

SECTION 131 FORM

18/11/22

Appeal NO: ABP 314760-22

Defer Re O/H

TO: SEO

Having considered the contents of the submission dated/ received 02/11/2022
from

Lagan Materials I recommend that section 131 of the Planning and Development Act, 2000
via Agent: J. Sheils Planning & Environmental Ltd.
be/not be invoked at this stage for the following reason(s): No New Planning Grounds.

E.O.: [Signature]

Date: 14/11/2022

To EO: _____

Section 131 not to be invoked at this stage. ☐

Section 131 to be invoked – allow 2/4 weeks for reply. ☐

S.E.O.: _____

Date: _____

S.A.O.: _____

Date: _____

M _____

Please prepare BP _____ - Section 131 notice enclosing a copy of the attached submission

to: _____ Task No: _____

Allow 2/3/4 weeks – BP _____

EO: _____

Date: _____

AA: _____

Date: _____

File With _____

CORRESPONDENCE FORMAppeal No: ABP 314760-22

M _____

Please treat correspondence received on 02/11/2022 as follows:

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Update database with new agent for Applicant/Appellant _____
2. Acknowledge with BP <u>20</u>
3. Keep copy of Board's Letter <input type="checkbox"/> | 1. RETURN TO SENDER with BP _____
2. Keep Envelope: <input type="checkbox"/>
3. Keep Copy of Board's letter <input type="checkbox"/> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|

Amendments/Comments

Applicant response to appeal.

4. Attach to file

- | | |
|---------------------------------------------|-------------------------------------------|
| (a) R/S <input type="checkbox"/> | (d) Screening <input type="checkbox"/> |
| (b) GIS Processing <input type="checkbox"/> | (e) Inspectorate <input type="checkbox"/> |
| (c) Processing <input type="checkbox"/> | |

RETURN TO EO ☐

	Plans Date Stamped <input type="checkbox"/>
	Date Stamped Filled in <input type="checkbox"/>
EO: <u>[Signature]</u>	AA: <u>Anthony McNally</u>
Date: <u>02/11/2022</u>	Date: <u>09/11/2022</u>

The Secretary,

An Bord Pleanála,

64 Marlborough Street,

Dublin 1, D01 V902

AN BORD PLEANÁLA

LDG- _____

ABP- _____

314 760 - 22

02 NOV 2022

Fee: € _____

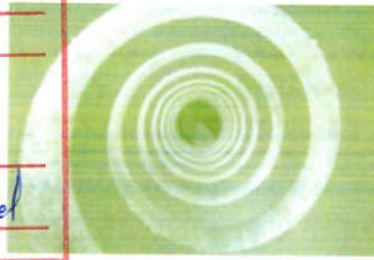
Type: _____

Time: _____

15.45

By: _____

hand



JSPE

J Sheils Planning & Environmental Ltd

31 Athlumney Castle, Navan, Co Meath

Phone: Ireland +353 46 9073997

Mobile: John Sheils +353 87 2730087

Email: johnsheils@jspe.ie

Date: 2nd November 2022

Our Ref: JSPE 280_L15

Your Ref: ABP-314760-22

P. Reg. No. 21/700

Delivered by Hand

Re: The continued use and operation of the existing quarry including deepening of the quarry. Extraction will be confined to the existing permitted quarry area (P.A. Ref. 10/383) comprising an extraction area of c. 14.5 ha within the full landholding of c. 19.6 ha. The development will include provision of new site infrastructure, including portacabin site office / canteen, toilets, concrete batching plant and truck washdown facility, hydrocarbon interceptors, mobile crushing and screening plant, upgrading of the water management system, provision of holding tank for wastewater, and other ancillaries. The proposed development will utilise/upgrade the existing in-situ quarry infrastructure, including site access, internal roads, storeroom, wheel wash, weighbridge, aggregate storage bays, refuelling hard stand, water settlement pond system, and other ancillaries. The planning application will be accompanied by an Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS). At Knockbaun, Spink, Co. Laois.

Name of Submitter:

Lagan Materials Ltd.

Address of Submitter:

**Rosemount Business Park, Ballycoolin Road,
Dublin 11, D11 K2TP**

Location of Proposed Development:

Knockbaun, Spink, Co. Laois

Planning Ref. No.

21/700

ABP Appeal Ref No.

ABP-314760-22

Dear Sir/Madam,

The enclosed response to a third party appeal is made by J Sheils Planning & Environmental Ltd. (address as per above letterhead), as agents on behalf of the first party, Lagan Materials Ltd. This submission has been prepared in response to your letter dated 6th October 2022 with respect to a third party appeal.

It is noted that the third party appeal submission appears to include two separate Planning Appeal Forms. The first form provides the appellants' details as follows.

1. Niall & Siobhán Headen
2. Ronan & Katie O'Reilly

3. Denise Brophy
4. Eamonn Brophy
5. Brendan Kehoe
6. Pat & Elizabeth Fitzpatrick

This form provides the appeal details as the attached documents. The attached documents relate to a number of separate submissions prepared by the third parties listed above and for ease of reference we will address each party separately (Refer to Attachment A).

It is noted that there are no individual appeal submissions in the documentation submitted for Party No. 3 - Denise Brophy, Party No. 5 - Brendan Kehoe and Party No. 6 - Pat & Elizabeth Fitzpatrick. As such, we consider that these parties concerns will be addressed through our response to the matters raised by the other parties to the appeal.

Our client wishes to make a submission to refute the reasons and arguments put forward by the appellants and in support of the Council's Notification of Decision to GRANT planning permission.

The detailed submission, which addresses each of the appellants' stated reasons and arguments, is attached below (Refer to Attachment A).

It is noted the appellants have requested an oral hearing. We consider that the matters can be addressed by consideration of the information submitted including appeal submissions and responses, the planning application and supporting documents including, EIAR and NIS.

Yours Sincerely,

Agent Acting on behalf of Lagan Materials Ltd.



John Sheils MSCSI MRICS

J Sheils Planning & Environmental Ltd.

A. Detailed Response Submission

Submission

Background

This submission relates to the Notification of Decision to Grant planning permission P. Reg No. 21/700 by Laois County Council on 9th September 2022. *“Planning application for the continued use and operation of the existing quarry including deepening of the quarry. Extraction will be confined to the existing permitted quarry area (P.A. Ref. 10/383) comprising an extraction area of c. 14.5 ha within an overall application area of c. 19.6 ha. The development will include provision of new site infrastructure, including portacabin site office, canteen, toilets, concrete batching plant and truck washdown facility, hydrocarbon interceptors, mobile crushing and screening plant, upgrading of the water management system, provision of holding tank for wastewater, and other ancillaries. The proposed development will utilise/upgrade the existing in-situ quarry infrastructure, including site access, internal roads, storeroom, wheel wash, weighbridge, aggregate storage bays, refuelling hard stand, water settlement pond system, and other ancillaries. The planning application will be accompanied by an Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS) at Knockbaun, Spink, Co. Laois”.*

The proposed development is the subject of a First Party Appeal, in which the appellant, Lagan Materials Ltd, is challenging the imposition of Condition 5(a) of planning permission P.A. Ref. 21/700 (i.e., ABP 314760-22), which is presented below.

Condition No. 5(a).

“Excavation shall not take place below a level of at least 1 metre above the highest seasonal water table level on 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 abstractions from groundwater shall comply with the Local Government (Water Pollution) Act 1977, Register of Abstractions from Waters, Laois County Council. The Planning Authority shall, if necessary, determine additional monitoring wells to be provided by the developer.”

That appeal was submitted to An Bord Pleanála on 6th October 2022.

This current submission is made in response to a Third Party Appeal by the appellants, Niall Headen and others, in which the Notification of Decision to GRANT planning permission P.A. Ref. 21/700 (i.e., ABP 314760-22) is being challenged. That appeal was submitted to An Bord Pleanála on 5th October 2022. Below, we present the appellants' reasons and arguments along with the corresponding counter arguments, which we feel have merit and are reasonable and proper grounds to dismiss this Appeal.

Appellants' Reasons & Arguments and Response

Six parties are signatories to the Third Party Appeal received by An Bord Pleanála (i.e., ABP-314760-22), as follows:

1. Niall & Siobhán Headen (Property No's. 1 & 8)
2. Ronan & Katie O'Reilly (Property No. 9)
3. Denise Brophy (Property No.12)
4. Eamonn Brophy (Property No. 12)
5. Brendan Kehoe (Property at No. 13)
6. Pat & Elizabeth Fitzpatrick (Property No. 2)

Three of the appellant parties each submitted separate submissions within the overall appeal. It is noted that there are no individual appeal submissions in the documentation submitted for Party No. 3 - Denise Brophy, Party No. 5 - Brendan Kehoe and Party No. 6 - Pat & Elizabeth Fitzpatrick. As such, we consider that these parties concerns will be addressed through our response to the matters raised by the other parties to the appeal.

We have addressed the appellants' reasons and arguments in the order presented in the documents attached to the Appeal. For convenience, the location of the residence corresponding to each of the appellant parties is shown in Figure 1. Please note that the residence of Brendan Kehoe is not shown on Figure 1, as it is located c. 90 m off the map. For reference, it is located in the townland of Clenagh, c. 920 m north of the site.



Figure 1. Location of nearby residential properties at Spink. Location of the residence of R. & K. O'Reilly is shown as Property No. 9. Location of residence of E. & D. Brophy is shown as Property No. 12. Location of the residence of N. & S. Headen is shown as Property No. 1, while their property for rent is shown as Property No. 8. The residence of P. & E. Fitzpatrick is shown as Property No. 2. The residence of Brendan Kehoe is located on the L7792 local road, c. 90 m off the map. Modified from Figure 7.10 of EIA/R.

Party No. 2. Ronan & Katie O'Reilly

1. Distance to Residence

The Appellants live at Property No. 9 (Refer to Figure 1), which is c. 175 m northwest of the quarry site.

Response

The residence was previously owned by the former quarry owner, Mr. Larry Behan. Planning permission was granted for the residence in 1999 (P.A. Ref. No. 99/65) to Niall Headen, (party to the appeal). Mr. Behan subsequently acquired the property and was granted planning permission (P.A. Ref. 0477) for retention of bonnet window to front facade, dormer window to north elevation, extra window to east elevation & roof alteration from previous Planning Ref. no. 99/65 in 2004.

It is also evident that this property was identified as a residential development during preparation of the planning applications and EIS's that accompanied the planning permissions for the quarry at Spink (i.e., Planning Permissions P.A. Ref. 01/947, PL 11.130640 and P.A. Ref. 10/383). For example, a statement under Air & Climate - Section 3.5.3.1 of the EIS relating to P.A. Ref. 10/383 states that *"There is minimal residential development in the immediate vicinity of the site with the closest receptors to the site located approximately 220 metres north (Fitzpatrick) and approximately 150 metres northwest (**applicants house**) of this site boundaries"*. It is therefore evident that both the applicant, Larry Behan and Laois County Council gave due consideration to the residential use of the property in consideration of the various applications associated with the quarry development.

The appellants have provided details from the Auctioneers (See Appendix 1 of R. & K. O'Reilly's submission in the Appeal) that the property was put on the market in 2014 under 3 Lots: Lot 1 - quarry on 20 ha (50 acres), Lot 2 - house on 7.3 ha (18 acres) and Lot 3 - the entire. The property description in the auctioneer's advertisement states that planning permission for the continuance of quarrying had been granted on 19th September 2011 subject to 20 conditions (P.A. Ref. 10/383). The property was subsequently sold in two separate lots, namely the quarry as one lot and the house and agricultural land as another. They argue that by splitting the property and allowing the house to become a residence, the planning permission relating to the quarry was rendered redundant. This is clearly not the case.

