

An Bord Pleanála



Inspector's Report

PL10.QD0001

DEVELOPMENT:-

Deepening of existing quarry to a depth of minus 6 metres AOD over 14.03 hectares, modifications to condition no. 2 of PL10.120270 thereby extending the life of the quarry by 25 years and the implementation of a restoration plan at Kilree, Sheastown, Bennetsbridge, County Kilkenny.

PLANNING APPLICATION

Planning Authority:	Kilkenny County Council
Planning Authority Reg. No:	N/A
Applicant:	Eoin O'Carroll
Application Type:	Application under Section 37L of the Planning and Development Acts
Planning Authority Decision:	N/A
Prescribed Bodies:	Inland Fisheries Ireland, Transport Infrastructure Ireland, An Taisce, HSE, Department of Arts, Heritage and the Gaeltacht, Irish Water and Kilkenny County Council.
DATE OF SITE INSPECTION:	13 th April, 2016.
Inspector:	Paul Caprani

1.0 INTRODUCTION

QD10.QD0001 relates to an application under the provisions of Section 37L of the Planning and Development Acts 2000 – 2015 in respect of a further development of an existing quarry. The development will consist of the deepening of an existing extracted area c.14 hectares in size to a finished floor area of minus 6 metres AOD thereby extending the life of the quarry by 25 years. It is also proposed to implement a restoration plan for the overall site on the cessation of works. The existing quarry is located in the townland of Kilree, Sheastown outside the village of Bennetsbridge in County Kilkenny.

2.0 SITE LOCATION AND DESCRIPTION

The quarry is situated in the townland of Kilree approximately 5 kilometres south of Kilkenny City and 1 kilometre north-west of the village of Bennetsbridge.

The quarry is mainly surrounded by large agricultural fields bounded by mature hedgerows. The M9 Motorway is located adjacent to the southern boundary of the site. The River Nore runs in a north-south direction approximately 500 metres to the east of the site. The quarry is accessed off the R700, a regional route that also runs north-south to the eastern side of the site linking Bennetsbridge with Kilkenny City.

In terms of surrounding settlement there are a number of dwellinghouses and farm buildings located to the immediate east of the quarry development, located along an access road which runs roughly parallel to the quarry access from the R700. These dwellinghouses are located between the quarry and the R700, to the south of the quarry access. Most of the other dwellings in the surrounding area front onto the R700, particularly to the north of the site. Some isolated rural farmsteads are located further west of the site. There are a number of other large quarries in the surrounding area including Hennessy's Concrete Quarry approximately 500 metres to the north-east and a large Roadstone Quarry located approximately 1 kilometre to the north-east.

Existing Operations on Site

The existing quarry site at Kilree is a substantial operation encompassing an area of 39.32 hectares. The site accesses onto the R700 Regional Route at the north-eastern side of the quarry. The main production and processing area is located in the north of the site adjacent to the entrance and this comprises of:

- Administrative buildings and staff facilities.
- Processing and plant equipment.
- A weighbridge and wheelwash facility.

In addition to the quarry activity there is precast concrete production facilities also located at the northern end of the site. A lagan asphalt plant also operates within the quarry under a lease from the operators. Both of these operations are separately run from the quarry operations.

The current quarry extraction area is centrally located within the site and two benches c. 10 to 15m in depth have been excavated to date. The upper bench extends out to the perimeter of the quarry. The lower bench has been excavated to a maximum depth of 30 metres AOD. The lower bench is restricted to the central area of the quarry. Hydrogeological investigations show that the water table, while subject to seasonal fluctuations, rests at about 40 metres AOD. The lower bench therefore has been excavated to approximately 10m below the water table. Evidence of the water-table breach was apparent with significant water egress between faults within the quarry wall (see photographs attached). Both pluvial and groundwater is collected in channels along the quarry floor and is directed to a large sump area. Groundwater and rainwater accumulations from the sump area are pumped, via four large pumps, up the quarry faces and into a large settlement lagoon which is located in the south-eastern corner of the quarry. The settlement lagoon has the potential to accommodate approximately 55,000 m³ of water. Water is discharged from the lagoon into the Dunbell Stream. This stream is a small stream which runs to the south east of the quarry, under the M9, through agricultural fields and subsequently discharges into the River Nore approximately 500 metres east of the subject site. The water management measures have been subject to a separate discharge licence (see Planning History below).

3.0 PROPOSED DEVELOPMENT

The proposed development which is located under the provisions of Section 37L which permits an application for substitute consent to be accompanied by an application to further that development in accordance with the provisions of the Act. The proposed development in this instance comprises of the following:

- The deepening of 14.03 hectares of the existing quarry to create a finished floor area of minus 6 metres AOD, within the entire 14.03 hectare site thereby extending the life of the quarry by 25 years. For the purposes of clarity, both benches within the quarries will be excavated to this depth.

- By implication and modification of Condition No. 2 of the extant planning permission relating to the site (Reg. Ref. PL10.120270, see Planning History below) to allow the continuation of quarrying on site for a 25 year period beyond December, 2018.
- Ancillary works associated with the implementation of the restoration plan for the site.

The Planning Report submitted with the application indicates that the proposed development will result in the extraction of approximately 4,762,950 m³ of limestone. This equates to approximately 12.86 million tonnes of rock. The annual rate of extraction will amount to approximately 525,000 tonnes of material.

4.0 PLANNING HISTORY

Details of the planning status and planning history of the existing limestone quarry are set out in Section 4 of the Planning Report accompanying the application. The main information contained in this section is briefly summarised below:

Under Council **Reg. Ref. P419/85** the limestone quarry was originally granted planning permission on 16th January, 1987.

Under **P.A. Ref. 99/1161** an application was made to significantly enlarge the quarry to encompass a 30.8 hectare site. The Planning Authority's notification to grant planning permission for the proposed development was subject to a number of third party appeals.

Under Reg. Ref. **PL10/120270** An Bord Pleanála upheld the decision of Kilkenny County Council and granted planning permission subject to 32 conditions. Condition No. 2 states that the permission shall be for the period until the 31st day of December, 2018.

Subsequent to this principle permission, Kilkenny County Council granted planning permission for a number of other developments and facilities at the subject site including the provision of landscaping and wheelwash facilities, the provision of a lime and asphalt plant and the development of a precast concrete facility on site. A number of planning permissions also related to alterations to the existing ancillary facilities provided on site.

Under **An Bord Pleanála Ref. PL10QV.0244** An Bord Pleanála decided to confirm the determination of the Planning Authority under the provisions of Section 261A(2)(a)(i) and (ii) and Section 261A(3)(a) of the Planning and Development Acts 2000 – 2010 in respect of the subject quarry. The effects of the Board's order was to direct the quarry owners to apply for substitute consent with an application accompanied by a remedial EIS and a remedial NIS. The Board order also set aside the decision of the Planning Authority in respect of the quarry development under the provisions of Section 261A(5)(a).

Under **SU10.SU0122** an application for substitute consent was lodged with An Bord Pleanála on 30th September, 2014. An Inspector's Report was prepared in respect of this application. This report is contained on the subject file attached.

However prior to determination of the Substitute Consent file by An Bord Pleanála, a letter was received from the applicant (dated 16th July, 2015) requesting that the Board do not issue a decision in relation to the substitute consent application on the grounds that new regulations are forthcoming (EU (EIA and Habitats) No. 2 Regulations 2015 (S.I. 320 of 2015)). Under the new provisions of the Act (Section 177E(2)(a)) makes it possible under certain circumstances for substitute consent applications to be made in respect of both that part of the development authorised under the permission which has already been carried out and make an application for planning permission within that part of the development authorised which has not been carried out. In this case the application for substitute consent under SU10.SU0122 was submitted prior to the 22nd July, 2015 (operative date for the new legislation). Therefore the original substitute consent application, in accordance with the new legislation, is deemed to have been withdrawn.

5.0 PLANNING APPLICATION

The planning application lodged on 17th September, 2015 was accompanied by the following documentation.

- A Planning Report.
- A Habitat Directive Screening Report for Appropriate Assessment (Stage 1).
- An Environmental Impact Statement (including a separate volume containing a non-technical summary).
- A Quarry Restoration Plan.

- Application form and drawings including site layout (existing and proposed) and sections of the extracted area.

The subject application was lodged with An Bord Pleanála on 17th September, 2015. On receiving the application the Board notified the following bodies:

- The Development Applications Units at the Department of Arts, Heritage and the Gaeltacht.
- Fáilte Ireland.
- The Heritage Council.
- The Arts Council.
- Inland Fisheries Ireland.
- Department of Tourism, Energy and Natural Resources.
- Transport Infrastructure Ireland.
- An Taisce.
- The Health Service Executive.
- Irish Water.

The submissions received by the prescribed bodies are briefly summarised below.

10.8 Submission from Transport Infrastructure Ireland (TII)

The TII observations outlined in the original submission on the substitute consent application (SU0122) are still applicable. Having regard to the existing quarry operations and the quarry deepening proposals to the M9 Motorway, it is recommended that any consent granted for the subject development, safeguards the strategic function of the national road from quarry related operations including potential dust and debris impacts. The Planning Authority also request that discharge from the holding pond/lagoon indicated on the site layout plan and adjoining the motorway is appropriately controlled to prevent risk of flooding on the motorway.

