



An
Bord
Pleanála

Inspector's Report QD07.QD0021

Development	Further development of an existing Quarry.
Location	Towmileditch, Tuam, County Galway.
Planning Authority	Galway County Council.
Planning Authority Reg. Ref.	----
Applicant	Roadstone Ltd.
Type of Application	Permission pursuant to S.37L of the Planning and Development Act 2000 as amended.
Planning Authority Decision	----
Observer	
Date of Site Inspection	22 nd November, 2016.
Inspector	Gillian Kane

Contents

1.0 Introduction and Background.....	4
2.0 Site Location and Description	4
3.0 Planning History.....	6
4.0 Planning Application	7
5.0 Submissions	8
6.0 Responses.....	11
7.0 Development Plan Provision.....	11
8.0 General Assessment	15
8.2. Principle of Development and Development Plan Policy.....	16
8.3. N6 Transport Strategy for Galway City.....	16
8.4. Issues raised by Other Parties	17
9.0 Environmental Assessment	18
9.2. Description of the Development	19
9.3. Human Beings.....	20
9.4. Ecology	20
9.5. Soils and Geology	23
9.6. Surface Water and Groundwater.....	24
9.7. Climate	25
9.8. Air Quality.....	25
9.9. Noise & Vibration	26
9.10. Landscape & Visual	27
9.11. Cultural Heritage and Material Assets.....	27
9.12. Traffic & Transportation	28

9.13.	The interaction of the Foregoing	29
9.14.	Conclusion	29
10.0	Appropriate Assessment	29
11.0	Conclusion and Recommendation	35
12.0	Reasons	36

1.0 Introduction and Background

- 1.1. QD07.QD0021 relates to an application for further development of a quarry at Twomileditch, Tuam, in County Galway. This application under section 37L of the Planning and Development Acts 2000-2015, seeks permission for the further development of a quarry that was registered under section 261 of the Acts (QB07.QB0210 refers) as a pre 63 quarry. An application for substitute consent (SU07.SU0055 refers) is currently before the Board.
- 1.2. The current application seeks to extend the quarrying works within the quarry site. Under the original substitute consent application consent was sought for the retrospective excavation of 40.5ha. Under the current application it is proposed to continue use and deepen quarrying to a level of -34mOD of an area of 27.7ha of the overall 65.9ha quarry area.

2.0 Site Location and Description

- 2.1. The subject site is located to the northeast side of Galway City, directly adjacent and outside of the city development boundary, c.4km from the city centre and c.4.5km southwest of Claregalway.
 - 2.1.1. The lie of the land varies from steep to gently rolling to flat and appears to be moderate agricultural land set out in small plots and used for grazing, interspersed with widespread scrubland in parts. There are extensive areas of exposed rock in karstic formation to the south and west of the site, contiguous with the substitute consent area. There are extensive areas of raised bogland from 600m to the north which have been heavily harvested. One-off housing development is prolific throughout much of the road network to the northeast of the city, particularly along the Castlegar Road. The lands to the southeast, fronting onto the N17, appear to be in transition from residential to commercial type uses. Two dwellings accessing onto a local road to the north have been built in recent years (from 2008) adjacent to the northeast of the substitute consent area. Ballybrit Racecourse is located c.400m to the southeast. An extensive business park (Racecourse Business Park) is located c.300m to the east.

- 2.1.2. Lough Corrib is within c.3.5km to the west of the quarry, however the site is within c.1.65km of boundary to the Lough Corrib SAC to the west. Ballindooly Lough is located to the west of the quarry but is not subject of Natura or other national environmental designation. The lands surrounding the Lough have been subject of significant artificial drainage.
- 2.1.3. The application area is stated to be 27.7ha. It forms part of a total (stated) quarry landholding of 65.9ha which includes a pre-64 area of c.14.5ha at the southeast of the site. The 14.5ha area has been subjected to extraction but now encompasses mainly processing, block making, storage ancillary to or associated with the extraction activities on the wider site, in addition to the access route to the N17. The 65.9ha area also includes a 9.22ha area for which permission was granted in 1971 for extraction. The entire 9.22ha area would appear to have been subject of extraction, to a depth of least -4mOD in parts. The area has also been subject of considerable backfilling at the eastern end to a level at 19mOD (according to the survey drawings).
- 2.1.4. The site boundaries comprise mainly of traditional field boundary hedgerows, with some stonewalls, and low fencing to the southwest. Palisade fencing (c.2m high) has been erected along part of the eastern boundary and chain-link fencing (c.2m high) along the southeast boundary, but most of this boundary treatment is outside of the application area.
- 2.1.5. The site is accessed from the N17 road (Tuam Road) to the southeast. The N17 junction with the N6 (Galway Ring Road) is located c.1.8km to the south, connecting to the M6. Two alternative routes of similar length to the M6 are available via the local road c.600m to the north (serving the racecourse and business park) via the R339 and N18, or via the N6. The site has access to the N17 within the 100kph zone, just outside the 50kph zone. The N17 has a wide hard-shoulder in this location and the lines of sight in both directions appear unobstructed from a 2.4m setback.

3.0 Planning History

3.1.1. Planning decisions on or including the subject quarry site:

- **PL07.05.11170 / Reg.ref.5062:** Outline permission **GRANTED** by the Minister for Local Government (07/03/69) for construction of house at Ballygarraun, Co. Galway
- **Ref.ref.6138:** Approval **GRANTED** by Galway County Council (13/06/69) for the erection of a dwelling house within the townland of Ballygarraun, Co. Galway.
- **PL07.5/16952:** Permission **GRANTED** by the Minister for Local Government on appeal (10/12/71) for the construction of a house at the townland of Ballygarraun, Co. Galway.
- **Reg.ref.11173:** Permission **GRANTED** by Galway County Council (18/05/72) for development of land comprising the extension of quarry boundary within the townland of Polkeen to encompass an area of almost 12.5ha.
- **Reg.ref.37077:** **OUTLINE** Permission **GRANTED** by Galway County Council (05/01/81) for a c.10.5ha extension to existing quarry in the townland of Polkeen. No evidence of a subsequent grant of approval permission has been submitted.
- **Reg.ref.QY7** – The planning authority decided to attach 11no. conditions to the continued operation of the subject quarry proposed to be registered under section 261 of the Act 2000, as amended. This decision is referred to as a '*license for quarry operation*' in correspondence from the Planning Authority dated 20/02/07 – no such term is employed under section 261. The total quarry area was stated to be 68ha by the applicant.
- **Reg.ref.QSP7** – Section 261A(3)(a) notice¹ issued from the Planning Authority dated 03/08/12 directing the owner / operator to apply to the Board for substitute consent under section 177E accompanied by a remedial EIS and a remedial NIS within 12 weeks of the issuing of the

¹ The notice issued by the Council incorrectly states that it is a notice under section 261A(3)(c).

notice. The notice was not subject of an application to the Board for a review. Under **SH07.0012** the Board permitted a time extension of 38 weeks to the 12-week period.

- **SU.07.SU0055:** An application for substitute consent for the subject quarry is currently before the Board.

