the proposed development is included in the EIS section of this report.

7.5.2 I am satisfied based on my reading of the entire file and inspecting the site, that permitting the continued use of the quarry for extraction of aggregates, is in compliance with national and local planning policy. It is more sustainable in planning terms to continue the extraction of aggregates from an existing established quarry as opposed to a greenfield site. The concept of extending the quarry area to the east and west has been considered and permitted in 2010, and the footprint of the quarry is in situ. Prior to the 2010 planning application been granted to Mr. Behan, he had been granted planning permission Under Reference 01/947 for quarrying rock on

18Ha at Spink with a tarmac dam plant. The quarry use at this location predates a signifigant number of one-off dwellings in the general vicinity. The residents in the area and coming into the area are aware of a long established use at Spink.

7.5.3 Having considered the EIAR I find no planning justification for changing what has previously been permitted in principle on the site under the 2010 planning application. In my opinion, the baseline studies provided with the current application, in terms of water and biodiversity are more robust than the previous planning applications. In my opinion, the applicant has a sound understanding of all the localised environmental issues arising and has presented robust and reasonable mitigation and monitoring measures to ensure existing residential amenities are not seriously impacted upon by the proposed development.

7.5.3 By granting the permission for the current proposal, there is a long-term plan for the restoration of the site included in the EIAR.

7.6 **Adequacy of the Development**

7.6.1 It is submitted on appeal that there is inadequate supply of raw materials within the proposed site to support the concrete batching plant and that materials will have to be imported form surrounding quarries. In response to this the applicant has indicated the average output of the proposed quarry will be 200,000 tonnes per annum of aggregates. I note this is significantly reduced from the previously permitted output granted under planning reference 10/383 at Spink which was 350,000 tonnes per annum. The concrete batching plant will produce up to 15000 cubic metres (36000 tonnes0 of ready-mix per annum. Only cement (4,500tonnes) and fine aggregate sand (7500 tonnes) will be imported onto the site to produce concrete.

The location of the quarry close on the Regional Road (R340) and in close proximity to national routes (N77 (west), and N78 and N80 (east)). The supply of local aggregates is essential for the sustainable development of local communities. A strategic location adjacent to a robust road network reduces transport distances and costs in addition to reducing the carbon footprint compared to non-local resources. Aggregate extraction can only take place where a suitable and sufficient aggregate resource exist. The existing quarry has been established for a number of decades. The bulk of the raw materials are located within the site. I do not consider the

importation of cement and sand onto the site for the production of concrete to be a signifigant issue. The bulk of the raw materials and aggregates to serve the wider local community can be sourced on site. It would not be feasible for the applicant to draw in vast amounts of aggregates onto the subject site from surrounding quarries. I am satisfied with the projected levels of imported materials onto the site for the production of concrete, these are essential components and cannot be sourced on site.

7.7 **Visual Amenity**

7.7.1 The topography of the region is that of a rolling hilly landscape with the site situated to the north west of the Castlecomer plateau. There are no landscape designations or scenic routes designated in the Development Plan associated with the site or immediate area. Given the existing contours of the area, the visual impact of the development is localised to the general vicinity of the site. The site occurs along the southern side of the Regional Road. There is a sharp gradient from north to south across the site. The quarry is sandwiched between the R430 and a forestry plantation that runs along the southern site boundary positioned above the level of the quarry. The surrounding lands are agricultural. The existing quarry is located within an elevated area. The activities and quarry face are screened from the surrounding area by the natural landform, overburden mounds and planting. From my internal inspection of the site, I was impressed that the sheer scale and extent of the quarry was not visible form the surrounding area or road network given it's close proximity to the R430.

7.7.2 The overburden mounds along the western site boundary are to be reduced in height by 4metres. Their slope will be regraded from a 1:1 gradient to 1:5. Having regard to the approach to the site from the west along the R340 and the existing dwelling built into the contours 175m from the western site boundary, I consider the visual impact of the quarry to be most obviously along the western site boundary. I welcome the mitigation measures outlined in the EIAR to alleviate the existing visual impact. In my opinion, given the natural gradient of the topography along the western axis of the quarry, and the separation distance from surrounding dwellings and their context on the landscape, I consider the revised overburden mounds will readily integrate into the existing topography, and will not result in a serious injury to the visual amenities of the area.

7.8 **First Party Appeal against Condition No. 5(a)**

7.8.1 The applicant accepts all of the planning conditions as issued by Laois Co. Co. (Planning Reg. No. 21/7000) with the exception of Condition No. 5 (a):

Excavation shall not take place below a level of at least 1metres above the highest seasonal water table level on site. Water levels in surrounding wells shall not be drawn down by the quarry activities and continuous monitoring of water levels in the wells shall be carried out. Any abstraction from groundwater shall comply with the Local Government 9Water Pollution) Act 1977, Register of Abstractions from Waters, Laois Co. Co. The planning authority shall, if necessary, determine additional monitoring wells to be provided by the developer.

7.8.2 The applicant's expert adviser states '*Excavation shall not take place below a level of at least 1metres above the highest seasonal water table level on site.'* Makes no sense, is impractical and it has no scientific or legal justification.

- The existing quarry has already been developed at a depth below the 'water table' including groundwater dewatering and discharge to surface waters subject to a licence to discharge to surface as required under Section 4 of the Local Government Water Pollution Act (1977).
- As part of the planning application there was substantial information submitted derived from surveys of the soil, bedrock and core drilling, water well drilling of different geological formations across the site. Local well owners were identified, and the conclusions drawn from the detailed studies indicated that there was no potential for impact due to quarry dewatering.
- The ground at the site was drilled using a site investigation rig which was followed up with water well boreholes specifically drilled to enable actual pump testing. Signifigant ground investigations were completed alongside robust mathematical assessments resulting in the EIAR conclusion as detailed in EIAR Section 7.5.8.1
- The well survey shows that the groundwater flow direction is south-southwest in line with the dip angle of the contact between the Clay Gall Sandstones and Moyadd Coal Formation. Hence, most groundwater inflow to the quarry is likely to arise from recharge to the aquifer in the area north of the site. The

upgradient users will have abstracted their water supply in advance of waters arriving at the quarry. Downgradient groundwater users will be adequately supplied by the catchment around their own wells.

- The mathematical analysis demonstrated that the receiving surface water could accommodate the envisaged discharge of waters arising form the site. Although Inland Fisheries initially queried the mathematical approach taken, the EPA subsequently confirmed the approach taken was correct.
- Water management systems, including floor sump and settlement lagoons were designed and specified for the stated volume of water that would arise at the site, from rainfall, runoff and groundwater inflow and the requisite assimilation capacity calculations were presented.
- The Planner's Report on file demonstrated the planner understood the dewatering. The information on volumes of rainwater and groundwater were stated, detailing the amount of rainfall-run-off direct o the site is 296cubic meters. It also stated that it is understood the amount of water requiring management design and the assessment of hydrology and hydrogeology impacts is based on a maximum 1453 cubic sq. metres/ day potential discharge rate. Unfortunately, the section entitled Reasoned Conclusion of Signifigant Effects is completely at odds with the review in the report. It states there should be no discharge from the site to surface watercourses, which is something that can only occur in a gravel quarry.
- The applicant has submitted the first line of Condition 5 (a) may have been included in error. This is the type of wording associated with a sand/ gravel pit and not one applied to a hard rock quarry that is already below the water table level.
- Condition No. 14 of the permission relates to monitoring of groundwater and surface water volumes and monitoring of quarry water discharge to the western water receptor. The planning authority are committed to both groundwater dewatering and monitoring of the quarry water discharge.

7.8.3 There are clear contradictions between Conditions 5(a) and Conditions 2(a) & Condition 14 of the planning authority's decision that would indicates that perhaps the first part of Condition 5(a) may have been attached in error. The first part of 5(a)

makes no sense having regard to the fact the existing quarry is below the water table, the content of the EIAR, the content of the planning report and the other conditions attached to the permission. Condition No. 2(a) of the same permission authorises the continued use and operation of the existing quarry including the deepening of the quarry.

7.8.4 The permission granted is for 29years in order to extract the known resource. The design considerations of the quarry in terms of extraction in an easterly and westerly direction were based on deepening the quarry further below the groundwater table, given an annual output of 200,000 tonnes.

7.8.5 I agree with the applicant's submission there are blatant contradictions in the Planner's Report on file and the Reasoned Conclusions of the Report. There are also blatant contradictions between the conditions attached to the decision relating to the development regarding excavation works below the water table. From the Report, I can find no sound basis for such contradictions given the nature of the existing and proposed development, and the information contained in the extensive submission documents. According to the Development Management Guidelines for Planning Authorities (2007) for conditions to be legally valid they should satisfy six basic criteria:

- Necessary: In my opinion the planning authority has not substantiated in the report the necessity for imposing such a radical and materially altering condition to the overall decision. The part of the condition would effectively make the entire development unimplementable and unfeasible, without sufficient justification for same.
- Relevant to Planning: I would consider the development to be relevant to planning.
- Relevant to the development: It has been argued by the applicant comprehensively, that the nature of the restriction imposed by the condition is relevant to a sand and gravel pit and not a stone quarry. I would concur with the applicant. I note the planning authority did not respond to the First Party appeal, in particular, the issues of the contradictions that arise in the final Planning Report and Recommendation.
- Precise: I consider the condition to be precise.

