

Inspector's Report RQD07.QD0015.

Development Further development of a quarry and

all associated site works.

Location Tonroe, Oranmore, County Galway.

Planning Authority Galway County Council.

Planning Authority Reg. Ref. N/A.

Applicant(s) Canon Concrete Products Limited.

Type of Application Application under Section 37L.

Planning Authority Decision N/A.

Observer(s) 1. Transport Infrastructure Ireland.

2. Paul de hOra.

Date of Site Inspection 12th & 13th December, 2016.

Inspector Paul Caprani.

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1.0 Introduction

- 1.1. QD07.QD0015 relates to an application under the provisions of Section 37L of the Planning and Development Act, 2000 to 2015 (as amended) in respect of the further development of an existing quarry in the townland of Tonroe, Oranmore, County Galway.
- 1.2. A separate application for substitute consent has been submitted for works already undertaken on site under Reg Reference SU0076. This application has been assessed and reported upon and is attached to the current file. The Board have yet to determine the substitute consent application at the existing quarry as the current application under the provisions of Section 37L should be assessed in conjunction with the substitute consent application. The existing operations on the site include the extraction of limestone material and the processing of rock into various grades of aggregates using mobile crushing and screening plant which are located within the quarry floor. Limestone is extracted by means of drilling and blasting the bedrock. The quarry also incorporates a concrete batching plant and readymix facility. Concrete and concrete products, mainly concrete blocks are also produced at the quarry.

2.0 Site Location and Description

- 2.1. The appeal site is located in central Galway to the east of the N18 between the villages of Oranmore and Clarinbridge, south-east of Galway City. The site is located approximately 2.5 kilometres south-east of Oranmore and a similar distance from Clarinbridge. A local road from the N18 National Primary Route links the quarry with the national road network. The local road is approximately 400 metres long. This road ends at the entrance to the quarry. I estimate that there are approximately a dozen houses located along the access road leading to the quarry. The main cluster of houses are located close to the junction with the N18.
- 2.2. A smaller excavation pit is located midway along the northern side of the access road serving the quarry. It appears that this is council depot and small excavation pit.

- 2.3. The quarry itself is a large limestone quarry and is excavated to depths of 20 to 30 metres below ground level. A reception area and car parking area is located near the entrance of the site. A concrete block making facility and two readymix concrete facilities are located to the north of the reception building. The processing and storage area is located on a large concrete apron along the western boundary of the site. The main quarry area where extraction activity has taken place is located further west. The excavated area is estimated to be approximately 7.33 hectares in size with a total quarry area of c.10 hectares.
- 2.4. The excavated area has been worked to two separate levels. The south-eastern portion of the site, much of which had the benefit of planning permission is now exhausted and has been worked to a depth of approximately 15 to 20 metres. This area now accommodates stockpiles of crushed aggregate and some obsolete machinery. The north-eastern portion of the site constitutes the active working area and has been quarried to a depth of 25 to 30 metres. 6.3 hectares of this area formed the area for substitute consent under SU07.SU0076. This area also accommodates a large sump on the quarry floor where surface water collects. A smaller area to the immediate south of the sump accommodates a silt lagoon where silt laden water run-off from the concrete batching plant collects prior to migrating to the quarry sump area. It appears that the water table has not been breached and therefore all water within the quarry floor is surface water.
- 2.5. Under the current application it is proposed to extend the excavation area in a northerly direction to the site perimeter of the area registered under Section 261. The area to be excavated is roughly rectangular in shape. The total area to be excavated is 3.9 hectares. The area is approximately 250 metres in width and 150 metres in length. The overburden has been removed from the southern half of the proposed extended area and much of this overburden has been stockpiled in mounds in the northern portion of the site. Thus exposed limestone rock covers the southern part of the application site. There are a number of old vehicles and trucks located along the perimeter of the application site area.
- 2.6. In terms of surrounding development, the site is surrounded on all sides by agricultural fields and while a small narrow and overgrown laneway runs along the northern boundary of the site. There are no dwellings or farm agricultural buildings located along this section of the laneway. The nearest dwellings, other than the

dwellings located along the access lane leading to the quarry are located to the north in the townlands of Knockaunnasliggaun and Moneymore. These dwellinghouses are located almost 1 kilometre to the north of the subject site. There are no dwellings located in the vicinity to the west and north-west. The nearest dwellings to the west are located over 1.5 kilometres away while the nearest dwellings to the south are likewise located c.1.5 kilometres away.

3.0 Proposed Development

3.1. It is proposed to extend the working face of the quarry in a northerly direction in order to excavate approximately 3.9 hectares of limestone bedrock on the site. The proposal will involve the stripping of overburden, as already mentioned the southern portion of the application site has already been stripped of overburden. Aggregate will be extracted from the quarry face through sequential drilling, blasting and removal of material from the cliff face. The blast material will be passed through mobile crushing and screening units in order to reduce the material to an aggregate of specified size. The material will then be stockpiled on the quarry floor and will be either transported off site as raw aggregate or will be used for the manufacture of concrete blocks or readymix concrete within the manufacturing area of the facility. No details are provided in terms of the amount of aggregate likely to be produced as a result of the proposed extension. The site operates from 0700 hours to 1900 hours Monday to Friday and 0700 hours to 1500 hours on Saturday.

4.0 Application Submitted

The planning application was submitted directly to the Board under the provisions of Section 37L of the Act on 15th January, 2015. The application was accompanied by the following documentation:

- The planning application fee.
- The planning application form.
- Details of public notices.
- Drawings.
- An Environmental Impact Statement.

The Board on 23rd February circulated the application to the following prescribed bodies:

- The DAU.
- Bord Failte.
- The Heritage Council.
- The Arts Council.
- Inland Fisheries Ireland.
- The Department of Communications, Energy and Natural Resources.
- Transport Infrastructure Ireland.
- An Taisce.
- HSE.
- Irish Water.
- Galway Airport.
- The Irish Aviation Authority.
- 4.1. The following observations submitted on foot of the circulation of the application are set out below:

5.0 Observations

5.1. Observation from Paul de hOra.

This observation expresses concerns in relation to traffic and additional blasting. An earlier submission in respect of the substitute consent application is also attached which likewise raised concerns in relation to traffic and the lack of traffic calming measures, particularly along the access road leading to the quarry. The Board are requested to ensure that the applicant introduces traffic calming measures along the access road serving the quarry. Concern is also expressed in relation to flooding on the local road and the driveway of surrounding houses.