4.0 Planning Application

4.1.1. A planning application for permission under the provisions of Section 37L was submitted to the Board on 22nd January, 2016. This application has been accompanied by the following documentation:

- A completed application form.
- An application fee.
- A newspaper notice and site notice.
- Environmental Impact Statement
- AA Stage 1 Screening Report
- Restoration Plan
- Detailed drawings.
- A CD with a copy of the full planning application and associated documentation in digital format.

4.2. The **Stage 1 Screening Report** submitted with the application concludes that the continuation and extension by deepening of quarrying operations will not have any standalone effects on the integrity of any Natura 2000 site or sites or any of the qualifying habitats and / or species for which any such site has been designated / classified as being of European importance. The screening report (section 6 and section 9) states that no further assessment is required for the continuation of use and extension by deepening of quarrying operations at Towmileditch as a stand-alone project. No specific avoidance and mitigation measures are proposed (section 7). Section 9 states that there is no requirement to proceed to a Stage 2 NIA.

4.3. The **Environmental Impact Statement** submitted with the application comprises an assessment of the potential for significant impacts on the factors of the environment. The EIS identifies potential impacts on each of the factors

of the environment. It concludes that the proposed development would not result in significant adverse effects with respect to human beings, ecology, soils & geology, surface & ground water, climate, air, noise, vibration, landscape, cultural heritage, material assets and roads & traffic.

5.0 Submissions

- 5.1. **Submissions of the TII (14/03/16):** The subject site accesses the N17 national primary road at a location where a 100kph speed limit applies. Any consent granted for development at this site should not result in intensification of use of the existing direct access to the N17 within the 100kph zone in accordance with the DoECLG Spatial Planning and National Roads Guidelines. Any recommendations arising from the Traffic and Transport Assessment contained in the EIS should be implemented, particularly in the interests of maintaining levels of safety, efficiency and capacity on the national road network. The Board is requested to note that Galway CC have identified a preferred route corridor for a potential road based element of the transportation solution for Galway. The existing and proposed quarry operations are not impacted by the proposed emerging preferred route corridor.
- 5.2. **Submission of GSI: (09/03/16):** The Twomileditch quarry has been identified as a County Geology Site (CGS) in the National Heritage Plan 2002 and not just a site of interest as noted in section 5.40 of the EIS. Under point 5.41 the GSI would like to include the preservation of a representative section and access to it beyond the quarry life as also recommended under SU07.SU0055. The installation of an information panel and a viewing platform would promote geological heritage values as per the GSI-ICF guidelines and could enhance public perception of the extractive industry. Under point 5.46 of the EIS the section on 'Direct Impacts' should be modified to state that the geological heritage interest of the quarry as a CGS will not be impacted by on-going quarrying activities.
- 5.3. **Submission of Galway County Council (04/03/16):** The site notice was inspected 04/02/16 and was found to be in place. There is no enforcement

history in respect of this site. Permission was granted for extension of quarry boundary under reg.ref.11173 in 1972. It is considered that the quarry complies with the mineral extraction and quarry policies and objectives as set out in the development plan. After reviewing the EIS and the report submitted on Limestone Pavement Conservation, it is considered that further development consent should be granted for the development. 6 no. conditions recommended.

- 5.4. **Submissions from Applicant (15/04/16):** Regarding the Council's recommendation to attach conditions, the applicant submits that conditions no.s 1 and 2 should be deleted or revised. In relation to condition no. 1 the applicant states that the entrance to the quarry is existing and established. Section 13.115 of the EIS notes that the current sightlines are adequate and that any revisions to the entrance as a result of the proposed N6 bypass would be in accordance with the required design standards. Land on either side of the entrance is not in the ownership of the Applicant and therefore improvements to the entrance are limited. Galway CC did not impose sightline conditions when the quarry was registered. The Board is requested not to attach condition no. 1. In relation to condition no. 2, it is stated that there are no infrastructure projects proposed by Galway CC that would warrant a special contribution as per condition no. 2. It is stated that the criteria do not apply and that additional special contributions are not warranted in this instance. It is submitted that there is no basis for the alternative condition suggested and that the Board should impose their standard condition.
- 5.5. **Submission of the Dept. of Arts, Heritage and the Gaeltacht (04/05/16):** It is noted that the extension area of 27.7ha is a subset of the 40.5ha for which substitute consent was sought and that the overall quarry is 65.9ha. The quarry is not in or near any nature conservation sites. The depts. notes the applicants Stage 1 screening report which identifies the following two hazards: alterations to the hydrogeological regime and changes in water quality. The board must consider

- whether there is adequate consideration of the likely significant effects of the quarry extension in combination with the overlapping substitute consent application which is undergoing retrospective EIA,
- whether there is adequate consideration of the likely significant effects of the quarry extension in combination with other plans and projects, noting that the 'in-combination' section is separate from the main analysis. The board is requested to note that the emerging preferred route for the N6 Galway City Transport Project is in the vicinity of the quarry.
- whether the conclusion that AA is not required is reached on the basis of screening and available information or on the basis of the project EIS and the assessment it contains.

5.5.1. The Dept. state that the ecological surveys of the quarry were carried out at sub-optimal times of the year (03/02/13 and 24/11/15) and that the EIS presents limited baseline ecological information about the site and surrounds. The dept. is aware of the intensive ecological surveying carried out for the N6 Galway City Transport Project which cover the current site. These surveys have established the presence of various natural and semi-natural rocky, grassland and scrub habitats and vegetation types in and adjacent to the quarry including the current substitute consent area. Figures 4.3.6 and 4.3.10 of the Route Selection report refer. The greater extent of coverage of these habitats and their higher ecological evaluations (except in the case of Limestone Pavement) are in contrast to the data and the information on habitats in the EIS. Maps of recorded bat activity and bat roosts in the general area are available in Figures 4.3.12 and 4.3.16 of the Schemes Route Selection Report. Additional ecological information is also likely to be available in that report. The dept. advises that there should be due consideration of the ecological information that is available for the site.

5.5.2. Regarding the effects the quarry has had on flora and fauna (chapter 4) it has been established that permanent losses of approx. 6.5ha of Limestone Pavement an Annex I priority habitat have resulted from quarrying at the site and that limestone pavement remnants with an area of 1.52ha in total may remain. The losses have occurred since 1990 when EIA legislation came into

force. The applicant does not address the cumulative impacts on Limestone Pavement in the wider local area and region except to say that no baseline data is available to carry out an assessment. The dept. notes that limited new information is provided to characterise the Limestone Pavement. The rEIS survey was undertaken at a sub-optimal time and the additional ecological surveys of the pavement areas only were undertaken on 24/11/15. The dept. understands that the Limestone Pavement Conservation and Management Plan and the revised Restoration Implementation Proposals will be implemented in full and monitored by a suitably qualified ecological consultant over a period of five years.

6.0 Responses

6.1.1. **An Taisce** (23/05/16): It is understood that further development has taken place since the application was first lodged on 22nd January 2016. The application is therefore invalid.