- Enforceable: I consider the condition is enforceable. However, the issue of the existing quarry, which is below the water table level, is another consideration. There is an existing planning permission, Ref. 10/383 for the extraction area of 14.5Ha within the overall application site of 19.6Ha which includes the deepening of the quarry. Therefore, the enforcement of the condition as written is questionable given the planning history of the site and the existing quarry.
- Reasonable: In my opinion, the condition as worded is unreasonable given the nature and extent of the proposed, permitted and existing quarry on site.

7.8.6 I would agree with the First Party the first sentence of Condition 5(a) 'Excavation shall not take place below a level of at least 1 metre above the highest seasonal water table level on the site' should be omitted form the condition.

8.0 **Environmental Impact Assessment**

8.1 **Legislation and Introduction**

8.1.1 This application was submitted to the Board after 1st September 2018 and therefore after the commencement of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 which transpose the requirements of Directive 2014/52/EU into Irish planning law.

8.1.2. Schedule 5, Part 1 and Part 2 of the Planning and Development Regulations 2001, as amended set out the classes of development for the purposes of EIA. • Section 2 of Part 2(d) provides that a mandatory EIAR is required for the 'Extraction of stone, gravel, sand or clay by marine dredging (other than maintenance dredging), where the area involved would be greater than 5 hectares or, in the case of fluvial dredging (other than maintenance dredging), where the length of river involved would be greater than 500 metres.' Accordingly, an EIA is required for the proposed development.

8.1.3. The applicant has submitted an EIAR with the application. The EIAR includes the continued use and operation of an existing quarry confined within the boundaries of an existing permitted quarry are (P.A. Ref. 10/383) comprising of an extraction area of c. 14.5ha within an overall application area.

8.1.4. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment and complies with all relevant requirements. I have carried out an examination of the information presented by the applicant, including the EIAR, and the written submissions.

8.1.5 The planning authority requested further information regarding certain issues in the EIAR originally submitted with the planning application. A comprehensive response was received on the **25th of May 2022**. There were 10 no. Appendices to the Further Information Submission:

Appendix 1.1 Terminology of Impact Assessment

Appendix 1.2 Cumulative Impact Assessment Table 1 outlines the Potentially Signifigant Developments within the Spink Quarry Study Area, including Kilsaran Quarry, Coillte Wind Farm, John Stone Quarry, Wholesale Suppliers Quarry, with cumulative impacts to include Traffic, Water, and Visual. The potential cumulative impacts ranged from none to imperceptible.

Appendix 1.3 'Do Nothing' scenario.

Appendix 2.1 Habitat Map

Appendix 2.2 Aquatic Report – Ecological Assessment of the Receiving Waters of Drainage from the quarry. 2.3.2 Peregrine Falcon Conservation Management Plan.

Appendix 4.1 Residual Effects Assessment

Appendix 4.2 Surface Water Monitoring (4No. monitoring points, site discharge, western system upstream, western system downstream, and eastern system.

Appendix 4.3 Groundwater monitoring

Appendix 4.4 Emission Limit Values

Appendix 4.5 Discharge Monitoring Locations

Appendix 4.9 Eastern Stream Drainage Upgrade Works.

Appendix 4.10 Hydrocarbon Interceptor Specifications

8.2 **Consideration of Reasonable Alternatives**

8.2.1. Chapter 2 deals with the site selection and consideration of alternatives. In line with the EPA Guidance (EPA, 2022) the applicant provided 6 alternatives to the proposal:

- 'Do-Nothing Alternative – means that all quarrying and ancillary activities would cease. The site would be restored as per the requirements of thee existing permission (P.A. Ref. 10/383). The resources of the quarry would remain in-situ and unutilised at a time when the economy and the construction industry are growing and the demand for aggregates is growing.
- Alternative Sources of Aggregate – in general aggregates in the construction industry in Ireland are derived from hardrock sand and gravel pits, there are no reasonable alternatives. Secondary aggregates derived from construction and demolition waste are required to meet End of Waste criteria in respect of waste materials. Furthermore, the volume of C & D waste suitable for recycling as secondary aggregates for use in construction is very low relative to the overall demand for aggregates. In the longterm the extraction of sand and gravel from marine sources may be implemented as terrestrial sources become depleted. Currently there are no marine aggregates being exploited in Ireland. Currently, terrestrial deposits such as sandstone/ shale will continue to be the main source of construction aggregates in Ireland.
- Alternative Locations – Minerals can only be worked where they naturally occur. The most signifigant cost involved is transportation, and most quarries operate within a radius of c. 25-30km of their market. Spink is strategically located adjacent to a quality road network and a concentration of growing population. It is preferable to allow continuance of operations and extensions as opposed to greenfield sites. The current site has an established history of quarry working.
- Scale and Size – The size of the development is dictated by the physical dimensions of the resource that lies within the landholding owned by the applicant, is economical, is extractable and ultimately permitted by the planning authority. The scale of the operation under planning permission P.A. 10/383 was up to a maximum output of 350,000 tonnes per annum. The

proposed development will not exceed this level and the average output will be closer to c. 2000,000 tonnes per annum.

- Alternative Site Layout – the layout of the quarry has developed over the years and is largely established. The layout relates to the logical placement of infrastructure and plant associated with the elements of the process within the area of the site. The layout has been dictated by the commercial imperatives of process efficiency, operational efficiency and cost efficiency as well as environmental considerations such as noise, dust and visual impact.
- Alternative Design – Design relates to visual aesthetics. The final scheme adopted by the applicant has been determined by a process of examination and elimination to be most appropriate for the site. As this is an established quarry with fixed infrastructure in place, design alternatives are very limited at this point in the life cycle of the development.
- Alternative Processes – as this is an established quarry, no alternative working methods were considered. Conventional drilling and blasting methods are used in the breaking of the quarry rockface. There are three stages to the crushing and screening operations. The aggregates will be stockpiled for distribution. There are no viable alternatives to the widely used conventional methods of quarrying.
- The appellants suggested that marine aggregates are currently being mined in the UK, and the applicant should consider this as an alternative to seeking a 29 year permission for aggregate extraction at Spink. In the Uk, marine aggregates are dredged from the seabed in the UK and elsewhere around the globe. There is no marine aggregate currently been exploited in Ireland, although extraction form the Irish Sea has been studied. In the absence of signifigant volumes of aggregates from marine and recycled/ secondary sources, terrestrial deposits such as the sandstone/ shale at Spink quarry, will continues in the near term as the main source of construction aggregates in Ireland. In addition, the marine aggregates would be brought into deep ports such as Rosslare or Dublin, which are a considerable distance from Laois.
- Alternative Mitigation Measures – The EIA identifies potentially signifigant adverse impacts and to propose measures to mitigate or ameliorate such

impacts. The EIAR describes the various options and provides an indication of reasons for selecting chosen options, including comparisons of the environmental effects.

8.2.2 Conclusion:

The EIAR concluded that the proposed development represents the optimum solution taking into account access to land, cost and environmental effects. Having examined the alternatives and the options proposed I am satisfied the applicant has considered sufficient alternative and concur with the proposal as the optimum site as a medium scale quarry as opposed to developing a proliferation of smaller greenfield quarries to meet with the current demand for aggregates in the area.

8.3 **Description of Project**

8.3.1 The proposed development has been detailed in Section 2.0 above and is summarised as follows:

8.3.2 Development Overview:

As stated the proposed development is for the continued use and operation of an existing quarry including the deepening of the quarry. The extraction will be confined to the permitted extraction area of 14.5ha within an overall application area of 19.6ha. A 50m standoff from the extraction area to the R430 Regional Road will continue to be maintained. The standoff area includes the site access, wheelwash, weighbridge, final water settlement ponds, screening berms and refuelling area. The standoff also includes the northeastern constructed pond/ wetland that feeds the headwaters of the Clogh stream. The rising of the Clogh River is in this zone and is thereby protected.

It is proposed the quarry will be worked in a series of benches (typically 10 to 20 metres) down to a final depth of 200 m AOD in the western quarry area and 190m AOD in the eastern quarry area. The workable reserves have been calculated at c5.8 million tonnes. It is proposed the output will be 200,000 tonnes per annum, given an anticipated extraction period of 29years. A further two years will be required to implement and complete the final restoration.

An average annual output of 200,000 tonnes equates to traffic volumes from the development of approximately 38 truckloads including the concrete plant per day leaving the site on a 48 working week per year basis.

The settlement sumps and the floor of the quarry have sufficient capacity to accommodate all waters during the lifetime of the quarry. The water management and settlement pond system will ensure no change to the concentrations of suspended solids at the point of mixing for the discharge into the Owveg_010 stream.

9.3.3 Description of Design

Site Layout Figure 3.1 shows the layout including the position of the mobile crushing and screening plant, concrete batching plant, etc. The cross sections through the site illustrate the working of the quarry from the top-down with progressive restoration of the back face with the progressive working and deepening of the quarry. The westerly extraction deisgn takes into account a requirement in the hydrogeological study of the EIAR to maintain at least a 5m buffer area between the sandstone and the coal formation. This will reduce the amount of water to be managed and discharged off site. Simultaneously, the easterly direction will develop in a series of 10m benches down to 190m AOD. The main site activity will be sited on the quarry floor.

