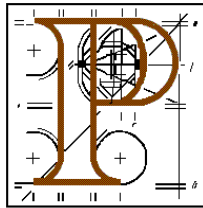


An Bord Pleanála



Inspector's Report

DEVELOPMENT:- Quarry at Ballinabarny North and Bolagh Lower, Redcross, Co. Wicklow

Planning Authority: Wicklow County Council

Applicant: East Coast Transport Ltd T/A ECT Sand & Gravel

Application Type: Application for Substitute Consent.

DATE OF SITE INSPECTION : 8th June 2015

INSPECTOR: Mairead Kenny

SITE LOCATION AND DESCRIPTION

The site is located in the townland of Ballinabarny North and Bolagh Lower, about 4km to the south-east of Rathdrum village and 4km due west of the N11.

Access to the site is by way of the county road network, The applicant's information indicates that a number of haul routes have been used over the years and that traffic has travelled to the north-east and east in the direction of the N11 and to the west in the direction of the regional road / Rathdrum village. The haul routes shown would join the N11 at The Beehive to the north-east and The Tap to the east, both of which are well known landmarks in the locality. This section of the national road is heavily trafficked and for the duration of the period to which this application relates the national road was un-improved. The applicant's submission refer also to use of the minor road to the south from Kilmacrea Upper for the purposes of accessing the site. The site is positioned at the end of a private cul de sac road and located to the west of the L15155-0, the road to Kilmacrea Upper / Kilmacrea Cross Roads.

The rural area in which the site is situated is characterised by an undulating landscape which is mainly in pasture. The lands are relatively high to the east and south of the quarry being in the region of 250mOD at most while to the west the elevations are lower with the presence of Avonmore River at 50mOD. The 23 hectare quarry site itself is on relatively flat ground between 111m and 134mOD height. The quarry is largely screened from views from the public roads by the topography and from dwellinghouses by hedgerows. The extraction is most prominent in views from the county road to the east of the site. Just beyond that road are more elevated lands. Thus, as noted during my inspection of the site and surrounding area the zone of visibility of the subject development is relatively limited notwithstanding its nature and extent.

The main river in this area is the Avonmore / Avoca, which enters the sea at Arklow to the east. The lands in the vicinity of the quarry drain to the Balleese Stream, which is an important salmonid tributary of the Avonmore River which holds important populations of salmon and trout. The site is bounded by a small watercourse which is part of the headwaters of the Balleese. The stream was not accessible at the time of my inspection from within the site but only from a nearby bridge at the county road to the north-east.

The site itself is accessed from the south-east. The private road network on the applicant's overall landholding includes two main routes by which the quarry can be accessed, as well as a partly constructed third route. I refer the Board to the map attached to this report which identifies the three road sections which I refer to as routes A, B and C. The relevant road for the purpose of this application is that which takes the central course, route B. This passes through the applicant's lands which are subject of an authorised waste activity for the spreading of soil. Permission has also been granted and partly implemented to develop a new access road (route C) connecting to the county road at a point to the north of Kilmacrea Cross Roads.

Further details on the internal roads together with the nature of the activity on the site and on the adjacent lands are set out below.

Photographs of the site and surrounding area, which were taken by me at the time of my inspection are attached.

DESCRIPTION OF PROPOSAL

The application is for substitute consent for an existing area of extraction of 20.1584 hectares comprising extraction of sand and gravel with associated processing areas, stockpiling areas and ancillary works. The area to which the application refers is outlined in red. The overall holding is set out in blue and includes the majority of the access road to the site.

The application is accompanied by a remedial Environmental Impact Statement (rEIS). This document describes the development subject of this application. The entirety of the site is developed as a quarry. Soiled water and other ponds are mainly positioned in the northern half of the site. Buildings and processing plant are positioned in the centre and southern parts of the site. There is a well at this location also and a septic tank. Route A did not appear to be in use at the time of inspection.

Buildings and structures on site include workshop / machinery shed, 4 no. storage containers, tools storage container, 2 no. portable office buildings, 1 no. portable office / canteen / WC, a pump-house, electrical control rooms, diesel generator container, a substation. In total the area of the buildings is stated to be 376 square metres. In addition on site there are bunded storage tanks and sand/gravel washing/screening plant.

In relation to the processes undertaken at the quarry I note the rEIS presents a number of details.

- The operations and processing have been restricted to sand and gravel extraction and processing and the production of sand for building, plastering and concrete manufacture and washed pebbles - blasting has not occurred
- normal hours of operation have been 08.00 to 17.00 Monday to Friday and 0800 to 1400 on Saturday
- there is no precise indication of tonnage / years of operation
- on average ten persons were directly employed at the site and 5 indirectly
- all oil tanks are on concrete aprons with oil interceptors and are bunded
- an existing maintained tank has been used on site for the treatment of wastewater and there is a bored well and a small pumphouse
- surface water has been collected in lagoons and storage tanks and recycled within the site

- a closed loop system operates for washing water
- in normal operation the water table is lowered to bedrock elevation and the extraction area drains by gravity along a system of surface water drains towards a sump at the bottom of a pond at 111mOD at the north-west
- water is pumped occasionally to a series of settlement ponds and then discharged via a stone soakway system into the quarry stream and into the watercourse to the north and from there to the Avoca
- the site has been secured by mounds, hedgerows and fencing which are designed to provide landscape integration also and is accompanied by warning signs
- the operation has been managed by a full-time site manager and by other personnel including the owner for most of the time
- the extraction rate of production on average of 125,000 tonnes per annum within the period of the development has given rise to about 26 trucks per day in and out and 15 car movements for staff and visitors
- the restoration will involve preparing the site for natural flooding after the resource is exhausted and all future extraction is completed.

