



An
Bord
Pleanála

Inspector's Report ABP304690-19

Development	10 hectare Extension to Quarry.
Location	Ballycar, Ardnacrusha, County Clare.
Planning Authority	Clare County Council.
Planning Authority Reg. Ref.	P18/818.
Applicant	Bobby O'Connell and Sons Limited.
Type of Application	Permission.
Planning Authority Decision	Grant.
Type of Appeal	Third Party -v- Grant.
Appellant	Liam Moloney.
Observers	None.
Date of Site Inspection	7 th August, 2019.
Inspector	Paul Caprani.

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1.0 Introduction

ABP304690-19 relates to a third-party appeal against the decision of Clare County Council to issue notification to grant planning permission for a 10 hectare extension to an existing quarry in the townland of Ballycar, Ardnacrusha, County Clare. The third-party appeal argues that the proposed development will give rise to unacceptable volumes of traffic on a substandard road which is unsuitable for HGV vehicles. Concerns are also expressed in relation to noise levels and potential structural impacts on the appellant's dwellinghouse. It is also argued that the proposed development results in a significant adverse impact on biodiversity, water quality and archaeology in the area. It is also contended that the operator breaches the restriction placed on operating hours. The proposed quarry extension is located in the townland of Ballygar in County Clare approximately 7 kilometres north of Limerick City. The application was accompanied by an EIAR (and a revised EIAR on foot of an additional information request).

2.0 Site Location and Description

- 2.1. The existing quarry occupies an area of approximately 16.9 hectares and is located on the southern slope of Ballycar Hill. The existing quarry comprises of an extraction area together with crushing, screening and manufacturing of materials (greywack limestone) on site. The facility also accommodates a concrete batching plant and associated ancillary facilities. The existing working quarry consists of a weighbridge, wheelwash, office buildings, maintenance workshop together with a concrete batching plant, storage buildings, stockpiling areas and haul roads. The main processing area and administration and staff buildings is located close to the entrance on the south-eastern side of the site. The main working area of the quarry where extraction is taking place is concentrated on the western end of the site progressing into Ballycar Hill. A number of settlement lagoons are located within the northern part quarry floor. These lagoons collect surface water within the quarry where settlement takes place before being discharged to a local stream which runs along the northern boundary of the site. The water management system is the

subject of a separate discharge licence. According to the information contained in the EIAR the extraction area has not breached the water table. Furthermore, the greywack limestone being extracted from the site is highly impermeable resulting in no groundwater egress through the quarry faces.

- 2.2. The progressive extraction within the quarry in a westerly direction into Ballycar Hill has resulted in a quarry face in excess of 60 metres in height within the western portion of the existing quarry. Ground levels within the existing quarry range between 150 and 180 metres AOD.
- 2.3. Material is currently extracted by blasting methods. The blasting material is loaded into dump trucks and transported to the manufacturing area within the existing quarry via a series internal haul roads. Material is unloaded directly onto the main crusher where material is crushed and subsequently screened. The material is then processed into a range of aggregates which is generally used for construction fill, high PSV chippings (polished stone value) which is extensively used in road construction and maintenance and aggregate and for use in concrete products. The aggregate is then transported off site to destination markets.
- 2.4. The quarry is served by a single roadway, a local road the (L7062) which runs southwards from the site linking up with the Regional Route R464 approximately 5 kilometres to the south. The 80 kmph speed limit applies along this section of the road. The R464 links the villages of Ardnacrusha and Parteen with the city of Limerick to the south. Ardnacrusha is located approximately 4 kilometres to the south-east of the subject site. The L7602 is generally between 4.5 and 6.1 meters in width and is capable of accommodating heavy vehicular traffic along its alignment from the quarry to the R464. There are a number of acute bends on the road to the south of the site. The local road serving the quarry deteriorates significantly north of the quarry entrance where it becomes narrower and poorly surfaced. The local road meets up with the R471 Regional Route approximately 4 kilometres to the north of the site. The local road to the north of the quarry incorporates a 10-tonne restriction

and therefore all traffic generated to and from the quarry travels in a southwards direction onto the R464 Regional Route¹.

- 2.5. In terms of surrounding land uses, the quarry is surrounded exclusively to the south-west, west and north-west by coniferous forest. Lands along the southern boundary of the site accommodate arable fields while lands to the east of the site on the opposite side of the access road comprise of a mixture of forest lands and lands used for livestock grazing.
- 2.6. In terms of surrounding settlement lands surrounding the subject site are sparsely populated. The nearest dwellinghouse to the subject site is located approximately 250 metres north of the site. The next nearest dwelling is approximately 300 metres to the east. Both these dwellings are set back a considerable distance from the access road serving the site. There are numerous dwellings along the access road to the south of the site which are located much closer to the roadway. The closest two dwellings to the south are located adjacent to the access road approximately 550 metres to the south.

3.0 Proposed Development

Planning permission is sought for a 10-hectare extension incorporated in wooded lands to the west and south-west of the existing quarry. The area is extensively covered with conifer trees which are to be felled by Coillte prior to any extraction taking place. The area to be extended, at its maximum, is approximately 700 metres in length and just over 200 metres in width. The ground levels rise in a southerly direction for approximately 220 metres to 260 metres. Rock will be extracted down to a level of approximately 150 metres AOD. Rock will be extracted using blasting techniques; the same as those used in the extraction process in the existing quarry. It is estimated that quarry will be extracted at a maximum rate of approximately 400,000 tonnes per annum. The total aggregate reserve in the extension is estimated to be approximately 14.4 million tonnes.

¹ A condition of a previous permission by the Board prohibits quarry traffic from using the northern section of the road.

4.0 Planning Authority Decision

4.1. Decision

Clare County Council issued notification to grant planning permission subject to 19 conditions.

The planning application was submitted on 17th October, 2018. A covering letter submitted with the application indicates that the applicant is seeking a 16-year permission as part of the application. The application was also accompanied by an Environment Impact Assessment Report and a Screening for Appropriate Assessment. A letter of consent from the landowner (Coillte) is also attached.

4.2. Initial Assessment by the Planning Authority

- A report from the Water Safety Development Officer recommends a number of conditions be attached.
- A report from the Development Applications Unit of the Department of Culture, Heritage and the Gaeltacht recommends a number of archaeological conditions and also recommends a condition in relation to the protection of peregrine falcons.
- A report from the Building Control Officer states that the fire authority have no objection to the proposed development subject to complying with all building regulations.

A report from Road Design makes the following comments:

- The existing quarry access is onto a local road where the 80 km/h speed limit applies and therefore in accordance with geometric design guidelines for junctions site distances of 160 metres are required. Arising from a site inspection it is considered that a vehicle could not travel on this road at 80 kmph and therefore two steps below this desirable limit i.e. 90 metre sight distances would be acceptable. The applicant should be asked to

demonstrate how they will provide 90 metres sight distances, and this will require an alteration to the boundary of the north of the quarry access.

- It is further noted that the horizontal and vertical alignment of the L7062 is poor. It is therefore recommended that the installation of warning signs to warn other roads users of HGV and quarrying activity should be placed along the roadway.
- Finally, a financial contribution should be sought as the vast majority of HGVs using the road are related to the quarrying activities.

The initial planner's report notes that the existing quarry is in operation since pre-1964 and has expanded over the years. There is no objection in principle to the further expansion of the quarry and for the continuing of the processing of aggregate within the existing quarry subject to normal planning and environmental criteria. With regard to appropriate assessment, further information is required in relation to the lagoon/silt management in order to allow for a more thorough screening investigation. The report also assesses the EIAR submitted with the application and considers that further information is required to make a full assessment.

4.3. Additional Information Request

1. (a) It is noted that the Environmental Impact Assessment Report as submitted does not address Section 171A(b)(ii) of the Planning and Development Act 2000 which requires an EIA to include such examination, analysis and evaluation of the expected direct and indirect significant effects on the environment derived from the vulnerability of the proposed development to risk of major accidents or disasters that are relevant to the development. Having regard to the nature and scale of the development as proposed which includes for blasting, you are advised that further information is required to allow a complete and informed assessment of the likely impacts of the proposed development. You are requested to submit a revised EIAR to address the above.
- (b) The information in the EIAR does not take account for the clearing/felling of the 10-hectare site and as such is considered that this

must be addressed within the report. The information necessary to avoid potential project splitting and to determine any likely significant effect on the project as a whole. You are requested to submit a revised EIAR to address this concern.

2. (a) With regard to the impacts on surface water, it is noted that the EIAR states that potential impacts from the proposed extension of the quarry are to the Blackwater and North Ballycannon sub-basins. However, the Planning Authority also considers that the stream to the south of the site should also be assessed in terms of its impact on surface water noting that this stream flows into the River Shannon SAC.
(b) The Planning Authority also notes that the holding capacity of the settlement lagoons have not been fully assessed in the EIAR. Further details are required to indicate that there is enough retention time for adequate settlement of solids prior to discharge.
(c) The applicant is requested to submit details of the additional water volumes that are to be added to the lagoonal system to ensure that there is adequate capacity within the system to allow for appropriate settlement prior to discharge.
3. The applicant is asked to clarify how silt stockpiles will be managed and where it will be located within the quarry in order to ensure that there is no interference with lagoon management.
4. The applicant is requested to clearly outline the location of all internal access roads and any buffer areas between access roads and streams to the west and south-west of the site.
5. The applicant is requested to ascertain details of winter groundwater levels as opposed to the groundwater levels during the summer period as indicated in the EIAR.
6. The applicant is requested to increase the number of dust monitoring stations in order to ascertain a more comprehensive analysis of dust deposition rates in the wider area.
7. With regard to noise impacts, it is noted that the proposed extension is at a higher level to the existing quarry site and it is considered that the amount of

noise monitoring stations need to increase in order to better ascertain the potential impact in terms of noise. The applicant is requested to submit revised proposals in this regard.

8. It is considered that the zone of visual influence assesses very narrow in its scope and does not address the main views in the extension area which exists from the R471 to the north. The applicant is requested to assess the visual impact arising from the proposal on the R471.

The further information request was dated 10th December, 2018.

4.4. Further Information Submission

Further information was received on 15th March, 2019. The further information is summarised below:

- In relation to Item 1(a) it is stated that the EIAR is being revised and each of the environmental factors assessed in the EIAR incorporates a new sub-section entitled “Unplanned Events”.
- In relation to Item 1(b) the felling of trees and the environmental impact arising from same has also been incorporated into the EIAR and the biodiversity and water sections have been amended to include the felling of trees in the environmental assessment.
- With regard to the impact on surface water and specifically the potential impact of the development on the stream to the south of the site, it is argued in the response that the proposed quarry extension belongs to a different catchment area which drains in a north-easterly direction away from the stream to the south of the quarry. As such any quarry extension would have a negligible on the stream to the south. Details are further elaborated upon in Chapter 8 of the EIAR.
- With regard to the size and capacity of the lagoons on site, the response states that the entire water management requirement including the capacity of

the settlement lagoons and retention times has been assessed in Appendix 4 of the EIAR².