6.1.2. **TII** (18/05/16): The subject site accesses the N17 national primary road at a location where a 100kph speed limit applies. Any consent granted for development at this site should not result in intensification of use of the existing direct access to the N17 within the 100kph zone in accordance with the DoECLG Spatial Planning and National Roads Guidelines. Any recommendations arising from the Traffic and Transport Assessment contained in the EIS should be implemented, particularly in the interests of maintaining levels of safety, efficiency and capacity on the national road network. The Board is requested to note that Galway CC have identified a preferred route corridor for a potential road based element of the transportation solution for Galway. The existing and proposed quarry operations are not impacted by the proposed emerging preferred route corridor.

7.0 Development Plan Provision

7.1. The site is governed by the policies and provisions contained in the Galway County Development Plan 2015 – 2021. The Plan notes that County Galway has extensive deposits of stones and mineral material which is a fundamental

resource for the building industry. It is recognised that the winning and processing of these materials are key factors in the economic life of the county and that the Planning Authority will face a challenge in facilitating the gainful exploitation of the materials with minimum impact on the environment and least disturbances to residences.

- 7.2. Section 6.2 of the Development Plan specifically relates to mineral extraction in quarries. It states that the Council will facilitate harnessing the potential of the area's natural resources while ensuring that the environment and rural and residential amenities are appropriately protected. The Council would take full account of the DECLG Guidelines in respect of quarrying and ancillary activities.
- 7.3. **Policy EQ1** relates to environmental management practice and states that the Council will have regard to environmental management practice as set out in the EPA Guidelines for the Extractive Industry.
- 7.4. **Policy EQ2** seeks to ensure that adequate supplies of aggregate resources to meet future growth needs within the county. The Council will also facilitate the exploitation of such resources where there is a proven need and a market opportunity for such minerals and aggregates and ensure that this exploitation of resources does not adversely affect the environment or adjoining existing land uses.
- 7.5. The specific objectives are as follows:
- Objective EQ1** – protection of natural assets, protect areas of geomorphological interest, groundwater and important aquifers, important archaeological features and natural heritage areas from inappropriate development.
- Objective EQ2** – the council shall require the following in relation to the management of authorised aggregate extraction.
- (a) All quarries should comply with the requirements of the EU Habitats Directive, the Planning and Development Acts and the Guidance contained in the DoEHLG Guidelines and DM Standard 37 of this Development Plan.

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

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

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

7.6. **Development Management Standard 37 - Extractive Development**

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

- a) *Guidelines:* Compliance with section 261 of the Planning and Development Act, the DOEHLG Quarry and Ancillary Facility Guidelines 2004 and the EPA Guidelines for Environmental Management of the Extractive Industry 2006. Where extractive developments may impact on archaeological or architectural heritage, regard should be had to the DOEHLG Architectural Conservation Guidelines and the Archaeological Code of Practice (2002) in its assessment of planning applications. Reference should be made to the geological heritage guidelines for the extractive industry 2008.
- b) *Landownership:* Details should be submitted showing the proposed site in relation to all lands in the vicinity in which the applicant has an interest.
- c) *Deposits:* Details to be submitted to include the depths of topsoil, subsoil and overburden and material at various points on the site. An indication of the type of minerals which it is intended to extract, a statement as to whether the parent rock from which the mineral is extracted is suitable for other uses, and the estimated total quantity of rock and material which can be extracted commercially on site.
- d) *Methods:* The methods of excavation and machinery to be used on site should be submitted. Details to be submitted to include all proposed site development works, including the proposed method of working, any existing or proposed areas of excavation, stages of work proposed, location of any settlement ponds, waste material and/or stock piling of materials, methods for the removal and storing topsoil, subsoil and overburden etc.
- e) *Production:* Details should be submitted to include the proposed production process to be employed, all requirements for water, electricity and/or other impacts to the production process and any proposals for chemical or other treatments.
- f) *Mitigation Measures:* Details should be submitted to include the assessment of potential impacts on water resources, residential and visual amenity (including noise, dust and vibration impacts) biodiversity and any other relevant considerations together with appropriate proposals for mitigation.
- g) *Access:* Vehicle routes from the site to major traffic routes and the impact on the adjoining road networks. Details should be included on the

mode, number and weight of trucks or other vehicles being used to transport materials and any truck sheeting or washing proposals.

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

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

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

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

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

8.0 **General Assessment**

8.1. It is considered that the following are the main issues relevant to the determination of the application for further development at the subject site:

- Principle of the development and Development Plan Policy
- N6 Transport Strategy for Galway City
- Issues raised by Other Parties

8.2. Principle of Development and Development Plan Policy

8.2.1. The Department's Guidelines for Planning Authorities on Quarries and Ancillary Activities (DoEHLG, 2004) acknowledge that extractive industries make an important contribution to economic development in Ireland but that the operation of the same can give rise to land use and environmental issues which require mitigation and control through the planning system.

8.2.2. Policies of the Galway County Development Plan 2009-2015 recognise the contribution that minerals make to the local economy; facilitate the extraction of stone and minerals from authorised sites having regard to the landscape sensitivity of the site; control all new operations and carefully evaluate all proposals to limit impacts on the amenities. The development plan sets out detailed prescriptive requirements under Development Management Standard 37 – Extractive Development. I am satisfied therefore that the proposed development complies with the requirements set out in the development plan in respect of the extractive industry and generally accords with the overarching policies and objectives set out in the Plan which seek to, where appropriate and subject to satisfying qualitative and environmental requirements, support and encourage the development of quarries in order to benefit the economic development of the county. I further note that the development plan does not incorporate any policies which would prohibit or discourage quarrying activities in specific areas of the county. The proposed development does not contravene any policy statements set out in the development plan and the proposal appears to support many of the wider goals set out in the plan in relation to the extractive industry. I note that the Planning Authority has not raised any objection to the application currently before the Board and in fact are supportive of a grant of permission in this instance.

8.3. N6 Transport Strategy for Galway City

8.3.1. As noted by the submission of the TII an emerging preferred route for the N6 Galway city ring road has been identified. The route has been published and was up to recently on public display (submission accepted up to 02/12/16).

8.3.2. Drawing no. GCOB-SK-D-098 of the Route Selection Report for the transport project shows Option B for the N84 Ballindooley to Ballybrit section of the project. The proposed route shows an access road leading from approx. the subject quarry entrance on the N17 Tuam Road to the new road development.

8.3.3. In their submission on the subject development the TII advised the Board that Galway CC have identified a preferred route corridor for a potential road based element of the transportation solution for Galway. The existing and proposed quarry operations are not impacted by the proposed emerging preferred route corridor.

8.4. Issues raised by Other Parties

8.4.1. In their submission of 04/03/16 the Planning Authority has suggested 6 no. conditions in the event that the Board be minded to grant permission. These can be summarised as follows:

1. Applicant shall provide a layout map of the entrance confirming adequate sightlines as per national standard NRA TD 41-42/11. If sightlines are non-compliant the applicant shall provide a clear timeline to provide and implement same not exceeding two years from the receipt of consent.
2. Applicant shall provide a contribution of €250,000 within six months of receipt of consent to Galway CC to defray the cost of road maintenance arising from the transport of materials supplied from the quarry complex followed by a similar contribution every ten years or on supply of 1,500,000 tons of material to sites in County Galway whichever shall occur earliest.
3. The applicant shall agree provide and maintain appropriate road signage
4. Normal good practice must be observed when refuelling
5. Recyclable or waste material must be removed off site to licensed or permitted facilities
6. A restoration proposal for the lands shall be agreed with the Planning Authority.

