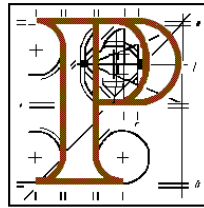


# An Bord Pleanála



## Inspector's Report

### SUBSTITUTE CONSENT APPLICATION under Section 177E

### pursuant to notice under Section 261A(3)(a) of the Planning and Development Act

**DESCRIPTION :** Existing rock quarry, extraction and processing of rock by drilling, blasting, crushing, screening and all ancillary facilities / works, screening berms and landscaping on a 4.35ha site.

**SITE ADDRESS:** Townland of Ardgaheen, Claregalway, Co. Galway

#### DIRECTION UNDER S.261A

Planning Authority: Galway County Council

Planning Authority Reg. Ref.: QSP.55

Owner: Frank Harrington Ltd

Operator: Frank Harrington Ltd

Direction: To apply to An Bord Pleanála for substitute consent under 177E with a remedial environmental impact.

Review: Confirmation of determination under 2(a) and the decision under 3(a).

#### APPLICATION:

Made by: Harrington Concrete and Quarries

Type of application: Application for substitute consent under Section 177E.

**INSPECTOR:** John Desmond

Date of inspection: 17/01/14

## SITE DESCRIPTION

The subject site is located in a rural area c.12.75km northeast of Galway City and c.11km southwest of Tuam. The area is very generally gently rolling in character, rural, but with very widespread one-off housing. The quarry is accessed via a local class rural road (L6182) which connects to the N17 c.1.25km to the east of the site entrance. The high level of one-off housing along both sides of the road presents an almost suburban character. There is a national school accessing onto the L6182 almost adjacent the junction with the N17.

The site subject of the substitute consent application has a stated area (on application form) of c.4.35ha<sup>1</sup> but it measures closer to only 3.9ha. Approximately 0.6ha of the west and north of the site has not been extracted. The extraction area subject of this application is contiguous with the original authorised extraction area to the south. The total area extracted on site measures c.6ha, although the western extent of the extraction area is difficult to determine. The applicant indicates that a 14.9ha extraction area, within a 31.8ha quarry, was registered under the section 261 registration process, however the extraction area was clarified as 7.7ha in further information received 21/09/05 to that application and was confirmed by the Board's Inspector on review (QV07.0056).

To the west of there is a storage area for extracted and / or processed materials, in addition to an extensive processing area. To the northwest there is an extensive manufacturing area and drying area for concrete products. To the northeast and east of the subject area the contiguous lands within the subject landholding are agricultural in nature and use. The neighbouring lands are all agricultural in nature and use, although they have residential components also (to the southwest, south and east). The nearest residential dwelling to the site subject of this application is c.190m to the east of the pit, but there are numerous dwellings within 400m of the site boundary. The site accesses the local road via an access road of c.270m, but the lands either side of the lane are in separate ownership and are generally in agricultural use.

The extraction pit subject of this application has been extracted to around 0mOD at the northern end, where there is a quarry lake (of c.0.27ha) and at the southern end which slopes down towards another quarry lake (of c.0.69ha) within the original authorised extraction pit area. Between the two said areas the pit has been extracted to c.10mOD. The southern pit has been extracted to c.-15mOD. The ground levels adjacent the pit is generally between 30-35mOD. There has been some filling of the east side of the pit with waste materials, including C&D waste and timber and plastic and metal and there is also a pile of old metal separate within the pit. There was evidence of a small amount of domestic rubbish burning on site, above the western side of the pit. There are stockpiles of processed materials

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<sup>1</sup> Section 1.0 of the rEIS indicates that the Board clarified in correspondence received 26/06/14 that an area of 4.35ha should be included in the substitute consent application.

stored within the western section of the pit and that area overlaps with the main processing area.

The nearest sites with nature designations are as follows: Lough Corrib SAC (site ref.no.000297) c.2.5km to the east, but also c.6.7km to the south and c.6.7km to the west where the Lough Corrib SPA (site ref.no.004042) and Lough Corrib pNHA designations also apply. There is a cluster of pNHA sites beyond 7km to the northwest of the site, including turloughs.

## **SUBSTITUTE CONSENT APPLICATION DOCUMENTATION (received 26/07/13):**

**General cover letter** c/o Patrick O'Donnell of Earth Science Partnership (Ire) Ltd.

**Letter from Michael Burke** – Consents to quarrying activity being undertaken on his lands and to the making of a substitute consent application.

**Remedial Environmental Impact Statement**, prepared by Earth Science Partnership Ireland Ltd.

**Drawings**: Site location map 1/50,000 – PP-100-00  
Site location map 1/5000 – PP-100-01  
Site location map 1/2500 – FHL-DWG-008  
Site layout plans 1/500 – PP-110-00  
Site section 1/1000 – PP-120-00

## **RELEVANT PLANNING HISTORY**

On or including the subject quarry site:

**Planning decisions (I have attached a key map outlining the approximate boundary in the case of each of the permissions):**

**Reg.ref.24002:** Permission **GRANTED** by Galway County Council (22/07/77) to Mr Thomas Hernon to open and operate a rock quarry in the townland of Ardgaineen. The site area is not stated but measures between 3.7ha to 4ha based on the site location plan.

**PL7/5/088562 / Reg.ref.65041:** Permission **GRANTED** on appeal (30/11/92) for retention of stone crushing and screening plant and stock piling areas at Ardgaineen. The site area measured c.1.58ha and was adjacent the west of site reg.ref.65913.

**PL7/5/088665 / Reg.ref.65141:** Permission **GRANTED** on appeal (30/11/92) for the erection of a macadam / asphalt plant, office building and a septic tank at Ardgaineen. No site maps are attached to the history details forwarded by the planning authority and therefore the site area is not clear.

**PL7/5/088667 / Reg.ref.65144:** Permission **GRANTED** on appeal (30/11/92) for the

erection of a concrete batching plant for production of readymix concrete, concrete blocks and stock piling area at Ardgaheen. The site measured c.3.25ha.

**Reg.ref.65913:** Permission **GRANTED** by Galway County Council (18/05/92) to Frank Harrington Ltd for retention of existing aggregate stockpiling area in the townland of Ardgaheen. The site area is stated as 0.86ha.

**Reg.ref.13/575:** Permission **GRANTED** by Galway County Council (11/11/13) to Harrington Concrete & Quarries for the erection of an aggregate storage shed and all associated ancillary facilities (1104-sq.m GFA).

#### **Enforcement:**

None referred to by Galway County Council planning authority.

#### **Quarry Registration:**

**QV0056 / QC2193:** The quarry was registered under section 261 of the Act, as amended, and the planning authority decided to impose conditions on the quarry under section 261. The quarry owner / operator appealed conditions nos.2 and 6 but subsequently withdrew the appeal. The total landholding area was stated as 31.8ha, the area extracted as 7.7ha and the total extraction area as 22.8ha in further information response received 21/09/05.

#### **Quarry Review:**

**QSP55:** A notice issued from Galway County Planning Authority on 03/08/12 under section 261A(3)(a). It was determined that section 261A(2)(a)(i) applies and it was decided that section 261(3)(a)(i) and (ii) were fulfilled. The owner / operator was directed to apply to An Bord Pleanála for substitute consent under 177E accompanied by a remedial environmental impact assessment. The determination and decision were confirmed by the Board on review (02/05/13).

## **REPORTS**

### NRA (23/08/13)

The rEIS does not specifically outline the impact of traffic movements associated with the subject quarrying operations on the junction of the L6182 with the N17. As section 10-7 of the rEIS gives a commitment that it is not proposed to increase the level of extraction or processing above levels granted under the section 261 registration, the NRA has no specific objection in principle to the proposal.

Intensification above the level permitted under the section 261 registration would warrant a Traffic and Transportation Assessment addressing the potential impact on the L6182/N17 junction.

Any recommendations arising from the traffic analysis contained in the rEIS should be included as conditions in the event that permission is granted.

### An Taisce (30/08/13)

ECJ case 215/06 – development coming under EIA should only be subject of retrospective assessment in ‘exceptional cases’.

