An Bord Pleanála

Inspector's Report

Development: Rock and sand & gravel quarry at Knockaunnagat, Dunmore, Co. Galway.

Application for Substitute Consent under Section 177E

Planning Authority : Galway County Council

Owner/Operator : Finnegan's Sand Ltd.

Review under Section 261A

: None

Parties

Observers : None

Date of site inspection : 30th July 2014

Inspector: **Michael Dillon**

1.0 SECTION 261A

1.1 Galway County Council determined on 3rd August 2012, that a remedial Environmental Impact Statement (rEIS) and a remedial Natura Impact Statement (rNIS) were required in relation to this quarry. The site had been visited on 15th March 2012. No submissions were received by the Council during consideration of the 261A process. The determination/decision of the Council in relation to Section 261A was not referred to the Board for Review.

1.2 The Board granted an extension of time for the making of an application for substitute consent – the relevant date being 13th November 2013.

1.3 The quarry was registered under Section 261 of the Act (**QY87**) – to Finnegan's Sand Ltd. The area registered was stated to be 5ha, with an extraction area of 2ha – both sand and stone being extracted. The quarry was divided into two portions – linked by a way-leave track. The quarry was stated to benefit from pre-1963 use. There is a copy (submitted from Galway County Council) of a set of conditions which the Council proposed to attach to the future operation of this quarry. It is not clear if these conditions were in fact attached under the section 261 process.

1.4 Two separate applications for substitute consent have been lodged with the Board (refs. SU0072 & SU0073) for adjacent quarries, both of which are operated by Finnegan's Sand Ltd. The quarries operate as one single unit. The reason for two separate applications is that the quarries were registered separately under the Section 261 Registration process, and continued to be treated separately by Galway County Council under the Section 261A process. A joint rEIS and joint rNIS have been submitted, and accepted by the Board, for the two quarries. I propose, for the most part, to refer jointly to the two quarries in this Report.

2.0 PLANNING HISTORY

The planning history of this overall quarry site, insofar as it can be ascertained from documentation submitted to the Board, is as follows-

Ref. 25019: Relates to permission granted to T.J. Gilmore for two separate sand pits on the western side of the L6512 access road on 5th December 1977. The access would appear to be from the applicant's own farmhouse located midway between the two sand pits and also from the road to the south – the L6464. The history file relating to this application contains two 6" map extracts. One shows a large site outlined in red (which is indicated as the area of the permission (outlined in magenta in drawings submitted with the application for substitute consent SU0073).

However, a later map shows two sand pits hatched in red on a 6" map – both of which are outside the earlier submitted 6" map.

Ref. 98/1758: Permission granted to Thomas J. Gilmore to open a sand pit and provide new entrance on 27th October 1998. Processing was only allowed on the existing sand pit to the north of the site. This pit may be the southern outlier of the quarry the subject of the application for substitute consent (SU0073), but the only two maps submitted are contradictory. The area covered in the earlier map on this file would appear to be already covered by one of the two sandpits in permission ref. 25019, so it may be that the later one is the correct one.

Ref. 01/3919: Relates to an application to develop a quarry of 1.71ha at Knockaunnagat – on the west side of the access road. The applicant was John Gilmore. A request for additional information (dated 15th November 2001) would not appear to have been responded to. A very small portion of this 1.71ha site is the subject of the application for substitute consent ref. SU0073. [The remainder is currently indicated as being in the ownership of Finnegan's Sand Ltd].

Ref. 08/334: Permission sought to construct settlement lagoons and carry out associated land reclamation works and also retention permission for a series of settlement lagoons and associated land reclamation works, together with retention permission for existing sand washing plant. The proposed extension involved an additional area of 5.909ha to the existing section 261 registered operation, no. QY87. The development for which permission was sought to construct and operate settlement lagoons for washings associated with the quarry operation and carry out associated land reclamation works was 4.383ha, and the retention permission relating to the existing settlement lagoons and associated land reclamation works, involved an area of 3.091ha. The application also included retention permission for washing facilities, overburden stripping areas and associated works. The application was deemed incomplete. [There are no maps relating to this application on the file].

Ref. EN06/226: This is an enforcement file in relation to construction of siltation ponds on top of cut-over bog within the site as outlined in red, and forming part of substitute consent application site ref. SU0072. The latest correspondence on the file would appear to date from 25th June 2010. An application for retention of these ponds was subsequently lodged with Galway County Council **ref. 10/1040**.

Ref. 10/1035: Permission refused to Finnegan's Sand Ltd. on 16th March 2011, for replacement silt ponds on site of 1.77ha within worked out quarry on the west side of the access road (within that portion of the quarry subject to substitute consent application ref. SU0073). Permission was

refused on grounds of impact on Lough Corrib SAC and absence of information relating to wastewater treatment facilities.

Ref. 10/1036: Permission refused to Finnegan's Sand Ltd. on 16th March 2011, for retention of, and continuation of use of, a sand washing plant (0.298ha). The site was located on the west side of the access road (within that portion of the quarry which is the subject of substitute consent application ref. SU0072). Permission was refused on grounds of impact on the Lough Corrib SAC and absence of information relating to wastewater treatment facilities.

Ref. 10/1040: Permission refused on 16th March 2011, for retention and continued use of silt ponds (2.76ha). Applicant was Finnegan's Sand Ltd. The site was located on the east side of the access road (within that portion of the quarry which is the subject of substitute consent application ref. SU0072). Permission was refused on grounds of impact on the Lough Corrib SAC and absence of information relating to wastewater treatment facilities and negative impact on public health.

Ref. 11/989: Permission granted on 2nd September 2011, for retention of sand washing plant (0.298ha). Applicant was Finnegan's Sand Ltd. The site was located on the west side of the access road (within that portion of the quarry which is the subject of substitute consent application ref. SU0072). On appeal by 3rd parties to the Board (**PL 07.239615**), permission was refused on 29th July 2013 for two reasons. The first reason related to the washing plant forming part of a quarry which was to be the subject of an application to the Board for substitute consent, where no such application had been so lodged. The second reason related to the piecemeal nature of the development in dealing with drainage and environmental management at an extensive quarry site.

Ref. 11/990: Permission granted on 2nd September 2011, for replacement silt ponds (1.77ha). Applicant was Finnegan's Sand Ltd. The site was located on the west side of the access road (within that portion of the quarry which is the subject of substitute consent application ref. SU0073). On appeal by 3rd parties to the Board (**PL 07.239616**), permission was refused on 29th July 2013 for two reasons. The first reason related to the silt ponds forming part of a quarry which was to be the subject of an application to the Board for substitute consent, where no such application had been so lodged. The second reason related to the piecemeal nature of the development in dealing with drainage and environmental management at an extensive quarry site.

Ref. 11/1030: Permission granted on 14th May 2012, for retention and continued use of silt ponds (2.76ha) for a temporary period pending construction of new ponds on the opposite side of the road. Applicant was

Finnegan's Sand Ltd. The site was located on the east side of the access road (within that portion of the quarry which is the subject of substitute consent application ref. SU0072). Condition 5 provided for a bond for reinstatement of the land. Condition no. 2 referred to an existing Waste Permit WR/146.

3.0 APPLICATION FOR SUBSTITUTE CONSENT

3.1 An application for substitute consent was made on 12th November 2013, by Archer Consulting Engineers, agent on behalf of the quarry owner, Finnegan's Sand Ltd. The application was accompanied by an rEIS and an rNIS. The site area was stated to be 6.433ha. It relates largely to that portion of the quarry on the eastern side of the access road, with a small portion on the western side of the access road – wherein the aggregate washing plant is located. Water supply is stated to be from a private well on the site. There is no indication of any foul effluent treatment on the site. Surface water percolates to ground.