8.4.2. The Applicant, in their submission of 15/04/16 requested the Board to delete or revise condition no.s 1 and 2. In relation to condition no. 1 the applicant states that the entrance to the quarry is existing and established. They state that section 13.115 of the EIS notes that the current sightlines are adequate

and that any revisions to the entrance as a result of the proposed N6 bypass would be in accordance with the required design standards. Land on either side of the entrance is not in the ownership of the Applicant and therefore improvements to the entrance are limited. Galway CC did not impose sightline conditions when the quarry was registered. The Board is requested not to attach condition no. 1.

- 8.4.3. With regard to the sightlines at the existing entrance to the quarry, I note the emergence of a preferred route for the N6 Galway Transport Strategy which provides for road upgrades at the quarry entrance. Given the significance of this major infrastructural project, it is considered that any alterations to the subject quarry entrance would be premature.
- 8.4.4. In relation to condition no. 2, the Application submits that there are no infrastructure projects proposed by Galway CC that would warrant a special contribution as per condition no. 2. It is stated that the criteria do not apply and that additional special contributions are not warranted in this instance. It is submitted that there is no basis for the alternative condition suggested and that the Board should impose their standard condition.
- 8.4.5. The report of the Council does not indicate if the recommended contribution towards road maintenance is in the nature of a contribution required under the Development Contribution Scheme or is a Special Development Contribution. The Development Contribution Scheme for Galway County Council (adopted on 29th February 2016) is not referenced in the report of Galway County Council to the Board. However, the Scheme clearly provides for a development contribution for quarries at the rate of €17,000 per ha of extraction. In the instance of the current application this would amount to €470,900 i.e. €17,000 x 27.7. A condition should be attached to any grant of planning permission requiring payment of a development contribution in accordance with the s48 development contribution scheme.

9.0 Environmental Assessment

- 9.1.1. The EIS is accompanied by a Non-Technical Summary. Appendices are attached at the end of the relevant chapter. The EIS submitted examines the impact of the proposed development under a grouped format approach, with

each of the impact areas set out in Article 3 of the EIA Directive being addressed for potential impacts, proposed mitigation measures, and residual post-mitigation effects. There are separate chapters covering human beings; ecology; soils & geology; surface & ground water; air quality; climate; noise & vibration; landscape & visual impact; cultural heritage; material assets; traffic & transportation; and the interaction of the foregoing. The EIS addresses the main likely significant direct and indirect effects that the development will have on the environment.

9.2. Description of the Development

- 9.2.1. The EIS describes the overall quarry site as being 65.9ha, on relatively flat to undulating lowland with levels varying from 20mOD at the northern boundary to -2.5mOD at the quarry floor. Quarry operations are described in detail. The proposed development is described as the continuation of use and deepening to -34mOD of a 27.7ha area of the overall quarry (overlapping part of the area for which substitute consent is currently being sought). This will result in benches of -4mOD and -19mOD and the quarry floor of -34mOD. No details of current ground levels are presented, nor are estimates of expected extraction volumes. The subject site does not comprise any plant, machinery or structures.
- 9.2.2. Chapter 2 also contains details of the proposed restoration scheme for the overall quarry. The restoration plan is to allow the application site area to become a natural habitat. Figure 2.4 shows the majority of the application site to be a flooded quarry void, with some areas of woodland scrub and hedgerows along the boundaries. Three areas of Limestone Pavement are identified, one of which is located in the north-western corner of the subject site. Section 2.61 of the EIS notes that an area of the quarry will be retained for geological study as requested by the GSI.
- 9.2.3. Section 2.85 of the EIS discusses the consideration of alternatives, namely alternative sources of aggregates, alternative locations, alternative designs and alternative methods of working. Having regard to the nature of the application, consideration of alternative sites is not relevant – being an extension to a working quarry, where infrastructure is already in place. Again, consideration of alternative means/methods of extraction is not relevant,

having regard to the extent of the proposed expansion area within the overall quarry.

9.3. Human Beings

- 9.3.1. Chapter 3 of the EIS refers to Human Beings. The proposed development is considered to have no impact (direct or indirect) on population in terms of numbers or structure. No mitigation measures are considered necessary. In relation to interaction with other impacts, the impact of dust, noise and vibration on human beings is found not to be significant due to the mitigation measures implemented. The EIS notes that there are no dwellings within 250m of the quarry and 57 no. dwellings within 500m of the subject site. Minimal impact on traffic is expected and negligible impacts on landscape and visual impacts are predicted.
- 9.3.2. These conclusions are considered reasonable. Having regard to the nature of quarrying activity long established at the subject site and the extent of development currently proposed, it is considered that the proposed development would not have any significant impacts on human health. I note that no objections to the proposed development have been submitted to the Board.

9.4. Ecology

- 9.4.1. Chapter 4 of the EIS notes that an Ecological Impact Assessment has been carried out and that a habitat survey has been undertaken. The EIS notes the location of four SAC / SPA's and three pNHA's within 5km of the subject quarry. Chapter 4 provides a detailed description of the habitats and sub-habitats in and around the subject site. It notes that no records of protected, rare or notable species of flora, mammals, reptiles, amphibians and invertebrates were recorded or predicted on the subject site. 18 no. bird species were recorded including the Annex 1 listed peregrine falcon. The low ecological value of the quarry is noted with the exception of the three areas of Limestone Pavement.
- 9.4.2. I note the submission of the Dept. of Arts, Heritage and the Gaeltacht that the ecological surveys of the quarry were carried out at sub-optimal times of the

year (03/02/13 and 24/11/15) and that the EIS presents limited baseline ecological information about the site and surrounds. The Dept. refers to the intensive ecological surveying carried out for the N6 Galway City Transport Project and notes that the greater extent of coverage of these habitats and their higher ecological evaluations (except in the case of Limestone Pavement) are in contrast to the data and the information on habitats in the EIS.

9.4.3. I note Figures 4.3.6 and 4.3.10 of Chapter 4 of the Route Selection Report for the N6 Galway City Transport. The survey area for the project excludes the quarry lands. The Dept. states that the surveys have established the presence of various natural and semi-natural rocky, grassland and scrub habitats and vegetation types in and adjacent to the quarry including the current substitute consent area. Figures 4.3.6 and 4.3.10 of the Route Selection report refer. The. Maps of recorded bat activity and bat roosts in the general area are available in Figures 4.3.12 and 4.3.16 of the Schemes Route Selection Report.

9.4.4. I have considered the two referred drawings plus others, plus the Route Selection Report. Drawing No. 4.3.10 shows some areas of non-Annex habitat is local (high) importance which are not reflected in the EIS. Table 4.3.6 of the Route Selection Report notes Limestone Pavement (*8240) and calcareous grassland (6210) along with scrub, recolonising bare ground and semi-natural grassland along margins of the quarry. I am satisfied that these surveys broadly and satisfactorily compare to Figure 4.2 of the EIS in that the Annex I habitats have been identified and a conservation management plan put in place for its preservation.