By way of a submission to the Board received on 2nd October 2014 the applicant has submitted a map of the land ownership and dwellinghouses in the area and of the main habitats on site. The latter map is described as being a supplement to Chapter 4 of the rEIS.

PLANNING HISTORY

The most relevant planning history is summarised below.

The site

Under **Planning Reg. Ref. 06/4577** permission was granted for a new entrance and driveway to an existing sand and gravel pit and farm. That is the route referred to as route C.

Under **QY39** an application was lodged on 27th July 2005 for registration of the quarry. The applicant was requested to provide additional information including a map of the relevant area. The Planning Authority did not register the quarry as it was decided that the applicant did not respond to the request for additional information hence the requirements of registration were not met. The report of the Planning Authority submitted in relation to the current application for substitute consent notes that there was confusion on behalf of the applicant in relation to documentation to be submitted. Having regard to section 3.4 of the Act and the related guidelines which refer to fulfilling requirements in relation to registration the

Planning Authority consider that the requirements in relation to registration were fulfilled.

There was **enforcement** action on foot of complaints received in December 2007. These include a :

- Warning Letter issued on 12th December 2007 with respect to the operation of a quarry without permission and non-compliance of conditions under Planning Reg. Ref. 06/4577
- Enforcement Notice served on 5th June 2008 requiring cessation of activities, removal of structures and removal of roadway
- Section 160 orders of 30th June 2008 and 16th July 2008 instigating legal proceedings
- A number of inspections in 2008 and in 2009 and 2011 during which times the quarry was noted to be in operation¹.

Under **PL27.233638** the Board considered an appeal of the decision of Wicklow County Council to grant permission under Planning Reg. Ref. 08/1153 for retention and continuation of use processing are, stockpiling and various buildings and plan etc. The site was of stated area of 25.9617 hectares and permission was sought for the retention and continuation of use of sand and gravel extraction at 21.07 hectares in 4no. phases. Processing of 150,000 tpa was proposed. The application was accompanied by an EIS. A request for additional information by the Planning Authority included matters related to hydrogeology (water table, cone of depression and extent of resources below the water table), habitat restoration, fisheries protection (including emergency overflow and position of berms), hours of operation and lifetime of the quarry and other details including the suitability of the road network.

The Planning Authority decided to grant permission subject to conditions including :

- 16 year duration
- Control of surface water to include settlement ponds
- Ensure development does not affect water quality or yields and to undertake remedial works
- Groundwater monitoring

¹ Pages 12-13 of the Inspector's report under QV0299 refer. The levels of extraction in 2011 were noted to be less intensive than in previous inspections and in an inspection on 13th January 2012 there was no excavation or processing taking place but large piles of excavated, screened and sorted material were in situ. The quarry was active again in April 2012.

- Installation of flow recorders and loggers along the stream to be installed upstream of the site and in the event of substantial reduction in flow works to cease
- Remedial measure to treat elevated manganese at water supply source
- Noise and dust control monitoring
- Wastewater treatment
- Bunding, wheelwash, concrete aprons and other standard requirements
- Use only of new access and closure of existing entrance and commercial traffic not to exceed 50 HGVs in and out per day
- Environmental monitoring
- Site specific EMS
- Phasing and restoration.

The Board's reason for refusal referred to the planning history of the site, the failure to register the quarry in accordance with section 261, the judgement C-215/06, the decision of the Board that the development for which permission is sought is of a class that requires EIA and includes a significant element of retention, the Board is precluded from granting permission in this case.

Under **Planning Reg. Ref. 12/6015** permission was granted for a waste recycling facility to include recovery and recycling of construction and demolition wastes at a maximum rate of 25,000 tonnes per annum.

Under **QV0251** the Board determined on 28th March 2014 that development was carried out after the 1st day of February 1990, which development would have required an environmental impact assessment. The Inspector's report notes that the available aerial photographs indicates site extraction areas of 2.9 hectares (1995), 7.4 hectares (2000) 16 hectares (2005)

The Inspector's report also describes a series of applications for waste permits related to the spreading of soil.

The applicant was advised by a note on the Board Direction that the remedial EIS to be submitted in support of the application for substitute consent would need to be comprehensive and up to date and that the re-submission of the 2008 EIS would not be acceptable.

Other lands

Under **Planning Reg. Ref. 12/6015** permission was granted for a waste recycling facility to include recovery and recycling of construction and demolition wastes

involving crushing and screening of soils, stone, concrete and tarmacadam materials at a maximum rate of 25,000 tonnes per annum. The location of that development is to the south of the quarry and within the same landholding. Contrary to the recommendation of the Council's Director of Services and Senior Executive Planner, permission was granted for a duration of 4 years and 6 months only after the expiration of which time all use shall cease and all structures shall be removed and the site restored. Other conditions attached related to landscaping, dust control and noise levels.