5.2. Submission from Transport Infrastructure Ireland

This submission states that TII notes the traffic analysis undertaken in support of the subject application outlining Section 10 of the EIS accompanying the application. Although the EIS does not specifically outline the impact of traffic movements associated with the subject quarrying operations on the junction of the N18/L81067, the Authority does note the statement in Section 10.4 of the EIS that the proposed development will not result in an increase in traffic on the local road infrastructure above that which was experienced in the past. Subject to such provision and safeguarding the strategic function and safety of the national road network in the area the Authority has not specific objection in principle to the proposal.

5.3. Planning Authority Report to An Bord Pleanála

The report outlines the planning history and notes that there is no enforcement history associated with the site. The report also sets out in detail the various policies and provisions contained in the Development Plan as they relate to the extractive industry. It goes on to state that the quarry is surrounded by agricultural lands with one-off houses and ribbon development along access roads. The area is designated as "Class 1 – Low Sensitivity" where Class 1 is the least sensitive of the five classes set out in the Development Plan. It is also noted that the Roads Department of Galway County Council have no objection to a grant of further development consent on this site subject to certain conditions being attached to any grant of consent.

The Planning Authority therefore recommends that the following conditions be attached to any grant of substitute consent. A total of five conditions are listed. These include the following:

- The applicants shall provide a once-off payment of €5,000 towards the upgrade
 of the local roads in the vicinity of the quarry.
- The applicants shall agree, provide and maintain appropriate road signage to highlight the quarry entrance.
- Normal good practice should be observed when refuelling machinery so as to avoid spills. Any fuel stored on site must be within a suitable double walled container or bunding arrangement.

- Recyclable or waste material must be removed off-site to a licensed or permitted facility.
- A restoration proposal for the lands shall be agreed with the Planning Authority.

5.4. Response on behalf of the Applicant

A response is submitted on behalf of the applicant by Earth Science Partnership (IRE) Limited. It specifically relates to the proposed conditions suggested by Galway County Council and these are briefly summarised below.

In relation to the once-off payment of €5,000 towards the upgrade of the local roads, it is stated that Galway County Council requested the same amount as part of the submission to the substitute consent application. The applicant proposes to provide services and materials to the value of €5,000 towards the upgrade and maintenance of the local road network. The applicant is of the opinion that a second charge of €5,000 should not be applied.

With regard to the provision of road signage, it is stated that the applicant will communicate with Galway County Council Roads in relation to the erection of such signage. This signage will be erected once agreed.

It is stated that the applicant has procedures in place for the refuelling and maintenance of plant and machinery on site and these are briefly set out in the response.

With regard to recyclable and waste material, it is stated that all such material will be removed off-site and transported to a licensed and permitted facility where it be recycled and disposed of in an appropriate manner.

In relation to a restoration plan, it is stated that a restoration plan was submitted as part of the Section 37L application. This will be reviewed with Galway County Council and a plan which is agreeable to both parties will be finalised and implemented.

6.0 **Planning History**

Within the wider quarry landholding but outside the substitute consent area:

Reg.ref.13/275 – Permission granted by Galway County Council on 23/07/73 to Micheal J.Cannon for erection of stone crushing plant and develop quarry in the townland of Tonroe.

Outside the landholding and substitute consent area:

Reg.ref.69674 - Permission granted by GCC 17/01/94 for retention of conversion of garage to playroom in dwelling location c.350m from the southeast corner of the substitute consent site.

Reg.ref.57567 - Permission granted by GCC 21/11/88 for dwellinghouse at c.350m from the southeast corner of the substitute consent site.

There is an abundance of other permissions granted along the access road to the quarry and in proximity to the junction of that road with the N18 since after the original quarry development was permitted, most of which pertain to the development of one-off type housing.

Enforcement Issues: The P.A.'s cover letter of 16/12/13 indicates that 'copy of letter from enforcement department in respect of this site to follow. None appears to have been received to file. In respect of 'enforcement', the report of the Council's Planner (23/05/12) states 'NA'.

Quarry Registration: QR74: The Planning Authority imposed 13 no. conditions in registering the quarry on 25/04/07. The registered area was 16.821ha, including 2.57ha that was under negotiation for purchase. The extraction area was stated as 14.938ha and the extracted area as 5.864ha. The Inspector's report indicated that there were no planning enforcement files relating to the site.

Section 261(A) Process: QSP74 / QV0134: On 05/09/14 the Board confirmed the Planning Authority's determination under section 261A(2)(a)(i), set aside the Planning Authority's determination under section 261A(2)(a)(ii) and confirmed the Planning Authority's decision under section 261A(3)(a).

7.0 **Development Plan Provision**

- 7.1. The site is governed by the policies and provisions contained in the Galway County Development Plan 2015 2021. The Plan notes that County Galway has extensive deposits of stones and mineral material which is a fundamental resource for the building industry. It is recognised that the winning and processing of these materials are key factors in the economic life of the county and that the Planning Authority will face a challenge in facilitating the gainful exploitation of the materials with minimum impact on the environment and least disturbances to residences.
- 7.2. Section 6.2 of the Development Plan specifically relates to mineral extraction in quarries. It states that the Council will facilitate harnessing the potential of the area's natural resources while ensuring that the environment and rural and residential amenities are appropriately protected. The Council would take full account of the DECLG Guidelines in respect of quarrying and ancillary activities.
- 7.3. Policy EQ1 relates to environmental management practice and states that the Council will have regard to environmental management practice as set out in the EPA Guidelines for the Extractive Industry.
- 7.4. Policy EQ2 seeks to ensure that adequate supplies of aggregate resources to meet future growth needs within the county. The Council will also facilitate the exploitation of such resources where there is a proven need and a market opportunity for such minerals and aggregates and ensure that this exploitation of resources does not adversely affect the environment or adjoining existing land uses.
- 7.5. The specific objectives are as follows:
 - Objective EQ1 protection of natural assets, protect areas of geomorphological interest, groundwater and important aquifers, important archaeological features and natural heritage areas from inappropriate development.
 - Objective EQ2 the council shall require the following in relation to the management of authorised aggregate extraction.
 - (a) All quarries should comply with the requirements of the EU Habitats Directive, the Planning and Development Acts and the Guidance contained in the DoEHLG Guidelines and DM Standard 37 of this Development Plan.

