



An
Bord
Pleanála

Inspector's Report SU05E.SU0128.

Development	Substitute Consent Application for a Quarry.
Location	Ballymagroarty and Glasbolie, Ballintra, County Donegal.
Planning Authority	Donegal County Council.
Planning Authority Reg. Ref.	---
Applicant	Patrick McCaffrey and Sons.
Type of Application	Application for Substitute Consent.
Observers	James Gorman Pierce O' Gorman Dorasami Raman Christine Dinsmore Stewart Kirkpatrick Hugh Gorman Mary Cosgrove Geological Survey of Ireland Irish Water Jason Cohen

Date of Site Inspection

8th November, 2016.

Inspector

Paul Caprani.

1.0 INTRODUCTION

- 1.1. The previous planning report prepared by myself, Paul Caprani Senior Planning Inspector, dated 22nd May, 2015 (Reg. Ref. SU 0128) details the background to the operations on site, describing the site location and description together with the existing operations on site and the report also summarised the various submissions and responses contained on file. Finally report sets out the planning policy context prior to undertaking a preliminary assessment of the substitute consent application. My previous report of May, 2015 should be read in conjunction with the supplementary report now prepared for the Board.
- 1.2. My preliminary assessment concluded that the Board should issue a Direction specifically stating what geographical area of the quarry should be included in any application for substitute consent. The requirement for the revised Direction from the Board was predicated on the various disputes and claims contained on file as well as a level of ambiguity in the various decisions made regarding the geographical area of the quarry which should form the basis of the substitute consent application.
- 1.3. In its direction the Board requested the applicant to prepare and submit a revised remedial EIS and revised remedial NIS in relation to the overall quarry development of a subject site (north quarry, south quarry and the quarried lands to the east of the public road). This Direction was dated 19th June, 2015.
- 1.4. In a further letter on behalf of the applicant dated 21st July, 2015 the rationale behind the Board direction was questioned on the basis that it was previously decided that only the area to the north of the main quarry would be included for the purposes of the substitute consent application. It is suggested that the Board does not have jurisdiction to request an enlarged and substantially different area as part of the further information. Without prejudice to the above the applicant also requested an extension of time within which to submit a revised application.
- 1.5. On 11th August, 2015 the applicant was advised of recent legislation signed into law whereby it was now open to the applicant under the provisions of section 37L(7) to inform the Board whether or not it was the applicant's intention to submit a concurrent application for an extension to the quarry under the provisions of section 37L.

- 1.6. A further Direction from the Board and dated 16th September, 2015 determined that the applicant should be afforded a three-month extension of time to submit the information requested (namely the revised remedial EIS and revised remedial NIS) under the original Section 132 notice.
- 1.7. A letter dated 2nd September, 2015 on behalf of the applicant states that the applicant hereby gives notice under the provisions of section 37(L)(b) that they intend to submit a simultaneous application for further development of lands at the subject site. (See quarry file QD05 QD0018 which should be assessed in conjunction with the current application for substitute consent).

2.0 Submission of Revised Remedial Environmental Impact Statement and Revised Remedial Natura Impact Statement

On 15th December, 2015 the applicant submitted a revised rEIS and revised rNIS which provides an assessment of the overall quarry development which includes an assessment of the in combination effects of the north quarry and the main quarry to the south as well as the quarry land to the east of the public road as requested by the Board.

3.0 Further Submissions by Observers in response to revised rEIS and rNIS submitted.

3.1. Submission from Mary Cosgrove

- 3.1.1. It reiterates that the quality of lives of the residents living in the area around the quarry have been totally destroyed with their properties completely devalued and the land being destroyed as a result of dust, smoke and noise. The proposal has adversely impacted on the applicant's amenity and health and has visually destroyed a scenic area. It is suggested that the Departments of Justice, Environment and Social Protection should be alerted as to this information. It is inconceivable that the

applicant would be granted planning permission to continue this process for another 35 years.

3.2. Submission from the Geological Survey of Ireland

- 3.2.1. A report from the GSI makes reference to Chapter 5.3.8 of the rEIS in respect of geological heritage. It is suggested that the list presented in Table 5.4 is incomplete in that a karst feature, which provides an excellent example of a shallow developed roof cave, located approximately 3.7 kilometres from the site and this feature has not been included in the documentation submitted.

3.3. Submission from Irish Water

- 3.3.1. A letter from Irish Water has reviewed the information on file and notes that the quarry activities have ceased and reinstatement works are proposed. It is noted that water supply sources for the Ballymagroarty Water Treatment Plant and the Cashelard Water Treatment Plant are located in proximity to the quarry. There is also a public watermain located approximately 200 metres to the west of the quarry. Any reinstatement works should take account of Irish Water's assets and ensure protection of same.

3.4. Submission from Hugh Gorman

- 3.4.1. It states that the existing quarry has a huge and continuing negative impact on the observer's life. The observer's property is in a direct line of the site. The dwelling is frequently in the direct line of dust, noise and smells emanating from the south quarry. As a result the observer states that he cannot reside in the house. The south quarry is at the heart of the operations and this is where the majority of the pollutants arise.

3.5. Submission from Mr. Jason Cohen

- 3.5.1. Again concerns are expressed in relation to levels of dust, noise and vibration associated with the existing quarry and any increase in the quarry will accentuate this dramatically. It is acknowledged that the quarry was in operation when the

observer bought his house but it was not envisaged that the quarry would be expanding. The existing quarry has resulted in houses being unsellable in the area.

3.6. Submission from Donegal County Council

3.6.1. It states that the contents of the revised rEIS is noted and in particular the additional remedial measures proposed in respect of:

- Hydrology and hydrogeology.
- Landscape and Restoration.
- Archaeology and Cultural Heritage.