8.3.3 Description of Size and Scale

This has been described above. The development will be worked in a phased manner to ensure full implementation of the mitigation and restoration measures proposed. The existing workings have been incorporated into the overall phasing of the scheme.

There are a number of residences within 1km of the application site boundary, with 6No. residences within 250m, 9No. residences within 500m and 36No. residences within 1km. The closest residence is 175m west of the application site. There has been a long history of quarrying associated with the site. The phasing and direction of working and restoration of the upper quarry face with respect to receptors is to reduce visual impact, while impacts due to noise and dust will be substantially attenuated within the existing quarry envelop.

8.3.4 Population and Human Health

Section 4 deals with Population and Human Health. A baseline description of the receiving environment in terms of its landuse, population, economy, employment, tourism, human health and sensitive receptors have been provided. The site is an existing quarry. The surrounding lands are largely agricultural and in pasture with a forestry plantation to the south. Residential property in the area consists of one-off

housing, with 36 dwellings within a 1km of the quarry site. The closest dwelling is 175m west of the site and is one of a cluster of dwellings at Larkin's Cross. There are 4No. dwellings within 250m of the site, one of which is not sheltered from the site, the others are sheltered by a hill.	
Submissions	Concerns Raised
A number of local residents	The impacts on population and human health arising from noise, dust and traffic are dealt with under sections below. The submissions received during the planning authority's consultation period are outlined above in sections 3.3 and 3.4 and third party appeals section 6. One of the dwellings is 175m from the quarry site and it will impact negatively on their home, amenities and property value. Concern regarding a family member having autism and Global Development Delay. The noise dust and traffic will be detrimental to the mental and physical health of the family. Concern regarding litter from the site.
'Do-nothing Impacts' The aggregate would remain unused, and local supply of quality aggregates and concrete products would be restricted. The site would be restored as per requirements of P.A. Ref. 10/383.	
Potential Impacts	Assessment and Mitigation Measures
The site has been a quarry since the 1970s, therefore minimal impact on the land use.	There are no mitigation measures proposed beyond normal site management during the construction,

The quarry has contributed to sustaining and developing the local and regional economy. It will directly employ 3No. persons and generate indirect employment. Nearest community facility is a public house 750m from the site. There are no major tourist attractions in the immediate vicinity (<5km). There will be no signifigant additional visual intrusion. In terms of property values, the quarry has existed at the location since 1970s and has co-existed with other land uses. The quarry will be operated in full compliance with Health and Safety requirements. There is a signifigant ridgeline between the nearest house and the quarry face to attenuate noise from the quarry.	operational, phasing and restoration of the site. During the operational stage, mitigation measures proposed by the operator and those imposed as planning conditions will be controlled and monitored by the Environmental Management System and programme. The greatest risk on site is from accidents occurring on site. All works on site will be carried out in accordance with all relevant Irish and European Safety measures. A Health and Safety Plan will be implemented. Excavations will be the subject of legal requirements under the Safety, Health and Welfare at Work (Quarries) Regulations. Under the previous permission, Ref. 10/383 the permitted extraction area was 100metre from the dwelling in question. The distance now 175meters between the nearest dwelling and the site, the future extraction on the western axis of the quarry will be confined to the quarry floor and 255m from the residence. The entrance gates to the quarry will be locked outside of working hours. All litter will be collected from the site and disposed of at a Waste Management Facility.

Conclusion Human Beings & Population
The development will be controlled and regularised in accordance with measures incorporated into the EIAR, through continued environmental monitoring and implementation of planning conditions. The proposal will have no major and/or longterm effects on the human environment. I have considered all the information on file including written submissions made in relation to population and human health and the information contained in the EIAR. I am satisfied that it was conducted in accordance with best practice. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on population and human health

8.3.5 **Biodiversity**

Section 5 addresses Biodiversity. There is a Natura Impact Statement accompanying this application, and Appropriate Assessment is dealt with in Section 10 below. There was a desktop study to determine existing records in relation to habitats. The second phase of the study was a site visit including a night-time bat detector.	
Submissions	Concerns Raised
A number of local residents	Concerns about the Peregrine Falcon, aquatic ecology, sand martins, pearl mussel.
Under the 'Do Nothing' scenario, all quarrying activities would cease. Habitat development would occur slowly and there would be a general increase in biodiversity as plant cover would become more varied.	
Potential Impacts	Assessment of Mitigation Methods

The headwaters of any pearl mussel catchment are extremely important. It is imperative the suspended solids concentrations shall not change as a result of the proposal. There were calls from two species of bats recorded from the forestry area south of the site in the forestry area. There are no predicted direct effects on bats A single peregrine falcon was recorded nesting on the cliff of the southwestern are of the site. Sand Martins are seasonal colonisers of the quarry stockpile. There are two active surface water outfalls from the site, one to the eastern catchment and one to the western catchment leading to the River Clough and Owenbeg River, these are potential receptors. A spring arises on site and this is a potential receptor. Groundwater is a receptor. There are three lamprey species that occur in the River Nore catchment area and it is not known if their occur locally. There will be no direct impacts to the lamprey species. The white-claw crayfish is known to be in the upper catchment of the River	In terms of fuel storage and usage on site tanker contractors will be used with no fuel stored onsite. A wheelwash with a sprinkler system will be used. Hydrocarbon interceptors will be used and emptied regularly by a contractor. All quarry stockpiles where sand martins are currently nesting (summer) will not be worked during the summer breeding season. Site data from a fully operational rock quarry with regular blasting has shown a nesting peregrine falcon successfully raised and fledged a chick in 2021. Incorporation of minimum buffer area of 125m between the peregrine falcon nest site and any blast sites during breeding season. As per Appendix 2.3.2, which will include breeding surveys during the breeding season. There will be no loss of habitat at the western end of the quarry. The settlement sumps and the floor of the quarry have sufficient volumetric capacity to accommodate all waters for the lifetime of the quarry. Discharge will be of a quality that will not impact on water quality.

Nore. There will be no direct impacts to the Crayfish spiieces. Important populations of freshwater pearl mussel and the Nore freshwater pearl mussel occur in the River Barrow and River Nore SAC. It is particularly sensitive to water quality deterioration. There will be no direct impacts to the lamprey species.	Assimilation capacity simulations have been completed and appropriate Emission Limit Values have been proposed. A flow meter has been proposed for the discharge. Settlement pond and systems are already in place on site to ensure no change to the resultant suspended solids concentrations.
Biodiversity Conclusion There are no predicted adverse effects on local or downstream biodiversity, flora or fauna as a result of the proposed development. Given the inclusion of workable industry standard mitigation measures that will be monitored to ensure continued efficiency. There are no other quarries in close proximity, therefore there is no cumulative impact. The proposal will comply with the requirements of the Groundwater and Surface water Regulations. I have considered all of the written submissions made in relation to biodiversity. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on biodiversity	

8.3.6 **Lands, Soil and Geology**

Section 6 of the EIAR deals with Land, Soils and Geology. The quarry is a well-established operation, therefore it is considered there will be minimal additional construction works. As this is an existing quarry there will be no land take with the development. There is an overlap with hydrogeology issues and these are dealt with in the next section.	
Submissions	Concerns Raised
A number of local residents from the area	The submissions expressed concern reagridng the integrity of the overburden mounds.
The Do-Nothing impacts would imply the aggregate resource would remain unused in situ, and the local supply of quality aggregates would be restricted. The site would be restored to beneficial use as per the requirements of the existing planning permission. The aggregates would have to be sourced from a more remote greenfield site.	
Potential Impacts	Assessment of Mitigation Measures.
Rock quarrying has occurred on the site, therefore there is an existing impact on the bedrock geology. The extraction area has been largely stripped of soils with perimeter screening berms in place for future restoration. Soil stripping will be carried out in new extraction areas in a phased manner. The topsoil will be temporarily stored. The 50m standoff from the extraction area to the regional road will be maintained. This area includes the site access, weighbridge, wheelwash, hard standing area, store, settlement pond, screening berms, and a constructed	The excavated soil and overburden will be vegetated as soon as possible, to prevent erosion, and reduce visual impact. Figures 3.1 and 3.3 of the EIAR detail the working and restoration plan. The existing western overburden mound slopes are to be regarded from a 1:1 to 1:5 and their overall height reduced by 4metres. There will be a moderated but controlled impact due to the removal of raw material during operation. The impact of the removal of material by benching will have a moderate longterm negative

pond/wetland that feeds the headwaters of the Clough Stream. The working of the quarry in a westerly direction takes into account a 5m buffer above contact between the Clay Gall Sandstone Formation and Moyyadd Coal Formation. This will reduce the amount of water to be managed and discharged offsite. The quarry will be worked in an easterly direction with the removal of the Coolbaun Formation to expose the underlying Clay Gall Sandstone Formation.	impact. The decommissioning will provide a safer onsite environment with the removal of plant and infrastructure, and the creation of stable slopes. Environmental monitoring, including local groundwater and surface water monitoring will be implemented during the operational, closure and decommissioning phases. Dewatering volumes will be low. Extensive measures will be put in place to avoid pollution as a result of an accidental spillage as per Section 7.7 of the EIAR and Appendix 9.1 of the Response to Further Information. .
Land, Soil and Geology Conclusion As a result of the proposed mitigation and enhancement measures incorporated in the deisgn, there are no longterm adverse impacts anticipated. Following the full restoration and closure of the site, the land will be more manageable than is currently the case, with a change of use from agricultural, to quarrying to a wildlife amenity. The working and restoration scheme was prepared by a qualified mining engineer. Standard criteria has been applied to face heights, slopes and stand offs to site boundaries. I have considered the submissions made in respect of land and soil, and I am satisfied that any potential impacts would be avoided, managed and mitigated by measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects in terms of land and soil.	