- (b) Require development proposals on or in the proximity of quarry sites to carry out appropriate investigations into the nature and extent of all quarries (where applicable). Such proposals should also investigate the nature and extent of soil and groundwater contamination and the risk associated with site development works together with appropriate mitigation.
- (c) Have regard to the landscape character assessment of the county and its recommendations including the provision of special recognition of Esker areas as referenced in Galway County Council's "Galway's Living Landscapes Part 1 Eskers".
- (d) Ensure that any quarrying activity has minimal adverse impact on the road network.
- (e) Ensure that the extraction of minerals or aggregates does not adversely impact on residential or environmental amenity.
- (f) Protect all known unworked deposits from development that might limit their scope for extraction.

Objective EQ3 – sustainable reuse of quarries, encourage the use of quarries and pits for sustainable management of post-recovery stage construction and demolition waste as an alternative to using agricultural lands subject to normal planning and environmental considerations.

Objective EQ4 – compliance with Article 6(3) of the European Habitats Directive ensure that all projects associated with mineral extractive industry carry out screening for appropriate assessment in accordance with Article 6(3) of the Habitats Directive where required.

7.6. DM Standard 37 states the following in relation to the extractive industry:

The extraction of sand, gravel, stone etc. is fundamental to the continuing economic and physical development of the county. It is desirable that such materials will be sourced close to the location of a new development to minimise the need for long haul routes and potential interference with traffic flows and amenity. The following details shall be considered central to the determination of any application for planning permission for the extractive industry.

7.6.1. Guidelines

Compliance with section 261 of the Planning and Development Act, the DOEHLG Quarry and Ancillary Facility Guidelines 2004 and the EPA Guidelines for Environmental Management of the Extractive Industry 2006. Where extractive developments may impact on archaeological or architectural heritage, regard should be had to the DOEHLG Architectural Conservation Guidelines and the Archaeological Code of Practice (2002) in its assessment of planning applications. Reference should be made to the Geological Heritage Guidelines for the extractive industry 2008.

7.6.2. Landownership

Details should be submitted showing the proposed site in relation to all lands in the vicinity in which the applicant has an interest.

7.6.3. Deposits

Details to be submitted to include the depths of topsoil, subsoil and overburden and material at various points on the site. An indication of the type of minerals which it is intended to extract, a statement as to whether the parent rock from which the mineral is extracted is suitable for other uses, and the estimated total quantity of rock and material which can be extracted commercially on site.

7.6.4. Methods

The methods of excavation and machinery to be used on site should be submitted. Details to be submitted to include all proposed site development works, including the proposed method of working, any existing or proposed areas of excavation, stages of work proposed, location of any settlement ponds, waste material and/or stock piling of materials, methods for the removal and storing topsoil, subsoil and overburden etc.

7.6.5. Production

Details should be submitted to include the proposed production process to be employed, all requirements for water, electricity and/or other impacts to the production process and any proposals for chemical or other treatments.

7.6.6. Mitigation Measures

Details should be submitted to include the assessment of potential impacts on water resources, residential and visual amenity (including noise, dust and vibration impacts) biodiversity and any other relevant considerations together with appropriate proposals for mitigation.

7.6.7. Access

Vehicle routes from the site to major traffic routes and the impact on the adjoining road networks. Details should be included on the mode, number and weight of trucks or other vehicles being used to transport materials and any truck sheeting or washing proposals.

7.6.8. Rehabilitation

Details should be submitted should include reported plans and sections detailing the anticipated finished landform and surface/landscape treatments, both of each phase and whole excavation, quality and condition of topsoil and overburden, rehabilitation works proposed, the type and location of any vegetation proposed, the proposed method of funding and delivery of restoration reinstatement works etc.

7.6.9. EIS

Any environmental impact study required by statute should be submitted. An EIS should ensure that all impacts in relation to heritage, environment biodiversity, groundwater protection etc. are clearly addressed and appropriate mitigation measures are included.

7.6.10. Proximity

Details to be submitted should include the location of all existing developments in the vicinity of the site that may be affected by the site development works, extractive operations and/or traffic movements generated.

7.6.11. Landscape and Screening

Details should be submitted to include an indication of existing trees or other screening to be retained or removed or any proposed screening, grassing or planting of trees or shrubs and proposals for their maintenance.

7.6.12. Heritage and Biodiversity

Details would include any recommendations for the site to be considered as part of the geological heritage of the county and any proposed measures with regard to the protection and promotion of environment and biodiversity including any proposals for rehabilitation.

8.0 **Assessment**

8.1. Introduction

I have read the entire contents of the file including the EIS and visited the site in question and I consider the following issues are pertinent in determining the current application before the Board.

- Principle of Development.
- Impact on Scenic Amenity.
- Traffic Impact.
- Ecological Impact.
- Impact on Residential Amenity through Noise and Vibration.
- Impact of Hydrology and Hydrogeology.

 The planning assessment will also evaluate the EIS and carry out a separate appropriate assessment screening exercise in respect of the application before the Board.

I have also read the accompanying file in respect of the substitute consent application (SU0078). I consider the assessment carried out by the inspector in respect of the application for substitute consent to be comprehensive, robust and reasonable. I would also agree with the conclusions set out in the report that substitute consent should be granted in this instance. Having regard to my broad conclusions in respect of the accompanying application for substitute consent, I do not propose to revisit the substitute consent application for the purposes of this assessment.

8.2. Principle of Development

In the in first instance it is considered appropriate that the Board should address the principle of development in the context of the general objectives and policies set out in the Galway County Development Plan specifically as they relate to the extraction industry. Firstly, I note that the Planning Authority has not raised any objection to the application currently before the Board and in fact is supportive of a grant of planning permission subject to the application of a number of conditions.

The Development Plan sets out detailed prescriptive requirements under 'Development and Management Standard 37 – Extraction Industry'. It appears having regard to the contents contained in the EIS (see Assessment below) that the proposed development has endeavoured to comply with the various requirements set out in the Guidelines referred to in DM Standard 37. The application likewise provides details in relation to landownership and the method of extraction and the machinery to be used in undertaking the abstraction. Detailed information is provided in relation to the proposed mitigation measures to be employed to reduce the environmental impact. Proposals for restoration or reinstatement as set out in the EIS, as are details of landscaping and screening.