3.6.2. It is stated with the continued implementation of existing mitigation measures it is noted that the Planning Authority has no objection in principle to An Bord Pleanála approving the current application for substitute consent subject to conditions and the implementation of existing mitigation measures as set out in the revised remedial Environmental Impact Statement.

3.7. Submission from Pierce O’Gorman

3.7.1. The submission argues that the proposal does not accord with the Board Direction. It is argued that a new application was not submitted, as required under the Board’s Direction dated 29th June, 2015. An Bord Pleanála should therefor invalidate the application. The documentation submitted does not give a fair realistic assessment of the impact of the quarry on surrounding townlands.

3.7.2. As part of the restoration plan it was proposed to incorporate benches in the northern quarry after excavation ceased. It is clear however according to the observer from the photographs attached, that no such benches were incorporated and the quarry comprises of a sheer cliff face. This has resulted in extremely dangerous excavation. It is also contended that the applicants dumped waste from the southern quarry in the northern quarry after it was abandoned.

3.7.3. Reference is made to large amounts of unauthorised development in the southern part of the quarry including a lorry park, the erection of security fencing and the conversion of a retaining wall into a shed. The applicant has also incorporated

unauthorised artificial lighting at night. Significant problems arise from dust deposition in and around the houses in the vicinity of the site. There appears to be anomalies in the dust deposition survey carried out and it is suggested that the data presented is just not credible. Concern is also expressed regarding the visual impact of the quarry.

3.7.4. The application fails to address the impact of the levels of traffic to and from the quarry from the N15. Traffic is a major source of noise and dust pollution. The movement of cattle across the road to other fields in and around the quarry cannot be carried out during normal work hours as a result of quarry traffic.

3.7.5. The revised remedial EIS is generic in nature and does not specifically deal with the bespoke issues associated with the current quarry operations.

3.8. Submission from Stuart Kirkpatrick

3.8.1. It is argued that the applicant has had to endure “this nightmare on my doorstep for the past 40 years” and while the applicants have had ample opportunities to abide by the planning laws over the years they continue to work on new developments without getting planning permission. The non-technical summary submitted with the EIS is ‘a bland uncritical generic report’.

3.8.2. The berms surrounding the north quarry has obliterated scenic views along the roadway and is inadequate in terms of safety and security.

3.8.3. Concern is expressed in relation to quarry traffic. The revised application clearly displays a complete lack of appreciation at the impact of blasting. An Bord Pleanála are requested to take a firm stand and stand up for the residents in the vicinity by refusing this application.

3.9. Further Submission from Pierce O’Gorman

3.9.1. This submission states that it is inappropriate that any proper Planning Authority would grant planning permission for a development that has resulted in the creation of a massive permanent hazardous environmentally damaging quarry such as the north quarry. A grant of permission in this instance would be perverse and therefore substitute consent must be refused.

3.9.2. A further submission from James Gorman of Ballymagroarty states that the quarry owners have recently commenced pumping water out of the north quarry at a rate greater than 2,500 cubic metres per day and this matter has not been addressed in the revised EIS. The applicants are also continuing to deepen the floor of the south quarry through blasting and excavation. Likewise, this matter has also not been addressed in the revised EIS.

4.0 FURTHER ASSESSMENT OF THE APPLICATION

4.1.1. I have read the entire contents of the file including the revised remedial EIS and NIS submitted with the application. I have also had particular regard to the issues raised in the various observations on file and have visited the site in question.

4.1.2. I am also cognisant of the Board Direction dated 19th June, 2015 which required a substitute consent application to be submitted for the entire site. This appears to be predicated on the premise that both the north and south quarries are intrinsically linked. The assessment set out below sets out an evaluation of significant effects on the environment that have occurred on the site post 1990. While it appears from the Ordnance Survey maps that the boundary of the quarry has not significantly altered since 1995, there can be little doubt based on the relief and contouring of the aerial photographs of 1995 to 2005 that the quarry has been subject to significant excavation over this period.

I propose to assess the revised substitute consent application under the following headings:

- Principle of Development.
- Surrounding Settlement.
- Flora and Fauna.
- Hydrology and Hydrogeology.
- Dust and Air Pollution.
- Traffic.

- Visual Impact.

4.1.3. The final two sections of this assessment will evaluate the revised remedial Environmental Impact Statement submitted and a separate section will carry out an Appropriate Assessment of the works undertaken on site.

4.2. **Principle of Development**

- 4.2.1. I note from the information contained on file and in particular the letter dated 11th February, 2016 from Donegal County Council, that the Planning Authority has no objection in principle to An Bord Pleanála approving the current application for substitute consent subject to conditions set out in the original report from An Bord Pleanála under the provisions of Section 177(l) (received by the Board on 24th February, 2015).
- 4.2.2. The statements contained in the current county development plan do not include any policies or objectives which would preclude in land use terms, the location of a quarry in this area of the county of Donegal. The development plan recognises the importance of the extractive industry and notes that aggregates are a significant and necessary natural resource for the continued economic development of the county. Therefore, there is a need to facilitate the sustainable extraction of appropriate materials subject to minimising any adverse impacts on the natural environment.
- 4.2.3. While the site is not located in an area designated as being of especially high scenic amenity nor is it located adjacent to any designated views or prospects. There are nevertheless a number of policies in the development plan which seek to ensure that any quarry development seeks to preserve the character of the landscape and protect the environment generally including the prevention, limitation, elimination, abatement or reduction of environmental pollution and to protect waters, groundwaters, the sea shore and the atmosphere.
- 4.2.4. It is reasonable to conclude therefore, that the principle of quarry development on the subject location would not contravene any specific policies and provisions contained in the development plan. Notwithstanding this point, the Board must satisfy itself that the quarry in question meets the qualitative safeguards set out in

the more detailed policies and objectives contained in the development plan and this issue is explored and evaluated in more detail under the various separate headings set out below.

