



An
Bord
Pleanála

Inspector's Report ABP-300425-17

Development	Extension to existing limestone and sand & gravel quarry.
Location	Powerstown, Nurney, Co. Carlow.
Planning Application to An Bord Pleanála	
Related Substitute Consent Files	ABP-300034-17 & ABP-300037-17
Planning Authority	Carlow County Council
Applicant(s)	Grant Thornton (Receivers)
Type of Application	Further quarrying under section 37L
Observer(s)	Philip Morrissey
Date of Site Inspection	15 th May & 24 th August 2018
Inspector	Michael Dillon

1.0 Introduction and Context

- 1.1. This application arises following the commencement of Section 37L of the Planning and Development Act, 2000 (as amended), which provides, *inter alia*, for the making of planning applications direct to An Bord Pleanála, for continuation of quarrying, where an application for substitute consent for a quarry was with An Bord Pleanála before 15th July 2015, and where a decision had not issued in relation to the substitute consent application. In the case of this quarry, legal proceedings had been taken by the quarry owner in relation to a decision of the Board to refuse planning permission for an extension at this quarry, and so the provisions of section 261A(21)-(24) were applied. The legislation provides for the two applications to be dealt with, in conjunction. In this instance leave to apply for substitute consent was granted by the Board – refs. 01.LQ0001 & 01.LS0019.
- 1.2. In the context of this application, there are two applications for substitute consent with An Bord Pleanála for the parent quarry at Clonmelsh and Garryhundon townlands – ref. ABP-300034-17 for the quarry itself, and ABP-300037-17 for the majority of the quarry plant area.
- 1.3. All three files are travelling together.

2.0 Site Location and Description

- 2.1. The site, with a stated area of 21.9ha, of which the proposed extraction area extends to 13.6ha, is located some 7km due south of Carlow town centre, and some 4.5km due northeast of the village of Leighlinbridge, in Co. Carlow. The M9 Motorway, the Dublin to Waterford railway line, the old N9 National Primary Road (now R448 Regional Road) and Barrow River are all located to the west of the site at varying distances of up to 1.5km. The site forms part of a much larger landholding of approximately 170ha, stated to be under the control of the applicant – some of which is used for quarrying, whilst other lands are in agricultural use. A number of houses in the area (many of which are now derelict) are indicated as being within the property ownership/control of the applicant (outlined in blue).

- 2.2. For the purposes of continuity, the southern end of the adjoining Clonmelsh limestone quarry has been included within the site boundary, as outlined in red – the northern portion of the current application site. The proposed expansion area comprises a rectangular arable field, which rises to a height of 66m OD at its centre and falls to a low point of 59m OD at one edge. Some spoil heaps are in evidence in the northeast corner of the field – in the vicinity of an house and agricultural entrance from the L3045 county road. The channel of the Clonmelsh Stream runs from east to west along the rim of the quarry void – at the northern end of the arable area. The stream once flowed across the quarry to the north, and has been diverted several times. It is stated to be ephemeral, and the stream bed was dry on the dates of site inspection by this Inspector, notwithstanding that there was a small inflow in the stream where it entered the quarry by way of a culvert beneath the L3045 county road in May 2018. There are a number of ESB cables traversing the site – carried on wooden poles.
- 2.3. The site is bounded by the L3045 county road to the east and south – a narrow carriageway along which it is not possible to pass two vehicles for most of its length. The boundary with this road is an hedgerow of varying quality. There is one single-storey house, with a large farm shed, on the site side of this road – close to the northeastern corner of the site. It is surrounded by mature trees and planting, and is separated from the site by a fence and hedgerow. It appeared to be unoccupied on the dates of site inspection. It is not within the ownership/control of the applicant company. There is an existing agricultural access to the site from this road – which would appear to have been a quarry entrance in the past – linking the Clonmelsh and Garryhundon portions of the wider quarry. There is a further agricultural entrance off the L3045 road – in the southeast corner of the site. To the west, the site abuts the L3044 county road – wide enough for two vehicles to pass. The boundary with this road is a good-quality hedgerow. Agricultural access to the site exists from this road also. There is one unoccupied, single-storey house on a long narrow plot on the site side of this road. This plot is separated from the field by an hedgerow – with some mature cypress trees around the house. Whilst this house and its grounds are not indicated within the red line boundary of the site – it is indicated as being within the ownership/control of the applicant. The house is derelict.

- 2.4. The 80kph speed restriction applies in this area. There are no public footpaths and there is no public lighting. Access to the wider quarry is from the L3050 county road to the north – the western section of which has been realigned, and a new junction created with the L3044 road, in association with the construction of the M9 Motorway. Sight distance is good at the recessed quarry entrance on the L3050 road. The Garryhundon quarry (part of the same ownership) is separated from the main Clonmelsh quarry by the L3045 road – and is located to the southeast of the proposed section 37L extension area. Quarrying at Garryhundon has been halted for some time past.
- 2.5. The principal land use in the area is agriculture – with a high proportion of tillage. There are a number of one-off houses flanking the road network. A temporary travellers' encampment was in existence on the L3045 road, at the southeastern corner of the proposed expansion site (at the entrance to the Garryhundon quarry) in May 2018. The travellers' encampment was not in evidence in August 2018; where low earth berms had been constructed along the verges of the road to prevent unauthorised parking of caravans or vehicles. The Powerstown Landfill and Recycling Centre is located 0.9km to the west of the proposed extended quarry area (linked by the continuation of the L3045 road): it is accessed from the L3045 road. The Milford Quarry (Kilcarrig) is located 0.6km to the southwest of the site, and is accessed from the old N9 National Primary Road (now R448).

3.0 Proposed Development

- 3.1. Permission sought on 5th December 2017, from An Bord Pleanála, under section 37L of the Planning and Development Act, 2000 (as amended), to extend an existing limestone/sand & gravel quarry for a period of 20 years. The site area measures some 21.9ha, with extraction being confined to an area of 13.6ha. The extension will be in two benches down to a depth of 25m OD, over four phases – with a fifth phase for restoration. Soil and subsoil overburden is estimated at 5.5m depth – resulting in approximately 1.35 million tonnes (to be used for screening berms and ultimate restoration). The rock reserve is estimated at 10 million tonnes. The water table will be lowered, through dewatering, to facilitate extraction; and upon completion of extraction, the overall Clonmelsh quarry will be allowed to flood to approximately 48m OD. No site facilities are proposed. Mobile plant will be used for

crushing/grading/screening. There is an existing washing plant on the adjoining Clonmelsh quarry floor. The existing quarry facilities to the north, at Clonmelsh, will be used for staff. Some aggregate will feed into the asphalt/concrete products manufacture/'Readymix' plant at Clonmelsh. No new vehicular access points are proposed. The channel of the already diverted Clonmelsh Stream will be further diverted to the south around the extended quarry area.

- 3.2. The application is accompanied by an Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS).

4.0 Planning History

4.1. Planning History and Quarry Registration

There is an extensive planning history attaching to the quarry at Clonmelsh and Garryhundon townlands, relating to- enforcement record; quarry registration under sections 261 & 261A; Discharge Licence; Air Pollution Licence; Section 5 references to Carlow County Council and An Bord Pleanála: which are set out in the EIAR, and in other documentation from Carlow County Council on this file.

4.2. Recent Planning History

Ref. 10/130: Permission was granted by Carlow County Council for continuation of quarrying. This application was accompanied by an EIS, but not by an NIS. It involved diversion of county roads on the quarry boundary and deepening the quarry void from 25m OD to minus 75m OD, amongst other things. This decision was the subject of 1st and 3rd Party appeals to An Bord Pleanála (**PL 01.238679**). The proposal was later revised to reduce the extraction area from 123.0ha to 68.4ha, and to alter the extraction depth to minus 25m OD, together with omission of proposed road diversions. The decision of the Board to refuse permission on 27th May 2013, is the subject of Judicial Review to the High Court by the applicant, Dan Morrissey (Ireland) Ltd. (ref. 213/556), with no decision to date. [I understand that this court case is not proceeding, pending the decisions of the Board in relation to the three applications currently before it].

Ref. 12/240: Permission was granted by Carlow County Council for retention of plant, machinery and buildings, for new offices, and a replacement wastewater treatment system at the quarry. The retention element was prompted by condition 4(a) of permission ref. 10/130, that omitted certain plant and machinery. This decision was appealed by 1st and 3rd Parties to An Bord Pleanála (**PL 01.242648**), and permission was refused on 17th November 2014, for reasons that the plant needed to be considered in association with the quarrying activities.

ABP-300034-17: Application to An Bord Pleanála under section 177E of the Planning and Development Act, 2000 (as amended) for substitute consent for a quarry at Clonmelsh and Garryhundon townlands by Grant Thornton (Receivers). There is no decision to date on this application.

ABP-300037-17: Application to An Bord Pleanála under section 177E of the Planning and Development Act, 2000 (as amended), for substitute consent for the majority of quarry plant area at Clonmelsh townland, by Grant Thornton (Receivers). There is no decision to date on this application.

01.SH0235: Refers to applications to An Bord Pleanála by Grant Thornton (Receivers), for extensions of time to apply for substitute consent for quarry at Clonmelsh and Garryhundon townlands – the final Order being dated 20th October 2017 – extending the appropriate period up to and including 24th October 2017.

01.SH0236: Refers to applications to An Bord Pleanála by Grant Thornton (Receivers), for extensions of time to apply for substitute consent for quarry plant area at Clonmelsh townland – the final Order being dated 20th October 2017 – extending the appropriate period up to and including 24th October 2017.

01.LQ0001: Refers to an application to An Bord Pleanála by Grant Thornton (Receivers), for leave to apply for substitute consent for quarry at Clonmelsh and Garryhundon townlands. By Order dated 7th April 2017, the Board granted leave.

01.LS0019: Refers to an application to An Bord Pleanála by Grant Thornton (Receivers), for leave to apply for substitute consent for quarry plant area at Clonmelsh townland. By Order dated 7th April 2017, the Board granted leave.

Note: both 01.LQ0001 and 01.LS0019 originated in a single application to An Bord Pleanála, on 6th July 2015 – under section 177C of the Planning and Development Act, 2000 (as amended), for leave to apply for substitute consent. It was considered

necessary to split the two elements – (a) quarry and (b) quarry plant area, for legislative and procedural reasons. Just how this situation was arrived at, is set out in the Inspector’s joint report on 01.LQ0001 and 01.LS0019, and it is not proposed to repeat it here. Suffice to say, An Bord Pleanála has accepted the two applications for substitute consent (under section 177E), and the application for continuation of quarrying (under section 37L), of the Planning and Development Act, 2000 (as amended).

5.0 Policy Context

5.1. Development Plan

The relevant document is the Carlow County Development Plan 2015-2021.

- Section 3.5.7 recognises the importance of sand & gravel extraction to the economy of the county.
- E.D. – Policy 13 states- It is the policy of Carlow County Council to:
 - Provide for quarry and extractive development where it can be demonstrated that the development would not result in a reduction of the visual amenity of designated scenic area [sic], to residential amenities or give rise to potential damage to areas of scientific, geological, botanical, zoological and other natural significance including all designated European Sites.
 - Ensure compliance with the overall objectives of the Water Framework Directive in the context of quarries, mining and extractive development.
- Section 9.1.11 deals with Geological Heritage Sites – and identifies the Morrissey Quarry at Clonmelsh as a potential proposed Natural Heritage Area (pNHA) in the future.
- Section 11.16 deals with ‘Extractive Industries’ and the factors that will be considered in assessing any applications for quarry development.
- Appendix 6 dealing with Landscape Character Assessment, identifies the area as “Central Lowlands” – being moderately sensitive to development – 2-3 on a scale of 1-5, where 5 is most sensitive. “Applications for quarrying should be

accompanied by a detailed landscape plan setting out mitigation measures with particular reference to land grading and screen planting”.

- Scenic Route 5 is located approximately 1.5km to the southeast of the site – on slightly elevated ground to the north of the village of Nurney – on the Tinryland road. Scenic Route 9 is located on elevated ground to the west.
- Protected Views and Prospects 27 and 33 are located at/near Nurney to the southeast and on the Barrow Way to the west.

5.2. Natural Heritage Designations

The River Barrow and River Nore Special Area of Conservation (Site code 002162), is located approximately 1.3km to the southwest of the overall quarry site. The Powerstown Stream, in the northwestern corner of the overall quarry site, discharges to the SAC some 2.4km downstream. The Cloghristick Wood proposed Natural Heritage Area (pNHA) is located approximately 1.5km to the west of the site.

5.3. Records of Monuments and Places

There are a number of such sites in the vicinity of the quarry – particularly to the east. Two are indicated within the site boundary – CW012-093 (Enclosure) and CW012-202 (Ring ditch).