PLANNING POLICY CONTEXT

Wicklow County Development Plan

A number of policies support the exploitation of natural aggregate resources subject to principles of sustainability and protection of amenities.

Criteria for consideration of particular sites for development of the extractive industry are set out in section 8.4.6 of the plan and include the safeguarding to the greatest possible extent of the environment and landscape, accessibility to suitable roads, safeguarding of residential and tourist amenities, provision for suitable beneficial after use of the land and subject to the working, landscaping, restoration and aftercare of the site to be to the highest standards.

The plan provides details of the information to be presented in an application which shall include :

- information on the nature of the deposition including the results of site investigation and on the proposed method of extraction including the quantity of material and method and depth of working
- details of processing and the expected number of vehicle movements and their type
- information regarding the environmental effects of the proposal including from blasting and the generation of noise, dust, visual or hydrogeological impacts
- details of restoration and after care and after use.

The plan identifies matters which may be addressed by the application of planning conditions including time limits, conditions to control the extent of development, financial contributions, conditions relating to the operation and restoration including monitoring and repair of the affected road network and landscaping and screening. In particular there will be a requirement that the developer will submit an annual summary of all environmental monitoring results for the year.

The site is within an area designated as an Area of Special Amenity.

Prospect no. 37 is from the L5155 at Connary – the prospect is towards the Avonmore River Valley.

Views 19 and 2 are from points to the south of the quarry. View 19 is from L6154 to the coast to the north-east and south. View 20 is from the L5677 toward Brittas Bay sea, sand and dunes and beach.

PRESCRIBED BODIES SUBMISSIONS

National Roads Authority

The Authority notes the traffic analysis undertaken and the traffic generation attributable to the operation as outlined in section 3.3.7 of the rEIS. The Authority is satisfied with the scope of the analysis and has no further observations to make.

DCENR / Geological Survey of Ireland

The GSI has no comment to make in relation to the rEIS.

REPORT OF PLANNING AUTHORITY

The report of the Planning Authority is stated to address the items required under section 177I(2) as required.

Planning History

The planning history detailed refers to :

- the permission granted on under Planning Reg. Ref. 12/6015 for a waste recycling facility at the adjacent site
- the decision of An Bord Pleanála under PL27.233638 to refuse permission for retention / continuation of sand and gravel extraction at this site
- Planning Reg. Ref. 06/4577 for a new entrance and driveway to the existing sand and gravel pit and farm
- Planning Reg. Ref. QY39 application for quarry registration.

Enforcement History

Unauthorised development file reference 2629 refers.

County Development Plan Objectives

A range of policies relating to the extractive industry and the making of applications for quarries are outlined. Policy relating to Areas of Special Amenity are noted.

It is noted that there are no listed views / prospects impacting on the site and no archaeological sites located within the site boundaries.

Environmental Issues / Remedial Measures

The report of the Planning Authority indicates that there are no Natura sites within or adjoining the site of the application. The effects on the three closest sites of relevance are described.

Deputy's Pass Nature Reserve cSAC (Site Code 000717) is managed as a Nature Reserve. The Conservation Objectives are noted. The main conservation objective is related to the Oak woodland. The site is 3.6km from the quarry and there are possible links by way of surface-water, groundwater, vibration, airborne dust. Surface water is not considered to be an issue due to lack of conduit. The downstream position of the quarry relative to the Potters River is noted. Potters River flows through and along the Natura Site. Surface water is not therefore considered to be an issue. The quarry is located at 400-500m and the minimum floor level is given as 111m. Given the separation and the level distance there is considered to be no groundwater link. Vibration is not an issue. In view of the separation distance and the dust control measures and type of impact arising from airborne pollutants is not considered to be an issue.

Vale of Clara (Rathdrum Wood) SAC (Site Code 000733). The Vale of Clara woodland lies between 107m and 244m above sea level. It is a remnant of the once extensive forests of east Wicklow. The SAC is 4km from the quarry and the main possible links would be surface water, groundwater, vibration and airborne dust. The Avonmore River would be a possible conduit but the quarry is downstream from the designated site so surface water is not an issue. Groundwater links are discounted for reason of the separation distance and the level difference. Vibration is not an issue. Airborne dust is not an issue due to the separation distance and the potential for impact on an oak wood.

Buckroneys-Brittans Dunes and Fen cSAC (Site Code 000729) is a complex of coastal habitats about 10km south of Wicklow town. Given the separation distance it is stated that the only potential link is that of a contaminated surface water link. The Redcross River flows into this Natura site and there are streams that run near the site into the Redcross. Given the nature of the sand and gravel quarry and the separation to these rivers it is unlikely that any surface water would run into same. There may have been some deposits of sediment due to run-off from roadways but this would be limited and needs to be considered in combination with the length of the watercourse between the quarry and the Natura 2000 site.