4.3. Surrounding Settlement

- 4.3.1. The EIS states that there are four occupied dwellings within 250 metres of the subject site and 14 dwellings within 500 metres of the subject site. The revised remedial EIS does not however include a map indicating the location of the dwellings in question. Having visited the site, I noted that a number of dwellings in the vicinity of the site are currently unoccupied but may have been occupied in the more recent past. One of the dwellings is located adjacent to the access road which separates the northern and southern portions of the quarry. This dwelling is located less than 50 metres from the boundary of the northern quarry and likewise less than 50 metres from the boundary of the southern quarry. This dwelling was occupied at the time of my site inspection. There is no information on file which indicates that this house is under the ownership of the quarry operators. Likewise there is no information contained on file which indicates that the occupant of this house is one observers objecting to the development.
- 4.3.2. It is inconceivable in my view that, where a planning application were to be lodged for a quarry or an extension of a quarry that quarrying works would be permitted in such close proximity to a third party dwelling, due to the potential adverse effect on residential amenity. It is also inferred from the third party observations contained on file that other dwellings in the immediate vicinity were vacated primarily on the grounds that the quarry in question was having an unacceptable impact on the amenity of residents in the vicinity.
- 4.3.3. A critical issue in determining whether or not the quarry has had significant environmental impacts on the amenity of surrounding residents relates to the separation distance between the active quarry and the residential dwelling in question. In this instance active extraction including blasting, excavation and processing of material has occurred within 70 metres of a third party dwelling. In the case of the north quarry, rock has been excavated to a depth in excess of 100 metres. The eastern face of this quarry is c.70 metres from the western gable of the third party dwelling. In the case of the concrete batching plant, buildings associated

with this processing activity are located less than 50 metres from the third party dwelling. It is very doubtful in my view, that were a planning application lodged in respect of these activities, that a Planning Authority would permit the juxtaposition of such activity with third party dwellings.

4.3.4. It is also apparent from the observations contained on file that a number of observers have wished to relocate and retire to property in the vicinity of the subject site but have been discouraged from doing so due to the nature of the activities being undertaken at the quarry. In this regard I would refer the Board to the original observation submitted by Mrs. Mary Cosgrove and Mr. Hugh Gorman.

4.3.5. In conclusion therefore I would consider the proximity and encroachment of the quarrying activities to be a significant and material consideration in the Board's determination of the substitute consent application. The Board should be mindful of the fact that the quarrying activity in this instance has occurred adjacent to, and particularly in the case of the north quarry, contiguous to the quarry boundaries thereby bringing active quarrying to the doorstep of third party dwellings surrounding the site. This is a significant and material consideration in assessing both the historical and ongoing environmental impact arising from the development.

4.4. **Flora and Fauna**

4.4.1. As in the case of most applications for substitute consent, it is problematic to try and retrospectively assess the impact of quarrying activity on flora and fauna which have long since been removed from the site. Having regard to the historical aerial photographs, and the fact that it appears that in 1995 much of the existing vegetation and overburden had been stripped off the site, it is likely that the impact of quarrying activity subsequent to February 1990, has been minimal on the flora and fauna of the site. I do note however that the revised or remedial EIS states that no specific survey were carried out for certain species on the site such as bats. The survey in relation to flora was also limited and was restricted to a walkover of the site carried out in November. It is also somewhat confusing in that throughout the revised remedial environmental impact statement reference is made to the application site as being the north quarry only when in fact the revised remedial environmental impact statement should have referred to the entire quarry for the purposes of the assessment.

- 4.4.2. It is also somewhat surprising that the revised remedial environmental impact statement, in attempting to ascertain the significant effects on the environment that have occurred on site as part of the substitute consent application, has made no reference whatsoever to the original application refused by the Board under Reg. Ref. PL05.131103. While this application was refused by the Board for two reasons including a reason relating to the inadequacy of the EIS, there nevertheless includes some baseline information dating from 2000 and 2001 which should have been used in order to retrospectively assess the environmental impact arising from works carried out subsequent to this date.
- 4.4.3. For example, the EIS prepared in respect of the previous application (PL05.130131) notes that fields in the vicinity of the site are well preserved examples of unimproved pasture containing wet hollows and while “*nationally such habitats are a significant, unimproved limestone grassland is common in the area the fields proposed for quarrying are not as floristically diverse as some others in the immediate area*”. The previous inspector’s report also notes the paucity of information in relation to flora and fauna and the fact that there is no reference to the receiving environment and the type of habitats likely to be present. The lack of systematic survey in respect of flora and fauna in the current revised remedial EIS is also noted.
- 4.4.4. Therefore, in relation to flora and fauna I consider that it is likely that the environmental impact arising from works carried out post-1990 on flora and fauna is likely to be not significant having regard to the aerial photographs which suggest that a significant area of the site was cleared subsequent to 1990. However, it is considered that the surveys carried out in respect of the current revised remedial EIS were modest in content. Furthermore, no reference is made in the current EIS to the previous baseline studies in respect of flora and fauna in respect of the previous application lodged with the Planning Authority and appealed to the Board in 2003.

