An Bord Pleanála

Inspector's Report

Development	**: Quarry, Heronstown, Lobinstown, Co. Meath**
Planning Authority	**:** Meath County Council
Applicant	**:** Mountain House Quarries Limited
Observer	: John White
Application Type	**:** Application for Substitute Consent
Date of Inspection	**:** 01/09/14
Inspector:	**:** Pauline Fitzpatrick

1.0 INTRODUCTION

1.1 On 28th June 2013, the Board confirmed the planning authority's determination under section 261A of the Planning and Development Acts 2000-2011 in respect of the quarry at Heronstown, Lobinstown, Co. Meath. The effect of the Board's order was to direct the owner to apply for substitute consent with the application accompanied by a remedial EIS.

1.2 Following a written request from the applicant, the Board decided to grant an extension for the period of time in which the application could be made, up to 22nd October 2013 (Board ref.17.SH.0141).

1.3 On the 14th October 2013, Mountain House Quarries Ltd. lodged an application for substitute consent with the Board with a remedial EIS. This report provides an assessment of the application and sets out a recommendation for the Board in respect of the development.

2.0 SITE LOCATION AND DESCRIPTION

The site is as described on file QV0027 and is as follows:

2.1 The quarry site is located in the townland of Heronstown c. 2km to the south east of Lobinstown village and some 8km north west of Slane in County Meath. It is located c.4km south east of the N52 which connects Kells to Ardee with vehicular access to the site via local road L1603. The closest residential property is located approx. 20 metres to the south-west of the overall quarry site. There is a national school c.500 metres to the north of the site.

2.2 The overall quarry has a stated area of 10.4ha with an extraction area stated to cover an area of c. 4.89ha. The quarry is set back from the local road and is reached by way of an internal access road. The main activities are located on lands to the east of this access road. Ground levels in the quarry vary between 111mOD in the south to 83mOD in the north. The existing quarry floor is divided into two sections; one at 89mOD and the other at 80mOD (located to the north of the first section). Water collects in the quarry void which is pumped up to a settlement pond in the north-eastern most corner which eventually discharges to a drain along the north-eastern boundary and then to a watercourse to the north.

2.3 The site is largely bare/exposed with patches of gorse and vegetation. Berms have been constructed along sections of the overall site boundaries. The quarry is not currently operational. No reinstatement or restoration

works have been undertaken. The structures which remain on site including storage sheds and offices are dilapidated. The foundations for a weighbridge alongside the internal access road are also evident. A well pump house is located in the immediate vicinity of the weighbridge location.

3.0 APPLICATION FOR SUBSTITUTE CONSENT

3.1 The application for substitute consent received by the Board on the 14th October, 2013 includes a completed application form, copies of statutory notices, a remedial EIS and associated drawings. Clarification of the extent of the quarry subject of the application in addition to revised public notices were received by the Board on the 5th November, 2013.

Extent of Site Subject of Application

3.2 With regard to the extent of the quarry subject of the application Declan Brassil on behalf of the applicant in the letter received on the 5th November contends that whilst Meath County Council and subsequently the Board's Inspector referred to a 10.5ha site with an extraction area of approx. 6.4 ha., these areas are not stated in the County Council's quarry notice. The aerial photograph that was attached to the said notice delineated the section 261 registered quarry boundary and extraction area. It is on this basis that it has been assumed that the full extent of quarrying activity at the site represents the extent of development on which the planning authority has made a determination under subsection 2(a). It is submitted that such an approach is consistent with the definition of a quarry under Regulation 3 of the European Union (Environmental Impact Assessment and Habitats)(No.2) Regulations 2011. As the respective areas are not stated on the photograph accompanying the determination they were overlaid on a topographical survey which demonstrated that the overall quarry area largely coincided with that registered and measured 10.46 ha. The extraction area also largely coincided with that delineated but measured 4.89 ha and not 6.4ha. In the absence of any stated areas in the notice it is considered appropriate to utilise the accurate areas measured from the topographical survey.

Quarry Activity

3.3 The material quarried at the site is grey wacke to supplement high PSV reserves used in the applicant's asphalt operations throughout the country. There has been no activity on site since early 2011.

3.4 A couple of blasts are undertaken each year. Given the intermittent use of the site, plant is brought to process material and is removed as required. Blasted rock is dug by a crawler-mounted backhoe and loaded directly into a mobile

primary crusher unit which is situated on the quarry floor. The crushed matter is then conveyed into a mobile secondary crusher and screening deck also located on the quarry floor. Processed material is removed to stockpiles or into trucks by a front-end loader.

3.5 There were a number of storage structures in addition to a site office and accommodation on site. These have fallen into a state of disrepair and are no longer serviceable. It is intended to remove the structures from the site. The foundations of a weighbridge are located adjacent to the internal haul road. The weighbridge has been temporarily removed since extraction ceased at the site and will be reinstated when extraction recommences.

3.6 Staff facilities were brought on site whilst extraction was undertaken. There are no permanent staff facilities and no septic tank.