In relation to other environmental impacts the report of the Environmental Services Section indicates that the extraction of sand and gravel from the site has in localised areas extended below the water table resulting in the creation of a groundwater pond in the base of the pit and altering the classification of groundwater vulnerability from High to Extreme. Water sampling undertaken in 2008 were in general good but there were indications of some hydrocarbon contamination in one of the boreholes, high manganese values in one borehole and in one surface water location and in one of the surface water samples there were indications of elevated orthophosphates. A walkover survey was undertaken by AWN in July 2014 as part of the preparation of the rEIS but no water samples were taken. There is thus no

additional up to date information to determine whether the hydrocarbon results were an isolated event or whether the water quality has altered since 2008.

Manager's Opinion

The rEIS highlights a number of issues. It deals with the area that has been extracted without the benefit of permission but also refers to 'ongoing operations' and additional future extraction. This is evidence in the cross sections in the rEIS for example which refers to a final pit floor, although it is acknowledged that this is subject to future permission. The consent application is seeking not only to legitimise the areas quarried but also to continue the use and further extend the area of quarrying as part of the application. That is not the Planning Authority's understanding of Part XA.

The rEIS provides information on hydrogeological assessments, surface water and groundwater quality results, levels and flow rates all of which relate to investigation dating back to 2008. With the exception of an indication of a lowering of groundwater levels in the boreholes in the quarry in 2014 there is no additional information to determine whether the hydrogeology, surface or groundwater quality and quantity has been adversely altered since 2008.

Notwithstanding the limitations of the rEIS the following applies :

- The area quarried forms a natural extension of the original resource
- There have been no concerns with regard to the entrance
- There is a lack of connectivity to sensitive environmental sites and the quarried area has not resulted in any significant environmental impacts
- There has been a relatively limited visual impact with the main visual impact being from a forest trail at Kilmacrea Upper therefore visual impact has not been significantly negative and will be mitigated following restoration.

Notwithstanding the shortcomings of the rEIS which the Board may consider appropriate to address prior to issuing their decision, it is the Manager's opinion that in principle substitute consent could be granted. The stated reason for granting permission is having regard to :

- the history of quarrying on the site and given that the extracted area forms a natural extension
- the provisions of the development plan
- the lack of evidence of any significant effects or ongoing impacts due to the excavation that has taken place on site
- the relatively limited visual impact of the extracted area.

The development would accord with the objectives of the development plan and is acceptable in terms of visual impact, traffic safety and would not be injurious to the environment.

The list of recommended conditions relates to :

- the consent should be clarified as relating solely to the area that has been quarried and not permitting further extraction within the red site boundary unless permission is granted for such works
- annual surface and groundwater sampling to be undertaken
- a detailed scheme for rehabilitation and landscaping of the extracted area
- contribution scheme payable in accordance with the Scheme in place during the relevant period.

FIRST PARTY COMMENT

While there may have been some confusion initially as to whether or not the entire requirements of section 261 in relation to Planning Reg. Ref. QY39 had been met, the Council has now acknowledged that those requirements have in fact been fulfilled.

Had that position been adopted previously the applicant would have avoided the need to make application Planning Reg. Ref. 08/1153 and would have avoided the need for the current application for substitute consent.

The Council now expresses its opinion that substitute consent should be granted but subject to certain financial conditions. In inserting any contribution conditions the Board should take into account those additional costs incurred by the applicant in the special circumstances of this particular case to date which might have been avoided. The appropriate amount should be left to be agreed in due course between the applicant and the Council and in default of agreement referred back to An Bord Pleanála.

ASSESSMENT

I consider that the application for substitute consent may be considered under the following headings :

- Whether the development is acceptable in principle
- Conditions relevant to the application
- Environmental Impact Assessment
 - Impacts on groundwater, surface water and related ecology
 - Roads and traffic impacts
 - Landscape and visual impacts
 - Cultural heritage issues
 - Other impacts including ecology and noise and dust
 - Environmental impact assessment conclusions
- Appropriate Assessment
- Recommendation.

Principle

I submit that the application relates to an established quarry. Notwithstanding the lack of clarity surrounding the registration process I note the position of the Planning Authority to the effect that this is resolved. I also refer to the fact that in deciding that the Board could not consider a grant of permission under PL27.233638 the Board did not make any statements regarding the overall status of the quarry. The extraction subject of this application is within the same site and development plan policy continues to support the extractive industry. In summary, in terms of the principle of the extension of the quarry which has taken place, I consider that the development is acceptable.

Relevant conditions

In the event that the Board decides to grant substitute consent, the issue of appropriate conditions will arise. The planning authority has recommended conditions including requirements relating to the extent of the development to which any permission relates, annual surface water and groundwater sampling, details of rehabilitation and landscaping and details of any contribution payable. I agree with the submission of the Planning Authority on these matters.

In the event of further applications for continuance of quarrying or expansion of activities at the site some of the the matters identified by the Planning Authority would be re-visited. Recent legislation provides for further applications and the Board has requested the owner / operator to clarify whether it is intended to make such an application.

Regarding the financial contributions which might be payable the submission from the applicant dated 8th January 2015 refers. This notes the history of the applications in particular in relation to the registration of the quarry and states that due to unnecessary expenses incurred by the applicant it would be reasonable that any financial contribution payable be agreed between the Planning Authority and the applicant. I agree with the request, albeit not for the reasons presented by the applicant. In my opinion the Planning Authority is best placed to determine what level of payment would be reasonable in terms in particular of road maintenance requirements which may have arisen as a result of the development which took place.