4.5. Hydrology and Hydrogeology

- 4.5.1. Observations submitted to the Board in respect of the current application for substitute consent expressed a number of concerns in respect of hydrology and hydrogeology, particularly in respect of groundwater discharges off site from the northern quarry. The information contained on file indicate that the northern quarry was excavated to a depth of 110 metres c.52 metres of which was below the water table. This necessitated largescale pumping of groundwater to an adjacent stream/ditch to the north of the quarry which discharges into the Ballymagroarty Stream which in turn flows into Durnesh Lough to the north-west of the subject site.
- 4.5.2. It is arguable whether or not a Planning Authority would have permitted such largescale excavation below the water table in the absence of detailed hydrogeological investigations. Notwithstanding this point, water discharge from the northern quarry was the subject of a discharge licence (under Reg. Ref. WW05F.WW0330). The impact of groundwater discharges off site therefore was the subject of detailed investigation and evaluation. The Board considered such a discharge to be acceptable subject to compliance with various quality standards (for pH, suspended solids, total ammonia, total phosphorous and aluminium). Furthermore, the Board restricted the volumetric flow per day to 700 cubic metres.
- 4.5.3. It is clear therefore that both the Planning Authority and the Board have evaluated historic discharges from the site when ground water pumping was being undertaken in the northern quarry and the Board deemed this discharge to be acceptable subject to appropriate conditions. The remedial EIS in my view has demonstrated from monitoring results upstream and downstream that the quarry has largely been in compliance with the discharge licence and parameters set out in the licence granted by the Board (WW05F.WW0330). Monitoring has also indicated that groundwater quality at the site complies with groundwater regulation threshold value ranges and groundwater quality at monitoring locations have indicated that the groundwater complies with legislative requirements.
- 4.5.4. In terms of groundwater drawdown and its consequential impact on the cone of depression, the revised remedial EIS indicates that local experience of the groundwater regime in the area suggests that any quarrying dewatering would have caused a steep cone of depression with a limited radius. There is no evidence to

suggest on the information contained on file or the observations submitted that the groundwater pumping regime has had any adverse impact on local wells or water supply schemes in the vicinity. Nevertheless, the site is underlain by a Regionally Important Aquifer which is karstic in nature. Such aquifers are generally characterised by faster groundwater flows which higher densities of cracks and fissures. It might therefore be expected that the cone of depression might be more extensive than that suggested in the studies undertaken in the EIS.

- 4.5.5. With regard to volumetric discharges from the northern quarry, I would refer the Board to Appendix B of Appendix 2 of the revised remedial Environmental Impact Statement which contains details of the volumetric discharges from the northern quarry from 2011 to 2013. The figures indicated that there have been numerous breaches of the 700 m³/d limit set out in the discharge licence. Notwithstanding these breaches, there is no evidence to suggest that this has resulted in an adverse environmental impact on the receiving waters of Ballymagroarty Stream or Durnesh Lough. In support of this conclusion I refer the Board to the submission from the Department of Arts, Heritage and the Gaeltacht dated 29th January, 2015 contained on file which notes that *“the hydrological situation appears to be stable and is not considered a threat to the integrity of the adjacent watercourses or designated sites further downstream”*.
- 4.5.6. Similar conclusions can be arrived at in my opinion in respect of any water discharge from the southern portion of the quarry. Under Reg. Ref. PL05WW.0303 Donegal County Council granted a licence, a decision which was upheld by the Board, in the southern part of the quarry to discharge effluent arising from dust suppression systems and surface water run-off. Again the surface water discharges to an open drain which ultimately discharges into Durnesh Lake. The water management system and discharges arising from the site was the subject of detailed scrutiny and evaluation under this application and the Board deemed the discharge to be acceptable and in accordance with the provisions of the Water Pollution Act as amended.
- 4.5.7. In conclusion therefore, and notwithstanding breaches which may have occurred in respect of the volumetric discharge off-site from the northern quarry, I consider that any historic and current discharges from the site have been the subject of appropriate scrutiny and evaluation and I consider it reasonable to conclude that any

such discharge have not had an adverse impact on the receiving environment. Likewise, notwithstanding the karstic nature of the underlying aquifer, it appears that any cone of depression that arose as a result of pumping groundwater off site, did not adversely affect wells or water supply in the vicinity.

4.6. Dust and Air Pollution

- 4.6.1. Dust deposition appears to be a significant issue in my opinion particularly having visited the site and noted the size and scale of the activities undertaken on site. The quarry processes between 150,000 and 250,000 tonnes of rock per year. In addition to blasting and excavating, aggregate is crushed and screened on site and aggregate is also processed in the concrete batching plant. The potential or dust generation is therefore significant and largescale dust deposition was noted within the site and on the access roads in the vicinity of the site during my site inspection. I refer the Board to the photograph attached which shows silt laden run-off from the main access road serving the quarry onto the N15. I also refer the Board to the inspector's report in respect of the previous application on site (PL05.131103). It notes that dust was identified by Donegal County Council as being a major issue in respect of the operations. I further note the inspector's report on page 28 which states "*on the date of inspection, the quarry was not in full operation due to summer holidays. Weather conditions were dry with no wind. There was dust evident along the local approach roads to the site and on the surrounding vegetation*". The Board should also be cognisant of Figure 6 in the submission from Pierce O'Gorman received on 15th February, 2016. It indicates largescale dust deposition on a vehicle and this attributed to the quarry in question.
- 4.6.2. The revised remedial EIS submitted indicates in Table 8.3 dust deposition monitoring results on various dates from 2007 to 2015. In total 375 readings are presented in Table 8.3 at five separate monitoring locations at the quarry. On 10 occasions according to the data presented, the TA Luft Guideline of 350 g/m²/day was exceeded. This represents an exceedance of approximately 3%. It should be noted however that in some cases the exceedance was 3 to 4 times the guidance limit.

4.6.3. A key consideration in relation to the impact of dust, is the location of the dust monitoring points for the purposes of the assessment. Three of the five dust monitoring locations are located along the south-western boundary of the site. As the prevailing wind as indicated in the Wind Rose contained in the revised remedial EIS indicates, the predominant wind direction is from the south-west. These dust monitoring points are therefore located downwind of the quarry and therefore in my opinion would not record the highest dust deposition rates. It would be more appropriate in my view that the dust deposition monitoring points would be located along the north-eastern boundary of the southern quarry where aggregate is stockpiled and processing of materials are taking place. Having regard to the prevailing wind direction it is most likely that the lands to the immediate north-east of the southern part of the quarry are most likely to experience highest levels of dust deposition. The results recorded therefore are unlikely to represent a worst case scenario in terms of dust deposition.