3.7 The application is accompanied by a rEIS. It includes a non-technical summary and a main document. The main document is structured into sections describing the development and dealing with impacts arising under topic headings. The rEIS concludes that subject to compliance with the mitigation measures in place and proposed, the continued operation of the development will not result in significant adverse environmental effects.

4.0 PLANNING AND REGULATORY HISTORY

4.1 Planning History

PL17.204854 (SA20207) – permission granted in 2004 for the construction of an asphalt plant and associated site works including wheelwash and weighbridge in addition to a puraflo, wastewater treatment system, oil interceptor and well for domestic water supply. This permission was not implemented.

P77/1561 – planning permission granted for an entrance to the quarry.

PL17/8/497 – the Board adjudicated on a reference application case related to this quarry in 1991 and decided that the use of the site as a quarry is development, which is not exempted development.

4.2 Other permits/licences:

Discharge License **3/99** granted for discharge of trade effluent from the site to Killary Waters.

4.3 Quarry registration under Section 261:

QY21: An application for Registration of this quarry by the current owner/operator was granted by Meath County Council under Section 261 of the Planning and Development Act, 2000. The registration related to a quarry with a total area of c.10.5ha. The Planning Authority issued a schedule of conditions normally associated with quarry development. Of note:

Condition 2: Permission to be for period of 12 years.
Condition 3: Within 6 months the owner/operator to agree exact area of the quarry within which future extraction is to be confined and the maximum depth of extraction.
Condition 5: Advance signage to be erected on public road.
Condition 7: Noise survey and assessment programme to be undertaken.
Condition 10: No discharge to ditches or watercourses unless agreed.
Condition 14: Monitoring of surface water and groundwater.
Condition 16: Submission of landscaping and restoration programme.
Condition 17: Vibration levels and monitoring programme.
Condition 18: Hydrological assessment to be undertaken to identify groundwater flow regime in area and the receiving waters.
Condition 19: Boundary treatment to be submitted

4.4 Section 261A Determination and Decision

The Board on review confirmed Meath County Councils' determination under subsection 2(a) and further confirmed the decision under sub-section 3(a). An application for substitute consent accompanied by a remedial EIS therefore required.

5.0 PLANNING POLICY CONTEXT

The Meath County Development Plan 2013-2019 refers.

Section 10.12 refers to the Extraction Industry. Policies include:

- To ensure that projects associated with the extractive industry carry out screening for AA in accordance with Article 6(3) of the EC Habitats Directive, where required.
- To facilitate the exploitation of the county's natural resources and to exercise control over the types of development taking place in areas containing proven or potential deposits, whilst also ensuring that such

industries are carried out in a manner which would not unduly impinge on the visual amenity or environmental quality of the area.

- To protect the finite aggregate resource in such areas of known or potential aggregate sources. Only development compatible with mining or quarrying activities shall be permitted in areas being or likely to be used for these purposes.
- To ensure that the extractive industry minimises adverse impacts on the road network in the area and that the full cost of road improvements, including during operations and at a time of closure, which are necessary to facilitate extractive industries, are borne by the industry itself.
- To ensure that the extraction of minerals and aggregates minimise the detraction from the visual quality of the landscape and do not adversely affect the environment or adjoining existing land uses.
- To ensure that all existing workings shall be rehabilitated to suitable land uses and that all future extraction activities will allow for rehabilitation of pits and proper land use management.
- To ensure that development for aggregates/mineral extraction, processing and associated concrete production does not significantly impact on the following areas:
  - Existing and proposed SACs, SPAs and NHAs
  - Other areas of importance for the conservation of flora and fauna
  - Area of significant archaeological potential
  - In the vicinity of a recorded monument
  - Sensitive landscapes and
  - World Heritage Sites.

The site is located in an area identified as a landscape character area which has a rating of Very High Value with High Sensitivity.

6.0 OBSERVATIONS

John White (landowner adjoining quarry with right of way marked Y at end of quarry as shown on plans):

- The screening berm to the north of the site is constructed right up against the river bank with no provision for access to clean the watercourse. During its construction material was deposited in the stream.
- The site is open with poor attention to health and safety. The fencing and entrance gates are considered to be totally inadequate.
- The site is kept in an untidy condition.

7.0 PRESCRIBED BODIES

The application for substitute consent was circulated by the Board to prescribed bodies. The responses received can be summarised as follows:

7.1 An Taisce

- Development coming under EIA should only be permitted and subject to retrospective assessment in 'exceptional circumstances' which has not been defined.
- Lodgement of a rEIA does not establish the legal basis of the quarry to which it relates or entitlement to retrospective EIA.
- No consideration should be given to any rEIA for a quarry which exceeds EIA thresholds and which does not have a valid planning basis.
- Previous registration of a site under s261 is deemed irrelevant (An Taisce v ABP, 2010).

7.2 National Roads Authority

The NRA has no specific comment to make on the subject development in terms of impacts relating to the safe and efficient operation of the national road network in the area.