It should also be noted that prior to the sale of the agricultural lands (contained within Lot 2, as referenced above), these formed part of the quarry lands under planning permission (P.A. Ref. 10/383) and therefore the residential property was further insulated from the quarry following their severance. The extraction area under this planning permission prior to the severance of these lands would have been within 100 metres of this residence. We would also point out that although the distance to the quarry landholding boundary is 175 metres, future extraction in the western quarry area will be confined to the current quarry floor and at least 255 metres distance from the residence (Refer to Planning Application Drawing D04 Site Plan - Proposed).

2. Quality of Life

As stated above, the appellants live in a residence, which is c. 175 m northwest of the quarry site. The appellants have two young children, [REDACTED]

[REDACTED] They argue that the decision to GRANT planning permission shows a lack of understanding of [REDACTED] They also argue that the noise, dust and traffic will also be detrimental to the mental and physical health of the family as a whole.

Response

The residence in question lies c. 175 m northwest of the site on the far side of the ridge into which the quarry has been excavated. Thus, the residence, which is at c. 210 m AOD, and the quarry, the floor and processing area of which are at c. 225 m AOD, are separated by a ridge line that includes the proposed regraded overburden mound at c. 238 m AOD. This ridge line will significantly attenuate any noise arising from the quarry (refer to Planning Application Drawing D04 Site Plan - Proposed) towards this property.

As detailed above under response to Item 1, although the distance to the quarry landholding boundary is 175 metres, future extraction in the western quarry area will be confined to the current quarry floor, being at least 255 metres distance from this residence (Refer to Planning Application Drawing D04 Site Plan - Proposed).

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 residents including the closest to the development (NSL2).

The appellants residence also directly adjoins the R430 Regional Road and some of the existing measured ambient noise levels at the residence already exceed the predicted levels from the development. The appellants have made no reference to the proximity to the R430 Regional Road and the existing ambient noise levels, which exceed the predicted levels from the development. They have also made no reference to other developments and activities in the area including wind farm developments and agriculture. We would consider their response to be biased against the quarry development and lacking understanding of the existing ambient noise levels and noise prediction modelling which shows that the quarry development can continue to operate within accepted thresholds.

As detailed in the EIAR and Response to Further Information *"The impact assessment and its context are such that the development is highly unlikely to result in an adverse effect. With that in mind, we see no reason from a noise impact perspective for this development not to proceed"*.

Noise arising from the quarry operations can be maintained at acceptable levels by the implementation of good design, effective operation and management and by the implementation of measures which are deemed to be best practice.

As detailed in the EIAR and in accordance with Condition No. 11(a), the proposed development can operate within the proposed working hours and comply with the Environmental Protection Agency (EPA) Recommended General Noise Limit Criteria (EPA 2016; Scheduled Activities (NG4)¹). These are Daytime Noise Criterion of 55 dB L_{Ar,T} (07:00 to 19:00 hrs) Monday to Friday inclusive (excluding bank holidays), and between 07:00 hours and 14:00 hours on Saturdays, when measured outside any noise sensitive location (i.e.,

¹ EPA (2016). Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4), Environmental Protection Agency (EPA), Johnstown Castle, Wexford, Ireland.

residence) in the vicinity of the site. Sound levels shall not exceed 45 dB $L_{Aeq,T}$ at any other time.

In relation to Air Quality Condition No. 10(a). of the Notification to Grant planning permission (P.A. Ref. 21/700) states that *"The total dust emission arising from the on-site operations associated with the proposed development shall not exceed 350 milligrams per square meter per day, averaged over a continuous period of 30 days, when measured as deposition of soluble and insoluble particulate matter at any position along the boundary of the site. No stripping of topsoil or overburden shall be carried out in periods of dry weather"*.

As stated in Section 9.2.2 of the EIAR, both the DoEHLG (2004)² and EPA (2006)³ recommended that the above TA Luft dust deposition limit value be adopted at site boundaries associated with quarry developments. This limit is in accordance with Condition No. 6 of the existing planning permission (P.A. Ref. 10/383) for the quarry development.

The proposal is for the continued use of a quarry for the production of aggregates and operation of a concrete batching plant in the townland of Knockbaun, Spink, County Laois. The scale of the operation under planning permission P.A. Ref. 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. 200,000 tonnes per annum. In addition, the concrete batching plant will produce up to 15,000 m³ (36,000 tonnes) of ready-mix concrete per annum. As such, this is a considerably smaller scale quarry development than what was previously operated at this location.

The volume of traffic generated by the proposed development can be absorbed by the available capacity of the adjoining National and Regional roads (Refer to EIAR Section 14 Traffic). 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 – 10.0% along the R430, based on 3 different quarry production scenarios. The existing capacity of the adjacent road networks has been shown to be readily capable of absorbing this increase within the existing traffic. Thus, no significant, adverse residual impacts are predicted in terms of roads and traffic during the operational phase of the quarry.

3. Blasting

The appellants note that Breedon was fined for safety breaches in relation to a fly rock incident at a quarry in Wales, and express concern about living in what they describe as the "danger zone". They also raise concern about possible structural damage to the house due to the proximity to blasting.

Response

The appellants state that a court case was taken against Lagan Materials Ltd. with respect to a flyrock incident at one of their quarries in Wales in 2020. Whilst Lagan Materials Ltd. are part of the Breedon Group, it should be noted that no fly rock incident has ever occurred with respect to a Lagan Materials Ltd. quarry within the jurisdiction of Ireland.

² DoEHLG (2004). Quarries and Ancillary Activities - Guidelines for Planning Authorities. Department of the Environment, Heritage and Local Government (DoEHLG), Dublin, Ireland.

³ EPA (2006). Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals). Environmental Protection Agency (EPA), Johnstown Castle, Wexford, Ireland.

The appellants noted that the Inspector of Quarries in the UK stated that *"Blasting operations are inherently high risk, and these risks must be rigorously controlled by good explosives engineering practice and in accordance with legal requirements"*.

Blasting at Spink Quarry will be carried out by a certified 'shotfirer' in accordance with the relevant health and safety regulations. A consequence of blasting is ground vibration measured as peak particle velocity (i.e., PPV) and air overpressure measured as the noise level of "air blast" (i.e., dB (Lin)). Blast monitoring will be carried out at agreed residences within the area. Ground vibration and air overpressure at the nearest susceptible residences in the area will be measured for each blast.

The EPA publication 'Integrated Pollution Control Licensing – Guidance Notes for Noise in Relation to Scheduled Activities' states that *"in the case of quarrying and mining operations, the vibration levels from blasting should not exceed a peak particle velocity of 12 mm/sec, measured in any three mutually orthogonal directions at a receiving location when blasting occurs at a frequency of once per week, or less. Blasting should not give rise to air overpressure values at sensitive locations which are in excess of 125 dB (Lin) _{max peak}"*. It is proposed that blasting at the Spink Quarry will be conducted typically on a monthly basis when required.

Lagan will put in place a "Blast Notification Procedure & Blast Monitoring Programme". A copy of the proposed procedure is provided in EIAR Appendix 11. This procedure will be amended as necessary on any grant of planning permission for the quarry development.

Laois County Council specified that blasting be carried out in accordance with Condition No. 12 of the Notification of Decision to Grant Planning Permission P.A. Ref. 21/700, which is compliant with EPA Guidance. Condition No. 12 states:

12. *Blasting & Vibration*

- (a) *The developer shall only carry out blasting during 09.00 18.00 hrs, Monday to Friday, except in emergencies or for health & safety reason beyond the control of the developer. The developer shall put in place a procedure for notifying local residents of the date(s) and times of blasting. This documented procedure shall be agreed with the Planning Authority and be available on-site for inspection by the Planning Authority.*
- (b) *No blast or combination of simultaneous blasts shall give rise to a ground-borne vibration level at the nearest noise sensitive receptor which exceeds a peak particle velocity of 12 mm/second, as measured in any of the three mutually orthogonal direction about a fixed point.*
- (c) *No blast shall give rise to an air overpressure level at the nearest noise sensitive receptor that exceeds 125 dB (Lin) maximum peak. 95% of all air overpressure levels measured at the nearest noise receptor location shall conform to the specified limit value. No individual air overpressure value shall exceed the limit value by more than 5 dB(Lin).*
- (d) *The developer shall carry out blast monitoring (ground-borne vibration and air overpressure) for each blast. The monitoring locations shall be agreed in advance with the Planning Authority and shall be established prior to commencement of development. Blast monitoring shall be carried out for each blast, unless otherwise agreed in writing with the Planning Authority.*

The following information shall be recorded for each blast: date; time; location in the quarry; amount of explosive used; maximum instantaneous charge; vibration and air overpressure monitoring results. The results of the monitoring shall be submitted to the Planning Authority four weeks after the end of the quarter being reported on.

Blasting will be undertaken by a company holding a current explosive licence (i.e., Irish Industrial Explosives). The rock will be fragmented utilising standard blasting procedures that have been long established at this location. The primary objectives of these procedures are to efficiently extract rock from the quarry face, while ensuring the safety of all persons and property.

Blasting in quarries gives rise to ground transmitted vibrations as well as air overpressure, which also maybe perceptible at nearby residences. In order to minimise these effects, the blast management practice at this quarry will include several mitigation measures, such as: (1) best professional practice in the design and execution of blasting; (2) only certified Shotfirers are used to conduct blasting; (3) millisecond time delays are used in sequential detonation of the explosives to limit the maximum instantaneous charge; and (4) explosive charges are properly confined by a sufficient quantity of quality stemming material. Refer to EIAR Section 10.6.12 for details of mitigation measures.

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 nearest susceptible residences including the O'Reilly family (Refer to EIAR Appendix 11).

As part of the Response to Further Information (RFI), the applicants were asked to consider a system of blast notifications at the Spink Picnic Area. They were also asked to hold consultations with residents to tailor the approach to blast notifications for the more sensitive receptors (Refer to copy of RFI submitted on 24/05/22). Consequently, representatives from Lagan Materials undertook consultations with a number of the sensitive receptors adjacent to the site on 22nd April 2022 and 25th April 2022.

As a result of these consultations, the blast notification process for these sensitive receptors will be altered to the following:

- A leaflet drop will be undertaken 1 week prior to blasting to inform the residents of the intention to blast;
- On the morning of the blast, the resident will be called via telephone to inform them of the time at which blasting is intended to occur;
- If any changes to this intended blasting time are required, the resident will be notified via telephone before the blast is due to take place; and
- A text message will be sent approximately 30 minutes before blasting.

These changes will be incorporated into the proposed Blast Notification Procedure & Blast Monitoring Programme to be adopted at Spink Quarry (Refer to EIAR Appendix 11), subject to agreement with Laois County Council.

The blast notification procedure can be altered on request should any additional changes be required subject to agreement of Laois County Council.

On the morning of intended blasting, a mobile sign will be placed in the Spink Picnic Area. This sign will inform the public that blasting will be occurring that day and that the sign is for

information purposes only with no alterations to the planned activities of the public required. The form and location of the sign will be agreed with Laois County Council.