4.6.4. I note that no detailed odour assessment was undertaken in respect of the asphalt plant which is currently operating on site in the revised remedial EIS. Malodour was a material issue raised in the submissions to the Board. It appears that the plant was constructed without the benefit of planning permission. However, an air pollution licence was sought for the operation of the plant and Donegal County Council issued notification to grant the licence and this was subject to a third party appeal. Notwithstanding the concerns raised in the third party objection, the Board upheld the decision of the Planning Authority and granted the licence in October, 2005. The impact of the proposed asphalt plant has therefore been assessed and deemed to be acceptable.

4.7. Noise and Vibration

4.7.1. Section 9 of the revised remedial EIS deals with the issue of noise and vibration. Noise was raised as a significant issue in respect of the previous application and determination by the Board under PL05.131103. Details of three separate noise surveys undertaken in the vicinity of the site in May, 2008 and two in October, 2014 are set out in the revised remedial EIS. There can be little doubt that the proximity of the N15 National Primary Route contributes significantly to noise levels particularly for dwellinghouses located to the south-east of the quarry. However, I would

anticipate that quarry activities are likely to contribute materially to noise levels at noise sensitive receptors to the immediate north of the southern quarry and dwellinghouses to the west of the northern quarry having regard to the more rural location away from arterial traffic routes. The surveys indicate that noise levels at these two locations (N3 and N4) in relation to the survey undertaken in 2008 have L_{aeq} levels of between 55 and 56 dB(A) and 39 and 41 dB(A) respectively. In the case of the more recent noise surveys the monitoring results indicated noise levels of between 47.9 and 54.7 in the case of monitoring location N1 (to the immediate north of the southern quarry) and 48.9 in the case of N2. N4 which is located at the south-western corner of the main quarry area recorded noise levels of between 53.4 and 54.4 dB(A) L_{aeq} on the more recent surveys undertaken in October, 2014.

- 4.7.2. I carried out spot noise surveys during my site inspection in November 2016. I stress that the survey was not a comprehensive or scientific survey such as the surveys carried out in the rEIS. The spot survey undertaken by myself is not aimed at replacing or invalidating the surveys undertaken in the rEIS. The Board should place greater emphasis on the surveys contained in the r EIS as these surveys were carried out in accordance with appropriate methodologies. The spot survey undertaken during my site inspection recorded noise levels higher than those contained in the r EIS and give an indication of the background noise levels in the vicinity of the site during the quarry operations on the day of my site inspection.
- 4.7.3. At the front of the dwelling house to the immediate east of the North Quarry and adjacent to road which traverses the north and south quarries, I recorded noise levels, of between 60 and 90 dB(A). (The L_{eAq} is more likely to be at the lower end of this range). There can be no doubt that quarrying activity was the dominant source of noise during the c 1 min long survey and not traffic on the N15, as indicated in the rEIS. My site inspection would suggest that, at the very least, further detailed noise surveys and investigations would be required before a conclusion could be reached that noise levels emanating from the quarry would be acceptable in terms of impacting on amenity.
- 4.7.4. It is extremely likely that noise levels emanating from the operations would have been greater during the period under which excavation was occurring at the north quarry (according to the information contained on file quarry operations ceased in the north quarry in 2013). I note however that this is not reflected in the survey

undertaken in 2008. Ambient noise levels in 2008 were actually recorded as being lower than those associated with the latter surveys despite the fact that quarrying operations in the northern quarry had ceased by October, 2014.

- 4.7.5. The remedial EIS comes to the conclusion *“that it is not anticipated that there will be an adverse impact in relation to noise and vibration associated with the application site on neighbouring landowners and dwellings in the vicinity of the application site”*. The rationale for coming to such a conclusion is not adequately explained in the Impact Assessment in this section of the EIS. It is assumed that this conclusion is predicated on the statement in Section 9.3.1 of the EIS which suggests that noise from the activities on site shall not exceed 55 dB(A) between 0800 and 2000 hours and 45 dB(A) during night-time hours. The quarry does not operate at night-time therefore the critical assessment relates to daytime only. In my opinion it is not sufficient to merely come to a conclusion that the proposed operations are acceptable on the basis that they adhered to (albeit marginally) the maximum permissible limit of 55 dB(A).
- 4.7.6. It will be more appropriate in my opinion that any noise assessment would also make reference to the criteria set out in BS4142 in relation to noise impact assessment. Any reasonable noise assessment methodology would assess the proposed development in terms of baseline ambient noise levels which could be expected in a rural area. Typical noise levels in a rural area would generally range from between 40 and 50 dB(A) and more typically below 45 dB(A). L_{Aeq} levels at nearest noise locations are recorded as being in the region of 50 to 55 dB(A). This represents an increase in noise levels of between 5 and 10 dB(A) above that that could normally be expected in a rural area.
- 4.7.7. Furthermore, BS4142 suggest that a rating level should be incorporated for certain acoustic features which can increase the likelihood of complaint over that expected from a simple comparison between specific noise level and the background noise level. It suggests the application of a 5 dB(A) correction where noise contains a distinct tonal characteristic (a whine, screech, hum etc.) or incorporates an impulsive element such as blasting.
- 4.7.8. I consider it reasonable that a 5 dB correction could be incorporated in respect of quarrying activities where you have blasting, sirens associated with HGVs reversing

and other tonal components in the noise associated with the crushing, screening and processing of materials. Taking all the above into consideration, it would not in my opinion be unreasonable to conclude that the largescale development of a quarry at this location could result in a difference of between 5 and 10 dB (or more) above that associated with ambient noise levels in a rural area.