7.3 Health Service Executive

- There is no information provided on how the applicant proposes to operate the quarry in the future. Thus is it difficult to establish whether or not the future dewatering would have an impact on the local groundwater regime.
- Monitoring of groundwater levels and quality should be sought in order to provide some baseline information
- A detailed restoration plan for the quarry should be requested.
- Details of a pest control plan should be sought.
- Boundary fencing and access gates require attention. Site security should be addressed as a matter of urgency.

8.0 PLANNING AUTHORITY'S REPORT

8.1 The PA's report sets out the planning history and the relevant development plan provisions. The PA is satisfied that the data contained in the rEIS is correct and it has no information which would suggest that quarrying adversely impacted on the environment. The Development Contribution Scheme 2010-2015 provides for levies relating to quarrying activity established on a per 0.1 hectare basis. No such contributions were applicable

prior to the adoption of the 2010 Development Contribution Scheme. Given that the PA is satisfied that the quarry has not been operational for some time it is not considered appropriate to seek any development contributions. It is concluded that the quarry has not given rise to significant adverse effects on the environment and that ongoing impacts are limited in type and significance and can be remediated as outlined in the rEIS. The PA recommends that the application for substitute consent be granted subject to conditions including:

1. Grant relates only to works undertaken prior to Meath County Council's decision to serve notice on the 31/07/13 of the requirement to apply for substitute consent.
2. Submission of landscaping plan and works to be carried out within 1 year.
3. Restoration scheme to be submitted for agreement within 3 months. Prior to commencement of restoration works a further survey of the site by an ecologist to be undertaken to establish, in particular, the presence of badgers, nesting birds, bats or other species of ecological value including flora which may recently moved onto the site. The restoration plan to have regard to the results of the survey.
4. Lodgement of security for the satisfactory reinstatement of the site.

8.2 By way of section 131 notice the PA was invited to submit comments on the revised public notices and associated correspondence from the agent for the applicant regarding the area to which the subject consent refers. The response states:

- The revised public notices accurately describe the works the subject of the application as being the development in respect of which the PA made its original determination under subsection (2)(a).
- The extracted area of 6.4 hectares was determined on the basis of an on site survey which delineated the boundaries of the extracted area at that time. It was on that basis that the assessment was undertaken and, as such, the determination and decision contained therein related to that area only (plan showing the quarry survey area is attached).

9.0 APPLICANT'S RESPONSE TO PLANNING AUTHORITY SUBMISSIONS

9.1 Response to PA report on the application

The response can be summarised as follows:

- The PA states that the quarry is no longer operational. The applicant intends to continue to operate the quarry in a manner consistent with that

as carried out over the past decade. Accordingly it is proposed that any landscaping and restoration requirements which may be attached by way of condition would be appropriately phased in accordance with future operational and extractive needs.

- It is requested that the conditions requiring a landscaping scheme and restoration plan as recommended be amended to include a provision that in default of agreement the matters can be referred to the Board.

9.2 Response to PA's comments on the Revised Public Notices and Accompanying Submission on Site Area

On the basis of the Council's clarification and having regard to the definition of quarry in regulation 3 of the European Union (Environmental Impact Assessment and Habitats)(No.2) Regulations 2011 which includes the 'extracted area' and ancillary area ' on the surface surrounding or adjacent to the quarry occupied together with the quarry for the storage or removal of the minerals for the purposes of a process ancillary to the getting of minerals including the breaking, screening, washing', it is submitted that the rEIS, drawings and notices submitted to the Board are compliant and consistent with the Regulations.

10.0 ISSUES AND ASSESSMENT

I consider the issues arising in respect of this application for substitute consent can be addressed under the following headings:

- Procedural Issues
- Principle of Development
- Environmental Impact Assessment
- Financial Contributions and Costs
- Conditions

Procedural Issues

Principle of the Application for Substitute Consent

10.1 An application for substitute consent may only be brought forward under section 177E(2)(a) of the Planning and Development Act 2000 (as amended) pursuant to a notice under Section 261A of the Act (or other relevant sections of the Act).

10.2 In this case the PA has served a notice on the owner/operator of the quarry under Section 261A. Further, in the notice the PA states that it decided that

quarrying had commenced prior to October 1964 and that the requirements in relation to registration of the quarry under section 261 were fulfilled. The Board, in its review of the determination, confirmed both the determination and decision of the PA. The development, which is the subject of this application for substitute consent has therefore been brought forward in accordance with the legal provisions of the Planning and Development Act 2000, as amended, and within the specific provisions of section 177E(2)(a). There is, therefore, an appropriate legal basis for the application.

Section 177J

10.3 The subject site was not operational on day of inspection and does not appear to have been so for a period of time. I do not consider that the provisions of section 177J of the Planning and Development Act 2000 relating to cessation of works would be applicable in this instance.