8.3.7 **Water**

Section 7 of the EIAR deals with Water. It is a very large and comprehensive section of the EIAR. There is an overlap between this section and Land and Soil and the Appropriate Assessment. Waters leaving the site will be managed by a Discharge Licence. There is an existing Discharge Licence associated with the site. The Water Section has been completed collaboratively between Dr. Pamela Bartley (Hydro-G) and Dr. Colin O'Reilly (Envirologic). Bedrock exposed at the site belongs to the Clay Gall Sandstone Formation and is composed of medium and fine quartz sand with some feldspar, which is cemented by silica and gives a non-porous rock. The Clay Gall Sandstone ranges from 2 to 58metres in thickness. The Clay Gall Formation is overlain by the Coolbaun Formation, and underlain by the thick Moyadd Coal Formation, which itself sits on the flaggy sandstone of the Breguan Flagstone Formation. The hydrogeology is outlinesd and mapped. Local water is supplied by private wells. The Swan Public Water Supply is to the east but it does not serve the area around the quarry, and there is no potential for the quarry to influence the Public Water Supply. The site lies within the Castlecomer GWB which has a Good status. A spring rising on the site is one small tributary contributing to the River Clough. The main channel of the Clough flows southwards passing 2.5km east of the quarry. The significance of potential impacts on geological, hydrological and hydrological sensitive receptors was estimated. The further information submitted on 24th of May 2022 included an ecological assessment of receiving waters

Submissions	Concerns Raised
A number of local residents from the area	i. Private water supplies serving dwellings in the area and livestock will be compromised.

	ii. Insufficient testing carried out by the applicant of existing water supplies in the area iii. Lack of confidence in the expert hydrogeologist appointed by the applicant. An independent assessor was requested.
The Do-Nothing impacts would imply the ground of the proposed development would remain a quarry floor within the existing quarry void excavated in the north-western half of the site and scrubland in the elevated south-eastern half of the site. There would be no changes to the site. Furthermore, following the assessment of the site on the edge of the Castlecomer Plateau, the interception and discharge form the site will not significantly change the groundwater dynamics component of the site. It is therefore assessed that to 'go deeper' is unlikely to change the 'do-nothing' scenario.	
Potential Impacts	Assessment of Mitigation Measures.
A spring arises on the site and it is a potential receptor. Surface waters are potential receptors. The downstream River Nore SAC is a potential receptor. Groundwater is a receptor. The main potential impact in relation to hydrogeology relates to the potential contamination of groundwater from quarrying activities and subsequent risk posed to surface water receptors. The potential radius of influence upon completion of works as illustrated in EIAR Figure 7.12 does not extend	There will be no bulk fuels stored on the site. Plant and equipment that operate at the quarry will be refuelled by competent fuel companies. Procedures will be in place for dispensing fuel with drip trays, dealing with accidental spillages and maintenance of the hydrocarbon interceptor. A wheelwash facility and sprinkler system will be in operation. Regular maintenance of silt trap. The settlement sumps on the floor of the quarry have sufficient volumetric capacity to accommodate all waters for the required time.

beyond the western boundary in the direction of O'Reilly's dwellinghouse. Excavation works will result in the same vulnerability of the groundwater of the site as is now experienced by the same area of open bedrock. Quarry floor and internal road surface runoff or drainage systems could result in contaminated surface waters or groundwater. Changing the nature of surface water and groundwater dynamics in the catchment could affect downstream ecosystems. Downstream ecological receptors such as the Pearl Mussels, fish life and habitats could be affected. Lowering the quarry floor could lead to an increase of groundwater component, which could lead to an increase of water being discharged to the discharge zone. Plus it could result in lowering the water table outside of the quarry , which might affect domestic wells. Use of explosives on the site could add nitrogen to the water.	Discharge will be of a quality not to impact on water quality. Assimilation capacity simulations have been completed and there are appropriate emission value limits proposed. There is a flow metre proposed for the discharge. Discharge has been calculated to intercept < 0.1% of the regional groundwater flow volume. There will be no signifigant net loss or gain in the GWB system because volume intercepted and managed at the site <0.1% of the regional groundwater flow volume. Hydraulic response testing of the bedrock suggests that the radial effect will not impact local wells. Blasts are Industry Standard Regulated and controlled. Modern methods ensure controlled systems. The lagoon system in place is oversized in respect of suspended solids retention.
Residual Impacts: The bedrock at depth in the proposed development area has little porosity. The sump area will be managed by duty and standby pumps at the site. As a result of proposed mitigation and enhancement measures incorporated	

in the deisgn, there will be no signifigant adverse residual impacts in terms of the hydrological and hydrogeological environment during the operational phase.
Application of EA Hydrogeological Assessment Methodology: In addition to standard impact assessment, the applicant has presented a 'best practice' approach a hydrogeological focused assessment for quarries, with all 14No. Steps completed
Water Conclusion The assessment along with mitigation methods found the continuation of the quarry and deepening of the quarry would not present any risk of an adverse impact effect on groundwater flow, local groundwater wells or the downstream receptors. This was supported by Groundwater Body and Total Aquifer water balance calculations, which place the site as insignificant and unlikely to pose a risk using WFD hydrological assessment methodologies. There is no signifigant net loss of water envisaged. Waters arising in the sump are recirculated to the natural systems. There are no active groundwater receptors that may be at risk from groundwater drawdown within 350m of the centre of the sump. No potential for drawdown therefore, no potential on local wells is predicted. No other quarries nor other developments are within a signifigant distance to affect cumulative impact. Dr. Bartley credentials to carry out the all assessments in terms of groundwater, surface water and wastewater are considered to be acceptable. She is a specialist in quarry and discharge evaluations. I have considered the submissions made in respect of water, and I am satisfied that any potential impacts would be avoided, managed and mitigated by measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects in terms of water.

8.3.8 **Climate**

Section 8 of the EIAR deals with Climate. Climate change will continue to cause damage to the environment and compromise economic development. The production of aggregates was not explicitly identified to prepare or be incorporated into a climate change action plan.

8.3.9 **Air Quality**

Section 9 of the EIAR deals with Air Quality. The principle concern in respect of air emissions is the effect on residential amenity. Knockbaun falls within Zone D (rural) of the National Ambient Air Quality Network. of emissions is the effect on residential amenity. Baseline dust monitoring was carried out at the site using a Bergerhoff dust deposition gauge. The method of measurement is the German Standard VDI 2119. There were 4No. monitoring stations set up to collect relevant data.	
Submissions	Concerns Raised
A number of local residents from the area	The appellants are concerned the levels of dust will affect their residential amenities.
The Do-Nothing impacts would imply all quarrying and ancillary activities would cease. The site would be restored as per the requirements of the existing planning permission (P.A. Re. 10/383).	
Potential Impacts	Assessment of Mitigation Measures.
The stripping, transport and placement of soils and overburden will have a greater propensity for erosion and subsequent generation of dust than the underlying sandstone/ shale rock material. The emission of fugitive dust is dependent on weather conditions. The	Dust monitoring will be carried out in accordance with the within recognised TA Luft dust deposition limit value of 350mg/m3 per day. There is an integrated management system designed to comply with the environmental requirements of ISO 14001:2:2015 and Quality Management

main impacts are visual impact, costing/ soiling of property, coating of vegetation, contamination/ alteration of soils, water pollution, changes in the plant species composition and loss of plant species. The facade of the nearest residences is approximately 260m from the nearest active quarry area, guidance would advise there is no potential for soiling.	requirement of ISO 9001:2015. The Environmental Management Plan includes: A wheelwash at the entrance to the site; Fixed and mobile water sprays to control dust emissions from stockpiles, road and yard surface in dry and windy weather. Covering of truck trailers entering and leaving the site. A daily inspection programme to ensure dust control measures are inspected to verify effective operation and management. Findings shall be recorded to a daily inspection sheet. Dust monitoring shall be carried out to verify continued compliance with relevant standards. Plant and machinery shall be equipped with dust covers, wind boards, netting, etc Blowers, belt scrapers and other devices shall be fitted to clean conveyors to prevent a build up of spillage. There are other onsite measures prescribed to prevent dust within the quarry and the concrete batching plant.
Residual Impacts: Given the low inherent potential for dust and dispersion from the proposed development, the remote location and the mitigation measures incorporated in the deisgn, it is anticipated that the impact on the existing air	

quality during the construction and operational phase will be negligible such that no residual impacts are predicted.. .

Air Conclusion

Appellants consider that their amenities are and will be adversely impacted from dust arising from the existing quarry and the proposed extension. The results of the monitoring undertaken show no exceedances of the relevant limits for a significant period of time. Sufficient detail has been provided to support the conclusion that the proposed development with mitigation measures would not result in excessive dust emissions. The proposal is for the continued production of aggregate and the operation of a concrete batching plant. The scale of the operation granted under P.A. 10/383 was up to a maximum output of 350,000 tonnes per annum, the current application proposes an output of 200,000tonnes per annum. It is a considerably smaller scale development proposed that previously permitted.