Environmental Impact Assessment

Groundwater, surface water and dependent ecology

The operation has involved dewatering of the quarry which is stated to be at or marginally below the water table at the time of preparing the rEIS. I note that the EIS previously prepared indicated that excavation was already below the water table. The effect of this dewatering has included a loss of water from the watercourse to the north. Water quality issues are also reported.

In the foregoing I outline the information presented by the applicant particularly in Chapters 4 and 5 of the EIS and assess whether the Board is in a position to undertake a complete Environmental Impact Assessment of this case in terms of :

- The nature of the information presented and of investigations undertaken
- The impacts on the receiving environment.

Information presented and investigations undertaken

The Board is referred to the rEIS which presents work by AWN Consulting Limited as well as the EIS prepared by AOS in connection with PL27.233638 and the Hydrogeological Investigation report of WYG submitted in response to a request by the Planning Authority for further information under PL27.233638. The report of WYG is heavily referenced in the rEIS. The AWN report is based on a site walkover in July 2014 and on to water level testing of the wells on site. Chapter 4 which deals with Flora and Fauna provides details of the existing environment and the effects of the development, including in relation to the issue of aquatic ecology.

I acknowledge the inherent difficulty in describing a development which took place over a period of 23 years, in the context of the apparently limited environmental management and monitoring, which would have resulted in a repository of relevant data. The 2008 EIS and report of WYG provides a snapshot of the situation in 2008. The rEIS presents little new information in terms of existing conditions and does not adequately utilize records from other sources (e.g. sales records, water quality monitoring by EPA and so on) to present a picture of the nature and intensity of the operation over the decades and from that to describe the impacts which are likely to have occurred. While the extent of the development is stated to have been 125,000 tonnes per annum 'over the period' this information combined with the area of the site comprises the description of the development in terms of the working of the site as set out in Chapter 2. Chapter 5 does provide a good description of the existing water regime on site. In terms of the data presented there is very limited indication of what occurred in earlier decades or the changes which occurred since 2008. It is not clear whether the extraction level of 125,000 tonnes per annum dates back to 2008 or even to 1990. There is no evidence presented in relation to the direction of working or the period of commencement of dewatering and other aspects of the operation and limited information relating to any mitigation and / monitoring, which are relevant to consideration of impacts on water and ecology as well as other effects.

I share the opinion of the Planning Authority that there is deficiency in information and consider that this relates particularly to the impacts since 2008 and generally for the period of working below the water table, which duration is not precisely defined or impacts assessed. Furthermore I consider that the situation prior to 2008 has not been set out in a comprehensive manner. The Planning Authority recommendation to grant permission is based on a conclusion that there has been a lack of demonstrated adverse environmental effects, which I now examine.

Information relating to likely impacts on receiving environment

I refer firstly to the significant predictions which WYG indicated would result from the extraction over a period of 20 years and based on 150,000 tonnes per annum working in 4 phases:

- Groundwater level changes, resulting in an increase in the already observed reduction in flow in the stream during phase 3 –
- As the water will be pumped back to the stream the impacts are only for 900m and the reduction in flow is a decrease from 128 l/s to 67 l/s
- Additional 5 boreholes together with calculations allowed for a determination of the maximum predicted extent of the cone of depression of 160m – low bedrock transmissivity so bedrock would contribute little water – determined from 71minute pumping test

- There would be no drawdown to the north and east of the quarry as the aquifer would be recharged by the stream and no impacts on private wells
- The total volume of the resource is 1,5854,959 m³ - 63% in the saturated zone
- Elevated manganese and hydrocarbons recorded – otherwise quality is very good.

I have summarized above the conditions recommended by the Planning Authority in dealing with the application in 2008. Notwithstanding that these were not binding applicant, I consider that the recommended conditions address matters which would be deemed necessary in order to ensure environmental protection. Phase 3 which was predicted to impact on the stream has commenced. I note that there is no evidence before the Board to suggest that monitoring of groundwater levels, water quality or river flow took place. In the absence of such information it is difficult to conclude that the development did not give rise to significant adverse effects on water quality and the dependent ecology.

I refer in particular to the impacts on fisheries. The information available relating to this development comes mainly from PL27.233638. It indicates long-standing impacts on a stream along the northern and part of the eastern boundary of the site. This small stream together with small watercourses make up the headwaters of the Balleese Stream which is an important salmonoid tributary of the Avonmore River. As noted by ERFB due to the small area of the catchment of the stream the watercourse is liable to have very low flows from time to time. The Avonmore River and its tributaries are important salmonoid waters with good populations of salmon, brown trout and sea trout. The WYG assessment is stated not to describe how minimum flows in the stream were calculated or to include a correlation to estimate 95 Percentile and Dry Weather Flows. In the context of the above applications the ERFB referred to the significant potential for silt pollution.