5.4. Quarries and Ancillary Activities: Guidelines for Planning Authorities

These Guidelines, issued by the Department of Environment, Heritage and Local Government in April 2004, are of relevance. They provide guidance to planning authorities on planning applications and development plan policy as well as section 261 of the 2000 Act. The importance of quarries is emphasised and the continued need for aggregates is highlighted. The potential for environmental impacts needs to be considered. The Guidelines recommend that in formulating development plan aims and strategy, in an area containing significant aggregate resources; the plan should acknowledge their economic value, which may be of national or regional importance. Since aggregates can only be worked where they occur, priority should

be given to identifying the location of major deposits, and to including a commitment to safeguard valuable unworked deposits for future extraction. The Guidelines go on to address the assessment of applications and Environmental Impact Statements [now EIARs], and the formulation of planning conditions – including issues related to noise and vibration, dust, water supplies and groundwater, traffic, archaeology, water, environmental monitoring, waste management, contributions, extraction limits, and the documentation which should be included in an application.

5.5. National Planning Framework (Project Ireland 2040) and National Development Plan 2018-2027

These joint documents set out a vision for the future development of the country and, in particular, to support the sustainable development of rural areas by encouraging growth. National Policy Objective 23 seeks to facilitate the development of the rural economy through supporting, amongst other sectors, a sustainable and economically efficient extractive industry sector, whilst at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.

6.0 Submissions and Responses

6.1. Observer's Submission

6.1.1. There is one observation on the application, from SLR Environmental Consulting Group (Ireland) Ltd, agent on behalf of Philip Morrissey, Clonmelsh House, received by An Bord Pleanála on 15th January 2018, which can be summarised in bullet point format as follows-

- No notice has issued under either section 261A (3)(a), (4)(a) or (5)(a).
- The application for leave to apply for substitute consent (01.LQ0001) was made under S177C. The application for substitute consent made by the applicant, and relied upon for the purposes of this application is not an application for substitute consent made or required to be made pursuant to

subsection (7), (10) or (12) of section 261A. An Bord Pleanála has no jurisdiction to consider the application.

- The application area has been selectively chosen to omit the current Clonmelsh quarry area which is under the ownership of Philip Morrissey, and who has not given consent to using the access or the plant area.
- Details of the Morrissey land ownership are provided within the submission made in relation to the substitute consent application ABP-300034-17. The applicants have no legal ownership of the lands at Clonmelsh and Garryhundon townlands.
- The application is premature and invalid.
- Lands at Clonmelsh and Garryhundon townlands are subject to a licence agreement between Philip Morrissey and Dan Morrissey (Ireland) Ltd. – dating back to 1985. The licence relates to extraction of sand & gravel and not to rock. The lands are to be returned to agricultural use. This will require closure of the access and removal of plant.
- An Bord Pleanála should immediately invalidate the application.

6.1.2. The observation is accompanied by the following documentation of note-

- Letter from Farrell McElwee Solicitors (dated 24th November 2017), in relation to disputed quarry lands at Clonmelsh and Garryhundon townlands, and title to lands which form part of the applicant site (including Land Registry documentation). Lands within folio CW2075F are in the ownership of Philip Morrissey. This folio contains a parcel of land in the townland of Garryhundon. Lands within Garryhundon townland in folio CW6086F are in the ownership of Philip Morrissey. The remainder of lands within the townlands of Clonmelsh and Garryhundon (folio CW236F) are in the ownership of Kevin Morrissey. Philip Morrissey is the plaintiff in extant proceedings before the High Court (2017/2361P) which seek, *inter alia*, to prevent the defendants from extracting any further limestone or other material from the Clonmelsh quarry, save with the consent of Mr. Morrissey; together with an injunction preventing the defendants, their servants or agents from

trespassing on the lands of Philip Morrissey. Philip Morrissey does not consent to the making of these applications for substitute consent and extending the quarry.

- Copy of Land Registry documentation.

6.2. Carlow County Council Submission

6.2.1. The response of Carlow County Council to the application, in accordance with the requirements of section 37L(12)(a), was received by An Bord Pleanála on 25th January 2018. It comprises a submission in relation to all three applications at this quarry, and can be summarised in bullet point format as follows-

- Additional information is needed in relation to cumulative effects of other quarries within the Barrow catchment, and the impact of the Powerstown Landfill on water quality.
- Infrastructure for the management of surface water should be contained within the NIS, as should results of water testing.
- Up-to-date information is required in relation to water quality in the Barrow River.
- Additional detail is needed in relation to groundwater connection with the Barrow River.
- In-combination impacts with other quarries should be examined – particularly in relation to impact on the Barrow River.
- Vibration monitoring results for the years 2010-2017 are needed.
- Monthly monitoring results for discharge should be submitted.
- There is little by way of consideration of alternatives within the EIAR.
- There is lack of clarity in relation to traffic volumes at the existing quarry.
- The application is vague in relation to 24/7 extraction.
- An up-to-date survey of wells in the area is required.
- The impact on groundwater has not been sufficiently detailed.
- The Clonmelsh Stream has been diverted a number of times over the lifetime of the quarry. Inland Fisheries Ireland should be consulted in relation to the

re-routing. The Clonmelsh Stream discharges to the Powerstown Stream – and does not form part of the controlled discharge from the quarry. The EIAR refers to rerouting in an anti-clockwise direction, whilst the NIS refers to rerouting in a clockwise direction. The impacts of this work on European sites is not addressed.

- No rationale has been provided for removal of monument CW012-093.
- The feasibility of using rock-breakers as opposed to blasting has not been examined.
- The EIAR does not refer to two Protected Structures – some 700m to the southeast – Garryhundon House (RPS – CW288) and Walled Garden (RPS – CW289).
- A significant water body would be created with flooding of the site and the adjoining Clonmelsh quarry – 67ha approximately. Restoration at the Clonmelsh quarry would have to be held up, pending flooding of the entire area – at least twenty years.
- Photomontages would be of benefit in relation to restoration proposals.
- The extraction rate per annum is not clear – with reference to up to 1 million tonnes per annum being extracted in the past. This has implications for traffic over time.
- There is an absence of detail on site plans, including existing features and proposed changes.
- Progressive reinstatement of the Clonmelsh quarry should have been undertaken.
- Local residents have concerns in relation to the following-
 - Blasting at the existing quarry and structural damage to property.
 - Quarry pits in Garryhundon are used as a dumping ground.
 - Inadequate fencing and lifebuoys at ponds.
 - Potential reduction in property values.
 - Negative impact on water quality.
 - Lack of engagement with the local community.

- Intensification of use.
- Impact on water levels in wells.
- Use of an unauthorised road.
- The Board has previously had concerns in relation to quarrying at this site and has refused planning permission.
- There appears to be dumping of domestic waste in and close to the Clonmelsh Stream at the northwest end of the application site.
- Roads at the southeast corner of the site are potholed and in poor condition.
- Site security needs to be examined to prevent unauthorised trespass.

6.2.2. The report is accompanied by Development Plan extracts, colour photographs and panoramic views.

6.3. Applicant's Response to Carlow County Council Submission

6.3.1. The submission of Carlow County Council (received on 25th January 2018), was referred to the applicant for comment, on or before 26th April 2018.

6.3.2. The composite response (including memory stick electronic copy) of Property Resource Planning Management & Development Ltd, agent on behalf of Grant Thornton (Receivers), received by An Bord Pleanála on 26th April 2018, can be summarised in bullet point format as follows-

- Little monitoring information existed for the existing quarry in the absence of any conditions attached to any planning permission. The applicant took control of the quarry in 2014.
- There is no 24/7 operation at this quarry – hours of operation are 0600-2100 Monday to Friday and 0600-1700 on Saturday.
- The diversion of the Clonmelsh Stream is evident from a review of historic mapping. The exact line of previous diversions is unknown.
- A Landscape and Visual Impact Assessment is now submitted – to support the findings of chapter 12 of the EIAR. It includes photomontages and a

rendering of the proposed restoration plan in the manner of that submitted with the rEIAR for the adjoining Clonmelsh quarry.

- The record of fly-tipping in the vicinity of the quarry – held by CCC is noted. The applicant and licensee regularly removed illegally fly-tipped waste from the margins of the quarry lands. The fly-tipping is regularly reported to CCC.

6.4. Applicant's Response to Observer's Submission

6.4.1. The observation of Philip Morrissey (received on 15th January 2018), was referred to the applicant for comment, on or before 26th April 2018.

6.4.2. The composite response (including memory stick electronic copy) of Property Resource Planning Management & Development Ltd, agent on behalf of Grant Thornton (Receivers), received by An Bord Pleanála on 26th April 2018, can be summarised in bullet point format as follows-

- There is no alternative to making an application for extension of this quarry, other than under section 37L.
- The substitute consent provisions have been followed by An Bord Pleanála and by the applicant. Leave to apply for substitute consent has been granted by the Board – ref. 01.LQ0001.
- The continuation of quarrying is designed to be an extension to the void at Clonmelsh. The lands at Clonmelsh and Garryhundon were determined to be two distinct, but co-operating units. The plant area was determined not to constitute a quarry, and leave to apply for substitute consent for this element was granted by the Board – ref. 01.LS0019.
- Lands for which leave to apply for substitute consent were granted were not subject to notices issued under section 261A(3)(a) or (4)(a) or (5)(a). The very absence of issuing of any notice which may have directed the seeking of substitute consent was one of the factors which supported the application for leave to apply for substitute consent upon its original making in July 2015, and that prompted An Bord Pleanála to process the quarry portion of the area in accordance with section 261A(21)-(24) as notified by letter to the applicant on

4th February 2016. The Board's jurisdiction in relation to simultaneous applications for further development is in order.

- It is not possible to seek an application for further quarrying at Clonmelsh and Garryhundon, as these lands are the subject of applications for substitute consent under ref. ABP-300034-17.
- The lands the subject of the proposed section 37L application are in the full ownership of the applicant.
- The applicant has already addressed the concerns of the observer in relation to property ownership at this quarry by way of response to his observation in relation to ABP-300034-17.
- Licence requirements in relation to adjoining lands at Clonmelsh do not affect the extension site into Powerstown. Restoration proposals outlined are correct.

6.4.3. The response is accompanied by the following documentation of note-

Appendix 1: Copy of drawing in relation to application ref. 10/130 as it relates to wider area remaining following flooding of wider extended quarry.

Appendix 2: Landscape and Visual Impact Assessment (dated April 2018). Of note is the following-

- A 5km radius study area was adopted.
- The visual impact includes the existing quarry at Clonmelsh and Garryhundon, and also the extension into Powerstown townland.
- Operational and restoration impacts are examined.
- Scenic Routes 5 and 9 of the County Development Plan are addressed. The site is located within the Central Lowlands LCA. The landscape is largely dominated by farming.
- Visual receptors are local residents and those using the road network in the area.

- Restoration at Clonmelsh will ultimately include removal of all plant and creation of a large water body with landscaped edges. Restoration at Garryhundon will include agricultural and woodland/scrub woodland.
- Impacts identified include extension of the quarry void, erection of screen berms on the quarry extension boundary.
- Restoration will involve the flooding of the extended quarry void in association with Clonmelsh quarry void.
- Hedgerows on boundaries will be retained.
- Lands around the quarry edge will be regraded and returned to agricultural/scrub woodland use. Native trees and shrubs will be used.
- The loss of agricultural land is considered to be of minor significance.
- The waterbody and marginal areas will improve biodiversity in the area.
- The visual impact will be limited to areas in close proximity to the site.
- The life of the plant within Clonmelsh will be extended if permission is granted for the proposed extension under section 37L.
- Hedgerows and new berms will limit the visual impact of the development from local roads.
- The quarry extension will only be visible from rising ground to the east and west of the Barrow valley – and this would be mitigated by distance.
- The water body and former working faces of the quarry around its boundary will only be visible in glimpsed views from the surrounding road network and, where visible from high ground to the east and west, will be mitigated by distance.
- Protected Views and Prospects (27 and 33) will not be impacted – no. 27 to the southeast of Nurney being focussed on the south, and views to the north towards the quarry will be screened by intervening trees and hedgerows. Protected view no. 33 (west of the Barrow) will not be impacted due to the mature tree cover on some of the intervening lands between the river and the quarry.

- Scenic Route 5, to the southeast of the quarry, will not be impacted, due to the intervening distance and the nature of the works proposed.
- Views towards the site from houses at Garryhundon Cross are largely screened by field boundaries and garden vegetation. The planted berm around the extended quarry would screen any view into the quarry void. Existing glimpsed views across the site are curtailed by the rising ground of the site itself, so there would be no loss of long-distance views as a result of the boundary berms.
- Mature vegetation surrounding the house on the eastern boundary, ensures that the quarry extension will have no visual impact.
- The bungalow at the northwestern corner of the extended site will not be impacted, as existing screening berms and hedgerows already restrict views from this house.
- Views from the Barrow Way are restricted by vegetation.
- Road users are considered to be of medium sensitivity. They will experience only glimpsed views of the site. The L3044 roadside boundary hedgerow is mature and screens almost all views into the site. The L3045 roadside boundary hedgerow would allow for infrequent glimpses into to the site. The erection of screening berms on quarry boundaries would not have significant impacts on visual amenity for road users.
- Visibility from the M9 Motorway is restricted by intervening field boundaries.
- Six panoramic photographs are included with the assessment.