- The management of stockpiles generated by the extraction activity is addressed in Section 8.8.4 of the revised EIAR. It sets out details in relation to the handling, storage and stockpiling of aggregates on site.
- The proposed access road into the extension area will be temporary in nature and it's only function is to provide access to the top of the quarry face for on-going blasting operations. This temporary access road will run along the northern boundary of the extension and will not intersect with any streams.
- Additional groundwater monitoring was carried out on the 23rd January, 2019 to give an indication of winter/high groundwater levels. Further details are contained in Section 8.7.6 of the EIAR.
- In response to the Planning Authority's request, it is proposed to provide three additional noise monitoring points and three additional dust monitoring points in the proposed extension area. Further details are contained in Chapters 10 and 11 of the EIAR.
- Finally, the revised EIAR now assesses the visual impact of the existing and proposed development from the R471 and details are given in Chapter 13 of Section 13.4 of the revised EIAR. The revised assessment concludes that the proposed quarry extension will not result in any significant change in terms of visual impact. It should also be noted that the quarry is over 2 kilometres from the R471.

Details of revised public notices were also submitted to the Planning Authority.

4.5. Further Assessment by Planning Authority

- A further report from the Roads Design Office stated it had no comments to make on the further information submitted.

² The Board will note that this information is actually contained in Appendix 6 of the EIAR.

- A report from the Environmental Assessment Officer states that it is satisfied with the additional information submitted, subject to appropriate conditions being attached.
- A further report from the Environment Section stated that there was no objection subject to including a number of conditions in relation to water, dust, noise and vibration.

4.5.1. A further planning report states that the Planning Authority is now satisfied that the EIAR is in compliance with Article 94 and Articles 111 of the Planning and Development Regulations, (as amended). Having regard to the examination of the environmental information accompanying the application and the submissions and reports received in the course of the application, the Planning Authority is satisfied that any potential impacts can be avoided, managed or mitigated by the measures which form part of the proposed scheme and through appropriate planning conditions. It was therefore recommended that planning permission be granted for the proposed development.

5.0 Planning History

- 5.1. According to the information contained in the EIAR there was no record of any planning applications on site prior to 2005. An application was made under Section 261 of the Planning and Development Act 2000 for registration of a quarry on the basis that the quarry commenced operations prior to the 1st October, 1964. Whereby the Planning Authority decided in its order that a planning application be submitted accompanied by an EIS in accordance with the requirements of Section 261(7) of the Planning and Development Act.
- 5.2. One history file is attached. Under PL03.227746 Clare County Council issued notification to grant planning permission for the proposed development. This decision was the subject of two third party appeals and a first party appeal against 11 conditions. An Bord Pleanála in its decision upheld the decision of the Planning Authority and granted planning permission with revised conditions. The Board's decision was dated 2009.
- 5.3. Further details of planning history relating to the site is set out in Section 4.3 of the EIAR. Under PL12/256 Clare County Council granted planning permission for the

construction of a concrete batching plant and associated ancillary facilities subject to 9 conditions.

6.0 Grounds of Appeal

6.1. The decision was appealed by Liam Moloney of Ballyfinan, Ardnacrusha, County Clare. The grounds of appeal are outlined below:

1. The proposed extension to the quarry will be injurious to both the amenities of the area and property in the vicinity for the following reasons:
 - (a) The volume of heavy vehicular traffic drawing readymix and stone to and from the quarry on a very narrow road with a number of bad bends has created significant hazards for road users. The road serving the quarry is extremely narrow with a significant incline and a number of bad bends with no visibility. No appropriate passing points have been provided and no road widening has been proposed as part of the permission granted.
 - (b) The proposal will result and will further exacerbate road safety concerns and make the road even more unsafe for pedestrians.
 - (c) The number of HGVs travelling to and from the quarry gives rise to significant noise levels despite the fact that the appellant has installed triple glazed windows.
 - (d) It is argued that the structural integrity of the appellant's dwellinghouse has already been impacted upon as a result of the vibration from heavy vehicles and the number of structural cracks clearly visible on the gable end of the house.
 - (e) The valuation of the properties facing onto the L7062 access road will incur further reduction in value due to the deterioration in road safety and the increased noise, dust and vibration as a result of the increased volume of HGV traffic.
2. The proposed quarry extension poses a significant risk to the local area in terms of habitat and biodiversity in the following way.

- (a) The increased dust particles will have further consequences for flora and fauna in the area. It is stated that the habitats study should be undertaken to determine the impact the quarry has on the biodiversity of the area.
 - (b) Dust from the open trucks emits constant dust along the access road. The grounds for the extension to the quarry does not make covered loads a requirement to protect the habitats along the access road. It is suggested that an extended environmental impact study be undertaken which encompasses both the quarry and the access road.
- 3. The proposed extension to the quarry poses a significant risk to the quality of drinking water in the area where residents are dependent on local wells. The impact of blasting, drilling and the use of chemicals needs to be fully assessed to determine the impact of the proposal on water quality as residents rely on local wells for drinking water as well as group water schemes. The current tailing ponds in the quarry are unlined and the extension to the quarry in such circumstances poses a considerable risk to water quality.
- 4. The local area has numerous sites of potential archaeological interest including a medieval burial site. The proposal represents potential damage to local heritage, and this has not been assessed as part of the grant for the extension. The Board are requested to ensure that an appropriate archaeological study is undertaken.
- 5. It is stated that, on a regular basis, delivery schedules to and from the quarry exceed the current restricted operation hours. It is not unusual to have trucks commence delivery from daybreak onwards particularly the summer time to meet building demand. With the extension of the quarry it is anticipated that early morning trucks movements will increase.

7.0 Appeal Response

- 7.1. Earth Science Partnerships on behalf of the applicants submitted the following response.

- 7.2. By way of a preliminary matter, it is noted that the Board in granting planning permission under PL03.237746 attached 22 conditions. Conditions 21 and 22 required the payment of financial contributions to Clare County Council. However, the Board did not specify the amount to be paid. This was negotiated between the developer and Clare County Council and in 2013 Clare County Council sought both general contributions and special contributions for improving the public road serving the quarry. The amount of contribution was appealed to the Board who upheld the Council's claim. This was then subject of a High Court case and the agreement was reached in a settlement attached as Appendix 2 of the submission. It is stated that €350,000 was agreed as a special contribution towards the proposed road improvement as specified in Condition No. 22 of An Bord Pleanála's grant of planning permission. Details of the proposed works to be undertaken as part of the special contribution scheme are attached to Appendix 3 of the submission. It is stated that Clare County Council have entered into an agreement under the jurisdiction of the High Court to carry out roadworks and therefore any failure to comply with the issue of road improvements lays solely with Clare County Council and not with the applicants.
- 7.3. With regard to the current volume of heavy traffic using the road, the volume of traffic has been considered by both Clare County Council and An Bord Pleanála as part of the existing planning permission. Furthermore, it is stated that passing points are to be provided as part of the road improvement works by Clare County Council. Furthermore, road widening is to be provided as part of the road improvement works by Clare County Council. It is also stated that there will be no further increase in heavy traffic volumes as a result of the proposed development.
- 7.4. In relation to other traffic issues it is stated that the road is to be upgraded by Clare County Council in accordance with the proposals set out in Appendix 3 of the applicant's response to the grounds of appeal. The traffic section of the EIAR has demonstrated that the existing road has the capacity to accommodate the present and future use of the road by the quarry.
- 7.5. In relation to noise, it is stated that the traffic which uses the public road consists of quarry traffic and general traffic from other road users. To assess the impact, it is suggested that a detailed noise survey both inside and outside the appellant's house should be undertaken. However, this is not within the remit of the quarry owners and

it is suggested that this issue should be investigated by Clare County Council who are responsible for the road.

- 7.6. Likewise, in relation to vibration it is suggested that any structural damage to the appellant's house should be the subject of a separate investigation by Clare County Council Roads Section. It is stated that there is no increase in traffic volumes as a result of the proposed development.
- 7.7. Likewise, in relation to the valuation of properties facing onto the L7062, it is stated that there is no increase in traffic volumes due to the proposed development and therefore there will be no increase in noise, dust or vibration.
- 7.8. In relation to biodiversity issues, it is stated that an Appropriate Assessment Stage 1 was carried out in line with the requirements of the Habitats Directive. Following detailed ecological, hydrological and hydrogeological assessments, it was concluded that there would be no significant effects on qualifying interests associated with Natura 2000 sites. In addition, a comprehensive ecological assessment was carried out and this is set out in Section 6 of the EIAR. The conclusion of this assessment was that no significant issues arise in respect of biodiversity.
- 7.9. Dust emissions from the existing quarries are within the limits set down in the existing planning permission. The limits specified in the planning permission will be adhered to in the future extraction from the quarry.
- 7.10. With regard to the issue of water quality, it is noted that blasting and drilling has been ongoing for the past 20 years. There is no evidence to suggest that there have been any issues in relation to water quality in the area. In addition, the hydrology and hydrogeological assessment carried out as part of the EIAR demonstrates that there is no impact on groundwater quality.
- 7.11. With regard to the settlement ponds on site, it is stated that these are all located in the northern section of the existing quarry and have been in use for many years. The retention ponds overlie a poor aquifer and the possibility of seepage from these ponds is extremely low and this has been reduced even further by the deposition of silt which, in itself, acts as a liner. Any discharge from the quarry has been the subject of a license and the monitoring shows that the water leaving the site complies with the requirements of the Water Discharge License. The quarry therefore presents no risk to water quality.

- 7.12. In relation to archaeological impact reference is made to Section 15 of the EIAR submitted. It was concluded that there are no items of cultural heritage, monuments or buildings of heritage interest in the area. No direct or indirect impacts are envisaged in the application area or in the vicinity and therefore no mitigation measures are required.
- 7.13. With regard to operating hours it is stated that the quarry has been and will continue to work within the allowable working hours stated in the grant of planning permission. There will be no increase in traffic due to the proposed extension. It is concluded that the appellant in this instance is seeking to rerun the Section 261(7) application and the conditions attached thereto in submitting the current appeal.
- 7.14. **Planning Authority's Response to the Grounds of Appeal**
- It appears that Clare County Council have not submitted a response to the grounds of appeal.