Extent of Area to which Application Refers

10.4 Section 261A(14) of the Planning and Development Act 2000, as amended, states that where an application for substitute consent is required to be made under section 261A, '*it shall be made in relation to that development in respect of which the planning authority has made a determination under subsection (2)(a)'.*

10.5 With regard to the extent of the quarry subject of the application the agent for the quarry owner in correspondence received by the Board on 5th November submits that whilst Meath County Council and subsequently the Board's Inspector in the Section 261A review referred to a quarry site of 10.5ha with an extraction area of approx. 6.4 ha., these areas are not stated in the County Council's quarry notice. The aerial photograph that was attached to the notice delineated the section 261 registered quarry boundary with the extraction area shown thereon. As the respective areas are not stated on the photograph they were overlaid on a topographical survey which demonstrated that the overall quarry area largely coincided with that registered and measured 10.46 ha. The extraction area also largely coincided with that delineated, but measured 4.89 ha and not 6.4ha. It is submitted that in the absence of any stated areas in the notice it is considered appropriate to utilise the accurate areas measured from the topographical survey and that such an approach is consistent with the definition of a quarry under Regulation 3 of the European Union (Environmental Impact Assessment and Habitats)(No.2) Regulations 2011.

10.6 I would tend to accept this analysis and note that whilst the figure pertaining to the extraction area is that which would trigger the need for EIA an application for substitute consent, in many instances, may incorporate a larger area in

accordance with the definition of a quarry as set out in Article 3 of the European Union (Environmental Impact Assessment and Habitats)(No.2) Regulations 2011. In this instance the red line as delineated on the PA's map would comply with this definition with the lands adjacent to the extraction area used for purposes ancillary to the getting of the mineral resource. Therefore the extent of the site as delineated on the said plans is considered acceptable for this substitute consent process.

Principle of Development

10.7 The material quarried on the site is a high Polished Stone Value (PSV) grey wacke. It is stated that PSV reserves are a scarce and strategic resource which are used in the production of wearing course asphalt materials. The annual rate of extraction at the site varied over the years. The peak occurred over the period 1990 to 1995 with approx. 100,000 tonnes extracted per annum, which reduced to a level of approx. 25,000 tonnes extracted per annum over the period 2005-2010. No extraction has taken place at the site since early 2011.

10.8 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 such operations can give rise to land use and environmental issues which require mitigation and control through the planning system. Concurrently policies of the Meath County Development Plan 2013 recognise that aggregates resources contribute significantly to the economic development of the county and facilitate its further development but that the exploitation of such resources is required to be carried out in a manner that does not adversely impact on the environment, existing infrastructure and the amenity value of neighbouring lands. Within this current policy context, I consider that the principle of development is acceptable on the site, subject to a satisfactory assessment of environmental effects.

Environmental Impact Assessment

Adequacy of remedial Environmental Impact Statement

10.9 Retrospective assessment as is required in this instance has evident limitations. Deficiencies in information available for past operations results in a reliance on informed likely estimation of effects. In the context of such shortcomings I submit that the Statement is consistent with the requirements of section 177F of the Planning and Development Act 2000 in that it contains

a statement of the significant environmental effects on the environment which have occurred. I also submit that the document is generally consistent with the requirements of Article 94 of the Planning and Development Regulations, 2001-2013 (contents of an EIS). It does not provide information on the main alternatives studied, but having regard to the particular nature of the development, this is not a significant omission. It also includes a non-technical summary. Therefore I am satisfied that the rEIS is adequate to enable the Board to make a decision on the application for substitute consent.

Environmental Impact Assessment

10.10 As the competent authority for decision making, the Board is required to carry out an environmental impact assessment of the application for substitute consent i.e. to identify, describe and assess the direct and indirect effects of a proposed development, in accordance with Articles 4 to 11 of the EIA Directive, on the following:

- Human beings, flora and fauna,
- Soil, water, air, climate and the landscape,
- Material assets and cultural heritage, and
- The interaction of the foregoing.

The following assessment of environmental effects has regard to the EIS submitted, the information on file and my inspection of the site.

Human Beings

10.11 Matters pertaining to soil, water, air quality, noise, landscape and traffic that affect human beings are addressed later in this assessment.

10.12 Notwithstanding the intermittent nature of the operation and absence of any full time employment arising it is not unreasonable to submit that the application site has made a positive contribution to economic activity in the area. Issues with site security in terms of easy access from the road and adjoining lands are pertinent as raised in the observation to the application received by the Board and acknowledged in the rEIS. In addition there are some structures on site such as storage sheds and bays and offices which are in a state of disrepair. Their removal is proposed. I note that wayleaves exist via the existing haul road to adjoining agricultural lands and any measures to secure the site must have due regard to same.

10.13 Having regard to the matters discussed below and conditions recommended in this report, I am of the view that no significant environmental impacts have arisen as a consequence of the development to adversely impact on the well-being of people or populations in the vicinity of the site.