9.4.5. In relation to Limestone Pavement, the Dept. notes that the EIS does not address the cumulative impacts on Limestone Pavement in the wider local area and region except to say that no baseline data is available to carry out an assessment. Chapter 4 of the EIS includes a **Limestone Pavement Conservation and Management Plan**. The plan for the period 2015 to 2025 identifies objectives for the conservation and management of limestone and associated habitats. The plan provides details of a survey undertaken on the

24th November 2015. Three areas of limestone pavement are shown on drawing no. 2.

- **MA1:** 0.52ha of open limestone pavement and associated calcareous habitat along the south-western corner which includes two areas that are no longer intact but support an important biological resource of ferns and bryophytes. The plan states that the vegetation in the area is particularly complex, with evidence of historical disturbance from quarrying and the discharge of water from the quarry (under licence). This results in a mosaic of exposed rock, calcareous scree, loose rock and recolonising ground along with damp grassland where water flows along the grikes and out into adjacent areas before seeping in the epikarst layer. Table 2 of the plan lists the species found in MA1.
- **MA2:** 0.8ha of wooded limestone pavement in the southern most corner of the overall landholding, close to the site entrance. The area is largely dominated by scrub with some mature trees on the upper slope and small areas of open limestone pavement. Some limestone clints are visible but most are covered with leaf litter or a carpet of bryophytes. Table 3 of the plan lists the species found in MA2.
- **MA3:** 0.2ha of open shattered limestone pavement, also in the southern most corner of the overall landholding, close to the site entrance. The area comprises a former block limestone pavement that has been ripped out so that the former clints form an area of horizontal scree. Due to this disturbance the vegetation does not conform to any limestone vegetation type and is species poor.

9.4.6. The Limestone Management Plan sets out 5 objectives to conserve and manage all remaining areas of limestone pavement and associated habitats. The five objectives can be summarised as follows:

- To maintain the current extent of limestone pavement at the quarry in the identified areas
- To ensure no further deterioration in the quality of the geodiversity and biodiversity of the remaining limestone pavement in the identified areas

- To initiate restoration actions where limestone pavement has been degraded by quarrying operations, to restore the biodiversity value of the remaining habitat,
- To manage the other habitats associated with limestone pavement in the three management areas to provide suitable conditions for the species typically associated with the limestone pavement vegetation type within any management area
- To raise awareness and understanding of the importance of limestone pavement to all employees at the quarry

9.4.7. A programme of actions to fulfil these objectives including timelines and person responsible is presented in the plan. Table 5 of the plan provides a summary of the management actions and intentions for each of the three management areas and a series of performance indicators against which favourable conservation status will be measured. Monitoring of the plan will be undertaken by an Ecologist and an internal review of the plan will be carried out annually with a full review every five years. The plan states that no further areas of limestone pavement will be removed (outside of the existing quarry void areas) and that all future quarrying will be cognisant of the management plan.

9.4.8. I note that the extent of Limestone Pavement Habitat identified by the EIS is approximately the same as that identified by the N6 Ecological Report.

9.4.9. I am satisfied that all likely significant impacts of the proposed development on the ecology of the subject site and the wider area have been identified and assessed and that no significant impacts will occur.

9.5. **Soils and Geology**

9.5.1. Chapter 5 of the EIS states that a geological appraisal of the proposed development was undertaken by means of a desk study, a walk over study and analysis of previous ground investigations. Details of rotary coring undertaken at three bored holes in 2013 is presented. The GSI in their submission to the Board state that section 5.40 of the EIS is incorrect in classifying the quarry site as “a site of interest”, as the Twomileditch quarry

has been identified as a County Geology Site (CGS) in the National Heritage Plan 2002.

- 9.5.2. Bedrock Geology in the overall quarry area is limestones of the Two Mile Ditch member of the Knockmaa Limestone Formation. No karst features of note are located in the immediate quarry area according to the GSI Karst database. The direct impact of the proposed development on soils and geology is the excavation of the underlying bedrock. No impact on geological heritage in the vicinity of the site is predicted. Three mitigation measures are proposed.
- 9.5.3. The GSI have requested that if permission is granted, that the installation of an information panel and a viewing platform would promote geological heritage values as per the GSI-ICF guidelines and could enhance public perception of the extractive industry.
- 9.5.4. Having regard to the extensive nature of quarrying in the vicinity, I consider that the proposed continuation of use and deepening of the subject quarry will not have any significant impact on bedrock or soils in this area.

9.6. **Surface Water and Groundwater**

- 9.6.1. Chapter 6 of the EIS refers to surface water and ground water, including 11 no. figures, three graphs, photos and appendices. The EIS notes that there is a water management system in place within the application site linked to the water management system for the overall quarry site. The water management system is the subject of a discharge licence issued by Galway County Council. Water is required within the excavation area to control fugitive dust emissions. There are no surface watercourses in the site or the wider area and there is no discharge from the site to a watercourse. Run-off within the extraction area ponds at the surface and either infiltrates to the ground or evaporates, there is no collection sump. Excess water is discharged via settlement lagoons (outside the subject application site) and a hydrocarbon interceptor to the ground under licence. The EIS provides comprehensive detail on the hydrology of the subject site and the wider area, identifying surface water flows and the quality of the Corrib Lough River Waterbody. The

EIS concludes that as there is no discharge from the site to a surface watercourse, therefore that there will be no impact on surface water quality.

- 9.6.2. In relation to groundwater, chapter 6 notes that the site is underlain by undifferentiated Viséan Limestones which are classified as a regionally important karstic aquifer with conduit flow. One 15cm wide karst conduit was identified running in a northwest – southwest direction. The proposed development of deepening the existing quarry floor which is currently below the water will require dewatering. The EIS states that very little groundwater inflow is recorded at the quarry due to the low permeability of the limestones.
- 9.6.3. Monitoring of groundwater levels suggests that the existing zone of influence surrounding the quarry is approx. 15m from the face, with the water table in the surrounding limestones being unaffected by the quarry void. The main impact of the proposed development may be a slight change in groundwater flows in the two local sub-catchments that the quarry extends across. The impact is considered negligible however, given the small volumes of groundwater seeping into the quarry. Existing mitigation measures in place are listed, with no additional mitigation measures deemed necessary.
- 9.6.4. The assessment of the impact of the proposed development on surface and ground water is considered reasonable. I am satisfied that, having regard to the nature of the application, and to the mitigation measures outlined in the EIS, the proposed development would not result in any significant impact on the hydrology or hydrogeology of the area and would not have any significant impact on these aspects of the environment.

9.7. **Climate**

- 9.7.1. Chapter 7 of the EIS describes the receiving environment including wind and rainfall. The EIS concludes that the proposed development is not of sufficient scale to have any direct or indirect impacts on regional or local climates. No mitigation measures are proposed.

9.8. **Air Quality**

- 9.8.1. Chapter 8 of the EIS refers to condition no. 3 of the quarry registration which set dust levels and dust monitoring requirements for the subject quarry.