5.2 Submission from the Department of Arts, Heritage and the Gaeltacht

With regard to appropriate assessment screening, it is noted that the quarry is currently operating below the water table and that discharge from the quarry enters the River Barrow and River Nore candidate Special Area of Conservation. The Department have noted on a number of visits that water entering the stream is laden with silt. System failures in this respect have been detailed in the appropriate assessment screening. In order to protect the water quality of the SAC downstream, the current system may need to be

upgraded. It is noted that suspended solid limits were breached on a number of occasions on the existing licence. It is not clear whether the licence water quality emission limit values as set by the EPA (*sic*) in the discharge licence dated 13th February, 2015 are appropriate to protect the site's qualifying interests. An Bord Pleanála should also be satisfied that the proposed extension to the quarry depth and the accompanying pumping out of groundwater will not negatively impact on the River Barrow and River Nore cSAC. Additional information should be requested in this regard.

The issue of cumulative effects needs to be addressed. Furthermore An Bord Pleanála should satisfy itself that enough detail has been supplied to ensure that the restoration plan is of sufficient detail to carry out a screening for appropriate assessment.

Finally any nesting for Peregrine Falcons should be designed so that they cannot be easily accessed by those who may wish to steal the eggs or chicks of the birds.

5.3 Submission from Kilkenny County Council

With respect to the issue of noise, Kilkenny County Council would not have any significant concerns and would suggest noise limits in line with the recommendations set out in the EPA Guidance.

In respect of dust it is likewise suggested that limits specified in EPA Guidance Documents be adhered to in this instance. The Board should also consider amending wheel washing procedures to limit the amount of dust on the adjoining roadway.

One of the most significant potential impacts identified relates to dewatering from the quarry and its potential impacts on the River Nore. It is considered that the flows and emission values set out in the licence are at or very close to the maximum that can be licensed while still complying with the Surface Water Regulations. Concerns are expressed that the underlying bedrock may be karstic in nature and may give rise to significant groundwater flows. Any water discharges from the site should be assessed in the context of complying with the limits set out in the Surface Water Regulations. It is likely that a review of the existing discharge licence may have to be sought. A loss of groundwater recharge should be evaluated in more detail. The cone of depression in groundwater resulting from a further 36 metre extraction depth should be carefully investigated so as not to have any undue impact on existing wells in the vicinity.

5.4 Submission from Irish Water

Irish Water request that the applicant submit further information to enable Irish Water to assess the impact of:

- The proposed reduction of ground level and associated water table drawdown on water supplies in the area both in terms of quantity and quality.
- Dewatering on the River Nore in terms of the water balance and on the increased risk to water quality downstream to the discharge.

5.5 Submission from Inland Fisheries Ireland

Inland Fisheries Ireland have no objection in principle to the proposed development, however its main concerns relate to the nature, quality and volume of discharges from the quarry site. There is uncertainty in relation to the exact volumes of water which may, according to the information submitted, be in the order of 53,000 cubic metres per day. The existing licence permits a mean daily discharge of 15,000 cubic metres per day over the course of any month and a maximum daily discharge of 40,000 cubic metres. A number of tables are attached to the submission indicating the predicted water quality in the River Nore arising from two discharge scenarios from the quarry. It is noted based on the current available information for receiving waters, the discharges do not breach the standards set out in S.I. 272 of 2009. In the event of the Board granting substitute consent, the IFI recommend a number of conditions be attached.

5.6 Submission from HSE

The submission notes details of the hydrological investigations carried out as part of the EIS, and recommends that as part of an environmental management plan, water quality in the vicinity be monitored. In the event of wells in the area being adversely affected, the developer shall undertake appropriate mitigation measures to ensure that water quality/quantity is not affected.

The capacity of the existing surface water management system should be reviewed to ensure that it has adequate capacity to deal with any increased volume of discharge or deal with any severe weather event.

It is also recommend that dust monitoring be carried out and form part of the Environmental Management Plan (EMP). Finally it is stated that it is essential that a comprehensive EMP be drawn up for the quarry.

5.7 Submission from An Taisce

The submission from An Taisce notes that many issues in relation to non-compliance with planning conditions have been raised by third parties in the past. The rationale for lodging this application in advance of the substitute consent determination is not explained. Accordingly it would be premature to consider this application for extending the excavation depth and the duration of the operation as substitute consent may not be forthcoming on grounds of a lack of a buffer area and separation distance to residential dwellings.

Any revision to Condition No. 2 of the parent permission (Reg. Ref. PL10.120270) should not be permitted until all compliance issues are resolved. It is submitted that 10 years should be the maximum duration for any consent for a new extended quarry. Development of this scale must not only demonstrate lack of adverse impact on the surrounding hydrological regime but also needs to be adequately separated in terms of distance from surrounding residential development.

5.8 Submission by Ann Gibbons

This third party submission objects to the proposed development and the grounds of objection are as set out below.

It is stated that subsection 37L(3) of the Planning and Development Act 2000 only provides for 'further development of a quarry as a quarry' and does not provide for retention or continued use of other non-quarrying structures or facilities such as offices, canteens, workshops, laboratories and manufacturing activities etc. It is contended that the subject application is invalid as it proposes the continuation of use of ancillary development which is not covered in the definition of a quarry and is explicitly excluded from consideration in the context of the current application by subsection 37L(3) of the Act.

It is also argued that the public notice is invalid on the grounds that the notice makes absolutely no references to whether or not the application is accompanied by a Natura Impact Statement and is therefore contrary to Article 265(1) of the Planning and Development Regulations.

It is also argued that the drawings submitted in support of the applicant do not comply with the basic requirements set out in the Planning Regulations. The

applicant has failed to indicate the existence of a right-of-way on the plans submitted in support of the application and it is therefore contended that the applicant is invalid as it fails to comply with subsection 227(2)(b)(iii) of the Planning and Development Regulations 2001 (as amended).

It is argued that the Environmental Impact Statement submitted is inadequate in that it fails to adequately address the impact of the existing quarry on the character and setting of Kilree House, its curtilage and attendant grounds.

In terms of noise and vibration, reference is made to the EIS which was submitted with the original application for substitute consent under SU10.SU0122 which indicates that in 2009 the maximum air over pressure measured as a result of blasting regularly exceeded the limit 125 dB (linear) as stipulated in Condition 15(2) of PL10.120270. It is stated that the observer has experienced significant vibration at her residence at Kilree House including structural damage. This is particularly important as this house is a protected structure. Having regard to the fact that the applicant has accepted that they have previously failed to comply with standards set down by An Bord Pleanála for noise and vibration limits at this site, it is respectfully requested that permission be refused for the continuation of this unauthorised and clearly non-compliant quarrying activity. Concerns are expressed that the EIS does not address the potential health and safety implications of blasting in such close proximity to the M9 Motorway.

Given the proximity of the working face to the motorway it is suggested that issues in relation to potential fly rock dust plumes ground and structural vibrations should be material considerations in the assessment of this proposal and they should have been incorporated into the EIS.

The submission goes on to refer to a number of issues relating to unauthorised development within the overall landholding. Reference is made to the presence of three above ground gas storage tanks which have been installed to the north of the Bennetsbridge limestone quarry and the presence of a concrete refuelling apron to the front of these tanks. It is also stated that an authorised gateway has been erected close to the main entrance to the quarry.

Finally it is noted that the restoration plan submitted does not recognise the existence of the clearly established private right-of-way across the applicant's property which was specifically referenced in a condition of a previous decision of the Board.

Furthermore the proposed site restoration plan makes no provision for the rehabilitation of lands in the applicant's ownership which are currently occupied by unauthorised quarry related development.

In conclusion therefore it is argued that the subject applicant is invalid, and notwithstanding this contention, the proposed development would have a significant detrimental impact on the amenity and value of third party property in the vicinity. It is therefore recommended that An Bord Pleanála refuse planning permission for the further development of the quarry.

10.8 Board Direction dated 17th November 2015

On foot of an internal memorandum prepared in respect of the validity of the application as set out in the above observer's submission, it was considered that the ancillary elements of the application extended the duration of the existing permission (i.e. the continued operation of the asphalt plant, agricultural line plant and precast concrete plant), and it was further considered that these elements of the proposal may not lie within the scope of Section 37L(3) which limits any applicant under Section 37L to limit any 'further development of a quarry as a quarry' only. The Board agreed and concluded that the proposal listed under Part B of the Public Notices in respect of the application do not come within the scope of quarry development as referred to in Section 37L and therefore cannot be considered by the Board. The applicant was therefore requested to rectify this matter.

The applicant submitted revised public notices reflecting the Board's direction in relation to same. The revised notices were submitted to An Bord Pleanála on 18th December, 2015. A briefing document submitted with the application submitted states that for the avoidance of doubt under this application further development on the site comprises of:

- Additional excavation over an area 14.03 hectares.
- Continued use of parts of the quarry site where extractive material is stored are subject to the processes of breaking, crushing, grinding, screening, washing or dressing i.e. all processing plant and associated infrastructure.
- Ancillary quarry operations including administration and staff facilities. This application does not relate to any manufacturing operations on site namely the operational asphalt plant or the disused lime crushing plant.

- The applicant invites a condition specifying same. The briefing document also incorporates amendments to the applicant documentation including the applicant form, planning report and Environmental Impact Statement.

7.0 RESPONSES

10.8 Response to Submission from Anne Gibbons

Separately the Board received a response on behalf of the applicant by AOS Planning in respect of the submissions from:

- Mrs. Ann Gibbons
- The Development Applications Unit of the Department of Arts, Heritage and the Gaeltacht and
- Kilkenny County Council

In respect of the validity of the application as per the public notices, the submission suggests that the ancillary activities referred to are incidental activities associated with the quarry and the management of the quarry and it would be unreasonable to exclude these from the application under the provisions of Section 37L. These two aspects of the development are inherently linked. (The Board will note however from the previous section of my report that notwithstanding the applicant's argument in this regard, the Board determined that new public notices were required in accordance with the provisions of Section 37L(3)).