6.5. Observer's Response to Carlow County Council Submission

- 6.5.1. The submission of Carlow County Council (received on 25th January 2018) was referred to the Observer for comment, on or before 26th April 2018.
- 6.5.2. The response of SLR Environmental Consulting Group (Ireland) Ltd, agent on behalf of Philip Morrissey, received by An Bord Pleanála on 26th April 2018, can be summarised in bullet point format as follows-

- There is a clear dependence on the existing processing plant and entrance at Clonmelsh. This information should be included in public and site notices.
- The applicant does not have the consent of the owner of the Clonmelsh quarry (Philip Morrissey) to use the plant and entrance. This area will have to be restored. The applicant will not, therefore, be able to operate the quarry extension.
- Significant further information is required before Stage 2 appropriate assessment can be carried out by the Board. Any revised NIS submitted should be circulated to the observer for comment.
- Further significant information is required in order to allow EIA to be carried out on this extension. The assessment of alternatives is incomplete, as the applicant does not have the consent of the landowner, Philip Morrissey.
- Reference to 24/7 operation would require continuous noise monitoring for all hours of the day.
- An updated private well survey is required.
- More information is required in relation to diversion of the Clonmelsh Stream – incorporating the requirements of Inland Fisheries Ireland.
- A full set of monitoring results for the surface water discharge should be submitted.
- Blast monitoring results are incomplete.
- Restoration cannot be considered in isolation from the remainder of the quarry at Clonmelsh.

6.6. Carlow County Council Response to Observer Submission

- 6.6.1. The observation from Philip Morrissey (received on 15th January 2018), was referred to Carlow County Council for comment, on or before 26th April 2018.
- 6.6.2. The response of Carlow County Council, received by An Bord Pleanála on 19th April 2018, indicated that there was no further comment to make.

6.7. **An Bord Pleanála request to Applicant**

- 6.7.1. By letter dated 6th April 2018, the applicant was requested to submit revised scaled drawings and a revised CD of the application on or before the 26th of April 2018.
- 6.7.2. The response of Property Resource Planning Management & Development, agent on behalf of the applicant, Grant Thornton (Receivers), received by An Bord Pleanála on 26th April 2018, included copies of the requested drawings and an electronic copy in memory stick form.
- 6.7.3. The other parties to the application were informed of the issuing of the letter to the applicant on 6th April 2018.

6.8. **Prescribed Bodies**

- 6.8.1. By letters dated 6th April 2018, An Bord Pleanála referred the application to the following Prescribed Bodies for comment, on or before the 3rd May 2018-
 - An Chomhairle Ealaíon.
 - An Taisce.
 - Development Applications Unit of Department of Culture, Heritage and the Gaeltacht.
 - Fáilte Ireland.
 - The Heritage Council.
 - Health Service Executive.
 - Minister for Communications, Climate Action and Environment.
 - Inland Fisheries Ireland.
- 6.8.2. There was one response, from the HSE, received on 3rd May 2018, which can be summarised in bullet point format as follows-
 - No reference is made to public consultation. This should have been undertaken to assess the impact on public health.

- The bedrock aquifer is regionally important. All remedial measures outlined in the EIAR should be implemented in full. Wells within 250m of this project should be included in a water sampling plan.
- Residual dust was noticed on the L3050 road for 10m on either side of the Clonmelsh quarry entrance – the same entrance that is to be used for this quarry extension. Extra monitoring for dust should be located at the three habitable residences on the edge of the EIAR site. The plant area should be screened from the L3050 road, to minimise fugitive dust emissions. An assessment of the wheel-wash should be undertaken.
- Noise surveys do not indicate the contribution which the quarry makes to background noise – instead attributing noise to road traffic. Truck movements should be assessed for all elements of the wider quarry – to see how they are contributing to noise levels in the area.

6.9. HSE Submission Circulated

6.9.1. The submission of the HSE was referred to the other parties to the application (by letters dated 13th July 2018), for comment on or before 2nd August 2018.

6.9.2. The response of Property Resource Planning Management and Development Ltd, agent on behalf of the applicant, received by An Bord Pleanála on 2nd August 2018, can be summarised in bullet point format as follows-

- Quarrying and processing are carried out under licence by Plazamont Ltd. The requirements of existing air pollution and discharge licences must be observed by the operator.
- This application has the advantage of being proposed rather than extant – in the case of the two applications for substitute consent at Clonmelsh and Garryhundon.
- Environmental assessment was undertaken for previous developments on this site – including application refs. 10/130 and 12/240.
- This application has regard to the rEIAR submitted with the substitute consent applications.

- The adjoining Clonmelsh Quarry was operational during the noise surveys carried out for this application. Road traffic was the principal source of noise in the area. It is acknowledged that quarry traffic would have formed part of the road traffic.
- Public consultation as part of the EIA process is statutorily protected through the advertisement of the making of a planning application.
- Should the Board see fit, the applicant is willing to monitor private wells within 250m of the applicant's lands.
- The applicant has instructed the quarry operator to install an additional dust monitoring location between D1 and D2 on the western boundary of the rEIAR site – indicated on figure 8.1 of the rEIAR. This will be located at a dwelling in the ownership of the applicant.
- The suggestion in relation to augmented screen planting on the northern boundary of the Clonmelsh quarry (along the L3050 road), whilst not forming part of the application site under section 37L, will be carried out before September 2018.

6.9.3. There was no response received from Carlow County Council.

6.9.4. There was no response received from Philip Morrissey.

6.10. Applicant's Response to Carlow County Council Submission Circulated

6.10.1. The applicant's response of 26th April 2018, was referred to the other parties to the application (by letters dated 13th July 2018), for comment on or before 2nd August 2018.

6.10.2. The response of Carlow County Council, received by An Bord Pleanála on 2nd August 2018, indicated that there was nothing further to add.

6.10.3. The response of SLR Consulting, agent on behalf of Philip Morrissey, received by An Bord Pleanála on 27th July 2018, can be summarised in bullet point format as follows-

- Significant further information is required from the applicant in relation to appropriate assessment. A revised NIS is required to address each of the

concerns of Carlow Co. Council – including cumulative impacts with Powerstown landfill.

- A revised EIAR is required to meet the concerns of Carlow Co. Council.
- The applicants do not have landowner consent in relation to continued use of the processing plant at Clonmelsh – and there is an agreement in place that these lands have to be restored and returned to agricultural use.
- The quarry and asphalt plant is working on a 24-hour basis – recorded by the observer on 5th June and 3rd of July 2018. Operations commence at 0500 hours. The hours of operation of this quarry need to be clarified.
- An up-to-date survey of all wells in the area is required.
- The diversion of the Clonmelsh Stream has not been satisfactorily dealt with by the applicants.
- Further information in relation to the licensed surface water discharge is required.
- There are no vibration monitoring results for the period 2010-2017.
- The restoration of lands within this quarry cannot be considered in isolation from restoration of the Clonmelsh quarry. Clarification is needed on just what areas are to be flooded and what areas returned to agricultural use – particular regard being had to a 1985 licence agreement with the observer.
- The updated Landscape and Visual Impact Assessment has not considered Clonmelsh House – the closest house to the quarry.
- Section 37L only permits an application for permission to be made to An Bord Pleanála in three specific circumstances relating to section 261A(3)(a), (4)(a) and (5)(a). No such notice ever issued. The application for leave to apply for substitute consent ref. 01.LQ0001 is not valid. The Board has no jurisdiction to consider this application.
- It would be open to the applicant to make an application to Carlow Co. Council under the normal section 34 route, subject to the consent of the relevant landowner.

- The Clonmelsh Quarry is in the ownership of Philip Morrissey. To access the lands of the current application, the applicants will have to pass through the lands of Philip Morrissey, and they have no permission to do so.

7.0 General Assessment

7.1. Associated Files

This application for further quarrying under section 37L, should be considered in association with two substitute consent applications ref. ABP-300034-17 and ABP-300037-17 for the adjoining quarry at Clonmelsh and Garryhundon townlands. The Board has already determined that applications for substitute consent in relation to the Clonmelsh and Garryhundon quarry are appropriate, and I do not propose to revisit the issue of the validity of this application, as argued by the sole observer, Philip Morrissey.

7.2. Development Plan and Other Guidance

The site is not zoned for any particular type of development in the current development plan for the area. The relevant policies have been outlined elsewhere in this Inspector's Report, and issues dealt within under appropriate headings within the Environmental Impact Assessment section of this report. I am satisfied that the proposed development is in accordance with national and local guidance in relation to quarrying. The advice set out in the Quarries and Ancillary Activities Guidelines (2004) is addressed within the relevant sections on Environmental Impact Assessment in this report.

7.3. Design and Layout

- 7.3.1. The southern face of the adjoining Clonmelsh quarry to the north, has been included for completeness. Extraction at this southern face of the Clonmelsh quarry is continuing. It is proposed to extend the quarry southwards into Powerstown townland. There are no proposals for diversion of local roads – as was provided for

in a previous application for a large-scale extension at this quarry. The extension area is confined to one large arable field between the L3044 road to the west and the L3045 road to the south and east. Roadside boundary hedgerows are to be retained. The rerouted Clonmelsh Stream, the channel of which currently runs along the northern boundary of the site (from east to west), is to be rerouted around the proposed quarry extension. This stream has been rerouted in the past around the existing quarry void within adjoining Clonmelsh townland to the north.

- 7.3.2. It is proposed to extract limestone rock within two bench levels to 25m OD. Current ground level within the arable field varies from 59-66m. It is not clear from documentation submitted just how much soil, subsoil and sand & gravel overlies the rock deposit. The area of the field (plus portion of existing Clonmelsh quarry) is indicated at 21.9ha, with the extraction area being confined to 13.6ha. The extraction area is set back 100m from an existing single-storey house (which appears unoccupied) on the northeastern boundary.
- 7.3.3. No new access points are proposed, and existing processing and staff facilities within the adjoining Clonmelsh quarry to the north are to be used. Mobile processing plant on the quarry floor will follow the advance southwards of the quarry face. The house on the western boundary of the quarry extension area is not included within the site, notwithstanding that it is in the ownership/control of the applicant company. The rationale given is because it is located so close to the road, and is not, therefore, sterilising any significant amount of aggregate in the ground beneath – the quarry being set-back from the road edge for geotechnical stability reasons. This house is derelict.

7.4. Financial Contribution and Bond

The proposed development is for an extension to a quarry. In the event of granting planning permission, the Board should attach a condition requiring payment of a development contribution in accordance with the Development Contribution Scheme for County Carlow. The current Carlow County Development Contribution Scheme 2017-2021, refers to a contribution for quarries at €1,500 per 0.1ha. There are no exemptions or reductions for a development of this nature. There is no indication of any special or supplementary development contribution which might apply to this development. I have elsewhere in my assessment recommended that the extraction

area be restricted in order to protect a Recorded Monument, the impact of the removal of which has not been properly assessed in the application. A bond condition for the restoration of the site should be attached to any grant of permission to issue from the Board.

7.5. Signage

The proposed development is for the extension of an existing quarry. The existing quarry access is to be used. No signage has been proposed. A condition could be attached to any grant of permission requiring that no additional signage be erected at the roadside boundaries of this extension.

7.6. Devaluation of Property

The quarry at Clonmelsh and Garryhundon townlands has been in operation for a considerable period of time, and predates many of the houses in the area. Developments, such as this one, are common throughout the country. There is no indication that an extension to the existing quarry would result in devaluation of property in the vicinity. The original quarry owners have acquired a number of houses on the quarry boundaries – most of which have been vandalised and allowed to fall into dereliction. The existing quarry at Clonmelsh has advanced as far as the house on the eastern boundary of the proposed extension. The extension of the quarry into Powerstown townland will not alter the impact of quarrying on the amenities of this dwelling to any greater degree than quarrying impacts on it at present. There is a cluster of houses at Garryhundon Cross – at the southwestern corner of the quarry extension. At least one of these houses is in the ownership/control of the applicant, and appeared unoccupied on the dates of site inspection. The quarry void will slowly advance towards these houses if permission is granted. The closest house at Garryhundon Cross would be approximately 40m from the site boundary, and 55m from the quarry void – separated from it by the L3044 road. I would be satisfied that the existing boundary hedgerows and proposed quarry berm (5m in height) would mitigate the impact of the quarry on these houses and would not result in any significant devaluation.

7.7. Duration of Permission

Permission has been sought to continue extraction into the extended area for a period of twenty years. This period is at the upper end of what is recommended in the Quarry and Ancillary Activities Guidelines, 2004. It is indicated that the quarry extension area contains a reserve of 10 million tonnes of rock. Current extraction rates at the Clonmelsh quarry are indicated as being in the region of 180,000-200,000 tonnes per annum. At this rate of extraction, it would take up to fifty years to extract the aggregate. However, the application documentation indicates a throughput of up to 1 million tonnes per annum at the height of the economic boom, and it may well be that output will increase over the period of the permission. It would be open to the applicant to seek a further permission, if required. The 2004 Guidelines recommend against the imposition of any condition which would limit the quantity of material which may be extracted annually, and this would appear to be reasonable – particularly in light of extraction levels during the economic boom. I would be satisfied that a twenty-year permission would be reasonable for a development of this scale and nature.

7.8. Floodlighting

Diesel generator powered floodlighting may be used at the quarry face from time to time in winter. Such lighting would be screened by the quarry faces, berms and boundary hedgerows, and will not result in any significant degree of light pollution. Floodlighting exists at the plant area at Clonmelsh to the north. I note that Junction 6 Carlow South, on the M9 Motorway at Powerstown is floodlit. This is not a remote rural area.