I am further satisfied that the proposed development complies with other general requirements set out in the Development Plan in respect of the extractive industry and generally accords with the overarching policies and objectives which seek to, where appropriate and subject to satisfying qualitative and environmental requirements, support and encourage the development of quarries in order to benefit the economic development of the county. I further note that the development plan does not incorporate any policies which would prohibit or discourage quarrying in specific areas of the county. The proposal does not contravene any policy statements set out in the Development Plan and appears to support many of the wider goals set out in relation to the extractive industry.

8.3. Impact on Scenic Amenity

I do not have any major concerns that the proposed development will have a significant adverse effect in terms of scenic amenity. While the extraction and processing of rock in general terms has a profound impact on the scenic landscape, the proposed development should be assessed in the context of the existing quarry on site. In this regard, the proposal merely seeks to extend in a northerly direction, operations which currently exist on site (albeit part of which was unauthorised and is now part of a substitute consent application). Furthermore, the proposed quarry extension is in no way visible from vantage points surrounding the site. There are no dwellings located on any of the access roads surrounding the site which would be adversely affected in terms of visual impact arising from the proposed quarry extension. The quarry extension is located within isolated lands exclusively surrounded by agricultural fields. As already mentioned there are no dwellings situated on the laneway which runs along the northern boundary of the site and dwellings on access roads to the east and south are a significant distance, in excess of a kilometre away from the proposed extension.

Finally, in relation to this issue, it should be noted that the subject site is located in an area classed as being 'least sensitive' in landscape terms (Class 1). The restoration plan provides that the landscaping around the perimeter of the site which will further militate against an adverse visual impact. When development ceases, the pit will be allowed to flood and the site will re-vegetate naturally. Overall, therefore I consider the visual impact in this instance to be acceptable.

8.4. Traffic Impact

It is difficult to fully ascertain the traffic impact arising from the proposed development as the EIS submitted with the application does not provide an indication of proposed annual extraction rates from the quarry. Obviously traffic generation is intrinsically linked to production rates within the quarry. Traffic movements from 2006 to 2012 are set out in Table 10.2. They range from a high of 160 movements in 2006 (80 loads per day) to 38 movements (19 loads per day) in 2012. The EIS does not give a breakdown in relation to HGV traffic, staff traffic, deliveries etc. We can assume however that that information contained in Table 10.2 of the EIS relates to traffic arising from extraction/production activity only.

The Board in my view should consider, if it is minded to grant permission for the extension, to limit abstraction/production rates so as to ensure that any impacts on the receiving environment, including traffic impacts, are acceptable. It is estimated that at peak production, based on 20 tonne trucks delivering material off site that the site was producing 500,000 tonnes of aggregate per year (312 days x 80 trips x 20 tonnes per trip). This equates to 1 trip either in and out of the quarry every 4½ minutes based on a 12-hour day. I consider the traffic generation during peak production times could have been problematic particularly for traffic on the local access road. Part of the local access road near its junction with the N18 is restricted in width and cannot adequately accommodate two vehicles travelling in opposite directions.

The fact that the subject site accesses directly onto a national primary route which is of sufficient width and size to accommodate traffic generated by the proposed development is advantageous in traffic terms. Furthermore, this section of the N18 is soon to be superseded by a section new motorway the (M18 - Gort to Tuam section), in the next 24 months. This should also be viewed as an advantage in terms of providing access to the wider road network.

Although details are not provided on file, it is clear from my site inspection that a significant proportion of the traffic associated with operations on site relate to the concrete block manufacturing facility and the readymix concrete facility. The manufacturing element of the operations on site is directly dependant on the raw materials sourced from the quarry. Therefore, while the excavation of aggregate

associated with the quarry itself may not give rise to significant amounts of traffic in terms of exporting raw aggregate off site, the fact that this aggregate is also supplying and provides the raw material for the production elements on site will in itself give rise to traffic generation. On the other hand, the juxtaposition of two interdependant industries within the confines of the site is also advantageous in reducing overall traffic trips on the road network.

It would be appropriate in my view to set a limit on the amount of aggregate that can be extracted within the quarry over a year. If quarrying activity was capped at say 300,000 tonnes per year, this would equate to approximately 50 loads per day being transported off site which would give rise to c.100 round trips per day, or 1 trip per 7½ minutes on the local road network. While it is acknowledged that the impact of heavy vehicles travelling along the narrow road has had a localised significant adverse impact in terms of noise, vibration and dust, it should be noted, and this is pointed out in the previous inspector's report in respect of the substitute consent application, that the original quarry and existing manufacturing activity on site preceded the majority of residential development which is taking place along the lane. Therefore, baseline residential amenities of the dwellings have to be viewed in this context rather than in the context of a typical rural area. Furthermore, the proximity of the houses to the busy N18 national primary route should also be noted in terms of impact on residential amenity.

Limiting the level of extraction on site to 300,000 tonnes per annum would in my view constitute an acceptable compromise in terms of protecting residential amenity for the dwellings along the local access road and allowing reasonable and apportioned expansion to take place within the quarry. Therefore, if the Board are minded to grant planning permission for the proposed extension to the existing quarry, I recommend that a condition be attached limiting the rate of extraction to 300,000 annually.

The single 3rd party observation on file requests that the Board consider incorporating speed ramps along the local road in order to slow down traffic on the road. I would agree with the opinion set out in the inspector's report in respect of the substitute consent application (SU0076) that the incorporation of speed bumps should be rejected on the grounds that it would increase noise. Furthermore, research suggests that drivers which routinely travel along a certain section of road,

quickly familiarise themselves with the location of the speed bumps and as a result traffic tends to speed up between the speed bumps thereby defeating the overall purpose of the traffic calming measure. Monies would more appropriately in my view be spent on improving road surfaces and in particular road drainage to ensure that surface water does not flow off the road and into the driveways of residential dwellings located adjacent to the road as indicated in the photographs submitted with the observation.

I note that Galway County Council have requested a condition requiring the payment of €5,000 towards road upgrades in the area. The applicant has responded to this by stating that a similar contribution was requested under the substitute consent application and that a similar contribution under the current application for all intents and purposes represents double charging. I would reject this assertion on the grounds that the €5,000 contribution for road improvements requested by the Council related to historic 'wear and tear' associated with unauthorised development within the quarry, whereas the current contribution relates to future 'wear and tear' of the road surface which may arise as a result of extending the quarry. The Board in my view, if it is minded to grant planning permission therefore should request an overall contribution of €10,000 towards upgrading the road serving the quarry.