The relevant legislation fails to define where exceptional circumstances are deemed apply.

The lodging of a rEIS with the Board does not establish the legal basis of the quarry to which it relates or the entitlement of the operator to obtain retrospective EIA consent.

No consideration should be given to any rEIS for a quarry which exceeds EIA thresholds and which does not have a valid planning basis and operating site boundary.

Registration under section 261 is irrelevant as it did not establish the legal basis of a site (Charlton J. judgement in An Taisce v An Bord Pleanála, November 2010 confirmed this).

### HSE (02/09/13)

Noise & vibration – Background levels of noise should be taken when the quarry is not operational during daytime and night time at noise sensitive locations.

Complaints about noise nuisance increase where noise levels generated exceed 10 dB over background levels.

Surface water & groundwater – The site is underlain by a locally important aquifer of ‘X (rock near surface) and E (extreme) vulnerability rating. Extraction has proceeded and is intended to proceed below the water table. It is recommended that the depth of excavation never exceeds the existing local water table level and that remedial measures are put in place to protect same. All the mitigation measures proposed [in the rEIS] to reduce the threat of contamination of the surface / groundwater by activities carried out in the quarry must be adopted.

On-site waste water treatment – It must be ensured that the existing WWTS is fully operational and in proper working order.

Galway County Planning Authority (07/10/13) : The site notice was inspected 21/08/13 and was found to be in place.

Provides an overview of the site planning history. There is no enforcement history in respect of this site.

The County Development Plan, section 4.6, notes the importance of the extractive industry to the economy of the county, recognises the challenge in facilitating gainful exploitation of the materials with minimum impact on the environment and residences, and that the extractive industry is fundamental to the continuing economic and physical development of the county.

Policies ED16-ED19, inclusive, objectives ED6 and ED7 and DM Standard 35 'extractive industry' apply.

*Environment section –*

No complaints made to the Council's Environment Section. Have conducted a review of the environmental information for Galway County Council.

The quarried area has a vulnerability rating of 'extreme – exposed rock' above a locally important karst aquifer. The bedrock is described as massive unbedded lime mudstone. There is no evidence that pollution has occurred.

Discharging pumped excavation groundwater back into the immediate environment should have no perceptible impact on groundwater levels beyond the immediate environment of the site.

Excepting possible effects from noise and dust in the immediate environs, the quarry activities have not had a significant effect on the wider environment including the wider environment, adjacent areas and Natura sites. No current or anticipated significant effects are expected to arise from these past activities.

*Roads section -*

The sightlines at the entrance to the L6182 are inadequate and must be improved to provide clear vision splays to 70m within the 80kph limit zone (address by condition).

A properly designed signage scheme indicating the quarry location, highlighting its entrance / exit and warnings as regards HGV movements must be provided and maintained in agreement with GCC Roads and Transportation Section (address by condition).

The local road network is subjected to substantial HGV traffic due to the quarry activity and the haulage of materials and by products. The quarry operator should therefore contribute to the maintenance of these roads to the sum of €40,000, based on the cost of provision of overlay of 50mm DBM on L6182 up to the N17 junction (address by condition).

*GCC Recommendation –*

The site is designated 'class 1 – low sensitivity', there are no objections from the Roads or Environment Sections, the quarry complies with the extractive development policies and objectives under the County Development Plan and it is considered that substitute consent should be granted for the development subject to 5no. conditions as follows:

- 1) *The applicant shall provide a minimum 70 metre clear sight triangle set back 2.4m from the road edge at the entrance to the quarry access from the local road LP-1201. Reason: In the interest of traffic safety.*
- 2) *The applicant shall provide a once off payment towards the upgrade of the local roads in the vicinity of the quarry of €40,000. This is based on the cost*

*of an overlay of 50mm DBN on the section of LS6182 as far as its junction with the N17. Reason: In the interest of traffic safety.*

- 3) The applicant shall agree, provide and maintain an appropriate road signage scheme to highlight the quarry entrance. This shall be agreed with Galway County Council Roads and Transportation Section. Reason: In the interest of traffic safety.*
- 4) Normal good practice must be observed when refuelling machinery so as to avoid spills, any fuel stored on site must be within a suitable double walled container or bund arrangement. Reason: In the interest of orderly development and environment protection.*
- 5) A restoration proposal for the lands should be agreed with the planning authority. Reason: In the interest of orderly development and environment and environmental protection.'*

## **OTHER OBSERVATIONS / SUBMISSIONS**

None.

## **RESPONSES**

First party c/o Earth Science Partnership (Ire) Ltd (23/10/13) : The applicant responds to the conditions recommended by the planning authority can be summarised as follows:

- 1) The applicant will undertake the necessary work to achieve the required sightlines provided the relevant landowners provide the land or the local authority CPO the land in question on the grounds of safety concerns. This will be discussed further with the County Council's Roads and Transportation Section.
- 2) The applicant has agreed to provide services and material to the value of €40,000 associated with the upgrading of the section of the LS6182 as far as its junction with the N17. This will be discussed further with the County Council's Roads and Transportation Section.
- 3) The applicant will communicate with the County Council and compile and erect a road signage scheme for the quarry entrance which is agreeable to both parties.
- 4) The applicant has procedures in place for the refuelling and maintenance of plant and machinery. The applicant will assess all storage tanks located at the working quarry to see if they comply with the requirements and will upgrade where necessary.

- 5) A restoration plan was submitted as part of the substitute consent application. This will be reviewed with the County Council and a landscape and restoration plan which is agreeable by both parties will be finalised and implemented.

## **POLICY DOCUMENTS**

### **GALWAY COUNTY DEVELOPMENT PLAN 2009-2015 –**

Section 4.6 Extractive Development. Extractive development policies ED16-ED19. Extractive development objectives ED6 and ED7.

DM Standard 35: Extractive Development.

DM Standard 36: Compliance with Landscape Sensitivity Designations – Class 1 Low Sensitivity rating (may encroach on High Sensitivity rating at western fringe).

DM Standard 37: Site with Nature Conservation Designations.

DM Standard 40: Water Resource Management and Protection

DM Standard 41: Prevention of Groundwater Pollution

## **REFERENCE DOCUMENTS**

*‘Advice Notes On Current Practice (in the preparation of Environmental Impact Statements)’* (EPA, September 2003).

*‘Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities’* (DoEH&LG, December 2009).

*‘Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC’* (European Commission, November 2001).

*‘Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development’* (DoEH&LG, August 2003).

*‘Environmental Management in the Extractive Industry (Non-Scheduled Minerals)’* (EPA, 2006).

*‘Guidelines for Local Authorities on the Waste Management (Management of Waste from the Extractive Industries) Regulations 2009’* (EPA, 2012)

*‘Guidance on the authorisation of discharges to groundwater’* (EPA, 2011)

*‘Guidelines on the information to be contained in Environmental Impact Statements’*, (EPA, March 2002).

*‘National Survey of Limestone Pavement and Associated Habitats in Ireland (Irish Wildlife Manual no.73)’*, DAH&G (2013)

*‘Quarries and Ancillary Development, Guidelines for Planning Authorities’* (DoEH&LG, 2004).



## **ASSESSMENT:**

- 1.0 Introduction
- 2.0 Nature and extent of development concerned
- 3.0 Planning policy issues
- 4.0 Environmental Impact Assessment
- 5.0 Conclusion and recommendations

### 1.0 Introduction

- 1.1 This is an application for substitute consent under Part XA, Section 177E of the Planning and Development Act 2000, as amended. The planning authority issued a direction under section 261A(3)(c) contained in a notice issued by the planning authority under section 261A(3)(a)<sup>2</sup> on 03/08/12 in respect of the quarry located in the townlands of Ardgaineen, Co. Galway, which was subsequently confirmed by the Board on review. The notice required that the owner / operator apply to the Bord for substitute consent in respect of the 'quarry' under section 177E of the Act accompanied by a remedial Environmental Impact Statement.