7.9. Power Lines

There are a number of ESB power lines traversing the site (supported on wooden poles) – notwithstanding that the EIAR states that there are none. A condition should be attached to any grant of planning permission to issue from the Board, requiring the relocation of these lines.

7.10. Times of Operation

The rEIAR submitted with the applications for substitute consent on the adjoining Clonmelsh and Garryhundon quarry (ABP-300034-17 and ABP-300037-17) refers to existing hours of operation at the quarry – 0600-21.00 Monday to Friday, and 0600-1700 on Saturdays. Whilst such may have been the historic operating hours, I would consider that they go beyond what is necessary for the efficient functioning of any quarry, and certainly do not conform to the Quarry and Ancillary Activities Guidelines 2004. Such hours of operation would not generally be considered to be in the interests of the residential amenities of an area. Having regard to the fact that the proposal is for new development, it would be appropriate to attach a condition restricting normal operating hours within the quarry to those set out in the aforementioned Guidelines – 0700-1800 Monday to Friday, and 0700-1400 on Saturdays; with no operation on Sundays or bank holidays.

7.11. Fly-Tipping

The occurrence of fly-tipping at the margins of the wider quarry void cannot be laid at the door of the applicant. There was no evidence of any fly-tipping within the field the subject of the proposed section 37L application. Illegal fly-tipping is a matter for Carlow Co. Council and An Garda. The submission of 26th April 2018, from the applicant, reported regular clean-ups of fly-tipped waste on the wider quarry boundaries.

7.12. Phasing

The application documentation indicates that the quarry is to be developed in four phases – progressing in a southerly direction. A fifth phase is indicated as being for restoration. Drawings to this effect were submitted on 26th April 2018 – and section 3.2.7 of the EIAR indicates the phasing in diagrammatic form. This phasing arrangement is reasonable. It would be appropriate to attach a condition to any grant of planning permission requiring submission of an aerial photograph to the PA, every second year – commencing two years from the date of the Board's order – to allow the PA to monitor the extent of the expansion.

7.13. Restoration

Details of restoration (Phase 5) of the development were provided by way of the original application submission and within additional information on 26th April 2018. The quarry extension is to be restored in association with the restoration of the adjacent Clonmelsh quarry. The void is to be flooded to a depth of approximately 48m OD – the water table level in the area. The immediately adjacent area will be steeply graded, up to approximately 60m OD. The permission sought is for a twenty-year extraction period, so most of the restoration works will have to be deferred until that time, as the quarry void will have to be continually dewatered to facilitate ongoing extraction. The area surrounding the void will be returned to grassland, with woodland mix planting on berms around the eastern, southern and western quarry boundaries.

8.0 Environmental Impact Assessment

8.1. General Comment and Consideration of Alternatives

- 8.1.1. The application is accompanied by an EIAR. It is set out in grouped format as follows- Population and Human Health; Biodiversity; Land, Soils and Geology; Water and Hydrogeology; Air and Climate; Noise; Material Assets and Traffic; Cultural Heritage; Landscape; Interactions and Cumulative/In-Combination Impacts. The document is accompanied by a separate Non-Technical Summary.
- 8.1.2. Because of the necessity to carry out EIA for both the proposed extended area and the quarry the subject of substitute consent applications, the lack of historic data and information on the quarry at Clonmelsh and Garryhundon townlands is acknowledged as constituting limitations and difficulties encountered in preparing the EIAR. The EIAR did not include a Landscape and Visual Impact Assessment (LVIA). Reference is made to one having been commissioned, and that it would be passed on to An Bord Pleanála upon completion. Such was submitted to An Bord Pleanála on 26th April 2018, by way of applicant's response to the submission of Carlow County Council. I further note that the rEIAR submitted with substitute consent applications ABP-300034-17 & ABP-300037-17 (which are being considered with this application for extension) include an assessment of visual impact.

- 8.1.3. Because this application is linked to the applications for substitute consent – the ability to consider alternatives was limited. The ‘do nothing’ scenario is not realistic, if employment levels are to be maintained. The application for substitute consent on adjoining lands does not provide for future quarrying – simply regularising the planning status of these lands. The ability to extend the quarry is determined by the availability/presence of extractable reserves, and the applicant’s land ownership. Any proposal to extend the Clonmelsh quarry to the west, north or east would require closure and diversion of existing local roads. The alternative of deepening the quarry void at Clonmelsh was excluded, due to potential impact on groundwater levels and potential impact on 3rd party water supplies. The alternative of deepening the void at Garryhundon was excluded due to limited lateral extent of the void capable of being extracted, arising from proximity of houses and agreed set-back distances from such houses. In addition, extraction from Garryhundon would have to traverse local roads to reach the processing plant within Clonmelsh townland – located at some distance. The requirement for working benches of 15-20m further restricted alternatives in relation to extraction. The quarry will be extended southwards over four phases. Underground extraction is not financially viable. Blasting is the only financially viable option for removal of rock. The 25m OD floor level proposed will match the floor level of the adjoining Clonmelsh quarry, and will utilise the drainage arrangements already in place for dewatering that quarry. It is preferable to process aggregate where it is extracted – and existing processing facilities at Clonmelsh will be used in this instance. The existence of other quarries in the area is no guarantee that the limestone will be quarried. I would be satisfied that the EIAR satisfactorily addressed the issue of alternatives – limited in the instance of this quarry extension.
- 8.1.4. There is no obligation on the applicant to undertake public consultation prior to lodging a planning application under section 37L – not even in relation to public health. Members of the public or interested parties are afforded the opportunity to comment on the application by way of submission to An Bord Pleanála – following public advertising of the development by way of site notices and newspaper notices. There was only one such submission; from Philip Morrissey – although I note that there are others in relation to the substitute consent applications on the adjoining Clonmelsh/Garryhundon quarry.

8.2. Population and Human Health

- 8.2.1. Chapter 4 of the EIAR deals with these associated issues. Matters relating to human health are addressed in other sections of the EIAR dealing with air, water, noise, dust and landscape. Indirect effects relate to flora and fauna, archaeology and heritage. Both employees and residents of the area may be affected by the development.
- 8.2.2. The development will not have any significant impact on population in the area, nor on employment within the quarry – even allowing for an increase in processing over and above current output of 180,000-200,000 tonnes per annum. There are currently the equivalent of 12 full-time jobs associated with the Clonmelsh quarry. Of the eleven properties within 250m of the site, some five are in the control of the applicant (only one of which five is occupied). The remainder are located immediately to the southwest at Garryhundon Cross. One house in the southeast corner of the site was removed some time before 1995. Proposed extraction in the northeastern corner has been set back 100m from the house in this area, in order to mitigate the impact on the occupants: I note that the house appeared vacant on the dates of site inspection. A traveller encampment had been established on the L3045 road, along the southwestern boundary of the quarry on the date of site inspection in May 2018. However, it was no longer in place in August 2018, and precautions taken to prevent its re-establishment.
- 8.2.3. There are no Seveso sites within, immediately abutting, or close to the quarry extension area.
- 8.2.4. There will be no significant cumulative impacts on human health with other development in the area – such as the continued use of plant at the Clonmelsh quarry, the Powerstown Landfill and Recycling Centre, and the Milford Quarry (Kilcarrig) – all of which developments have existed for some time.
- 8.2.5. I would be satisfied that there will be no significant impact on population or human health arising from the extension of this quarry.

8.3. Biodiversity

- 8.3.1. Chapter 5 of the EIAR deals with this issue. A site visit was carried out on 12th July 2017, and habitats were mapped. The site largely comprises an arable field, with hedgerows on three boundaries. In the northeastern portion of the site, there is some scrub growing on mounded soil, around what was once a quarry entrance. The northern portion of the site is a quarry face and recolonising bare ground. No badger setts were noted. Hedgerows may be suitable for bat roosts.
- 8.3.2. The site is neither within nor abutting any European site – the closest such being the River Barrow and River Nore SAC, some 1.3km to the southwest of the site (as the crow flies). The Clonmelsh Stream would appear to no longer link the application site and the European site. This stream flows beneath the L3045 road in the northeastern corner of the site, and would ultimately have connected with the Powerstown Stream. However, it was noted that the stream ran dry upon entering the site, and whilst the bed of the re-routed stream remained soft on the dates of site inspection by this Inspector, there was no water within it. Further, where the stream passes beneath the L3044 road to the north, the original line of the Clonmelsh Stream to the west of this road has been culverted within a field. The culvert beneath the L3044 road was dry on the dates of site inspection by this Inspector. This relationship is more fully addressed in the Water and Hydrogeology section of the is Report, and it is not proposed to repeat it here.
- 8.3.3. The Cloghrystick Wood proposed Natural Heritage Area (pNHA) is located approximately 1.5km to the west of the site, and is not linked to it by the Powerstown Stream. The proposed extension of quarrying will not have any impact on this pNHA – noted for its trees and woodland floor flora.
- 8.3.4. The likely significant impacts will be-
- Loss of land-based habitat over 13.6ha.
 - Re-routing of the bed of the Clonmelsh Stream.
- 8.3.5. The principal mitigation measures include-
- Vegetation clearance outside of bird-nesting season.
 - Floodlighting to be minimal, and confined to early evenings in winter.

- Control of chemicals and hydrocarbons.
- Minimisation of fugitive dust emissions – including from mounded soil.
- Restoration of quarry void boundaries with topsoil on cessation of quarrying.
- Groundwater monitoring.

8.3.6. The wider area is characterised by similar arable fields, surrounded by hedgerows. The site is not considered to be particularly bio-diverse. Hedgerows will be retained. The loss of an arable field will not be significant in biodiversity terms. The ultimate flooding of the quarry will create a different, water-based habitat, which will offset the loss of the existing land-based habitat. The proposed development is an extension to an existing quarry: fauna (particularly mammals and birds) in the area will be habituated to quarry operations. The proposed development will not have any significant impact on the biodiversity of the area.

8.3.7. There will be no significant cumulative impacts with other developments in the vicinity – including the continued operation of the associated plant at the Clonmelsh quarry, the Powerstown Landfill and Recycling Centre, and the Milford Quarry – arising from the separation distance from these last two (0.7km to the west and southwest respectively).

8.3.8. I would be satisfied that, if the mitigation measures outlined are put in place, and if appropriate conditions are attached to any grant of permission relating to the operation of this quarry, there will be no significant impact on biodiversity in the area.

8.4. **Land, Soils and Geology**

8.4.1. Chapter 6 and Appendix 6 of the EIAR deal with these associated issues. Land is an issue which must be addressed – as per amended European Union Directive 2014/52/EU. The proposed quarry void is 13.6ha, which land will be lost to ultimate flooding of the quarry, with part of the balance of the 21.9ha site being lost to agricultural production through creation of screening berms. Overburden on site consists primarily of glacial till – which includes sand & gravel, which is to be won. The bedrock geology from the Geological Survey of Ireland (GSI) indicates that the site is underlain by the Ballysteen Limestone Formation – much of which is dolomitised. There is a fault line indicated in the southwest corner of the site. Some

three boreholes (BH03-BH05) were drilled on site in 2007, and 15 no. trial pits (TP1-TP15) excavated in 2005. Overburden up to 15.1m in depth was encountered at BH05 at the southern end of the site. None of the 15 no. trial pits encountered rock – the deepest being 9.7m.

8.4.2. The likely significant impacts will be-

- Removal of approximately 10m tonnes of limestone – permanent loss.
- Loss of approximately 13.6ha of land – to an ultimately restored water body, will be permanent.
- Loss of an additional 3-4ha to agricultural use for grading slopes.
Notwithstanding the retention of soils and subsoils for restoration – there will be loss of agricultural land in its current form and gradient.

8.4.3. The principal mitigation measures include-

- Refuelling of plant to be undertaken within designated refuelling areas or using precautions against spillages outside such areas.
- Regular maintenance of mobile plant to prevent leaking hydrocarbons.
- Re-handling of topsoil will be minimised to protect the integrity of the soil.
- Groundwater monitoring will be on-going.
- The setback areas will be returned to agricultural use for grazing animals – approximately 5ha.

8.4.4. The loss of limestone bedrock will not be significant in the context of the amount of similar limestone bedrock in the area. The loss of agricultural land will not be significant in the context of the amount of similar-type land in the vicinity.

8.4.5. There will be no significant cumulative impacts with other developments in the vicinity (apart from the obvious extension of the Clonmelsh quarry) – including the continued operation of the associated plant at the Clonmelsh quarry, the Powerstown Landfill and Recycling Centre, and the Milford Quarry – regard being had to the separation distances involved, and the quantity of limestone and sand & gravel which underlies this part of the county.

8.4.6. I would be satisfied that, if the mitigation measures outlined are put in place, and if appropriate conditions are attached to any grant of permission relating to the operation of this quarry, there will be no significant impact on land, soils and geology in the area.