3.2 By letter dated 17th December 2013, the Board requested the applicant to submit additional drawings, and to justify the submission of a joint rEIS and rNIS (for SU0072 & SU0073). The revised submission of 13th January 2014 includes the following-

- Reasoning for submission of joint rEIS and joint rNIS for applications SU0072 and SU0073. The quarries are immediately adjacent to one another and are interdependent. Both are operated by the same management. Both have the potential to impact on the Lough Corrib SAC. Adopting a holistic approach was required when assessing impacts, if any, on the European site. The Board has previously assessed joint appeals together – as in the instance of PL 07.239615 and PL 07.239616 for this overall quarry site.
- Revised drawings highlighting each of the two quarries in red, together with other lands under the control of the quarry owner outlined in blue.
- Section drawings through the quarry.

4.0 SITE LOCATION AND DESCRIPTION

4.1 Two linked substitute consent applications are before the Board (SU0072 & SU0073). I propose to describe the two quarries as one – as they essentially operate as one. The quarry is located approximately 3km southwest of the village of Dunmore in east County Galway. The area is largely agricultural, with some areas of peat harvesting (to the northwest of the quarry). The quarry straddles a county road (L6512) – which cuts north/south through it. There are a number of farmhouses and one-off houses flanking the access roads to the quarry (some of which are derelict). The landscape is characterised by a number of eskers at the

southern end, flattening out into peatlands at the northern end of the quarry. Fields are surrounded by a mixture of dry-stone walls, wire fences and hedgerows. There are a number of quarries in the area, and clearly a larger number of worked-out older pits.

4.2 Access is via a network of county roads which ultimately link to the N17 National Primary Route to the west and the N83 National Secondary Route to the east. The 80kph speed restriction applies in this area. There are no public footpaths and there is no public lighting in the area. The county roads are narrow and winding, and it is not possible to pass two vehicles along most of their length. There is grass growing in the centre of some of them. The junction immediately to the south of the quarry has been widened at some stage in the past. The junction to the north of the quarry would not appear to have been widened. The L6512 north of the quarry is of bog rampart construction. Traffic volumes were very light on the date of site inspection.

4.3 There is one wide recessed entrance to the eastern portion of the quarry – fitted with agricultural gates. This access also serves as a farm access to adjoining lands. There are three entrances to the western portion of the quarry. The principal one is located a little to the south of the entrance to the eastern portion. This entrance is wide and recessed – access being controlled by agricultural gates. The second entrance is not recessed – located immediately opposite the entrance to the eastern portion of the quarry. This second entrance is gated, and does not appear to be in use at present. The third entrance is located off an agricultural/bog access track which skirts the northern boundary of the western portion of the quarry. This last entrance also serves as access to an unoccupied two-storey farmhouse within the quarry. None of the entrance surfaces are sealed – all consisting of hard-core. Sight visibility is good at all entrances – owing to the absence of hedgerows. There are warning signs on the approach to the main quarry entrance. In addition to what is described above, there is a small quadrangular outlier to the overall quarry – accessed from a separate county road (L6464) to the south. This outlier forms part of application ref SU0073. It has its own dedicated entrance, which is currently occupied by a cattle handling facility. Sight distance is reasonable at the entrance to this outlier portion.

4.4 The quarry was closed on the date of site inspection, although it did briefly open to load two HGVs with stockpiled aggregate. It was evident that the closure was temporary, and that this is a working quarry.

4.5 The eastern portion of the quarry is clearly visible from the L6512 – due largely to the absence of roadside boundary hedgerows. It is accessed via an unsurfaced hard-core track which also serves as access to agricultural lands on either side of it and on the far side of the quarry void.

The agricultural lands to the south of this track were clearly once part of this overall quarry, land which has been remediated. This eastern portion of the quarry does not appear to be in use at present – although there is one large stockpile of small stones within it. The quarry has not breached the water table, and there was no surface water ponding on the date of site inspection. Sand martin nests are in evidence within exposed cliffs. This eastern portion is the location for a series of siltation lagoons which serve the larger/active portion of the quarry on the western side of the access road. The lagoons are constructed of clay/silt and are up to 8m above surrounding ground level. Vegetation is beginning to colonise part of the constructed berms. There are land drains surrounding the foot of these earth berms. The lagoons are almost completely filled with silt – only one small portion of one of the lagoons containing water. The inflow is a 4" pipe (with wash water pumped from the washing plant on the opposite side of the access road). The outfall is via a series of 4" pipes to a very small pond at the toe of one of the embankments, and from thence to a field drain. The field drain is heavily overgrown with vegetation. There was no evidence of any siltation in this field drain. As the quarry was closed, there was no inflow to, or outflow from, the siltation lagoons. There is an abandoned farmstead, surrounded by mature trees, on the southeastern boundary of the quarry pit. Lands to the east and southeast (outlined in blue) are in use for agriculture. There is an old children's burial ground within a field to the northeast – outside the wider blue-line boundary of the quarry.

4.6 The western portion of this quarry is the hub of activity at the site. There is a wheel-wash/shaker grid at the main entrance gate. Inside this entrance is a metal cabin which services as office/toilet facility. There is stated to be a septic tank to the rear of this facility, but it was not evident on the date of site inspection. Two tankers from trucks are located in this area for water storage for the wheel-wash. There are two metal shipping containers used for the storage of equipment. A number of oil drums are located at one of these containers. The area around them is not sealed and hydrocarbons have leaked into the ground. Immediately to the north of the entrance is the aggregate washing plant and water storage tanks. The plant is powered by a diesel generator which also has leaked oil into the ground. There is stated to be a well serving the washing plant, but it was not evident on the date of site inspection. There is demountable flood-lighting in this part of the quarry. The washing plant is located on the floor of a worked-out portion of the quarry, and hidden behind earth berms, and so is not visible from the adjoining L6512. There was a small amount of standing water in a sump area to the north of the washing plant, with no visible outfal. Mounds of washed aggregate are stored around the washing plant - one large mound being visible from the public road. The western portion of the quarry is clearly visible from the L6512 – particularly approaching from the north.

4.7 This washing/loading area of the quarry is separated from the active quarrying area by an hard-core track which serves as access to the unoccupied two-storey farmhouse located within the wider blue-line control of the applicant – perched high above the working floor. The northern section of the working quarry (largely co-terminus with application ref. SU0073) is used for storage of quarried material and deposition of spoil. There is mobile grading plant within this part also. A large portion has been laid out to function as a siltation lagoon – although not in operation. It is screened from the agricultural/bog access track to the north by vegetated earthen berms. Further to the south of this area again is the extraction area of the quarry, containing mounds of stripped soil, mounds of quarried stone, and some mobile grading plant. There are sand martin nests in evidence in cliff faces. The quarry has not breached the water table. A very small amount of surface water ponding was evident on the date of site inspection. Quarrying has been carried out right up to hedgerow boundaries within some steep cliff faces evident. Adjoining lands are used for agriculture.

4.8 There is a small southern outlier to this quarry (part of application ref. SU0073) which is accessed from the L6464 county road to the south. Quarrying has been completed in this area (a portion of an esker removed). The area contains a cattle handling facility of recent construction, and an overgrown cabbage garden. The active western portion of the quarry is visible from this southern portion and from the adjoining L6464 road. This outlier abuts agricultural land on three sides. A ring-fort to the northeast of this outlier area has not been impacted by quarrying – other than that it sits atop the same esker, a portion of which has been quarried out within the applicant site.

4.9 There is no signage at this quarry. There are no power lines traversing it. Housing in the vicinity is sparse – the house to south of the main access being in the ownership of the landowner wherein formerly quarried lands have been returned to agricultural use (part of quarry registered as QY87). The two-storey house within the wider blue-line lands of the western portion of the quarry is unoccupied. There is a derelict single-storey house further to the south along the L6512, with a newer bungalow to the south of it again. There is one derelict and one occupied two-storey house at the road junction to the south of the quarry (L6512/L6464). There are no houses within the boglands immediately to the northwest and north of the quarry. Machinery on site included- 2 no. Volvo articulated loading shovels, 1 no. excavator, 1 no. articulated Volvo dumper truck and 1 no. fuel tanker truck. There was no rock-crushing plant in evidence on the site, notwithstanding that rock-crushing has taken place on site. A small amount of builder's rubble and tarmacadam has been deposited on the quarry floor. Site notices were in evidence on the date of site inspection.