As detailed above under response to Item 1, although the distance to the quarry landholding boundary is 175 metres, future extraction in the western quarry area will be confined to the current quarry floor, being at least 255 metres distance from this residence (Refer to Planning Application Drawing D04 Site Plan - Proposed). While the mitigation measures and procedures above are considered comprehensive and sufficient, we would also point out that development of the western quarry area involves deepening of the quarry 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 575 metres distant from the eastern quarry development area.

Blast monitoring will be carried out at agreed residences within the area. Ground vibration and air overpressure measurements will be undertaken at the nearest susceptible residences in the area during each blast. The results obtained will be used to ensure compliance with any planning condition requirements. Consequently, it is considered that the proposed development can be operated within the accepted noise and vibration thresholds.

The appellant's have also raised concerns with respect to structural damage due to blasting.

A comprehensive research programme undertaken by the US Bureau of Mines (USBM) in the late 1970s (Siskind et al., 1980)⁴ determined that vibration values well in excess of 50 mm/s are necessary to produce structural damage to residential type structures. The onset of cosmetic damage can be associated with lower vibration levels, especially at very low vibration frequencies, and a limit of 12.7 mm/s is therefore recommended for such relatively unusual vibration.

A further USBM publication (USBM, 1987)⁵ states that these safe vibration levels are "*....for the worst case of structure conditions....*", and that they are "*....independent of the number of blasting events and their durations*", and that no damage has occurred in any of the published data at vibration levels less than 12.7 mm/s.

In comparison, the 1987 USBM publication states that daily changes in humidity and temperature with respect to residential type property can readily induce strain of an order that is equivalent to blast induced vibration of 30 – 75 mm/s. Typical domestic activities will produce strain levels corresponding to vibration of up to 20 mm/s and greater.

It is for this reason that many domestic properties will exhibit cracks that may be wrongly attributed to blasting activities. There are many additional reasons why properties will develop cracks, for example:-

- Fatigue and ageing of wall coverings.
- Drying out of plaster finishes.
- Shrinkage and swelling of wood.
- Chemical changes in mortar, bricks, plaster and stucco.
- Structural overloading.
- Differential foundation settlement - particularly after times of prolonged dry spells.

⁴ Siskind, D.E., Stagg, M.S., Kopp, J.W. & Dowding, C.H. (1980). Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting. Report of Investigation 8507, Bureau of Mines, US Dept. of Interior, Pittsburgh, PA, USA.

⁵ USBM (1987). Surface Mine Blasting. Proc. Bureau of Mines (USBM) Technology Transfer Seminar, April 15th 1987, Chicago, Illinois, USA.

Comprehensive investigations into the nature and effects of air overpressure with particular reference to its damage potential have been undertaken by the USBM.

The weakest parts of most structures that are exposed to air overpressure are windows. Poorly mounted, and hence prestressed windows might crack at around 150 dB with most cracking occurring at 170 dB. Structural damage can be expected at 180 dB.

Routine blasting operations can generate air overpressure levels at the closest property of around 120 dB. The pressure equivalent of 120 dB will be generated by a constant wind velocity of just 5 m/s (Beaufort force 3, gentle breeze), whilst an air overpressure of 130 dB is equivalent to a wind velocity of less than 8 m/s (Beaufort force 4, moderate breeze). Such magnitudes will be perceived by individuals although they are entirely safe.

As detailed above, Laois County Council specified that blasting be carried out in accordance with Condition No. 12 of Notification of Decision to Grant Planning Permission P.A. Ref. 21/700, and thus be compliant with EPA Guidance, i.e., *"in the case of quarrying and mining operations, the vibration levels from blasting should not exceed a peak particle velocity of 12 mm/sec, measured in any three mutually orthogonal directions at a receiving location when blasting occurs at a frequency of once per week, or less. Blasting should not give rise to air overpressure values at sensitive locations which are in excess of 125 dB (Lin) max peak"*.

The appellants property can also be included in the blast monitoring programme for the quarry to demonstrate that the levels of blast vibration are well within the accepted thresholds for blast vibration.

4. Water

The appellants state that they spent a lot of money fixing the damage that the quarry caused to the well supply. They expressed a lack of confidence in the expert hydrogeologist, Dr. Pamela Bartley, who Breedon commissioned to carry out the hydrogeological and hydrological study of the EIAR and subsequent RFI (including well survey), but were not prepared to pay for an independent assessor, which they had requested.

Response

The Water Chapter of the EIAR was completed collaboratively between Dr. Pamela Bartley (Hydro-G) and Dr. Colin O'Reilly (Envirologic), with Dr. Bartley assuming the lead role. Dr. Bartley is a water focussed civil engineer with 24 year's field-based practice in groundwater, surface water and wastewater. She is considered an expert hydrogeologist by Irish Water and many diverse competing business quarries, each of whom have confidence in her professional integrity. Upon completion of a Diploma in Water and Wastewater Technology at Sligo RTC, Dr. Bartley completed her primary degree in Civil Engineering at Queen's University, Belfast, followed by postgraduate education at the School of Civil Engineering at Trinity College, Dublin. While a postgraduate at TCD, she completed a MSc. in Environmental Engineering at the School of Civil Engineering, with geotechnical, hydrogeological, legislation and water specialities, and later a hydrogeologically focussed Ph.D.

As a result of her work in evaluating planning appeals, Dr. Bartley has become a specialist in quarry and discharge evaluations in the context of enacted Irish Regulation and EU Directives concerning the environment, such as the Groundwater Regulations (2010, 2011, 2012, 2016), Surface Water Regulations (2009, 2012, 2015), EU (Birds and Natural Habitats) Regulations (2011), and Water Framework and Habitats' Directives.

Dr. Bartley has completed hydrologically focussed impact assessments for many regional important quarries in SAC settings, including catchments with habitats for the designated species pearl mussel and vertigo. Dr. Bartley's significant quarry assessments of note include Bennettsbridge Limestone, Co. Kilkenny, McGrath's Limestone of Cong, Cos. Galway and Mayo, Cassidy's of Buncrana, Co. Donegal, Harrington's of Turlough, Co. Mayo, Ardgaineen, Co. Galway and Mortimer's of Belclare, Co. Galway. Each of these quarries operate within SAC catchments and have successfully managed their discharge, under licence, for many years.

Dr. Bartley's key work areas include the development of large-scale public supply water boreholes, surface water and groundwater assessments with a discharge focus, soil systems, soil hydrology and hydrogeological evaluations for quarries with a specific regulatory focus on water and ecological constraints. She is qualified and IOSH certified to act as Project Supervisor Design Phase (PSDP) and Project Supervisor Construction Stage (PSCS) as defined in the Construction Regulations. The company, Hydro-G, is a registered Irish Water Supplier (No. 1855), Dr. Bartley is HSQE approved within Irish Water and is one of their hydrogeologist service providers. She is a professional member of Engineers Ireland and International Hydrogeologists (Irish Group).

The planning application for the proposed quarry development was accompanied by a comprehensive Water Chapter as part of the EIAR, and the 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 of works is illustrated in EIAR Figure 7.12 and does not extend beyond the western quarry boundary in the direction of the appellant's residence (Property No. 9 on Figure 1). There are no active groundwater receptors that may be at risk of impact from groundwater drawdown within that 350 m of the centre of the sump. No potential for drawdown nor potential for impact on local wells is predicted.

5. Property Value

The appellants state that reopening of the quarry at Spink will greatly impacts the value of their home, and that they have been advised that the value would decrease by at least 30%. They argue that it would not only reduce the sale price but also reduce the amount of interest in the event they were to sell.

Response

Laois County Council originally used the lands at Knockbaun for rock extraction, which ceased in the 1970s. Mr. L. Behan re-opened the quarry in 2003 and operated a medium to large scale quarrying operation at the site for several years. Thus, the site has a history of quarrying extending back before the 1970s having co-existed with other land uses in the area, such that property values should be unaffected by the recommencement of quarrying. Lagan purchased the quarry in 2014, prior to the O'Reilly family's purchase of the adjacent property and residence in 2017. One must assume that the O'Reilly family would have been aware of the presence of the quarry, and the fact that it had a valid planning permission in place, when they purchased their residential property.

The development will be controlled and regularised in accordance with the scheme as outlined in the EIAR, through continued environmental monitoring and by the planning conditions imposed by the competent authority.

Lagan Materials Ltd. have in place a group wide Environmental Management System (EMS), including Environmental Management Plan (EMP) which will be implemented at Spink Quarry. A copy of the existing (EMP) for Spink Quarry is included as EIAR Appendix 10.

The applicant will establish an environmental monitoring programme for the quarry site to allow for on-going monitoring of environmental emissions (e.g., noise, dust, blasting, water) from the site, thereby assisting in ensuring compliance with requirements or regulations.

Various mitigation measures will be implemented to minimise any impacts as much as practical to ensure the operation of the quarry will not result in any significant impact on residences or local amenities.

6. Operational Hours

The appellants state that although the planning permission limits the hours of operation to 7:00 to 18:00 hrs Monday to Friday and 7:00 to 14:00 hrs on Saturday, they argue that these hours will greatly impact their home lives. They also argue that they will be awoken the moment the quarry opens, not to mention the noise of trucks lining up on the road outside their property. They are also concerned that the Council might grant planning permission allowing the quarry to open earlier (e.g. 5:00 hrs), as was the case in 2008 (i.e., P.A. Ref 08/729).

Response

In accordance with Condition No. 6 of Notification of Decision to Grant Planning Permission P.A. Ref. 21/700:

6. *The hours of operation on site shall be 07.00 hours and 18.00 hours, Monday to Friday and between 07.00 hours and 14.00 hours on Saturdays.*

No activities or maintenance shall be permitted outside of the above stated hours or on Sundays, Bank or Public Holidays.

Reason: To limit the impact of the development on the residential and rural amenities of this rural area and in the interest of the proper planning and sustainable development of the area.

This is also in line with the Planning and Development Guidelines for Quarrying and Ancillary Activities issued by the DoEHLG in 2004. An early start-up is required particularly when servicing large construction projects where the concrete pour must be completed in one operation.

An Bord Pleanála granted planning permission on appeal (P.A. Ref. 08/729, PL 11.230622) to vary conditions relating to hours of opening and dust emissions attached to permission granted under PL 11.13064019. Condition No. 1 of this decision permitted *"the tarmacadam production plant shall be permitted to operate between 0600 hours and 1800 hours Monday to Friday and between 0600 hours and 1400 hours on Saturday. The facility shall not operate on Sundays or on Public/Bank holidays. Deliveries of tarmacadam from the site shall not commence prior to 0700 hours"*.

This variance was sought to allow the tarmac plant to start production at 06:00 hrs in order that tarmacadam could be ready to leave the site at 7:00 hrs and supply the M9 motorway, which was being constructed in County Laois at that time. The tarmac plant has been removed from site.

There is no basis to the appellants contention that trucks will be queuing outside their premises which is over 640 metres from the quarry entrance. As part of the Environmental Management

Plan (Refer to EIAR Appendix 10 - (2) Depot Procedures Manual 012 – Traffic Management) measures shall be implemented to ensure that traffic entering and leaving the site is carried out as per the planning permission.

7. Closing Date of Submissions for Response to Further Information.

Following on from receipt of a letter from Laois County Council dated 7th July 2022, we provided copies of both newspaper and site notices dated 19/07/22 relating to additional significant information for the proposed development. The newspaper notice as per Article 35(1)(a)(v) of the Planning & Development Regulations 2006, as amended, states that:

*"Significant Further Information has been furnished to the Planning Authority and is available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy, at the offices of the Authority during office hours. A submission or observation in relation to the Further Information may be made in writing to the Planning Authority on payment of the prescribed fee, not later than **5 weeks** after the receipt of the newspaper and site notice by the Planning Authority".*

The five week period relates to the fact that the planning application was accompanied by an EIAR. The final date of submission of observation was therefore the 22/08/22.