With regard to the site notice, it was stated that the site notice was prepared and erected in line with the provisions of the Acts and Regulations. The form on both notices were based on the regulations and approved by An Bord Pleanála prior to lodgement.

With regard to the status and plans and drawings and in particular the issue of the right-of-way, it is stated that the applicant has at all times provided unimpeded access to this laneway which provides access to the rear of the appellant's property and is not the main entrance. That laneway is shown on the drawing submitted. It is not a registered wayleave or right-of-way and thus is not highlighted as such on the drawings.

With regard to the EIS it is stated that the cultural and architectural heritage section incorporated an extremely detailed study and considered the impact of the proposed development on all aspects of the cultural and architectural heritage including Kilree House.

Reference to historic blasts on site and the exceedances of limits set out in the planning conditions were included in the original application for Substitute Consent as this EIS related to a remedial EIS which by its very nature looked at historical events rather than modelling for future events. However it is apparent that since 2012 there have been no exceedances in relation to vibration as a result of blasting. It is therefore wholly realistic to assert that the regime under which the quarry will operate in future will mirror the conditions post 2012. Independent contractors have been employed since 2012 in respect of blasting and have complied with all limits set out in planning conditions since this date.

With regard to the proximity of the M9 all experts who were involved in the assessment of the proposal were confident that the assessments undertaken were accurate and sufficiently detailed.

With regard to unauthorised development on site the following is stated. The oil storage tanks were removed over a year ago. The lands to the north of the quarry were bought by the applicant when the quarry was purchased in 2001. There are no activities carried out on lands to the north of the quarry. There are some redundant sheds which were used by previous landowners.

The gateway referred to has been in existence for many years. The gates shown were erected in 2013 to replace manual gates. The observer has access to these gates and used them on a daily basis.

7.2 Response to Submission by Kilkenny County Council

The applicant welcomed the comments made by Kilkenny County Council in respect of noise and dust.

In relation to water it is stated that extensive surveys were carried out from 2008 to 2014 and it is stated that there is no evidence of karst features on site. Details of the studies are set out in the EIS. The hydraulic connectivity value of 2.95 metres per day was assigned to the hydraulic conductivity rate for the purposes of modelling is deemed to be a slightly high estimate of groundwater flow in the area. While the model indicates that the respective discharge could potentially increase to over 53,000 m³ /d, the on-site lagoon currently has the capacity to deal with 55,000 m³/d with the potential to enhance storage capacity as necessary.

The water management systems in place inform the AA screening report. Based on the detailed site investigations which have been carried out it is not considered that a revised discharge licence will be required nor is one

proposed. Based on expert opinion, the existing water management regime can facilitate the proposed development and perform within the parameters of the water discharge licence. The EIS modelled the potential implications of drawdown on wells in the vicinity. The ground simulation model indicates that groundwater levels will only be significantly affected in the immediate vicinity of the quarry extraction area. However the model simulation indicated that there would be some impact on the closest groundwater wells to the site. It is considered that the continued and strategic water management plan in place for the quarry and associated dewatering activities will therefore significantly reduce the potential for any impacts to off-site wells.

7.4 Development Application Unit DAHG

With regard to the statement in the observation that the stream discharging from the quarry was laden with silt, it is stated that at no time has an official from the Department visited the site and inspected the surface water management system. It is noted that the IFI frequently visited the site and undertake unannounced inspections. It is noted that IFI do not have any objection to the issuing of a reviewed licence. With regard to exceedances on qualitative standards of waters in the settlement pond, it is noted that these occurrences were isolated and associated with extreme weather conditions. Monthly water sampling is undertaken by an independent sampling laboratory and the results from the monitoring show on-going compliance with water quality standards. A routine inspection undertaken by Kilkenny County Council likewise found the site to be wholly compliant in terms of its water management regime. With regard to cumulative effects and the remediation plan, the applicant notes the long-term nature of the proposed development and the significant level of detail provided. The applicant commits to liaise with the Planning Authority with regard to the implementation of the restoration plan. The EIS in evaluating the overall constituent parts of the quarry has evaluated the cumulative effects.

8.0 FURTHER SUBMISSIONS

A further submission from Kilkenny County Council dated 8th January, 2015 stated that the Planning Authority has no further comments to make in respect of the proposed development.

A further submission on behalf of Ann Gibbons states the following:

As the planning permission will expire on 31st December, 2018 it is currently the case that the applicant will be required to remove the asphalt plant, the

agricultural lime plant, wheel wash, weighbridge and other ancillary structures prior to the expiration of the planning permission.

While it is acknowledged that Section 37L of the Act is quite restrictive in what it allows an applicant to apply for, it is considered that the approach adopted by the applicant in this instance might amount to project splitting. It is reiterated that there are a number of unauthorised developments and uses on the subject landholding which are not addressed by this application. It is suggested that a more appropriate mechanism to make the application would have been under the provisions of Section 34 of the Act. The Board should also consider issuing a notice seeking the cessation of all blasting and excavation. The quarry has extended well beyond that which was permitted under the parent application (Reg. Ref. PL10.120270).

9.0 PLANNING POLICY CONTEXT

9.1 Kilkenny County Development Plan 2014 – 2020

Chapter 6 notes the economic importance of the extractive industry. It is important to facilitate development with due regard to mineral reserves so that inappropriate development does not impinge on the viable exploitation of the resource.

Section 6.4.2 identifies Development Management Standards, including:

- A requirement to adhere to the EPA Guidelines for the Extractive Industry.
- All workings shall be rehabilitated and future workings shall facilitate proper landuse management.
- Development may be phased along with rehabilitation.
- Restoration programmes shall be submitted with applications

This area is identified as being of Very High Potential for Granular Aggregate and Crushed Rock Aggregate.

Chapter 9 contains general objectives to control noise and dust emissions as well as the protection of ground and surface waters from pollution.

The application site is located within the lowlands area, Landscape Character Area F2 – Kilkenny Western Basin. The Nore Valley South is identified as a highly scenic / visually pleasing area.

10.8 Quarries and Ancillary Activities, Guidelines for Planning Authorities (2004)

The guidelines note the economic importance of aggregates and note that there will be a sustained level of demand in support of infrastructure provision. They can only be worked where they occur and pits and quarries tend to be located close to urban areas where construction occurs.

Chapter 2 identifies appropriate development plan policies and indicates that heavy traffic should not be permitted on unsuitable roads unless suitable upgrading or improvement is carried out.

Chapter 3 identifies environmental issues associated with quarries and associated activities, and best practice / mitigation measures for each. These include:

- Noise.
- Dust/air quality.
- Water supplies and groundwater.
- Natural Heritage.
- Landscape.
- Traffic Impacts.
- Cultural Heritage, and;
- Waste Management.

Environmental Management Systems are recommended as a quality assurance system to measure a company's operations against environmental performance indicators.

Chapter 4 addresses the assessment of planning applications and environmental impact statements and identifies possible planning conditions. Chapter 5 deals with implementation of Section 261 of the Planning and Development Act 2000.

10.0 ASSESSMENT

10.8 Introduction

I have read the entire contents of the file including the planning report, appropriate assessment screening report, the EIS and the Quarry Restoration Plan, I have also had particular regard to the submissions made by Prescribed Bodies and third parties in respect of the application and have visited the site

in question. I consider the critical issues in determining the application under the provisions of Section 37L are as follows:

- The Validity of the Application
- The Validity of the Public Notices
- Right-of-way Issues
- Noise and Vibration Issues
- Cultural Heritage Issues
- The Issue of Unauthorised Development
- Water and Groundwater Issues

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

I have also read the accompanying file in respect of substitute consent (SU 0122). I consider that the assessment carried out by the inspector in respect of this application for substitute consent to be comprehensive, robust and reasonable. I would therefore 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 don't propose to revisit the Substitute Consent application for the purposes of this assessment.

10.2 Validity of the Application

The third party submission on behalf of Mrs. Ann Gibbons questions the validity of the application specifically on the grounds of the public notices published in respect of the proposed development. The observation suggests that the public notices can only refer to "the development of a quarry as a quarry" under the provisions of Section 37L(3). The Board in processing the application fully acknowledged this issue and sought a Board Direction in respect of same. The Board direction (dated 17th November, 2015) concurred with the observer's view that the notices as originally published do not come within the scope of quarry development as referred to in this specific section of the Act. It was therefore considered that new public notices to rectify this matter would be appropriate. The applicant duly submitted revised notices on foot of the Board's Direction and these notices were published on 18th December, 2015. The revised public notices were deemed to be acceptable by the Board and I therefore consider that the issue of public notices have been adequately addressed and therefore by extension the application is deemed to be valid by An Bord Pleanála.

10.3 Validity of the Public Notices

Raised as a separate matter the same observation to the Board, the observer also questioned the validity of the public notices specifically on the grounds that the notice did not specifically refer as to whether or not an NIS was submitted with the application. The Board will note that an NIS was not submitted with the subject applicant but an AA Screening Report was submitted. S.I. No. 310 of 2015 (Planning and Development (Amendment) (No. 2) Regulations 2015 require newspaper notices for applications for permission under Section 37L to require the applicant to state “that the application is accompanied by an EIS or NIS or both those statements where that is the case”. In this instance the application is accompanied by an EIS. The fact that an NIS is not referred to in the notice, to my mind, logically implies that no such document was submitted. As both types of statements were not submitted in respect of the subject application, it is acceptable and appropriate in my view that the published newspaper notice would only refer to the fact that the application is accompanied by an EIS.