5.0 REPORT OF GALWAY COUNTY COUNCIL

The Report of Galway County Council, received by the Board on 14th February 2014, can be summarised (where relevant) in bullet point format as follows-

- The site was inspected on 6th December 2013, and site notices were in place (photographs attached).
- There is an Enforcement file in relation to this quarry EN06/226.
- The County Development Plan 2009-2015 recognises the importance of quarries to the economy of the county.
- The landscape sensitivity in the area is the lowest of the five classes within the county.
- This quarry (QSP87) effectively operates as one quarry with an adjoining quarry (QSP10) which happened to be registered as two separate operations under the section 261 process. The area of the former is approximately 11ha and the area of the latter is approximately 9ha.
- Mobile plant is used for crushing and screening of aggregate, and washing plant is in place.
- The location of the discharge point(s) from settlement lagoons were not marked on maps.
- The locations of sampling points on the Sinking River are not indicated on maps.
- The location of the Cathill GWS is not indicated on maps.
- The locations of nearby dwellings are not indicated on maps.
- The location of landscape viewpoints are not shown on maps.
- The habitat map was schematic, and no accurate base map was submitted.
- Some of the landscape photos were taken in sub-optimal conditions, and are too dark.
- On p.128 of the rEIS there is reference to analysis and investigations of settlement ponds by DoEH&LG – but no reference or summary of investigation is provided.
- There is no groundwater information and no groundwater monitoring point in place.
- It is probable that the quarry has not had a significant effect on areas adjacent to the site, but the absence of detailed information makes it difficult to confirm this.
- Access to the quarry is from local road L6512 which in turn leads onto local road L6464 – both of which are narrow. These roads lead onto a busy local road LP2215. It is acknowledged that the applicant has co-operated with the local authority in carrying out improvements to the junction of the L6512/L6464.
- Any road warning signage will serve both this quarry and SU0073.

- The applicant estimates a weekly combined 60-70 laden HGV movements from the two quarries at this location.
- Whilst there is a National Secondary Route to the east of the quarry, deliveries to the west involve significant use of a network of smaller county roads. There is little evidence of deposition of quarry sourced materials on the local road network.
- It is considered that substitute consent could be granted by the Board, subject to a number of conditions being attached- (i) one-off payment of €10,000 for upgrade and maintenance of the local road network, (ii) warning signage on approach roads, (iii) relating to refuelling of machinery, (iv) removal of recyclable waste off the site, and (v) agreement of a restoration plan with the Council.

6.0 PRESCRIBED BODIES

6.1 The application was referred by the Board to a number of Prescribed Bodies on 20th December 2013, as follows-

- Development Applications Unit of Department of Arts, Heritage and Gaeltacht.
- An Taisce.
- Fáilte Ireland.
- The Heritage Council.
- An Chomhairle Ealaíon.
- Inland Fisheries Ireland.
- Department of Communications, Energy and Natural Resources.
- National Roads Authority.
- Health Service Executive.
- Galway Airport/Irish Aviation Authority.

6.2 Responses were received from An Taisce, Irish Aviation Authority, National Roads Authority, Development Applications Unit of Department of Arts Heritage and Gaeltacht, and the Health Service Executive.

6.2.1 <u>An Taisce</u>

The response, received on 2nd January 2014, can be summarised in bullet point format as follows-

- ECJ Case 215-06 only provides for substitute consent applications in exceptional circumstances, but such 'exceptional circumstances' have not been defined.
- An rEIS should only be accepted where the threshold exceeds the 5ha set down. The *bona fide* status of the quarry should be established as pre-1964, where no planning permission exists.
- Registration under section 261 must be deemed to be irrelevant.

6.2.2 Irish Aviation Authority

The response of the IAA, received by the Board on 6th January 2014, indicated that there was no comment to make.

6.2.3 National Roads Authority

The response of the NRA, received by the Board on 20th January 2014, indicates that there was no comment to make.

6.2.4 Department of Arts, Heritage and Gaeltacht

The response of from the Development Applications Unit, received by the Board on 3rd February 2014, relates to applications SU0072 and SU0073, and can be summarised in bullet point format as follows-

- The quarry is located approximately 160m from Lough Corrib SAC (Site code 000297). Water from the quarry ultimately discharges to the Sinking River within the SAC.
- It is noted that a series of settlement ponds were not in place on OS aerial photographs from 2005, so discharges prior to that date may have been a problem.
- Maps and drawings submitted are of poor quality, are difficult to read and to interpret, and do not show clearly the current application areas in the context of the full extent of all parts of the quarry.
- Details of the drainage and surface water management system of the quarry, including the location of the outfall from the sedimentation ponds, and ultimately to the SAC, are not shown.
- The habitat map in Chapter 6 lacks the necessary background to facilitate interpretation.
- Additional clearer and more detailed maps/drawings should be provided to show all parts of the quarry and its infrastructure and operations, to facilitate interpretation of the rEIS and rNIS for the two inter-related substitute consent applications in the context of the overall development.
- The cumulative impacts from the two quarries, other parts of the quarries and other plans and projects in the area must be assessed.
- No restoration plan is included in the rEIS.

6.2.5 Health Service Executive

The response of the HSE, received by the Board on 5th February 2014, relates to applications SU0072 and SU0073, and can be summarised in bullet point format as follows-

- There are old houses and farmyard sheds which are in danger of collapsing into the quarry pit.
- Extraction will be below the water table, in an area where the vulnerability is 'High'. There are limited remedial measures

proposed. The proposal to continue excavation below the water table is not recommended.

- Routine sampling of groundwater should be undertaken at various locations around the site.
- There is a septic tank within the quarry, discharging ultimately to groundwater. No details of the percolation area have been submitted.
- No details of operational noise and background night-time noise levels have been submitted.

7.0 Response Submissions

7.1 The Report of Galway County Council was referred, by the Board, to the applicant for comment, on 18th February 2014.

7.2 The response of Archer Consulting Engineers, agent on behalf of the applicant, Finnegan's Sand Ltd., received by the Board on 10th March 2014, can be summarised in bullet point format as follows-

- As a major employer, Finnegan's Sand Ltd. has always ensured that extraction and transport operations have been carried out in a safe and responsible manner. Numerous road repairs have been undertaken and lay-bys created in consultation with the Area Engineer for Galway County Council.
- Finnegan's Sand Ltd. contributes towards road tax and rates.
- The Council recommends that substitute consent be granted.
- The requirement to pay €10,000 towards road upgrades is opportunistic and punitive. The most effective way of maintaining the local road network is to continue to liaise with the local authority, and for Finnegan's Sand Ltd. to contribute material and machinery as and when required.
- The applicant is agreeable to providing the required road signage.
- The applicant is happy to observe best practice when carrying out refuelling.
- Recyclable waste will be removed off-site.
- A restoration plan for the quarry will be agreed with the Council.

8.0 ASSESSMENT – General Comments

8.1 Temporary Cessation if Necessary

It is open to the Board to consider issuance of a temporary cessation notice under section 177J. Having regard to the information presented in the application and the rEIS and rNIS, and to what was observed at the time of inspection of the site, it is my opinion that no aspect of the development is clearly giving rise to a very significant current adverse

effect on the environment or to adverse effects on the integrity of a European Site. I do not, therefore, consider that a temporary cessation notice is warranted in this instance.