We subsequently received a letter from Laois County Council dated 11th August stating the following:

"Further to your submission of Significant Further Information dated 19th July 2022 re planning application reference 21/700, we would like to advise you that the submission date and decision due date were incorrectly noted as 01st of August 2022 and 15th August 2022 respectively, due to an administrative error".

*"This detail has been corrected and the submission period is open until **22nd August, 2022** and the decision due date is **12th September, 2022**".*

It is noted that the appellants made only one submission on the RFI received by Laois County Council on 2nd August 2022 and that this was given due consideration by Laois County Council in making their determination of the Notification to Grant planning permission for the quarry development.

Party No. 4. Eamonn Brophy

1. Blasting

The appellant lives in a residence c. 700 m from the quarry (i.e., Property No. 12 in Figure 1) and states that the house was built in 1979 and that the foundations of the residence are built on the same rock as those being blasted. He states that the structure of his house will be adversely affected by blasting and that it has already caused some cracks in the structure of his house.

Response

The issue of blasting has already been addressed in Point 3 under Party 2. Suffice it to say that blast management practice at Spink Quarry will include several mitigation measures, such as: (1) best professional practice in the design and execution of blasting; (2) only certified Shotfirers are used to conduct blasting; (3) millisecond time delays are used in sequential detonation of the explosives to limit the maximum instantaneous charge; and (4) explosive charges are properly confined by a sufficient quantity of quality stemming material.

As detailed in response to Point 3 under Party 2, many domestic properties will exhibit cracks that may be wrongly attributed to blasting activities. There are many additional reasons why properties will develop cracks, for example:-

- Fatigue and ageing of wall coverings.
- Drying out of plaster finishes.
- Shrinkage and swelling of wood.
- Chemical changes in mortar, bricks, plaster and stucco.
- Structural overloading.
- Differential foundation settlement - particularly after times of prolonged dry spells.

As detailed above, Laois County Council specified that blasting be carried out in accordance with Condition No. 12 of the Notification of Decision to Grant Planning Permission P.A. Ref. 21/700, and thus will be compliant with EPA Guidance, i.e., *"in the case of quarrying and mining operations, the vibration levels from blasting should not exceed a peak particle velocity of 12 mm/sec, measured in any three mutually orthogonal directions at a receiving location when blasting occurs at a frequency of once per week, or less. Blasting should not give rise to air overpressure values at sensitive locations which are in excess of 125 dB (Lin) max peak"*.

It is considered that the proposed development can be operated within the accepted blast vibration thresholds.

2. Water

The security of the water supply is a major concern expressed by the appellant, as he has a borehole for domestic use. His well is over 100 ft deep (i.e., > 30 m) and he states that it has not been given due consideration. The appellant also notes that Condition 5(c) of P.A. Ref. 21/700 requires the quarry operator to take measures for the provision of an adequate supply, but no timeframe is specified.

Response

The issue of water and third party private wells has already been addressed in Point 4 under Party 2 above. All wells that could possibly be impacted were surveyed. A 30m deep well is

more vulnerable to local contamination, rather than a quarry over a significant topographic ridge.

The potential radius of influence upon completion of works is illustrated in Figure 7.12 and does not extend beyond the forestry on the lands to the south of the quarry development. There are no active groundwater receptors that may be at risk of impact from groundwater drawdown within that 350 m 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 c. 700 m from the site and the use best professional practice in the design and execution of blasting, the appellant's well is expected to be unaffected by ground vibrations.

3. Horses

The appellant states that his horses will be adversely affected by blasting and that his breeding mares and breed foals can feel the vibrations and pressure, which can have detrimental affects on their health. There is no consideration given to equines in the conditions and animals his animals will be grazing within 500m of the quarry.

Response

Again, the issue of blasting has already been addressed in Point 3 under Party 2 above.

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. Ground vibration and air overpressure measurements will be undertaken taken at the nearest susceptible residences in the area.

As stated previously, Lagan have developed a comprehensive Blast Notification Procedure at Spink Quarry, which will notify the residents of the nearest susceptible residences including Mr. Brophy (Refer to EIAR Appendix 11).

As part of the Response to Further Information (RFI), the applicants were asked to hold consultations with residents to tailor the approach to blast notifications for the more sensitive receptors (Refer to copy of RFI submitted on 24/05/22). Consequently, representatives from Lagan Materials undertook consultations with a number of the sensitive receptors adjacent to the site on 22nd April 2022 and 25th April 2022.

As a result of these consultations, the blast notification process for these sensitive receptors will be altered to the following:

- A leaflet drop will be undertaken 1 week prior to blasting to inform the residents of the intention to blast;
- On the morning of the blast, the resident will be called via telephone to inform them of the time at which blasting is intended to occur;
- If any changes to this intended blasting time are required, the resident will be notified via telephone before the blast is due to take place; and
- A text message will be sent approximately 30 minutes before blasting.

These changes will be incorporated into the proposed Blast Notification Procedure & Blast Monitoring Programme to be adopted at Spink Quarry (Refer to EIAR Appendix 11), subject

o agreement with Laois County Council. Whilst these procedures are tailored towards residential property, they will also provide sufficient warning to landowners such as Mr Brophy.

The Blast Notification Procedure can be altered on request should any additional changes be required, subject to agreement of Laois County Council.

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 (Refer to Planning Application Drawing D04 Site Plan - Proposed).

As stated previously, it is considered that the quarry can operate within the accepted vibration thresholds, such that horses grazing in a paddock at a standoff distance of c. 500 m from the quarry should be unaffected by ground vibrations due to blasting.

4. Spink Picnic Area

The appellant also expressed concern with regards the Picnic Area in Spink, which he feels has not been addressed. The appellant states that the area is an invaluable resting spot for those on a journey and to enjoy the unspoilt surroundings without the disturbance of noise, dust, blasting and extra traffic. Best Overall Amenity Area Award 2001 from Laois Tidy Towns Federation and Laois Co. Council.

Response

The Picnic Area is c. 250 m northwest of the quarry site and sheltered behind the ridge into which the quarry has been excavated. Furthermore, the southeastern boundary of the Picnic Area is lined with mature evergreen trees that provide visual screening of views towards the quarry development. Thus, there is no visual impact from the quarry, while any noise impact will be significantly attenuated by the screen of trees and intervening topographic ridge.

The picnic area directly adjoins to the R430 Regional Road and some of the existing measured ambient noise levels at the Picnic area (N2) due to passing traffic already exceed the predicted levels from the development.

Noise resulting from the quarry operations can be kept to acceptable levels by the implementation of good design, effective operation and management and by the implementation of measures that are deemed to be best practice.

The existing capacity of the adjacent road networks has been shown to be readily capable of absorbing the increase within the existing traffic. Thus, no significant, adverse residual impacts are predicted in terms of roads and traffic during the operational phase of the quarry.

As part of the Response to Further Information (RFI), the applicants were asked to consider a system of blast notifications at the Spink Picnic Area. They were also asked to hold consultations with residents to tailor the approach to blast notifications for the more sensitive receptors (Refer to copy of RFI submitted on 24/05/22). Consequently, representatives from Lagan Materials undertook consultations with a number of the sensitive receptors adjacent to the site on 22nd April 2022 and 25th April 2022.

As a result of these consultations, the blast notification process for these sensitive receptors will be altered to the following:

- A leaflet drop will be undertaken 1 week prior to blasting to inform the resident of the intention to blast;

- On the morning of the blast the resident will be called via telephone to inform them of the time at which blasting is intended to occur;
- If any changes to this intended blasting time are required, the resident will be notified via telephone before the blast is due to take place; and
- A text message will be sent approximately 30 minutes before blasting.

These changes will be incorporated into the proposed Blast Notification Procedure & Blast Monitoring Programme to be adopted at Spink Quarry (Refer to EIAR Appendix 11), subject to agreement with Laois County Council.

The blast notification procedure can be altered on request should any additional changes be required subject to agreement of Laois County Council.

On the morning of intended blasting, a mobile sign will be placed in the Spink Picnic Area. This sign will inform the public that blasting will be occurring that day and that the sign is for information purposes only, with no alterations to the planned activities of the public required. The form and location of the sign will be agreed with Laois County Council.

5. Concrete Raw Materials

The appellant states that the quarry has inadequate supplies of raw materials for concrete, therefore most of the materials will have to be imported from other quarries.

Response

The average output of the proposed development will be closer to c. 200,000 tonnes per annum of aggregates. In addition, the concrete batching plant will produce up to 15,000 m³ (36,000 tonnes) of ready-mix concrete per annum. Only cement (4,500 tonnes) and fine aggregate sand (7,500 tonnes) will be imported to site for use in the manufacture of concrete. This equates to 1,000 truck movements per annum or about 1 trip per hour during the working day.

There is a clear need for Laois County Council to make future provisions for the long-term supply of aggregates. The supply of local aggregates is essential to the sustainable development of communities. Local supplies reduce transport distances, thereby reducing their carbon footprint compared to non-local sources. By their nature, aggregate resources can only be worked where they occur. Aggregate products are generally of low unit value. The most significant cost is transportation and as a result most quarries typically operate within a c. 25 km to 50 km radius of their market (the upper limit typically relates to value added products such as asphalt and concrete).

The reserves at Spink Quarry are required to meet the demand being placed on the extractive industry to supply raw materials for continued social and economic growth and development within Laois — the second fastest growing county in Ireland, as well the wider Laois-Carlow-Kilkenny region.

The location of the proposed development, as shown on EIAR Figure 1-1, has the benefit of good access to the regional and national road network and is thus well positioned to meet future demand for aggregates.

Laois County 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 process of social and economic development, including the provision of housing, schools, factories and infrastructure.

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, and may give rise to land use and environmental issues. 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 landscape, if not appropriately designed and managed. It is essential that aggregates are sourced without significantly damaging the landscape, environment, groundwater and aquifer sources, road network, heritage and/or residential amenities of the area. Diminution of the visual amenity during and after the lifetime of the project is thus considered a major environmental impact that must be addressed during planning. However, aggregates are a necessary resource and are of great importance to the economy and society. Indeed, well managed and designed quarries minimise environmental impacts, and there is also the potential for habitat creation through the restoration of quarry sites following the cessation of operations.

In respect of Extractive Industries, it is the policy of the Council to:

- RUR8** 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 Directive and subsequent assessment as required, applicants for planning permission shall have regard to the GSI-ICF Quarrying Guidelines.
- RUR9** 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.
- RUR11** 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.

Party No. 1. Niall & Siobhán Headen

As stated above, the appeal was accompanied by a second appeal form that was completed by Niall & Siobhán Headen. Under the section titled Appeal Details in the Third Party Appeal Form, the appellants state that Laois County Council:

1. Failed to address our submission;
2. Failed to protect our home and second property;
3. Failed to protect the peregrine falcons in the quarry;
4. Failed to protect SAC.

It is clear from the above that the appeal details listed above relate solely to Headen's submission. In support of their appeal submission, the Headen's have enclosed a copy of their original submission to the Planning Authority dated 11/11/2021.

The appellants live in a residence located c. 425 m north of the quarry site (i.e., Property No. 1 in Figure 1), but also rent out a residential property located c. 200 m west of the site (i.e., Property No. 8 in Figure 1).