Finally in relation to this matter I again note that the Board in accepting and processing the application, is in itself a tacit acknowledgement that the public notices were acceptable and deemed to be in accordance of the Regulations.

10.4 Right-of-way Issues

The observation submitted on behalf of Mrs. Ann Gibbons also raises an issue in relation to an alleged right-of-way and the fact that this right-of-way was not indicated in the drawings submitted with the application. I say alleged right-of-way on the grounds that, while Condition No. 5.1 of the parent permission (PL10.120270) refers to a right-of-way laneway along the northern boundary of the site, the issue that a right-of-way exists at all on the site is contested by the applicant. The applicant quite clearly states that the laneway in question is not a registered wayleave or right-of-way and for this reason was not highlighted on the drawings in question. The issue of whether or not a right-of-way exists across the lands in question is a legal matter between the parties concerned and therefore is a matter for a court of law and not An Bord Pleanála. I note the inspector’s report in respect of the substitute consent application where it is stated (page 15) that “*issues relating to the right-of-way to the north of the quarry remain outside the scope of this application. These matters should be the subject of a separate investigation and where necessary enforcement proceedings by the Planning Authority*”. I would fully agree with this conclusion.

10.5 Noise and Vibration Issues

Historically there have been a number of exceedances of limits set out in Condition No. 15 of An Bord Pleanála's decision under PL10.120270. It should be noted that Condition No. 15 of the above decision of 2001 set out quite onerous emission limit values for ground vibration whereby any blast carried out shall not exceed a peak particle velocity of 6 millimetres per second at any residential property. The remedial EIS notes that figures for 2009 indicate that 28% of all blasting works exceeded 6 millimetres per second criteria.

In terms of air overpressure Condition No. 15 required that air overpressure arising from any blast carried out on site would not exceed 125 dB (linear) at frequencies of 2 hertz or over. Again results from 2009 indicated that in 40% of cases blast air overpressure exceeded this limit. The remedial EIS submitted with the substitute consent application indicates that since 2009 the lowering of the working face within the quarry has provided sufficient mitigation in itself to allow the site operate within the planning conditions specified. Hence as indicated in the response to the grounds of appeal, there were no exceedances in terms of peak particle velocity limits and air overpressure limits specified in Condition No. 15 in 2012. This would appear to support the assertion that the lowering of the working face within the quarry has provided sufficient mitigation in itself to allow the site to operate within the specified limits. (See Table 10.7 (page 80) of EIS submitted with the current application).

NRA guidelines in respect of peak particle velocity limits states that there is little or no risk of even cosmetic damage to buildings when the peak particle velocity complies with the following limits.

Less than 10 hertz	8 mm/s
10-50 hertz	12.5 mm/s
50-100 hertz	20 mm/s

It is clear from the EIS that the peak particle velocity (longitudinal, transverse and vertical) as indicated in Table 10.8 is considerably below these limits. In fact all recorded vibration impacts were less than 3 millimetres per second.

The inspector's report in respect of PL10.SU0122 considered the impact arising from blasting to be acceptable in environmental terms and thus recommended that substitute consent be granted in this instance. The report

does note however that a retrospective application and any future activity on site would be subject to a separate grant of planning permission and further conditions in monitoring. It concludes that further mitigation is not required in this regard.

The proposal in this instance seeks to reduce the level of the quarry floor to lower levels thereby further mitigating against potential negative impacts arising from blasting and vibration. Furthermore both the applicant's response to the grounds of appeal and the remedial EIS submitted along with the substitute consent application indicate that specialist blasting contractors were engaged from 2009 onwards and that subsequent blasting activities were carried out within identified emission limits set out. It is proposed to incorporate additional mitigation measures and these are set out in Section 10.5 of the EIS. Having regard to the blasting vibration measurements submitted for the year 2010 which indicates that peak particle velocity is well below the limits set out in Condition 15 of the parent permission, together with the mitigation measures to be employed and the successive deepening of the quarry floor through excavation works, I am satisfied that the vibration impact arising from blasting will have a negligible impact on surrounding environmental and residential amenity.

With regard to the potential impact on blasting activities on the M9 due to fly rock and dust generation, I would refer the Board to the sectional drawings submitted with the application (Drawing No. 150728G – FS). It is apparent from these cross sections that the quarry face closest to the motorway is in excess of 120 metres from the alignment of the M9. I am satisfied that there is a sufficient buffer zone to ensure that fly rock and dust will not cause a traffic hazard to traffic on the M9 motorway. The fact that it is proposed to excavate the quarry benches to levels of between 30 to 70 metres below the maximum ground level of the buffer zone, this will also mitigate against potential dust and fly rock being propelled outside the confines of the quarry.

Finally in relation to this issue I note that all blasting will be undertaken by specialised contractors and experts which would have the requisite knowledge and experience to ensure that directional blast will take place in such a way to ensure that dust or fly rock does not pose a threat to the adjacent motorway.

10.6 Cultural and Architectural Heritage Issues

The submission on behalf of Mrs. Ann Gibbons argues that the EIS does not adequately address the impact of the existing quarry on Kilree House which is a protected structure. The quality of the assessment undertaken in the Environmental Impact Statement is subject to a separate evaluation below. However specifically in relation to the impact of the proposed development on

Kilree House, I note that Section 14.3.2 of the EIS specifically addresses this issue of cultural and architectural heritage. In this regard detailed information is provided with regard to the historical background of Kilree House. Details of the curtilage and attendant grounds of Kilree House is also set out in the EIS. The document notes however that the attendant grounds of Kilree House have not been defined. Kilree House is located approximately 630 metres to the west of the western boundary of the quarry. The critical issue of which the Board must deliberate in this instance is whether or not the current application (QD10.QD0001) would adversely affect the context and setting of the existing protected structure. The inspector's report in respect of the substitute consent application (SU0122) concluded that the historic works undertaken have progressed in a generally southerly direction and it is not considered that the subject works would have resulted in any greater impact on the character or setting of the protected structure than the previous authorised extraction works. It is also noted that Kilree House was only added to the RPS under the 2014 County Development Plan.

The current application before the Board seeks to work within the confines of the existing footprint of the quarry and does not propose to morphologically extend the footprint of the quarry in any direction. It is difficult to argue in my view therefore that the works proposed under QD0001 which involves a deeper excavation within the existing footprint of the quarry will in any way adversely impact on the historical integrity or setting of Kilree House.

10.7 Unauthorised Development

The grounds of appeal contend that a number of unauthorised developments have taken place within the quarry site. This is vigorously contested by the applicant in his response to the grounds of appeal. The area of alleged unauthorised development is located beyond the northern boundary of the site and is therefore not located within the current application boundary before the Board. Furthermore the applicant in this instance argues that the tanks referred to in the observer's submission were removed a year ago and the redundant sheds to the north of the site form part of a historical agricultural activity and are in no way related to the quarry activity. Having inspected the site it appears that the lands in question do not form an integral part of the quarry operations and do not currently host any unauthorised development. However I cannot verify whether or not past unauthorised uses associated with the quarry have taken place on the lands in question. The issue of unauthorised development is an enforcement matter and therefore a matter for Kilkenny County Council as enforcement issues fall outside the jurisdiction of An Bord Pleanála. I would agree with the conclusions reached in the planning inspector's report associated with PL10.SU0122 where it is suggested that these matters should be the subject of a separate investigation

and where necessary enforcement proceedings should be undertaken by the Planning Authority (see page 15 of report).

10.8 Surface Water and Groundwater Issues

A number of issues were raised particularly by the Development Applications Unit of the Department of Arts, Heritage and the Gaeltacht and the submission by Kilkenny County Council in respect of groundwater issues and surface water discharge issues associated with the proposed deepening of the quarry. These are explored in more detail below under the following headings:

- Existing Hydrogeological Regime
- Extraction
- Drawdown of the Water Table
- Water Treatment Issues
- Discharges to the River Nore
- Licence Requirements

10.8.1 Existing Hydrogeological Regime

Before assessing the groundwater and surface water regime under the headings set out below, it is appropriate that the groundwater and surface water regime within the existing receiving environment is summarised in order to contextualise the potential impact of any deepening of the quarry.

In terms of the water management system, the Board will note that the existing groundwater and rain water collected within the quarry floor is discharged to a settlement lagoon at the south-eastern corner of the site. This settlement lagoon has a storage capacity of approximately 55,000 cubic metres. Water from the storage lagoon is discharged into the small Dunbell Stream where it runs under the M9 Motorway and south-eastwards where it discharges into the River Nore approximately 500m to the south-east. The River Nore is a designated Natura 2000 site. Q values for the River Nore and its tributaries in the vicinity of the site are set out in Table 8.2 of the EIS. The water quality at the nearest biological station downstream of the discharge point is classified as Q4 (good ecological quality when last assessed in 2013). The applicant obtained a discharge licence issued by the Board in January, 2015. In terms of volumetric discharge Condition 3.2 of this licence requires that the licence holder shall ensure that

- (a) the mean daily discharge over the course of any month shall not exceed 15,000 cubic metres per day, and

(b) the maximum daily discharge shall not exceed 40,000 cubic metres per day.