Flora and Fauna

10.14 As can be extrapolated from the aerial photographs for the area the actual extent of the quarry area was established by 1990 with subsequent works largely deepening the extraction area. Whilst visual evidence is not available regarding the site prior to quarrying activity it is not unreasonable to assume that it was comparable to adjoining lands, essentially comprising agricultural pasture land divided into fields, separated by hedgerows.

10.15 The site is not within or adjacent to any designated European Site or identified as being of specific ecological merit. The surveys undertaken identified flora and fauna which would be found elsewhere in the vicinity of the site with no badger setts or any potential roosting sites for bats identified. It would seem unlikely that the local population status of any individual or group of species that may have been present on the site and within the wider area would have been adversely affected by the development since 1990. The species observed on site would appear to have generally adapted to the level of disturbance arising from quarrying and no significant adverse impacts on these species were likely to arise. The rEIS does not propose any mitigation measures

10.16 However as a consequence of the deepening of the extraction area and the exposure of a natural spring running through the rock the formation of tufa spring on the eastern wall of the quarry has occurred. Tufa spring is a priority Annex 1 habitat. The water body which is considered to be of highest diversity is on top of the cliff face and is largely inaccessible. I do not consider that any remedial measures would be required at this juncture and that due consideration of the habitat would be required should permission be sought for the continuance of the operation.

10.17 In addition the cliff face created by the quarrying process has become home to a breeding pair of Peregrine Falcons first detected in 2007 when the site would have been active and which have been monitored accordingly since by the NPWS. It is stated in the rEIS that following consultation with same the NPWS is happy for no mitigation measures to be put in place as the site is not active.

10.18 Thus I consider that it is reasonable to conclude that the environmental controls which have been in place and the general operation of the quarry

were unlikely to have adversely impacted on habitats and species. I note that the PA recommends that the restoration plan to be prepared should be informed by a further ecological survey which I consider to be reasonable.

Soil

10.19 As noted above the extent of the quarry was largely established by 1990 with operations concentrated on the deepening of extraction thereafter. Top soil and sub-soils have been removed from the quarry area together with the underlying greywacke deposits. Overburden has been stored on site in bunds and is available for site restoration.

10.20 Extraction of greywacke by blasting and excavators is a permanent and irreversible impact. However, the quarry is a relative small site and this permanent loss is unlikely to be significant in terms of the overall reserve.

10.21 Contamination of soils was possible as a consequence of accidental spills. The rEIS appears to be largely silent on whether such situations arose and whether any measures are in place to prevent same. Nonetheless, I observed no evidence of pollution of soil/bedrock on site with no detail on file to suggest that same was such an issue. On the basis of the information available I consider that the operation is unlikely to have given rise to any significant direct or indirect impacts on soil or geology

Water

10.22 The quarry varies in ground elevation from 111mOD in the south to 83mOD in the north. The existing quarry floor is divided into two sections; one at floor level 89mOD and the other at floor level 80 mOD located to the north of the first section. The existing quarry extends 31 metres below the entrance ground level. The static groundwater level at the site lies between 104mOD and 83mOD. The average water table at the extraction area lies at approx. 84mOD. Dewatering has therefore been required to allow for quarrying operations. Possible impacts arising include changes to water table, alteration of groundwater flow paths, contamination of groundwater, alteration of flow volume within surface water body and pollution of surface water bodies.

10.23 The drainage system operational on site consists of the water in the quarry void being occasionally pumped, via a pipe to the settlement lagoon in the north-eastern corner of the site. The said lagoon is 16 x 20 metres with a depth of two metres. No details are provided as to the quantities that would

be pumped at any time. Settling out of suspended solids takes place in the lagoon and the water filters through to the stream in the north-eastern most corner of the site which then flows into the receiving Killary Water. It is stated that although the quarry was emptied periodically in the past by pumping from the floor up to the settlement pond, discharge never occurred into the stream as the water was infiltrating to ground from the base of the settlement pond. This said discharge point was previously licenced under ref. 3/99 but this has since expired. Whilst it is stated that it has not been replaced as the quarry has not operated since 2010 pumping of the quarry void was evident on day of inspection. As evidenced infiltration to ground from the base of the settlement pond would appear to be the case. This is supported by the fact that the channel from the settlement pond facilitating discharge to the watercourse is dry and very overgrown and would not appear to have been utilised for some period of time.

10.24 A pumping well was installed in 2009 and is used to supply the site with a required volume of c.6m^3/day which was used in the mobile wheel wash system and dust suppression in accordance with the registration requirements ref. no. QY/21. The water was pumped and stored in an adequately sized holding tank located in proximity to the wheel wash area. Waste water from the wheel wash was discharged via an oil interceptor to the stream to the west of the site, which again discharges to Killary Water.

10.25 The detail provided in the rEIS corresponds with the information provided in the hydrogeological assessment report that was submitted to the PA in July 2008 in accordance with the requirements of condition 18 attached to the section 261 quarry registration. This entailed the analysis of 5 no.borehole investigations. This was further supplemented by a field survey of the area and water level recording in 2013 and an examination of the maps and plans for the area.