8.2 Inspection of Site under Section 261A

The determination/decision of Galway County Council under Section 261A was not the subject of a Review to the Board, and the site was not, therefore, inspected under that process.

8.3 Extent of Site

This application for substitute consent relates to two quarry sites which effectively operate as one quarry – SU0072 and SU0073. The reason for two applications is that they were registered separately under the section 261 process, as QY87 and QY10. Substitute consent application SU0072 partially relates to QY87, whilst application ref SU0073 partially relates to QY10. The coloured lines included on the maps accompanying these applications, though somewhat bewildering at first glance, attempt to outline the planning status of the overall quarry. The overall quarry site is essentially divided into two portions by a county road (L6512) – with a further outlier portion accessed from county road (L6464) to the south. Part of the quarry registered as QY87 has been remediated and is now in agricultural use. The relevant areas for the two applications are SU0072 – 6.433ha, and SU0073 – 4.571ha. The overall area which has been quarried at some stage (or is being quarried) extends to approximately as much area again. I note that the application drawings refer to an area outlined in magenta, for which planning permission was obtained for quarrying in 1977. The applicant is stated to have been involved in quarrying at this site since 1989.

8.4 County Development Plan

The current document is the Galway County Development Plan 2009-2015. There are no designated landscapes, protected areas, Protected Structures or protected views/prospects within or immediately abutting this site. The Plan recognises the importance of quarrying to the economic development of the county. The Landscape Sensitivity for the area is 'Low' – the lowest category in a sensitivity total of five.

8.5 Financial Contribution

Galway County Council has recommended that the quarry operator be required to pay a Special Development Contribution of €10,000 towards upgrading the narrow road network in the area. In the normal course of events, it is likely that a planning application for quarrying would result in

the attachment of such a condition. It does not seem reasonable that a quarry which has expanded beyond a permitted boundary should be exempt from payment of such a contribution. It is acknowledged by the Council that the quarry operator has assisted in road improvement works in the area in the past. However, any grant of substitute consent pertains to the quarry and not to the quarry operator, and should this quarry change hands in the future, there is no guarantee that the operator would be willing to cooperate with the planning authority in the same fashion in relation to road improvements. Whilst the applicant in this instance argues that the request for payment of a contribution is opportunistic, I would not consider this to be the case. The roads approaching this quarry are narrow and were never intended for the additional traffic which a development of this nature would impose, particularly at times of heavy demand for aggregate. I note that the Council report submitted covers both quarries – ref. SU0072 and SU0073. It would appear, although it cannot be stated with any degree of certainty, that the Council intended only one contribution of €10,000 – rather than two such contributions – one for each quarry. I would recommend that the quarry operator be required to pay a special development contribution of €5,000 for road works for each of the two substitute consent applications.

8.6 Reinstatement

The applications for substitute consent involve working quarries – although there does not appear to be any extraction at present on the eastern side of the access road. The submission of the applicant to the Board on 10th March 2014, indicated that the quarry operator was willing to submit to the local authority, a restoration plan for the quarry. It is stated that it is intended to extract material from below the water table – leaving an open area of water on completion of quarrying. A condition should be attached to any grant of substitute consent requiring the quarry operator to submit such plans. I would note that part of this overall quarry has already been remediated and returned to agricultural use. The quarry operator should be required to submit a bond for the future reinstatement of the quarry areas – particularly as it is clearly the intention of the quarry operator to relocate the siltation lagoons to the opposite side of the road.

9.0 ASSESSMENT – Environmental Impact Assessment

9.1 General Comments

The rEIS is accompanied by a Non-technical Summary (contained within the main volume). Appendices are contained within the same volume. The rEIS covers the two application sites refs. SU0072 & SU0073 – which are in the same ownership and function as a single quarry unit. The single rEIS allows for an assessment of the cumulative impacts of both parts of

the operation. It is acknowledged in section 2.3 that environmental monitoring history at this quarry is limited. I would note that the number of maps and photographs submitted with the rEIS is limited.

9.2 Consideration of Alternatives

Section 2.6 of the rEIS refers to alternatives. Having regard to the nature of the application, consideration of alternative sites is not relevant. Again, consideration of alternative means/methods of extraction is not relevant. The quarry voids are as they are. The applicant concludes that given the ownership of the site, and the value of the resource, there are no alternatives to the continued operation of this quarry. This would appear to be reasonable.

9.3 Structure of remedial Environmental Impact Statement

The rEIS submitted examines the impart of the development that has been undertaken on the site under a grouped format approach with each of the impact areas set out in Article 3 of the EIA Directive being addressed for potential impacts, proposed mitigation measures and residual post-mitigation effects. There are separate chapters covering human beings, soils & geology, ecology, surface & ground water, air quality, climate, noise & vibration, landscape & visual impact, archaeology & cultural heritage, material assets, traffic & transportation, and the interaction of the foregoing. The rEIS addresses the main likely significant direct and indirect effects that the development has had on the environment.

9.4 Historical/Current Operating Level

In terms of impacts, and having regard to the retrospective nature of the application and assessment, it is also noted that the site which forms the basis of the analysis contained within the rEIS (and the rNIS) is operating at an historically low output level relative to the height of the economic boom, when the quarry was registered under Section 261 (in two separate parts). The expansion of the quarry beyond the permitted/registered boundary has resulted in the two applications for substitute consent.

9.5 Human beings

Section 4 of the EIS deals with this issue. The issue is further addressed in other sections of the rEIS such as climate, noise, visual impact and traffic. At the height of the economic boom, the quarry was employing 7 people. The quarry now employs four full-time staff. The impact of the development on population or employment is considered to be minor. Hours of operation were 08.00-18.00 Monday to Friday; and 08.00-15.00 on Saturday. There is stated to be one house within 70m of the quarry –

but no indication is given of the location of this house, or indeed any other houses in the vicinity. This house would appear to be the farmhouse on the eastern side of the access road, and which would appear to be occupied by the owner of lands on the eastern side of the access road which were formerly used for quarrying and which have now been remediated. The maps submitted with the application are blown-up copies of older 6" maps – so there is not much included by way of newer development. There is one two-storey house within the western quarry – currently unoccupied. It would appear to belong to the farmer from whom the quarry is rented/sold. It is indicated as being within the blue line control of the applicant. The Council was concerned with the proximity of this house to the quarry face. I would consider that this is a matter from the quarry operator and the landowner – as it relates to private agreements between lessor/lessee. The precise nature of land ownership (and when and if title was transferred) in the vicinity of this quarry is unclear, Finnegan's Sand Ltd. variously stated as being owners/tenants of the same piece(s) of land. There is an unoccupied house further to the south on the access road L6512, with a newer bungalow built just to the south of it. There is a further two-storey house at the junction of the L6512/L6464 just to the south of the aforementioned bungalow – together with a derelict/unoccupied two-storey house. There is a derelict farmhouse to the southeast of the eastern quarry – within the blue line control of the applicant. There is a derelict house to the west of the western quarry – accessed by the farm/bog track which skirts the northern boundary of the western quarry. There are no houses within the bog to the north of the quarry sites.

9.6 Soils & Geology

9.6.1 Section 5 of the rEIS deals with this issue. The site is underlain by the Kilbryan limestone formation. There are isolated Waulsortian reefs (mudstones) within the formation. Weathering of upper limestone layers is widespread in the area. There are no karst features in the vicinity of the quarry site. Soils and sub-soils are largely dominated by ice age deposits of sand and gravel till. Peat and alluvium deposits are in existence to the northwest and north of the quarry. The quarry is situated along the quaternary geological boundary of sand & gravel with some clay deposits. Removed overburden has been used in the construction of berms and embankments and is also stored for future restoration of the quarry. Obviously, the removal of sand & gravel is a permanent impact on geology. However, in terms of the amount of such material in existence within the wider area and nationwide, the impact is negligible. It is stated in section 5.12 that the quarry will be extracted to a level below the water table, and that restoration will involve the formation of a lagoon, with topsoil and subsoil spread out over the remainder of the site. It is not clear if this relates to both eastern and western portions of the quarry. It would

appear that quarrying at the southern outlier is completed – given that the area has been planted as a cabbage garden (gone to seed) and recently fitted with a stock handling facility. However, section 13.5 of the rEIS states- 'The rock, sand and gravel extraction is above the water table'. It is stated that section 11.0 of the rEIS deals further with the issue of restoration, but there is no real reference to restoration within section 11.0.