### 2.0 Nature and extent of development concerned:

- 2.1 This substitute consent application is for '*an existing rock quarry subject to extraction and processing of rock by drilling, blasting, crushing, screening and all associated ancillary facilities / works, screening berms and landscaping on a 4.35ha site. The application site is part of an existing working quarry.*' The Council's direction referred to '*quarry development*'. On request for clarification as to the extent of the substitute consent area, the Board specified the 4.35ha area to be encompassed.

### 3.0 Planning policy issues:

- 3.1 I note the policies (*ED16-ED19*) and objectives (*ED6* and *ED7*) of the County Council in respect of extractive development as set out under section 4.6 of the Galway County Development Plan 2009-2015. I also note the development management standards (*DM Standard 35*) for extractive industries under the plan. The Council recognises the existence of deposits of stone and minerals as a fundamental resource and the winning of same as a key factor in the economic life of the County, but there are no actual clear

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<sup>2</sup> Incorrectly referred to as a 3(c) notice by the Planning Authority.

objectives<sup>3</sup> pertaining to extractive development in the County. The policies are also unclear. The development management standard for extractive development under the plan, *DM standard 35*, does not set out quantitative or qualitative standards for such development but rather sets out policy in terms of, *inter alia*, the general location of such facilities and the details that are required to be submitted with an application.

- 3.2 I also note section 9.4 '*Landscape Conservation and Management*' of the County Development Plan and to section 11.8 DM standard 36 '*Compliance with Landscape Sensitivity Designations*'. Five levels of landscape sensitivity are set out under section 9.4 of the plan, with the subject site is rated class 1 '*low sensitivity*', which I consider to be appropriate. Section 11.8 of the plan indicates that '*all developments consistent with settlement policies*' are generally acceptable. The wording of section 11.8 would suggest it relates to urban generated development rather than to development such as quarrying.
- 3.3 The Galway County Development Plan 2009-2015 does not provide clear guidance on the location and scale of quarry development in terms of its objectives, policies and standards. I can only conclude that quarry use is open for consideration within this location subject to considerations of the proper planning and sustainable development of the area.

#### 4.0 Environmental Impact Assessment:

##### 4.1.0 Remedial Environmental Impact Statement

- 4.1.1 The applicant submitted a remedial Environmental Impact Statement with the application. Part XA, section 177E of the Act of 2000, as amended states that a remedial environmental impact statement shall contain:

*'(a) a statement of the significant effects, if any, on the environment, which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out*

*(b) details of—(i) any appropriate remedial measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy any significant adverse effects on the environment; (ii) the period of time within which any proposed remedial measures shall be carried out by or on behalf of the applicant;'*

*(c) such information as may be prescribed under section 177N.*

- 4.1.2 This differs from, and is less prescriptive than the information required to be contained in an EIS as specified under article 94 and schedule 6 of the Regulations 2001, as amended. There is no indication under Part XA that the

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<sup>3</sup> An objective is an aim or a goal that someone wants to achieve. Objectives ED6 and ED7 do not provide any statement of what the Council wants to achieve in respect of this industry.

information contained in a remedial EIS shall also follow the requirements of the said Regulations and I note that the department's '*Guidelines for Planning Authorities and An Bord Pleanála on carrying out EIA*' makes no reference to rEIS. I have not been able to locate any regulations made by the Minister prescribing additional information requirements under section 177N. The Board may, however, decide that the requirements of article 94 and schedule 6 of the Regulations also apply and I have carried out an environmental impact assessment of the subject development accordingly, having regard to the departmental guidance for carrying out same.

#### 4.2 General comment:

4.2.1 The rEIS provides, generally in accordance with the requirements of schedule 6 (1) of the Regulations, a detailed description of the subject development, a description of measures provided or proposed to mitigate adverse effects, data to identify and assess the what it considers to be the main effects and it addresses the issue of alternatives appropriate to the context of it being an rEIS and a substitute consent application. The rEIS also provides an explanation or amplification of that information, as required under section (2) of schedule 6, including a description of the aspects of the environment that may or may not be likely to be significantly affected by the subject development having regard to the individual factors comprising the environment. The rEIS can therefore be considered to generally be in compliance with the requirements of the legislation under the regulations and also under section 177E of the Act. However, as set out in detail in my assessment, below, I consider the scope and detail of the rEIS to be deficient in a number of respects. I would caution that the names and qualifications of the persons carrying out the investigations and assessment informing the rEIS are not provided except in a limited number of cases.

#### 4.3.0 Human beings

4.3.1 The description of the human factor of the environment is reasonably comprehensive although it does not refer to the location of a national school c.1.25km to the east of the site near the junction of the L6182 and the N17. This is a significant omission in the context of identifying the full range and categorising the significance of potential impacts on the 'human being' factor of the environment.

4.3.2 The potential negative impacts on human beings and local amenities are listed as noise, dust, vibration, traffic and visual issues (nuisance and health issues) but the rEIS does not address them within the context of 'human beings' as a specific factor of the environment. It submits that the potential adverse impacts are eliminated or mitigated to acceptable levels through existing / proposed remedial measures outlined in the other relevant sections

of the EIS. It does not detail or outline the measures (existing / proposed) to mitigate the impact on human beings. This impedes my (and the Board) carrying out a comprehensive environmental impact assessment and is contrary to the requirements of the legislation as set out under article 94 and schedule 6 of the Planning and Development Regulations 2001-2013, as amended. Given the proximity of and density of residential dwellings in the immediate vicinity, I consider there to be potential for significant adverse impact on local residential amenities from noise, vibration, dust and traffic with the quarry operating at peak level, particularly when taken cumulatively with the full extent of processing and manufacturing activities taking place within the wider development site. These have not been adequately addressed and have not been properly mitigated for through detailed existing or proposed remedial measures.

- 4.3.3 I would expect there to be a significant direct / indirect risk from the activity to people walking, driving or, indeed, playing on the local road, including school children and resident children from HGV and other quarry traffic accessing the N17 via the L6182. This will vary over time based on the economic situation and the rate at which extraction is taking place to meet demand for extracted materials. The risk is increased due to the existing inadequate sightlines at the entrance (GCC Roads Section report) and the inadequate signage alerting to quarry entrance and quarry traffic on the L6182 and perhaps also on N17. The Local Authority's Road Section has no objections to the granting of substitute consent subject to provision of 70m sightlines and the provision of appropriate road signage for agreement. The applicants have indicated (submission 23/10/13) that they are willing to undertake the necessary works but that they don't own the relevant lands.
- 4.3.4 The rEIS does not adequately address the long term safety risk presented by the high cliff-faces of the flooded extraction pit. I don't accept that security fencing is an appropriate or practical long term solution for an exhausted quarry and would point out that the site is currently not secured against unauthorised access while it is in operation.
- 4.3.5 The EIS suggests that the widespread construction of houses in the vicinity post commencement of the quarry in the 1970's is an indicator that the development has not had a significant impact on the settlement patterns, population, land-use and social patterns in the vicinity. There is certain logic to this argument, however the development of one-off housing is a complex issue determined by many factors and constraints<sup>4</sup> and therefore people may have limited choice in where they can build a one-off dwelling. The Board will note that there are no objections to the application for any local residents.

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<sup>4</sup> Land ownership, access to and cost of land, house prices, family ties, family history and employment and national and local policy issues that define 'local need' but which also effectively rule out people building in certain parts of the county.

This would suggest that the impacts on local amenities and quality of life have not been significant.

4.3.6 Further information is required in respect of potential significant effects and full details of remedial measures to mitigate same.

#### 4.4.0 Flora and fauna

4.4.1 The rEIS concludes that no significant impacts on flora and fauna will result, that localised moderate-severe indirect impacts were likely comprising of a reduction in forage and commuting areas for Annex IV bat and bird species through removal of hedgerow and scrub and also potential disturbance of disturbance of nesting for peregrine falcon (Annex I bird species) that may reside in the quarry faces. It is submitted that the said impacts can be avoided or reduced to insignificance through implementation of mitigation measures which are set out under section 4.6. However the mitigation measures are not described in adequate detail (e.g. water management system and environmental management systems and controls for dust / fugitive emission), and / or are not accompanied by appropriate scaled drawings, and / or are not committed proposals but rather are suggestions (site restoration, compensatory habitat / commuting corridors, site illumination restrictions), and / or are of questionable feasibility (restricted blasting programme / locations to protect birds, restoration plan costing), and / or have no timeframe within which they are to be carried out. They cannot therefore be considered to mitigate impacts on flora and fauna.