The rEIS presents an opportunity to provide an updated report on the WYG predictions and in particular to examine the reasonably comprehensive body of data and ascertain the actual impacts which have occurred and the mitigation which has been undertaken. I refer below to the main additional (new) information presented by AWN in the rEIS relating to the nature and extent of the surface water and groundwater impacts:

- Section 5.4 describes the site operation in relation to water
- There are 12 no. wells within 1km no reports of complaints
- Water levels indicate local impact on aquifer, no regional impact
- WFD scores for the surface water body is 'at risk' notwithstanding the good status and Q rating of 4 as indicated by 2014 EPA data

- The Groundwater Body (Avoca Mine) is also 'at risk'
- Water quality is generally good but monitoring for manganese, hydrocarbons and orthophosphate required
- There has been a slight negative impact to date on streams but while a hydraulic connection with the Avonmore cannot be ruled out impacts are unlikely
- Potential for leakage from waste oil drums – greater aquifer vulnerability
- No formal checking of septic tank but no observed issues on visual inspection
- It is important to note that the subject assessment area is considered overall as not having any significant impacts in terms of cumulative, geological, hydrogeological and hydrological impacts
- Quarry excavations to date would be considered neutral with a slight to moderate permanent impact - subject to mitigation measures the impact would reduce to slight to imperceptible.

In relation to the above I comment as follows :

- the rEIS acknowledges limited data on water levels (one sample each from 2014 and 2008 – from different seasons) - the conclusion that groundwater levels not been impacted is not firmly based and impacts prior to 2008 are not addressed and an impact on the Avonmore not ruled out
- water quality results indicate that by 2008 the quarry had an effective settlement system in place by 2008 as suspended solid levels in the stream were low – it is possible that water quality effects would not have significantly damaged fisheries, but evidence on this matter is extremely limited and the receiving environment very sensitive
- I consider that the dewatering of the stream even for a distance of 900m could have had significant impacts on fisheries - there is no evidence that this aspect of the operation was monitored and the stream was inaccessible from the site when I inspected
- The data presented on fisheries impacts / aquatic ecology is particularly deficient
- 4.2.2 of the rEIS in one paragraph notes the aquatic plants
- there is a reference in the rEIS to the fact that stream fauna analyzed in 2008 indicated slightly polluted water Q3 in the channel south-east of the quarry, which is neither noted or explained – page 28 of AOS EIS refers

- similarly there is reference in the AOS EIS to the watercourse arising from the wetlands south-east of the quarry, which again is not referenced in the rEIS – this may refer to part of the applicant’s land between routes C and B where landfilling of inert material was previously authorized but this requires more investigation
- assessment of the ecological value of such wetlands within or close to the cone of depression is warranted but has not been undertaken
- there is a reference in the rEIS to an ‘apparently lower number of freshwater shrimps .. slight improvement in water quality’ – there is also one very short paragraph relating to the peripheral stream water quality which ‘situation is now much improved’ - I consider that this is unsubstantiated and poorly considered
- The rEIS has not addressed previous comments of the ERFB relating to the small catchment , likely DWF and that a significant reduction in flow could mean that little or no water remained – assessment of impacts on fisheries is absent
- Regarding the WFD I acknowledge that there are major legacy issues in this area including from Avoca Mines – nevertheless the role of the quarry in terms of the ‘at risk’ scores for groundwater and surface water needs to be further considered
- As noted in the rEIS Manganese is generally naturally occurring and Orthophosphates would derive from agriculture – however there is no evidence relating to current water quality conditions particularly relating to hydrocarbons which were previously recorded
- The rEIS refers to lack of evidence for oil spills – there has not been thorough checking of oil tanks or the septic tank and no recent groundwater quality monitoring.

Of the above I highlight two particular areas of concern which relate to the WFD and the impact on ecology.

1. Regarding the references to the WFD I consider that the ‘at risk’ scores needs to be further addressed and pressures determined. Only having considered that information can the Board be satisfied in my opinion that the development has not given rise to a deterioration in the status of the water body and is not contributing to the ‘at risk’ status. This is necessary information also in relation to the matter of whether or not mitigation is necessary to address any water quality impacts and loss of flow in the stream.

2. I submit that the Board is not in a position based on the available evidence to make a determination in relation to the impact of the development on surface water flows and on fisheries. Having examined the information available in the planning history files in particular I consider that the assessment undertaken has failed to provide adequate information on impacts during the operational phase. I do not consider that the description of the effects as temporary is sufficient response. While it can be assumed that dewatering in the quarry resulted in low flows, such flows cannot be quantified nor their impacts on fisheries assessed.

In addition to the above I note that the EIS is deficient in its failure to properly address alternatives including in relation to the direction of working and the phasing of development.

I conclude that the Board cannot be satisfied based on the available information that the development did not give rise to unacceptable adverse impacts.

Roads and Traffic

During the course of my inspection of the site I travelled the haul route which was used for the duration to which the application relates and concluded that having regard to relatively low traffic volumes on the rural roads in the area and to the proximity to the N11, the development is unlikely to have given rise to significant adverse consequences in terms of traffic safety or impacts. The sightlines at the site entrance are poor including only 71m view to the north-east. Use of the partly constructed new road would have constituted an improvement in traffic safety, but the applicant was precluded from such use pending authorization of the quarry. The Planning Authority in its report to the Board indicates that there have been no concerns relating to the quarry entrance. An estimated 75% of HGVs of the HGVs would have joined the N11 at 'The Tap' where sightlines are also acceptable. The level of traffic estimated at 26 HGVs appears to have been accommodated without undue concerns relating to traffic safety.