I have considered all of the written submissions made in relation to air. I am satisfied that potential effects would be avoided, managed and mitigated by the extensive measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on air and climate

8.3.10 **Noise & Vibration**

Section 10 of the EIAR deals with Noise and Vibration. Traffic on the adjacent R430 Regional Road is the dominant noise source at this location. There are recommended General Noise Limit Criteria (EPA Scheduled Activities) and Recommended Tonal/ Impulsive Noise Ratings. The hours of operation are indicated, with transportation of aggregates commencing at 07:00 (Monday to Saturday). The blasting will be carried out in accordance with Condition No. 7 of P.A. Ref. 10/383. There was a noise monitoring survey carried out on 01/06/2021

Submissions	Concerns Raised

A number of local residents from the area	(i) The proximity of their dwellings to the quarry site implies they are located within a 'danger zone' of blasting. (ii) The hours of operation will cause signifigant disruption to their lives. (iii) Although conditioned to commenced at 7.00 am this can mean warming up machinery and operations start at 5 am. (iv) Proximity of residences to blasting locations and potential structural damage and nuisance (v) The picnic area 250m northwest of the quarry will be adversely affected.
The Do-Nothing impacts would imply all quarrying and ancillary activities would cease. The noise environment in the immediate vicinity of the site is determined primarily by noise from the regional road. Under the Do Nothing scenario, the proposed development would not occur and the site would be restored as per the requirements of the existing permission.	
Potential Impacts	Assessment of Mitigation Measures.
Elevated noise levels may be experienced along the site boundaries during the construction of screening embankments. Theses direct impacts will be slight, short term negative due to construction works. The direction and sequence of the extraction and working scheme within the quarry has been designed to reduce the visual impact of the workings. The plant and machinery will be screened from outside views by the intervening	All Mitigation Measures as listed in Appendix 9.1 of the Response to Further Information prepared in May 2022 will be implemented. Lagan will put in place Blast notification procedures and blast monitoring programme in accordance with EIAR Appendix 11. The applicant will comply with ISO EN 14001:2015 environmental standards. The Environmental Management System will be implemented, restricting

quarry face and topography which will also act as a noise attenuation barrier. The operational activities which give rise to noise are tabulated. The concrete batching plant will also be located at the base of the screening mound at the western site boundary. Blasting will occur on site once a month. It is a split second similar to thunder. The computer based prediction model quantified noise levels in a worse-case scenario suggested 'Low' to 'None' adverse impacts is likely at residences including those nearest the quarry. It should be noted the nearest dwelling is positioned alongside the R430 and noise levels at the residence already exceed those that are predicted at the proposed development. Routine blasting operations can generate air overpressure levels at the closest property of around 120dB. This magnitude is considered to be safe, similar to a wind velocity of 5m/s (Beaufort Force 3, gentle breeze). The picnic area adjoins the R340, and the existing ambient noise levels as a result of traffic on the road exceed the predicted levels from the quarry.	the hours and days the quarry will operate, and general measures for the modus operandi of the entire site. Noise monitoring will ensure operations will comply with recognised thresholds. The noise prediction modelling date shows the development can comply with the noise level threshold as specified, and the development will have no signifigant effects as regards noise levels in the area. Blasting will be carried out in accordance with Condition No. 7 of planning permission 10/383. The blasting will be carried out by a certified 'shotfirer' in line with relevant health and safety regulations. Blast monitoring will be carried out at agreed residences, to include ground vibration and air overpressure at the nearest susceptible residences in the area for each blast. It is proposed blasting will occur on a monthly basis. The Hours of operation will be in line with the Planning and Development Guidelines for Quarrying and Ancillary Activities (DoEHLG 2004). There is no tarmac plant associated with the proposed development. The hours of operation will commence from 7.00 am as opposed to 5.00am.

Residual Impacts: As a result of the proposed mitigation and enhancement measures, no signifigant adverse residual impacts are predicted in terms of noise and vibrations levels on the local residences, their property, livestock or amenity during the operational phase.
Cumulative Impacts: The appellants made no reference to the existing noise levels in the area as a result of proximity to the Regional Road, and other activities in the area including agriculture. The appeal does not reference the current ambient noise levels in the area, and the noise prediction models demonstrate the quarry development will continue to work within accepted thresholds.
Noise and Vibration Conclusion I have considered all of the written submissions made in relation to noise and blasting. I am satisfied that potential effects would be avoided, managed and mitigated by the extensive measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on noise or vibrations.

8.3.11 **Landscape**

Section 11 of the EIAR deals with Landscape. I refer the Board to Section 8.7 of the Planning Assessment above and recommend the sections be read in conjunction with each other. The immediate vicinity of the site is characterised by extensive quarrying operations in terms of the current appeal site. One off housing is prevalent with specific concentrations noted to the northwest. There are no abutting dwellings, the closest residence is 175m to the west. It is not in proximity to an area designated as being of scenic amenity with no designated views in the vicinity. Views of the current quarrying operation are largely limited due to the general topography of the area The area of the extension varies in elevation between 215m AOD on to between 261m AOD. Surrounding lands are mainly agricultural. The quarry development will be worked top-down and phased with initial development focused on working the exposed sandstone reserves below the current quarry floor in two benches to c.206m AOD and 200m AOD towards the

west. Phase 2 will see the quarry developed to 190m AOD by developing the quarry in an easterly direction. The objective is to reduce the visual impact of the workings	
Submissions	Concerns Raised
A number of local residents from the area	Overburden Mounds
The Do-Nothing impacts would imply all quarrying and ancillary activities would cease. Under the Do Nothing scenario, the proposed development would not occur and the site would be restored as per the requirements of the existing permission.	
Potential Impacts	Assessment of Mitigation Measures.
Change of use from quarrying/ extraction to restored land. The views towards the quarry site are generally limited to restricted mi-distance viewed from elevated ground and residences to the north. Views of the screening berms at the northeastern boundary of the property along the R430. Table 11.3 outlines the Predicted Visual Impacts with 9No. key views assessed. The quarry workings will not be open to view due to the flank of the hill and screening mounds. Change of use from quarrying to a secure wildlife refuge.	Area will be restored to beneficial agricultural use and secure wildlife refuge. The screening berms and mature planting will be maintained to prevent outside views of quarry lands both before and during the restoration phase. Western overburden mound slopes regraded from 1:1 to 1:5 and height reduced by c 4m. Decrease height of existing stockpiles so they are not visible from vantage points to the north. Favourable direction of working to ensure working face is screened form outside views as quarry is developed eastwards. The final restoration will be within two years of competition of the extraction operations.

Residual Impacts: As a result of the proposed mitigation and enhancement measures, no signifigant adverse residual impacts are predicted in terms of the landscape. The restored quarry will provide a more sustainable, long-term environment than is currently the case, but with a change of use to a wildlife amenity.
Landscape Conclusion I have considered all of the written submissions made in relation to landscape. I am satisfied that potential effects would be avoided, managed and mitigated by the extensive measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on the landscape.

8.3.12 **Cultural Heritage**

Section 12 of the EIAR deals with Cultural Assets. The assessment has been prepared by Dr. Charles Mount. The study area extends 1km from the application site. There was a desk study and a field assessment carried out. In terms of the quarry site it was divided into 3No. Areas. Area 1 is the area of existing rock extraction and there is no indication of cultural heritage material. Area 2 is to the south-east of the existing rock extraction. It has been stripped of overburden down to the surface of rock, partially worked and the soil has been stored to the north-east and south-east. There is no indication of any cultural heritage material.
The Do-Nothing impacts would have no negative impact on the cultural heritage.
Cultural Heritage Conclusion There were no direct impacts identified warranting specific mitigation measures. I am satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on cultural heritage.

8.3.13 **Material Assets**

Section 12 of the EIAR deals with Cultural Heritage. The proposed development arises from the continued demand of human beings to have their buildings, roads and structures modified and improved. The supply of construction materials is essential to material progress of human society and their built environment. It is expected that potential negative impacts on material assets of the area arising from the quarry will relate primarily to nuisance form noise, dust and traffic.	
The Do-Nothing impacts would imply the aggregate resource would remain unused in situ, and the local supply of aggregates and concrete products would be more restricted. All quarrying and ancillary activities would cease. The site would be restored as per the conditions of the existing planning permission (P.A. Ref. 10/383)	
Potential Impacts	**Assessment of Mitigation Methods**
Much of the infrastructure is in situ, therefore only a brief construction period is envisaged. The operational stage will require maintenance and repair of the R430 roadway in the vicinity of the site. Waste management will require the removal and reuse/ recycling/ disposal as appropriate. In terms of the residential development there will be slight short-term negative impact due to minor dust and noise. There will be slight short term negative impact during construction stage due to increased traffic. Upon decommissioning the quarry will be left safe and secure.	Potential impacts on material assets arise out of the construction, operational and decommissioning stages with different sets of mitigation measures required under each stage. The company's Environmental Management System included in Appendix 10 will be implemented. There will be an environmental monitoring programme, allowing for ongoing monitoring of environmental emissions (noise, dust, blasting, water) from the site, to ensure compliance with appropriate regulations or requirements. Appropriate signage will be in place on approach to the site. The access gate will be padlocked outside of working hours.