8.5. Water and Hydrogeology

- 8.5.1. Chapter 7 and Appendix 7 of the EIAR deal with these associated issues. The existing quarry to the north is currently dewatered – with a floor area at approximately 25m OD. The proposed extended area of 13.6ha will be similarly dewatered – using the sump and pumping facilities at the adjoining Clonmelsh quarry. No karst features have been noted in the adjoining quarry, and neither is there evidence of any significant amount of dolomitisation. The overall quarry will be allowed to flood to a level of approximately 48m OD, upon restoration.
- 8.5.2. The site is located within Hydrometric Area 17 – the South-eastern River Basin District. The area drains to the Barrow River to the west. The surface water features in the area include the Clonmelsh Stream (flowing east to west), which has been diverted to the south in the past, to facilitate the extraction of rock in the quarry to the north. The stream is stated to be ephemeral, and to run dry in summer months. It had a small flow of water on the date of site inspection by this Inspector in May 2018, at a culvert beneath the L3045 road, flowing into the Clonmelsh quarry to the north of the current site. Just inside the site boundary, the bed of the stream ran dry, and a small cascade of water into the quarry void in the vicinity, was taken to be the destination. The inflow of this stream to the quarry lands ran dry on the date of site inspection by this Inspector in August 2018. The rerouted bed of the Clonmelsh Stream ultimately debouches to a culvert beneath the L3044 road on the western side of the Clonmelsh quarry. This culvert was dry on both site inspection dates by this Inspector, but there was evidence of flow in it at some stage in the recent past, in that fly-tipped waste on the eastern side of the L3044 had been washed through the culvert to the western side of the road. The course of the Clonmelsh Stream, within agricultural lands to the west of the L3044 road, has been culverted. It was noted that the bed of the rerouted Clonmelsh Stream around the quarry void to the north was soft and muddy under foot – indicative of a relatively recent flow of water – whether from the inflow at the L3045 road culvert or from land drainage within the

quarry site to the north, is not clear. The Powerstown Stream runs along the northwestern boundary of the wider Clonmelsh quarry – ultimately discharging to the Barrow River some 2.8km downstream of the quarry boundary. At present, therefore, there is no direct surface water connection with the Powerstown Stream – although the sump on the Clonmelsh quarry floor discharges by pumping to a drain which flows into the Powerstown Stream at the northern end of the Clonmelsh quarry.

8.5.3. Surface water monitoring is undertaken quarterly (as part of the Discharge Licence for the overall quarry) at SW01 on the Clonmelsh Stream (in the northeastern corner of the site), at SW03 on the Clonmelsh Stream on the western boundary of the Clonmelsh quarry (to the north of the site), and at SW02 on the Powerstown Stream below the confluence with the Clonmelsh Stream (to the northwest of the site). As noted elsewhere in this report, the Clonmelsh Stream is dry at SW03. The Discharge Licence (DL7/233) – amended by 01.WW0371 decision of the Board – controls discharges from the quarry at pumped discharge point DW01, to a vegetated channel just inside the L3050 road boundary of the Clonmelsh quarry. This drainage channel debouches to the Powerstown Stream, approximately 0.2km to the west of the discharge point. The distance from discharge point to Barrow River outfall is approximately 3.4km. The licence sets emission limit values for pH, Ammonia, Total Suspended Solids, BOD, COD, Total Phosphorous, Orthophosphate, Nitrates, Total Hydrocarbons and Turbidity. Flow rates are limited to 2,000m³ per day and 85m³ per hour. Emissions are monitored variously by hour, day, week, month or quarter. At surface water monitoring points, elevated levels of nitrates and ammonia are attributed to agricultural activity (most recent results from 2017). The most recent results from the discharge point in 2017, indicate no exceedances. The EPA indicates that water quality in the Barrow River (downstream of the Powerstown Stream outfall) is Q3-4 – ‘Moderate Status’.

8.5.4. Ground water flow is in the direction of the Barrow River to the west. The pre-quarrying water table is estimated at 48m OD. Minor faults are the principal means of flow through the bedrock aquifer – with no evidence of karstification or dolomitisation, apart from 1m depth at the top of the bedrock (epikarst). The aquifer is characterised as being a regionally important diffuse karstified bedrock aquifer with good development potential. A sand & gravel aquifer overlies the bedrock

aquifer on the site, and is determined to be regionally important – recharging the underlying bedrock aquifer. Groundwater vulnerability at the Clonmelsh quarry is ‘high’, as will be the case when overburden is stripped from the proposed extended area. Groundwater levels in boreholes show seasonal variation, with no discernible pattern in relation to proximity to the quarry void. Despite dewatering, the bedrock aquifer remains almost fully saturated, with a limited cone of drawdown in the vicinity of the quarry faces. Groundwater monitoring results from 2007/2008 appear to be the most recent available. Elevated levels of Chloride, Nitrate, Nitrite, Orthophosphate, Potassium, and Ammoniacal Nitrogen (as NH₄), suggest contamination from agricultural sources.

- 8.5.5. There are approximately 40 wells within 500m of the wider quarry site. Most are for domestic supply or monitoring at the Powerstown Landfill and Recycling Centre. Some 11 wells in the area were surveyed on behalf of the quarry operator in July 2007. None exhibited any problems with supply, notwithstanding dewatering of the Clonmelsh quarry. Drawdown will occur only within the overburden deposits, but not within the bedrock aquifer. The cone of drawdown will be steep. There are no source protection zones for public water supplies within the vicinity of the quarry.
- 8.5.6. The Clonmelsh Stream is to be diverted, once again, around the proposed quarry void, flowing in a clockwise direction on three sides of the proposed void. The diverted channel will be lined with clay to prevent seepage into the quarry void. As noted elsewhere in this report, it is not clear just where waters from such a rerouted stream will ultimately end up – most likely leaching into the quarry void to be pumped back into the Powerstown Stream. This would be a continuation of the situation which exists at present.
- 8.5.7. Ground and surface water from the extended quarry area will flow to the quarry void, where it is collected in a sump, and pumped to a series of settlement lagoons before being pumped up to the discharge point (DW01). Water is extracted from the discharge channel for the processing plant and dust suppression. Average daily discharge is stated to be 950m³.
- 8.5.8. The likely significant impacts will be-
- Gradual extension of dewatered quarry void to the south – increase in area being dewatered through discharge point DW01.

- Re-routing of the Clonmelsh Stream.
- Cone of drawdown impact on any wells at Garryhundon Cross as the quarry advances in this direction.
- Accidental spillage of hydrocarbons or chemicals entering surface or ground water.
- Discharge of silted waters to watercourses.

8.5.9. The principal mitigation measures include-

- Adherence to Discharge Licence Emission Limit Values (ELVs).
- Shallow flooding of the quarry floor in the event of extreme rainfall events.
- Maintenance of settlement ponds on the Clonmelsh quarry floor, to remove suspended solids.
- Recycling of water to feed the plant area.
- Supply of drinking water from off-site supplier.
- Septic tank maintained for site operatives at the plant area.
- Well supply at the plant area, to supply staff facilities.
- Clay lining of the re-routed Clonmelsh Stream.
- Refuelling of plant and machinery under strict supervision and control, with provision made for accidental spillages.
- Continuous groundwater monitoring.
- Applicant has indicated a willingness to carry out appropriate remedial measures in event of impact on wells of third parties.
- Phased restoration of lands (where outside of the quarry void), to protect underlying aquifer(s).
- No fuel or chemicals will be stored within the boundary of the quarry extension.

8.5.10. The regime in relation to the handling of surface water and groundwater at the Clonmelsh quarry will not change in any significant way with this extension. The void will steadily move closer to houses at Garryhundon Cross, where the applicant has

undertaken to carry out appropriate remedial measures in the event of impact on third party wells. A condition could be attached to any grant of planning permission, to provide for appropriate remedial measures, in the event of such an occurrence.

- 8.5.11. There will be no significant cumulative impacts with other developments in the vicinity – including the continued operation of the associated plant at the Clonmelsh quarry, the Powerstown Landfill and Recycling Centre, and the Milford Quarry, apart from the flooding of the extended quarry upon completion of quarrying; which will be neither negative nor positive in terms of water and hydrogeology. The extended quarry will be further from the Barrow River than any of the aforementioned developments – via surface water connection. The flooded quarry void would not be directly connected with any surface water feature.
- 8.5.12. I would be satisfied that, if the mitigation measures outlined are put in place, and if appropriate conditions are attached to any grant of permission relating to the operation of this quarry, there will be no significant impact on ground water or surface water in the vicinity of this quarry extension.

8.6. Air Quality and Climate

- 8.6.1. Chapter 8 of the EIAR deals with these associated issues. Dust is the principal emission to air from quarrying activity. The proposal is for an extension of a working limestone and sand & gravel quarry with associated ancillary site works. The advised upper limit for dust deposition is $350\text{mg}/\text{m}^2/\text{day}$, measured over a 30-day period. Dust is and has been monitored at seven points around the wider quarry – with D2-D4 being located on the boundaries of the proposed extended extraction area. Table 8.5 indicates a small number of exceedances at these three points over the period of measurement from 2007 to 2017. The closest house which is likely to be affected, is the one on the eastern boundary of the quarry (which currently appears unoccupied) – the derelict house on the western boundary being in the ownership/control of the applicant. The principal cluster of potentially affected houses is located to the southwest – at Garryhundon Cross – within 55m of the quarry extension.
- 8.6.2. The impact on air quality from vehicle and plant exhaust will not be significant, being largely similar to the situation which currently obtains at the southern face of the

adjoining Clonmelsh quarry. HGVs will enter and leave via the L3050 road, and no traffic will use the L3045 road and very little will use the L3044 road.

8.6.3. There was no evidence (on the dates of site inspection by this Inspector) of any significant deposition of dust on road margins 10m either side of the L3050 road access to the wider quarry, notwithstanding claims by the HSE to the contrary. If departing HGVs are routed via a wheel-wash, there should be no difficulty with aggregate, mud or silt being carried out onto the road. This could be required by way of condition attached to any grant of planning permission.

8.6.4. The proposed development will not have any significant impact on climate.

8.6.5. The likely significant impacts will be-

- Dust deposition at the house on the eastern boundary, and the cluster of houses at Garryhundon Cross.
- Dust deposition on the L3044 and L3045 roads on three boundaries of the quarry extension.

8.6.6. The principal mitigation measures proposed are-

- Regular servicing of plant.
- Monitoring for dust.
- Stockpiled mounds will be sprayed with water during dry periods.
- Overburden mounds will be planted with grass to minimise wind-blown dust.
- Internal haul roads will be compacted and maintained, with on-site speed restrictions.
- Wheel-wash will be used at the quarry exit.
- HGVs carrying fine dry loads will be covered when leaving the quarry.
- Crushing of blasted rock close to the base of the quarry face, where the quarry face will act as a barrier to wind-blown dust.

8.6.7. There will be no significant cumulative impacts with other developments in the vicinity – including the continued operation of the associated plant at the Clonmelsh quarry, the Powerstown Landfill and Recycling Centre, and the Milford Quarry. Dust monitoring for the principal quarry already extends to the proposed expansion area.

8.6.8. I would be satisfied that, if the mitigation measures proposed are put in place, and if appropriate conditions are attached to any grant of permission relating to the operation of this quarry, there will be no significant impact arising from dust.

8.7. Noise and Vibration

- 8.7.1. Chapter 9 of the EIAR deals with these associated issues. This proposal is for an extension to an existing working quarry and associated plant areas. The noise regime in the area is dominated by quarrying and road traffic – particularly the nearby M9 Motorway to the northwest. Noise monitoring is undertaken at the existing Clonmelsh quarry, and results from 2008-2017 are presented at Table 9.2. Conditioned noise limits refer to 55dBA_{L_{Aeq} 1 hour} for day-time and 45dBA_{L_{Aeq} 15 minutes} for night-time. Results are for day-time only (0800-2000 hours) – notwithstanding that it is stated elsewhere in the EIAR that the hours of operation commence at 0600 hours Monday to Saturday.
- 8.7.2. The primary source of vibration is from the quarry itself. Vibration monitoring is undertaken at the existing quarry, as part of the Environmental Management Programme for the site – with results presented for the year 2009 only (Table 9.3). Guidelines for vibration are 12mm/s peak particle velocity (PPV) measured in any of the three mutually orthogonal planes at the receiving location, and Air Overpressure of 125dB_(linear) maximum peak, with a 95% confidence limit. Blasting is carried out only between the hours of 0800 and 1800, Monday to Friday.
- 8.7.3. The closest house is that on the eastern boundary of the quarry (which currently appears to be unoccupied) – the house on the western boundary being in the ownership/control of the applicant (currently derelict). The principal cluster of potentially affected houses is located to the southwest (at Garryhundon Cross) – the closest house being within 55m of the quarry extension. There are a smaller number of houses again within 500m of the site boundary.
- 8.7.4. Noise monitoring is carried out at three points within the proposed quarry extension site at N2, N3 & N5. Vibration monitoring is carried out at two points immediately to the northeast and southwest of the proposed expansion area. Elevated day-time noise levels are attributed to road traffic. Limited exceedances of the air

overpressure limits, were still within the 95% confidence limit. However, I note that these latter figures are from 2009, with no indication of more current results.

8.7.5. Noise thresholds, as set down in the Quarry Guidelines 2004, should be applied to this quarry extension. Notwithstanding the claims of the applicant of longer historic working hours in relation to the adjoining Clonmelsh quarry, I have elsewhere in this report recommended that operating hours be as recommended in the Guidelines – as this is a new development, and residential amenities need to be addressed. The noise thresholds imposed by way of condition, should correspond to the working hours permitted.