4.4.2 The habitat map (plate 4.1) in chapter 4 of the EIS (see also appendices section 15 of rEIS) indicates that there is exposed calcareous rock adjacent the southeast of the pit, with dry calcareous grassland also. It does not appear to be '*limestone pavement*' (priority habitat<sup>5</sup> 8240) although there is limestone rock on site that display similar weathering patterns.

4.4.3 The EIS refers to the potential of a former souterrain on site as a roost for bat species (all bat species are protected) but as the souterrain has been removed the potential impact on bat species was not assessed in this regard. It cannot be known whether the said feature accommodated a roost for bats, or if it did the species roosting there. There is no description of the size and scale of the structure and its suitability as a roost (it was surveyed by an archaeologist). As a comparison the Kildun souterrain SAC (Co. Mayo) houses the Lesser Horseshoe bat, an Annex II species and, accommodating 69 pairs of bat it is considered of international importance. The DoAH&G's 'Bats in Ireland' notes that the destruction of souterrains reduce the number of possible hibernation sites. The loss through the carrying out of the subject

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<sup>5</sup> *Priority natural habitat types* means natural habitat types in danger of disappearance, which are present on the territory referred to in Article 2 and for the conservation of which the Community has particular responsibility in view of the proportion of their natural range which falls within the territory referred to in Article 2.

quarry extractions can be considered a significant impact, possibly of international significance depending on the particular species of bat and the size of the roost. There are no proposals to provide an alternative roost habitat on the applicants' lands.

- 4.4.4 Further information is required in respect of potential significant effects on protected bat species and on the remedial measures proposed to be carried out to mitigate significant effects on flora and fauna.
- 4.4.5 The habitat map (plate 4.1) in chapter 4 of the EIS indicates that there is exposed calcareous rock (ER2) adjacent the southeast of the pit, with dry calcareous grassland also, but provides no detail of same. The rEIS reports that the site (referring to the wider holding) was found not to contain any semi-natural habitats corresponding to Annex I of the Habitats Directive. The rEIS makes no reference to the probability of Annex I habitat having been located within the site prior to extraction. Appendix II in chapter 15 of the rEIS contains a more detailed ecology assessment, including the results of the survey of the exposed calcareous rock area (ER2), referring to it as exposed limestone rock outcrop bordering the eastern perimeter of the extraction area and concluding that it (and the adjacent scrub area WS1) is of medium to high local conservation value.
- 4.4.6 What constitutes limestone pavement habitat is not straightforward. The *National Survey of Limestone Pavement and Associated Habitats in Ireland (Irish Wildlife Manual no.73)* defines limestone pavement based on two geological structures – blocky limestone pavement (fixed) and shattered limestone pavement (loose) – and classifies it based, not only exposed and wooded limestone pavements, but also in respect of the associated habitats - European dry heaths, Alpine and Boreal heaths and Semi-natural dry grasslands and scrub facies on calcareous substrates. The report highlights the complexity of the habitat and difficulty of classifying the habitat on the whole<sup>6</sup>. The exposed calcareous rock found adjacent the site may actually be correctly defined as '*limestone pavement*', a priority habitat<sup>7</sup> (8240) listed under Annex 1 of the Habitats Directive. This is supported by the species described in the ecological assessment, all of which typically occur on limestone pavement<sup>8</sup>. This would suggest that the rEIS is incorrect, attributing less significance to the habitat than is warranted. The status of the priority habitat, according to the NPWS status report<sup>9</sup> of 2013, is Unfavourable – Inadequate (stable) and that quarrying and mining are one of the main threats and pressures on the habitat.

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<sup>6</sup> P.151.

<sup>7</sup> *Priority natural habitat types* means natural habitat types in danger of disappearance, which are present on the territory referred to in Article 2 and for the conservation of which the Community has particular responsibility in view of the proportion of their natural range which falls within the territory referred to in Article 2.

<sup>8</sup> As defined in '*The Status of EU Protected Habitats & Species in Ireland*', NPWS (2013).

<sup>9</sup> P.773, '*The Status of EU Protected Habitats & Species in Ireland*', NPWS (2013)'.

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4.4.7 The aerial photographs of the site would indicate that the exposed calcareous (ER2) habitat, potentially a priority habitat, formerly extended into the southeast corner of the extraction area concerned. Whilst the area was not and is not protected by any statutory designation, its loss may be considered a significant permanent impact. The rEIS does not address this impact, does not propose any remedial measures to mitigate the impact and does not address the potential for ongoing adverse significant impacts on the remaining habitat adjacent the site. Further information is required in this regard.

#### 4.5.0 Soils & Geology

4.5.1 The EIS describes the nature of the soils and bedrock but provide no indication of their significance, if any. The information available on the GIS public viewer would suggest that the soils and bedrock found on this site are very extensive within this region and are not particularly significant. No significant impacts are identified. The impacts are very localised and therefore I would accept that they are not significant in their context.

4.5.2 The remedial / mitigation measures proposed under section 5.5 of the EIS are inadequate in detail, are not described with appropriately scaled plans and drawings to indicate where such measures are / will be implemented and do not provide a timeframe within which the measures will be carried out. As this information relates to an existing on-going operations, detailed information and evidence of the mitigations already implemented will be available and should have been documented (e.g. for berms, overburden storage, designated fuelling areas, etc.) which photographic evidence, etc., and clear time periods for the implementation of future measures and the criteria to be used for decided where measures such as the construction of screening berms should also have been provided. Further information is required.

#### 4.6.0 Hydrology & hydrogeology

4.6.1 The description of the groundwater environment is seriously lacking as it does not include existing and natural groundwater levels on the site and within the vicinity and does not describe the cone of drawdown pertaining to the pit. Neither the current '*poor*' status attributed to the groundwater body nor its 1a rating '*at risk of not achieving good status*' under the Water Framework Directive risk scores are referred to. It does not refer to EPA's groundwater quality data which rates the area at the poorest quality level in respect of '*faecal coliforms*'.

4.6.2 No significant effects were identified but the potential impacts are described as:

- Reduction of groundwater quality from operational activity exacerbated through the removal of the protective layer of overburden which increases the vulnerability of the groundwater.
- Contamination of groundwater through accidental emissions from plant and machinery.
- Possible cumulative impacts with associated developments comprising impacts on surface water (no evidence) and groundwater quality (no means of testing).

4.6.3 It is submitted that provided the mitigation measures are implemented the continued operation of the site will have no significant impact. However I consider the mitigation measures proposed under section 6.6 to be inadequate in detail and scope. For example, the water management system for the site (referred to in mitigation under flora and fauna) is not described. The location of the '*designated area*' for addition of hydraulic oils or lubricants is not identified; the restricting of '*site stripping*' to certain periods is not relevant as the entire area has been stripped and mostly extracted and there is no indication as to what an '*emergency response kit*' for preventing spills from reaching the watercourse comprises or how it would be implemented. It is suggested that a groundwater level and quality programme be implemented to obtain accurate levels and quality results however it would appear that monitoring of same was required by condition no.5 attached to the quarry under the section 261 process. No reference is made to such monitoring and its results. The groundwater levels on site and within the wider vicinity should have been provided to demonstrate the cone of drawdown associated with the quarry. In addition the proposed monitoring scheme (section 6.7) does not state the scope of monitoring that will take place and does not state what measures, if any, will be taken if '*an adverse impact on the water environment*' is discovered.

4.6.4 The details submitted indicate that water (c.1080m<sup>3</sup>/day in winter and 360m<sup>3</sup>/day in summer) is pumped from the quarry sump. This water is pumped directly offsite, without any intervening stilling pond, etc., from the quarry sump within the pit offsite to the southwest, forming a pond on neighbouring lands. The water does not discharge to a watercourse (there are no surface watercourses within the vicinity) but percolates down through the thin soils into the bedrock and therefore may constitute discharge to groundwater. Having regard to the EPA's '*Guidance on the authorisation of discharges to groundwater*' (2011), given the scale and nature of the discharge, it is possible, but not clear whether it requires authorisation by the EPA.