8.0 Development Plan Provision

- 8.1. The site is governed by the policies and provisions contained in the Clare County Development Plan 2017-2023. The subject site is located within the 'western corridor working landscape'. Section 13.3.2.2 of the development plan notes that this part of the county contains the highest concentration of population and employment and the strongest transport links and connectivity. It is an objective of the development plan to permit development in these areas that will sustain economic activity and enhance social wellbeing and quality of life subject to conformity with all other relevant provisions in the plan and the availability and protection of resources.
- 8.2. The selection of appropriate sites in the first instance within this landscape, together with the consideration of details of siting and design are directed towards minimising visual impact.
- 8.3. Particular regard should be given to avoid intrusions on scenic routes and/or ridges or shorelines. Development in these areas will be required to demonstrate that:
- (a) The site is being selected to avoid visually prominent locations.
 - (b) The site layout avail of existing topography and vegetation to reduce visibility from scenic routes, walking trails and public amenities and roads.

(c) The design for buildings and structures reduce visual impact to careful choice of form, finishes and colours and that any siteworks shall seek to reduce the visual impact of the development.

- 8.4. Many areas within the western corridor working landscape contain ground and surface waters that are sensitive to the risk of pollution and also coincide with areas identified for nature conservation.
- 8.5. Section 10.14.6 of the development plan specifically relates to the extractive industry. It states that Clare County Council contains reserves of materials including stone, sand, gravel and peat which are worked at many locations across the County. There is also the potential for extraction of precious and base minerals in the County. Quarrying and other extractive industries are recognised as important to rural economic development in terms of generating employment and providing raw materials to the construction industry and other industrial processes. The exploitation of these materials, together with the decommissioning and restoration of all sites, must be carefully managed in order to minimise the potential impact on the environment. The Council will facilitate the harnessing of the area's natural resources while ensuring that the environment and rural and residential amenities are appropriately protected.
- 8.6. CPD 10.13 states that it is the objective of the development plan to promote the extraction of minerals and aggregates and associated processing where such activities do not have a significant negative impact on the environment, landscape, public health, archaeology or residential amenities of neighbouring settlement and where operations are in compliance with all national regulations and guidelines applicable to quarrying and mining activities.

9.0 **Planning Assessment**

I have read the entire contents of the file, visited the site in question and have had particular regard to the issues raised in the grounds of appeal. I consider the pertinent issues in determining the current application and appeal before the Board are as follows:

- Traffic and Road Safety Issues

- Habitat and Biodiversity Issues
- Impact on Local Water Supply
- Archaeology Issues
- Operational Hours

The final section of my assessment will address appropriate assessment Issues and carry out an independent evaluation of the EIAR submitted with the application and concludes as to whether the proposal complies with the EU Directive on EIAR.

9.1. **Traffic Issues**

9.1.1. The grounds of appeal raise a number of concerns in relation to traffic and road safety issues. The concerns include:

- The volume of traffic generated by the proposed development.
- The substandard nature of the road to accommodate such traffic.
- The noise levels arising from traffic generation.
- The impact of traffic travelling along the road on the structural integrity of the appellants dwelling.

Each of these issues are dealt with below.

9.1.2. Traffic and Road Safety Issues

The grounds of appeal argue that the volume of traffic using the local road (L7062) is totally inappropriate having regard to the narrow alignment and restricted sightline along the road to the south of the quarry. It is acknowledged that the road serving the site is a third-class rural road accommodating numerous residential dwellings along its alignment, particularly further south along the alignment. It is also characterised by a steep incline northward along most of its length. The road network beyond the L7062 comprises of regional roads (R464 and R465) leading to Limerick, Parteen, Ardnacrusha and beyond. These roads are in my opinion, of sufficient width and structure to accommodate traffic associated with the quarry.

A key consideration of the Board in determining the current application and appeal before it, is the fact that the extension of the proposed quarry under the current application does not involve an intensification of use over and above the existing

operations carried out on site. All traffic entering and exiting the site does so along the approach road to the south the L7062. This roadway has varying carriageway widths between 4.5 and 6 metres.

In terms of trip generation, the average hourly trip generation from the quarry is 17 to 18 trips per hour, over an 11 hour period. This equates to less than 1 trip every 3 minutes. Peak traffic volumes occur between the 9 a.m. to 10 a.m. period and the early afternoon period 13.45 to 14.45.

A key consideration in determining the impact of the proposal in terms of traffic is the fact that the quarry will continue to operate at the present rate of extraction and will not exceed the levels currently undertaken at the quarry. Therefore, it is not anticipated that the quarry in question will give rise to volumes of traffic over and above that currently experienced on the road network. This is an important consideration in my view as the Board granted planning permission for the quarry under PL03.227746 on the basis that it considered that the level of traffic generated by the proposal was deemed to be acceptable.

In terms of the impact on the surrounding road network, Section 12.5 of the EIAR outlines the likely and significant effects on the capacity of surrounding junctions. These are indicated in Table 12.4 and 12.5 of the EIS. It is apparent from the figures presented that there is more than ample capacity at the existing junctions to cater for the traffic generated by the proposed development. The ratio of flow to capacity (RFC) value for each of the junctions assessed, clearly indicates that there is ample capacity. None of the junctions studied are close to capacity up to the design year of 2034. I can only conclude therefore that the road network including the access road (L7062) has sufficient capacity to cater for the volume of traffic proposed and that the Board, in granting planning permission for the original application under PL03.227746 which anticipated similar volumes of traffic to that under the current application, was satisfied that the road network had sufficient capacity to cater for the volume of traffic.

With regard to the substandard nature of the road, having inspected the site I noted that the road surface was generally of good structural integrity and did not show any evident signs of deterioration due to excessive HGV use. In fact, I would refer the Board to the photographs submitted by the appellant with the grounds of appeal and

my own photographs attached to this report which indicate that the road surface is generally in good order. I do acknowledge however that the local road serving the site does not contain any road markings, including centrelines and also incorporates a number of narrow pitch points along its alignment as well as a number of beds where forward vision is restricted.

Anticipated Road Improvement Works

The original planner's report prepared in respect of PL03.227746 notes that there is a need for certain road widening or adequate provision of passing bays along the alignment. It notes that An Bord Pleanála should specify road improvements necessary to facilitate the continuation of quarrying activities as proposed. To this end, the Board in issuing a grant of planning permission, included Condition No. 21 which specifically required that the developer pay to the Planning Authority a financial contribution in accordance with the provisions of Section 48 of the Act. Furthermore, Condition No. 22 related to a special contribution under the provisions of Section 48(2)(c) which required the developer to pay an unspecified financial contribution, specifically for the improvement of the local road to the north and south of Sheehan's Cross along the local road.

The applicant's response to the grounds of appeal indicates that the amount of contribution was subsequently appealed to the Board and was the subject of a High Court case. On foot of a High Court settlement, whereby the total contribution under both conditions amounted to some €950,000 with €350,000 specifically earmarked as a special contribution towards the proposed road improvements. It is noted that Clare County Council have entered into an agreement under the jurisdiction of the High Court to carry out the roadworks and therefore any failure to comply with this issue of road improvement lies solely with Clare County Council and not the applicant according to the response to the grounds of appeal. Details of the High Court ruling are contained in Appendix 2 of the applicant's response to the grounds of appeal. Details of the proposed road improvement proposed by Clare County Council are indicated in a report dated January, 2013. This report details the requirements in relation to road strengthening, widening and drainage, signage and fencing/walls and kerbs.

I note that Clare County Council have not submitted a response to the grounds of appeal and therefore have not commented on this issue.

Based on the evidence before the Board, it is reasonable to conclude that the applicant in this instance has complied with the requirements in terms of financial contributions towards road improvements and that it is a matter for the local authority and not the applicant to carry out such improvements on the local road. It also appears that such improvements are imminent having regard to the details proposals and costings undertaken by Clare County Council in 2013. Having regard to the fact that road improvements are forthcoming and are to be carried out on the basis of the applicant's financial contribution under the parent permission, it would in my view be unreasonable to refuse planning permission for a continuation of the said quarry on the grounds that the access road serving the quarry is inadequate. It would also be inappropriate in my opinion to defer any extension to the quarry on the basis of prematurity. The applicant has carried out all reasonable steps to ensure adequate road improvements take place by paying a financial contribution for the roadworks in question and it is a matter for the Planning Authority to carry out the said works and not a matter for the applicant.

On the above basis I do not consider it appropriate to refuse planning permission for the proposed extension to the quarry on the basis of the inadequacy of the road network serving the development.

Traffic Noise

Concern is also expressed in the grounds of appeal in relation to noise levels arising from traffic generation to and from the proposed development. Section 11.5.4.1.2 of the EIAR submitted acknowledges that the transport of material around the quarry and to and from the quarry can generate noise. I note that no noise surveys or assessments were undertaken along the local access road serving the quarry as part of the Environmental Impact Assessment. If the Board have significant concerns in this regard, I would recommend further details be sought in relation to noise generation along the access road. I acknowledge that the appellant's dwelling is located in close proximity to the road and is located in a rural area where ambient noise levels are likely to be low. However, traffic generated by the proposed development will be similar to, and not likely to be in excess of, that associated with

the existing operations. The Board considered it appropriate to grant planning permission for the existing quarry operations under PL03.227746. As there will be no intensity of activity on the subject site, I do not consider that the baseline environment will be materially altered in terms of traffic generation and I consider that the Board can reach a similar conclusion than any noise impact arising from traffic to and from the quarry will be acceptable having regard to its previous decision under PL03.227746.

Vibration Impacts

The grounds of appeal also express concerns that traffic to and from the quarry is adversely impacting on the structural integrity of the appellants dwelling. I note the photographs submitted with the application include a number of superficial cracks on the external walls of the appellant's house. I cannot be satisfied based on the evidence presented that any of the cracks appearing on the external elevation of the building can be attributed specifically to HGV traffic associated with the quarry. I again reiterate that the Board are satisfied that the existing operations on site were acceptable and in accordance with the proper planning and sustainable development of the area in granting planning permission for the continuance of the quarry under Reg. Ref. PL03.227746. As the proposal in this instance does not constitute an intensification of use, I can only conclude that the continuing operation of activities on site is likewise deemed to be acceptable. If the Board have any concerns in relation to structural integrity of the appellant's buildings, it could request further information in relation to this matter.