8.7.6. The principal mitigation measures proposed include-

- Maintenance of haul routes to limit vibration and noise from HGVs and machinery.
- Reduction in drop heights.
- Cutting out of idling machinery.
- Maintenance of machinery and plant to ensure efficient operation.
- Judicious use of explosives.
- Blasting limited to working days – and not at all at weekends or bank holidays.
- Monitoring for noise and blasting.
- Notice of blasting given to local residents.

8.7.7. There will be no significant cumulative impacts with other developments in the vicinity – including road traffic, the continued operation of the associated plant at the Clonmelsh quarry, the Powerstown Landfill and Recycling Centre, and the Milford Quarry. Noise and blast monitoring for the Clonmelsh quarry already extends to the proposed expansion area.

8.7.8. I would be satisfied that, if the mitigation measures outlined are put in place, and if appropriate conditions are attached to any grant of permission relating to the operation of this quarry, there will be no significant impact arising from noise and vibration.

8.8. Material Assets and Traffic

- 8.8.1. Chapter 10 and Appendix 10 of the EIAR deal with these associated issues. No new access points to public roads are proposed – the existing Clonmelsh quarry entrance on the L3050 road is to be used. The proposed expansion area will effectively result in a continuation of the existing traffic generation at the Clonmelsh quarry over a further period of twenty years. Existing extraction rates are stated to be 180,000-200,000 tonnes per annum – although they have been as high as 1 million tonnes per annum at the height of the economic boom. In addition, some 250,000 tonnes per annum of aggregate is imported to the Clonmelsh quarry site for processing. The quarry entrance at Garryhundon will not be impacted in any way by the proposed extension.
- 8.8.2. A Traffic and Transportation Assessment (dated December 2017), was undertaken as part of the EIAR. The L3050 road is wide enough to pass two HGVs with care. Sight distance at the existing Clonmelsh quarry entrance is good in both directions – the road having been partially realigned in association with the construction of the M9 Motorway. There is no warning signage in place to the west of the entrance, where there is warning signage to the east. Traffic counts, undertaken on Tuesday 7th November 2017, indicate 510 daily trips to/from the quarry, of which some 78% related to HGVs. There is no proposal to increase staff numbers.
- 8.8.3. It is claimed that the proposed expansion area is not traversed by any telecommunication or power lines, but this is not the case. There are a number of power lines traversing the site – supported on timber poles.
- 8.8.4. The likely significant impacts would not differ from the impacts of the existing Clonmelsh quarry – at a time of historically low activity – extraction of 180,000-200,000 tonnes per annum.
- 8.8.5. There are no mitigation measures proposed – as the existing quarry entrance is to be used, and traffic volumes will not be significantly different to existing. Obviously, any significant upturn in the construction industry would have likely impacts on traffic movements – but unlikely to reach the levels of the 2007 economic boom. It would be possible to attach a condition to any grant of planning permission requiring the erection of warning signage to the west of the L3050 road entrance, and for the extension of the wheel-wash facility at the quarry entrance to cover all HGVs

departing the site – including those passing over the weighbridge (which currently do not pass through the wheel-wash). I do note that notwithstanding this situation, there was no evidence of any significant amount of mud or dust being carried onto the L3050 road on the wheels of HGVs on the dates of site inspection by this Inspector.

- 8.8.6. There is no right-turning lane for traffic into the Clonmelsh quarry. Neither are there acceleration or deceleration lanes on the L3050 road. The western portion of the L3050 road was realigned in association with construction of the M9 Motorway. This involved realignment of a section of the L3044 road, and construction of a new junction between the two. The L3050 road becomes the L1003 road shortly after it crosses the M9 Motorway in a westerly direction towards the former N9 National Primary Route (now R448 Regional Road). The L1003 road is wide enough for two vehicles to pass. The junction of the L1003 road and the former N9 (R448) road is a staggered crossroads at Milford – approximately 1.3km to the west of the Clonmelsh quarry entrance. There are ghost island right-turning lanes on the R448 road, as well as short left-turn merge/diverge tapers on the east side of the R448 road. The 100kph speed restriction applies on the R448 road, and sight distance is good. The junction has been provided with public lighting. Bicycle lanes are in place on either side of the R448 road. The junction of the L3050b road with the N80 National Secondary Road, (approximately 5.3km to the east of the Clonmelsh quarry entrance) at Graiguenaspiddoge Cross, is a broad, staggered T-junction. The 100kph speed restriction applies on the N80 road, and sight distance is good. The extension of the quarry will not have any significant impact on these two junctions. The construction of the M9 Motorway has significantly reduced traffic levels on the former N9 (now R448) road.
- 8.8.7. There are no cycling facilities on the local road network, although such have been introduced on either side of the R448 road. The extension of quarrying will not have any impact on the cycling network – as R448 road traffic has priority at the junction with the L1003 road.
- 8.8.8. In terms of cumulative impact, I note that access to the Powerstown Landfill and Recycling Centre is from the L3045 road – at a point where two vehicles can pass: with the most direct access to it being from the former N9 (now R448) road – south of Junction 6 Carlow South on the M9 Motorway. The access to Milford Quarry (Kilcarrig) is from the former N9 (now R448) road – and has its own dedicated right-

turning lane and short deceleration lane on the R448 road. These facilities use a different network of roads to the Clonmelsh quarry – which uses the L3050/L1003 roads to access the R448 road (north of Junction 6 Carlow South on the M9 Motorway) to the west, and the L3050 road to access the N80 road to the east. Traffic movements associated with the proposed development will represent a continuation of the existing traffic regime associated with the existing quarry at Clonmelsh, and there will be no significant impact on the road network or traffic safety in the area.

- 8.8.9. I would be satisfied that, if appropriate conditions are attached to any grant of permission relating to the operation of this quarry, there will be no significant impact on the road network.

8.9. Cultural Heritage

- 8.9.1. Chapter 11 and Appendix 11 [a series of six colour photographs] of the EIAR address this issue. I note that Appendix 11 is inserted (in error) before Appendix 10. The site was inspected in October 2017, and is located in an area of high archaeological potential. The Sites and Monuments Record (SMR) of the OPW indicates that there are two sites within the red line boundary – CW012-202 ring ditch, and CW012-093 enclosure. Both were identified by aerial photographs and crop marks. The latter, a rectilinear enclosure, was excavated (under licence) in 2008, and was preserved by record. The excavations appear in aerial photography from April 2009. It is located just to the south of the existing southern Clonmelsh quarry face. The former, located in the southeastern corner of the site, is not visible to the naked eye in this arable field. This chapter of the EIAR correctly locates both monuments. However, in drawing up plans for the proposed quarry extension, the location of the former was mistakenly taken to be further to the north. Drawings submitted with the application show it located immediately to the south of the house on the eastern boundary, and set-back lines have been afforded for purposes of its preservation. However, the feature identified on drawings (and elsewhere in the EIAR) as the ring ditch appears to be just deposition of spoil from the quarry to the north or from the archaeological testing of nearby CW012-093 – admittedly in circular form. The upshot of this is, that the proposed quarry void would result in the removal of both recorded monuments, notwithstanding that in this chapter of the

EIAR, a setback/exclusion area of 20m from the ring ditch is recommended. The impact of removing both recorded monuments has not been addressed in the EIAR – arising from the mistake in identifying the true location of CW012-202 for the purposes of expansion.

- 8.9.2. I note that an enclosure identified as CW012-101, within the Clonmelsh quarry area to the north of the site, has been quarried out in the past – although this is not referenced in the EIAR.
- 8.9.3. There are a number of other recorded monuments – particularly to the east, on the opposite side of the L3045 road. The proposed development will not have any impact on these. Older maps for the area show the site divided into a number of smaller fields, with a building in the southeast corner – all now obliterated. The northern boundary of the site forms the division between the townlands of Clonmelsh to the north and Powerstown to the south. This boundary has been quarried out.
- 8.9.4. There are no items of architectural heritage in the immediate vicinity of the proposed extension area. Garryhundon House and the associated walled garden to the southeast, are Protected Structures. They will not be impacted in any way by the proposed development.
- 8.9.5. The principal mitigation measures proposed relate to the preservation by record of monument CW012-093 (which is to be quarried out) and a generous set back from the supposed location of CW012-202. Unfortunately, the mistaken identification of the location of monument CW012-202 would result in it being quarried out also, without the impact having been assessed in the EIAR. It would be possible to exclude this area from any grant of planning permission for extension of quarrying – requiring a minimum setback of 20m from the monument. This would have the effect of excluding the southeastern corner of the proposed excavation area. It would be open to the applicant to apply for a further planning permission to address the issue – the monument being located within a later phase of the proposed development. I would be satisfied that permission could be granted for this extension which should include a condition excluding the area of monument CW012-202 from future expansion, and requiring a minimum 20m setback from the outer extent of the monument.

- 8.9.6. The proposed development will not have any significant cumulative impact with other developments in the area – apart from the impacts already indicated in relation to removal of a monument within the Clonmelsh quarry to the north, and the presence of two further monuments within the Garryhundon quarry (CW012-026 and CW012-136) both of which are identified as enclosures from crop marks on aerial photography – and one of which has been removed. I note that a number of similar-type monuments were removed in association with the construction of the M9 Motorway, but these would have been preserved by way of record.
- 8.9.7. I would be satisfied that, if the mitigation measures proposed are put in place, and if appropriate conditions are attached to any grant of permission relating to the operation of this quarry, the proposed development would not have any significant impact on the cultural heritage of the area.

8.10. Landscape

- 8.10.1. Chapter 12 of the EIAR deals with this issue. The proposal represents a southern extension to an existing large void at the Clonmelsh quarry. The sand & gravel extraction at Garryhundon townland is located in close proximity to the proposed expansion area to the southeast. Extraction in this area has halted – and the site is slowly re-vegetating (evident from aerial photography). The quarry extension site is within the ‘Central Lowlands’ landscape character type – defined in the Carlow County Development Plan 2015-2021. Most of the county lies within this character type. The landscape is mostly level to gently rolling. It is characterised by fertile fields. The site comprises one large, rectangular, arable field, with hedgerows on three of the four sides. It originally comprised a pattern of smaller fields, but all trace of these has been obliterated. There is similar-type arable land in the vicinity – with the Clonmelsh quarry and the Garryhundon quarry located to the north and southeast respectively. There are a number of one-off houses lining the network of roads in the area – particularly the L3044 road. As referred in the previous section, the area is rich in archaeology – much of which does not exhibit any above ground manifestation. Central Lowlands landscape character is indicated as being moderately sensitive to development.
- 8.10.2. There are nine panoramic views included within the rEIAR for the substitute consent applications (ABP-300034-17 and ABP-300037-17). Each of the nine views shows

the impact of the existing quarry (principally the Clonmelsh quarry plant) on the landscape from both the local road network, and also from roads slightly further afield – including Scenic Routes 5 and 9. I would consider that Scenic Route 9 is too remote to be impacted by the extended quarry. The existing quarry is partially screened from view using berms created from stripped soil and subsoil. The plant area at the Clonmelsh quarry is clearly visible from local roads and is the most dominant feature on the landscape. Upon completion of quarrying, the void will be flooded in association with the Clonmelsh quarry.

8.10.3. The proposed boundary berms will screen the quarry void from view from surrounding roads – L3044 and L3045. The quarry void would be visible from higher ground to the east and west of the site – but the separation distances involved would render the impact on the landscape minor. There will be no impact from the Barrow Way walking route along the old tow path associated with the Barrow Navigation to the west. The intervening distance, changes in ground level, together with the presence of trees and hedgerows, would ensure no negative visual impact.

8.10.4. The likely significant impacts will be-

- Loss of approximately 13.6ha of agricultural land – to be replaced by a water body upon completion of quarrying.
- Creation of berms along the eastern, southern and western boundaries of the quarry which will restrict existing views from the L3044 and L3045 roads.
- Extension of a flooded void from Clonmelsh into this Powerstown section to create a waterbody of approximately 46.0ha.

8.10.5. The principal mitigation measures proposed are-

- Screening berms along the eastern, southern and western sides of the quarry void to screen quarrying from view.
- Retention of roadside boundary hedgerows.
- Restoration of the quarry void through flooding and partial return to agricultural/woodland use of margin areas.
- Setback of 100m from the unoccupied house on the eastern boundary (L3045 road).