The Council could also consider reducing speed limits along the local road in order to improve traffic safety. Finally, in respect of traffic safety, I note the statement in Section 4.10.4 of the inspector's report in respect of SU0076 which states "that the assessment is not aware of any past accidents and I note there are no road accidents recorded in the RSA's Road Collision Map System that would appear to be attributed to the operation of the quarry". This suggests that traffic safety is not a major issue in respect on quarry operations on site.

8.5. **Ecological Impact**

Section 4 of the EIS relates to flora and fauna. In terms of habitat classification, the subject site accommodates in the main described as 'Spoil and Bare Ground' (ED-2). The site also accommodates a smaller area of 'Recolonising Bare Ground' (ED-3) and an area described as 'Artificial Surfaces' (ED-4), (Fossitt's Classification 2000).

These habitats are described in detail in the EIS. The survey results undertaken indicated that no rare or protected plant species were found during the survey. A survey was also undertaken for fauna on site which included a survey of invertebrates, mammals, birds and exotic species. The assessment likewise concluded that there were no protected or threatened habitats or species of high conservation value at risk of significant impact as a result of the proposed development. I can only conclude based on the surveys carried out in the EIS that the proposed development will not have a significant and environmental impact on the ecology of the area. I consider the above conclusions to be reasonable based on my own site inspection.

8.6. Impact on Residential Amenity through Noise and Vibration

I am satisfied that the proposed quarry extension will have little or no impact on amenity through noise and vibration. I note the baseline noise monitoring studies which are set out in Table 9.2. They indicate that at noise sensitive location N1, which is located on the local access road, that noise levels breached the 55 dB(A) limit on a number of occasions reaching 60.9 dB(A) on the 31st March, 2008 when quarrying operations would have been close to their peak. Having inspected the site I noted that much of the noise levels experienced on the access road can be attributed to traffic passing along the N18. In fact, for the majority of the houses which are located adjacent to the N18 junction, traffic on the N18 is the dominant source of ambient noise levels in the area. Elevated noise levels are obviously recorded as a result of HGV traffic associated with the quarrying and manufacturing activity.

It is anticipated that noise levels will remain generally the same along the access road, particularly if extraction rates are limited to 300,000 tonnes per year as recommended in this assessment. The proposed extension of the quarry in an orderly direction will have a negligible impact on ambient noise levels as experienced at the nearest noise sensitive locations. The quarry face will move further away from the nearest noise sensitive receptors along the access road. If anything the fact that the drilling, blasting and excavation of materials will occur at a further distance away from these noise sensitive receptors will be advantageous in terms of reducing noise

levels in the ambient environment, albeit marginally. It is acknowledged however that the main source of noise generation associated with traffic at these noise sensitive locations are associated with the HGVs entering and exiting the quarry.

I do not anticipate that noise levels will increase to any material extent for dwellings located to the north of the subject site. The closest dwellings are located almost 1 kilometre to the north and therefore are unlikely to experience any material adverse impact as a result of the proposed extension. I note that the EIS in this instance has failed to model any predicted impacts which could arise on noise sensitive receptors particularly to the north and east as a result of the proposed quarry extension. In the interest of completeness, the Board may wish to seek further noise modelling surveys assessing any future noise impact which could arise. However, having regard to the separation distances involved, I would be generally satisfied that the proposal would not have a material impact on the residential amenities of any noise sensitive location in the wider vicinity and as such I not consider that further details in this regard are necessary in order to ascertain the environmental impact.

Similarly, having regard to the separation distances between the proposed quarry extension and the nearest residential dwellings, I am satisfied that the proposed development will have no material adverse impact in terms of vibration arising from blasting.

8.7. Impact on Hydrology and Hydrogeology

According to the information contained on file, the quarry operates a closed water system in that no water is discharged off site. Water balance details are set out in Section 3.1.4 of the EIS. It is estimated that the proposed extension will give rise to approximately 31,500 cubic metres per year (total precipitation less evaporation). This equates to approximately 86 cubic metres per day. This water either percolates to groundwater or is used for production purposes in the manufacture of concrete. There are no surface water features located in the immediate vicinity of the site. Precipitation falling directly on the application site generally percolates through the underlying geology over time or flows to shallow depressions where it evaporates off the surface of the quarry. Surface water is collected in a large sump area on the quarry floor. When required, water is pumped from the sump to the manufacturing area and is used for the production of concrete.

It appears from the information contained on file that the excavation activities have not breached the water table on site. The EIS notes that groundwater levels fluctuate seasonally and rises during winter months in response to periods of high precipitation. This results in parts of the lower level of the extraction area becoming flooded during periods of prolonged rainfall.

Mitigation measures are detailed in the EIS to ensure that water which collects at the quarry floor is not contaminated with any oils or lubricants on site. Assuming that these mitigation measures are implemented, I consider that any water management arrangements on site will not adversely affect groundwater or surface water in the vicinity, as no discharge to surface waters occurs. Any percolation from the quarry floor to groundwater in the area will be the subject of natural filtration. Groundwater quality monitoring results set out in Table 6.3 indicate that existing groundwater quality in the vicinity of the site is good, it can be reasonably deduced therefore the existing operations on site are not giving rise to groundwater contamination.

8.8. Archaeology and Cultural Heritage

The subject site has been subject to an archaeological and cultural heritage assessment which is set out in Section 13 of the EIS. A desktop study was carried out as part of the EIS which included consultation with:

- The Record of Monuments and Places.
- The Record of Protected Structures.
- Aerial Photographs.
- Previous Excavation Reports.
- Cartographic and Documentary Sources.

A field inspection was also carried out in July, 2013. The results of the assessment suggest that there are no direct or indirect impacts on any known items of archaeology, cultural heritage, buildings of heritage interest in the application area or the vicinity. I can only conclude therefore that the proposed development would have an acceptable impact on the archaeology and cultural heritage of the area.