It should be noted that in response to the request for Further Information (Item 15) we were asked to address 7 no. third party submissions (including Mr. Headen's) received by the Planning Authority in relation to this proposal with particular reference to notification of blasts; meaningful engagement with respect to groundwater wells; integrity of overburden mounds; distance to residence in relation to the Headen's Property No. 1 (Refer to Figure 1 above); and clarification of extraction methodology including use of hydraulic rock breakers.

A comprehensive Response to Further Information (RFI) was prepared which addressed the above matters. It is considered that through the submission of a comprehensive planning application, including EIAR and Natura Impact Assessment, and RFI, which provided further information relating to the following, that the matters raised by the appellants have been addressed to the satisfaction of the Regulatory Authority.

The following matters were addressed through the Response to Further Information:

- Cumulative Effects
- Baseline Scenario Including Do-nothing effects
- Biodiversity including Peregrine Falcon Management Plan
- Land, Soil & Geology in relation to hydrocarbon contamination & GSI IGH programme
- Water including surface & Groundwater Monitoring programme, Emission Limit Values (ELV's), Water Management & Quarry Water Discharge
- Climate including impact of Greenhouse Gas Emissions
- Air Quality
- Noise & Vibration
- Roads & Traffic
- Mitigation
- Appropriate Assessment Screening Report
- Natura Impact Statement
- Use of Geological Survey of Ireland Datasets
- Inland Fisheries Ireland
- HSE - National Office for Environmental Health Services
- Third Party Submissions

The appellants state that the Planning Authority, in this case Laois County Council, have four distinct legal tasks when assessing such applications, namely: (1) must assess the merits of application in accordance with the Planning and Development Act 2000, as amended; (2) Planning Authority is required to form and record a view as to the environmental impacts of the development, considering the EIAR; (3) Planning Authority is the competent authority having responsibilities under the Habitats Directive, cannot have lacunae and must contain complete, precise and definitive findings and be capable of removing all reasonable scientific doubt as to the effects on the protected site; and (4) the development must be assessed for compliance with the requirements of the Water Framework Directive. Although these statements appear to be an admonishment of Laois County Council for not fulfilling these tasks, we would contend that, in this case, Laois County Council has fulfilled these tasks with a high level of scientific scrutiny and rigor, particularly with respect to Biodiversity and Water, as evidenced by the comprehensive FI process.

Niall & Siobhán Headen – 10 Point Submission on Planning File Ref. 21/700 Dated 11/11/2021

The appellants also provided a list of ten points in their original submission that they considered must be taken into consideration by the planning authority in reaching a determination. As stated above, we consider that Laois County Council have given due consideration to their submission through consideration of the planning application including EIAR and Natura Impact Assessment, and RFI, which provided further information relating to the matters raised by the appellants, and by the subsequent Notification of Decision to GRANT planning permission (P.A. Ref. 21/700), which is subject to 31 conditions. Consequently, our responses herein include some of the corresponding responses we provided as part of the RFI but with further comment as deemed necessary.

Point 1

Planning proposals that impact upon our enjoyment of our home, health or privacy may engage European Convention on Human Rights (ECHR). The impact on us and our home has reached a minimum level of severity. The intensity and duration of the proposed development, in such proximity to our home, may result in physical and mental health issues, and are very important factors for your consideration of the final planning decision. The Planning Authority must balance our rights with the rights of the developer, Articles 8 and article 1 of Protocol 1 of the ECHR require this.

Response

The appellant commenced construction of their residence (P.A. Ref. 05/103) at Clenagh in 2005, at a time when the quarry was in full operation. The quarry was a far more substantial operation at that time, than what is now proposed by Lagan. Consideration has been given to the appellants' properties and amenity through preparation of a comprehensive planning application including EIAR, NIS and RFI.

It is not reasonable to demand that these quarry lands and contained resources are subsequently sterilised from future quarrying. The Laois County Development Plan 2017-2023 recognises that aggregate extraction can only take place where suitable aggregate resources exist—they are a 'tied' resource and that planning policies should be carefully constructed to avoid adverse effects on aggregate resources, safeguarding these valuable resources for future extraction. Thus, the planning objective is to protect these lands and resources against conflicting land uses and not the reverse retroactively.

In respect of Extractive Industries, it is the policy of the Council to:

- RUR8** 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 Directive and subsequent assessment as required, applicants for planning permission shall have regard to the GSI-ICF Quarrying Guidelines.
- RUR9** 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.
- RUR11** 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 development will be controlled and regularised in accordance with the scheme as outlined in the EIAR, through continued environmental monitoring and by the planning conditions imposed by the competent authority.

Lagan Materials Ltd. have in place a group wide Environmental Management System (EMS), including Environmental Management Plan (EMP). A copy of the existing EMP for Spink Quarry is included as EIAR Appendix 10.

The applicant will establish an environmental monitoring programme for the quarry site, prior to recommencement. The programme will allow for on-going monitoring of environmental emissions (e.g., noise, dust, blasting, water) from the site, thereby assisting in ensuring compliance with requirements or regulations.

Various mitigation measures will be implemented to minimise any impacts as much as practical to ensure the operation of the quarry will not result in any significant impact on residences or local amenities.

Point 2

Working Hours: The applicant is seeking working hours from 7am to 18.00 (Monday-Friday) and 7am-14.00 (Saturday) with an earlier start for certain projects and trucks to leave the site at 7am. If the trucks were to leave the site at 7am, loaded with concrete or stone, what time would batching and loading commence? No transparency on working hours, it appears to be that the quarry will be open as industry requires for 29 years to include maintenance on Sundays. All these loading and batching operations throughout the night to include safety, PPE (i.e., lighting, reversing sirens), do not lend themselves to rural living.

Response

The issue of hours of operation has already been addressed in Point 6 under Party 2 above.

In accordance with Condition No. 6 of the Notification of Decision to Grant planning permission P.A. Ref. 21/700, the hours of operation are as follows:

6. *The hours of operation on site shall be 07.00 hours and 18.00 hours, Monday to Friday and between 07.00 hours and 14.00 hours on Saturdays.*

No activities or maintenance shall be permitted outside of the above stated hours or on Sundays, Bank or Public Holidays.

This is in line with the Planning and Development Guidelines for Quarrying and Ancillary Activities issued by the DoEHLG in 2004. This early start-up is required particularly when servicing large construction projects where the concrete pour must be completed in one operation.

There is no ambiguity with respect to the hours of operation as per Condition No. 6. No activities or maintenance shall be permitted outside of the above stated hours (including night working) or on Sundays, Bank or Public Holidays.

Lagan does not use reversing sirens and vehicles are fitted with other warning systems including CCTV and proximity sensors.

Point 3

There is a major concern that the applicant will obtain planning permission and in turn will offer the site for sale or lease as previously advertised in 2015. A scenario may arise where the new owner or tenant will not have an understanding of the EIAR or conditions of planning and proceed to blame the previous operator and LCC for not recording or enforcing conditions. There will be no accountability or taking responsibility of the issues arising. A new landlord/tenant may be able to contractually walk away from the site after discovering its unfeasibility due to water ingress, leaving the environment with two lake type bodies of stagnant quarry waters.

Response

Lagan are part of the Breedon Group and have policies in place with respect to Social Responsibility (Refer to EIAR Appendix 5). They have a history of acting in a responsible and ethical manner, and of being actively and positively present in the communities where they operate. Some of their Social Responsibility Policies are as follows:

- comply with applicable legislation and regulations;
- maintain a comprehensive code of business conduct incorporating the principles of internationally proclaimed human rights;
- establish a systematic dialogue process with stakeholders;
- seek to minimise the impact of our activities on, whilst maximising their benefit to, the environment, our colleagues and local communities;
- endeavour to integrate social responsibility considerations into our business decisions;
- seek to create employment opportunities within the communities that we work in;
- contribute to the social and economic development of the communities in which we operate through community engagement and employee volunteering;
- develop community engagement plans in all relevant locations, to help us understand and address local concerns and take responsibility for the potential impact of our activities;
- procure goods and services locally where appropriate and practicable;

- monitor issues material to our social performance, recognising ISO 26000 as reference document, and publicly report on performance to ensure continual improvement.

The planning permission is attached to the property/land and not the owner/operator and as such is enforceable by the Planning Authority against the owner/occupier of the lands. Nonetheless, Lagan are fully committed to complying with the requirements of both existing and any future planning permissions relating to the quarry.

Point 4

The applicant refers to the prominent, overburden mound, as screening the quarry views from the northwest. This mound of overburden was not authorised at previous planning grants. It is unauthorised and unenforced, and we have previously complained to LCC on numerous occasions through the years during stripping operations.

This material is loose and piled upon a rock hill. In an adverse weather event, it is possible that it could slide out on to the R430. Refer to Unauthorised Development files UD1657/UD1857/UD21S7 and Appendix 1 picture from our home.

During the applicants "Do Nothing Approach", we regularly cleaned the fly tipping rubbish from the entrance and the surrounding ditches. Only on pending expiration of planning 10/383, did the applicant clean up his property.

Response

As stated in the RFI Response (Section 15.3), the existing western overburden mound slopes are to be regraded from 1:1 to 1.5 and the height reduced by c. 4 m to mitigate visual impact on the landscape (Refer to EIAR Section 11 Landscape). The working scheme was prepared by a qualified mining engineer. In preparing the design, standard criteria were adopted with regard to face heights and slopes, standoffs to site boundaries, etc. (Refer to EIAR Section 3.3.1.2).

Excavations at the site will also be subject to the requirements of the Safety, Health and Welfare at Work (Quarries) Regulations. These regulations replace the existing provisions in the Mines and Quarries Act 1965, various regulations relating to quarries made under that Act, and the provisions of the Safety, Health and Welfare at Work (Extractive Industries) Regulations, 1997 (S.I. No. 467 of 1997), as it relates to quarries. The regulations are accompanied by a comprehensive set of guidelines outlining how the regulations should be implemented.

An appropriately qualified certified engineer or geotechnical professional will be appointed with respect to geotechnical requirements as required under the relevant Health and Safety Regulations.

In regards litter and fly dumping, the entrance gates will remain locked outside of normal working hours and public warning notices are posted at appropriate locations along the site boundary. A daily site inspection including site boundaries adjoining public roads will be carried out. Any litter observed will be removed as soon as possible and disposed of at a licenced Waste Management Facility. Waste oils, batteries, scrap metal, etc. will be removed from site for recycling by approved contractors. A licensed waste collection contractor will

remove any office/canteen waste requiring recovery/disposal to a licensed waste management facility.

Point 5

The applicant states in Alternatives that marine aggregates are currently being mined in the UK, but they are still seeking a 29-year planning permission for blasting and deepening on-site in Spink. Surely an international company the size of Lagan and Breedon will be involved in alternatives in the near future.

Response

As stated in EIAR Section 2.1.2, aggregates used in construction are generally won from hard rock quarries and sand and gravel pits. There are no reasonable alternatives in the near term to the current terrestrial sources of aggregates.