Baseline field monitoring was undertaken between Jan 2014 and June 2015. Results of the monitoring are within the recommended thresholds set by condition no. 3. Dust sensitive receptors such as the Lough Corrib SCA and 12 no. human dust sensitive receptors within 500m of the subject site are noted. No high sensitivity receptors are within the survey area. Sources of dust assessed as being part of a source-pathway-receptor link are listed as transport, soil and overburden handling, excavation and of stone and the processing plant. The risk assessment for each of the human sensitive receptors is concluded to be insignificant. Existing mitigation measures are stated to be the cause of reduced risk and therefore no additional measures are proposed.

9.8.2. I am satisfied that, having regard to the nature of the application and to the mitigation measures outlined in the EIS, the proposed development would not result in any significant impact on the air quality of the area. A condition should be attached to any grant of planning permission requiring compliance with the maximum dust deposition of $350\text{mg/m}^2/\text{day}$ (measured over a 30-day period) contained within the Quarry Guidelines 2004.

9.9. Noise & Vibration

9.9.1. Chapter 9 of the EIS notes that the overall quarry is operated in accordance with condition no. 2 (noise levels) and condition no. 4 (vibrations) of the quarry registration (QY7). Noise surveys were undertaken between 2011 and 2015 with vibration monitoring between 2013 and 2015. Principal noise sources are noted to be machinery, drilling of blast holes and soil stripping operations are temporary. Results of noise monitoring presented in the EIS show that noise criterion limits for daytime operations are met at all the noise sensitive locations. A condition should be attached to any grant of planning permission requiring that noise emissions be within the parameters set down within the Quarry Guidelines 2004 – 55dB(A) by day-time ($L_{a_{eq}}$ 1 hour) and 45dB(A) by night-time ($L_{a_{eq}}$ 15 minutes).

9.9.2. Vibration monitoring results are stated to be within the DoEHLG (2004) and EPA (2006) recommended threshold limit values. Mitigation measures for both noise and vibration impacts are presented.

9.10. Landscape & Visual

- 9.10.1. Six viewpoints are identified in chapter 10 of the EIS as representative and illustrative of the impact of the proposed development on the surrounding landscape. The photographs presented in the EIS were taken in June 2013. The zone of theoretical visibility is 2km surrounding the site and 4km to the north. The subject site is located in Landscape Character Area 5 of the County Development Plan which is described as flat, fertile pastoral land bound with field hedgerows, of no particular scenic value. The EIS notes the extensive ribbon development of one-off houses, the industrial units along the N17 and the urbanisation of the area to the south.
- 9.10.2. The main change to the landscape from the proposed development is the change of the landform in the form of a deeper quarry void. As all works will be contained within the existing void no impacts on the landscape are predicted.
- 9.10.3. I concur with the finding of no visual impact and consider that the deepening of and continuation of use of the quarry will have no further significant impacts on the landscape.

9.11. Cultural Heritage and Material Assets

- 9.11.1. An investigation of the cultural heritage and material assets within 1km, of the subject site finds:
- no protected structures.
 - Two buildings listed on the NIAH, one of which is within 700m
 - No upstanding structures of interest within 300m of the site
 - One recorded monument 400m from the site
 - one undesignated monument 800m from the site
 - No archaeological assets
- 9.11.2. No direct or indirect impacts are predicted on cultural heritage or material assets. No mitigation measures are proposed. This finding is accepted.

9.12. Traffic & Transportation

- 9.12.1. Chapter 13 of the EIS refers to Traffic and Transportation. A site visit was undertaken on the 12th March 2015 with traffic survey for the N17 also from March 2015.
- 9.12.2. The EIS notes that as of 23rd November 2015 a chosen design option was published for the N84 Ballindooley to Ballybrit. The emerging preferred route shows a junction to the south of the overall quarry site that provides access to the N17 and to the business parks at Parkmore and Ballybrit.
- 9.12.3. Details of the traffic assessment including full traffic count data is presented in the EIS. Likewise details of traffic generated by the existing operations at the quarry are described. The impact of the existing quarry on the surrounding road network is quantified, in terms of trip generation, traffic profiles and trip assignment based on an assessment year of 2014. The traffic assessment reaches the conclusion that based the existing overall quarry site traffic operates without any issues, has a minimal impact in terms of traffic and transportation and will continue to do so should the level of site operation realise historic levels.
- 9.12.4. I note that the traffic assessment does not analysis the changes in traffic movements or levels from the proposed development. The continuation of use of the existing quarry should not result in a significant change but the deepening of the quarry to -34mOD is not noted in the assessment. No data in terms of output and the impact that would have on traffic movements within the site or on the surrounding road network is presented. It is not sufficient to analysis historic data and conclude that there is no environmental impact. The impact of the proposed development on traffic and transportation must be assessed.
- 9.12.5. I note the concerns of the Inspector regarding the TTA raised in the first report on SU07.07.0055 and share those concerns. Given that traffic levels on the surrounding road network will be extensively analysed as part of the wider Galway City Transport Project, it is recommended that the applicant be conditioned to submit a traffic management plan to the Planning Authority for written agreement.

9.13. **The interaction of the Foregoing**

9.13.1. Chapter 14 of the EIS addresses the issue of interaction between the foregoing headings. I do not consider that there are any significant interactions which have not been addressed within the EIS.

9.14. **Conclusion**

9.14.1. The EIS is in compliance with Articles 94 and 111 of the Planning and Development Regulations, 2001, as amended. The EIS contains the information specified in paragraphs 1 & 2 of Schedule 6 of the Regulations. There is an adequate summary of the EIS in non-technical language. The EIS identified the likely significant direct and indirect effects of the operation of the quarry on the environment. I would be satisfied, having regard to the preceding subsections of this Report, that the operation of this quarry extension would not have a significant impact on the environment.

10.0 **Appropriate Assessment**

10.1.1. The subject site is approx. 1.8km from Lough Corrib SAC (000297) and 3km from the Lough Corrib SPA (004042).

10.1.2. The NPWS describe the Lough Corrib SAC (000297) as the second largest lake in Ireland, with an area of approximately 18,240 ha (the entire site is 20,556 ha). The lake can be divided into two parts: a relatively shallow basin, underlain by Carboniferous limestone, in the south, and a larger, deeper basin, underlain by more acidic granite, schists, shales and sandstones to the north. The surrounding lands to the south and east are mostly pastoral farmland, while bog and heath predominate to the west and north. A number of rivers are included within the cSAC as they are important for Atlantic Salmon. These rivers include the Clare, Grange, Abbert, Sinking, Dalgan and Black to the east, as well as the Cong, Bealanabrack, Failmore, Cornamona, Drimneen and Owenriff to the west. In addition to the rivers and lake basin, adjoining areas of conservation interest, including raised bog, woodland, grassland and limestone pavement, have been incorporated into the site. The site is a Special Area of Conservation (SAC) selected for the

following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive where * denotes a priority habitat.