4.7.9. Notwithstanding the anomalies set out in the noise survey undertaken, it is likely in my opinion that overall noise levels were likely to be greater historically when the northern quarry was operating and therefore were likely to adversely impact on surrounding residential amenity. Based on the above assessment I would consider it reasonable to conclude that the size and scale of operations undertaken historically would have had an unacceptable impact on surrounding residential amenity in terms of noise.

4.7.10. In relation to blasting and vibration, I note that blast monitoring results are set out in Table 9.4 of the EIS. Again comprehensive and frequent details are provided for the six-year period between 2007 and 2013. In terms of combined peak particle velocity there was an overall compliance rate of 97%. In terms of air overpressure there was a compliance rate of 98%. I have no reason to doubt the veracity of the information contained in the revised remedial EIS and I can therefore only conclude that the blasting operations undertaken on site were generally acceptable in terms of the impact on surrounding residential amenity. In terms of blasting and extraction, I would request the Board to note that normal good practice requires the incorporation of benching in the creation of quarry faces particularly in terms of health and safety. The Board will note that the northern quarry area despite being excavated to a depth of 110 metres did not incorporate any such benching. Had the extraction been the subject of a planning application it may have been a requirement to incorporate such benching for health and safety reasons.

4.8. **Traffic**

I note the contents of the Traffic Section in the revised remedial EIS. It assesses the impact of the historic operations on site when the north quarry was operating and the overall traffic associated with the main quarry during the peak season amounted to some 99 trips per day (including staff, customer and HGV trips). The site is located in

close proximity to the N15 National Primary Route which has an AADT of 6,800 vehicles per day of which 6% are HGVs (c.550 vehicles). I consider that the proposed development would have had an acceptable impact on the road network in terms of traffic. I consider that the national primary route which is located adjacent to the subject site has ample capacity to cater for the peak traffic generated by the site historically.

4.9. **Visual Impact**

- 4.9.1. I would have significant concerns in relation to the visual impact arising from the works on site. There are numerous photographs contained on file particularly those furnished by the observers which indicate the profound visual impact arising from the quarry including views from the N15. I refer the Board to the photographs attached to this report, which equally in my opinion, depict the profound adverse visual impact arising from works undertaken on site to date. The area of extraction extends to over 11 hectares. The site accommodates numerous large buildings, silos, plant and machinery and stockpiles of aggregate and in my view represent a significant blot on the landscape. While I fully acknowledge that the lands on which the site is located are not designated as lands of special scenic amenity and that quarry by their very nature will alter the natural landscape, I nevertheless consider that the totality of the operations on site would constitute a very important and material consideration in assessing any planning application for a quarry on the size and scale proposed. It is in my opinion difficult to come to any other conclusion that the quarry in question would not have a profound impact on the visual amenities of dwellings in the vicinity particularly dwellings in the wider area to the north and west of the subject site.
- 4.9.2. To illustrate this point I would refer the Board to the photographs submitted in the original observation by Stewart Kirkpatrick which provides a panoramic view of the landscape towards Donegal Bay and beyond. The development of a quarry and associated facilities at this location has profoundly altered views in the wider area.

The access road and right of way which currently runs through the southern portion of the quarry and separates the north and south quarries has become indistinguishable as a result of the works undertaken. This right of way resembles an internal haul route within the overall quarry and is no longer discernible as a right of way.

- 4.9.3. Finally, in relation to the visual impact I consider that the construction of the berms around the northern quarry has likewise impacted on the visual amenities of the area in that it has obscured and screened panoramic views of the countryside in a north-easterly direction which in turn has had an adverse impact on the visual amenities of the area.

5.0 CONCLUSIONS AND RECOMMENDATIONS IN RESPECT OF THE APPLICATION FOR SUBSTITUTE CONSENT

- 5.1.1. Based on my assessment above, I consider that the historic works which have been undertaken on the entire site would have had an unacceptable impact on the residential and environmental amenities of the area primarily through the unacceptable visual impacts arising from the development and adverse impacts on amenity, particularly in terms of noise and dust. On foot of this assessment I recommend that the Board refuse to grant substitute consent for the current application before it.

6.0 ENVIRONMENTAL IMPACT ASSESSMENT

- 6.1.1. Having read the revised remedial EIS document submitted with the application, I am generally satisfied that the information contained in the document identifies the major environmental issues which would have likely arisen as a result of historic operations on site and attempts to describe and identify the main direct and indirect as well as cumulative environmental impacts which occurred as a result of the proposed development. However, I am not satisfied that the EIS correctly and adequately quantifies and assesses all the impacts which would have occurred historically on

the site subsequent to 1990. The evaluation of the revised remedial EIS is assessed in more detail below.

- 6.1.2. I am satisfied that the document describes the processes undertaken at the quarry and sets out in detail the activities relating to the existing development. The Board will note however that throughout the entire document, reference is made to “the application site” as being the north quarry only and not the entire quarry, notwithstanding the fact that the revised remedial EIS was required to assess the project in its entirety (i.e. north and south quarries). Notwithstanding this point the characteristics of the existing development together with all the processes undertaken on the site are, in the main, adequately described in the document.
- 6.1.3. Section 3 of the EIS relates to human beings. It describes details of the existing environment in terms of population demographics and economic activity in the area. It also details social structure in the area. The impact which has occurred on human beings are identified and assessed in subsequent chapters of the revised remedial EIS.
- 6.1.4. Section 4 of the EIS relates to flora and fauna. Designated sites in the wider area are identified (for further assessment of designated sites please see Appropriate Assessment section below). With regard to survey methodology, I note that the EIS included a habitats survey and a bird survey. However, no specific surveys were carried out for other species such as bats due to the time of year and which the survey was undertaken. This may result in gaps or lacuna in the information necessary to adequately evaluate the environmental impact arising from the development. Again the section on flora and fauna (page 4.11) refers to “*much of the area within the application area consists of a large lagoon exposed quarry faces and bare ground supporting little vegetation*”. This again infers that the detailed ecological investigation may have been restricted to the northern quarry only. Notwithstanding the above conclusion I do acknowledge that it is likely that a substantial portion, if not all the quarry, was established prior to 1990 and that works undertaken subsequent to that date may have been on the whole restricted to the excavation of the existing area. Therefore, it is likely that works undertaken post-1990 would not have a significant adverse impact in terms of habitats and terrestrial flora and fauna within the site.