Traffic and Property Values

Finally, with regard to potential impact on property values in the vicinity, I do not consider that the continuation of the existing quarry which was granted planning permission by An Bord Pleanála under Reg. Ref. PL03.227746, will give rise to significant or material adverse impacts on residential amenity over and above that associated with the existing operations which were deemed to be appropriate by the Board in granting permission in the first instance. Therefore, I am satisfied that the proposed development will not result in a material devaluation of properties facing onto the L7062. I note that no other residents along the local road have appealed the

decision of the Planning Authority on the basis that the continuing operations would devalue property along the roadway.

9.2. **Habitat and Biodiversity Issues**

- 9.2.1. The grounds of appeal argue that the proposed development could adversely affect the surrounding biodiversity and habitats primarily through fugitive dust emissions. It is also suggested that a habitats study should have been undertaken to determine the impact that the quarry would have on the biodiversity of the area. The EIAR submitted with the application includes a chapter in relation to biodiversity. The chapter includes a desktop review, a site survey and habitat and fauna survey and evaluation (see evaluation of section on biodiversity in EIAR below). The assessment notes that the site comprises entirely of mature conifer planting with pockets of gorse around the boundary. The survey undertaken noted that no rare or protected species were encountered during the EIAR survey undertaken. The conifer planting is considered to be of low ecological importance for birds, non-volant mammals, bats, amphibians as well as reptile species or invertebrates. The only potential impacts identified related to vegetation clearance for bird habitats which was identified as having a moderate impact.
- 9.2.2. It is further noted that an Appropriate Assessment Stage 1 was carried out in accordance with the requirements of the Habitats Directive. It concluded that the proposed development is unlikely to have a significant impact on the qualifying interest associated with Natura 2000 sites in the vicinity. See separate section in this report on Appropriate Assessment.
- 9.2.3. Contrary to what is stated in the grounds of appeal, I am satisfied that the proposed development has been adequately assessed in terms of its potential impact on the environment. Furthermore, I am satisfied based on the assessment undertaken, that the environment into which the proposed quarry is to extend is of low ecological importance.
- 9.2.4. With regard to potential dust generation arising from the excavation process, and its impact on surrounding flora and fauna, I note that Chapter 10 of the EIAR specifically relates to air and air quality issues. The study acknowledges that dust generation could potentially occur from the stripping of overburden, the drilling and blasting of in situ material, the processing of material and the transportation of material. The EIAR

sets out a number of mitigation measures in order to counteract any potential fugitive dust generation. These include the reduction in overburden removal and berm construction during periods of dry weather and periods of excessive wind. During very dry periods, dust emissions from heavily trafficked locations will be controlled with the spraying of surfaces with water. Materials and aggregate will be transported from the site with covered trucks where the likelihood of emitting dust is high. Constant monitoring will take place to ensure the appropriate reduction in fugitive dust generation.

- 9.2.5. Finally in relation to this matter, I would refer the Board to the photographs attached to this report. It is apparent from these photographs that the access road in the vicinity of the site is relatively free of dust with modest amounts of dust tracks from vehicles exiting the quarry. This suggests that the on-going monitoring and mitigation of dust generation associated with the existing operations is relatively successful.
- 9.2.6. On the basis of the above, I am satisfied that any dust generation associated with both the site clearance or operational activities on site would not be such as to give rise to significant adverse effects on surrounding fauna or biodiversity.

9.3. **Impact on Local Water Supply**

- 9.3.1. The grounds of appeal suggest that the proposed extension poses a significant risk to the quality of drinking water in the area where residents are dependent on local wells. Specific concerns are expressed in relation to the issue of blasting, drilling and the use of chemicals on site. Concerns are also expressed that the current tailing ponds are unlined and as such pose a considerable risk to water quality.
- 9.3.2. The EIAR submitted notes that dwellinghouses within a 500 metre boundary of the site are reliant on wells for drinking water both domestically and also to serve farming activities. A survey of wells in the vicinity of the site are set out in Table 8.1 of the EIAR. Two wells within the same catchment and downgradient of the proposed quarry extension are identified. These wells (WS1 and WS4) are located approximately 260 and 220 metres downgradient of the quarry respectively. Both wells are used for farming purposes.
- 9.3.3. The EIAR notes that the upper 15 metres of bedrock within the quarry appear to be more weathered and the bulk of groundwater flow occurs in this horizon. The permeability of the rock is likely to diminish very rapidly with depth.

- 9.3.4. Well WS1 which is located c.260 metres downgradient from the proposed quarry extension is at a lower elevation than the proposed floor level of the extension (138.5 metres AOD) whereas the proposed floor level of the quarry is 150 metres AOD. The results of pumping tests indicate that the levels of aquifer drawdown are very modest with no noticeable effect from dewatering of the proposed extension outside a radius of c.70 metres from the quarry compound. On foot of this there is no real possibility of the wells being adversely affected as a result of the proposed quarry extension.
- 9.3.5. Well WS4 is located c.220 metres downgradient from the quarry and this is also located at a lower elevation than the quarry floor. Pumping tests undertaken at the quarry in 2007 show that there was no impact from the quarry in terms of potential dewatering of this well. Again, for this reason Well WS4 is unlikely to be impacted from the proposed quarry.
- 9.3.6. I would also refer the Board to condition no.7 of this report. This condition prohibits any excavation below the water table. Should the Board consider it appropriate to incorporate this condition, it will assist in protecting groundwater and wells in the vicinity of the proposed quarry extension.
- 9.3.7. With regard to the potential impact of the proposed development on surface waters, The EIAR indicates that surface waters generated within the excavation area together with any groundwater ingress below the water table are drained into a series of pumps which allow the settlement of suspended solids prior to being discharged into an adjoining stream. Furthermore information contained in the EIAR indicates that surface water quality in the adjoining streams are relatively good. It is further noted that any discharge from the quarry is subject to a separate water discharge license (Ref. WP163). On-going surface quality monitoring associated with this discharge license is indicated on Table 8.8 of the EIAR. It indicates that there is full compliance with the emission limit values set out in the discharge license which supports the conclusion that the water management regime undertaken on the subject site is not giving rise to any surface water pollution issues.
- 9.3.8. Finally in relation to this matter, the grounds of appeal suggest that the current tailing ponds in the quarry, which are unlined, pose considerable risk to water quality in the area. I have argued above, that the proposed development does not pose a significant threat to wells and groundwater abstractions in the area primarily through

the fact that the subject site is located on a designated poor aquifer where hydraulic conductivity rates are low and groundwater transmissivity through the aquifer is also low. Any possibility of seepage through the retention ponds would be further constricted with the deposition of silt along the bottom of the ponds which would assist in cleansing and filtrating water passing through the lining of the retention ponds prior to entering the groundwater body. I therefore do not consider that the proposed quarry extension will in any way pose a significant or material threat to groundwater quality in the area.

9.4. Archaeology Issues

- 9.4.1. With regard to archaeology, the EIAR states that a field inspection was carried out in respect of the proposed extension. No visible indication of any cultural heritage material was encountered during this field investigation. There are no recorded monuments situated within the application area. Notwithstanding this, it would in my view be pertinent and appropriate that an archaeological monitoring condition be attached in any grant of planning permission requiring the applicant to carry out archaeological monitoring during the stripping of soil and overburden within the area which is the subject of the proposed extension.

9.5. Operational Hours

- 9.5.1. Finally, the grounds of appeal argue that the hours of operation give rise to amenity issues. Specifically, it is suggested that the delivery schedules from the quarry take place outside the restricted operating hours and it is not unusual to have trucks commence delivery from daybreak onwards particularly during the summer. Condition No. 11 of the parent permission sets out the operation hours of the quarry. If permitted, the quarry and all activities associated with the quarry are to operate between 0700 hours and 1800 hours Monday to Friday and between 0700 hours and 1400 hours on Saturday. It also required that no rock breaking activity shall be undertaken within any part of the entire quarry complex before 0800 hours each day. Any potential breach of the above condition is an enforcement matter for Clare County Council and not a matter for An Bord Pleanála. The applicant in his response to the grounds of appeal has indicated that the quarry has worked within the allowable working hours stated in the grant of permission.

10.0 Environmental Impact Assessment

10.1. Introduction

- 10.1.1. The application is accompanied by an Environmental Impact Assessment Report (EIAR) on the basis that it falls within the 7th Schedule of the Planning and Development Act 2000 (as amended) and also falls within Part 2, Class2(b) of the Fifth Schedule of the Planning and Development Regulations, that being the extraction of stone, gravel, sand or clay, where the extraction would be greater than 5 hectares. No formal scoping procedure with the Board was entered into. The application was lodged subsequent to the provisions of Circular Letter PL1/2017, and therefore the subject application falls within the scope of the amending 2014 EIA Directive (Directive 2014/52/EU) on the basis that the application was lodged after the last date for transposition in May 2017. It also falls within the scope of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI No. 296 of 2018), as the application was lodged subsequent to these Regulations coming into effect on 1st September 2018.
- 10.1.2. This section evaluates the information in the EIAR and carries out an independent and objective environmental impact assessment (EIA) of the proposed project in accordance with the requirements set out in the above legislation. In carrying out an independent assessment, I have examined the information submitted by the applicant including the submitted EIAR as well as the written submissions made to the Board on appeal.
- 10.1.3. A single EIAR (albeit in two separate volumes in the form of the main EIAR and a separate non-technical summary) has been prepared in respect of the proposed quarry extension. A number of the environmental issues relevant to the EIA undertaken have already been addressed in my planning assessment of this report above. This EIA section of the report should therefore, where appropriate, be read in conjunction with the relevant parts of the Planning Assessment.
- 10.1.4. The impact of the proposed development is addressed under all relevant headings with respect to the environmental factors listed in Article 3(1) of the 2014 EIA Directive. The EIAR clearly sets out the background and quarrying operations on site existing operations. The EIAR set out details of the public consultations

undertaken (Section 2.2 and Appendix 1 of report) and the competency of experts involved in producing the EIAR. The main issues raised specific to EIA can be summarised as follows:

- Potential for adverse impacts on surrounding residential amenity through increase dust generation, noise and vibration and increased traffic volumes.
- Potential adverse impacts on the landscape and visual amenity of the area.
- Biodiversity impacts.
- Impacts on surface water, and to a lesser extent groundwater quality, through uncontrolled and accidental discharges from the quarry.

10.2. Consideration of Alternatives

10.2.1. Section 2.3 of the EIAR sets out the evaluation of the alternatives considered as part of the development. Part 2 of Annex IV of the EIA Directive requires that the developer sets out a description of reasonable alternatives studied and providing an indication of the main reasons for selecting the chosen option.