10.26 Evidence from drilling of the monitoring wells across the site has shown the bedrock to be of low permeability with clay lining fractures restricting groundwater flow. Thus the contribution from groundwater inflow to the overall discharge from the site is stated to be small. Surface water ponds readily during storm events indicating a low infiltration rate. The GSI classifies the bedrock beneath the site as a Poor Aquifer and yield tests from monitoring wells on site confirmed this.

10.27 Discharge water quality was assessed following water sampling carried out in May 2009 with samples taken at the quarry sump, the settlement pond and the receiving water. In general the quarry water was of a better quality than

that of the receiving water save for Sulphate. It is considered that this is due to the groundwater contribution in the discharge water and the solution of sulphate from the exposed rock in the quarry void. The concentration was still low at 15 mg/l relative to the EPA's Interim Guideline Value for Groundwater of 200mg/l and the European Communities (Drinking Water No. 2) Regulations, 2007 which has a limit of 250 mg/l. Testing of the pumping water quality also concluded that the quarry water's chemical composition was relatively uniform throughout the quarry void.

10.28 It is noted that the mixture of Ammonium Fuel Oil (AN-FO) used for rock blasting in addition to fuel oil are sources of groundwater contamination if blasting is carried out below the water table. It is stated that best blasting practices were initiated to avoid such a scenario.

10.29 On the basis of the available information I submit that, at worst, the streams may have been affected by increased loading of sediments from the site or accidental spillages of hydrocarbons, in particular during peak periods of operation. However the water quality of the stream as recorded in 2009 was noted to be good and no third party or prescribed body has raised concerns regarding impact of the quarry on groundwater (volume or quality) or surface water quality of the watercourses in the vicinity. This appears to demonstrate that the previous activities subject of this application have not had any known significant adverse environmental impacts on water in this area. I note the observer's concerns regarding lack of access to the watercourse along the northern boundary for cleaning purposes as a consequence of the berm works carried out. I consider that this could be addressed by way of condition.

Air and Climate

10.30 As stated, the application site is situated in a lightly populated rural area. There are a number of dwellings in the vicinity predominately located along the county roads that serve the area. The nearest dwelling is c.20 metres to the south-west of the overall quarry site and c. 100 metres from the nearest quarry activity. There is a national school c.500 metres to the north.

10.31 The main emission to air arising from the quarry is dust. Dust monitoring has been carried out since 2002 at 3 points around the site which were augmented with a further 3 monitoring points from 2008 and all results as set out in Table 5.3 have been within the recommended limit value of 350mg/m^2/day for dust deposition.

10.32 The main processing and material transfer operations associated with the extraction activities since 1990 most likely occurred below the existing ground level which would have contributed towards containing dust emissions within the site boundaries. Dust emissions from the quarry operations were also minimised by implementing environmental management practices at the site via a site specific Environmental Management Plan (EMP). These included use of water sprays on materials stockpiles and haul roads during dry weather and a wheel wash. Screening bunds around the site perimeter were also used. A copy of the said plan does not appear to be in the documentation before the Board.

10.33 Having regard to the scale of the development, the intermittent nature of the activity on the site, the dust monitoring results, the distance of the nearby residential properties from the site and intervening landscape features, I do not consider that the development has given rise to significant dust deposition.

10.34 In terms of noise the quarry operated in a rural area with quiet background noise levels. In the vicinity of the quarry noise arises from the local road passing the site. From the quarry, noise emissions would have arisen from plant and equipment on site, blasting, processing and vehicles entering and leaving the site.

10.35 There are a number of screening banks along portions of the site boundaries which appear to offer some noise attenuation which is further assisted by the fact that the working quarry floor is materially below the surrounding ground levels which would also assist in ameliorating noise.

10.36 It would appear that no noise monitoring was undertaken in the past. As a consequence baseline noise monitoring was undertaken in August 2013. The results as set out in Table 8.1 of the rEIS are largely reflective of the site's rural location with the biggest contributor being passing traffic on the surrounding network. There were no activities occurring on the quarry site at the time of the survey. On foot of this the rEIS effectively sets out a study of the anticipated noise levels at the nearest noise sensitive locations that would have arisen when the quarry was operational. The worst case scenario entailed the assumption that all mobile machinery would be working at the quarry boundary point closest to the various noise sensitive receptors at the same time as all the stationary plant items operating in the centre of the quarry floor. In addition due consideration was also given to traffic noise impacts. As per Table 8.8 all the predicted noise levels were below the 55dB(A) standard applied for such type development save at location N2 to

the south-west of the quarry entrance. This was as a result of the increased baseline result recorded at that location (59dBA) due to a mechanical digger operating nearby and was not associated with the operation of the quarry. On the basis of the explanation given and that the worst case scenario was calculated I would accept the conclusions that the operation of the quarry did not have an adverse impact on the nearest noise sensitive receptors.