- 8.10.6. The margins of the extended quarry void (approximately 8.3ha) will be mounded and landscaped during extraction, and then partially returned to agricultural use upon completion of quarrying. The L3044 roadside boundary hedgerow is of good quality, and already restricts views across the site. Large berms have been created inside this roadside hedgerow to the north – at the Clonmelsh quarry, without significant impact on visual amenities. The hedgerows on the L3045 road south of the site, are of poorer quality, affording views to the north across the site. However, this is a minor county road with only two houses between the junction of the L3044 road to the west and the L3050 road to the north. One of these houses would appear to be vacant at present, and the other was historically associated with the operation of the quarry at Clonmelsh and Garryhundon. There are already earth berms along sections of the L3045 road, associated with the Clonmelsh quarry. I would not consider that the erection of berms on the quarry boundary would have any significant impact on views from this road.
- 8.10.7. The house on the eastern boundary of the site is already surrounded by mature gardens and hedgerows and the extension of the quarry will not have any impact on this house. As already referred to, the house on the western boundary of the site is in the ownership/control of the applicant, and is derelict. There is a further house at the northwestern corner of the extension site, which is already impacted by the presence of the Clonmelsh quarry. The proposed extension will not increase the visual impact in any significant way. I note that this house is in the ownership/control of the applicant, and is semi-derelict. Houses at Garryhundon Cross to the southwest of the site are mostly surrounded by mature gardens or roadside hedgerows, and the quarry expansion will not have any impact on the visual amenities of these houses – one of which is in the ownership/control of the applicant. The L3044 and L3045 roads separate these houses from the quarry site.
- 8.10.8. Scenic Route 5 is located 1.7km (at its closest) to the southeast of the quarry extension site, and views of the existing quarry are only intermittent – the quarry plant being the most prominent feature. The existing Clonmelsh quarry predates the designation of the Scenic Route and so, would have been an element in the landscape when the route was designated. Clearly it was not considered that the quarry had a serious detrimental impact on the views from Scenic Route 5 – else it

would not have been designated such. The extension of the quarry to the south will not have a significant impact on Scenic Route 5.

8.10.9. Views and Prospects (27 and 33 of the County Development Plan) will not be impacted by the proposed quarry extension. Protected View no. 27, to the southeast of Nurney, being focussed on the south, and where views to the north towards the quarry will be screened by intervening trees and hedgerows. Protected view no. 33 (west of the Barrow) will not be impacted due to the mature tree cover on some of the intervening lands between the river and the quarry to the west.

8.10.10. The principal cumulative impact is in relation to extension of the existing Clonmelsh quarry. Notwithstanding this extension, the amount of quarrying in the area (including the Milford Quarry and the Garryhundon quarry) remains limited, and the principal land use in the area is agriculture – characterised by a pattern of large fields (often tilled), and divided by hedgerows. This application is not to be compared to the introduction of quarrying to an area which had not previously been subjected to quarrying. There is a long history of quarrying at both Clonmelsh and Garryhundon. The visual impacts of this quarrying on the area are already in evidence, and the proposed extension of the Clonmelsh quarry to the south will not introduce any significant new visual element – regard being had to proximity to the existing quarry void, the relatively flat nature of the landscape in the immediate vicinity, the presence of boundary hedgerows and the proposals to erect berms around three sides of the proposed extension. Only mobile plant on the quarry floor will be used – the plant at Clonmelsh being used for any additional processing required. The granting of planning permission for an extension would likely prolong the life of the quarry plant at Clonmelsh for up to twenty years (if permission for such a term is granted by the Board). Without such a grant of permission it is likely, but not certain, that such plant would be removed much sooner: noting, however, that material is imported to the plant area from other quarries. I would be satisfied that the visual impact of the proposed extension will be limited to the L3044 and L3045 roads in the immediate area, and any impact on views from further afield will be mitigated by habituation to the presence of the existing quarry void and plant.

8.10.11. I would be satisfied that, if the mitigation measures proposed are put in place, and if appropriate conditions are attached to any grant of permission relating to the

operation of this quarry, the proposed development will not have any significant impact on the landscape in this area.

8.11. Interactions

Chapter 13 of the EIAR deals with this issue. There is an over-riding residual significant negative environmental impact resulting from the permanent loss of agricultural land and recorded monuments. This, however, is balanced by the extraction of a valuable limestone resource, maintenance of existing employment at the Clonmelsh quarry, and the creation of a new water-based habitat. The principal interactions identified are-

- Human health and noise, vibration, air quality, hydrology/hydrogeology.
- Biodiversity and water quality.
- Land and biodiversity.
- Geology and archaeology.
- Hydrology and biodiversity.

Mitigation measures are set out in the different chapters of the EIAR to lessen the impact of the development on these interacting environmental factors.

8.12. Conclusion

The EIAR complies with Articles 94 and 111 of the Planning and Development Regulations, 2001 (as amended). The EIAR broadly contains the information specified in paragraphs 1 and 2 of Schedule 6 of the Regulations. There is an adequate summary of the EIAR in non-technical language. The EIAR identified the likely significant direct and indirect effects of the quarry extension on the environment. Cumulative impacts with other developments in the area were also addressed. I would be satisfied that, having regard to the preceding subsections of this Inspector's Report, that the extension of this quarry would not have a significant impact on the environment.

9.0 **Appropriate Assessment**

9.1. **General Comment**

The application to An Bord Pleanála was accompanied by a Natura Impact Statement (NIS) – dated November 2017. The proposed quarry extension is not directly connected with or necessary for the management of an European site. Species, habitats, surface water, drainage, etc. are all described in the EIAR which accompanies this application. To firstly carry out screening for appropriate assessment, six steps will be followed in this section.

9.2. **Step 1 – Identify European Sites which could potentially be affected by quarrying (source-pathway-receptor model)**

- 9.2.1. The closest European site to the quarry is the River Barrow and River Nore Special Area of Conservation (Site code 002162) – approximately 1.3km to the southwest of the site – as the crow flies. The Powerstown Stream runs along the northwestern boundary of the Clonmelsh quarry site, and discharges some 2.3km downstream into the SAC. The stream passes beneath the Dublin to Waterford railway line, the M9 Motorway (in two places – and is connected with the motorway drainage) and passes the Powerstown Landfill and Recycling Centre, before discharging via culvert beneath the old N9 road (now R448) into the SAC, and then onwards into the Barrow River. The diverted Clonmelsh Stream (an ephemeral watercourse) would have once linked this site with the SAC, debouching into the Powerstown Stream to the west of the Clonmelsh quarry. However, the Clonmelsh Stream appears to run dry within the Clonmelsh quarry site, and the connection to the west of the L3044 road has been culverted. The surface water connection will be via a sump and a series of settlement lagoons on the Clonmelsh quarry floor, to a discharge point (DW01) on the L3050 road to the north – which discharge ultimately flows into the Powerstown Stream some 0.2km to the west of the discharge point.
- 9.2.2. Water quality in the Barrow River, and groundwater quality generally, is protected by the requirements of the Water Framework Directive (WFD). This Directive requires that there should be no dis-improvement in water quality. The regionally-important

karstified diffuse-flow aquifer (Bagenalstown Lower Groundwater Basin) which underlies the quarry, is not at risk of over-abstraction.

9.2.3. The Slaney River Valley SAC (Site code 000781) is located approximately 12.5km to the east, and is within a separate river basin, and for this reason, is not considered here.

9.3. Step 2 – Identify the Conservation Objectives of the relevant site(s)

9.3.1. The qualifying interests of the River Barrow and River Nore SAC are as follows-

- Estuaries.
- Mudflats and sandflats not covered by seawater at low tide.
- Reefs.
- Salicornia and other annuals colonising mud and sand.
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*).
- Mediterranean salt meadows (*Juncetalia maritimi*).
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation.
- European dry heaths.
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels.
- Petrifying springs with tufa formation (Cratoneurion).
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles.
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*).
- *Vertigo moulinsiana* (Desmoulin's whorl snail).
- *Margaritifera margaritifera* (Freshwater pearl mussel).
- *Austropotamobius pallipes* (White-clawed crayfish).
- *Petromyzon marinus* (Sea lamprey).

- *Lampetra planeri* (Brook lamprey).
- *Lampetra fluviatilis* (River lamprey).
- *Alosa fallax fallax* (Twaite shad).
- *Salmo salar* (Salmon).
- *Lutra lutra* (Otter).
- *Trichomanes speciosum* (Killarney fern).
- *Margaritifera durrovensis* (Nore freshwater pearl mussel).

9.3.2. The Conservation objectives for the 12,373ha site, are to maintain the favourable conservation condition of Desmoulin's whorl snail, White-clawed crayfish, Estuaries, Mudflats and sandflats, Salicornia, Killarney fern, Water courses of plain to montane levels, European dry heaths, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Petrifying springs: and to restore the favourable conservation condition of Sea lamprey, Brook lamprey, River lamprey, Twaite shad, Atlantic salmon, Atlantic salt meadows, Otter, Mediterranean salt meadows, Nore freshwater pearl mussel, Old sessile oak woods, Alluvial forests. The status of the Freshwater pearl mussel is currently under review, to establish whether a site-specific conservation objective is set for this species.

9.4. **Step 3 – Identify the potential- a) likely, and b) significant, effects of the project with reference to the site's Conservation Objectives, in light of best scientific knowledge**

The principal impacts which may occur (both negative and positive), largely relate to water quality, and include the following-

- Accidental spillages of hydrocarbons, entering groundwater.
- Drawdown of groundwater through dewatering (at adjoining Clonmelsh quarry measured as only affecting lands within 50m of the void).
- Discharge of suspended solids to watercourses.
- Fugitive dust emissions.
- Further diversion of Clonmelsh Stream.

- Improvement to dilution of nitrates in Powerstown Stream, through pumped discharge of groundwater from the adjoining Clonmelsh quarry.

9.5. Step 4 – As above, but considering in-combination effects with other plans or projects

The discharge from the Clonmelsh quarry is to the Powerstown Stream. Road drainage from the M9 Motorway also discharges to this stream, downstream of the quarry discharge. The stream flows past the Powerstown Landfill and Recycling Centre to the southwest – before discharging to the Barrow River. The Milford Quarry (Kilcarrig) to the southwest does not discharge to the Powerstown Stream. Motorway drainage is treated prior to discharge, as is the case with the Powerstown Landfill and Recycling Centre. There will be no opportunity for in-combination impacts on water quality in the Powerstown Stream.

9.6. Step 5 – Identify any mitigation measures which may be put in place to reduce/lessen likely significant impacts on European sites

Mitigation measures outlined include the following-

- Monitoring of groundwater.
- Settlement lagoons for silt within the Clonmelsh quarry void.
- Soil and overburden stockpiles allowed to become vegetated.
- Monitoring of licensed surface water discharge at DW01 – (Licence DL7/233).
- Regular servicing of machinery and plant.
- Drip trays used during refuelling of plant and machinery.
- Availability of emergency spill kits.
- Dust suppression measures at plant and stockpile areas and on haul roads.
- No excavation below 25m OD.
- Construction of lined, re-routed Clonmelsh Stream, to encourage flow within this ephemeral watercourse.
- Creation of new aquatic habitats on closure of the quarry.

9.7. **Step 6 – Determine whether likely significant effects, either individually or in combination with other plans or projects, on European sites, can reasonably be discounted, on the basis of objective scientific information**

The applicant deemed that it was not possible to so discount any likely significant effects, and so proceeded to the preparation of an NIS for submission to An Bord Pleanála, to enable the Board, as the competent authority, to carry out appropriate assessment. This was reasonable, given the connection to the Clonmelsh quarry, the licensed discharge to the Powerstown Stream, and the proximity of the River Barrow and River Nore SAC.

9.8. **Stage 2 Appropriate Assessment**

- 9.8.1. The quarry, and particularly the associated plant at Clonmelsh, were substantially in existence when the SAC was so designated – indicated by OSI aerial photography from 1995. Therefore, the impact of quarrying at this site will have been taken into consideration when deciding to include the Barrow River within a candidate SAC. The Discharge Licence controls what is discharged to the Powerstown Stream – and ultimately the Barrow River. It is not proposed to make any changes to the existing discharge arrangements. The diverted, ephemeral Clonmelsh Stream will be lined, to encourage flow within it, although this is not currently successful within the existing Clonmelsh quarry to the north – the stream effectively running dry within a short space of entering the quarry. There will be no discharge from the extended quarry to the diverted Clonmelsh Stream channel. The area of groundwater drawdown will be extended further to the south, but this will not result in any major change to groundwater flow – the cone of drawdown being limited to approximately 50m of the quarry void. The site is neither within nor immediately abutting the River Barrow and River Nore SAC. The SAC is located approximately 2.8km downstream of the licensed discharge (DW01) from the Clonmelsh quarry. Such an intervening distance would allow for some settlement of accidental discharge of silted waters or hydrocarbons.
- 9.8.2. The principal or ‘high’ ranking threats and pressures to the SAC, as indicated by the National Parks and Wildlife Service, are- pollution to surface waters; dykes and flooding defences in inland water systems; modifying structures of inland water

courses; erosion; agricultural intensification – without being any more specific. Quarrying is not specifically mentioned, but could be included under the heading of pollution to surface waters both inside and outside the SAC. The ‘Site Synopsis’ indicates that- “The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, over-grazing within the woodland areas, and invasion by non-native species, for example Cherry Laurel (*Prunus laurocerasus*) and Rhododendron (*Rhododendron ponticum*). The water quality of the site remains vulnerable. Good quality water is necessary to maintain the populations of the Annex II animal species listed above. Good quality is dependent on controlling fertilisation of the grasslands, particularly along the Nore. It also requires that sewage be properly treated before discharge. Drainage activities in the catchment can lead to flash floods which can damage the many Annex II species present. Capital and maintenance dredging within the lower reaches of the system pose a threat to migrating fish species such as lamprey and shad. Land reclamation also poses a threat to the salt meadows and the populations of legally protected species therein”. Again, quarrying is not mentioned as a main threat to the SAC.