Four alternatives were considered in relation to the quarry expansion. These included:

- Option A, extracting an area of approximately 14.7 ha on contiguous lands to the north west of the site. However, these lands would as they are not currently in the applicant's ownership.
- Option B, acquiring lands to the east of the site, on the eastern side of the local road L7062. This however would require excavated material to be transported across this local road creating a potential traffic hazard which would adversely impact on the local community.
- Option C, involved the extension of the quarry to the south east, amounting to approximately 5 ha. This area was considered to be the most visually vulnerable area in the vicinity of the quarry and excavation in this area was deemed to be unacceptable in visual terms. In order to mitigate the visual impact, large-scale landscaping and construction of berms would be required, and land required to implement the mitigation measures was not available for purchase.

- Option D, is the preferred option and comprises of the extension of the quarry in the south-west direction, encompassing an area of 10 ha. No additional lands would need to be purchased and the expansion in this area results in the most appropriate environmental impact. The manufacturing area will remain in situ within the existing quarry.

Alternative treatment processes, including, primary and secondary settlement. secondary settlement options examined both biofilm and aeration systems.

10.3. Details of Competencies and Expertise of the Contributors to the EIAR

10.3.1. The EIAR has been prepared on behalf of the developer by a multi-disciplinary team of competent and technical experts in accordance with the requirements of Article 5(3) of the amending Directive. The competencies of the experts are detailed in Section 1.6 and Table 1-2 of the EIAR of the EIAR. I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and this is reflected in the information contained in the EIAR.

10.4. Details of Public Consultations undertaken as part of the EIAR

10.4.1. Details of the consultation entered into by the applicant as part of the preparation of the project and to inform the EIAR process are set out at Section 2.2 of the document. Specific consultation with various bodies / stakeholders was undertaken in the preparation of the individual chapters. Consultations were also undertaken with interest groups in order to identify concerns with the project and incorporate mitigation measures where required. Details of the responses of the public consultation are contained in Appendix 1 of the EIAR. The planning appeals process also allows for further opportunities from third parties in relation to public consultation.

10.5. Environmental Factors

10.5.1. The sections below address each of the environmental factors. The headings used in the EIAR are as follows:

- Population and human health
- Biodiversity
- Land, soils and geology

- Water
- Climate
- Air
- Water
- Noise and Vibration
- Traffic
- Landscaping and Restoration
- Material Assets
- Cultural Heritage
- Interactive Effects

The final chapter sets out an impact and mitigation summary.

10.6. Population and Human Health

- 10.6.1. Chapter 5 of the EIAR addresses population and human health issues. Effects are considered in the context of socio-economic considerations, land use, health and safety, tourism and residential amenity. Other impacts that have the potential to impact on humans include potential effects on water, air, noise and vibration, traffic and landscape; these are discussed in the respective chapters of the EIAR.
- 10.6.2. Section 5.1.1 of the EIAR sets out the characteristics of the proposal. The baseline environment in terms of population is set out. A detailed demographic profile of the areas is presented. Reference is made to the age profile, the principal economic status of the local population, commuting patterns and household size and social infrastructure of the population of the local area. In terms of settlement the surrounding area consists of one-off dwellings and farm houses. This is compared with county and state demographic profiles. Local tourist amenities in the wider area are identified and identified and described.
- 10.6.3. In terms of population impact assessment, the 'do-nothing scenario' would result in quarry closure and loss of employment. The proposal will result in sustained economic growth and will not result in a significant loss of agricultural land having

regard to the abundance of such land in the area. The proposal will not impact on any tourist attraction nor will it impinge on existing social infrastructure of the area.

10.6.4. The overall effect on population is deemed to be positive. Mitigation measures in relation to air, noise, vibration and water etc are detailed in other chapters of the EIA.

10.6.5. In terms of human health, a Health Risk Assessment is undertaken as part of the EIAR. Details of the methodology to be employed in the Health Risk Assessment is set out in the document. It identifies and assesses the potential impacts as being noise and vibration, air emissions and traffic. Having regard to the potential emissions generated and the location of the site in a rural area, the assessment reasonably concludes in my opinion the proposed extension to the quarry will not give rise to effects on human health.

10.6.6. I have considered all the information on file including written submission made in the appeal in relation to population and human health and the information contained in the EIAR. I am satisfied that the potential for impacts on population and human health can be avoided, managed and/or mitigated by measures that form part of the proposed scheme and with suitable conditions, to an acceptable extent.

10.7. **Biodiversity**

10.7.1. The EIAR includes an extensive desk top study of published literature undertaken as part of the biodiversity assessment. A site survey (including a survey of the wider area) was also undertaken on May 3rd 2018. The evaluation, based on the field survey covered birds, non-volant mammals, bats, amphibians and reptiles, invertebrates and aquatic ecology. The chapter also identifies all Natura 2000 sites within a 15 km radius. The habitat of the site comprises entirely of mature conifer planting (WD4) with pockets of gorse around the boundary (WS1). No rare or protected species, or invasive plant species were encountered during the survey.

10.7.2. The conifer plantation habitat is considered to be of low local importance for birds, non-volant mammals, bats, amphibian and reptile species and invertebrates.

10.7.3. There are a number of ditches/streams which drain the site (referred to in the EIAR as 'brooks'). They are all tributaries of the River Trough to the north of the site. This River holds no specific designations in terms of sensitivity other than being a 'salmonid water'.

10.7.4. The only potential impacts which are identified are vegetation clearance for bird habitats which are identified as being 'moderate' and the potential of contaminating surface waters through hydrocarbon or other discharges from the quarry. The EIAR set out a series of mitigation measures to address these adverse potential impacts.

10.7.5. The third-party submission did raise concerns about the impact of the proposal on biodiversity. However, I am satisfied that the impacts that are predicted to arise in relation to biodiversity are negligible having regard to the extensive conifer cover on the subject lands which in itself, is of little intrinsic biodiversity value. Furthermore, it is considered that any potential adverse impacts can be avoided, managed and / or addressed by the mitigation measures set out in the EIAR. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of biodiversity in the long-term. I am also satisfied that significant cumulative impacts are not likely to arise, as no large-scale developments are proposed or have been identified that could result in any in-combination environmental effects.

10.8. Land, Soils and Geology

10.8.1. The Teagasc Soil Map indicates that the site is underlain by coarse loamy drift which overlies Silurian age siltstones. The rock is heavily folded and faulted within the vicinity of the quarry. The rock is considered to be very suitable for high quality stone chippings, such as those used in the construction of roads.

10.8.2. The major anticipated impact is the removal of the resource for the production of finished stone product. The proposal will also involve the removal of overburden and the construction of berms. Other potential impacts are also identified including accidental spillages or emissions, stability of quarry faces and waste generation. A series of mitigation measures are set out to ensure that any potential adverse impacts on the environment are minimised. They include measures to ensure the stability of quarry faces including geotechnical inspections, measures to prevent spillages and waste minimisation measures. A proposed restoration plan will be implemented after the quarry is decommissioned. Strict monitoring will be undertaken during the operational phase.

10.8.3. I am satisfied that the impacts that are predicted to arise in relation to land, soils and geology are negligible having regard to the extensive geological resources in surrounding area. Furthermore, it is considered that any potential adverse impacts, other than the resource removal itself, can be avoided, managed and / or addressed by the mitigation measures set out in the EIAR. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of land soils and geology in the long-term. I am also satisfied that significant cumulative impacts are not likely to arise, as no large-scale developments are proposed or have been identified that could result in any in-combination environmental effects. I note that the removal of the resource in itself was not an issue raised in the grounds of the third-party appeal.

10.9. **Hydrology, Hydrogeology and Water Quality**

10.9.1. The site is located within the Lower Shannon surface water catchment area. The proposed extension lies between two River sub-basins, the Blackwater (Clare) and the North Ballycannon sub-basins. Drainage is predominantly to the north and north east direction in the vicinity of the quarry. Three unnamed streams drain the northern end of the quarry they all drain northwards into the River Trough which in turn discharges into the River Blackwater c 3 km to the east. This is the closest River with a designated biotic index which has varied between Q4 and Q5 (good to high status, unpolluted, satisfactory condition) over the previous 3 decades. On-going surface water quality sampling within the stream that accommodates the discharge from the quarry shows that the parameters monitored are well within the limits of the discharge licence. It is noted however that on 1 instance ammonia levels were exceeded (see table 8.8 in the EIAR for further details).

10.9.2. In terms of hydrogeology, the site for the proposed extension is primarily underlain by a poor aquifer and a locally productive aquifer both of which primarily rely on secondary permeability. In terms of groundwater vulnerability, the subject site is classed as being of extreme vulnerability. The EIAR details the groundwater abstractions in the surrounding areas. The groundwater flow is in a northerly direction. The EIAR sets out details of the existing water management regime.

10.9.3. In terms of predicted impacts, it is estimated that the additional surface water generated by the quarry extension would be in the region of c.20.8 m³ per day.

Changes in drainage and increases in sediment release could occur from the felling of trees. Increases in suspended solids could also occur from excavation and stockpiling. It is not anticipated that the proposed extension will result in any significant increase in discharge to adjoining streams, particularly Brook 1, which is the subject of a surface water discharge licence. An increase in discharge of c.20 m³ will ensure that discharges remain well below the maximum levels of discharge permitted in the licence. There will be no requirement for additional settlement ponds to cater for the increase in surface water flows off site.

Contamination from spills also presents a threat to water quality. Potential impacts on groundwater due to dewatering are also highlighted in the EIAR, however due to the modest transmissivity of the underlying rocks, any increase in drawdown is not considered to be a significant issue.

10.9.4. A suite of mitigation measures through mitigation by avoidance, mitigation by design, the incorporation of silt traps, drainage inspection and maintenance, management of run-off for aggregate and soil storage areas, protocols for the management and containment of spillages are set out in the EIAR. With the employment of such measures the residential effects on the groundwater and surface waterbody regimes are considered to be negligible.

10.9.5. The third-party submission did raise concerns about the impact of the proposal on existing groundwater wells in the area. However, I am satisfied that the impacts that are predicted to arise in relation to groundwater and surface water are negligible. It is considered that any potential adverse impacts can be avoided, managed and / or addressed by the mitigation measures set out in the EIAR. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of the water environment in the long-term. I am also satisfied that significant cumulative impacts are not likely to arise, as no large-scale developments are proposed or have been identified that could result in any in-combination environmental effects.

10.10. Climate

10.10.1. Chapter 9 of the EIAR assesses the impact of the proposed quarry extension on climate. The EIAR sets out details on legally binding global agreements on climate

change. It also sets out details of the regional and local climate relating to the area. The characteristics of the proposed development are also set out.