In terms of groundwater, the area below the quarry is designated as a Regionally Important Aquifer (R_{id}). A considerable amount of hydrogeological investigations have been undertaken primarily on foot of previous applications on site. These are referred to in Chapter 8 of the EIS and more particularly appendix C1 of the EIS. It is noted that the eastern section of the site is located adjacent to a gravel aquifer. In general gravel aquifers tend to have a higher transmissivity and hydraulic conductivity than bedrock aquifer. The EIS also makes reference to the Kilkenny Groundwater Body Report prepared by the GSI. This initial characterisation indicates that the pure nature of the limestone means that rocks are susceptible to dissolution and by extension karstification. It notes that coupled with the probability of extensive fracturing this implies that the aquifer in the vicinity of the site is likely to be karstified in some areas. The EIS notes a number of karst features in the vicinity and these are set out in Table 8.7 of the EIS. The EIS acknowledges that a large solution fissure is visible on the western face of the quarry and I noted similar fissures on the eastern face, which transported relatively large volumes of water into the quarry (see photo's attached). Work carried out by EDA (see P10. of appendix C1) 'have indicated and proven the existence of a number of fractures and faults in the vicinity of the quarry as well as widespread jointing at the quarry', and the presence of a 'main N-S trending fault along the eastern section of the quarry....this fault also coincides with a line of groundwater discharge points in the form of springs which lie in the same general N-S orientation.

The Groundwater Body Characterisation Study further states that permeability and transmissivity data are very variable with a permeability ranging from 0.1 metre per day to 100 metres per day with a consequential range in transmissivity from $5 \text{ m}^3/\text{d}$ to $3,000 \text{ m}^3/\text{d}$. It is further stated that the main areas of karstification are likely to be confined to the upper portions of bedrock or the epikarst area of the aquifer.

Shallow groundwater inflows relate to the unconfined aquifer in the region. Artesian conditions in the quarry flow represent confined quarry flow in the lower portions of the quarry.

In terms of aquifer vulnerability the vast majority of the aquifer is underlain by designated high groundwater vulnerability. In terms of groundwater levels the groundwater level underlain the site is estimated between +35 and +40 metres AOD. The groundwater monitoring levels from 2010 to 2013 are indicated in Section 3.3 of Appendix C of the EIS. The maximum saturated

impermeable part of the aquifer is estimated to be approximately 75 metres thick.

In terms of groundwater wells in the vicinity Figure 8.5 and Table 8.5 indicate the wells in the vicinity within a 2 – 3 kilometre radius of the site is estimated that there are approximately 30 wells. The yield from the wells vary from 3.7 m³ per day up to 962 m³. The closest two wells outside the quarry to the east and west yield between 22 and 109 cubic metres per day.

In terms of hydraulic conductivity, S.5.1.9 of appendix C1 of the EIS notes that investigations suggests a range in permeability of 0.1m/d to 100m/d. The modelling undertaken assumes a flow of 2.95m/d to 10m/d.

10.8.2 *Extraction*

In terms of extraction it is proposed to extract approximately 14 hectares from an existing depth of between 30 and 40 metres above ordnance data to a depth of minus 6 metres ordnance data. This will reduce the grounds levels within the quarry by approximately 36 metres. Groundwater monitoring levels currently indicate that the quarry has excavated approximately 10 metres below groundwater levels. Discharge water volumes for 2013 vary from just under 5,000 cubic metres per day to just under 25,000 cubic metres per day. However according to Appendix 3 of the EIS discharge volumes during the substitute consent works between 2007 and 2013 vary from just under 5,000 cubic metres per day to 55,000 cubic metres per day. The average discharge rates were generally less than 15,000 cubic metres per day rising up to 55,000 cubic metres per day during inclement weather events.

10.8.3 *Drawdown and Cone of Depression*

The Report undertaken by AWN Consulting Limited which is contained in Appendix C of the EIS models potential drawdowns and cone of depressions under various pumping scenarios. Three scenarios were modelled. Scenario 1 represents the level of drawdown under the existing scenario i.e. the approved level of c.30 metres AOD. It indicates that the mass balance under the model is less than 1% error between the inputs and outputs to the model.

Under Scenario 2 the level of drawdown was estimated at a new bench level of +12 metres AOD. Under a pumping rate of 5,000 cubic metres per day the model indicates that groundwater levels will only be significantly affected in the immediate vicinity of the quarry extraction. Under a pumping rate of 10,000 cubic metre per day, a similar scenario arises with the cone of depression not extending significantly outside the quarry boundaries.

During a pumping rate of 15,000 cubic metres per day where the ground level of minus 30 metres AOD, the model indicates that groundwater levels will only be significantly affected in the immediate vicinity of the quarry extraction area.

I consider the Board need to scrutinise the figures presented with some caution. The figures may in my opinion may be conservative in estimating water volumes. The quarry currently operates approximately 10 – 15 metres below the natural groundwater table. I note that the average discharge rates were generally less than 15,000 cubic metres per day but rising up to 55,000 cubic metres per day during inclement weather events. A further deepening of the quarry by c.36 metres (a three to fourfold increase in depth below the water table) would result in the quarry at its maximum extent operating at between 45 and 50 metres below the groundwater level over a 14 hectare area. This has the potential in my opinion to generate significant levels of groundwater, having particular regard to the nature of the underlying bedrock which includes extensive jointing and faulting.

This may require significantly more pumping than that indicated in the model. The proposed development will result in a 3 to 4 fold increase in the depth of the quarry below the water table and this could give rise to commensurate levels of groundwater egress requiring significantly more pumping of water from the quarry floor as the quarry progresses deeper. This in turn could have implications for the size and rate of the cone of depression and therefore for wells in the vicinity. The fact that confined aquifers and artisan conditions have been reported at boreholes installed in the existing lower quarry floor could result in faster flow rates of groundwater into the quarry as the hydraulic head of groundwater increases with depth. It appears improbable in my estimation that recorded discharge rates between 2009 and 2016 amounted to an average of c.14,000¹ cubic metres on a daily basis would remain essentially static with a doubling in depth below the water table. The modelling undertaken evaluated scenarios where the pumping rates ranged from between 5,000 and 15,000 m³ per day. If increases in pumping rates were necessitated for dewatering purposes this could impact on the level of drawdown with consequential impacts on the wells in the area.

If the Board are minded to grant planning permission for the proposed development in this instance I would recommend that the applicant be requested to (a) request more details in respect of pumping tests where daily pump rates were increased to 20,000 cubic metres per day and 25,000 cubic metres per day in order to assess the potential impact in terms of the level of drawdown or (b) restrict the depth of the quarry to levels above that proposed

¹ In 2009 average daily discharge amounted to 19,769m³/d.

in the planning application. Again the maximum excavation depth can only be determined in my view on foot of additional studies.

Water Treatment

The existing water treatment comprises of a large settlement lagoon. The lagoon can currently handle approximately 40,000 cubic metres in any 24 hours together with a discharge limit of 15,000 cubic metres per day where necessary. Theoretically therefore the lagoon currently has a capacity to deal with 55,000 cubic metres per day. The Board will note from the planning history that a licence was recently granted to the applicant (under Ref. 10.WW.0411). The licence states that the mean daily discharge over the course of any month shall not exceed 15,000 cubic metres per day and the maximum daily discharge shall not exceed 40,000 cubic metres per day. The development is therefore presently operating at, or very close to the capacity set out in the Water Discharge Licence issued by the Board. The licence also sets out limits for the following:

- Suspended solids – 10 mg/l
- BOD – 3 mg/l
- COD – 15 mg/l
- Nitrate – 10 mg/l-n
- Total Ammonia – 0.25 mg/l-n
- MRP – 0.1 mg/l-p
- Total Hydrocarbons – 1 mg/l
-

According to the information contained in the EIS the analytical results for total suspended solids range from between 2 mg/l to a maximum of 89 mg/l over the assessment period with the maximum level being recorded on the 15th December, 2006 when high rainfall was also recorded. The number of exceedances recorded over the period are not indicated in the EIS. However it is concerning that an exceedance of almost 9 times the maximum limit set out in the licence issued by the Board was recorded on site. In terms of nitrate concentration the EIS indicates that the results of the analysis for nitrate show a remarkable consistency and are generally in the range of 5 to 11 mg/l. Again the maximum limit set out in the licence is 10 mg/l. No details are provided in relation to BOD, COD or other parameters referred to in the licence. On my site inspection I noted that while the discharge waters appeared relatively clear in the Dunbell Stream, a film of suspended solids was apparent in the stream bed on low velocity sections of the stream course (see photos).

Currently the quarry operates at or close to the volumetric capacity set out in the licence. An increase in depth of the quarry below the water table will

undoubtedly give rise to additional volumes of water to be discharged off-site through the settlement lagoon. As already stated I have concern in relation to the estimation of dewatering volumes required in the modelling undertaken as part of the EIS. Again in support of this contention I refer the Board to Table 5.3 on page 35 of Appendix C1 of the EIS. I note that the potential average dewatering volumes are based on the average daily dewatering in 2013 which equated to 9,563 m³/d. It appears that the model fails to recognise that in 2009 the average daily volume discharge was just under 20,000 m³/d. In 2010 it was just over 16,000 m³/d. In 2011 it was just under 11,000 m³/d and in 2012 it was 14,775 m³/d. In fact the average annual daily discharge in 2013 was the lowest annual average since 2004 (see table on page 11 of Appendix C1 of the EIS). Thus I consider that the level of discharge in relation to the existing quarry may have been somewhat underestimated in the modelling undertaken. As already stated the average annual daily discharge between 2009 and 2013 amounted to some 14,100 m³/d, 4,500 m³/d above the figure uses in Table 5.3 in Appendix C1.