- 9.8.3. The issue of in-combination impacts is addressed in the screening stage of this Inspector’s Report, and the possibility was discounted. It is not, therefore, necessary to consider such impacts afresh – the likely significant impact being from the quarry discharge itself. The quarry floor acts as a large retaining reservoir in the event of heavy rainfall – where all drainage within the site ultimately ends up either within the quarry void or percolating to ground. This retention feature within the quarry will have had the effect of containing any large amounts of silt arising during heavy rainfall events.
- 9.8.4. I consider it reasonable to conclude, on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of European site no. 002162, or any other European site, in view of the site’s Conservation Objectives.

10.0 Recommendation

I recommend that permission be granted, and I attach a Draft Order for the consideration of the Board.

DRAFT ORDER

Decision

WHEREAS Property Resource Planning Management & Development, agent on behalf of Grant Thornton Receivers, made an application to An Bord Pleanála on the 5th day of December 2017, pursuant to section 37L of the Planning and Development Act, 2000, as amended, to further develop a quarry at Clonmelsh and Powerstown, Nurney, Co. Carlow, in accordance with plans and particulars lodged with An Bord Pleanála.

NOW THEREFORE, the Board, in accordance with section 37N of the said Act, and based on the Reasons and Considerations set out below, decided to **GRANT** permission to further develop the quarry, in accordance with the attached Conditions.

Matters Considered

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts, and Regulations made thereunder, it was required to have regard. Such matters included any submissions and observations received by it in accordance with statutory provisions.

Reasons and Considerations

In making its decision, the Board had regard, *inter alia*, to the following:

- a) the provisions of the Planning and Development Act, 2000, as amended, and in particular, section 37L,

- b) the provisions of the Planning and Development Regulations, 2001, as amended,
- c) Council Directive 92/43/EEC on the Conservation of natural Habitats and of Wild Flora and Fauna, as amended,
- d) the 'Quarries and Ancillary Activities, Guidelines for Planning Authorities', issued by the Department of the Environment, Heritage and Local Government, in April 2004,
- e) the provisions of the Carlow County Development Plan 2015 – 2021,
- f) the Environmental Impact Assessment Report submitted with the application to further develop the quarry,
- g) the Natura Impact Statement submitted with the application to further develop the quarry,
- h) the submissions received from the applicant in response to the Section 132 notice of An Bord Pleanála,
- i) the report and the opinion of the planning authority under section 37L(12)(a) of the Planning and Development Act, 2000, as amended,
- j) the submissions made in accordance with regulations made under Articles 270 and 271 of the Planning and Development Regulations, 2001, as amended,
- k) the decisions of the Board to grant substitute consent in respect of part of the subject quarry, refs. ABP-300034-17 and ABP-300037-17,

- l) the nature and scale of the development the subject of this application to further develop the quarry,
- m) the planning history of the site,
- n) the Wastewater Discharge Licence in place for the associated Clonmelsh quarry, and
- o) the pattern of development in the area, and the proximity of the quarry to an European site.

Environmental Impact Assessment

The Board had regard to the Environmental Impact Assessment Report submitted with the application, and to the remedial Environmental Impact Assessment Report submitted with the associated applications for substitute consent, and completed an Environmental Impact Assessment in relation to the proposed development in question, and considered that the assessment and conclusions of the Inspector's Report were satisfactory in identifying the environmental effects of the development to be undertaken. The Board adopted the Inspector's Report and agreed with the Inspector's conclusions in relation to the acceptability of mitigation measures and residual effects, which would be acceptable on the environment.

Appropriate Assessment

Having regard to the nature, scale and extent of the subject proposed development, the Natura Impact Statement submitted with the application, the remedial Natura Impact Statement submitted with the associated applications for substitute consent, the mitigation measures contained therein, the submissions on file and the Inspector's assessment, the Board completed an Appropriate Assessment of the impacts of the development on nearby Natura 2000 sites, specifically the River Barrow and River Nore Special Area of Conservation (Site code 002162). The Board concluded that, on the basis of the information available, the subject

development, either individually or in combination with other plans or projects, would not adversely affect the integrity of any European site, having regard to the conservation objectives of those sites.

Conclusion

Having regard to the acceptability of the ecological and environmental impacts as set out in the foregoing it is considered that, subject to compliance with the Conditions set out below, the subject development would be in accordance with the proper planning and sustainable development of the area.

11.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, and further information received by An Bord Pleanála on the 26th day of April 2018, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development, and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. Mitigation and monitoring measures outlined in the Environmental Impact Assessment Report and the Natura Impact Statement submitted with this application, shall be carried out in full, except where otherwise required by condition attached to this permission to further develop the quarry.

Reason: In the interest of protecting the environment and in the interest of public health.

3. This grant of planning permission for further extraction of sand & gravel and rock, relates only to the 21.9-hectare area outlined in red on drawing

number 04 Rev A, submitted with the application on the 5th day of December 2017, and shall be limited to a period of 20 years from the date of this order.

Reason: In the interest of clarity and to enable a review of the appropriateness of the continued operation of the quarry in light of the circumstances prevailing at the time.

4. Extraction of rock, or any other material within this quarry extension, shall not take place below a level of 25m OD.

Reason: In the interest of clarity and to limit the extent of the development to the extraction level in the adjoining Clonmelsh quarry.

5. The location of Recorded Monument CW012-202 (ring ditch) has been incorrectly identified when establishing the extent of the proposed extension area. The monument is located within the southeastern section of the site rather than within the northeastern section. No environmental impact assessment has been carried out in relation to the quarrying-out of this monument. The proposed extraction area shall be reduced to reflect the true location of the Recorded Monument – such that no extraction shall take place within 20m of the outer extension of the monument. Prior to commencement of any development, a revised extraction layout shall be submitted for the written agreement of the planning authority to reflect the correct location of this monument and to indicate the required 20m set-back of quarrying from it.

Reason: In the interest of clarity, and to protect subsurface archaeology which may exist within the site.

6. The developer shall facilitate the archaeological appraisal of the extension area. In this regard, the developer shall:
 - (a) notify the planning authority, in writing, at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,
 - (b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the

site and monitor all site development works, and

- (c) provide arrangements, acceptable to the planning authority for the recording and for the removal of any archaeological material which the planning authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (*in-situ* or by record) and protection of any archaeological remains that may exist within the site

- 7. The development shall be operated and managed in accordance with an Environmental Management System (EMS), which shall be submitted by the developer to, and agreed in writing with, the planning authority, prior to commencement of development. This shall include proposals for the following:

- (a) suppression of on-site noise,
- (b) on-going monitoring of sound emissions at dwellings in the vicinity,
- (c) suppression of on-site dust,
- (d) safety measures for the land above the extended quarry void; to include warning signs and stock-proof fencing/hedgerows,
- (e) management of all landscaping,
- (f) monitoring of ground and surface water quality, levels and discharges,
- (g) details of site manager, contact numbers (including out-of-hours) and public information signs at the entrance to the Clonmelsh quarry on the L3050 road.

Reason: In order to safeguard local amenities.

- 8. The Clonmelsh Stream shall be diverted within a lined channel, along the eastern and southern and western boundaries of the quarry extension, to tie in with the already diverted Clonmelsh Stream bed on the western

boundary of the Clonmelsh quarry.

Reason: In the interest of protecting the environment, and to preserve, insofar as is possible, the watercourse network in the area.

9. All groundwater ingress and surface water within the extended quarry void area shall be discharged via the existing siltation lagoon network on the floor of the adjoining Clonmelsh quarry. No groundwater or surface water shall be discharged to the adjoining road network, diverted Clonmelsh Stream or to adjacent lands.

Reason: In order to protect groundwater and surface water quality in the area, and in the interest of traffic safety.

10.
 - (a) Blasting operations shall take place only between 1000-1700 hours, Monday to Friday, and shall not take place on Saturdays, Sundays or public holidays. Monitoring of the noise and vibration arising from blasting, and the frequency of such blasting, shall be carried out at the developer's expense, by an independent contractor, which shall be agreed, in writing, with the planning authority.
 - (b) Prior to the firing of any blast, the developer shall give notice of intention to the occupiers of all dwellings within 500 metres of the site. An audible alarm for a minimum period of one minute shall be sounded. This alarm shall be of sufficient power to be heard at all such dwellings.

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

11.
 - (a) Vibration levels from blasting shall not exceed a peak particle velocity of 12 millimetres/second, when measured in any three mutually orthogonal directions at any sensitive location. The peak particle velocity relates to low frequency vibration of less than 40 hertz where blasting occurs no more than once in seven continuous days. Where blasting operations are more frequent, the peak particle velocity limit is reduced to 8 millimetres per second. Blasting shall not give rise to air overpressure values at sensitive locations which are in excess of $125\text{dB}_{(\text{Lin}) \text{ max peak}}$ with a 95% confidence limit.

No individual air overpressure value shall exceed the limit value by more than $5\text{dB}_{(\text{Lin})}$.

- (b) A monitoring programme, which shall include reviews to be undertaken at annual intervals, shall be developed to assess the impact of quarry blasts. Details of this programme shall be submitted to, and agreed in writing with, the planning authority prior to commencement of quarrying works on the site. This programme shall be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: In order to protect the amenities of property in the vicinity.

12. Prior to commencement of development, signage, alerting road users to the existence of a quarry entrance, shall be erected on the L3050 road approach from the west.

Reason: In the interest of traffic safety.

13. The noise level from within the boundaries of the quarry extension area, measured at noise sensitive locations in the vicinity, shall not exceed-
- (a) an $L_{\text{A,T}}$ value of 55dB(A) during 0700-1800 hours Monday to Friday and 0700-1400 hours on Saturdays. The T-value shall be one hour.
 - (b) an L_{AeqT} value of 45dB(A) at any other time. The T-value shall be fifteen minutes.

Reason: To protect the residential amenities of property in the vicinity.

14. All HGVs departing the quarry void shall do so via a wheel-wash at the plant area adjacent to the L3050 road. Any aggregate, silt or muck carried out onto the public road shall be promptly removed by the developer.

Reason: In the interest of traffic safety.

15. (a) Dust levels at the eastern, southern and western site boundaries shall not exceed $350\text{mg/m}^2/\text{day}$, averaged over a continuous period

of 30 days (Bergerhoff Gauge).

- (b) A monthly survey and monitoring programme of dust and particulate emissions shall be undertaken to provide for compliance with these limits. Details of this programme, including the location of dust monitoring stations, and details of dust suppression measures to be carried out within the entire quarry complex, shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. This programme shall include an annual review of all dust monitoring data, to be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: To control dust emissions arising from the development and in the interest of the amenities of the area.

16. No signage of any sort shall be erected on the boundary of the quarry extension or within it (so as to be visible from adjacent public roads), without a prior specific grant of planning permission.

Reason: In the interest of visual amenity.

17. All overhead electricity cables traversing the site, shall be relocated, with the agreement of ESB Networks.

Reason: In the interest of orderly development.

18. The quarry extension, and all activities occurring therein, shall only operate between 0700 hours and 1800 hours, Monday to Friday and between 0700 hours and 1400 hours on Saturdays. No activity shall take place outside these hours or on Sundays or public holidays. No rock-breaking activity shall be undertaken within any part of the site before 0800 hours on any day.

Reason: In order to protect the amenities of property in the vicinity.

19. The developer shall submit, every second year, for the twenty-year lifetime of the permission to further develop the quarry, an aerial photograph which adequately enables the planning authority to assess the progress of the phases of extraction. The first such shall be submitted two years from the date of this order.

Reason: In order to facilitate monitoring and control of the development by the planning authority.

20. This grant of permission to further develop the quarry does not authorise the importation of materials for the restoration of the site.

Reason: In the interest of clarity.

21. Scrap metal and other waste material shall be removed, at least annually, from the site, and from the adjoining Clonmelsh quarry, in accordance with the written requirements of the planning authority. Such materials shall be deemed to include scrapped trucks, other scrapped vehicles, empty oil barrels, broken or otherwise unusable truck bodies, worn out conveyor belts/chains, worn out batteries, unusable tyres and worn out conveyor/roller shafts.

Reason: In the interest of visual amenity and protection of ground and surface waters, in the interest of public health.

22. Prior to commencement of development, a restoration plan in accordance with drawings received by An Bord Pleanála on 26th April 2018 (Drawing no.s 05a Rev B & 05b Rev B), shall be submitted to, and agreed in writing with, the planning authority for the restoration of the entire Clonmelsh quarry/plant area, and the extension hereby permitted. The plan shall include, *inter alia*, existing and proposed finished ground levels, estimated water level within the flooded void, landscaping proposals, and a timescale for implementation. Restoration of the site shall be carried out in accordance with this plan.

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

23. The developer shall pay to the planning authority a financial contribution in

respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Planning and Development Act 2000, as amended. The contribution shall relate to the greenfield area of the site, which has not, to date, been excavated, and shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission to further develop the quarry

24. Prior to commencement of development, 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 (together with the adjoining Clonmelsh quarry), 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.

**Michael Dillon,
Planning Inspectorate.**

28th September 2018