- 10.10.2. In terms of impacts during the construction phase and operational phase, it is stated that the operation of machinery and plant during the clearance works and the processing of materials will give rise to exhaust emissions (CO₂ and NO₂). However no new plant or machinery will be required, and the annual rate of extraction will not increase as such there will be no net increase in emissions over and above that already generated on site. The EIAR states that that it is unlikely that cumulative impacts will arise on the local climate as there are no activities in the area that are significant generators of emissions.
- 10.10.3. Unplanned events in relation to climate to which the proposed development could be vulnerable to include flooding and extreme temperatures (particularly freezing temperatures) and storm events. Finally, this section sets out mitigation measures which include servicing plant equipment and instigating energy audits on fuel consumption. No residual impacts are predicted.
- 10.10.4. I am satisfied that the impacts that are predicted to arise in relation to climate are negligible having regard to the nature and characteristics of the proposed development. It is considered that any potential adverse impacts can be avoided, managed and / or addressed by the mitigation measures set out in the EIAR. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of the climate change in the long-term. I am also satisfied that significant cumulative impacts are not likely to arise, as no large-scale developments are proposed or have been identified that could result in any in-combination environmental effects.

10.11. Air

- 10.11.1. Chapter 10 of the EIAR relates to air. The main potential impact arising from the activities to be undertaken relate to dust deposition. It is noted that the area around the site is sparsely populated. Details of the meteorological conditions relating to the local area are set out as are a number of health conditions associated with air pollution. It is noted that air pollution can pose particular problems for children and older people.

- 10.11.2. It is noted that there are currently no Irish statutory standards or EPA Guidelines relating specifically to dust deposition, but the German TA Luft Air Quality Standards specify a method of measuring dust deposition – The Bergerhoff Method. The limit value permits total dust deposition (soluble and insoluble) of 350 mg/m²/day (when averaged over a 30-day period). This method is used to monitor dust deposition within the quarry. Details of dust deposition rates are set out in Table 10-3 of the EIAR. The results indicated general compliance. However, there were instances of non-compliance, particularly during the dry hot summer of 2018.
- 10.11.3. The main predicted impacts on dust and air quality which could arise during the construction phase include site clearance works, berm construction and emissions from vehicles and machinery. During the operational phase landscaping and berm construction, drilling and blasting of in-situ material, processing of materials and transportation of material can all give rise to dust generation and deposition.
- 10.11.4. In terms of cumulative impacts, no activities or developments are identified in the vicinity that could give rise to cumulative impacts.
- 10.11.5. A suite of mitigation measures is set out in the EIAR, including stripping and soil handling will only take place at times where there is little or no wind. Internal roads will be kept in good condition, vehicles will be kept to appropriate speed limits. Stockpiles and vehicles will be sprayed in dry weather and dusty materials will be transported in covered trucks. Monitoring of dust deposition will be enforced.
- 10.11.6. I note that concerns were raised by the appellant in the grounds of appeal in relation to fugitive dust emissions. I am satisfied that the impacts that are predicted to arise in relation to air pollution are acceptable having regard to the nature and characteristics of the proposed development and the non-sensitive nature of the receiving environment. It is considered that any potential adverse impacts can be substantially reduced and managed and / or addressed by the mitigation measures set out in the EIAR. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of the air pollution in the long-term. I am also satisfied that significant cumulative impacts are not likely to arise, as no large-scale developments are proposed or have been identified that could result in any in-combination environmental effects.

10.12. Noise and Vibration

- 10.12.1. Chapter 11 of the EIAR relates to noise and vibration. The EIAR sets out details of the survey approach and describes the baseline environment. Noise surveys were carried out on 10 occasions between 2016 and 2018 at 4 separate locations around the perimeter of the quarry. The noise levels recorded ranged from 31 to 54 dB(A) L_{Aeq} . The existing quarrying activities do not exceed the daytime limit of 55 dB(A).
- 10.12.2. Vibration monitoring was also undertaken, the blast event report for the most recent blast event show an air overpressure peak value of 119.2 dB(L) at 2.445mm/s which is below the recommended guidelines of 125dB(L) at 12mm/s.

The predicted impacts which are identified and described in the EIAR are

- Noise associated with the construction/site preparation phase including overburden stripping, landscaping and the construction of berms.
- Operational impacts associated with the development include the blasting, extraction, processing and transport of products. These activities are detailed in the EIAR.

- 10.12.3. In terms of vibration, a short-term adverse effect of ground borne vibration and air overpressure along with the risk of fly-rock are the major predicted impacts which could arise from the activities to be undertaken. Quarry related HGV traffic could also be a minor source of vibration.
- 10.12.4. A suite of mitigation measures is set out to ensure that activities associated with the development do not generate excessive noise and vibration above the recommended emission limit values as set out in the EPA guidelines. Monitoring of noise levels and appropriate locations (EN1 to EN4 as indicated on figure 11.1) will take place throughout the operations. It is not anticipated that there will be any residual impacts.
- 10.12.5. I note the concerns were raised by the appellant in the grounds of appeal particularly in relation to noise and vibration arising from HGV haulage vehicles. I am satisfied that the impacts that are predicted to arise in relation to noise and vibration are acceptable having regard to the nature and characteristics of the proposed development and the general lack of noise sensitive receptors in the environment surrounding the site. It is considered that any potential adverse impacts can be

substantially reduced and managed and / or addressed by the noise mitigation measures set out in the EIAR.

10.12.6. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of the noise pollution and /or vibration in the long-term. I am also satisfied that significant cumulative impacts are not likely to arise, as no large-scale developments are proposed or have been identified that could result in any in-combination environmental effects.

10.13. Traffic

10.13.1. Chapter 12 of the EIAR relates to traffic. In order to determine existing traffic flows, a traffic count was carried out on Tuesday May 18th 2018. The count was carried out at (a) the existing quarry access and (b) R464 Regional Road and the L3065 local road priority junction. Details of the road alignment serving the quarry are set out in the EIAR. It is noted that the road alignment is approximately 6.1 meters in width. It is expected that extraction rates at the quarry will continue at the same rate. As such there will be no increase in traffic generated at the quarry. Existing peak traffic volumes per hour at the quarry access are set out on Table 12-1 of the EIAR.

10.13.2. Between 9am and 10am it is estimated that 17 HGV's arrive and the site and c.14 HGV's depart. Throughout the entire day it is estimated that 92 HGV's arrive at the quarry and approximately 98 HGV's depart from the quarry. During their peak operation in 2007 the EIAR estimates that over 250 vehicles arrived and departed from the quarry.

10.13.3. In terms of trip distribution, all quarry traffic exits and enters the quarry along the southern leg of the L7062. The EIAR Incorporates a predicted traffic growth factor up to the year 2034. It is on this basis that the impact on the surrounding road network is estimated. The road network junction analysis set out in Table 12.4 clearly indicates that the road network has more than adequate capacity to cater for the traffic generated by the quarry. The ratio to flow capacity (RFC) at each of the junctions analysed clearly indicate that there is ample capacity in the road network to cater for traffic generated by the quarry. The EIA or also carried out a link capacity analysis. The analysis indicated after is more than sufficient capacity on the road network to cater for the anticipated annual average daily traffic (AADT) forecasted to be accommodated on the road network.

- 10.13.4. In terms of mitigation measures visibility sight lines of 160 meters will be provided at the proposed access junction. No parking shall be permitted along the L7062 in the vicinity of the entrance.
- 10.13.5. In conclusion the EIAR notes that the quarry access junction will operate below the desired 0.85 RFC up to and including the design year of 2034 with the inclusion of quarry generated traffic.
- 10.13.6. I note the concerns were raised by the appellant in the grounds of appeal particularly in relation to HGV traffic and road safety; specifically in relation to HGV and haulage vehicles passing outside his house. I am satisfied that the impacts that are predicted to arise in relation to traffic are acceptable having particular regard to the fact that it is not proposed to increase the rate of extraction from the quarry and therefore the level of traffic generated will not exceed that associated with the extant operations on site. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of the traffic generation. I am also satisfied that significant cumulative impacts are not likely to arise, as no large-scale developments are proposed or have been identified that could result in any in-combination traffic generation effects.

10.14. Landscape and Restoration

- 10.14.1. Chapter 13 of the EIAR assesses the landscape impact arising from the works to be carried out and also sets out details of the restoration work which will be carried out post operations. The site is located in the Slieve Bernagh Uplands which has a high sensitivity rating in the Clare County Development Plan. It is noted that the proposed extension is located in an area which is exclusively covered with conifer planting. The site is described as semi-rural and remote in places with long views afforded across the surrounding landscape. It is noted that the higher slopes of the uplands would be sensitive to very visible development. The skyline between Woodcock Hill to Ballycar is also designated as a high amenity area under the current development plan. Two scenic routes to the North of Ballycar are identified in the development plan however the quarry is not visible from these designated scenic routes.
- 10.14.2. The majority of the boundary of the quarry is screened from view due to the presence of berms. The quarry will be operated on a phased basis and this will also

ensure that restoration procedures are also carried out on a phased basis. This will minimise the impact of the proposed development in visual terms.

- 10.14.3. In terms of visual impact assessment 11 vantage points were selected and identified to best assess the visual impact arising for the proposed quarry extension. 7 of these vantage points are to the east of the quarry on the L7062. One vantage point was located to the south west in the townland of Cappatateemore, approximately 1.3 kilometres away. A further 3 vantage points (VP 9-11) were chosen along the R471 to the north of the site. The significance of landscape impacts arising from the development is assessed as being 'moderate'. The visual assessment shows that the application site and quarry are well screened due to existing hedgerows and field boundaries together with swathes of afforestation. The proposed development will not result in any significant increase in visibility of the quarry. The impacts are set out on Table 13 -7 of the EIAR. Both the magnitude of visual impact and the significance of visual impact are assessed as resulting in no change.
- 10.14.4. Section 13.6 of the EIAR set details of the landscaping and restoration measures which will be undertaken to ensure that the workings are not visible from the surrounding road network and dwellings. A restoration programme will involve the construction of berms, the restoration of side slopes together with extensive planting. Details of the species of trees to be planted are set out in section 13.6.1.3. Mitigation measures will be put in place to reduce loss of biodiversity and enhance the conservation value of the area. Details of the mitigation are set in section 13.7 of the EIAR. A major feature of the restoration plan will be the creation of a new quarry lake and the quarry will be allowed to naturally re-vegetate after the decommissioning of works.
- 10.14.5. I note that the 3rd party submission in relation to the application did not raise any specific concerns in relation to visual amenity. Nevertheless, I am satisfied that the impacts predicted to arise in terms of visual amenity have been adequately assessed and this impact will be negligible, based on the evaluation undertaken in EIAR. I am also satisfied that significant cumulative impacts are not likely to arise as no large-scale developments are proposed or have been identified that could result in any in-combination visual impacts.