In terms of the impact on the condition of the road, I noted little or no evidence of poor structural condition of the road network apart from at the site entrance where the county road was in poor condition, which I attributed to the impact of heavy vehicles turning, the majority of which would have been related to the subject quarry. The strength of this county road and the need for improvements was raised in the recommendation of the Planning Authority under PL27.233638.

Based on the available information I consider that the Board can be satisfied that the development is not likely to have given rise to significant adverse effects on the road network or constituted a threat to public safety.

Landscape and visual impacts

The development has taken place in a highly vulnerable landscape. At a distance of about 3km from the site also are two rural resources, Avondale House and Forest Park and the National Botanic Gardens at Kilmacurragh – views from both areas to the site are limited by distance and blocked by topography and vegetation. The view from a forest trail at Kilmacrea Upper Hill is not listed but this would be deemed to be a sensitive receptor, heightening the significance of impacts. I formed the opinion that none of the views and prospects which are listed in the development plan are impacted by the quarry and the Planning Authority has not raised any concerns in this respect.

At over 20 hectares the quarry is of significant scale and is of a character which is likely to significantly negatively impact on views from the surrounding landscape. There is no indication that the development which has taken place has resulted in significant adverse landscape effects through removal of any landscape features of value.

In relation to the landscape and visual impacts which have occurred these would have varied from time to time as the excavation commenced. In general it is clear that the nature of the surrounding countryside including the presence of hedgerows adjoining public roads would have resulted in there being only very limited glimpsed views to the area of extraction. The rEIS notes that the majority of the views are and would have been from the east, north-east and south east. The rEIS describes the dynamic nature of the development in terms of its visual impacts and identifies the landscape effects which have occurred and which are occurring.

The quarry presently mainly has the appearance of disturbed ground and there are glimpses also of screening machinery, which structures would be out of character with the rural landscape. From time to time excavation has resulted in dust which has a visual impact. At the time of peak construction there would have been more significant visual impacts due to greater stockpiling and exposure of larger expanses of open ground. Stripping of vegetation has not been taking place in recent years and much exposed soil has become overgrown. In all, I consider it reasonable to conclude that the visual impacts of the development were previously more significant. I note the assessment in the rEIS that 'where the working of the site could have been seen, the visual and landscape impacts can be viewed as negative, moderate to significant and medium to long term in the nature' and I agree with that conclusion. I consider that there is nothing to suggest that the development which has taken place or the outstanding visual impacts warrant a refusal of permission.

The site restoration plan submitted as drawing C-69-50 is largely not relevant to the subject application as it presents a situation relating to completed extraction of the resource. Even without formal site restoration, the rEIS suggests that there would be natural regeneration in 30-40 years. The main surface water body would remain in

situ. I consider that the remedial measures set out in section 8.5.0 of the rEIS do not adequately address mitigation of outstanding visual impacts although it is demonstrated that the view of the quarry from Kilmacrea Upper will be screened by tree planting. The full restoration of the site is appropriate in the interest of visual amenity, ecology and public safety and to ensure beneficial use of the lands in the long-term. In the event of a grant of permission a condition addressing this matter is appropriate. Subject to appropriate conditions I consider that the landscape and visual impacts which have occurred and which are ongoing can reasonably be addressed through mitigation measures.

Cultural Heritage

The rEIS notes that there are no prior records of archaeological sites or stray finds and that the nearest recorded monument is 500m to the north-east. While it would be appropriate that a development of this scale be subject of archaeological monitoring, I consider that the applicant has reasonably demonstrated that the operation of the quarry is not likely to have resulted in direct effects by destruction of unknown archaeological remains.

None of the monuments in the immediate vicinity of the site are of significance in terms of their appeal as visitor attractions or of national importance and as such the impact of the development in terms of the setting of the monuments is not a significant concern in my opinion.

I conclude that the development is not likely to have given rise to significant adverse effects in terms of cultural heritage. I note and agree with the statement that tourist / recreational assets are also unlikely to have been adversely affected.

Other impacts

The site has a **sand martin** colony, which has declined in numbers since the surveys for the previous EIS. Previously the colony was reported to be in the order of 'hundreds' while now there are stated to be about 40 pairs. It is not clear to me from the available information whether the quarrying activity has led to decreased numbers of this species which is of medium conservation concern in Ireland and subject to the general protection measures of the Birds Directive. The EIS in 2008 indicates that the species occurred on the eastern and northern part of the quarry. It appears now that the species is more limited in terms of extent and numbers. As a migratory species numbers will vary depending on a range of factors including for example conditions in the country of origin. Due to the importance of faces of sand in quarries and in view of legal obligations to protect the species and in view of the recorded changes since 2008 I consider that the rEIS is deficient in its assessment of Flora and Fauna. On the basis of the available information it cannot be determined whether or not the operation of the quarry has been in accordance with best practice including the avoidance of active nesting burrows. In my opinion, the

Board cannot therefore favorably determine this aspect of the development in terms of its environmental impact without first seeking additional information.