Material Assets Conclusion have considered all of the written submissions made in relation to material assets. I am satisfied that potential effects would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on material assets.

8.3.14 **Traffic & Roads**

Section 14 of the EIAR deals with Traffic and Roads. There were traffic count assessments carried out in the area. The capacity of the existing road network was evaluated and deemed to have sufficient capacity to cater for the traffic associated with the proposed development.	
Submissions	Concerns Raised
A number of local residents from the area	Hours of operation The level of HGVs on the roads
The Do-Nothing impacts would imply all quarrying and ancillary activities would cease. The noise environment in the immediate vicinity of the site is determined primarily by noise from the regional road. Under the Do Nothing scenario, the proposed development would not occur and the site would be restored as per the requirements of the existing permission.	
Potential Impacts	Assessment of Mitigation Measures.
There will be no direct, indirect, cumulative impacts as a result of traffic during the construction and decommissioning phase. There will be an increase in traffic volumes using existing road networks, primarily form HGVs, which will be most pronounced along the R430.	The weighbridge will weigh each HGV leaving the site. There will be a wheel wash. Traffic signs Upgrading of existing road markings Sufficient onsite parking provided.

The projected increase in traffic due to the quarrying is an increase of 6.4-10% along the R430. The local road network has the carrying and structural capacity to cater for the increase in traffic movements.	
Residual Impacts: The existing capacity of the adjoining road networks has been shown to be readily capable of absorbing the predicted traffic increase within thee existing traffic. There are no signifigant adverse residual impacts predicted in terms of road and traffic during the operational phase of the development.	
Traffic and Roads Conclusion I have considered all of the written submissions made in relation to traffic. The volume of traffic generated by the proposed development can be absorbed by the available capacity of the adjoining National and Regional Roads. I am satisfied that potential effects would be avoided, managed and mitigated by the extensive measures which form part of the proposed scheme, the mitigation measures and through suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on noise or vibrations.	

8.4 **Further Information**

Extensive further information was submitted on 24th of May 2022. There was extensive information presented, with no new issues arising. Of particular relevance is Appendix 9.1 which outlines the Summary of Mitigation Measures, which is comprehensively presented. Considering the original submission and the further information details submitted by the applicant, it is considered the EIAR adequately describes the direct, indirect and cumulative effects on the environment as a result of the proposed development.

Having regard to the above, the likely significant environmental effects arising as a consequence of the proposed development have been identified, described and assessed in this EIA.

9.0 Appropriate Assessment

9.1 Screening is the process that addresses the first two tests of Article 6(3) of the Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna :

i. Whether a plan or project is directly connected to or necessary for the management of the site, and

ii. Whether a plan or project, alone or in combination with other plans and projects, is likely to have signifigant effects on a Natura 2000 site in view of its conservation objectives.

The applicant has submitted a Screening Report (Appendix 10.1 Further Information received 24/ May/2022) and a Natura Impact Statement (Appendix 9 Natura Impact Statement). The report was prepared in line with best practice. It provides a description of the proposed development and identifies European sites within a possible zone of influence of the development, having regard to the nature, scale and form of the development. The report makes reference to the detailed assessments carried out in the individual topic sections of the EIAR and concludes that the continued use and deepening of the quarry, in the absence of suitable mitigation, could pose a risk of likely significant effects on Natura site, River Barrow and River Nore SAC. It carries forward this site for Appropriate Assessments.

Having reviewed the documents and related submissions, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

9.2 **A Brief Description of the Proposed Development**

The proposed development applied for consists (as per revised site notice 19/07/2022) 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 14.5Ha within an overall application area of c.19.6ha.

- The development will include portacabin site office/ canteen, toilets, concrete batching plant and truck washdown facility, hydrocarbon interceptors, mobile crushing and screening plant, upgrading of water management system, provision of holding tank for wastewater and other ancillaries.
- The proposed quarry will utilise/ upgrade the existing in-situ quarry infrastructure, including site access, internal roads, storeroom, wheelwash, weighbridge, aggregate store bays, refuelling hard stand, water settlement pond system and other ancillaries.

9.3 **European Sites**

The development site is not located in or immediately adjacent to a European Site. The closest European site is the River Barrow and Nore SAC which is within 1Km of the site. The proposed development is examined in relation to any possible interaction with European sites to assess whether it may give rise to significant effects on any European Site.

The following are the European Sites located within a possible 15km distance zone of influence of the site. :

Site Code	Site Name	Distance	Connections (Source, Pathway, Receptor)	Considered Further screening
002162	River Barrow and River Nore SAC	1.04	2 active surface water outfalls	Yes
000869	Lisbigney Bog SAC	8.8	No Pathway	No
002256	Ballyprior Grassland SAC	10.14	No Pathway	No

004233	River Nore SPA	8.51	2 active surface water outfalls	Yes

The nearest European sites to the proposed development are associated with the River Nore and includes the River Barrow and River Nore SAC (Site Code 002162) and the River Nore SPA (004233) . There are two active surface water outfalls from the site, one to the eastern catchment and one to the western catchment. The source-pathway connectivity model was examined in the NIS AA Screening Stage, and there is no connectivity to any other European sites listed, and they are screened out of any further assessment at this stage given that they are located in a different catchment or is hydrologically upstream of the ultimate receiving waters of the River Nore.

9.4 **Identification of the site European Sites requiring further consideration:**

The potential for signifigant adverse effects on the River Barrow and River Nore SAC and the River Nore SPA is uncertain in the absence of control of potential pollution of discharge water during operation.

Therefore there may be potential impacts on the following sites that require further consideration:

River Barrow and River Nore SAC (002162)

River Nore SPA (000261)

And further Appropriate Assessment is required.

9.5 **Stage 2**

9.5.1 ***River Barrow and River Nore SAC (002162)***

The Site Synopsis on the www.npws.ie website states:

This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the

tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Major towns along the edge of the site include Mountmellick, Portarlington, Monasterevin, Stradbally, Athy, Carlow, Leighlinbridge, Graiguenamanagh, New Ross, Inistioge, Thomastown, Callan, Bennettsbridge, Kilkenny and Durrow. The larger of the many tributaries include the Lerr, Fushoge, Mountain, Aughavaud, Owenass, Boherbaun and Stradbally Rivers of the Barrow, and the Delour, Dinin, Erkina, Owveg, Munster, Arrigle and King's Rivers on the Nore.

Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains before passing through a band of Carboniferous shales and sandstones. The Nore, for a large part of its course, traverses limestone plains and then Old Red Sandstone for a short stretch below Thomastown. Before joining the Barrow it runs over intrusive rocks poor in silica. The upper reaches of the Barrow also run through limestone. The middle reaches and many of the eastern tributaries, sourced in the Blackstairs Mountains, run through Leinster Granite. The southern end, like the Nore runs over intrusive rocks poor in silica. Waterford Harbour is a deep valley excavated by glacial floodwaters when the sea level was lower than today. The coast shelves quite rapidly along much of the shore.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes:

The Qualifying Interests are as follows:

<u>HABITATS:</u>

Estuaries [1130]

Mudflats and sandflats not covered by seawater at low tide [1140]

Reefs [1170]

Salicornia and other annuals colonising mud and sand [1310]

Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]

Mediterranean salt meadows (Juncetalia maritimi) [1410]

Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]

European dry heaths [4030]

Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]

Petrifying springs with tufa formation (Cratoneurion) [7220]

Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]

Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]

SPECIES:

Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]

Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]

Austropotamobius pallipes (White-clawed Crayfish) [1092]

Petromyzon marinus (Sea Lamprey) [1095]

Lampetra planeri (Brook Lamprey) [1096]

Lampetra fluviatilis (River Lamprey) [1099]

Alosa fallax fallax (Twaite Shad) [1103]

Salmo salar (Salmon) [1106]

Lutra lutra (Otter) [1355]

Trichomanes speciosum (Killarney Fern) [1421]

Margaritifera durrovensis (Nore Pearl Mussel) [1990]

The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, over-grazing within the woodland area, and invasion of non-native species. The water quality of the European site remains vulnerable. Good quality water is necessary to maintain the populations of Annex II animal species listed above.

9.5.2 ***River Nore SPA (004233)***

The site synopsis is as follows:

The River Nore SPA is a long, linear site that includes the following river sections: the River Nore from the bridge at Townparks, (north-west of Borris in Ossory) to Coolnamuck (approximately 3 km south of Inistioge) in Co. Kilkenny; the Delour River from its junction with the River Nore to Derrynaseera bridge (west of

Castletown) in Co. Laois; the Erkina River from its junction with the River Nore at Durrow Mills to Boston Bridge in Co. Laois; a 1.5 km stretch of the River Goul upstream of its junction with the Erkina River; the Kings River from its junction with the River Nore to a bridge at Mill Island, Co. Kilkenny. The site includes the river channel and marginal vegetation. For a large part of its course the River Nore traverses Carboniferous limestone plains; it passes over a narrow band of Old Red Sandstone rocks below Thomastown.

The Qualifying Interests include the Kingfisher.

