Inspector's Report
ABP-307797-20

Development	Continued use of the previously permitted development under p. reg. no. 02/462 (pl 19.201727) consisting of the existing sand and gravel extraction and processing. All associated site works within an overall application area of 68.9 hectares, and all for a period of 18 years plus 2 years to complete restoration works (total duration of 20 years). An Environmental Impact Assessment Report (EIAR) has been prepared in respect of this planning application
Location	Bunaterin, Claragh & Heath Townlands , Screggan Tullamore , Co Offaly
Planning Authority	Offaly County Council
Planning Authority Reg. Ref.	19478
Applicant(s)	Kilsaran Concrete
Type of Application	Permission

Planning Authority Decision	Grant Permission
Type of Appeal	Third Party
Appellant(s)	Fionnan Cummins Brian Curley
Observer(s)	None.
Date of Site Inspection	15th March, 2021
Inspector	Stephen Kay

1.0 Site Location and Description

1.1. The appeal site is located approximately 6km to the south west of Tullamore and it is accessed via the N52 which is the National Secondary Road connecting Tullamore and Birr. The small settlement of Mucklagh on the N52 is located c.1.5km to the north east and the settlement of Screggan is located to the east of the site. The N52 road connects Nenagh with the M1 in the vicinity of Dundalk and is a busy national secondary route.

1.2. Access to the site is via an existing private access roadway off the N52 at the south west corner of the site. This access roadway measures approximately 385 metres in length and the junction with the N52 has a right turning lane and a deceleration lane on the east bound carriageway. The site measures approximately 1,500 metres north east to south west and the maximum width of the site is approximately 600 metres. The general topography of the area is relatively flat with small undulations or hummocks, and the quarry is not visible from the public road. The primary land use pattern in the vicinity of the site comprises a mixture of pasture and arable farmland and there is a significant area of forestry (Blackwood Forest) located to the north of the existing area of extraction and to the west of the lands where the extension to the extraction area is proposed.

1.3. The Clogiagh River runs to the east and north of the site at a distance of c.1.9km from the site boundary at the closest point and joins with the Tullamore River c.2.7km to the north of the site boundary. The Grand Canal also runs east – west to the north of the site at a distance of c.2.3km from the site boundary.

1.4. The stated area of the appeal site is 68.9 ha. which incorporates an existing operational site area of approximately 37.6 ha. and a proposed extended area of extraction of c.31.3 ha. The existing site area comprises a sand and gravel pit area as well as a readymix batching plant, concrete batching plant and asphalt plant.

1.5. The area of existing extraction has been excavated to a maximum depth of approximately 75 metres AOD and this level is such that it is above the water table. Levels in other areas of the site comprise a maximum of approximately 90 metres AOD at a point along the southern boundary of the exiting worked area and the existing level of the lands proposed for the extension vary between 83 and 86 metres OD.

2.0 **Proposed Development**

2.1. The proposed development comprises a number of elements that can be summarised as follows:

- The continued use of the existing permitted area of extraction of sand and gravel on site as granted permission under Register Ref. 05/462 and An Bord Pleanala Ref. PL19.201727. This permission permits sand and gravel extraction over an area of 37.6 ha, and processing to include washing and ancillary facilities including concrete batching, block yard, asphalt plant and associated site buildings, wheelwash, weighbridge, substation bunded fuel storage area and septic tank with puraflo effluent treatment system.
- Expansion to the north and east of the existing sand and gravel extraction area over an area of approximately 31 ha. As with the existing operation, this extended area of extraction is proposed to be a dry operation and above the water table. The total volume of material proposed to be extracted from the new area is estimated at c.6.5 million tonnes. The rate of extraction proposed is stated to be approximately 360,000 tonnes per annum which is the same as the existing and permitted annual output at the site.
- The method of extraction is proposed to comprise a load, dump and haul system with a front end loader used to excavate the material and material from the working face would be fed directly into the processing plant on site. No blasting is proposed to be undertaken on site.
- It is proposed that a new sand washing and screening processing plant would be located at the northern end of the existing extraction area and adjacent to the extended extraction area. Given the nature of the material in the extension areas, this new sand plant would not include crushing. Existing asphalt, concrete block and ready mix concrete production activities on the existing site are proposed to remain operational and in their current locations.