In the long term, the extraction of sand and gravel from marine sources may be implemented as terrestrial sources become depleted or increasingly in conflict in terms of land use and amenity and environmental protection. Today, marine aggregates are dredged from the seabed in the UK and elsewhere around the globe and are used largely in the production of concrete. Currently, no marine aggregate is being exploited in Ireland, although the extraction of marine aggregate from the Irish Sea has been studied (Sutton et al. 2008)⁶. The ICF (2017)⁷ stated that *"It is imperative, that in order to prepare for this likely shortage of reserves, the National Planning Framework commits to investigating further the potential of Ireland's marine aggregates resources and establishing the required regulatory provisions to permit commercial extraction of marine aggregates to address any future shortage in land based aggregates."*

In the absence of significant volumes of aggregates from marine and recycled/ secondary sources, terrestrial deposits, such as the sandstone/shale at Spink Quarry, will continue in the near term to be the main source of construction aggregates in Ireland.

Marine aggregates will not replace a high PSV aggregate used for producing a high quality surface dressing chip, as is the case at Spink Quarry. The nearest deep water ports to Spink are Dublin and Rosslare, c. 83 and 93 kms, respectively, and thus too distant to supply aggregate to Laois and surrounding counties, even if marine aggregates were being dredged in Irish waters.

⁶ Sutton, G., O'Mahony, C., McMahon, T., Ó'Cinnéide, M. & Nixon, E. (2008). Issues and Recommendations for the Development and Regulation of Marine Aggregate Extraction in the Irish Sea. Marine Environment & Health Series, No. 32.

⁷ ICF (2017). Submission on "Ireland 2040 – Our Plan – National Planning Framework – Issues and Choices". Irish Concrete Federation (ICF), Dublin, Ireland.

Point 6

The applicant states that there is only one Peregrine Falcon onsite, however we believe that there are two breeding pairs have set up home onsite during the applicants "Do Nothing Approach". There has been no proper bird survey carried out to protect these creatures.

Response

Lagan are familiar with operating a number of quarries with breeding Peregrine Falcons and implementing measures to avoid their disturbance. Site data from a fully operational rock quarry undertaking regular blasting that is operated by Lagan has shown that nesting peregrines there have successfully raised and fledged a chick in 2021.

As stated in the RFI Response (Item 2.3), a separate confidential habitat map showing the location of the Peregrine Falcon's nest and Sand Martin colony were prepared and submitted to the Local Authority. The assessment of impacts on Peregrine Falcons under the FI process did not change from that in the submitted EIAR. Ger O'Donohue of the Moore Group undertook a bird survey on-site and this is contained in EIAR Section 5.4.2 – Fauna. A single Peregrine Falcon (*Falco Peregrinus*) was recorded nesting on the cliff face of the southwestern area of the site. The falcon will not be affected by the proposed development. There will be no habitat loss and the potential indirect impacts are outlined in the Peregrine Falcon Conservation Management Plan (Refer to RFI Response Appendix 2.3.2).

This Plan sets out the measures to ensure that breeding Peregrine Falcons at Spink Quarry are not significantly impacted by the proposed development. Given the known presence of a nesting falcon within the site, the following measures have been incorporated into the proposed development of the quarry in order to avoid and minimise any potential for impact on the species:

1. Avoid the loss of the known Peregrine Falcon habitat at the western end of the quarry.
2. Incorporation of a minimum protective buffer of 125 m between the known nest site and any blast sites during the breeding season.
3. Monitoring will be undertaken during the initial recommencement of the works: years 1, 2 and 5.

Taking the above information into consideration and having regard to the precautionary principle, it is considered that the continued operation of the quarry will not result in any significant loss of Peregrine Falcon nesting features within the site. The continued operation will not result in a significant impact on the ecology of Peregrine Falcons in the local or county context.

Provided the quarry operations are managed in accordance with the measures described in this Plan, there is no potential for significant effects on Peregrine Falcon(s) at Spink Quarry.

The quarry operators will maintain a record of the progress of this Plan and the monitoring and reporting of same will be made available for inspection by Laois County Council.

In accordance with Condition No. 21 of the Notification of Decision to Grant planning permission P.A. Ref. 21/700, the restriction on blasting during nesting season is as follows:

21. *"No blasting shall occur adjacent to nesting sites during the nesting season of the Peregrine Falcon adjacent to the nest site".*

Point 7

The applicant states that extraction methods will not change. During the last quarrying operations, after blasting, two diggers with rock breaking hammer heads, would continuously hammer the boulders to reduce the size to fit into the crusher. There is no mention of this operation in this application. The repetitive noise from this caused unacceptable noise nuisance with relation to the close proximity to our home, and unrentable as it is only 211 meters from the boundary of the aforementioned quarry.

Response

As stated in the RFI Response (Item 15.5), blast design takes into consideration blast optimisation to ensure fragmentation to a size that reduces/alleviates the requirement for secondary breakage (including hydraulic rock breakers) and to produce block sizes that can be handled by the excavator and primary crusher (Refer to EIAR Section 3.3.3.5). It is not considered economically viable for the operator to be carrying out secondary breakage which would result in downtime and a loss of production. As such, the use of a rock breaker is considered an exceptional operation and if the need arises can be limited to the hours of 10 am to 4 pm Monday to Friday, and/or subject to agreement with Laois County Council.

Such activity, where required, is expected to be brief. Reducing noise at source wherever possible is the most effective way of minimising the impact but barriers and screens between noise source and receptor can also be used to very good effect. Mitigation measures are identified where necessary to eliminate or minimise adverse impacts. In addition to the mitigation measures proposed in EIAR Section 10.6, the following additional mitigation measures will be adopted to reduce the impact of noise associated with secondary breakage.

- Construction of temporary berms and/or quarry stockpiles close to the activity to aid noise attenuation.
- Consideration has been given to phasing and direction of working through preparation of the working scheme.
- Secondary breakage will be carried out at the lowest point in the quarry in the active extraction area being screened by the intervening quarry face and topography, which will also act as a noise attenuation barrier.

In accordance with Condition No. 11(c) of the Notification of Decision to Grant planning permission P.A. Ref. 21/700:

- 11(c). *"Prior to commencement of development, the applicant shall submit written confirmation to the Planning Authority that the rock breaker will not exceed the noise levels generated by Crushing and Screening Plant".*

Point 8

Blasting: We are very concerned about blasting operations as both our properties sit on the same rock and both properties are less than 500 meters from the blast site. Eircode R32 D2CS, this property is rented 211 meters from quarry. The issues arising are water discolouring after blasting lasting for 4-5 days, contaminating drinking water and heating system. Cracks from the last blasting operation in a tiled floor. Also due to the nature of both houses being home to front line workers to include shift work (night duty and weekends), sleep deprivation could arise from the very nature of the works being carried out by day, i.e., blasting rocks. Potential loss of tenants, thus loss of property value and income. Our home residence, R32 R2C9, has its water supplied by a private bore holed well and is only 438 meters from the quarry. See pictures in Appendix 2, 3 and 4.

Response

The issue of blasting has already been addressed in Point 3 under Party 2 above.

Laois County Council specified that blasting be carried out in accordance with Condition No. 12 of the Notification of Decision to Grant planning permission P.A. Ref. 21/700, and thus be compliant with EPA Guidance.

As stated above, the blast management practice at Spink Quarry will include several mitigation measures, such as: (1) best professional practice in the design and execution of blasting; (2) only certified Shotfirers are used to conduct blasting; (3) millisecond time delays are used in sequential detonation of the explosives to limit the maximum instantaneous charge; and (4) explosive charges are properly confined by a sufficient quantity of quality stemming material. It is considered that the proposed development can be operated within the accepted vibration thresholds.

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 nearest susceptible residences (Refer to EIAR Appendix 11).

As part of the FI process, the applicants were asked to consider a system of blast notifications at the Spink Picnic Area. They were also asked to hold consultations with residents to tailor the approach to blast notifications for the more sensitive receptors (Refer to copy of RFI Response submitted on 24/05/22). Consequently, representatives from Lagan Materials undertook consultations with a number of the sensitive receptors adjacent to the site on 22nd April 2022 and 25th April 2022.

As a result of these consultations, the blast notification process for these sensitive receptors will be altered to the following:

- A leaflet drop will be undertaken 1 week prior to blasting to inform the resident of the intention to blast;
- On the morning of the blast, the resident will be called via telephone to inform them of the time at which blasting is intended to occur;
- If any changes to this intended blasting time are required, the resident will be notified via telephone before the blast is due to take place; and
- A text message will be sent approximately 30 minutes before blasting.

These changes will be incorporated into the proposed Blast Notification Procedure & Blast Monitoring Programme to be adopted at Spink Quarry (Refer to EIAR Appendix 11), subject to agreement with Laois County Council.

The Blast Notification Procedure can be altered on request should any additional changes be required, subject to agreement of Laois County Council.

The appellants live in a residence at Clenagh at Eircode R32 R2C9, c. 425 m north of the quarry site (i.e., Property No. 1 in Figure 1), but also rent out a residential property at Eircode R32 D2CS, c. 200 m west of the site (i.e., Property No. 8 in Figure 1).

The standoffs to the future extraction area in the western quarry area, as opposed to the quarry boundary, are c. 300 and 600m, respectively, to properties Nos. 8 and 1.

While the mitigation measures and procedures above are considered comprehensive and sufficient, we would also point out that development of the western quarry area involves deepening of the quarry below the surrounding ground levels and the direction of blasting will be away from both of the Headen's properties.

Blast monitoring will be carried out at agreed residences within the area. Ground vibration and air overpressure measurements will be undertaken taken at the nearest susceptible residences in the area. The results obtained will be used to ensure compliance with any planning condition requirements. Consequently, it is considered that the proposed development can be operated within the accepted noise and vibration thresholds.

The appellants have also raised concerns with respect to structural damage due to blasting. Details have been provided above (Refer to Point 3 under Party 2 above) with respect to research undertaken by the US Bureau of Mines (USBM), which show that the blast vibration and air overpressure limits to be imposed as per Condition No. 12 of the Notification of Decision to Grant planning permission P.A. Ref. 21/700, are set well below levels likely to give rise to structural damage. As detailed previously, many domestic properties will exhibit cracks that may be wrongly attributed to blasting activities.

The appellants properties can also be included in the blast monitoring programme for the quarry to demonstrate that the levels of blast vibration are well within the accepted thresholds for blast vibration.

The issue of water and third party private wells has already been addressed in Point 4 under Party 2 above. The Water Chapter of the EIAR, which accompanied the planning application, was completed collaboratively between Dr. Bartley Hydro-G and Dr. Colin O'Reilly of Envirologic. Dr. Bartley and Dr. O'Reilly were also responsible for the preparation of responses to all water related questions as part of the Response to Further Information (RFI) for the proposed development. The potential radius of influence upon completion of works is illustrated in EIAR Figure 7.12 and does not extend beyond the western quarry boundary in the direction of the appellant's residence (Property No. 9 on Figure 1). There are no active groundwater receptors that may be at risk of impact from groundwater drawdown within that 350 m radius of the centre of the sump. No potential for drawdown nor potential for impact on local wells is predicted.

Point 9

The applicant states that there is a 50-meter buffer from the R430, the current wheel wash and weighbridge system onsite were not built-in accordance with the initial planning granted. They sit unauthorised less than 20 meters from the R430, therefore not in line with the application (See Appendix 5).

Response

As stated in EIAR Section 3.3.3.6 – Extraction Design & Phasing, in respect of protecting the river systems to the east of the site (Aughatubbrid stream and rising - Refer to RFI Habitat Map RFI Figure 2.1), the proposed quarry design makes provision for a 50 m buffer zone set back from the boundary with the R430 Regional Road. There will be no quarrying and no construction activity in this area. Thus, this buffer zone relates to the area to the east of the existing site entrance and not to already existing site infrastructure to the west of the entrance.