9.6.2 There are no logs for any boreholes drilled on this site. Whilst it is stated that extraction will proceed below the water table, there is no indication to what depth. Indeed, there is no indication of the extent of the sand & gravel resource on the site. The siltation lagoons have been constructed on cut-over peat – yet there is no mention of this in the rEIS – particularly in relation to the stability of the subsoil and the depth to bedrock beneath the lagoons. However, I would note that planning permission exists for the siltation lagoons, which are full with silt, and nearing capacity. There is no evidence of any subsidence around the lagoons – drains having been dug around the base of the embankments supporting them. There is a small amount of water in only one part of one small lagoon: the remainder are dry, and mud/silt is shrinking and cracking following the recent spell of dry weather.

9.7 Ecology

9.7.1 Section 6 of the rEIS deals with this issue. Some further information in relation to European sites is included within the rNIS which accompanies the applications for substitute consent, and it is not proposed to repeat it in this section of the report. A field survey was carried out on 29th and 30th October 2013. Species of flora encountered are listed at Table A1 of Appendix IV of the rEIS. The general habitats of the area are characterised by improved grassland, raised bog, wet heath, fen and esker ridges of sand & gravel. Table 2 lists the 19 habitats within the survey area – the principal one of which is 'active quarries' with subsidiary areas of improved and semi-improved agricultural grassland, wet heath, and settlement lagoons. The habitats are mapped at Appendix III of the rEIS. The wet heath corresponds to the EU Annex I habitat 'North Atlantic wet heaths with *Erica tetralix*'. There are also small areas of alkaline fens and semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*). The creation of this quarry would likely have involved the removal of EU Annex I habitats as indicated above – over an area of some 13ha. An estimated area of 1.4ha of wet heath was lost beneath the settlement ponds. This wet heath was re-colonising cut-over bog. The removal of some of these habitats would have occurred before the coming into effect of the Habitats Directive in February 1997. The operation of the quarry will not have resulted in a threat to the existence of these habitats on surrounding lands – in particular the large bog area to the northwest. I note that turf is being cut within this bog.

9.7.2 Macro-invertebrate sampling was carried out at three points on the adjacent Sinking River (SR1, SR2 & SR3). Whilst there is no map accompanying the rEIS to indicate the locations of the sampling points, 3 no. colour photographs of the sampling points are indicated at Appendix III. They are stated to be one upstream, one adjacent to, and one downstream of, the quarry drain discharge. Table A2 of Appendix IV lists the species encountered. No inference is drawn from the results of the samples in the rEIS. The EPA water quality monitoring of the Sinking/Clare Rivers indicates variable levels of pollution over the years 1984-2012. Silt in the upper levels of the Sinking River render it unsuitable for salmon spawning. White-clawed crayfish were encountered at location SR1 only.

9.7.3 Two badger setts were recorded to the west of the quarry. Badger activity was recorded further down the drain from the settlement lagoons discharge point. Otter activity was recorded in this latter area also. Other mammalian species are likely to occur in the vicinity of the quarry. These species are present, notwithstanding the active quarrying at the site.

9.7.4 A total of 19 bird species was recorded at the quarry (listed at Table 4) of the rEIS. Sand martin nests were recorded in the active and disused areas of the quarry. Exposure of sand cliffs, suitable for nesting, is a beneficial impact of the quarry.

9.7.5 There was reported to be no build-up of sediment in the drainage ditch at the point of discharge from the settlement lagoons on 29th & 30th October 2013, although some silt-related turbidity was present along much of the drain. There was no evidence of a build-up of silt at the point of discharge from the settlement lagoons on 30th July 2014. The quarry was not operational on the date of site inspection, and so there was no discharge from the siltation lagoons – as there was no pumping of treatment water to the lagoons and nor was it raining. Vegetation within the drain was stated to help precipitate out suspended solids, to the extent that there was no turbidity visible in the lower reaches of the drain prior to discharge to the Sinking River. Again, this could not be borne out on the date of site inspection by this Inspector, as there was no discharge from the settlement lagoons. However, I would be satisfied that the extensive vegetation growing in the field drains would assist in the precipitation of any silt which was discharged from this quarry site.

9.7.6 The closest Natural Heritage Area (NHA) is the Slieve Bog (Site code 000247) some 7km to the east of the quarry. This separation distance would ensure that the operation of the quarry had no impact on the NHA.

9.7.7 I note that there are no indications of any bat surveys or insect surveys for this site. There are no old buildings within the quarry site – although there are some abandoned farm buildings to the southeast of the eastern portion of the quarry. These abandoned buildings are surrounded by mature trees – many of which are rogue species grown wild. There are no caves or rock fissures within the quarry suitable for bat roosting or nesting. There are no mature trees within the quarry, although there are some on the site pit boundaries. Quarrying is not carried out at night – although temporary floodlighting is present at the washing plant, indicative of activity during hours of darkness. I would be satisfied that quarrying at this site has not had any significant impact on bat species, notwithstanding the likely removal of some hedgerows in the past.

9.7.8 Mitigation measures employed in relation to maintaining water quality and limiting noise and dust emissions will have a beneficial impact on ecology. Apart from this, no mitigation measures are indicated to have been put in place.

9.8 Surface & Ground Water

9.8.1 Section 7 of the rEIS deals with the issue of water. There is a locally important gravel aquifer underlying the site. Removal of topsoil and subsoil has rendered the vulnerability of the groundwater resource 'extreme'. Surface water in the area generally flows towards the Sinking River to the north. There is no surface water discharge from the site – rain water percolating to groundwater. There is no extraction of sand & gravel from below the water table, although it is stated that it is intended that extraction will take place below the water table in the future. There is a very small amount of surface water ponding in the western portion of the quarry – with a small sump area to the north of the aggregate washing plant. The Cathill Group Water Scheme (GWS) supplies water in this area. The source of this GWS is not indicated in the rEIS. There is a concrete pumphouse and covered well located just to the north of the track which links the two portions of the quarry. It is not clear just what this well is for or what properties (if any) it serves. It is not indicated on drawings submitted, although it has clearly been in place for some time.

9.8.2 There is no bunded area for refuelling or for parking machinery. The diesel powered generator on this site is not bunded either. Oil has leaked from this generator and from oil drums into the ground. Oil has also leaked from machinery. These leakages could result in contamination of groundwater beneath the site. As there are no borehole logs for this site, it is not clear just how far below existing ground level the water table lies – particularly in the vicinity of the aggregate washing plant wherein most machinery operates and where hydrocarbons are stored. A condition should be attached to any grant of substitute consent requiring all

contaminated ground (where spillages have occurred) to be excavated and removed permanently off the site to a licensed disposal facility. A condition should also be attached requiring construction of bunded areas for all hydrocarbon storage on site as well as for the diesel generator at the washing plant. A bunded area for refuelling of mobile plant should also be provided. Such work should be carried out within three months of the date of any grant of substitute consent.