9.0 Environmental Impact Assessment

I have read the EIS document submitted with the application and I am generally satisfied that the information contained in the document identifies the major environmental issues which are likely to arise as a result of the proposed extension of the quarry. I also consider that the document has attempted to describe and identify the main direct, indirect and cumulative environmental impacts which are likely to occur as a result of the proposed development. I do consider however that there are a number of shortcomings in the EIS submitted, namely that in some instances, the document has failed to adequately quantify and assess the all future impacts that may occur on site and these issues are dealt with in more detail below.

I am satisfied that the document describes the processes which are undertaken at the quarry and sets out in detail the activities that will be undertaken in respect of the proposed extension. It is worth noting however that the document fails to adequately quantify or estimate the total volume of material which will be excavated from site for the purposes of extraction and processing. Notwithstanding this point, it is open for the Board to limit the amount of material to be excavated on site on an annual basis and it is also open to the Board to limit the life of the quarrying activity by way of conditions.

Section 3 of the EIS relates to human beings. It describes in detail the existing environment in terms of population, economic activity, land use and housing and tourism and recreation facilities in the area. Positive environmental impacts arising from continuing employment and indirect employment arising from the quarry is identified. Potential negative impacts on human beings arising from noise, vibration, dust and traffic are identified in subsequent chapters.

Section 4 of the EIS relates to flora and fauna. The EIS identifies and classifies the habitats of the subject site and also carried out a detailed site investigation in relation to fauna. The impact assessment is evaluated under the headings of direct impact, indirect impact and cumulative impact. The assessment reasonably in my view concluded that there were no protected or threatened habitats or species of high conservation value in the area. A number of mitigation measures are proposed in the EIS to ensure that impacts on the aquatic environment and bird species as well as any potential impact from fugitive dust emissions are acceptable. Habitat

reinstatement will also take place as part of the restoration plan, post operation. I consider that the EIS has identified, described and evaluated the potential impacts which could arise on flora and fauna in the area and it is reasonably concluded that these impacts are not significant.

Section 5 of the EIS relates to soils and geology. I am satisfied that this section of the EIS provides baseline information in relation to the receiving environment including soils, bedrock, geology and any geological features which may exist on site. The proposal will obviously result in the stripping of overburden and the removal of bedrock. However, this impact is not deemed to be of any great significance.

In terms of hydrology and hydrogeology, the EIS assesses the potential impacts of the proposed development on surface water and groundwater. The EIS establishes that there will be no discharge to surface waters in the area. The quarry will operate under a closed water system in that any surface waters accumulating within the quarry floor will result only from rainfall (as opposed to groundwater intrusion). A proportion of this water will be used for processing activities on site and the remainder of the water will be subject to evaporation or will infiltrate over time back to groundwater. A number of mitigation measures are proposed to ensure that any potential contamination of water through hydrocarbon spills or oil spills are kept to a minimum and that appropriate bunding arrangements are put in place to ensure that any such spills do not percolate the groundwater. Groundwater monitoring results indicate the groundwater quality in the vicinity of the site is acceptable at present. Surface water and groundwater in the application site will continue to be monitored. Having regard to the mitigation measures being put in place in respect of groundwater percolation and the fact that the quarry does not discharge to surface waters in the area, I am satisfied that the conclusions reached in the EIS that the residual impacts will be acceptable, is a reasonable conclusion.

Section 7 of the EIS relates to climate. It identifies the main potential impact arising from the proposal and relates to changes in climate through increased air emissions. The document reasonably concludes in my opinion that it is unlikely that the activities undertaken on site would have led to a significant contribution of emissions to the overall environment.

Chapter 8 of the EIS relates to air quality. Air quality baseline data is provided in Table 8.3 of the EIS. The data submitted indicates that with the exception of three dates in 2007 (which equates to less than 10% of the overall readings), dust deposition rates generally complied with the recommended guideline value of 350 mg/m²/per day (Bergerhoff Guidelines). The EIS assesses the impact of the proposal in terms of dust deposition, removal of overburden, drilling and blasting of in situ material and the processing and transportation of material from the site. The EIS states that with the incorporation of appropriate mitigation measures which are set out in Section 8.6, (which include spray facilities) that it is not anticipated that there will be an adverse impact on air quality in the vicinity of the application site. This is a reasonably conclusion in my opinion having regard to the baseline monitoring data presented in the document and the fact that excavation and production rates are expected to be similar to those which occur historically on site. The EIS in my view has identified and described the major operations on site that will give rise to fugitive dust generation, has assessed the potential impact arising from the activities to be undertaken and has set out mitigation measures in order to counteract any adverse impact arising from the activities. The conclusion that there will be little adverse impact on air quality in the vicinity of the application site, particularly having regard to the generous separation distances between the extended quarry and the nearest dust sensitive receptors, is a reasonable conclusion in my opinion.

Section 9 of the EIS relates to noise and vibration. The EIS describes the existing noise environment and baseline noise surveys are set out in Table 9.2 of the EIS. While the baseline surveys indicate relatively high background noise levels, much of this noise can be attributed to heavy traffic volumes on the N18 adjacent to the site. The EIS identifies the characteristics of the operations to be carried out on site and identifies the main noise generating activities which involve the excavation and processing of material on site. The EIS however does not attempt to quantify or assess the potential noise impact arising from the extension of the quarry in a northern direction particularly on noise sensitive receptors located to the north of the quarry. However, having regard to the separation distances involved, I would be generally satisfied that the noise levels arising from the extension would have a negligible impact on the amenity of surrounding residents, particularly to the north and east of the site. The EIS also sets out mitigation measures to reduce noise

levels. These include the construction of berms and the enclosure and cladding of plant and machinery where possible. It is reasonable to conclude in my opinion that if mitigation measures are followed and implemented, no significant impacts will arise in terms of noise levels generated by the quarry particularly as the direction of excavation is away from the nearest noise sensitive locations in close proximity to the access.

If the Board consider it appropriate to implement a condition limiting production of aggregate to 300,000 tonnes per annum, noise impacts arising from traffic along the access road can be considered to be acceptable on the grounds that historical activities on site appear to have resulted in greater levels of extraction with commensurate traffic generation during peak times. If the Board consider that substitute consent should not be granted for any reason, particularly issues relating to traffic associated noise may require further evaluation.