If the Board agree that the existing average daily dewatering rates may have been underestimated in respect of the existing quarry, it is likely that the volumes of water to be discharged into the lagoon will be significantly greater with the future expansion of the quarry. This gives rise to a number of significant issues in assessing the ability of the lagoon to adequately attenuate and treat water being discharged from the quarry.

- Firstly a question arises over the volumetric capacity of the lagoon to cater for the expectant increases in water discharge.
- Secondly any increase in water discharge would consequently reduce the retention time within the lagoonal area and therefore the ability of the lagoon to be as effective in settling out suspended solids in any discharge.
- Thirdly increases in hydraulic and volumetric loadings into the lagoon will increase turbidity and upset quiescent conditions which are necessary to allow the appropriate settling out of suspended solids. The EIS readily acknowledges that in relation to discharge, quality exceedances occurred as a result of increases in the volume of water being discharge (see Section 8.4.13 of the EIS, third paragraph). Based on the information and analysis set out in the EIS and in particular the hydrogeological assessment set out in Appendix C1, I am not satisfied that the quarry expansion proposed can be accommodated in the absence of a potential reduction in the quality of water being discharge off the quarry site. This in turn could have adverse consequences for the receiving waters in the River Nore and this is briefly commented on below.

Potential Impact on the River Nore

Water from the lagoonal area in the south-eastern corner of the site is discharged to a small stream which in turn discharges to the River Nore approximately 500 m to the south-east of the site. The River Barrow and River Nore SAC (Site Code: 002161), have a number of qualifying interests which are particularly susceptible to changes in nutrient loadings and suspended solids. This issue is dealt with in more detail under a separate Appropriate Assessment section which is set out below further in my report. However it is sufficient to state at this stage that concerns expressed above in relation to both the volume of discharge arising from the proposed works together with a possible consequent reduction in discharge quality particularly in relation to suspended solids could have potential significant effects on the SAC in question. The hydrogeological investigations undertaken also acknowledge that under a worst case scenario where a pumping rate of 15,000 m³/d is undertaken this could result in potential dewatering of the River Nore in the order of approximately 3,200 m³/d (see page 31 of report). While it is acknowledged that any such dewatering would be compensated by discharge flows from the quarry such dewatering could potentially impact on groundwater dependent ecosystems along the river. I note that this issue was raised in the submission by Kilkenny County Council to the Board. The potential impact on the conservation objectives associated with the River Nore require further detailed investigations in my view prior to a grant of planning permission and this issue is dealt with in more detail under the heading Appropriate Assessment.

Discharge Licence Requirements

Based on my assessment above I find it somewhat surprising that the applicant in the response to the grounds of appeal states that “it is not considered that a revised discharge licence will be required nor is one proposed” (see page 9 of the submission). It is clear from the modelling exercise undertaken by the applicant (which in my view provide conservative figures in relation to potential water discharge from the quarry) that under the scenario where a final bench level of minus 6 metres AOD is excavated, the potential average dewatering volumes are estimated to be 24,563 cubic metres per day. This exceeds the mean daily discharge permitted over the course of any month by almost 10,000 cubic metres per day.

Having regard to the limits set out in Condition 3.2 of the extant discharge licence and the information contained in the EIS, I would consider it necessary that a revised licence be submitted in respect of the proposal and potential discharges arising from the proposed deepening of the quarry. In fact it would be reasonable to conclude in this regard that the application currently before

the Board is premature pending a decision in respect of revised licence under the Water Pollution Acts.

11. EIS ASSESSMENT

I am of the opinion that the EIS submitted with the planning application is comprehensive and, with the exception of specific references below, in the main, complies with the statutory requirements set out in Article 94 and Schedule 6 of the Planning and Development Regulations as amended and complies with the EPA Guidelines as they relate to the content to be contained in environmental impact statements. The EIS in my opinion has identified, described and assessed the key likely significant environmental impacts relating to the proposed development and this is set out in more detail below.

The environmental impact statement details the project including the proposed development and provides a general description of the site and its environs together with the existing quarry operations.

In terms of human beings, the potential impacts identified include continued economic activity with the positive impact of direct employment of some 20 employees. Potential adverse impacts include adverse consequences in terms of human health and safety, nuisance to increased noise levels, dust emissions etc. The mitigation measures to address adverse impacts on humans include standard mitigation measures including notification of blasting schedules, noise and dust suppression measurements and appropriate traffic management. Similar mitigation measures will be employed in respect of nuisance and these are outlined in more detail in subsequent chapters in the EIS. It is also proposed to incorporate a site restoration plan whereby the site would be secured and managed subject to strict health and safety management protocols. It is concluded therefore that there will be no significant residual impacts likely to result from the proposed development. The EIS has in my view correctly and appropriately identified the potential socio-economic impacts which could arise and I would agree with the conclusion that, subject to appropriate mitigation measures, remedial impacts would be slight.

In terms of flora and fauna the existing baseline environment is described. The predicted impacts are deemed to be negligible due to the existing presence of a quarry and the resultant negligible ecological value of the site. As a result there are no likely significant effects on the environment. There will be no permanent impacts on any designated areas within 10 kilometres of the proposed development site. The provision of compensatory habitat and the maintenance of surrounding hedgerow boundaries together with the on-going

treatment of run-off and monitoring of water quality will mitigate against any potential adverse impacts on the adjoining environment during the operation of the quarry. The restoration and rehabilitation of the site through the Restoration Plan will enhance local biodiversity when the quarry is decommissioned. The quarry will be flooded to create a freshwater limestone based lake and will provide a suitable breeding habitat for birds. Having regard to the presence of an existing authorised quarry on site I consider that the potential impacts have been correctly identified and the conclusions in respect of the residual impacts being classified as negligible are reasonable in my opinion.

The potential impact in terms of soils and geology are identified in the EIS as being the lowering of the quarry floor. As all soil has been stripped from the existing quarry no further removal of soil or subsoil will take place. Potential adverse impacts include a greater possibility of groundwater contamination through the further removal of bedrock as a result of excavations. There is also the possibility of some soil erosion through the generation of airborne dust during operational activities within the quarry especially during periods of dry weather. Further excavation could also potentially result in additional siltation in nearby drainage ditches and streams. The mitigation measures to address these identified potential impacts include; the continuation of measures taken to date in relation to best practice techniques, routine maintenance and improvements of existing drains, appropriate surface water management strategies and appropriate fuel storage techniques within the site. The implementation of the site restoration plan will go some way to address the impact associated with having a large deep excavation on site. The residual impacts are identified as being a large deep excavation in the landscape however the site restoration plan will go some way in addressing the residual impacts arising from the proposed development. I consider that the potential impacts arising from the proposal in terms of soils and geology have been appropriately identified and the conclusions in respect of residual effects are reasonable.

In terms of water, hydrology and hydrogeology I have assessed the content of the EIS in my evaluation above. I consider that the EIS has correctly described the baseline environment and has identified and described the likely effects arising from the proposed development namely potential increases in surface water discharge arising from dewatering activities in the quarry. The EIS identifies the likely significant impacts which could arise from such dewatering as being; the potential lowering of the water table, alteration and groundwater flow rate and direction, increased discharge and potential sediment loading and contamination of local watercourses and groundwater. I would concur that these are the likely impacts which could arise from the works to be undertaken. However as referred to above I consider that the

potential impacts arising from dewatering activities could be more profound than those suggested in the EIS particularly through the amount of groundwater discharge to be managed on site. While I consider that the residual effects and predicted impacts have been correctly identified in the document I also consider that the impacts in this instance may have been underestimated as set out in my assessment above.

In respect of air quality, I consider that the baseline environment which currently operates on site has been appropriately and adequately described in the EIS. The potential adverse impacts are correctly identified as potential increases in air emissions through traffic and through dust generation particularly PM₁₀ and PM_{2.5}. The EIS notes that currently dust limits are within the specified limits set out under the TA Luft limit value of 350 mg/m²/d. The modelled emissions for PM₁₀ and PM_{2.5} as a result of the proposed development, while showing an increase are well within the relevant limits set out above. I therefore consider that the EIS has correctly identified and described the likely effects in terms of air quality. The document has appropriately assessed these likely impacts and concluded that the residual impacts are deemed to be acceptable. The number of mitigation measures will be employed in order to reduce the potential residual impacts and I consider through conclusions reached in respect of the residual effects to be reasonable and appropriate.

In terms of noise and vibration this issue has been dealt with in previous sections of my evaluation above however for the purposes of incorporating a comprehensive EIA assessment the Noise and Vibration section of the EIS is further evaluated below. The EIS carried out a noise survey at four noise sensitive locations which are indicated on Figure 10.1. Details of the existing noise climate for each of the locations is set out in the EIS. The predicted impacts arising from the proposed development are identified as general noise arising from site activity, HGV movements on public roads and side roads, blasting noise and vibration impact. The impact of HGV movements on public roads resulting from the proposed development are deemed to be negligible. The increase in traffic along the local road serving the site does represent a potentially significant increase with regard to noise levels. However when modelled the predicted daytime noise level at the nearest noise sensitive location was calculated to be 46 dB which is deemed to be acceptable and within EPA specified limits. In terms of blasting, figures have been provided for the year 2012. None of the blasting events undertaken exceeded the 125 dB(Lin) limit set out. It would be expected that, with the depth of the quarry being gradually lowered, the screening effect would reduce the potential impact arising from blasting noise. Similarly in relation to vibration none of the criteria set out in the condition attached to the parent permission was exceeded in 2012. Again with the lowering of the ground

levels vibration impact is also likely to be reduced. The EIS also sets out a number of mitigation measures in order to further reduce or offset any potential adverse impacts which could arise in respect of noise generation and vibration. These mainly relate to appropriate operation procedures particularly in respect of blasting. It is reiterated that the further reduction in ground levels will significantly attenuate noise through natural acoustic screening. It is concluded that provided the mitigation measures are adhered to, no residual noise and vibration impacts are expected to arise as a result of quarry operations. I consider the potential adverse environmental impacts arising in terms of noise and vibration have been correctly identified and described and the potential impacts arising from the proposed development have been adequately assessed. I also consider the conclusions in respect to the residual effects arising from the proposed development are adequate and reasonable having particular regard to the mitigation measures to be employed.