4.6.5 The rEIS does not address the potential for significant effects on water from use of explosives and the resultant residues arising from those explosives and does not provide for remedial measures to address any significant effects.



4.6.6 The drawings on file indicate that the quarry is served by an onsite wastewater treatment plan shared with the ancillary and other associated manufacturing activities on the quarry site. There was no evidence of other toilet facilities, such as portaloos, serving the extraction pit. The wastewater treatment facility is located under the concrete pan area to the northwest of the site and does not comply with the EPA's Code of Practice for OWWTS for single dwellings (p.e.<10) or other guidance, although the p.e. generated by the activities on this site may be significantly higher, particularly when operating at peak.

4.6.7 Further information is required in respect of the above-mentioned issues.

#### 4.7.0 Climate

4.7.1 No significant adverse impacts reported. I don't consider this to be a significant issue in respect of the quarry development.

#### 4.8.0 Air quality

4.8.1 The rEIS submits that the development has not had an adverse impact on the environment' The applicants' dust monitoring has shown that dust levels at one of the four monitoring locations approached the 350mg/m<sup>2</sup>/day ELV recommended in the EPA Environmental Management guidelines (2006) and in the DoEH&LG's Quarry and Ancillary Activities guidelines (2004). Section 8.3 of the rEIS refers to a maximum standard of 130mg/m<sup>2</sup>/day was exceeded 4 times out of 19 samples but that the level of dust deposition was drastically reduced to well within the maximum advised limit following the implementation of mitigation measures. Given that the quarry is operating at approximately 15% of that in 2007 it is likely that significant impacts from dust generation may have occurred in the past, but not presently. Given the proximity low density housing in the vicinity, I consider there to be a significant risk that dust will adversely impact on the surrounding dwellings should production return to peak levels.

4.8.2 No details of the dust monitoring regime required to be implemented by condition no.5 attached to the quarry under the section 261 process, or of the dust monitoring results over the intervening period have been submitted. Such information is crucial to determining the potential for significant effects.

4.8.3 The remedial mitigation measures are set out under section 8.5 of the EIS are generally acceptable, however they are unduly vague and are not accommodated by appropriate details are drawings, for example the provision of wheel-wash facilities are proposed but no details are provided of where the facility is to be located or what exactly they'll comprise; it refers to measures to control emissions to prevent nuisance within the locality during drilling

activities but does not indicate what such measures would be. Whereas dust monitoring is proposed, no format for undertaking same is provided.

4.8.4 Further information is required.

#### 4.9.0 Noise & Vibration

4.9.1 The potential significance of any noise and vibration impacts that have occurred, are occurring and will occur from the operations on this site are increased due to the proximity of a large number of residential dwellings in the vicinity. The EIS identifies no significant adverse impacts from noise or vibration over the period of operation of the quarry or its current operations. The noise monitoring survey found noise levels at noise sensitive receptors to be within the 55 dB(A) limit recommended in the EPA's Environmental Management document, however the monitoring point at the north of the site had a recorded level of 57.6 dB<sub>LA10</sub>. This contravenes the EPA guidelines which provide that no noise shall exceed the limit by more than 2 dB. The rEIS acknowledges that noise levels are relatively low compared to previous years when demand was at peak level. This would suggest that potential for significant impacts arising from same would have more significant in the past and that there is potential for more significant impacts in the future as demand for materials increase.

4.9.2 In terms of mitigation / remedial measures, the noise assessment attributed a noise attenuation level of 15dB from screening and ground absorption 'due to screening berms in place, and due to all extraction and processing activities being undertaken within the quarry void which is below the existing ground level' (rEIS p.9-11). No description of the ground levels and berms heights and designs relative to the location of the relevant operations and the location of NSL are provided to support the level of attenuation applied. The rEIS indicates that the quarry was operational on the day of the noise survey and the survey is representative of the cumulative noise impact from all activities on the site. However, the quarry operations are not operating anywhere near the maximum levels experienced in the past and the noise survey does not detail what activities or operations were carried out during the course of the noise survey. I do not consider that the assessment provides a true reflection of the actual noise impacts in the past or the potential for cumulative adverse impacts into the future.

4.9.3 The section 261 registration application indicated that the quarry generated 170 vehicular movements per day. This is supported by chapter 10 of the rEIS (average of 172.3 per working day for 2007) which indicates that this figure relates to HGV movements generated by the entire quarry. Traffic movements for 2012 are indicated at an average of 26.5 (15% of 2007 level). The rEIS submits that it is unlikely that the high levels of production will be experienced in future. The rEIS does not include an assessment of indirect

noise impacts generated by HGV traffic along the rural road between the site and the N17, as occurred in the past, presently and potentially into the future. No mitigation is proposed in this regard.

- 4.9.4 Blasting monitoring records are appended (appendix V) to the rEIS (condition no.4 attached to the quarry under the section 261 process required monitoring of and imposed limits on the ground vibrations and overpressure generated by the blasts). The records show that the 125 dB maximum peak value for overpressure has been complied with at the monitoring point, but has reached 125dB and 124.4dB in the past. However as the monitoring point is more distant to the pit than the nearest three sensitive receptors (i.e. dwellings) and the location of the blast sites are not shown, given that the maximum overpressure level has been met in the past, it is plausible that the ELV was actually breached at the sensitive receptors. It is not clear from monitoring records that peak particle velocity of 12mm/s has been adhered to, but the same issue would arise in terms of distance between the monitoring location and the blast detonation site.
- 4.9.5 There is no indication of how future extractions would proceed within the subject extraction pit. The north and east perimeter of the pit is approximately coterminous with that of the substitute consent application boundary and lateral extension cannot proceed beyond same without a prior grant of planning permission. It would seem that the extraction pit can only proceed west to meet the boundary of the substitute consent area and / or downwards.
- 4.9.6 The quarry operations will emit impulsive noise from rock breaking and processing operations and possibly tonal noise from drilling. There is no indication that this has been taken into account in the assessment. EPA guidance<sup>10</sup> suggests that a 5 dB correction should be applied to the  $L_{Aeq}$  where impulsive and / or tonal noise applies.
- 4.9.7 The EHO recommends that background levels of noise should be taken when the quarry is not operational during daytime and night time at noise sensitive locations, noting that complaints about noise nuisance increase where noise levels generated exceed 10 dB over background levels. However, as the substitute consent application relates to a portion of a wider authorised development pre-dating the EIA regulations it would be unreasonable to use the 'no activity' as a baseline level, rather it is reasonable to look at the sound levels generated relative to the EPA's advisory limits for daytime and night time. The Council's Environment Section indicates that no complaints have been made to their section in respect of the development. That no objections have been received to the substitute consent application by any local residents would suggest that the impact on amenities is not so significant.

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<sup>10</sup> 'Guidance Note for Noise: License Applications, Surveys and Assessments in Relation to Schedule Activities (NG4)', EPA (April 2012)

4.9.8 The details of the noise and vibration monitoring regime required to be implemented by condition no.5 attached to the quarry under the section 261 process, and the results of same over the intervening period are unclear, although I assume the overpressure and vibration monitoring and records have been undertaken and maintained in accordance with the requirements of the Local Authority. Such information is crucial to determining the potential for significant effects

4.9.9 I am not satisfied that the rEIS adequately address the significant noise impacts that have occurred in the past, the true significance of noise and vibration impacts occurring at present from blasting, or the potential for significant impacts to arise in the future from continued extraction, associated processing and HGV traffic generation on the local road, in addition to the cumulative impact of other extraction and manufacturing activities on the wider site, in particular when the activities are operating at capacity. I am not satisfied that the mitigation measures, existing and / or proposed are sufficient in detail (e.g. location and size / design of berms; the enclosure of plant and machinery) or in scope (e.g. addressing impact of HGV traffic noise), or that they take account of the potential adverse impact of noise generated by the development on the widespread housing in the vicinity. Further information is required in this regard.