Chapter 10 of the EIS relates to traffic. Details of the existing traffic environment are set out including traffic levels on the N18. While the EIS does not specifically quantify the specific number of traffic movements associated with the facility. It states that it is not proposed to increase the level of extraction and processing above the levels granted under the 261 Registration. The quarry registration application indicates that there were 294 vehicular movements per day, 200 of which were HGV movements. Having regard to the traffic volumes on the N18 (c.19,000 vehicular movements per day), it is reasonably concluded that the traffic levels associated with the working quarry is relatively low when compared with the level of traffic used on the national primary route. The residual impacts are therefore considered to be acceptable. I have argued above in my assessment that if the Board are minded to grant planning permission for the proposed development the quantity of material to be extracted on an annual basis should be restricted to 300,000 tonnes per annum. I estimate that this will result in traffic volumes of approximately 100 HGV movements per day. This is approximately 50% of the peak value and this should further ensure that the traffic impact arising from the proposed development is acceptable.

In terms of landscape and restoration (section 11) the EIS adequately describes the receiving environment and identifies the potential impacts arising from the extension of the quarry in terms of the landscape and visual impact. A number of landscape and restoration measures are set out in the EIS and these relate to berm

construction, planting works and restoration. With the employment of the above mitigation measures and the fact that the quarry is located a significant distance from any public vantage points along the public road network serving the site, I would agree with the conclusions in the EIS that the residual impacts are deemed to be acceptable.

Section 12 of the EIS relates to material assets. It describes the existing environment providing details in relation to residential developments in the vicinity of the site, the geological and land-use resources within the site, details of the road network and access, waste management proposals and public utilities associated with the site are set out. It is not anticipated that the proposed quarry extension will have a significant environmental impact on any of the above. It is stated that the working quarry produces very limited amounts of waste and all waste will be removed to appropriately licensed facilities by licensed contractors. The proposal will have no significant impacts on public utilities nor will it result in a significant reduction of a geological or land-use resource having regard to the ubiquitous nature of limestone rock and agricultural land in the vicinity. I consider that all material assets have been identified in the document and the potential impacts arising on material assets have been identified, described and evaluated.

Section 13 of the EIS relates to archaeology and cultural heritage. The EIS provides a detailed desktop study of the site and its surroundings and also undertook a field survey in respect of the subject site. The EIS did not identify any features either on the site or in the vicinity of the site of archaeological, architectural or cultural heritage. The conclusion that the proposed development will have no material impact on the archaeology and cultural heritage of the area is of reasonable conclusion in my opinion having regard to the information contained in this section of the EIS.

In conclusion therefore and having regard to the contents of the EIS, I am satisfied that there is sufficient information in respect of the application to carry out a full environmental impact assessment and I would also generally agree with the conclusion set out in the EIS that the proposed development would not have a significant impact on the receiving environment, either directly or indirectly as a result of the proposed excavation to be undertaken as part of the quarrying activities. I am also satisfied that the EIS has adequately assessed where appropriate, the cumulative impacts which could arise as a result of other activities in the area. I am

satisfied that with the incorporation of mitigation measures as set out, that these measures will ensure that any adverse impact on the environment will be minimised and will not be of a significant nature.

Where the applicant has failed to carry out specific modelling in respect of future impacts arising, I am satisfied that any such impacts particularly in relation to noise and vibration and to a lesser extent dust, would not be such as to have an adverse impact on surrounding amenity having regard to the separation distances involved between the proposed extended area and the nearest residential dwellings. I am therefore satisfied that the EIS has been carried out in accordance with the requirements set out under Article 94 and Schedule 6 of the Planning and Development Regulations, 2001 as amended.

10.0 Appropriate Assessment

An Appropriate Assessment Screening Report was not submitted with the application. However, Section 4.6 of the ecology section of the EIS specifically deals with the potential impact of the proposal on European sites. It is noted that the quarry is not within or bordering any designated European site. There are seven Natura 2000 sites within a 15 kilometres radius of the site. The closest two sites are the Cregganna Marsh SPA (Site Code: 004142) which is located 1.1 kilometres to the west of the quarry and the Galway Bay Complex SAC (Site Code: 000268) and SPA (Site Code: 004031) is 1.5 kilometres to the west of the subject site. The EIS correctly identifies these two sites as being the only sites that could realistically be potentially impacted upon by the quarrying activities.

The Cregganna Marsh SPA has one designated feature of interest:

The Greenland White Fronted Goose.

The Galway Bay SPA located to the west of the subject site has many more features of interest including:

- The Great Northern Diver.
- The Cormorant.
- The Grey Heron.

- The Light Bellied Brent Goose.
- The Widgeon.
- The Teal.
- The Shoveler.
- The Red Breasted Merganser.
- The Ringed Plover.
- The Golden Plover.
- The Lapwing.
- The Dunlin.
- The Bar Tailed Godwit.
- The Curlew.
- The Redshank.
- The Turnstone.
- The Black Headed Gull.
- The Common Gull.
- The Sandwich Tern.
- The Common Tern.
- Wetland and Wetbirds.

The Galway Bay Complex SAC has the following features of interest.

- Mudflats and sandflats not covered by sea water at low tide.
- Coastal lagoons.
- Large shallow inlets and bays.
- Reefs.
- Perennial vegetation of stony banks.

- Vegetated sea cliffs on the Atlantic and Baltic coasts.
- Salicornia and other annuals colonising mud and sand.
- Atlantic salt meadows.
- Mediterranean salt meadows.
- Turloughs.
- Juniperus Communis formations on heaths and calcareous grasslands.
- Semi-natural dry grassland and scrubland faeces on calcareous substrates.
- Calcareous fens with cadium mariscus and species of the caricion davallianae.
- Alkali fens.
- Limestone pavements.
- Otter.
- Harbour seal.

The quarry extension is sufficiently removed from the SPAs to ensure that the proposed activities to be undertaken will in no way impact on the bird populations referred to above. It is unlikely that fugitive dust from the quarry would travel sufficient distances which will in any way impact on feeding grounds associated with the birds. The presence of the N18 between the subject site and the designated European sites is also likely to potentially have a greater impact in terms of bird disturbance than the quarrying activities taken place on site.

The EIS notes that the active area of the quarry including the steep sided quarry faces afford the possibility of roosting ledges for both corvid and raptor species such as the Peregrine Falcon an Annex I species. The EIS does not make any reference to the recording of any Peregrine Falcon nesting sites at the subject quarry.