In terms of landscaping and visual impact again the EIS adequately describes the receiving environment and identifies and describes the likely predicted impacts as being potential adverse impact on the appearance of the landscape, on the character of the landscape and on views from public vantage points around the landscape. The EIS notes that the existing quarry should be assessed in the context of other quarry pits located in close proximity. It notes that the location and configuration of the development is extensively screened in terms of visibility from the surrounding area and this is illustrated in a series of photographs contained in the EIS. Furthermore it is noted that the Site Restoration Plan, which is included as part of the application, will act as effective in mitigation in further reducing the visual impact of the proposed development. The fact that the proposal seeks to utilise the existing footprint of the quarry and will not extend the boundary of the quarry will ensure that the intensification proposed will not adversely impact on the established character of the area in visual terms. The likely adverse visual impacts have in my view been correctly identified and described in the EIS. I would agree with the conclusions in the document that from a visual point of view the proposed development will have little additional impact over that which currently exists on site and therefore the residual effects arising from the proposal will be negligible.

In terms of material assets the potential impact of the proposed development on utilities in the area (namely water supply, wastewater, surface water, waste and power are set out). The EIS notes that the proposed development does not include any works which will adversely affect existing utilities in terms of giving rise to additional demands on such utilities. The EIS therefore in my view correctly identifies and assesses the potential impact of the proposal in

terms of material assets and reasonably concludes that the development will not give rise to any residual impacts in terms of material assets.

In terms of roads, traffic and transportation the EIS sets out the existing road network and traffic volumes associated with the network as part of the baseline assessment. The EIS describes and assesses the do nothing impact in terms of the impact on road infrastructure in terms of the local road L26322 and the regional road serving the road (the R700). In terms of junction analysis (ratio of flow to capacity), the Statement concludes that the existing road network can adequately cater for traffic.

It is estimated that the exported materials from the quarry will increase from approximately 350,000 tonnes per annum to 525,000 tonnes per annum. This will increase the number of vehicles entering and exiting the quarry on a daily basis from approximately 96 vehicles per day to 144 vehicles per day. An increase of approximately 50%. A PICARDY junction capacity analysis was carried out in respect of projected traffic volumes arising from the increase in quarry production. It concludes that the highest ratio of flow to capacity at the junction between the L26322 and the R700 to be well below the maximum capacity with an RFC of 0.107.

As the predicted traffic volumes associated with the increase in quarry output are well below the limits for the surrounding road capacity network. It is therefore concluded in the EIS that no mitigation measures are required and the residual impacts are deemed to be acceptable. The Roads, Traffic and Transportation Section of the EIA in my view correctly identifies the predicted impacts which could arise as a result of increases in traffic generation arising from increases in production. These impacts have been adequately described and assessed and the conclusion that no residual impacts will result is appropriate in my view.

The potential impacts in terms of archaeology are identified as potential impacts on archaeological heritage such as the removal or interference with archaeological monuments or indirect impacts such as impacts on the setting of such monuments and potential impacts on cultural and architectural heritage in terms of protected structures and the setting of such structures. As the proposed quarry development is to take place within the confines of the existing quarry and all in-situ topsoil has been removed with the underlying bedrock significantly reduced, it is reasonably concluded that there are no potential adverse impacts in terms of archaeological or cultural heritage and therefore no mitigation measures or residual impacts are identified or required. Finally the EIS details potential interactions and cumulative effects arising from the proposed development as required under the legislation.

In conclusion therefore I consider that the environmental impact statement submitted with the application has correctly and adequately identified and described in detail the key likely significant effects which may arise from the proposed development during the operational phase of the development. As the application relates to the further excavation of an existing quarry construction impacts are not a material consideration in respect of this application. However the EIS has identified the key potential impacts in relation to:

- Impacts on amenity (including noise, traffic, air and vibration).
- Socio-economic impacts.
- Visual impacts.
- Transport and traffic impacts.
- Archaeological and cultural heritage impacts.
- Flora and fauna.
- Hydrology and Hydrogeological impacts.
- Material assets.

The EIS has also assessed the potential cumulative impacts where they arise in relation to other developments (see section 15.3 of the EIS). I note however that no specific reference was made to cumulative impacts arising from other quarry developments in the vicinity.

With the exception of groundwater and hydrogeology matters which I refer to previously in my assessment and the issues of cumulative impacts arising from other quarries in the area, I am generally satisfied that the proposed development, subject to the employment of appropriate mitigation measures as set out in the various chapters of the EIS, will result in a development that will not have a significant environmental impact on the receiving environment except in relation to dewatering and groundwater discharge issues. With the exception of the section on hydrogeology I consider that the residual effects identified under various sections of the document are acceptable.

The EIS has also adequately in my view considered the issue of alternatives as set out in Chapter 3. The alternatives considered included:

- The do nothing option
- Alternative sites and
- Alternative layout of operations within the existing site.

In summary therefore, having regard to the contents of the EIS and the various appendices attached to the main document, I am satisfied that there is sufficient information in respect of this application to carry out a full EIA and with the exception of matters relating to hydrogeology I would agree with the

overall conclusions contained therein that the proposed development would not adversely impact on the receiving environment to any significant extent subject to the implementation of mitigation measures proposed.

12. Appropriate Assessment

The applicant submitted a Screening Report (Stage 1) for Appropriate Assessment with the current application. This screening report in my view correctly identifies a single Natura 2000 site which could be significantly affected by the proposed development namely the River Barrow and River Nore SAC (Site Code: 002162). There are no other European sites within the vicinity of the proposal which are likely to be affected by the proposed development. The qualifying interests associated with this Natura 2000 site are as follows:

The Annex 1 habitats associated with the SAC are as follows:

- *Code 1130 – estuaries*
- *Code 1140 - mudflats and sandflats not covered by seawater at low tide.*
- *Code - 1310 Salicornia and other annuals colonising mud and sand.*
- *Code -1330 Atlantic salt meadows.*
- *Code - 1410 Mediterranean salt meadows.*
- *Code - 3260 watercourses of plain to montane levels with the ranunculion, fluitanits and callitricho-batrachion vegetation.*
- *Code - 7220 - petrifying springs with two formations.*
- *Code - 910E alluvial forests with alnus glutinosa and forxinus excelsior.*
- *Code - 6430 hydrophilous tall herb fringe communities of plains and montane to alpine levels.*
- *Code - 4030 European dry heaths.*
- *Code - 91AO Old sessile oak woods with ilex and blechnum in the British isles.*

The Annex 2 species associated with the River Barrow and River Nore SAC and these are:

- *Code - 1016 Desmoulins whorl snail*
- *Code - 1029 the freshwater pearl mussel*
- *Code - 1990 the freshwater pearl mussel*
- *Code - 0192 the white clawed cray fish*
- *Code - 1095 the sea lamprey*
- *Code - 1096 the brook lamprey*
- *Code - 1099 the river lamprey*
- *Code - 1103 the twaite shad*

- *Code - 1106 atlantic salmon*
- *Code - 1355 the otter*
- *Code - 1422 the Killarney fern*

The Screening Report submitted assesses the various qualifying interests in the context of the proposed development. I do note however that the assessment concentrates on the presence of the qualifying species within the Dunbell Stream which does not form part of the SAC. The critical assessment in my view relates to the assessment of the qualifying interests as they relate to the River Nore and not the stream linking the quarry to the River Nore. The Screening Report however does conclude that the proposed extension of the quarrying activities will not have any significant impact on water quality of the River Nore and thus will not have any significant negative impacts on the qualifying interests for which the SAC has been designated.

The Screening Report however in my view, infers this conclusion on the basis of results set out in the investigations undertaken as part of the EIS. I have argued in my assessment above, that I am not satisfied that the additional dewatering requirements which will occur as a result of excavating below the watertable, will adversely impact on water quality being discharged from the quarry. As already referred to in my assessment I base this conclusion on the premise that I consider that it is very likely that the volume of water to be discharged off-site will be above that forecast in the EIS. As a result it is not altogether apparent whether or not the existing lagoon area has the capacity to cater for such dewatering activities. Furthermore a question arises as to whether or not such dewatering activities would reduce the retention time within the lagoon area with the consequential reduction in the treatment of suspended solids and the through flow arising from the additional water would increase turbidity conditions in the lagoon with consequential increases in suspended solids in the final outfall.

I note the report from the Inland Fisheries Ireland on file and note that the IFI have carried out assimilative capacity calculations based on information contained in the EIA. The assimilative capacity calculations were carried out under two discharge scenarios from the quarry namely 25,000 cubic metres per day based on average discharge during average rainfall conditions when the quarry is operating at a depth of minus 6 metres AOD and 53,000 cubic metres per day based on an assumed underlying karst condition. Assimilative capacity was calculated at 95 percentile flows. The assimilative capacity calculations were carried out for BOD, Total Ammonia and MRP. I consider the assimilative capacity calculation attached to the IFI submission to be accurate and reasonable and indicate that under both discharge scenarios the concentrations for BOD, Total Ammonia and MRP would be acceptable.