Point 10

The applicant states in the planning pack that the site has never flooded. The open pit is flooded since attempts to quarry failed due to the volume of water entering the pit daily. During the hot, summer months, it is a mecca for parties and diving/swimming. We have raised these concerns since 2012 with LCC and local elected representatives (Refer to UD 1657, UD1857 and UD2157). There is no calculation of the volume of water in the flooded quarry. There is depth for sump 2 as is onsite. As the applicant states in the application, LCC have no records (i.e., didn't record) of water habits onsite at last quarrying attempt. At the preplanning meeting, LCC should have been able to state that the previous operator had difficulty in managing the water onsite. Due to failures in recording water flow and water sampling, LCC have agreed that none of this information has been retained as instructed by An Bord Pleanála (Reference 11.130640 Bord Direction and Inspectors Report). By failing to record this, the hydrologist did not have the facts necessary to carry out a correct assessment for the site.

The applicant also states that the Owenbeg River is 1.04 km from the site, however we would like to dispute this, in fact its less than 500 metres (See Appendix 6).

The applicant states that they don't know the size of the road culvert on the R430, but they plan to pump sump 2 into it at a maximum of 1450 m³ daily at a rough estimate (See Appendix 7). The plan is to create another sump which will only double the problem, going forward and leave at least double the amount of water to be managed in the years to come.

Under condition 20 of planning 10/383, water plants were unauthorised to grow to protect local species and biodiversity in streams and rivers (See Appendix 8, 9 and 10). The Nore Pearl Mussel does not tolerate acidic conditions that can be found in stagnant pools in sandstone quarries. This requires the local the local authority to give the critically endangered species as much protection as humanly possible within its catchment area (See Appendix 11).

Response

The planning application for the proposed quarry development was accompanied by a comprehensive Water Chapter as part of the EIAR, and the extensive clarifications submitted as part of the FI process, which provided a robust quantification of the hydrological and hydrogeological setting at Spink.

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

The quarry did not fail "due to the volume of water entering the pit daily" but became inactive due to the Global Financial Crisis in 2008 and the accompanying sustained collapse of the construction industry in Ireland.

The applicant readily acknowledges that the Owenbeg River is within 500 m. However, the reference to a distance of 1.04 km referred to the River Barrow And River Nore SAC and not the mainstream of the Owenbeg River nor its 1st order tributaries and wet ditches (See page 7 of RFI Response).

The appellant mistakenly states that the "plan is to create another sump which will only double the problem, going forward and leave at least double the amount of water to be managed". It is proposed that 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 with respect to sump capacity was provided in RFI Response Section 4.7 and 13.2.

Condition No. 20 of P.A. Ref. 10/383 states "*The applicant shall ensure that no water plants are introduced to the flooded quarry when operations have ceased as part of the reinstatement plan for the site as recommended in the Natura Impact Assessment received by the Planning Authority on the 14th of February, 2011*". The reason stated by the Council for this statement is "*To prevent the introduction of alien species which may impact upon the integrity of the nearby River Barrow & River Nore cSAC*". No water plants have been introduced to the quarry sump.

In response to a submission by the Inland Fisheries Ireland (IFI) (Refer to RFI Response Section 13.4), we stated that "*normally only consider inclusion of Invasive Species Management Plans in relation to sites where inert soil and stone is being imported to sites for restoration purposes. It is not considered standard practice with respect to construction aggregate quarries. However, our client is willing to appoint an Invasive Species Management specialist to carryout regular site surveys on an annual basis, or at an advised frequency*".

A full and comprehensive ecological assessment of the local watercourses, including the watercourse to which the waters from the proposed operations will be discharged, has been prepared by Ger Morgan, Manager, Aquatic Services Unit, Environmental Research Institute (UCC) (Refer to RFI Response Appendix 2.2). The report concluded that all of 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 Raised by Niall Headen

It is noted that there are a number of other disjointed points raised by Niall Headen in the appendices accompanying his submission. For ease of reference, we have summarised these comments and responses as follows:

- Mr Headen claims that there will be an impact on SAC as they have not proven otherwise as queried by Fisheries Ireland even after further information submitted. They have insufficient information in the groundwater proposal.

Response

The Inland Fisheries Ireland's query was resolved during the FI process. It should be noted that the EPA clarified for the IFI that the approach taken by the hydrogeologists with respect to determination of the Emission Limit Values (ELVs) was in accordance with the Department of Environment 'Guidance, Procedures and Training on the Licensing of Discharges to Surface Waters and to Sewer for Local Authorities' (DoEHLG 2011)⁸. The planning application for the proposed quarry development was accompanied by a comprehensive Water Chapter as part of the EIAR, and extensive clarifications submitted as part of the FI process, which provided a robust quantification of the hydrological and hydrogeological setting at Spink and prediction of any potential impacts with respect to water discharges on the downstream SAC. As the IFI have indicated in their letter to the Laois County Council of 9th June 2020, 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.

- Totally inadequate protection of nesting birds.

Response

Refer to Response to Point 6 under Party No.1 above. A Peregrine Falcon Conservation Management Plan was provided as part of the RFI Response. This report was prepared by G. O'Donoghue, principal ecologist at the Moore Group, with 27 years of experience in ecological impact assessment.

- There will be no respite from noise and dust vibrations. We work our five days and will not be permitted to relax on a Saturday morning with quarry operations at 7:00 AM on a Saturday morning for a possible 29 years.

Response

The issue of hours of operation has already been addressed in Point 6 under Party No. 2 above. Refer also to Point 2 under Party No. 2 above with respect to noise and dust impact assessment.

The appellants live in a residence c. 425 m north of the site, which would be considered a significant and acceptable standoff distance from this type of development. Noise prediction modelling shows that the quarry development can continue to operate within

⁸ DoEHLG (2011). Application for a licence to discharge to surface waters: Guidance to applicant. Water Services Training Group, Department of Environment, Heritage & Local Government (DoEHLG), Dublin, Ireland.

accepted thresholds. Noise arising from the quarry operations can be kept to acceptable levels by the implementation of good design, effective operation and management and by the implementation of measures that are deemed to be best practice.

As stated in Section 9.2.2 of the EIAR, both the DoEHLG (2004) and EPA (2006) recommended that the above TA Luft dust deposition limit value be adopted at site boundaries associated with quarry developments.

The applicant has established an environmental monitoring programme for the quarry site. The programme allows for on-going monitoring of environmental emissions from the site, including noise and dust, thereby assisting in ensuring compliance with requirements or regulations.

- Reduction in height of overburden not taken into account on RFI noise propagation on NSL 2 and NSL 1.

As stated in the RFI Response (Section 15.3), the existing western overburden mound slopes are to be regraded from 1:1 to 1.5 and the height reduced by c. 4 m to mitigate visual impact on the landscape (Refer to EIAR Landscape Section 11). This will reduce the height of the screening berm to c. 238 m AOD, which is in keeping with the ridgeline forming the western boundary of the site. It should be noted that the properties at the Noise Sensitive Locations NSL1 and NSL2 are well below this level (i.e., 200 m AOD and 210 m AOD, respectively) and afforded substantial protection from the whole of the natural hillside between the quarry lands and these properties, and as such, the reduction in height will not have an appreciable effect on noise propagation.

- Comments on conditions of notification to grant planning permission reference 21/700
 - Condition No. 6 – Niall Headen asks “Where is our respite from noise dust vibration” with respect to commencement of operations from 07:00. Refer to Response to Point 6 under Party No. 2 above relating to justification for operating hours, which are in line with the Planning and Development Guidelines for Quarrying and Ancillary Activities issued by the DoEHLG in 2004.
 - Condition No. 7(b) states that “only clean, uncontaminated surface water shall be discharged to adequately sized soak pit(s) or surface water system. Contaminated surface water arising on site shall be contained inside and shall not be allowed to discharge to any open drain or watercourse”.

In response to Niall Headen’s Comment “See letter from Fisheries Ireland” we would refer the Board to our response to above in relation to the fact that the IFI, in their letter to Laois County Council of 9th June 2020, have indicated that 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.

- Condition No. 10(a) states that “the total dust emission arising from the on-site operations associated with the proposed development shall not exceed **350** milligrams per square metre per day, averaged over a continuous period of 30 days, when measured as deposition of soluble and insoluble particulate matter at any position along the boundary of the site”.

Niall Headen has queried "Why is there an increase in dust emissions from the site". Refer to Response to Point 2 under Party No. 2 above. As stated in Section 9.2.2 of the EIAR, both the DoEHLG (2004) and EPA (2006), recommended that the above TA Luft dust deposition limit value be adopted at site boundaries associated with quarry developments. This limit is in accordance with Condition No. 6 of the existing planning permission (P.A. Ref. 10/383) for the quarry development.

- Condition No. 10(c) states that "All vehicles associated with the haulage of aggregates and other materials to **and from** the site shall be enclosed or securely sheeted to prevent dust emissions.

Niall Headen has queried why the above condition did not also include haulage from the site. Our client is amenable to the rewording of the condition (proposed text in red) to address this matter, as detailed above.

- Condition No. 11(a) states that "the noise levels attributable to all on-site operations associated with the proposed development shall be in accordance with those specified in the EIA received on 12/10/21 and 24/05/22 between 07:00 hours and 19:00 hours Monday to Friday inclusive (excluding bank holidays), and between 07:00 hours and 14:00 hours on Saturdays, when measured outside any noise sensitive location house in the vicinity of the site. Sound levels shall not exceed 45 dB(A) (Leq) at any other time".

Niall Headen has queried why the noise limit is "after 18:00 hours" and from 07:00 on Saturday Mornings. Refer to Response to Point 6 under Party No. 2 above relating to justification for operating hours i.e., Condition No. 6 states that "the hours of operation on site shall be 07:00 hours and **18:00 hours**, Monday to Friday and between 07:00 hours and 14:00 hours on Saturdays", which are in line with the Planning and Development Guidelines for Quarrying and Ancillary Activities issued by the DoEHLG in 2004. The reference to 19:00 hours is taken to be related to the EPA Recommended General Noise Limit Criteria (i.e., Scheduled Activities (NG4) (EPA, 2016)), in which the Daytime Noise Criterion are 55 dB L_{Ar,T} (07:00 to 19:00 hrs). Refer to EIAR Section 10.2.3.1 with respect to Noise Emission Limit Values.

- Condition No. 11(b) states that Noise Assessment shall be carried out on the site by a competent **independent** noise consultant.

Niall Headen has queried why the above condition did not state that an "Independent" noise consultant is to be appointed to carry-out the noise assessments. An independent consultant provides clients with expert advice in the sphere in which they have expertise. Our client is amenable to the rewording of the condition (proposed text in red) to address this matter, as detailed above.

- Condition No. 11(c) states that "Prior to commencement of development the applicant shall submit written confirmation to the Planning Authority that the rock breaker will not exceed the noise levels generated by crushing and screening plant."

Niall Headen makes reference to the rock breaker "not to exceed 43 dB". It is not clear what this refers to. The Noise propagation modeling undertaken by Enfonics (Refer to RFI Appendix 7.1) was based on using an overall rating of

111 dBA for the crushing and screening plant at source. As such, it is considered that this is the noise level that must be achieved at source whether rock breaking and/or crushing and screening is taking place.

As stated in response to Point 7 under Party 1 (Niall & Siobhán Headen) above, the following additional mitigation measures will be adopted to reduce the impact of noise associated with secondary breakage.