9.5 **Identification of Likely Effects**

There is no direct impacts or loss of habitat for any European site as a consequence of the development. The proposed development will have no impacts upon the integrity or the site structure of the River Barrow and River Nore SAC or the River Nore SPA. The assessment emphasis is now placed on potential indirect and cumulative impacts. The primary consideration in terms of source-vector-pathways for indirect impacts relates to surface water and potential indirect impacts on hydrologically liked habitats and aquatic species.

9.5.1 *Potential indirect effects arise from:*

The potential for impact is considered whereby there might be a detrimental change in water quality either alone or in combination with other projects or plans as a result of indirect pollution of surface water. The likelihood of impacts on hydrologically connected environmental sites is low and will be avoided by best practice management. The surface and groundwater accumulating within the processing and extraction area will be conveyed to the existing settlement ponds. This water will be utilised for dust suppression, if required, and/ or will discharge off site to an external watercourse subject to a Water Discharge Licence.

A Water Management Plan is included in the operational phase of the proposed development, which will avoid potential adverse effects on downstream habitats.

Emissions to water. The proposed development is connected to River Nore and River Barrow catchment via the discharge of waters from the quarry to two external outfalls. There is potential therefore for impacts on water quantity and water quality

arising from increased sediment load, accidental spills etc. and the potential for effects on the identified European sites, is therefore carried forward for appropriate assessment.

There was an Ecological Assessment carried out of the receiving waters of drainage from Spink Quarry in April 2022. This was submitted as part of the further information. The quarry drains to the headwater streams of two sub-catchments that eventually join the River Nore. Drainage form the quarry flows west towards the Owveg River sub-catchment and east towards the Clogh/ Dinin sub catchment. One the western side the discharge from the quarry is a little over 1km upstream of the River Barrow and the River Nore SA, while the discharge to the east from the quarry is roughly 4km upstream of the same SAC via the Clogh/ Dinin tributary of the River Nore.

Western Drainage : The quarry uses an extensive settlement system to remove suspended solids from the quarried stone before it leaves the site and enters the external drainage system. The quarry's treatment system is situated to the west of the quarry and the treated run-off is discharged under the regional road about 350m east of Larkin's Crossroads. The flow is piped under the road and emerges on its northern side where it discharges into a small headland drain which flows north for 150m to join a small stream. The stream flows for a further 0.85km to join the Owveg River 50metres downstream from the bridge on the R430.

Eastern Drainage: Uncontaminated surface water drainage from the eastern side of the quarry site flows and east and south east forming the headwaters of a small stream referred to by the EPA as Aughatubbrid-Chatsworth Stream that joins the upper reach tributary of the Clough River 2.2km downstream.

Both watercourses are small, first order streams which join larger watercourses within a few a few kilometres downstream. At the point of discharge both had slightly impaired water quality. However, within a few hundred metres, water quality in the western stream had improved to Good Status, and a little farther again the channel habitats were suitable for trout spawning and nursery and possibly suitable for brook lamprey spawning in places. The small stream to the east showed an improvement in water quality to Good Status within about 0.7km, where there was a clear evidence of salmonid spawning, brown trout and potential for lamprey spawning.

The Owveg was surveyed upstream and downstream of the confluence of the Garrintaggart Stream and at both sites the water quality was Good, and the Fisheries habitat was high quality.

Noise and vibration. Operational noise is unlikely to affect mobile species of conservation interest in European sites as these are substantially removed from it and features of interest in the European sites are unlikely to be found in the site given the habitats present (as demonstrated by survey). However, Peregrine Falcon, a qualifying feature of some SPAs and there is one recorded on site. population. Consequently, the potential for effects on the Peregrine Falcon is carried forward for appropriate assessment.

Kingfisher: The quarry site is located over 8km from the section of the R. Nore which is designated as part of the River Nore SPA (Site code 004233). The site does not have the potential for a nesting habitat for Kingfisher. There are no predicting impacts to the commuting and breeding of the Kingfisher. There will be no direct impacts on the Kingfisher and indirect impacts on water quality are a consideration in terms of supporting the conservation objectives for the spices.

9.5.2 The potential for impact is considered whereby the project would result in a signifigant detrimental change in water quality alone or in combination with other projects or plans as a result of indirect pollution of surface water.

It should be noted the likelihood of impacts on hydrologically connected environmental sites is low and will be avoided by best practice management outlined in quarry operation Water Management Plan in Chapter 7 of the EIAR. It is proposed that surface/ groundwater accumulating within the processing and extraction area will be conveyed to the existing series of settlement ponds. This water will be used for dust suppression (if required), and discharged off site to an external watercourse subject of a Water Discharge Licence.

In the absence of mitigation, a signifigant discharge of silt laden water could have a signifigant effect on the supporting habitats of otters, freshwater pearl mussel Atlantic salmon, twaite shad, lamprey species and white-clawed crayfish. Therefore the proposed mitigation measures are to be examined.

9.6 Mitigation Measures

There is one active quarry discharge from the site, the western catchment. Natural greenfield runoff from the undeveloped eastern part currently enters the eastern catchment. The natural catchment division will inform the evaluation of surface water management plan for the site.

The deisgn of the settlement ponds is such that the overall pond capacity is sufficient to prevent overfilling into the discharge pond, and this prevented flow of surface water from the site entrance onto the R430. All waters were pumped form the settlement ponds via silt and oil interceptors to the Discharge Pond.

The EIAR contains mitigation methods which ensure the continuation of the quarry and deepening of the quarry would not present any risk of an adverse impact effect on groundwater flow, local groundwater wells or the downstream receptors. This was supported by Groundwater Body and Total Aquifer water balance calculations, which place the site as insignificant and unlikely to pose a risk using WFD hydrological assessment methodologies. There is no signifigant net loss of water envisaged. Waters arising in the sump are recirculated to the natural systems. There are no active groundwater receptors that may be at risk from groundwater drawdown within 350m of the centre of the sump.

In terms of fuel storage and usage on site tanker contractors will be used with no fuel stored onsite. A wheelwash with a sprinkler system will be used. Hydrocarbon interceptors will be used and emptied regularly by a contractor. Discharge will be of a quality that will not impact on water quality. A flow meter has been proposed for the discharge. Settlement pond and systems are already in place on site to ensure no change to the resultant suspended solids concentrations.

9.7 Appropriate Assessment Conclusion

9.7.1 The proposed development has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000 as amended.

9.7.2 Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on two European sites, Lough Gill SAC and Sligo/Leitrim Uplands SPA. Consequently, an Appropriate Assessment was

required of the implications of the project on the qualifying features of the site, in light of their conservation objectives.

9.7.4 Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a full and detailed assessment of all aspects of the proposed development including mitigation measures and monitoring in respect of environmental effects (notably in respect of water and Peregrine Falcon) and there is no reasonable doubt as to the absence of adverse effects.

10. Recommendation

10.1 I recommend the planning authority's decision to grant planning permission for the proposed development be held by the Board.

11.0 Reasons and Considerations

Having regard to:

- The policy context for the development in the National Planning Framework and the existing and permitted use of the appeal site as a quarry and the policies relating to Mining & Aggregates in the current Laois County Development Plan 2021 to 2027,
- The proximity of the appeal site to a national road network and it's location along a Regional Road,
- The nature, scale and design of the proposed development which comprises the deepening of an existing quarry void and utilisation of a previous processing area,
- The location of the site in a rural area with limited residential development, and largely screened from the public road network,
- The detailed survey work which has been carried out in respect of the site and the conceptual model of the water environment,

- The proposed means to mitigate potential impacts and the arrangements for monitoring,
- Conditions of the permission which require measures to increase the biodiversity of the site over the duration of the permission and shared real time monitoring of environmental effects,
- The acceptability of environmental impacts and the lack of adverse effects on Natura 2000 sites,

It is considered that the proposed development would not seriously injure the residential or visual amenities of the area or property in the vicinity of the site, or be prejudicial to public health or biodiversity and would be acceptable in terms of traffic safety. The proposed development would therefore be in accordance with the proper planning and sustainable development of the area.

12.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 12th of October 2021, and the Further Information Received on the 24th of May 2022 and 19th of July 2022 except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

   Reason: In the interest of clarity.

2. The grant of permission shall be for a period of 29 years from the date of this Order. At the end of this period, the quarry use shall then cease and

all related structures removed and remedial works including restoration works, in accordance with the general principles set out in the application, shall be carried out, unless, before the end of that period, planning permission shall have been granted for the continuance of quarrying for a further period. The site restoration works described in the application shall be completed within two years of the cessation of quarrying on the site.

Reason: In the interest of visual and environmental amenity.

3. This grant of permission authorises the continued use and operation of the existing quarry including deepening of the quarry granted under Planning Permission Reference 10/383, comprising an extraction area of 14.5Ha within an overall site area of 19.6Ha.

Reason In the interests of clarity.

4. No more than 2000,000 tonnes of quarried material shall be extracted from the subject quarry in any one years.

Reason: In the interests of clarity and to comply with the extraction rate that was used for the analysis set out in the submitted Environmental Impact Assessment Report submitted with the planning application.