- 6.1.5. Chapter 5 of the revised remedial EIS relates to soils and geology. I am generally satisfied that this section of the EIS provides baseline information in relation to the receiving environment including soils, bedrock geology and karst features which may have existed on site prior to excavation. I am also satisfied that the EIS has identified, described and assessed the impact of the quarry on the geology and soils of the area.
- 6.1.6. Section 6 of the EIS relates to hydrology and hydrogeology. I am satisfied that the document has adequately described the existing environment in terms of topography and drainage and hydrology and hydrogeological characteristics. The EIS has correctly identified the main environmental impact in terms of hydrology and hydrogeology as being discharge of water off site to surrounding surface water bodies. The impact of such discharge particularly the historical impact arising from groundwater being pumped from the north quarry has been assessed and this has included a review of historical monitoring data. The review indicates overall compliance with environmental obligations as specified in water quality standards for both for the north and south quarries.
- 6.1.7. In terms of groundwater the EIS draws on local experience of the groundwater regime to support the conclusion that dewatering resulted in a steep sided cone of depression which did not affect surrounding groundwater resources. This conclusion in my opinion may not sit comfortably with the underlying karstic geology which may suggest greater levels of drawdown in the groundwater. No evidence has been presented that groundwater supplies of well have been significantly affected as a result of the pumping undertaken, particularly at the north quarry. In my opinion therefore it is considered that the potential environmental impacts have been identified and described and adequately assessed in the revised remedial impact statement submitted with the application.
- 6.1.8. Chapter 7 relates to climate. It identifies the main potential impact arising from the proposal relates to changes in the climate through increased emissions. The document reasonably concludes in my opinion that it is unlikely that the activities undertaken on site would have led to a significant contribution to emissions to the overall environment.

- 6.1.9. Chapter 8 of the EIS relates to air quality. The EIS correctly in my view identifies the main environmental impact which could arise as a result of the works undertaken is fugitive dust deposition through processes undertaken at the quarry site. The wind and dust deposition regime are adequately described in the EIS. However, the impact assessment in my view may have underestimated dust deposition on lands to the north-east of the site. This is primarily due to the location of the dust monitoring positions which were not located downwind of the prevailing wind direction.
- 6.1.10. Chapter 9 of the EIS relates to noise and vibration. The potential noise sources are adequately identified and described in the EIS. These are attributed to the processing of materials and the operation of plant and machinery associated with the EIS. While the remedial EIS attempts to identify the historic noise generation associated with the quarry activity undertaken on site, I consider based on my site inspection, that the historic noise regime associated with the operations on site may have been somewhat underestimated. I also consider having visited the site that background noise levels may have over attributed ambient noise levels on traffic associated with the N15 and may have underestimated the contribution of quarry activity in background noise levels.
- 6.1.11. I further consider that a more robust evaluation should have been undertaken in the context of the criteria set out under BS4142 in that a noise rating penalty should have been attributed to the quarrying activities due to tonal or impulsive noises which are characteristic of quarry operations. Furthermore, L_{Aeq} levels recorded as a result of the noise survey should have been assessed in the context of typical ambient rural noise levels in order to assess a more accurate picture under which quarrying activities may be contributing to ambient noise levels in the area. Therefore, while I acknowledge that the noise section of the remedial EIS attempts to evaluate the historic impact of quarrying activities on the noise regime of the area, this impact in my view may have been somewhat underestimated. I am satisfied that the revised remedial EIS adequately assesses the impact of the historic works in terms of blasting and vibration.
- 6.1.12. Section 10 of the EIS relates to traffic. The EIS correctly identifies the main adverse impact arising from works undertaken relates to increased traffic movements and in particular increased HGV movements. I am satisfied that the EIS has assessed the proposal in terms of historic peak traffic arising from the development and I am also

satisfied that the EIS has adequately demonstrated that the existing road network could adequately cater for this traffic and as a result the environmental impact is deemed to be acceptable.

- 6.1.13. Section 11 of the EIS relates to landscape and restoration. Having visited the site in question and having had particular regard to the visual impact arising from the size and scale of the works undertaken I consider that the conclusions reached in the EIS may have understated the visual impact arising from the works undertaken. I acknowledge however that this is a subjective opinion and the Board may decide otherwise.
- 6.1.14. Chapter 12 of the EIS relates to material assets. The main assets identified in the EIS include residential buildings, geological resource, land resource, public road network and access, public utilities, scenic routes and tourism. I am satisfied that works undertaken on the site to date have not adversely impacted on material assets.
- 6.1.15. Section 13 of the EIS relates to archaeology and cultural heritage. The EIS states that there are no recorded monuments situated within the substitute consent area. The closest monument is located 80 metres to the north-east of the site and was not impacted upon as a result of works undertaken. The remedial EIS states that the quarry was subject to a cultural heritage assessment in 2008 and was subject to archaeological testing and monitoring in 2001. Both investigations found nothing of archaeological significance. Having regard to the nature of the development in question and the likelihood that most if not all of the site was stripped of overburden and subsoil prior to 1990 the conclusions set out in the EIS that there is nothing of archaeological significance within the boundary of the substitute consent application is reasonable in my view.
- 6.1.16. Finally, the EIS sets out the interactions and inter-relationships in respect of the various potential environmental impacts. In conclusion therefore I consider that the revised remedial EIS submitted, while attempting to identify and describe and assess the significant environmental impacts which could have arisen as a result of the works undertaken on site, these effects may have been somewhat underestimated particularly in relation to noise, fugitive dust and visual impact.