10.15. **Material Assets**

- 10.15.1. Chapter 14 of the EIAR sets out details in relation to material assets. Material assets can be taken to mean built services and infrastructure. Details of the geological resource and the land resource associated with the quarry extension are highlighted. The geology comprises Silurian age siltstones overlain with soils and subsoils on which mature conifer planting has been planted.
- 10.15.2. The EIAR describes the existing infrastructure including public utilities and access groundwater and water supplies. It is noted that the quarry has existing ESB, telecommunications and water connection which will be extended into the application area should it be required. Details of the scenic routes, tourism and amenity features and archaeology features are also set out in this section.
- 10.15.3. In terms of impact assessment, it is noted that the loss of this geological resource will result in a significant impact which would be permanent in duration and will result in a change in the natural topography. However, the supply of aggregates will contribute to the local and regional economy. The proposed landscape and restoration plan will reduce impact associated with the quarrying activity. In terms of land resource, the existing forestry plantation will be felled immediately. Forestry plantation is a significant land use in the wider area and will not result in a significant loss of forestry resource.
- 10.15.4. The proposed continuation of quarrying will not result in any increase in traffic levels on the local road network. There will be no impact on the quality or availability of public utilities. No adverse impacts are anticipated in terms of scenic amenity, archaeology, tourism or waste.
- 10.15.5. Unplanned events / major accidents or disasters which could occur are identified. These include quarry face or berm slippage, accidental spillage, flooding, fire or storm events. Mitigation measures are set out to combat any potential impacts arising from these unplanned events. That residual impact will be a loss of a permanent geological resource however, the proposed restoration plan will offset any significant impact.
- 10.15.6. I note that the 3rd party submission in relation to the application did not raise any specific concerns in relation to material assets. Nevertheless, I am satisfied that the impacts predicted to arise in terms of material assets and resources have been identified and adequately assessed and such impacts where they arise will be

negligible, based on the evaluation undertaken in EIAR. I am also satisfied that's significant cumulative impacts are not likely to arise as no large-scale developments are proposed or have been identified that could result in any in-combination visual impacts.

10.16. Cultural Heritage

- 10.16.1. Chapter 15 relate to cultural heritage. The history of the area is described from the prehistoric period to the post medieval period. A field inspection was also carried out. There are no recorded monuments situated within the application area. The closest archaeological monument is located approximately 430 metres to the SE of the application area and is considered to be too far to be impacted upon by the proposal.
- 10.16.2. In terms of direct and indirect impact, no direct effects on any items of cultural heritage archaeology or buildings of historical interest will result from the proposal. As no adverse impacts have been identified and as such no mitigation measures have been proposed.
- 10.16.3. I note that the 3rd party submission in relation to the application raised concerns in relation to the impact of the proposal on the archaeology of the area. I am satisfied based on the study undertaken as part of the EIAR, that there will be no impact on archaeology as there is no evidence that any features of archaeological interest exist on site. I am also satisfied that significant cumulative impacts are not likely to arise as no large-scale developments are proposed or have been identified that could result in any in- combination archaeological impacts.

10.17. Interactions of Environmental Factors

- 10.17.1. An overview of the interactive effects is provided at Chapter 16 of the EIAR. Table 16.1 presents scenarios where interactions between the environmental factors may take place. The potential arises for population and human health to interact with almost all of the other factors (water, climate, air, noise and vibration, traffic and landscape and restoration). Biodiversity could impact on land, soil and geology, water, air, noise and vibration and climate. The details of all other interrelationships are set out under Table 16.1 of the EIAR, which I have considered in full.
- 10.17.2. I am satisfied that effects resulting from interactions, can be avoided, managed and / or mitigated by the measures which form part of the proposed development, the proposed mitigations measures detailed throughout the EIAR, and with the

incorporation of suitable conditions should the Board be minded granting planning permission. There is, therefore, nothing to prevent the approval for the development on the grounds of significant effects resulting interactions between the environmental factors.

- 10.17.3. The final chapter of the EIAR sets out a summary of the mitigation and monitoring measures to be employed on each of the environmental factors assessed.

10.18. Reasoned Conclusion on the Significant Effects

- 10.18.1. Having regard to the examination of environmental information contained above in the EIAR by the applicant, together with the written submission on file, I would conclude the following in relation to significant effects:
- 10.18.2. The most significant effect will arise from the permanent removal of forestry and the removal of a geological resource arising from the quarrying activity. However, the continued supply of aggregate during the working life of the quarry will ensure continued supply of aggregate and stone and building material for construction works in the local and wider area. The proposal will also result in continued employment which will have a positive benefit on the local economy.
- 10.18.3. Impacts on population and human health will be minimal as the quarry is located in a sparsely populated upland area with only 15 dwellings within a one km radius of the site and no dwelling within 250m of the site. Noise and vibration and dust generation effects would not be significant in terms of impacting on surrounding residential amenity. The potential impacts would also be mitigated by noise and vibration measures, such as the limiting of construction hours, the use of plant with low inherent potential of noise and / or vibration, the construction of berms around the perimeter of the site. Dust suppression measures are also to be incorporated into the operational regime.
- 10.18.4. Traffic impacts were a major cause of concern in the grounds of appeal. However, it is important to stress that traffic levels are not anticipated to increase as a result of the extension and will remain significantly below peak production in 2007. Traffic generated by the development under the parent permission was deemed to be acceptable and in accordance with the proper planning and sustainable development

of the area. No intensification of activities are proposed under the current application.

- 10.18.5. In terms of landscape and visual impacts, the EIAR has assessed these impacts robustly and objectively. It is reasonably concluded in my opinion that the impacts will be negligible having regard to the landscaping and restoration to be undertaken around the perimeter of the activities together with the presence of an existing quarry on site and the natural screening from vantage points in the vicinity which would screen the quarry from public view.
- 10.18.6. The incorporation of settlement ponds within the quarry ensures that any water discharged off site will be subject to appropriate attenuation and treatment so as not to result in water pollution of adjoining water courses. Water pollution is the subject of a separate consent process by way of a local authority discharge license.
- 10.18.7. Finally, EIAR reasonably concludes in my opinion, having regard to the nature of the existing environment, that there will be no adverse impacts arising from the quarry extension in terms of biodiversity, climate, material assets and cultural heritage.
- 10.18.8. The EIAR has considered that the main significant direct and indirect effects of the proposed development on the environment and potential impacts would be primarily mitigated by environmental management measures, as appropriate. Following mitigation, no residual significant long-term negative impacts on the environment or sensitive receptors would remain as a result of the proposed quarry extension. I am, therefore, satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative effects on the environment during the construction or operational phase.
- 10.18.9. I am satisfied that the information provided is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. Overall, I am satisfied that the information contained in the EIAR complies with the provisions of Article 3, 5 and Annex (IV) of EU Directive 2014/52/EU.

11.0 Appropriate Assessment

- 11.1. The planning application was accompanied by a screening for Appropriate Assessment. It concluded that, following detailed ecological, hydrological and hydrogeological assessment and given the location of the proposed application area in relation to the nearest SAC, no significant effects on the qualifying interests of the identified Natura 2000 sites, in view of the sites Conservation Objectives, either alone or in combination with other plans or projects, would occur. On this basis it was decided not to carry out a State 2 Appropriate Assessment.
- 11.2. For the purposes of completeness and objectivity it is proposed to carry out an independent screening assessment as to whether or not the proposed development has the potential to adversely impact on any Natura 2000 sites in the vicinity.
- 11.3. The purpose of AA is to examine and determine whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary for, the management of the site and/or if the potential effects of a project or plan either alone or in combination with other plans and projects on Natura 2000 sites in the vicinity, in view of the sites conservation objectives, will be significant.
- 11.4. There are seven European sites located within a 15-kilometre radius of the proposed quarry extension. These are:

Natura 2000 Sites	Distance and Direction from the Proposed Quarry Extension
Lower River Shannon SAC (002165)	2.6 km south
Glenomra Woods (001013)	5.5 km north west
Danes Hole, Poulnalecka SAC (000030)	7.3 km north west
Ratty River Cave SAC (002316)	8.4 km north west
Kilkishen House SAC (002319)	10.6 km north west
Slieve Bernagh Bog SAC (002312)	11.3 km north east
River Shannon and River Fergus SPA (004077)	5.8 south west

11.5. On one SAC is hydrologically connected to the subject site, that being the Lower River Shannon SAC. As the crow flies the River Shannon SAC is c.2.6 kilometres to the south of the quarry. However, the hydrological connection is somewhat more circuitous. The watershed which runs in an east/west direction to the south of the site results in streams/watercourses in the vicinity of the quarry draining north and north-eastwards. The stream which runs along the north-eastern boundary of the site which facilitates the water discharge from the quarry runs northwards to the River Trough approximately 1.5 kilometres to the north of the site. The River Trough in turn flows in an eastward direction meeting the River Blackwater c.4 kilometres to the east of the site. The River Blackwater then runs in a southerly direction a distance of approximately 4 kilometres before meeting up with the River Shannon SAC and Blackwater Bridge c.1 kilometre east of Ardnacrusha. Thus, the hydrological distance between any discharge from the quarry and the Shannon SAC is in the region of 16 kilometres in length. The qualifying interests associated with the Lower River Shannon SAC are set out below.