- Construction of temporary berms and/or quarry stockpiles close to the activity to aid noise attenuation.
- Consideration has been given to phasing and direction of working through preparation of the working scheme.
- Secondary breakage will be carried out at the lowest point in the quarry in the active extraction area being screened by the intervening quarry face and topography, which will also act as a noise attenuation barrier.

We would also point out that the operator must still comply with the Condition No. 11(a). Refer also to response above in relation to EPA Recommended General Noise Limit Criteria (i.e., Scheduled Activities (NG4) (EPA, 2016)), in which the 55 dB L_{Ar,T} (07:00 to 19:00 hrs) and EIAR Section 10.2.3.1 with respect to Noise Emission Limit Values.

- Condition No. 12(c) states that “No blast will give rise to an air overpressure level at the nearest noise sensitive receptor that exceeds 125dB (Lin) maximum peak”.

Niall Headen makes reference to the above condition, queries the above limit of **125dB (Lin)** and considers that it should “*not to exceed 45 dB*”. It seems that the appellant is mistakenly referring to the limit specified in Condition No. 11(a), which specifies a limit of **45 dB(A) (Leq)** outside of the hours of operation. These parameters are not the same. As detailed in response to Point 3 under Party No. 2 above, Condition No. 12(c) states that 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 Licensing – Guidance Notes for Noise in Relation to Scheduled Activities’. This guidance states that “Blasting should not give rise to air overpressure values at sensitive locations which are in excess of 125 dB (Lin) max peak”. Routine blasting operations can generate air overpressure levels at the closest property of around 120 dB. The pressure equivalent of 120 dB will be generated by a constant wind velocity of just 5 m/s (Beaufort force 3, gentle breeze), whilst an air overpressure of 130 dB is equivalent to a wind velocity of less than 8 m/s (Beaufort force 4, moderate breeze). Such magnitudes will be perceived by individuals although they are entirely safe.

Airblast is properly measured and described as a linear peak air overpressure (i.e., an increase above atmospheric pressure). Modern blast-monitoring equipment is capable of measuring peak overpressure in terms of unweighted decibels (dB). Decibels, as used to describe airblast, should not be confused with or compared to dB(A), which are commonly used to describe relatively steady-state noise levels, as is the case for environmental noise monitoring.

- Condition No. 14(e) states that “Details of safety measures for the land above the quarry, to include warning signs and **stock proof** fencing”.

The appellant makes reference to previous complaints and enforcement file U.D. 16/57. Lagan addressed matters relating to non-compliance with Condition No. 10(d) of Planning Permission P.A. Ref. 10/383 in their submission to Laois County Council of 19/07/16 as follows:

“Stock proof fencing is currently provided around the perimeter of the property and the good quality security gates provided at the site entrance, which is locked at all times. However, we know that the security fencing in the new facility off the site entrance requires improvement. To remedy this, we propose to erect new fencing on either side of the site entrance in the coming weeks. We will notify the County Council when such works are completed”.

Lagan subsequently informed the Council in a letter dated 29/07/16 that the proposed works to secure the site were to be completed and that a further site inspection would be carried out to verify that the site has been secured satisfactorily. It is clear from a more recent site visit that these works were completed.

Plate 1 Section of Security Fencing along Boundary with Regional Road R430 (01/06/21)



As stated in EIAR Section 3.3.3.12 Site Security & Safety:

Warning signs are / will be displayed at appropriate intervals along the property and excavation boundary. The existing boundaries around the site perimeter will be maintained and, if necessary, reinforced. The boundaries will be maintained in accordance with the operator's obligations under various health and safety legislation. The access gate will be kept padlocked outside of the normal working hours. Traffic warning signs are to be installed on the approaches along the R430 to the quarry.

The following barrier system has/will be put in place in the interest of public safety and to prevent public access to the quarry.

The barrier system will be as follows:

- The existing landscaped and planted embankment along the R430 Regional Road forms a substantial physical barrier to access to the quarry. It also provides additional screening from outside views;
- The perimeter of the entire working area will be secured in accordance with the requirements of the Safety, Health and Welfare at Work (Quarries) Regulations. All necessary warning signs will be displayed at visible locations along the boundary at appropriate intervals;
- Two rows of boulders of c. 1 m diameter will be placed at the limit of extraction to form a further permanent hurdle;
- The top of the existing face is largely protected by native barrier species such as hawthorn and gorse and this planting will be maintained and reinforced as necessary;
- The existing hedgerows on the site perimeter will be retained, and if necessary, reinforced for the duration of the workings. Any gaps in the existing boundary that would provide uncontrolled access to the proposed quarry will be blocked by a suitable means and reinforced with further planting as necessary and / or fenced; and
- In order to prevent unauthorised vehicular access, the site entrance has a lockable steel gate which will remain closed and locked outside normal working hours (Refer to Section 3.3.3.2 above).

This barrier system is designed to be a permanent, maintenance-free barricade to man and farm animals. Together the berms, existing trees, hedgerows, and all other natural growth will develop into a permanent, dense, and impenetrable barrier. The above measures are considered sufficient to prevent accidental access to the quarry working.

- Condition No. 21. – States that “No blasting shall occur adjacent to nesting sites during the nesting season of the Peregrine Falcon adjacent to the nest site”.

The appellant has questioned when is the nesting season.

The majority of birds tend to nest for the purpose of laying eggs and raising their young. This typically occurs between the beginning of March and the end of August in what is referred to as bird nesting season. Section 40 of the Wildlife Act 1976, as amended by Section 46 of the Wildlife (Amendment) Act 2000, actually specifies the nesting and breeding season for birds and wildlife as being from 1 March to 31 August.

- Condition No. 24 states that “Prior to the commencement of development, the developer shall submit a drawing showing new advance warning signs and line markings on the R430 for the Quarry Entrance to the Planning Authority for written approval”

The appellant makes reference to the fact that there is only one entrance/exit and that this does not support an emergency plan.

As stated in EIAR Section 14.4.2, *“The existing quarry access road forms a 90° angle at grade connection with the R430. The access road has an initial gradient of 0.5% from the regional road. The access road surface is composed*

of wearing course macadam. The **access road is 9 m wide** with 2 m high palisade double gateway. There is a steel box beam single swing barrier 3 m the roadside of the gateway. There is a dwell area of 25 m from the regional road edge to the gateway”.

As such, the entrance gate is of substantial width and more than sufficient to accommodate two way HGV traffic including emergency service appliances.

- Condition No. 28 states that “the entrance for material going to and from the quarry shall be kept to the regional and national secondary road network as described in EIAR report. Short cuts using the local road network shall be prohibited. The local road network should only be used if there is not an alternative route via a regional road or national secondary”.

The appellant makes a similar point with respect to the fact that there is only one entrance/exit and that this does not support an emergency plan.

The purpose of this condition is to restrict HGV traffic to the regional and national secondary road network. The quarry has the benefit of direct access onto the R430 Region Road. As stated in EIAR Section 14.6.2, “*The generated volume split of the proposed development traffic at the R430/N77/N78 junctions is anticipated to be 70% westwards and 30% eastwards along the R430. At the N77 in Abbeyleix, it is anticipated the proposed development traffic will move 90% northwards and 10% southwards along the N77. At the N78 at Newtown Cross, it is anticipated the proposed development traffic will move 30% northwards and 30% southwards along the N78 and 40% eastwards along the R430 towards Carlow. While these percentages may vary slightly in the future, they will not change to such a significant extent as to adversely affect the traffic distribution*”. As stated in Condition No. 28, “*the local road network should only be used if there is not an alternative route via a regional road or national secondary.*”

- Condition No. 31 states that “prior to commencement of development, the operator shall lodge with the Planning Authority a cash deposit or a bond of an insurance company of same value, in relation to the restoration and making safe of the site as required in connection with the development”

The appellant made a comment that “€100,000 will not restore any quarry in 2022 let alone 30 years’ time”.

As stated in EIAR Section 3.4:

“The development will be worked in a **phased manner** to ensure full implementation of the mitigation and restoration measures proposed”.

“Site restoration allows vegetation to become established during the course of the development, thereby reducing the overall impact of the development (i.e., visual impact, dust impact, flora and fauna impact, etc.). It also has the added benefit to the operator of **spreading out the cost of restoration over the life of the development**”.

“**progressive restoration** of the upper back southern face and a favourable direction of working to further reduce the visual impact of the development on the surroundings (Refer to Figures 3.1 to 3.3). This will ensure that the upper

back face is restored at the **earliest opportunity**, that the working face is not open to view, and that as the quarry pushes eastwards only the restored upper face will be revealed as quarrying progresses to the limit of extraction".

The main aim of the restoration is to minimise the impact of quarrying on the existing landscape of the area, **both now and into the future**. As discussed in previous sections, restoration of the existing and proposed site will be carried out in a **progressive manner over the life of the operation** (Refer to Section 3.4. above).

As stated in EIAR Section 3.4.6, the €100,000 bond is already in place in compliance with Condition No. 19 of planning permission P.A. Ref. 10/383. Given Lagan's record in respect of quarry restoration and its proactive approach to protection of the environment, it is considered sufficient to ensure the company completes the restoration works under the terms of any future planning permission.

- The appellant makes a comment on the acknowledgement of receipt of submission of observation on a planning application submitted with the appeal submission that *"they had a flyrock incident sending rock 270 metres, our house is 211 metres"*.

As stated in Point 3 under Party 2 above, *"there have been no fly rock incidents with respect to any Lagan quarry within the jurisdiction of Ireland"*.

As stated in response to Point 8 under Party No. 1 (Niall & Siobhán Headen), above, *"the standoffs to the future extraction area in the western quarry area as opposed to the quarry boundary are c. 300m and 600m, respectively, to properties Nos. 8 and 1"*.

While the mitigation measures and procedures proposed are considered comprehensive and sufficient, we would also point out that development of the western quarry area involves deepening of the quarry below the surrounding ground levels and the direction of blasting will be away from both of the Headen's properties.

Blast monitoring will be carried out at agreed residences within the area. Ground vibration and air overpressure measurements will be undertaken taken at the nearest susceptible residences in the area. The results obtained will be used to ensure compliance with any planning condition requirements. Consequently, it is considered that the proposed development can be operated within the accepted noise and vibration thresholds.

- The appellant also includes a copy of a submission received by Laois Council on 02/08/2022 in respect of response to Significant Further Information from Niall Headen.

The points raised in that submission have been addressed through our response to the third party appeal submission above. Only Point No. 1 of the submission has not been directly addressed through our responses above and is dealt with here as follows:

- **Point 1**

The appellant makes the comment *"We cannot find any reference to the construction of Laois/Kilkenny reinforcement project by Eirgrid or the Pinewood windfarm, both major projects within 5 km of the quarry. The accumulative risk of these large industrial projects in a small rural area must be considered"*.

A cumulative impact assessment that takes account of all significant projects within 5 km of the site and the entirety of both catchments in which the site is situated has been undertaken as part of the Response to Further Information. A summary of these projects, together with an assessment with respect to cumulative impacts, has been provided in RFI Appendix 1.2. The projects identified include extractive and industrial activities, residential, commercial, agricultural, and other developments.

Therefore, on behalf of Lagan Materials Ltd., we request that An Bord Pleanála dismiss the Third Party Appeal and uphold and affirm the Notification of GRANT of planning permission with the exception of Condition 5(a), which should be revised as per our First Party Appeal.

Agent Acting on behalf of Lagan Materials Ltd.

John Sheils MSCSI MRICS



J Sheils Planning & Environmental Ltd.