10.37 Blasting has occurred at the site at very low frequencies, typically at the rate of up to two blasts per annum. There is an ongoing monitoring programme in place at the site and all blasts are monitored. The standard parameters set out in condition 17 of the section 216 registration are referenced as being required to be met. Only the result of the last blast at the quarry in February 2011 are given and are set out in Table 8.2 of the rEIS. The results are materially below the peak velocity maximum of 12mm/second and the 125dB (Lin) air overpressure maximum value. It is stated that each blast was recorded in accordance with the requirements set out in the Environmental Management Plan (EMP).

10.38 In terms of climate the quarry development has resulted in the emission of greenhouse gases to the atmosphere, primarily from the operation of plant and vehicles. However, these would not be significant locally.

Landscape

10.39 The quarry lies within the '*North Navan Lowlands'* as identified in the current Meath County Development Plan with a landscape character which has a rating of very high value with high sensitivity. It is not affected by any view or prospect. Topographically the area is an undulating river valley landscape with rising lands to the south and east which afford opportunities for open distant views. Whilst the site is accessed directly from Local Road L1603 the main works area is set back approx. 60 metres from the entrance and accessed via a relative long haul road which passes west along the southern boundary before moving north to the location of the site offices (c.400 metres).

10.40 As noted in the aerial photographs for the area the extent of the quarry operation was in place prior to 1990 and the lateral extent of the quarry has changed little. The substantive changes since that date have been in the depth of extraction.

10.41 The quarry void has substantially altered the landform of the local area. It cuts into the base of the rising topography resulting in higher faces on the

south and east boundaries and has resulted in steep faces. However, views of the void and buildings on the site are limited as a consequence of topography, vegetation and embankments and are largely restricted to views from the north. Some attempt has been made to place an earth berm along the northern site boundary but this has not been satisfactorily completed and has not been planted. Its potential effectiveness has therefore not been fully realised. The rEIS also notes that there are a number of constructed berms at various points along the boundary, some of which would benefit from reshaping, topsoiling and planting.

10.42 As per the rEIS it is considered that without implementation of a fully considered restoration scheme, permanent negative landscape impacts would remain at this location. Such a restoration scheme is outstanding with the agent for the applicant stating that whilst currently not operational it is intended to re-activate activities on the site at some stage in the future and that site restoration requirements should be on a phased basis. I note that the agent for the applicant also requests that should such a condition be applied that recourse to the Board be provided for in the event that agreement with the PA cannot be secured.

10.43 In conclusion I would consider that landscape impacts as a result of the past operation of the quarry are locally significant but the visual impacts are not. Without active restoration and intervention landscape impacts have remained relatively undiminished at the site since the early 1990's. Although the impacts are not major it is considered that the resultant impacts could have been reduced had operational mitigation been included, namely advanced boundary earthworks and screen planting (particularly along the northern boundary), phased extraction and progressive restoration of extracted areas and appropriate boundary easements and restorative profiling of quarry faces. I recommend that such remedial measures be secured by way of condition.

Material Assets

10.44 Key local resources which are intrinsic to the application site include agricultural land on which quarrying has taken place, the stone resource which has being worked, and the road infrastructure in the vicinity of the site. Given the relatively small size of the application site direct impacts on agriculture and geology are considered to be minor.

10.45 There is no information on actual traffic flows generated by the quarry. The rEIS presents a traffic study based on information relating to the highest levels of annual extraction of material, namely between 1990-1995. HGV

movements in the order of 100 per day or 8-9 per hour are assumed to have occurred. Additional trips generated by staff and deliveries in the region of 5 trips into and out of the site in the AM peak hour.were also accounted for.

10.46 The local road serving the site is of a reasonable scale and condition. Sightlines at the entrance are generally good to the south but somewhat curtailed to the north due to the bend in the road. As per section 11.5.1. the haul route was restricted to turning left out of and right into the quarry site. During the assessment of the planning application for the asphalt plant on the site in 2004 under ref. SA20207 (PL17.204854) consideration was given to the existing site entrance and it was agreed with the Planning Authority that the current access would be retained as it proved to be the most suitable access location. Advance signage was required by way of condition attached to the said permission (not constructed) and further by way of condition attached to the section 261 registration. No such signage is in place.

10.47 It is my opinion that the estimation of the 1990-1995 traffic impacts resulting from the quarry development at this location appears to be a robust assessment of the likely significant traffic impacts that arose from the overall operations at a period of peak activity and thus is reasonable to accept for assessment purposes. The small volumes of traffic for the overall quarry operation could not, in my opinion, be regarded as having caused significant environmental impact for the wider community or to have adversely affected the carrying capacity of the local or national road network involved. There is no record of the overall development having resulted in any significant traffic hazard. With due regard to these observations it is reasonable to conclude that the traffic and transportation operations that arose from the development did not cause any known significant traffic and transportation impacts for other road users.

Cultural Heritage

10.48 No recorded monuments lie within the site or in close proximity to it. In addition there are no protected structures in the vicinity.