Sandbanks which are slightly covered by sea water all the time [1110]

Estuaries [1130]

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

Coastal lagoons [1150]

Large shallow inlets and bays [1160]

Reefs [1170]

Perennial vegetation of stony banks [1220]

Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]

Salicornia and other annuals colonising mud and sand [1310]

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

Mediterranean salt meadows (Juncetalia maritimi) [1410]

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

Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]

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

Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]

Petromyzon marinus (Sea Lamprey) [1095]

Lampetra planeri (Brook Lamprey) [1096]

Lampetra fluviatilis (River Lamprey) [1099]

Salmo salar (Salmon) [1106]

Tursiops truncatus (Common Bottlenose Dolphin) [1349]

Lutra lutra (Otter) [1355]

11.6. The only habitats and species that could be potentially impacted upon as a result of the quarry extension are those of an aquatic nature including the following:

- Sea banks that are slightly covered by sea water all the time.
- Estuaries.
- Mudflats and sandflats not covered by sea water at low tide.
- Coastal lagoons.
- Large shallow inlets and bays.
- Reefs.
- Freshwater Pearl Mussel.
- Brook Lamprey.
- Sea Lamprey.
- River Lamprey.
- Atlantic Salmon.
- Bottlenose Dolphin.
- Otter

11.7. Table 8.8 of the EIAR gives details of the water quality in the stream that accommodates the discharge from the quarry. The discharge from the quarry is subject to a separate discharge licence and it is clear from the Table referred to, that with the exception of one recording for ammonia, that all discharges are well within

the emission limit values set out in the license. The stream in question feeds into larger surface water bodies which will facilitate and increase dilution and dispersion rates prior to reaching the Lower River Shannon SAC - c.16 kilometres away. Having regard to the fact that the existing discharge from the quarry remains well within the limits permissible under the discharge license, together with a generous separation distance and dilution rates, which will occur along the connecting watercourses. No deterioration in water quality can be anticipated from the proposed development and as such no direct or indirect adverse impacts can be anticipated on any of the qualifying interests associated with the Lower River Shannon SAC.

11.8. In terms of in combination effects, the AA Screening Report submitted with the application undertook a planning enquiry as to whether other quarries are such similar developments which could give rise to discharges, are located within the same catchment area as the proposed quarry extension. No such projects were identified and as such it is reasonable to conclude that no in combination effects are anticipated.

11.9. It is therefore reasonable to conclude that on the basis of the information on file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans and projects would not be likely to have a significant effect on European Site No. 002165 or any other European site, in view of the sites conservation objectives, and a Stage 2 Appropriate Assessment (and submission of an NIS) is not therefore required.

12.0 **Decision**

Grant planning permission for the proposed development in accordance with the plans and particulars lodged based on the reasons and considerations set out below.

13.0 **Reasons and Considerations**

Having regard to the following:

- the nature of the proposed development comprising of continuation of quarrying at a site where quarrying is an established use,

- the Quarries and Ancillary Activities Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government in April, 2004,
- Policy CPD 10.13 of the Clare County Development Plan 2017 – 2023,
- the pattern of development in the area,

it is considered that subject to compliance with the conditions set out below, the proposed development would not adversely impact on the amenities of property in the vicinity, would not be prejudicial to public health and would generally be acceptable in terms of traffic safety and convenience. The proposal therefore in accordance with the proper planning and sustainable development of the area.

14.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the plans and particulars received by the planning authority on the 15th day of March, 2019, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. This permission shall cease to have effect 16 years from the date of this order.

Reason: In the interest of clarity and to define the scope of the permission.

3. All environmental, construction and ecological mitigation measures set out in the Environmental Impact Assessment Report submitted with the application together with other documentation submitted with the original

application and the further information received by the planning authority on the 15th day of March, 2019 shall be implemented in full by the developer in accordance with the timelines set out in the documentation submitted, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity and the protection of the environment during the construction and operational phases of the development.

4. All heavy goods vehicles to and from the site shall be via the L7062 running south from the quarry only. No heavy goods vehicles shall access the site or egress from the site along the L7062 to the north of the quarry entrance.

Reason: In the interest of traffic safety and to mitigate the extent of maintenance and upgrade of works to the local road network necessitated by traffic accessing the site.

5. The quarry shall operate only between the hours of 0700 to 1800 hours Mondays to Fridays inclusive, between 0800 hours and 1400 hours on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

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

6. (a) Blasting operations shall take place only between 11.00 hours and 17.00 hours Monday to Friday and shall not take place on Saturday, Sundays or public holidays. Monitoring of noise and vibration arising from blasting and the frequency of such blasting shall be carried out at the developer's expense by an independent contractor shall be agreed in writing with the planning authority.
- (b) Prior to the firing of any blast, the developer shall give notice of his

intention to the occupiers of all dwellings within 500 metres of the site. An audible alarm for a minimum period of 1 minute shall be sounded. The alarm shall be of sufficient power to be heard at all such dwellings.

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

7. No extraction of aggregates shall take place below the water table and the full extent of excavation shall not exceed that indicated on the site layout plan and cross-sections received by the planning authority on the 17th day of October 2018 as amended by the further information received by the planning authority on 15th day of March, 2019.

Reason: To protect groundwater in the area.

8. (a) Two groundwater monitoring wells shall be installed around the boundary of the site at locations to be agreed in writing with the planning authority prior to the commencement of development. Water levels in these wells shall be recorded every month. A log of these levels shall be submitted to the planning authority on a quarterly basis.
- (b) An alternative water supply shall be made available by the developer at his expense where it immediately becomes evident from the monitoring programme that the quality or quantity of water in the vicinity is being adversely affected. Alternative water supplies may be secured by the deepening of private wells, drilling of new wells or other such alternatives as may be specified by the planning authority.

Reason: To protect and monitor groundwater in the vicinity of the site.

9. Surface water run-off from open cut areas shall not be discharged directly to any watercourse.

Reason: To protect and monitor groundwater in the vicinity of the site.

10. (a) Vibration levels from blasting shall not exceed a peak particle velocity of 12 millimetres/second, when measured in any three mutually orthogonal directions at any sensitive location. The peak particle velocity relates to low frequency vibration of less than 40 hertz where blasting occurs no more than once in seven continuous days. Where blasting operations are more frequent, the peak particle velocity limit is reduced to eight millimetres per second. Blasting shall not give rise to air overpressure values at sensitive locations which are in excess of 125 dB (Lin)max peak with a 95% confidence limit. No individual air overpressure value shall exceed the limit value by more than 5 dB (Lin).
- (b) A monitoring programme, which shall include reviews to be undertaken at annual intervals, shall be developed to assess the impact of quarry blasts. Details of this programme shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. This programme shall be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: To protect the residential amenity of property in the vicinity.

11. (a) Dust levels at the site boundary shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days (Bergerhoff Gauge). Details of a monitoring programme for dust shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Details to be submitted shall

include monitoring locations, commencement date and the frequency of monitoring results, and details of all dust suppression measures.

- (b) A monthly survey and monitoring programme of dust and particulate emissions shall be undertaken to provide for compliance with these limits. Details of this programme, including the location of dust monitoring stations, and details of dust suppression measures to be carried out within the entire quarry complex, shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. This programme shall include an annual review of all dust monitoring data, to be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

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

12. All loads of dry fine materials shall be either sprayed with water or covered/sheeted prior to exiting the quarry.

Reason: In order to prevent dust emissions, in the interest of amenity and traffic safety.

13. All over ground tanks containing liquids (other than water) shall be contained in a waterproof bunded area, which shall be of sufficient volume to hold 110 per cent of the volume of the tanks within the bund. All water contaminated with hydrocarbons, including stormwater, shall be discharged via a grit trap and three-way oil interceptor with sump to a watercourse. The sump shall be provided with an inspection chamber and shall be installed and operated in accordance with the written requirements of the planning authority.

Reason: In order to protect groundwater and surface water.

14. The development shall be operated and managed in accordance with an Environmental Management System (EMS), which shall be submitted by the developer to, and agreed in writing with, the planning authority prior to commencement of development. This shall include the following:

- (a) Proposals for the suppression of on-site noise.
- (b) Proposals for the on-going monitoring of sound emissions at dwellings in the vicinity.
- (c) Proposals for the suppression of dust on site and on the access road.
- (d) Proposals for the bunding of fuel and lubrication storage areas and details of emergency action in the event of accidental spillage.
- (e) Details of safety measures for the land above the quarry, to include warning signs and stock proof fencing.
- (f) Management of all landscaping with particular reference to enhancing the ecological value of the woodland/grassland on the bunds and buffer areas.

Specification of limits in relation to the following parameters:

- (h) Monitoring of ground and surface water quality, levels and discharges.
- (i) Details of site manager, contact numbers (including out of hours) and public information signs at the entrance to the facility.

Reason: In order to safeguard local amenities.

15. The developer shall manage drainage in accordance with a drainage management plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall incorporate a monitoring programme relating to control and management of water on the site. The plan shall provide for the monitoring of ground and surface water quality, levels and discharges on the site and for ongoing sampling upstream and downstream of any discharge and

ongoing monitoring of the capacity of the settlement lagoons.

Reason: In order to protect water quality.

16. All proposed landscape screening measures, including improvements to boundaries and the provision of any fencing and berms, shall be completed prior to commencement of extraction on site.

Reason: In the interest of visual amenity and to safeguard the amenities of residential property in the vicinity during the operating phase of the development.

17. Restoration shall be carried out in accordance with a restoration plan, which shall include existing and proposed finished ground levels, landscaping proposals and a timescale for implementation. This plan shall be prepared by the developer, and shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

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

18. The developer shall submit annually for the lifetime of the permission a map of the progression of the phased development of the quarry and of the quarry perimeter, surveyed against the established perimeter beacons, the form and location of which shall be agreed in writing with the planning authority prior to the commencement of quarrying works.

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

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

to commencement of development. Monitoring results shall be submitted to the planning authority at monthly intervals for groundwater, surface water, noise and ground vibration.

- (b) On an annual basis, for the lifetime of the facility (and within two months of each year end), the developer shall submit to the planning authority five copies of an environmental audit. Independent environmental auditors approved in writing by the planning authority shall carry out this audit. This audit shall be carried out at the expense of the developer and shall be made available for public inspection at the offices of the planning authority and at such other locations as may be agreed in writing with the authority. This report shall contain:
 - (i) A written record derived from the on-site weighbridge of the quantity of material leaving the site. This quantity shall be specified in tonnes.
 - (ii) An annual topographical survey carried out by an independent qualified surveyor approved in writing by the planning authority. This survey shall show all areas excavated and restored. On the basis of this a full materials balance shall be provided to the planning authority.
 - (iii) A record of groundwater levels measured at monthly intervals.
 - (iv) A written record of all complaints, including actions taken in response to each complaint.

- (c) In addition to this annual audit, the developer shall submit quarterly reports with full records of dust monitoring, noise monitoring, surface water quality monitoring, and groundwater monitoring. Details of such information shall be agreed in writing with the planning authority. Notwithstanding this requirement, all incidents where levels of noise or dust exceed specified levels shall be notified to the planning authority within two working days. Incidents of surface or groundwater pollution or incidents that may result in

groundwater pollution, shall be notified to the planning authority without delay.

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

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

- 20. The developer shall pay to the planning authority a financial contribution of €1,457,860 (one million four hundred and fifty-seven thousand eight hundred and sixty euro) in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. The application of any indexation required by this condition shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine.

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

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

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

Paul Caprani,
Senior Planning Inspector.

November 11th 2019.