- 3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)
- 3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea
- 3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.
- 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation
- 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia) (* important orchid sites)*
- 6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)
- 7110 Active raised bogs*
- 7120 Degraded raised bogs still capable of natural regeneration
- 7150 Depressions on peat substrates of the Rhynchosporion
- 7210 Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae*
- 7220 Petrifying springs with tufa formation (Cratoneurion)*
- 7230 Alkaline fens
- 8240 Limestone pavements*
- 91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
- 91D0 Bog woodland*

10.1.3. The Conservation Objective for the site is “to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected”. As with all NPWS generic conservation objectives favourable conservation status of a habitat is achieved when its natural range, and area it covers within that range, are stable or increasing, and the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable. The favourable conservation status of a species is

achieved when population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

10.1.4. With regards to the **Lough Corrib SPA (004042)**, the description of the designated site is the same as the SAC, as is the generic conservation objective. A second conservation objective is “to maintain or restore the favourable conservation condition of the wetland habitat at Lough Corrib SPA as a resource for the regularly-occurring migratory waterbirds that utilise it”. The qualifying interests for which the site is designated are as follows:

- A051 Gadwall *Anas strepera*
- A056 Shoveler *Anas clypeata*
- A059 Pochard *Aythya ferina*
- A061 Tufted Duck *Aythya fuligula*
- A065 Common Scoter *Melanitta nigra*
- A082 Hen Harrier *Circus cyaneus*
- A125 Coot *Fulica atra*
- A140 Golden Plover *Pluvialis apricaria*
- A179 Black-headed Gull *Chroicocephalus ridibundus*
- A182 Common Gull *Larus canus*
- A193 Common Tern *Sterna hirundo*
- A194 Arctic Tern *Sterna paradisaea*
- A395 Greenland White-fronted Goose *Anser albifrons flavirostris*

10.1.5. The **Galway Bay Complex SAC (000268)** is down gradient of the subject quarry and therefore there is a potential hydrogeological source-pathway-receptor. The site is described by the NPWS as being a large site encompassing the majority of the south Connemara lowlands in Co. Galway. The site is bounded to the north by the Galway–Clifden road and stretches as far east as the Moycullen–Spiddal road. The site supports a wide range of habitats, including extensive tracts of western blanket bog, which form the

core interest, as well as areas of heath, fen, woodlands, lakes, rivers and coastal habitats. The site is underlain predominantly by various Galway granites, with small areas along the northern boundary of Lakes Marble, schist and gneiss. The Roundstone Bog area has a diverse bedrock geology composed mainly of the basic intrusive rock, gabbro. An area of rock, possibly Cambrian in age, called the Delaney Dome Formation occurs in the north-west of this area. Gabbro also occurs in the Kilkieran peninsula and near Cashel. The whole area was glaciated in the last Ice Age which scoured the lowlands of Connemara.

10.1.6. Site specific conservation objectives for the site were updated on the 28th October 2015. A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site. Favourable conservation status of a habitat is achieved when its natural range, and area it covers within that range, are stable or increasing, and the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable. The favourable conservation status of a species is achieved when population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

10.1.7. The qualifying interests for the SAC are:

- Coastal lagoons [1150]
- Reefs [1170]
- Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) [3110]
- Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea* [3130]
- Natural dystrophic lakes and ponds [3160]
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation [3260]

- Northern Atlantic wet heaths with *Erica tetralix* [4010]
- European dry heaths [4030]
- Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) [6410]
- Blanket bogs (* if active bog) [7130]
- Transition mires and quaking bogs [7140]
- Depressions on peat substrates of the *Rhynchosporion* [7150]
- Alkaline fens [7230]
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0]
- *Euphydrias aurinia* (Marsh Fritillary) [1065]
- *Salmo salar* (Salmon) [1106]
- *Lutra lutra* (Otter) [1355]
- *Najas flexilis* (Slender Naiad) [1833]

10.1.8. The Screening assessment undertaken by the Applicant identifies 8 no. Natura 2000 sites. The assessment notes that as the quarry lies in an area classified regionally as karstic, the proposed development has the potential to alter localised groundwater flows through the extraction of rock and ground water quality through the direct recharge of groundwater or through the discharge of trade effluent to ground. A potential hydrogeological source-pathway-receptor link between the subject quarry and the Lough Corrib SAC, Lough Corrib SPA, Galway Bay complex SAC and the Inner City Bay SPA is identified in section 4.1 of the screening exercise. Section 5.1 identifies the potential hazards, based on the scale and nature of the project as alterations to the hydrogeological regime and changes in water quality.

10.1.9. In relation to possible alterations to the hydrogeological regime the screening report notes that quarrying in a karstified landscape system can result in destruction or disruption of the groundwater conduit flow paths, changes in the pattern of groundwater movement and changes in the quantity of water flowing through the karst system. In screening out such effects, Table 2 of the report states that groundwater in the vicinity of the quarry is expected to discharge to the Kilrougher Stream, a tributary of the River Clare but that there is also the possibility of discharge to Galway Bay. The report notes that

only one (15cm wide) karst conduit has been identified and although the quarry is worked below the water table there is very little groundwater inflow. It is stated that the proposed deepening of the quarry is not expected to hit any karst conduits where there is a likelihood of any effects on localised hydrogeology outside the existing drawdown zone of approx. 15m from the quarry void. No effects are predicted on any of the qualifying interests in Lough Corrib SAC, Lough Corrib SPA, Galway Bay Complex Sac and the Inner Galway Bay SPA.

10.1.10. In relation to changes in water quality the screening assessment states that contamination of groundwater can occur through direct recharge of groundwaters close to the ground surface or of deeper aquifers through percolation and other hydrological pathways that may affect surface waters where there is a potential ground and surface water hydraulic connectivity. The report notes that there is an increased risk from quarries in karst areas as contaminants in groundwater may move faster through limestone than other types of rocks. Table 2 states that groundwater quality at the quarry is routinely monitored from the three boreholes in the south-eastern part of the site. Monitoring undertaken in 2014 and 2015 show high levels ammonium, nitrates and coliform bacteria which are attributed to agriculture practices in the wider area and the extreme vulnerability of groundwater in the region and not the subject quarry at Twomileditch. The screening exercise notes that the ground water discharge licence for the quarry (Licence no. W/388/05) was complied with apart from a single exceedance for suspended solids. No effects are predicted on the qualifying interests for Lough Corrib SAC, Lough Corrib SPA, Galway Bay Complex Sac and the Inner Galway Bay SPA.

10.1.11. Section 6 of the screening assessment states that based on the screening of potential hazards it is concluded that the continuation and deepening of the Twomileditch quarry will not have any stand-alone effects on the integrity of any Natura 2000 sites. As no likely significant effects are predicted no specific avoidance and mitigation measures are proposed over and above those within the overall design scheme. In relation to in-combination effects, section 8 of the screening assessment states that as no stand-alone effects are predicted for the proposed quarry development, there

is no need to undertake any further assessment in-combination with other plans and projects.