9.8.3 Process water from aggregate washing on the western side of the access road is pumped to siltation lagoons on the eastern side of the access road. It is stated that flocculants are added to assist in settling out fines. The outfall from the siltation lagoons is to a heavily vegetated drain which debouches into a larger drain (again heavily vegetated) at the confluence of a number of other land drains. There is a 36" diameter concrete culvert beneath the road, and the drain ultimately discharges to the Sinking River to the north. There is a fenced cattle drinking area within the stream at this culvert beneath the adjoining public road. The distance between the discharge point and the Sinking River is approximately 750m. Section 7.5 of the rEIS refers to analysis and investigations carried out by the DoEH&LG and review of same by the Western Regional Fisheries Board in 2007. However, no further details are given – and it may be that the analysis was of a general nature, and not specific to this quarry site.

9.8.4 Tables 7.2 & 7.3 of the rEIS provide water quality monitoring results from the settlement lagoons and from the discharge stream. There is no indication given of when this testing was carried out or exactly where the sampling points were. The result for coliforms in the stream was elevated – whilst being completely absent from settlement lagoon sample. As mentioned in the paragraph above, there is a cattle drinking point within the drain beside the culvert beneath the road to the north of the quarry site, which might account for the elevated levels of coliform.

9.8.5 The EPA monitoring results for the Sinking River and Clare River are variable over a considerable period of time. Sampling at three points in the River SR1, SR2 & SR3 has indicated macro-invertebrates tolerant of polluted waters.

9.8.6 The office/toilet cabin on site is located outside of the red line boundary of either of the two applications for substitute consent. There is stated to be a septic tank to serve the toilets, although it was not possible to locate one on the date of site inspection. It may be that the gravel beneath this site would not be the most suitable percolation material for a septic tank system. Given that such toilets facilitate the working of the quarry, it would be possible to attach a condition to any grant of substitute consent requiring the septic tank and percolation area to be exposed and tested,

and any corrective measures taken, within three months of the date of any grant of substitute consent.

9.8.7 Remedial measures in place are stated to include-

- Maintenance of siltation lagoons in good working order.
- Storage of fuel/lubricant in bunded areas [although none such exist, or if they do exist, they are buried].
- Maintenance of plant and machinery in good working order [some plant and machinery was leaking oil on 30th July 2014].
- Use of spill kits in the unlikely event of an hydrocarbon spillage.

9.8.8 I note that there is no indication given of the depth to groundwater beneath the site, as there appear to be no boreholes. A well is indicated on the site – to the north of the aggregate washing area, yet there are no results as to water quality in this well, flow rates or depth below ground. It is not clear if this well is used for drinking purposes. The location of the Cathill GWS is not indicated on any drawing or map. There is no indication of the location of any other wells or water abstraction points in the vicinity of the quarry, although clearly one such exists to the north of the right-of-way link road between the eastern and western portions of the quarry.

9.8.9 I would be satisfied that, notwithstanding shortcomings within the rEIS in relation to both baseline information and current information in relation to ground and surface water, wells and effluent treatment, and leakage of hydrocarbons, that substitute consent could be granted for this development, subject to the attaching of conditions to mitigate potential damage to ground and surface waters in the area, as suggested in the rEIS and the rNIS.

9.9 Air

Section 8 of the rEIS deals with the issue of air quality. The principal impact of a quarry on air quality will relate to dust. No drilling or blasting is carried out at this site. There is a wheel-wash at the entrance to the western portion of the site, but not on the eastern portion. Dust deposition was measured in 2007-2008 at four points. The tests were carried out from November-January – the highest deposition being 186mg/m^2/day. Further monitoring was carried out in October-November 2013 at three points – the highest deposition being 111mg/m^2/day. The time of year would indicate lower levels – summer readings would likely be higher. Figure 8.1 of the rEIS indicates the location of the 3 no. dust monitoring points from 2013. The location of the 2007/2008 dust monitoring points are not indicated. Whilst some material had been carried out onto the L6512 at the entrance to the quarry, there was no indication of any significant deposition of dust along roadside boundaries or hedgerows in the area on the date of site inspection – following a prolonged dry period.

There was no evidence of any dust-suppression measures on the site on the date of site inspection. Whilst most of the settlement lagoons were dry and the surfaces shrinking/cracking, there was no evidence of any significant wind-blown dust from dried-out silt on the surrounding lands. Mitigation measures in place are stated to include the following-

- Stockpile management to ensure that large stockpiles are not built up.
- Surfaces sprayed with water during dry periods.
- Stockpiles sprayed with water during dry periods.
- On-site speed limits.
- Covering of trucks where dusty materials are being carried off site.

9.10 Climate

Section 9 of the rEIS deals with this issue. A quarry of this size will have had no significant impact on climate.

9.11 Noise & Vibration

9.11.1 Section 10 of the rEIS deals with these joint issues. There is no blasting carried out at this quarry, so vibration is not an issue for consideration. A noise survey was carried out on Wednesday 18th September 2013 between 11.00-17.30 hours, at a total of five locations – four within the western portion of the quarry, and the fifth at the entrance to the house to the south of quarry entrance (the closest noise-sensitive receptor). Samples were taken at 15-minute intervals. There appear to be just four results for each of the five locations. Levels varied from 53-55dBA. As the quarry did not operate at night-time, no survey was undertaken for night-time hours. The principal noise from this quarry will have been from crushing, screening and washing plant, and from loading shovels, with subsidiary noise from HGVs. As the quarry was not operational on the date of site inspection, it is not possible to comment on noise from washing plant. There is mobile screening plant located on the quarry floor – noise from which will have been to some degree mitigated by cliff faces. As noted elsewhere in this report, quarrying at the southern outlier would appear to have been limited to the removal of a portion of an esker, and would seem to have ceased for some time past. Earth berms are in place at the western quarry – particularly at the northern boundary where it abuts the bog. Mitigation measures proposed include the following-

- Construction of further earth berms around the quarry boundary.
- Maintenance of access roads within the quarry free of potholes.
- Maintenance of plant/machinery on site.
- Minimising drop heights of materials.

9.11.2 As referred to elsewhere in this report, the precise indication of noise-sensitive receptors (houses) in the area have not been indicated. There

are no maps included with the application or rEIS showing the location of houses. The location of houses in the vicinity of this quarry has been described in section 9.5 of this report. The two most affected houses would appear to be in the ownership of persons who have an interest in the quarry – and one of which is, in any event, unoccupied. It would be satisfied that the undulating landscape, location of plant on the quarry floor, the presence of earth berms and the finally the separation distance of the quarry from other houses in the area would result in noise nuisance from a quarry of this nature not being significant

9.12 Landscape & Visual Impact

9.12.1 Section 11 of the rEIS deals with this issue. The principal land-uses in the area are agriculture and cut-over bog. There are some exhausted gravel pits in the area. Housing in the area is scattered – the two closest houses to the quarry being owned by landowners with an interest in the quarries. Site visits were undertaken in September and October 2013 for the purposes of writing the rEIS. There are no areas either within or adjoining the quarry which have specific landscape designations in the Galway County Development Plan. The landscape sensitivity for this area is rated as 'low' – the least sensitive of the five classes within the county. The section is accompanied by six colour photographs. The removal of soil and hedgerows have had an impact on the landscape. The quarry is clearly visible from the access road. Construction of berms on the quarry boundary is suggested as a mitigation measure to reduce the impact of the quarry on the landscape.