#### 4.10.0 Traffic (material assets)

4.10.1 The rEIS notes that traffic generated by the development during the peak (172 movements per day 2007) may have had an impact on the surrounding road network but due to the low levels of traffic now generated (26.5 movements per day 2012) it is unlikely to have a negative impact on the network. The rEIS states it is not proposed to increase the level of extraction processing above the levels '*granted*' under the Section 261 Registration. As there is potential for the quarry operate at peak level in the future, there is potential for impacts on the local road as a material asset and also on the residential amenities of residential properties fronting onto the local road.

4.10.2 The applicant is not aware of past accidents on local roads in the vicinity. The local authority (which maintains the record of reported road traffic accidents) has made no reference to any accidents. A high level of HGV traffic to/from the site will be associated an increased risk of road traffic accidents and, given the nature of the traffic, with an increased risk of a more serious accident than if only light vehicles were involved. The area is quite densely settled with one-off housing and has a young population, in addition to the presence of a primary school near the junction with the N17. These factors can also be seen to increase the risk of traffic accidents from conflict with quarry traffic. The Council's Road Section has requested that a properly designed signage scheme indicating the quarry location, highlighting its

entrance / exit and warnings as regards HGV movements must be provided and maintained in agreement with GCC Roads and Transportation Section (address by condition). In addition, the Section requires that 70m sightlines be provided to the site entrance onto the local road. The line of sight to the left hand side of the exit is substandard, the quarry entrance is not visible on approach from the east and there is inadequate warning signage (temporary sign erected to the east) and therefore the can be seen to pose an increased risk of conflict between traffic on the local road and that accessing / egressing the site.

4.10.3 The NRA has indicated that it has no objection in principle and that, as long as no intensification of the quarry occurs above that indicated under the section 261 application for registration, not Traffic and Transportation Assessment is required to address the potential impact in the L6182 / N17 junction is necessary.

4.10.4 The mitigation measures set out under section 10.5 are inadequate in detail and do not include the mechanisms for implementation. How will weight restrictions be monitored and enforced – is there weighbridge and will a record log of weights be maintained? How will it be ensured that all vehicles leaving the site are clean and tidy – is there a wheel-wash; who will inspect vehicles departing the site? Who will inspect the access road and local road to ensure they are maintained in a tidy manner and what time interval does ‘regular inspections’ mean? What is the nature and design of the ‘appropriate signage’ that is proposed to be erected by the applicant to warn vehicles of the ‘junction’ and to which ‘junction’ is the applicant referring – the junction of the entrance and the local road or the junction of the local road with the N17?

4.10.5 The rEIS does not provide a reasonable assessment of the potential significant impacts of the development on the local road network under section 12.3.4 ‘Material Assets’. I expect that a calculation of wear and tear on the local road and its junction with the N17 arising from the quarry based on historic and future potential HGV levels to/from the site can be produced to assess its impact. However as the applicant has agreed (in response of 23/10/13) to the Council’s Roads Section’s requests for a contribution condition to the sum of €40,000 to cover the cost of provision of overlay of 50mm DBM on the L6182 up to the N17 junction, I consider it unnecessary to pursue the matter further and that it can be addressed by condition.

#### 4.11.0 Landscape & Restoration

4.11.1 The significance of the visual impacts of the existing development is assessed as slight / moderate in the rEIS. Given the classification of the area under the Galway County Development Plan 2009 as ‘low sensitivity’, which is reasonable, I consider the rEIS conclusion to be reasonable.

- 4.11.2 The details of the landscaping and restoration measures are inadequate in detail and noncommittal, including the design (height, side slopes and extent) of existing / proposed embankments and berms and their suitability (or not) to accommodate natural or planted vegetation (the berm to the southwest comprises only bare boulders / rock) and the restoration and aftercare of the site. This is contrary to the '*Quarries and Ancillary Activities Guidelines for Planning Authorities*' (DoEH&LG, 2004).
- 4.11.3 Figure 11.2 shows the location of the existing and proposed berms. The typical berm details in Figure 11.4 of the rEIS are generally appropriate, but they are not to scale and therefore one cannot know with any certainty what is proposed. In addition, the said drawing does not reflect the design of the existing berms and the applicant does not actually propose to amend existing berms and provide new berms to this design. Given the extraction pit's context within a relatively flat landscape, the berms are relatively unimportant to mitigate the visual impact on the wider area. Therefore I am satisfied that this issue can be addressed by condition requiring agreement with the planning authority, if necessary.
- 4.11.4 However, I am concerned about the applicant's approach to the restoration and after-use of the extraction pit. The applicant does not provide for progressive restoration which is recommended in the EPA's '*Environmental Management Guidelines*' (2006). The subject pit is comparatively limited in itself, but it forms the extension of the original permitted pit which is still in existence and has not been subject of restoration. The nature of the extraction pit, comprising a deep pit with practically vertical cliff faces on almost all sides up to the site boundaries to the north and east means that it will not be feasible to provide graded slopes or stepped faces to most the extraction pit. The pit will therefore form a serious safety risk or hazard in the area in the long term – this is a significant permanent adverse impact.
- 4.11.5 The EPA '*Advice Notes on Current Practice*' (2003) indicate that one of the environmental effects on human beings that should be addressed in EIA for quarry development is health and safety. The mitigation measures include that the site boundaries to be secured, but no details of boundary treatment are provided. What guarantee can there be the site boundaries will be made and maintained as secure into the future when the pit is closed when they are not currently properly secured to the operating pit? I do not believe that the impact can be appropriately addressed by boundary treatment but must instead the risk must be reduced to a reasonable level through the making safe of the extraction pit cliff-faces.
- 4.11.6 The restoration provides that the natural water level will be allowed to flood the pit. Whilst this is generally acceptable in principal, the restoration sections (figure 11.3 chapter 11 of rEIS) suggest that the water level will reach

c.12mOD<sup>11</sup> and will be surrounded by vertical cliff faces rising up to 30-35mOD (approximately) on almost all sides. The restoration plan makes inadequate provision for safety benches on the final quarry faces and around the perimeter of the proposed flooded area. Should someone fall into the flooded pit, (assuming they survive the fall) it may be impossible for them to exit the water. The subject development will therefore pose a significant permanent safety into the future. Further information is required.

#### 4.12.0 Material Assets

4.12.1 No significant impacts or residual effects are identified. In my opinion the main potential significant impacts is on the local road from traffic. I have addressed this separately above.

#### 4.13.0 Archaeological & Cultural:

4.13.1 The assessment was prepared by Dr Charles Mount M.I.A.I, B.A., M.A., Ph.D degrees in archaeology with 20 plus years' experience. The rEIS states that there are no direct or indirect impacts on any known items of cultural heritage, archaeology or building of heritage interest in the substitute consent area or vicinity. However the rEIS indicates that a souterrain (GA057-165--) listed in the Archaeological Survey Database (not designated a recorded monument), within the substitute consent area, was identified in the quarry face in 2005. The rEIS indicates that an archaeological assessment was carried out under license (no.05E0560). The details available at [www.excavation.ie](http://www.excavation.ie) indicate that this was a pre-development testing which identified only a stone or axe. The report recommended that the feature be fully excavated (I assume this was meant in terms of archaeological excavation). There is no other information in this regard other than that the structure has been removed. Neither the rEIS, nor the testing report of 2005 state the level of significance of the said structure, if any. The nature of the structure is not clear to me. Two other features located to the northwest of the site, but in close proximity, have not been impacted by the subject development.

4.13.2 The DAU of DoAH&G were notified of the substitute consent applicant but made no submission. It may be therefore assumed that the impact on archaeology is not significant.

#### 4.14.0 Interactions

4.14.1 Chapter 14 of the rEIS addresses interactions. It sets out what it considers to be the principle interactions but concludes that no significant impacts from interactions arise. However significant interactions between different factors of the environment are identified elsewhere, such as the impact of the

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<sup>11</sup> Note, the natural ground water levels for the area have not been determined.

removal of a souterrain (archaeological feature) and a possible bat roost as identified in the chapter on fauna and flora and it would seem probable that impacts from noise and vibration may have impacted on any such roost given its proximity. Many of the potential interactions are addressed within the individual chapters of the rEIS. No specific mitigations are proposed to address interactions per se, but mitigation measures are proposed throughout the document.