I would argue however that these are not the critical pollutant parameters in respect of the application before the Board. The critical pollutant parameter in this instance is suspended solids. Suspended solids are the main source of pollutant arising from quarrying activities. While the EIS indicates that suspended solids concentrations in the final outfall of the quarry generally comply with the limits set out in the discharge licence there have been a number of exceedances included recorded levels of 89 mg/l which is almost 9 times the permitted limit. My concern arises that with the increased throughput in water arising from the proposed quarry the existing lagoon may not sufficiently attenuate and settle out suspended solids so as to conform with the parameters set out in the discharge licence. I note in the case of the report for the discharge licence WW10.WW0411 that the inspector, in assessing the licence in question, suggested an emission limit value of less than 5 mg/l having particular regard to two of the qualifying interests associated with the River Nore; namely the Freshwater Pearl Mussel and the Atlantic Salmon both of which are particularly sensitive to the presence of suspended solids in the receiving waters. The Board considered it pertinent to adopt a less stringent standard of 10 mg/l in respect of suspended solids.

While I note the conclusions in respect of the remedial Natura Impact Statement submitted along with the application for substitute consent, the Board must bear in mind that this application related to an assessment of retrospective impacts arising from the existing development and does not relate to the current application which would see a significant increase in the volume of water to be discharged off site.

Having regard to:

- (a) the element of uncertainty that surrounds the volume of water to be discharged off site in the event of planning permission being granted for the proposed development,
- (b) the ability of the existing water management system to effectively treat and attenuate the discharge in light of the increased throughput particularly in relation to suspended solids,
- (c) the environmental sensitivity of some of the qualifying interest associated with the River Nore most notably the Freshwater Pearl Mussel and the Atlantic Salmon, and
- (d) the absence of a new application for a revised discharge licence under the Water Pollution Acts having regard to the fact that the discharge limits set out in Condition No. 3.2 of the licence are most likely to be breached based on the figures presented in the hydrogeological

assessment contained in the EIS and in particular Appendix 3.1 of the EIS.

I consider that the proposed development constitutes a threat to the conservation objectives of a number of qualifying interests associated with the River Barrow and River Nore SAC particularly aquatic species where the conservation objectives seek to maintain the favourable conservation status of these species. I cannot be satisfied therefore that the proposed development will not adversely impact on the conservation objectives associated with qualifying interests of the River Barrow and River Nore SAC. If the Board agree with my conclusion that the development as proposed could adversely affect the integrity of this European site, it is precluded from granting planning approval. If the Board reject the above conclusion I would recommend that a full Natura Impact Statement in respect of the proposed development.

11.0 CONCLUSIONS AND RECOMMENDATION

Arising from my assessment above I consider that information contained in the application documentation and in particular the EIS may have significantly underestimated the potential volumes of groundwater which would be generated by the proposed excavation of the quarry to a depth of c.45 to 50 metres below the water table. The increase in the volumes of water to be discharged off site may result in levels of drawdown in the water table in the vicinity of the quarry with potential consequential impacts on groundwater wells in the vicinity.

Furthermore I cannot be satisfied that based on the volume of water which may be required to be discharged off site as a result of the proposed excavations that there is sufficient storage capacity within the designated lagoonal area to cater for such volumes and that the volume of the discharge could adversely affect the ability of the settlement lagoon to adequately treat and attenuate discharge from the quarry particularly in respect of suspended solids. This in turn could have potential adverse impacts on the River Barrow and River Nore Special Area of Conservation (Site Code: 002162) having particular regard to the conservation objectives associated with the said SAC.

Three options in my opinion are available to the in determining the current application before it namely:

(a) Refuse planning permission for the entirety of the development for the reasons referred to above.

(b) Request additional information in respect of the proposal as set out below :

(Note: If the Board are minded to grant planning permission for the proposed development, I would recommend that as a minimum, the following information be requested prior to any final determination by the Board).

1. A revised hydrogeological investigation report which assesses dewatering volumes based on a worst case scenario where the average annual daily discharge rate for 2009 were used as baseline figure.
2. Any revised hydrological investigation should estimate levels of drawdown in the water table in the context of pumping 20,000 cubic metres and 25,000 cubic metres from the quarry floor per day.
3. A reassessment of the settlement lagoon's ability to adequate treat discharge water from the quarry based on worst case scenario dewatering volumes.
4. A full Natura Impact Study in respect of the proposed development.

(c) Split Decision Limiting the Depth of Extraction

Another possible alternative, and an alternative that I would recommend in this instance is to issue a split decision. Whereby the Board could grant permission to the continued excavation of the quarry to limit the depth of the quarry to 30 AOD, in line with the existing floor levels of the quarry. The Board will note that are significant reserves of aggregate to the east and south of the quarry face which could be extracted to a depth of 30m AOD. Excavations to this level would not alter the existing groundwater regime and would not therefore have a significant impact on the environment or the River Barrow and River Nore SAC. (Note: I would recommend that the Board issue a split decision as opposed to granting permission and merely incorporating a condition limiting the depth of excavation, I base this recommendation on the grounds that the grant of planning permission would be materially different in terms of size and scale from that originally sought).

I therefore set out the following draft decision orders:

DECISION 1

Grant planning permission for the proposed quarry to extract limestone aggregate to a maximum depth of 30 AOD based on the reasons and considerations set out below:

REASONS AND CONSIDERATIONS

The Board had regard, inter alia, to the following:

- (a) The provisions of the Planning and Development Act, 2000, as amended, and in particular Section 37L,
- (b) The 'Quarry and Ancillary Activities, Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government in April 2004,
- (c) The provisions of the Kilkenny County Development Plan, 2014 - 2020
- (d) The Environmental Impact Statement submitted with the application for further development,
- (e) The report and the opinion of the planning authority under section 37L(12)(a),
- (f) The submissions/observations made in accordance with regulations made under Article 270(1) of the Planning and Development (Amendment) (No. 2) Regulations 2015,
- (g) The report of the Board's Inspector, including in relation to 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, and
- (k) Ref. SU17.SU0122 - application for substitute consent at the subject site.

CONDITIONS

1 The development shall be carried out in accordance with the plans and particulars lodged with the application as amended by the drawings received by the planning authority on the 17th day of September, 2015, as amended by the further information submitted on the 18th day of September 2018 except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity.

2. Excavation across the entire 14.03 hectare site shall be limited to a maximum depth of 30 meters above Ordinance Datum.

Reason: To protect groundwater resources in the area.

3. Within three months of the date of this order, details of the surface water management system for the entire site shall be submitted to, and agreed in writing with, the planning authority.

This shall include the following:

- i. A detailed layout plan of the surface water features on site;
- ii. Details of the capacity of the lagoon on site;
- iii. Calculations on the predicated surface water flow into the lagoons;
- iv. Predicated retention time of the existing settlement lagoons;
- v. Time frame for implementation of any changes which may be required; Management measures relating to the capacity of the system to cater for extreme rainfall events shall be incorporated;

Reason: To ensure protection of groundwater quality and to provide for the satisfactory disposal of surface water.

4. A detailed restoration scheme for the site according the details submitted in the Quarry Restoration Plan submitted to An Bord Pleanála on the 17th day of September, 2015, shall be submitted to the planning authority for written agreement within three months of the date of this order. The following shall apply in relation to the design and timing of the restoration plan:

Prior to the commencement of restoration works, a further survey of the site by an ecologist shall take place to establish, species of ecological value, including nesting birds and flora, which may have recently moved onto the site. The restoration plan shall have regard to the results of this survey.

Details relating to finished gradients of the cliff faces, the type of restoration to be carried out and to measures to ensure safety during site restoration shall be provided.

Details of landscaping including planting and mounding to be carried out.

A timescale for implementation and proposals for an aftercare programme of five years shall be submitted to the planning authority for written agreement.

Reason: In the interest of the visual amenities of the area, to ensure public safety, and to ensure that the quarry restoration protects' and enhances ecology.

5. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms and Development Act 2000, as amended. The contribution shall relate to the greenfield area of the site which has not to date been excavated and 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. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

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

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

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

DECISION 2

Refuse planning permission for the deepening of the quarry to a depth of – 6 metres below Ordinance Datum based on the reasons and considerations set out below.

REASONS AND CONSIDERATIONS

1. The Board is not satisfied based on the information submitted with the application, that the deepening of the quarry to a depth of minus 6 metres AOD would not give rise to significant levels of dewatering from the quarry which would result in the excessive lowering of the water table in the vicinity of the quarry with potential adverse impacts on groundwater dependant wells in the vicinity. The proposed development is therefore contrary to the proper planning and sustainable development of the area.

2. The Board is not satisfied based on the information submitted on file that the increased volume of waters to be discharged off site which ultimately discharge into the River Barrow and Nore Special Area of Conservation could undermine the treatment capacity of the existing lagoon particularly in relation to suspended solids. On the basis of the information provided with the application and appeal including the screening report for Appropriate Assessment (Stage 1) and in light of the assessment carried out above, the Board is not satisfied that the proposed development, individually, or in combination with other plans and projects would not adversely affect the integrity of European Site No. 002162, the River Barrow and River Nore Special Area of Conservation in view of the site's conservation objectives. In such circumstances the Board is precluded from granting planning approval/permission.

**Paul Caprani,
Senior Planning Inspector.**

27th April, 2016.

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