9.12.2 The number and quality of the photographs which accompany this rEIS are limited. Photographs attached to this Inspector's Report provide additional visual aid to assessing the impact of the quarry on the landscape. The quarry is clearly visible from the access road L6512 – particularly when approaching the quarry from the north. The western portion of the quarry is clearly visible from the L6464 road to the south. The southern outlier of the quarry is located immediately adjacent to the L6464, and so is clearly visible. However, this latter portion of the overall quarry is small, and the area has been returned to agricultural use – just two exposed faces remaining where that portion of the esker (within the site) was removed. The visual impact is not significant. The siltation lagoons within the eastern portion of the quarry are clearly visible. Embankments have not yet been fully colonised by vegetation, and so are more visible on the landscape. Notwithstanding this, the lagoons are located on the lowest portion of the eastern quarry, and do not protrude unduly above the skyline. The remainder of the eastern quarry is surrounded by agricultural land, and disuse for quarrying has resulted in some colonisation by vegetation. The folding nature of the landscape in this area serves to somewhat disguise the quarry. I would not consider

that quarrying this portion of the quarry has had a significant impact on the landscape. The western portion of the quarry is the largest section. Of note, the extensive washing plant is located on the floor of a worked out part of the quarry, and so is not visible from the L6512 which runs close by. In addition, earthen berms have been thrown up around the northern part of the western quarry – partially screening from view that portion of the overall quarry the subject of application for substitute consent ref. SU0073. The main extraction portion of the western quarry is located to the south of SU0073 and does not form part of either application site – SU0072 or SU0073. This active quarry area is located a good distance from roads, and is largely surrounded by agricultural land. It is visible from the L6464 road to the south and from the L6512 road to the north of the quarry. I would not consider that extraction within site SU0073 has had a significant impact on the landscape – it being located on the lower portion of the western quarry. I note that some of the quarry lands have been reinstated to agricultural use. I would be satisfied that quarrying at this overall site has not had a significant impact on the landscape in this area.

9.13 Archaeology & Cultural Heritage

Section 12 of the rEIS deals with this issue. The site was visited in October 2013. There are no identified archaeological sites within the boundaries of the site. There are stated to be a total of 5 no. archaeological sites within 100m of the quarry – the location of which are not shown on any map. It is stated that a lime kiln within the quarry has been obliterated, as have two further lime kilns immediately outside the quarry boundary to east and west. It is indicated that the time of removal is not known – and that they may have been removed prior to commencement of quarrying. These lime kilns are not included in the Record of Monuments and Places (RMP) of the Office of Public Works. I note that the red line boundary indicated in the rEIS covers all quarrying operations on the eastern side of the access road, but only the aggregate washing area on the western side of the road. It does not seem to refer to the western quarry area (the subject of application ref. SU0073). There is a Children's Burial Ground on the northeastern boundary of the overall quarry (GA017-13001) – with a buffer zone indicated between it and the eastern portion of the quarry. This buffer zone is a grassed field. Quarrying at the eastern portion of this quarry has not had any impact on this monument. There is a bi-vallate ringfort to the northeast of the southern outlier portion of this quarry (GA017-131). This ringfort is located atop the esker – part of which was quarried out (ref. SU0073). There is a derelict house immediately to the south of the ringfort – not part of the quarry site. Notwithstanding the removal of part of the esker, the southern outlier quarry has not had a significant impact on the monument. Because of the extensive nature of the quarry, it may be that some unrecorded archaeological material might have been disturbed. I would note that

planning permission does exist for part of this overall quarry. There are no Protected Structures located either within or immediately abutting the quarry site. The old farm buildings to the southeast of the eastern portion of the quarry are surrounded by mature trees and have not been significantly impacted by the quarry.

9.14 Material Assets

Section 13 of the rEIS deals with this issue. The development is stated to have no impact on tourism in the area – particularly the nearby village of Dunmore. The impact on the geological resource has been examined elsewhere in the rEIS. The removal of sand & gravel is not significant in terms of the quantity of such materials available throughout the wider area. There has been a loss of agricultural land. However, the loss is not significant in relation to the quantum of such lands in the area. Restoration of the quarry will return some lands to agricultural use. The impact on roads is dealt with elsewhere in the rEIS. This quarry will not have had a significant impact on material assets in the area.

9.15 Traffic & Transportation

9.15.1 Section 14 of the rEIS deals with these issues. The level of traffic currently accessing and leaving this quarry is at an historically low level, compared to with the height of economic activity in 2002/2003. The County Development Plan looks favourably on the development of quarries within the county. The quarry is approximately 4km from the N83 and 6km from the N17. The connecting county road network is narrow and twisting. HGV movements are currently estimated to be 60-70 loads per week. Works have been carried out by the quarry operator to the local road network in order to improve sight visibility. Local improvements have been carried out to the Cathill junction in association with the local authority [photograph referred to in the rEIS, but not in fact included]. The quarry generates a low volume of traffic relative to the carrying capacity of the road. The increase in traffic in terms of peak flows on National Routes is negligible. It is stated that appropriate warning signage will be erected on the approaches to the quarry entrances. I note that such signage has been erected.

9.15.2 The L6512 access road to the quarry is narrow and twisting. Sight distance at the main entrance to the western quarry is good in both directions. Notwithstanding the 80kph maximum speed limit, the alignment of the road would not allow for such speeds. The quarry was not operational on the date of site inspection by this Inspector. It was opened briefly to load two HGVs with aggregate. The L6512 was quiet on the date of site inspection – the principal traffic being farm machinery involved with baling of silage on nearby fields. I have elsewhere in this

report commented on road improvements carried out and the nature of financial contributions which might be paid. The quarry has not had a significant impact on the road network in the area, notwithstanding the narrow nature of the roads.

9.16 Interaction between Aspects of rEIS

Section 15 of the rEIS addresses the issue of interaction between the foregoing headings. I do not consider that there are any significant interactions which have not been addressed within the rEIS.

9.17 Conclusion

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

10.0 ASSESSMENT – Appropriate Assessment

10.1 A remedial Natura Impact Statement (rNIS), dated November 2013, accompanies the applications for substitute consent (SU0072 & SU0073) – both of which are operated by Finnegan's Sand Ltd. Of particular note, is that water handling facilities are shared. The site was visited on 29th & 30th October 2013.

10.2 European sites within the vicinity of the quarry include-

- Lough Corrib SAC (Site code 000297) – some 170m to the north of the closest part of the quarry.
- Coolcam Turlough SAC (Site code 000218) – some 12.5km to the northeast.
- Croaghill Turlough SAC (Site code 000255) – some 14.0km to the northeast.
- Williamstown Turlough SAC (Site code 002296) – some 9.5km to the northeast.
- Levally Lough SAC (Site code 000295) – some 9.25km to the southeast.

The latter four of this list can be excluded from consideration owing to the substantial distances at which they are situated from the quarry, and the absence of any direct surface hydrological link between them and the quarries, the subject of these applications for substitute consent.

10.3 Lough Corrib SAC, whilst approximately 170m to the north of the quarry as the crow flies, the closest point of the SAC (via surface water connection) is approximately 750m – the distance between the outfall point from the siltation ponds to the Sinking River – which forms part of the wider SAC. This linkage is initially via a field drainage ditch which is heavily overgrown with vegetation, and then subsequently to a much larger drainage ditch on the opposite side of the road to the north of the quarry – which larger drain is also heavily overgrown with vegetation. A number of field drains coalesce just to the south of the 36" diameter culvert beneath the aforementioned road. The area of the SAC is 20,556ha. It is stated that rivers (mostly to the east of the Lough) are included largely because of their importance for Atlantic salmon. The generic conservation objective is 'to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected'. The qualifying interests of the SAC include-

- Freshwater pearl mussel (*Margaritifera margaritifera*).
- White-clawed crayfish (*Austropotamobius pallipes*).
- Sea lamprey (*Petromyzon marinus*).
- Brook lamprey *(Lampetra planeri*).
- Salmon (*Salmo salar*).
- Lesser horseshoe bat (*Rhinolophus hipposideros*).
- Otter (*Lutra lutra*).
- Shining sickle moss (*Drepanocladus vernicosus*).
- Slender naiad (*Najas flexilis*).
- Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*).
- Hard oligo-mesotrophic waters with benthic vegetation of *Chara spp*.
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation.
- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco Brometalia*) (*important orchid sites).
- Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*).
- Active raised bogs.
- Degraded raised bogs still capable of natural regeneration.
- Depressions on peat substrates of the Rhynchosporion.
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*.
- Petrifying springs with tufa formation (*Cratoneurion*).
- Alkaline fens.
- Limestone pavements.
- Old sessile oak woods with *Ilex* and *Blechnum* in British Isles.
- Bog woodland.