10.1.12. In considering the submission of the Applicant as presented in the Stage 1 Screening Assessment, I concur with the finding that there are no other known potential sources arising from the quarry and pathways that could indirectly impact on the European sites. I further note the previous assessment undertaken in relation to Substitute Consent application 06S.SU0055 and my findings therein. Having regard to the nature of the discharge, the distance between the quarry and the Natura 2000 sites, the potential zone of influence previously determined, the lack of any known adverse impact on the hydrological regime of any waterbodies discharging to Natura sites, the lack of any known impact on water quality of watercourses discharging to any Natura 2000 site, and the lack of any likely loss of habitat or disturbance arising from the proposed development, it is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Sites no.s 000297 Lough Corrib SAC, 004042 Lough Corrib SPA, 000268 Galway Bay Complex or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment and submission of a NIS is not therefore required.

11.0 Conclusion and Recommendation

11.1. Arising from my assessment above therefore, I consider that the Board should consider granting planning permission for the proposed quarry extension as the proposed extension in my view accords with the general policies and provisions contained in the Galway County Development Plan as they relate to the extractive industry, will not have a significant adverse impact on the environment and will not impact on the integrity of European sites in the vicinity having particular regard to the conservation objectives associated with these sites. I recommend that the Board grant planning permission for the proposal based on the reasons and considerations set out below.

12.0 Reasons

The Board had regard, *inter alia*, to the following-

- (a) the provisions of the Planning and Development Acts, 2000 to 2015, 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 Galway County Development Plan 2015-2021,
- (d) the report and the opinion of the planning authority under section 37L(12)(a),
- (e) the submissions/observations made in accordance with regulations made under Article 270(1) of the Planning and Development (Amendment) (No. 2) Regulations 2015,
- (f) the planning history of the site,
- (g) the pattern of development in the area,
- (h) the details contained within application for substitute consent on the site ref. SU0055,
- (i) the nature and scale of the development the subject of this application, and
- (j) the Inspector's Report.

The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site. In completing the screening for Appropriate Assessment, the Board accepted and adopted the screening assessment and conclusion carried out in the Inspector's report in respect of the identification of the European sites which could potentially be affected, and the identification and assessment of the potential likely significant effects of the proposed development, either individually or in combination with other plans or projects, on these European sites in view of the site's Conservation Objectives. The Board was satisfied that the proposed development, either individually or in combination with other plans or projects, would not be likely to have a significant effect on European Site Nos. 000297,

004024, 000268, or any other European site, in view of the sites' Conservation Objectives.

The Board completed an Environmental Impact Assessment in relation to the subject development and concluded that the Environmental Impact Statement submitted identified and described adequately the direct and indirect effects on the environment of the development.

The Board considered that the Inspector's report was satisfactory in addressing the environmental effects of the subject development and also agreed with its conclusions in relation to the acceptability of mitigation measures proposed and residual effects and that the subject development would not be likely to have a significant effect on the environment.

Having regard to the acceptability of the environmental impacts as set out above, it is considered that, subject to compliance with the conditions set out below, the subject development would not be contrary to the proper planning and sustainable development of the area.

CONDITIONS

1. The development shall be carried out in accordance with the plans and particulars lodged with the application submitted to An Bord Pleanála on the 22nd day of January 2016, except as may otherwise be required in order to comply with the following conditions. Where such conditions require points of detail to be agreed with the planning authority, these matters shall be the subject of written agreement, and shall be implemented in accordance with the agreed particulars. In default of agreement, the matter(s) in dispute shall be referred to An Bord Pleanála for determination.

Reason: In the interest of clarity.

2. This grant of planning permission for further extraction of rock relates only to the 27.7ha area outlined in red on Drg. No. PL04 submitted with the application on the 22nd day of January 2016.

Reason: In the interest of clarity.

3. Mitigation & monitoring measures outlined in the Environmental Impact Statement and the Appropriate Assessment Screening Report submitted with this application, shall be carried out in full, except where otherwise required by condition attached to this permission.

Reason: In the interest of protecting the environment and in the interest of public health.

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

- (a) Proposals for the suppression of on-site noise and vibration.

- (b) Proposals for the on-going monitoring of noise and vibration emissions at properties in the vicinity.

- (c) Proposals for the suppression of dust on site.

- (d) Proposals for the bunding of any fuel and lubrication storage areas and details of emergency action in the event of accidental spillage.

- (e) Details of safety measures for the land above the quarry, to include warning signs and stock proof fencing.

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

- (g) Details of site manager, contact numbers (including out of hours) and public information signs at the entrance to the facility.

Reason: In order to safeguard local amenities.

5. Within three months of the date of this Order, a traffic management plan shall be submitted to the Planning Authority for written agreement. The Plan shall detail the level of traffic likely to be generated by the proposed development and proposals relating to the control and management of quarry traffic access to the site. The plan shall include details of road signage. The plan shall not provide for any intensification of use of the existing direct access to the N17 within the 100kph zone.

Reason: In the interest of Traffic Safety.

6. During the operational phase of the proposed development, the noise level from within the boundaries of the site measured at noise sensitive locations in the vicinity, shall not exceed-
- (a) an $L_{A,T}$ value of 55 dB(A) during 0700-1800 hours. The T value shall be one hour.
 - (b) an L_{AeqT} value of 45 dB(A) at any other time. The T value shall be 15 minutes.

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

7. (a) Dust levels at the site boundary shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days (Bergerhoff Gauge). Details of a monitoring programme for dust shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Details to be submitted shall include monitoring locations, commencement date and the frequency of monitoring results, and details of all dust suppression measures.
- (b) A monthly survey and monitoring programme of dust and particulate emissions shall be undertaken to provide for compliance with these limits. Details of this programme, including the location of dust monitoring stations, and details of dust suppression measures to be carried out within the site, shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. This programme shall include an annual review of all dust monitoring data, to be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

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

8. (a) Vibration levels from blasting shall not exceed a peak particle velocity of 12 millimetres/second, when measured in any three mutually orthogonal directions at any sensitive location. The peak particle velocity relates to low frequency vibration of less than 40 hertz where blasting occurs no more than once in seven continuous days. Where blasting operations are more frequent, the peak particle velocity limit is reduced to eight millimetres per second.

Blasting shall not give rise to air overpressure values at sensitive locations which are in excess of 125 dB (Lin)max peak with a 95% confidence limit. No individual air overpressure value shall exceed the limit value by more than 5 dB (Lin).

- (b) A monitoring programme, which shall include reviews to be undertaken at annual intervals, shall be developed to assess the impact of quarry blasts.

Details of this programme shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. This programme shall be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

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

9. Restoration shall be carried out in accordance with a restoration plan, which shall include existing and proposed finished ground levels, landscaping proposals and a timescale for implementation. This plan shall be prepared by the developer, and shall be submitted to, and agreed in writing with, the planning authority within three months of the date of this grant of permission. The restoration plan shall provide for the installation and maintenance of a viewing platform and information panel on the geodiversity and biodiversity features of the quarry.

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

10. 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 of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. 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 the Board to determine the proper application of the terms of the Scheme.

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

11. Within three months from the date of this order, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or other security to secure the provision and satisfactory restoration of the site, coupled with an agreement empowering the local authority to apply such security or part thereof to the satisfactory completion of any part of the development. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory restoration of the site.

Gillian Kane

Gillian Kane
Planning Inspector

22 December 2016