7.0 APPROPRIATE ASSESSMENT

- 7.1.1. Under QV05E.0128 the Board in its decision set aside the determination by Donegal County Council to close the quarry and sought an application for substitute consent accompanied by both an EIS and an NIS as per the provisions of section 261A(a) 2(a)(i) and 2(a)(ii). The applicant in his response, submitted a remedial Natura Impact Statement which was revised in December, 2015.
- 7.1.2. The NIS identifies eight Natura 2000 sites within 10 kilometres of the study area. The NIS reasonably in my view initially screens out most of these European sites due to the distance separating the quarry from the subject sites and the fact that there is no source – pathway – receptor connections.
- 7.1.3. Two European sites, the Ballintra SAC (located 1.9 kilometres north-east of the subject site), and Durnesh Lough SAC (located just over 2 kilometres to the west of the subject site) have been screened for the purposes of appropriate assessment. These two Natura 2000 sites, based on the precautionary principle, have the potential to be affected by the activities undertaken at the quarry.
- 7.1.4. Ballintra SAC has two qualifying interests, limestone pavement and wet heath. The limestone pavement is a priority habitat. The conservation objective is to maintain the Annex I habitats for which the SAC has been selected at favourable conservation status.
- 7.1.5. Durnesh Lough comprises of a large sedimentary lagoon which is separated from the sea by a barrier composed partly of drumlins, partly of sand dunes with the remains of a cobble barrier occurring in places. Water is connected to the sea by an artificial channel and pipe running under the sand dunes. The qualifying interests include coastal lagoons and molinia meadows on calcareous peaty or clay silt laden soils. Both of these habitats are priority habitats. The conservation objective is to maintain or restore the favourable conservation condition of these Annex I habitats.
- 7.1.6. Durnesh Lough is also an SPA. The features of interest are the Whooper Swan and the Greenland White Fronted Goose. The conservation objective is to maintain or restore the favourable conservation condition of the bird species.
- 7.1.7. In the case of Ballintra SAC, the NIS submitted correctly in my view concludes that works undertaken at the subject quarry has not resulted in any direct habitat loss,

damage or fragmentation. Furthermore, it has not resulted in any changes to the hydrological regime as there are no direct surface water pathways linking the quarry to the Ballintra SAC.

- 7.1.8. In relation to the Lough Durnesh SAC and SPA, the NIS also reasonably concludes in my opinion that the quarrying works undertaken has not resulted in any direct loss, disturbance or fragmentation to Lough Durnesh SAC or SPA. Durnesh Lough is hydrologically linked to the quarry via the Ballymagroarty Scotch River and the quarry has discharged groundwater to this stream. However, the discharges in question have been subject to licence which required water sampling to be carried out on a frequent basis. Both the remedial EIS and remedial NIS state that no exceedances have been noted in the water quality samples undertaken and no pollution incidences were detected. Therefore, there have been no direct effects of the quarrying work undertaken on the qualifying interest or the conservation objectives associated with Durnesh Lough SAC and SPA.
- 7.1.9. In terms of indirect effects, it is possible that the feeding grounds for the birds which form qualifying interests associated with the SPA could be affected by changes in water quality. However, it is apparent that water quality was not affected by the discharges from the quarry and as such it is highly unlikely that feeding grounds would have been altered within the lough. In terms of in-combination effects, there is no evidence to suggest that in-combination effects occurred with other discharges into the stream which forms a hydrological connection between the quarry and Durnesh Lough SAC and SPA. I would fully agree with the conclusions contained in the NIS that the qualifying interests of the European Sites in the vicinity will in no way be adversely affected but the works that have been undertaken on the subject site.
- 7.1.10. In conclusion therefore I consider it reasonable on the basis of the information on file which I consider adequate in order to carry out a Stage 2 Appropriate Assessment that the quarrying operations undertaken on the subject site individually or in combination with other plans or projects has not adversely affected the integrity of the Ballintra SAC (Site Code: 000115) or the Durnesh Lough SAC (Site Code: 000138) and Durnesh Lough SPA (Site Code: 004145) or any other European site in view of the site's conservation objectives.

RECOMMENDATION

Arising from my assessment above I consider that the Board should refuse to grant substitute consent for the quarrying works undertaken on the subject site in accordance with section 177K of the Planning and Development Act, 2000 based on the reasons and considerations set out below.

REASONS AND CONSIDERATIONS

In coming to its decision the Board had regard to the following:

- (a) The provisions of the Planning and Development Acts 2000 to 2015 and in particular Part XA,
- (b) The Guidelines for Planning Authorities and An Bord Pleanála on carrying out environmental impact assessment issued by the Department of Environment, Community and Local Government in March, 2013,
- (c) The Quarries and Ancillary Activities Guidelines for Planning Authorities issued by the Department of Environment, Heritage and Local Government in April, 2004,
- (d) The provisions of the current Donegal County Development Plan,
- (e) The remedial Environmental Impact Statement submitted with the application for substitute consent and the documentation on file generally,
- (f) The submissions made in accordance with Regulations under section 177N of the said Act as amended,
- (g) The pattern of development in the area,
- (h) The nature and scale of the development of this application for substitute consent, and

- (i) The report of the Board's Inspector specifically in relation to potential significant effects on the environment,

on the basis of the information submitted in support of the applicant for substitute consent the Board considered that the existing works undertaken on site has given rise to significant adverse amenity impacts particularly in respect of noise, dust and visual impact. The development would, therefore, be contrary to the proper planning and sustainable development of the area.

**Paul Caprani,
Senior Planning Inspector.**

28th November, 2016.