10.4 Juvenile Brook lamprey are recorded in the Sinking River. Atlantic salmon, which use the headwaters of the SAC for spawning, are not common in the Sinking River due to lack of gravels in the river. Otter spraints were encountered along the drain which discharges into the Sinking River in the survey carried out for the rNIS. White-clawed crayfish were encountered at site SR1 in the Sinking River during the survey. Freshwater pearl mussels do not occur in the Sinking River or the Clare River. There is little by way of aquatic vegetation in the Sinking River. There are no habitats of conservation interest within or abutting that stretch of the Sinking River adjacent to the site.

10.5 Macro-invertebrate sampling was carried out at three points on the Sinking River (SR1, SR2 & SR3). Whilst there is no map accompanying the rNIS to indicate the locations of the sampling points – 3 no. colour photographs of the sampling points are indicated. They are stated to be one, upstream of, one adjacent to, and one downstream of, the quarry drain discharge point to the Sinking River.

10.6 The NPWS identifies the principal threats to the SAC as pollution from agriculture and sewage discharges; which are causing localised eutrophication. Housing and boating are causing a loss in local lakeshore vegetation. Drainage and harvesting of peat is causing damage to raised bog habitats. Discharge from the silt ponds within this quarry is to a field drain. Whilst the exact location of this discharge point is not indicated on drawings or maps submitted with the applications for substitute consent, it was easily located on the date of site inspection by this Inspector. The discharge location is indicated on planning history drawings attached to these quarry sites. The outfall drain discharges north to the Sinking River; a tributary of the Clare River, which in turn drains into Lough Corrib just to the north of Galway City. The Sinking River, and the drain which debouches into it, have been the subject of excavation, to deepen and widen the watercourses, in the past. Spoil deposited on their banks has re-vegetated naturally.

10.7 The principal threat to the SAC water body is the discharge from the siltation ponds, which might have contained silt. I would note that planning permission was granted on 14th May 2012 for retention of the siltation ponds at this quarry (ref. 11/1030). The application was stated to be for retention on a temporary basis, pending levelling, reinstatement and re-use for agricultural purposes. There was a proposal for new siltation ponds on the opposite side of the access road. The quarry was not operational on the date of site inspection: there was neither inflow to nor outfall from the siltation lagoons. There was no indication of any build-up of silt at the outfall point. These siltation lagoons are substantial structures and are almost full of silt at this stage. Vegetation within the discharge

drains helps to precipitate out residual sediment. There is stated to be no silt in the discharge from the drain into the Sinking River. I would be satisfied that the constructed siltation lagoons have effectively trapped significant volumes of sediment from this quarry, and that the vegetated nature of the 750m length of field drains would have further assisted in precipitating out any residual sediment which might have been discharged. The heavily vegetated drains would not have been suitable for salmon, brook lamprey or white-clawed crayfish. It is stated by the NPWS that rivers (mostly to the east of the Lough) are included within the SAC largely because of their importance for Atlantic salmon. Neither the 750m length of drains to which treated waters from these quarries is discharged, nor the adjacent Sinking River, is suitable habitat for Atlantic salmon.

10.8 The separation distance between the Sinking River and the quarry (170m approximately) would be sufficient to ensure that any fugitive dust blown from this quarry would not have had a significant impact on any of the conservation interests of the SAC – as most dust would settle on intervening ground.

10.9 A third threat to water quality if from accidental hydrocarbon spills – with pollutants working their way through groundwater to ultimately discharge to surface waters. It is evident from my site inspection that machinery/plant and hydrocarbons stored on this site have leaked in the past and are continuing to do so. The spillages would appear to be minor, and are unlikely to have resulted in a threat to the SAC.

10.10 The cumulative impact of the development with other plans or projects has been considered. The wastewater treatment plant for the village of Dunmore (located upstream of the quarry) has recently been upgraded. There are no other active quarries in the immediate vicinity. Peat is harvested from the bog to the northwest of the quarry. The proposed development will not result in any cumulative impact on the SAC, when considered with any other plan or project in the area.

10.11 Mitigation measures suggested in the rNIS include storage of fuel/lubricants in bunded areas, refuelling in bunded areas, regular maintenance of plant/machinery, and availability of spill kits. There are no other specific measures proposed. Monitoring of the discharge from the settlement ponds is recommended. It is concluded that it is not likely that there has been, or that there will be, any significant adverse effects from the quarry development on the structure and/or function of the Lough Corrib SAC, or any other European site. There will not be any significant adverse effect on the conservation objectives of the site or its qualifying interests. I would concur with this conclusion.

11.0 RECOMMENDATION

I recommend that the Board grant substitute consent for this quarry for the Reasons and Considerations set out below, and subject to the attached Conditions.

REASONS AND CONSIDERATIONS

(a) the provisions of the Planning and Development Acts, 2000 to 2011, as amended, and in particular Part XA,

(b) the 'Quarry and Ancillary Activities, Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government in April, 2004,

(c) the provisions of the Galway County Development Plan 2009-2015,

(d) the remedial Environmental Impact Statement and the remedial Natura Impact Statement submitted with the application for substitute consent,

(e) the submissions/observations made in accordance with regulations made under section 177N,

(f) the planning history of the site,

(g) the pattern of development in the area

(h) the details contained within the application for substitute consent on an adjoining site ref. SU0073, and

(i) the nature and scale of the development the subject of this application for substitute consent.

CONDITIONS

1. This grant of substitute consent shall be in accordance with the plans and particulars submitted to An Bord Pleanála with the application on the 12th day of November 2013 and the 13th day of January 2014. This grant of substitute consent relates only to development undertaken as described in the application and does not authorise any future development on this site.

Reason: In the interest of clarity.

2. A detailed restoration scheme for the site shall be submitted to the planning authority for written agreement within six months of the date of this order, unless before that date, an application for planning permission for continuation of quarrying is submitted. The following shall apply in relation to the design and timing of the restoration plan:-

   (a) Prior to the commencement of restoration works, a further survey of the site by an ecologist shall take place to establish, in particular, the presence of badgers, nesting birds, bats or other species of ecological value, including flora, which may have recently invaded the site. The restoration plan shall have regard to the results of this survey.

   (b) Details relating to measures to ensure safety during site restoration shall be provided.

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

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

3. Within three months of the date of this order, details of the surface water and ground water management system for the entire quarry site, including a timeframe for implementation, and which incorporates the mitigation measures and water management proposals, as set out in the remedial Environmental Impact Statement, shall be submitted to, and agreed in writing with, the planning authority. In particular, the proposals shall provide for-

   (a) the exposure of the septic tank and percolation area which serve the quarry offices;

   (b) details of compliance with the standards set down in the document 'Wastewater Treatment Manual – Treatment Systems for Single Houses',

produced by the Environmental Protection Agency, for the septic tank system serving this quarry;

(c) the excavation of all soil/earth/gravel into which hydrocarbons have leaked, and the removal of such excavated material off-site to a licensed disposal facility;

(d) the provision of a fully bunded concrete hard-stand around the diesel generator at the aggregate washing plant;

(e) details of bunding for all fuel tanks and hydrocarbon/lubricant storage areas within the quarry – including a bunded area for parking and refueling of dumper trucks/loading shovels and other such plant;

Reason: To ensure protection of groundwater and surface water quality, in the interests of public health and ecology.

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

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

5. The developer shall pay the sum of €5,000 (five thousand euro) (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the planning authority as a special contribution under section 48 (2) (c) of the Planning and Development Act 2000 in respect of upgrading and maintenance of the local road network. This contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate. The application of indexation required by this condition shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board to determine.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

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Michael Dillon,
Inspectorate.

8th August 2014.