5.0 Other issues:

- 5.1 On the day of inspection it was evident that waste materials have been deposited within the pit (southeast side of substitute consent area). The waste appears to be a mix of extraction waste materials, overburden, construction and demolition waste and mixed waste (timber, plastic and metals). I do not know the extent of mixed wastes deposited on site. The deposition of mixed wastes within the pit will pose a threat to contamination of ground water depending on the nature of the wastes. The activity of deposition of waste materials within the pit, including the nature, mix and origins of the waste material has not been described and the potential impacts (immediate and long term) on the environment from same has not been assessed as part of the applicants' rEIS. Accordingly there are no mitigation measures to address the potential significant adverse impacts.
- 5.2 Section 3(2) of the Act provides that '*where land becomes used for ... the deposit of ... old metal, mining or industrial waste, builders' waste, rubbish or debris, the use of the land shall be taken as having materially changed.*' The subject use of the extraction pit for the deposition of waste materially may constitute a material change of use that falls outside the scope of this substitute consent application.
- 5.3 There was some minor evidence of domestic waste deposited on site (nappies, yoghurt carton, paper cup), possibly burned, adjacent the northwest of the pit. The site is not well secured from access by authorized persons and there is a significant risk that the site attracts or will attract fly-tipping of domestic waste. This risk is referred to in the DoEH&LG quarry guidelines of 2004, highlighting '*that in prosecution for illegal dumping under the Waste Management Acts, landowners can by reference to certain factors be deemed to have been complicit in the illegal dumping activity*'. The rEIS does not address this risk of fly-tipping (or other illegal deposition) of wastes at this site (it does not indicate that any such activity has occurred), does not address the threats (immediate and long term) to factors of the environment arising from same and makes no provision for mitigation measures to address the risks and potential significant adverse impacts. Further information is required in respect of these issues.



## 6.0 Conclusion and recommendations

- 6.1 The subject development is consistent with the policies, objectives and standards for extraction activity under the Galway County Development Plan 2009. The site is situated within an area defined as '*less sensitive*' to development under the plan and it is not located within and does not encroach on any lands designated for environmental or other purposes.
- 6.2 Despite that the site is located within an area heavily developed for low-density one-off housing and c.1.2km from a national school to the east, no objections have been received from the local community or residents within the vicinity. This would suggest that the existing development is not perceived by the local community to have had a significant adverse impact on the amenities of the area, or that, perhaps, any adverse impacts experienced are outweighed by positive benefits in terms of local employment or other economic benefits.
- 6.3 The NRA has raised no objection subject to the quarry not intensifying above the level of the section 261 registration application. The local authority has no objection subject to 5 generally standard-type conditions, however it should be noted that it is not within the power of the applicants to provide 70m sightlines at the entrance as they do not have control over the relevant lands. The objection received from An Taisce is of a generic type rather than raising concerns specific to the Ardgaheen operations.
- 6.4 I consider the remedial EIS to be deficient in a number of respects: it does not adequately address some potentially significant effects on the environment; it does not mitigate the potentially significant effects on the environment through adequate remedial measures that described in sufficient detail (including scaled plans and drawings, etc., as necessary), that are committed proposals rather than suggestions or recommendations, and that are to be carried out within a defined time period. In addition, the details of the persons who completed the assessments for each factor of the environment, including name and qualifications, are not provided, except for the flora and Fauna and the archaeological chapters. Also, the rEIS and the application do not address the issue of waste disposal within the pit and the wider.
- 6.5 Before the Board considers granting the application for substitute consent, I would recommend that the applicant be requested to submit further information in respect of the deficits of the rEIS.

### **Recommendation:**

**On the basis of the information submitted with the application for substitute consent and within the remedial Environmental Impact Statement, it is not possible to determine the full extent of potential impacts on the environment, or their significance, or the residual impacts. I therefore recommend that, prior to the Board making a final decision on this application, the applicants be requested to submit further information, as detailed below.**

1. The applicant is requested to submit revised details, drawings and documentation as necessary to address the deficiencies in the remedial environmental impact statement submitted with the application:

(a) Human beings -

Having regard to section 3.0 of the rEIS, the applicant is requested to:

- (i) Describe the potential for significant effects on '*human beings*', with particular regard to cumulative impacts on local residential amenities from noise, vibration, dust and HGV traffic arising from the quarry extraction operations, taken cumulatively with all associated development within the contiguous site at peak operation levels.
- (ii) Describe the remedial measure undertaken or to be undertaken to address the significant effects, providing appropriately scaled plans and drawings, etc., and the indicating the period within which the remedial measures will be implemented.
- (iii) Address the issue the significant effects comprising
  - a. on-going risk to human safety due to high vertical cliff-faces within a site that does not appear to be secured from access by unauthorised persons,  
and
  - b. the permanent risk to human safety, on closure of the pit, from high vertical cliff-faces surrounding the water-filled pit, which will be almost entirely without safety benches or ledges or slopes necessary to facilitate exit from the water,
  - c. Provide full details of remedial measures addressing the significant effects under a. and b. and the time period within which the measures will be carried out.

Note - It is not considered feasible to permanently mitigate the potential long term significant effects through boundary fencing and signage, but rather remedial measures to mitigate the risk to human safety through

a practical restoration plan, including a realistic costing of implementation of same may be appropriate.

(b) Flora & fauna –

Having regard to section 4.0 of the rEIS the applicant is requested to:

- (i) Provide a detailed description of the former souterrain structure that has been removed from the site (section 13.0 would suggest a survey of the structure was carried out), an assessment of the likelihood that the said structure was occupied (permanently or seasonally) as a roost for bat species and classify (with justification) the likely significance of the effect of the loss of the structure on fauna having regard to the legal protections afforded bat species and having regard to the conservation status of the likely resident species. In this regard a comparison may be appropriate with Kildun souterrain cSAC, Co. Mayo (site ref.002320), which houses 69no. pairs of the Lesser Horseshoe bat and is considered of international importance.
- (ii) Detail the remedial measures, including appropriate maps, plans and drawings to mitigate any significant effect on bat species, with particular reference to the feasibility of providing suitable replacement habitat in compensation. Section 4.3.2 of the rEIS indicates that a souterrain recently removed from the site would have been habitat likely to support the presence of Annex II species Lesser Horseshoe bat. The
- (iii) Detail the remedial measures that have been or will be undertaken to mitigate the significant effects on flora and fauna, including the location of measures and the period within which they will be carried out. In this regard the measures detailed under section 4.6 are vague, non-committal (i.e. uncertain) and / or are without stated time periods for implementation.

(c) Flora & fauna –

Having regard to section 4.0 and appendix II (ecology assessment) of the rEIS, the exposed calcareous (ER2) habitat described within the extended holding would appear to fall within the definition of *limestone pavement*, a priority habitat (8240) listed in Annex I of the Habitats Directive. The aerial photographs of the site would further indicate that the said priority habitat formerly extended into the extraction area subject of the substitute consent application but was removed through quarrying activity. The rEIS does not address the significance of effect that has occurred, does not address whether there are significant effects occurring or which can be reasonably expected to occur on the habitat remaining within the landholding because of

the development carried out (as required under section 177E of the Planning and Development Act, 2000, as amended).

The rEIS does not provide details of appropriate remedial measures, if any, undertaken or proposed to be undertaken to remedy the significant adverse effects on the environment in respect of the potentially significant effects on priority habitat, and the period of time within which they shall be carried out.

Accordingly the applicant is requested to fully address the deficiency of the rEIS as regards significant effects on priority habitat.