In relation to **noise and dust** and having considered the nature of the development and the surrounding environment I do not consider that a refusal of permission for this reason would be warranted as outlined below.

I note that there is a history of complaints relating to **air quality** impacts including prior to and during peak production around 2008. Earlier phases involving lateral extension of the site through soil stripping and excavation would have been at grade thus both noise and air quality impacts would have been more severe. The applicant's submission is that the boundaries of the site were subject of dust monitoring and that the site activities were managed and controlled effectively. Monitoring results presented in table 6.5 do indicate compliance with the relevant standards for 2008-2014 but there is very little information for the early part of that decade. It is stated that the large particle size would have minimized adverse impacts and I generally accept this point. Effects arising from soil stripping involving the disturbance of smaller particles would have been short lived as measures set out in section 6.8.1 of the rEIS would have minimized the effects. As well as the reference to the permanent sprinkler system to be installed along the site access road, mitigation of ongoing air quality emissions through remediation of exposed areas could be considered in the event of a grant of permission.

It is stated that the lack of blasting together with control of **noise** at site would have minimize noise impacts. Limited results of noise monitoring are presented in table 7.1 of the rEIS and it is stated that noise at the nearest noise sensitive receptor 280m away was not intrusive. It is acknowledged that the initial development may have resulted in short term elevated noise levels and the construction phase noise is addressed in section 7.5.2.1. In general the noise data demonstrates that operational phase noise was not unacceptable and a range of mitigation which was applied is set out. The Planning Authority has not indicated any significant concerns relating to noise and consequences for residents in the area. I consider that the applicant's submissions are sufficient for the Board to conclude that the development would not have given rise to adverse noise levels of sufficient consequence to warrant a refusal of permission. Mitigation is set out for future excavation, which is not relevant.

As there are no long-term residual impacts of significance in terms of the residential amenities of the area, I do not consider that a refusal of permission for reason related to past noise and dust and to ongoing dust impacts would be warranted.

Environmental Impact Assessment - Conclusions

I note that the Board specifically referred in the Direction under QV0299 to the need for the EIS to be presented with an application for substitute consent to be 'comprehensive and up to date' and that resubmitting the 2008 EIS in support of the

application would not be acceptable. The applicant has presented some data which updates aspects of the 2008 EIS. However, I would not describe this additional data as being comprehensive. Neither do I consider that it is appropriate that the public and the competent authority be required to consider the 2008 submission in conjunction with the rEIS. In view of the paucity of baseline and impact assessment presented in the rEIS I found that it was necessary to consider three documents, two of them related to a history case in an attempt to understand what has occurred at the site. I make that comment in reference to water impacts especially, but it is relevant also to other aspects of the development. It is contrary to the whole thrust of the Directive to have to piece together information from different sources and to attempt on that basis to adjudicate on whether or not the development gave rise to effects on the environment which would be deemed to be acceptable, or not.

In addition to the inadequacy of information on the most recent years, I consider that the rEIS is especially deficient in terms of describing the development which took place in the earlier decades and in its failure to adequately consider environmental impacts prior to 2008. That point is relevant especially to the period post 2000 which appears to have been when extraction was at high levels as the extraction area extended from 7.4 hectares to around 20 hectares.

The EIS is also deficient in relation to cumulative effects especially relating to the authorized waste facility at the adjacent site and regarding the consideration of alternatives. In relation to mitigation measures these are tentatively suggested especially in relation to water and landscape impacts but are not clearly defined and not presented as commitments. The latter could be addressed by condition but are more appropriately considered in the context of the environmental impact assessment and prior to consent.

The onus is on the applicant to present a rEIS which facilitates an environmental impact assessment of the development in its entirety. The applicant was previously reminded by the Board in its Direction under QV0299 of that fact. I conclude that the documentation submitted including the description of the development, the baseline information, the impact assessment and mitigation measures are not described in sufficient detail to enable the Board to make a favourable decision in this case. The assessment of impacts which have taken place is not based on best available information and is not comprehensive. I submit that there is no alternative but to refuse permission as the Board cannot be satisfied that the development did not give rise to adverse impacts especially in relation to surface water, groundwater and ecology.

It is open to the Board to consider issuance of a temporary cessation notice under section 177J. Based on preliminary consideration of the conditions I was satisfied that the development is not giving rise to adverse effects on the integrity of a European Site. I do not consider that a temporary cessation of works is warranted.

Appropriate Assessment

I consider that the Board has previously determined that Stage 2 appropriate assessment is not warranted when it considered the review of the decision of the Planning Authority under QV 0299 and I do not consider that there are any grounds for a different conclusion in this case.

RECOMMENDATION

Notwithstanding the principle of development, which I consider is acceptable in terms of policy and the likely lack of impacts in a number of relevant respects, I recommend that the application for substitute consent be refused for the reasons and considerations set out below.

1. The Environmental Impact Statement is deficient in its failure to consider cumulative effects and alternatives and to provide sufficient information in relation to key impacts including the effects on water and ecology. The Board is not satisfied that the development, which has taken place has not resulted in significant and adverse effects on the environment. The development would, therefore, be contrary to the proper planning and sustainable development of the area.

Mairead Kenny

Senior Planning Inspector

16th September 2015