5. a) Mitigation and Monitoring measures outlined in the Environmental Impact Assessment Report, the Natura Impact Statement and associated documents submitted with this application shall be complied into a Single Schedule of Monitoring and Mitigation Measures shall be submitted to the planning authority prior to the commencement of the development.

b) The Mitigation and Monitoring measures shall be carried out in full except where otherwise required by conditions attached to the permission.

c) The Schedule of Mitigation and Monitoring Measures shall be included in an updated Environmental Management System (EMS) and an updated Site Specific Environmental Monitoring Plan (EMP) which shall be submitted and agreed in writing with the planning authority prior to the recommencement of the development.

d) The EMS and the EMP shall be integrated with the Discharge Licence for the facility.

Reason: To safeguard local amenities.

6. Prior to the commencement of development, the applicant shall submit arrangements for the provision and management of compensatory habitat within the landholding, for the lifetime of the quarry, as per 'Biodiversity Net Gain Good Practice Principles for Development – A Practical Guide, CIEEM'.

Reason: In the interest of biodiversity.

7. a) The developer shall monitor and record groundwater, surface water flow, noise, ground vibration, and dust deposition levels at monitoring and recording stations, the location of which shall be agreed in writing with the planning authority prior to commencement of development. Monitoring results shall be submitted to the planning authority at agreed intervals for groundwater, surface water, noise and ground vibration.

b) On an annual basis, for the lifetime of the facility (within two months of each year end), the developer shall submit to the planning authority five copies of an environmental audit. Independent environmental auditors approved of in writing by the planning authority shall carry out this audit. This audit shall be carried out at the expense of the developer and shall be

made available for public inspection at the offices of the planning authority and at such other locations as may be agreed in writing with the authority.

This report shall contain:

i. A written record derived from the on-site weighbridge of the quantity of material leaving the site, to ensure compliance with the limits set out in condition number 4 of this permission and the associated HGV vehicle movements per day indicated in the EIAR (maximum of 50 HGV loads of limestone/day from the site). This quantity shall be specified in tonnes.

ii. An annual topographical survey carried out by an independent qualified surveyor approved in writing by the planning authority. This survey shall show all areas excavated, depth of excavation, those areas being actively managed for biodiversity gain and restored.

iii. A written record of all complaints, including actions taken in response to each complaint.

iv. All incidents where levels of noise or dust exceed the levels specified in this permission shall be notified to the planning authority within two working days. Incidents of surface or groundwater pollution, or incidents that may result in groundwater pollution, shall be notified to Irish Water and the planning authority to comply with condition no. 4.

v. Following submission of the audit or of such reports, or where such incidents occur, the developer shall comply with any requirements that the planning authority may impose in writing in order to bring the development in compliance with the conditions of this permission to further develop the quarry.

Reason: In the interest of protecting residential amenities and ensuring a sustainable use of non-renewable resources.

8. The quarry, and all activities occurring therein, shall only operate between 0700 hours and 1800 hours, Monday to Friday and between 0700 hours and 1400 hours on Saturdays. No activity (e.g. loading, movement of machinery or material etc.) shall take place outside these hours or on Sundays or public holidays.

Reason: In order to protect the amenities of property in the vicinity.

9. During the operational phase of the proposed development, the noise level from within the boundaries of the site measured at noise sensitive locations in the vicinity, shall not exceed:

- an LArT value of 55 dB(A) during 0800 and 2000 hours. The T value shall be one hour, and
- an LAeqT value of 45 dB(A) at any other time. The T value shall be 5 minutes.

Reason: In order to protect the amenities of property in the vicinity.

10. (a) Notwithstanding Condition No. 9 above, where any temporary quarry activity is expected to exceed the noise limits above, this shall be notified in advance to the planning authority, indicating the reason for such activity and its likely duration. No such exceedance of noise limits shall occur without the written agreement of the planning authority.

(b) A noise survey and assessment programme shall be undertaken to assess the impact of noise emissions arising from the operation of the entire quarry complex. The scope and methodology of this survey and the assessment programme shall be submitted to and agreed in writing with the planning authority prior to the commencement of any quarrying works on the site. The results obtained form the programme shall be submitted for review to the planning authority at intervals to be agreed with the

planning authority. The developer shall carry out any amendments to the programme required by the planning authority following the review.

Reason: In order to protect the residential amenities of the property in the vicinity.

11. (a) All Heavy Goods Vehicles departing the site (quarry void and processing area) shall do so via a wheel-washes adjacent to the public road.
(b) Prior to commencement of the development:

(i) technical details of the wheel-wash design and operation and its location shall be submitted to and agreed in writing with the planning authority.
(ii) Arrangements for cleaning, as required, the public road at the junction of the haul road and site entrance, and
(iii) Haul roads to be used by HGV traffic accessing the site.

Reason: In the interest of ensuring that a clean road surface is maintained and in the interest of traffic safety.

12. (a) Prior to the commencement of development, detailed design of the proposed wastewater treatment system shall be submitted to the planning authority for written agreement.

(b) The proposed wastewater treatment system shall be designed, constructed and operated in accordance with the requirements of the planning authority.

Reason: In the interest of public water supply.

13. Dust levels at the site boundary shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days (Bergerhoff Gauge). Details of a monitoring programme for dust shall be submitted to, and agreed in writing with, the planning authority prior to recommencement of development. Details to be submitted shall include monitoring locations, commencement date and the frequency of monitoring results, and details of all dust suppression measures. This programme shall include an annual review of all dust monitoring data to be undertaken by a suitably qualified person acceptable to the planning authority. The results of the review shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: To control dust emissions arising from the development and in the interest of the amenity of the area.

14. (i) Bird surveys carried out during the construction, operation and restoration phases of the development shall be submitted to the planning authority and NPWS.

(ii) The developer shall consult with the planning authority and the NPWS on an annual basis regarding the Peregrine Falcon associated with the subject site. All precautionary and mitigation measures outlined in the EIAR shall be implemented during the breeding/ nesting season.

Reason: In the interests of biodiversity.

15. The developer shall implement measures to reduce environmental risks associated with re-fuelling, greasing and other activities within the site. Such measures may include but are not restricted to the use of spillage mats and catch trays. Such measures shall be subject to the written

agreement of the planning authority prior to the commencement of quarrying works.

Reason: To prevent water pollution.

16. The developer shall submit annually for the lifetime of this permission, an aerial photograph which adequately enables the planning authority to assess the progress of the phases of extraction.

Reason: In order to facilitate the monitoring and control of the development by the planning authority.

17. The haulage routes for material going to an from the quarry shall be kept to the regional roads and national secondary road network as described in the EIAR report. Shortcuts using local road network shall be prohibited. The local road network shall only be used if there is not an alternative route via a regional or national secondary route.

Reason: In the interests of traffic safety.

18. (i) Adequate sightlines of 180metres shall be maintained along the Regional Road (R430) at the site entrance at all times. Advance warning signs and site entrance signage shall be in accordance with the details submitted in the EIAR report.

(ii) Prior o the commencement of the development, the developer shall submitted to the planning authority for the written approval, a detailed proposal for the strengthening of the R430 for a distance of 100metres in both directions of the existing entrance to include line marking and ancillary works. These works shall be carried out by the developer at the expense of the developer. The works shall be accrued out within 9months of the commencement of the development.

Reason: In the interests of traffic safety.

19. (a) Blasting operations shall take place only between09.00hours and 18.00 hours Monday to Friday, and shall not take place on Saturdays, Sundays or public holidays. Monitoring of the noise and vibration arising from blasting and the frequency of such blasting shall be carried out at the developer's expense by an independent contractor who shall be agreed in writing with the planning authority.

(b) All monitoring records shall be made available for inspection at the site office at all times.

(c) Prior to the firing of any blast, the developer shall give notice of his intention to the occupiers of all dwellings indicated in the EIAR report in line with the requirements of the planning authority.

(d) Vibration levels from blasting shall not exceed a peak particle velocity of 12 millimetres/second, when measured in any three mutually orthogonal directions at any sensitive location. Blasting shall not give rise to air overpressure values at sensitive locations which are in excess of 125 (Lin)max peak with a 95% confidence limit. No individual air overpressure value shall exceed the limit value by more than 5 dB(Lin).

(b) A monitoring programme, which shall include reviews Π to be undertaken at [annual] intervals, shall be developed to assess the impact of quarry blasts. Details of this programme shall be submitted to, and agreed in writing with, the planning authority prior to the commencement of any quarrying works on the site. This programme shall be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments

to the programme required by the planning authority following this annual review.

Reason: In the interests of public safety and residential amenity.

20. Prior to commencement of development, details for a phased restoration plan, generally in accordance with the principles as set out in the application, shall be submitted to, and agreed in writing with, the planning authority. The plan which shall be based on best practice shall include, inter alia, removal of all plant and equipment from the site within 6 months of cessation of operation, existing and proposed finished ground levels, landscaping proposals, proposals for the enhancement of the biodiversity of the area post-closure, safety measures proposed for steep faces and areas of deep water and a timescale for implementation. Phased restoration of the site shall be carried out in accordance with this plan.

Reason: To ensure the satisfactory restoration of the site and in the interest of visual amenity.

21. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms and Development Act 2000, as amended. The contribution shall be paid prior to recommencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission to further develop the quarry.

22. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to the Board for determination.

Reason: To ensure the satisfactory restoration of the site in the interest of proper planning and sustainable development of the area.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Caryn Coogan
Planning Inspector

23/04/ 2024