(d) Soil & geology –

Having regard section 5.0 (and, in particular section 5.5) of the rEIS the applicant is requested to:

- (i) Elaborate and explain the remedial measure to '*blend the quarry site into its surrounding environment insofar as is practical*' and detail feasible measures that will be implemented to achieve same and the period within which they are intended to be carried out.
- (ii) Indicate on the site layout plan all existing and proposed overburden storage areas, differentiating between temporary and permanent storage areas.
- (iii) Clarify to what level (to stated OD level) it is intended to extract within the subject pit and the time period within which the extraction is expected to be completed (a range of upper and lower periods may be appropriate depending on economic circumstances).
- (iv) Detail the period within which the restoration of the subject area will be carried out.
- (v) Provide details, including appropriately scaled maps, plans and drawings, for the stated proposals to cover and plant existing screening berms, and provide proposed berms and the period within these works will be carried out.

(e) Hydrology and hydrogeology –

Having regard to chapter 6.0 of the rEIS, the applicant is requested to:

- (i) Determine the ground water levels on site and within the surrounding area to establish the cone of drawdown resulting from the extraction activities and estimate (based on scientific evidence) the final natural water level within the flooded pit on cessation of extraction.
- (ii) Detail the likely significant effects, in any, on the environment arising the cone of drawdown and the proposed future flooding of the pit and the

remedial measures undertaken or to be undertaken (within a defined time period) to remedy those effects.

- (iii) Assess the implications of the development on ground water quality with reference to the current 'poor' status of groundwater quality and its rating under the WFD as '*at risk of not achieving good status*'.
  - (iv) Detail the water monitoring regime implemented on foot of condition no.5 attached to the quarry under the section 261 process, provide a copy of the monitoring records, a synopsis of the results and an assessment of the potential for significant effects on groundwaters and surface waters based on the said monitoring results having regard to the peak activity level experienced within this extended facility.
  - (v) Provide an assessment of the past, current and future potential for significant effects on groundwater quality from:
    - a. blasting operations having regard to the peak activity rate of the extraction activities;
    - b. from fly-tipping, particularly on closure of the facility;
    - c. from the deposition of mixed waste materials evident within the pit.
  - (vi) Provide detailed proposals for the carrying out of monitoring of groundwater and surface water into the future, justified based on compliance with best practice and legal requirements.
  - (vii) Provide full details, included appropriately scaled maps, plans and drawings of remedial measures undertaken or to be undertaken to mitigate significant effects on the water environment, and the time period within which the measure will be carried out.
  - (viii) Submit full details of the toilet facilities and onsite wastewater treatment system serving the site, confirm whether or not the system is compliant with the standards applying to such systems, whether the existing system poses any risk of significant effect on the environment and any remedial measures to be implemented within a specified period to mitigate such impacts.
  - (ix) Detail the treatment, if any that applies to the discharge of wastewater effluent discharged to the southwest of the site.
- (f) Air quality –
- Having regard to chapter 8.0 of the rEIS, the applicant is requested to:
- (i) Detail the dust monitoring regime implemented on foot of condition no.5 attached to the quarry under the section 261 process, provide a copy of the monitoring records, a synopsis of the results and an assessment of the potential for significant effects on the factors of the environment

based on the said monitoring results having regard to the peak activity level experienced within this extended facility and the location of the nearest sensitive receptors.

- (ii) Provide full details, including site map and drawings, of the remedial measures undertaken or proposed to be undertaken by the applicant to remedy any significant adverse on factors of the environment from dust and the period of time within which any proposed remedial measures will be carried out. In this regard the measures set out under section 8.5 of the rEIS are vague (for example, the actual measures to control emissions to prevent nuisance within the locality during drilling activities are not stated; no format is provided for the proposed dust monitoring), are not accommodated by appropriate drawings (for example where is the proposed wheel-wash facilities to be located and what will they comprise of) and no time limit is provided for the implementation for the mitigation measures. Remedial measures are to include full details of dust monitoring with reference to best practice and statutory requirements.

(g) Noise & vibration –

Having regard to chapter 9.0 of the rEIS, the applicant is requested to:

- (i) Detail the noise and vibration monitoring regimes implemented on foot of condition no.5 attached to the quarry under the section 261 process, provide a copy of the monitoring records, a synopsis of the results and an assessment of the potential for significant effects on the factors of the environment based on the said monitoring results having regard to the peak activity level experienced within this extended facility and the location of the nearest sensitive receptors
- (ii) Provide an assessment of the potential noise and vibration impacts arising from the associated HGV traffic on noise sensitive locations situated along the local road based on peak activity level experienced at the extended facility, including cumulative traffic levels generated by the entire facility.
- (iii) Provide a revised assessment of the potential for significant effects on NSLs from vibration and overpressure from onsite blasting based on the actual location of (or distance to) the nearest sensitive receptors and the location of the detonation site. The measurement location for the rEIS assessment was more distant than the NSLs, did not indicate the location of the detonation site and indicated that the maximum peak of 125 dB for overpressure was reached on at least one occasion. This would suggest that the maximum ELV (EPA guidance) was exceeded as the NSLs. The assessment of vibration impact are not clear.

- (iv) Provide a detailed assessment of potential impact of blasting in terms of vibration and overpressure based on the location of the nearest noise sensitive receptors, having regard to the proposed progression of extraction through blasting through the extraction pit in the future.
- (v) Provide a detailed assessment of the potential significant effects from noise on NSL expressly taking account of tonal noise (from drilling, etc.) and impulsive noise (rock breaking, etc.) having regard to the 5dB correction recommended in EPA guidance.
- (vi) Provide full details, including site map and drawings, of the remedial measures undertaken or proposed to be undertaken by the applicant to remedy any significant adverse on factors of the environment from vibration and overpressure associated with blasting activity within the quarry, including the period of time within which any proposed remedial measures will be carried out. Note, the existing details are not accompanied by drawings and sections of appropriate scale (i.e. to indicate location and scale of berms, the enclosure of plant and machinery), are insufficient in scope (do not address impacts of HGV traffic during peak operations, and are not set out as definite measures to be implemented within a defined timeframe).

(e) Landscaping and restoration –

Having regard to section 11.0 of the rEIS, the applicant is requested to:

- (i) Detail the proposed remedial landscaping and restoration measures, providing suitable scaled plans, maps and drawings and the time period within which the said measures will be carried out and a detailed estimated costing for implementation of a viable site restoration plan. The proposals contained in the rEIS are inadequate in detail, including the design (height, side slopes, and extent and coverage by topsoil and vegetation) of existing / proposed berms / embankments.

Note: Based on details included in the rEIS, on closure the pit will comprise near vertical cliff faces, without safety benches, surrounding a flooded pit or lagoon. The pit will pose a significant risk to human life directly from risks of individual falling into the pit and / or indirectly through the inability to exit the water and the pit. The securing of the pit / site through fencing is not a feasible long term solution, rather the pit should be made safe through site restoration measures.

(f) Traffic –

Having regard to section 10.0 of the rEIS, the applicant is requested to:

- (i) Provide full details of the an appropriate road signage scheme to highlight the quarry entrance (following consultation with the Galway

County Council Roads and Transportation Section) and the time period within which the erection of signage is proposed to be implemented.

- (ii) Clarify, having regard to the stated remedial measures under section 10.5:
  - a. How are / will weight restrictions be monitored and enforced.
  - b. Whether there is an existing weighbridge operating within the wider site, clearly indicating its current / proposed location on an appropriately scaled the site layout plan, the time period within which a weighbridge will be provided and made operational, and whether a record log of weights is currently or is proposed to be maintained.
  - c. The procedures / mechanisms / structure currently in place or to be implemented to ensure that all vehicles leaving the site are '*clean and tidy*'.
  - d. The procedures currently in place / to be implemented regarding inspection of the access and local roads to ensure they are maintained in '*a tidy manner*', including the time interval to which '*regular inspections*' refers.
- 2 The applicant shall provide the name and qualifications of the individuals who completed the assessments for each of the constituent factors of the environment in the rEIS, including revised assessments submitted as further information.
- 3 The applicant is request to clarify the extent and composition of waste materials that have been deposited within the pit, proposals regarding same and the time period within which such proposals are intended to be carried out.

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John Desmond  
Planning Inspector  
19/02/14