In terms of impact on the Galway Bay Complex SAC, the quarrying activity is sufficiently removed to ensure that the proposed works to be undertaken will in no way impact on habitats associated with the SAC. Thus the proposed quarrying activities will in no way result in the reduction or fragmentation of the habitats which

form part of the qualifying interest associated with the SAC. The Board will also note from the assessment above, that the quarry operates a closed water management system and therefore no surface water is discharged off site. Therefore, the proposed development will in no way alter or diminish the surface water quality of any surface water bodies in the vicinity of the site which could have consequential impacts on either the flora associated with the habitats which form qualifying interests of the SAC namely aquatic species such as the otter within the Galway Bay SAC. Furthermore, there will be no indirect impacts in terms of alteration of feeding grounds for any of the species listed in the European sites above.

Finally, in light of the above there is no potential for in combination effects with other quarrying activities or similar land-uses in the area as the main land-uses in the vicinity of the quarry are limited to agricultural and residential.

In conclusion therefore it is reasonable to conclude 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 others plans and projects would not be likely to have a significant effect on the Cregganna Marsh SPA, the Galway Bay Complex SAC or the Inner Galway Bay SPA or any other European site, in view of the site's conservation objective, and a Stage 2 Appropriate Assessment (and a submission of an NIS) is not therefore required.

11.0 Conclusions and Recommendations

11.1. Arising from my assessment above I recommend that the Board grant permission under the provisions of Section 37L of the Planning and Development Act 2000 (as amended) for the further extension of the quarry at Tonroe, Oranmore, County Galway in accordance with the plans and particulars provided, based on the reasons and considerations set out below.

12.0 Reasons and Considerations

In making its decision the Board has regard, inter alia, to the following:

- (a) The provisions of the Planning and Development Act 2000, as amended and in particular Section 37L of the said Act.
- (b) The "Quarry and Ancillary Activities, Guides for Planning Authorities" issued by the Department of Environment, Heritage and Local Government in April, 2004.
- (c) The provisions of the current Galway County Council Development Plan.
- (d) The Environmental Impact Statement submitted with the application for further development within the quarry.
- (e) The report and opinion of the Planning Authority submitted to the Board under Section 37L(12)(a) of the 2000 Act, as amended.
- (f) The submission made in accordance with the Regulations.
- (g) The report of the Board's inspector including the assessment of the potential significant effects on the environment.
- (h) The planning history of the site.
- (i) The pattern of development in the area.
- (j) The nature and scale of the development the subject of this application for further development.

13.0 Conditions

The development shall be carried out and completed in accordance with the plans and particulars lodged with the application 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 the recommencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

 The grant of permission to further develop the quarry shall be for a period of 20 years from the date of this order.

Reason: To enable the effects of the development to be reassessed in light of the operation of the permission to further develop the quarry and the circumstances then obtaining.

3. The applicant shall limit the extraction to a maximum of 300,000 tonnes of aggregate per annum.

Reason: To preserve the residential amenity of residents in the vicinity.

3. 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 re-

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;

Proposals for the suppression of dust on site; (c)

(d) Details of safety measures for the land above the quarry, to include

warning signs and stock proof fencing;

(e) Management of all landscaping;

(f) Monitoring of ground and surface water quality, levels and discharges;

(g) 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.

4. Surface water from the site shall not be permitted to drain onto the adjoining

public road.

Reason: In the interest of traffic safety.

5. The depth of the excavation shall not exceed minus 6 metres Ordnance

Datum.

Reason: To protect the groundwater in the area.

6. All overground tanks containing liquids (other than waters) shall be contained

in a waterproof bunded area which shall be of sufficient volume to hold 110%

of the volume of the tanks within the bund.

Reason: In order to protect groundwater.

7. Scrap metal and other waste material shall be removed at least annually from

the site in accordance with the written requirements of the planning authority.

Such materials shall be deemed to include old trucks, other scrapped

vehicles, empty oil barrels, broken or otherwise unusable truck bodies, worn

out conveyor belts/chains, worn out batteries, unusable tyres and worn out

conveyor/roller shafts.

Reason: To protect the amenities of the area.

The site shall be screened in accordance with a scheme of screening 8.

measures and boundary treatment in respect of the entire quarry complex

which shall be submitted to, and agreed in writing with, the planning authority

prior to re-commencement of development. This scheme shall include the

timeframe, specific locations, and final form and height of proposed screening

berms, details of all planting proposed on existing and proposed screen

berms, details of the ongoing care and management of such planting, details

of a phased programme of landscaping within the quarry and details of an

adequate barrier to prevent unrestricted access to the top of the quarry face

from adjacent lands.

Reason: In the interest of visual amenity and to safeguard the amenities of

property in the vicinity during the operating phase of the development.

9. The quarry, and all activities occurring therein, shall only operate between 0700 hours and 1900 hours, Monday to Friday and between 0700 hours and 1400 hours on Saturdays. No activity shall take place outside these hours or on Sundays or public holidays. No rock-breaking activity shall be undertaken within any part of the site before 0800 hours on any day.

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

- 10. (a) Blasting operations shall take place only between 1000 hours and 1700 hours, Monday to Friday, and shall not take place on Saturdays, Sundays or public holidays. Monitoring of the noise and vibration arising from blasting and the frequency of such blasting shall be carried out at the developer's expense by an independent contractor who shall be agreed in writing with the planning authority.
 - (b) 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 one minute shall be sounded.This alarm shall be of sufficient power to be heard at all such dwellings.

Reason: In the interest of public safety and residential amenity

11. (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 re-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.

- 12. (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 re-commencement of development. Details to be submitted shall include monitoring locations, re-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 re-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.

13. The applicant shall agree to provide and maintain appropriate road signage to highlight the quarry entrance. Details of all signage shall be agreed with the planning authority prior to the commencement of works on site.

Reason: In the interest of traffic safety.

14. Details of the proposed restoration plan subsequent to the closure of the quarry shall be agreed with the planning authority within one year of the commencement of development.

Reason: In the interest of orderly development and environmental protection.

15. The developer shall pay to the planning authority a financial contribution of €10,000 (ten thousand euro) in respect of road improvements in the vicinity of the site 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. The

contribution shall be paid prior to the 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 the Board to determine.

Reason: It is a requirement of the Planning and Development Act 2000 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.

16. Prior to the commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or any 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 security shall be as agreed between the planning authority and the developer, or in default of agreement shall be referred to the Board for determination.

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

Paul Caprani,

Senior Planning Inspector.

21st December, 2016.