10.49 As noted above the extent of the quarry was established by 1990 with works subsequent to that date largely involved in the deepening of the extraction areas. While it was potentially possible for undocumented sub-surface archaeological features and material to have existed within the substitute consent area, there is no record of any archaeological finds and no known reason to consider why the development the subject of the substitute consent application would have had any significant archaeological impact. No residual

impacts arise and no mitigation is required to be put in place. I would therefore accept the view that the quarry operation has not had an impact on cultural heritage

Inter-relationship between the Foregoing

10.50 The main interactive impacts arising from the operation of the quarry are:

- Human beings, landscape, noise, dust, material assets and traffic related impacts.
- Flora & Fauna, Soils & geology and water

10.51 The operation of the quarry has taken place in a rural area. However, a number of residential properties lie within 500m of the site. Individually, the rEIS has shown that the cumulative impacts generated by the application site and adjoining quarry (e.g. visual impacts, noise, dust and traffic), are within acceptable limits and are unlikely of themselves to have caused significant environmental effects. Whilst I would agree with these conclusions, no doubt the presence of the quarry with its associated noise, dust and traffic effects in particular, would have impacted on the local area. I consider that this would have been a cumulative moderate local impact for the duration of the quarrying activity.

10.52 The inter-relationship between flora and fauna, soils and geology and water has been discussed above under the 'Flora and Fauna' in which it is noted that the extraction has resulted in an environment that has allowed for the development of the tufa spring priority habitat, and has also provided an environment conducive for nesting peregrine falcons.

10.53 I know of no notable development from the period relevant to this application with which cumulative impacts may or could have resulted that would have culminated in any significant environmental effects arising.

Financial Contributions & Costs

10.54 I note that the planning authority does not recommend the attachment of a condition relating to financial contributions as the relevant section 48 scheme did not apply to quarry operations prior to 2010 and that it would not be possible to establish the extent of any works undertaken after that date. This is noted and accepted. As extrapolated from the information on file there has been no activity on site since early 2011. However I consider it appropriate that the application of a bond for the restoration of the site is entirely appropriate

10.55 I note that the Planning Authority has included a claim to recoup its costs for commenting on this application for substitute consent.

Conditions

10.56 In the course of the application the Health Service recommended a number of conditions in respect of the application. The application for substitute consent refers to the past development of the quarry, only, and a number of these conditions would, therefore, not be relevant.

11.0 CONCLUSIONS AND RECOMMENDATION

Having regard to the nature and scale of quarrying which has taken place on the application site in the context of the information provided in the rEIS, and subject to the conditions set out below, I am satisfied that the development has not given rise to significant environmental effects and is otherwise in accordance with the proper planning and sustainable development of the area. Therefore I recommend that substitute consent is granted for the development for the following reasons and considerations subject to the conditions set out below.

REASONS AND CONSIDERATIONS

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

- the provisions of the Planning and Development Acts, 2000 to 2014, and in particular Part XA,
- the 'Quarry and Ancillary Activities, Guidelines for Planning Authorities', April 2004,
- the provisions of the current Meath County Development Plan,
- the remedial Environmental Impact Statement submitted with the application for substitute consent,
- the report and the opinion of the planning authority under section 177I,
- the report of the Board's inspector, including in relation to potential significant effects on the environment,
- the submissions on file,
- the site's planning history,
- the pattern of development in the area, and
- the nature and scale of the development the subject of this application for substitute consent.

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

CONDITIONS

1. The grant of substitute consent shall be in accordance with the plans and particulars submitted with the application to An Bord Pleanala with the application on the 14th day of October, 2013. This grant of substitute consent relates only to works undertaken to date and does not authorise any future development on the subject site.

Reason: In the interest of clarity.

2. The developer shall arrange for the immediate removal of potentially polluting material from the site, including any fuels, chemicals and disused machinery and buildings within one month of the date of this order.

Reason: To reduce the visual impacts on the area and to reduce the potential for groundwater or surface water pollution.

3. A new lockable gate shall be erected at the site entrance within one month of the date of this order.

Reason: In the interest of orderly development.

4. A comprehensive plan for the reshaping, topsoiling and planting of the berms constructed on the perimeter of the site shall be submitted for the written agreement of the planning authority within two months of the date of this order and the works shall be carried out within six months of the date of this order.

Reason: In the interest of visual amenity

5. (a) A comprehensive plan for the restoration of the entire quarry, shall be submitted to, and agreed in writing with, the planning authority within three months of the date of this order. The plan shall include timelines and any proposals for phased Implementation, an aftercare programme

for a period of not less than five years and security provisions within and bounding the quarry site.

(b) An ecological management plan for the site associated with its restoration with regard, in particular, to habitat within the confines of the overall site including the tufa spring on the eastern quarry face and peregrine falcons, shall be prepared, submitted and agreed with the planning authority as part of the restoration scheme.

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

6. Within one month of 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 restoration 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.

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Pauline Fitzpatrick
Inspectorate

September, 2014