- The proposed operational hours of the site are 07.00 to 18.00 hours Monday to Friday and 07.00 to 14.00 hours on Saturday. Employment on site from the sand and gravel extraction operation is proposed to remain at 14 with an additional 10 no. full time truck drivers employed by Kilsaran and the site supporting a further 8 no. owner driver hauliers.
- The phased stripping and storage of topsoil and overburden materials over the extension lands for reuse in the restoration works. Restoration of the overall site will be a beneficial agricultural after use. Site restoration is proposed to be undertaken on a rolling basis during the construction activity and is illustrated in Figure 2.2 and 2.4 of the EIAR. It is not envisaged that the site restoration will require the importation of additional materials from those removed off site.
- Existing screening berms located at the southern , eastern, and western perimeters of the site will be extended with the additional extraction.
- The existing site entrance and access road, together with the existing wheel wash will continue to be used by the development on site. The existing car parking area and staff facilities located in the vicinity of the site access are also proposed to remain and be used to serve the development.
- The permission is proposed to be for a period of 18 years with an additional 2 years for site restoration, giving a total period of 20 years.

3.0 Planning Authority Decision

3.1. Request for Further Information

Prior to the issuing of a Notification of Decision, the planning Authority requested further information on a significant number of issues (17 no. in total) that included the following:

- That the planning authority have concerns regarding the impact of the proposed development on residential receptors in close proximity to the site (particularly with regard to noise, vibration, dust, and visual impact) and the

applicant is invited to submit revised proposals that increases the separation distance to these receptors.

- Clarification regarding site access.
- Further details regarding alternatives considered and in particular alternative locations.
- Consideration of potential impacts on mobile home at rear of property Ref. R112.
- Assessment of potential cumulative impacts on biodiversity within the 2km zone of influence arising from other quarry operations.
- Further details of the cumulative impacts of the proposed development and other developments on the Screggan Fan required.
- Revision of air quality assessment to account for material brought onto the site.
- Revisions to the noise assessment to account for the temporary site set up activities and the generation of noise contour mapping at a range of distances from the site. Consideration in cumulative assessment of the 2017 TII noise assessment.
- A operational vibration assessment is required.
- Measures to protect the woodland at the north west boundary of the site.
- Details of the profile of the berms proposed to be installed.
- Clarification regarding inconsistencies between the proposed restoration plan and the permitted restoration plan for the existing extraction area. Burial of concrete / hardcore is not acceptable as part of restoration proposals.

The following is a summary of the main information provided by the applicant in response to the further information request:

- Revision to the extraction line for the proposed development presented as indicated in Drawing 5 of the RFI. This revision would result in a reduction in the new area of extraction and an increase in the separation distance from the

extraction area to the receptors R111 and R112. Specifically, the planning application site area is reduced from 68.9 ha. to 68.8 ha. and the area of extraction is reduced from 31.3 ha. to 30.8 ha.

- Revised layout of proposed berms submitted and indicated in Appendix A to the response to further information. Best practice measures for noise and air quality impacts arising are set out.
- Confirmed that the existing access would remain and that there is no proposal to provide an access onto the local road to the north (L-2011).
- A revised Chapter 3 (Consideration of Alternatives) is submitted and included as Appendix C of the RFI.
- Confirmation obtained from the owner of property Ref R112 that the mobile home on site is not occupied for residential use. Letter of consent submitted from this property owner indicating that they do not have any objection to the proposed development.
- That effects on biodiversity are not anticipated to arise outside of the site.
- That the entire extent of the Screggan Fan within the recently realigned section of the N52 is 8.6 ha. and the total extent of the N52 within the fan is stated to be c.9.1ha.
- That the section / extent of the proposed development that impacts on the Screggan fan is 31.2 ha. Stated that Kilsaran has a good record of working with the GSI and that the proposed development would help in developing knowledge and understanding of the feature.
- That the existing asphalt plant on the site operates in accordance with an air pollution licence. Good compliance with the emission limits is stated to have been achieved.
- Analysis presented that indicates that the dust nuisance from the be classified as negligible.
- An assessment of the climate / CO2 impacts of the transport to and from the site is presented. .

- Outputs of revised noise assessment presented showing noise contour mapping.
- Results of vibration monitoring presented that show a negligible impact.
- The Landscape Baseline Figure prepared for the development has been amended to include revised locations for areas of high amenity. Figure 13.1 Rev 1 which is contained at Appendix E of the RFI). While part of one AHA overlaps with the existing site, this area has now been excavated.
- Details of the perimeter berm are presented at RFI Figure 11 and these features are proposed to measure 2 metres in height with 45 degree slope angles and 1.2 metre width on top.
- Revised Drawing 10 presented showing all vegetation to be removed.
- A methodology is presented for the removal of existing structures and equipment from the site.

3.2. Decision

The Planning Authority issued a Notification of Decision to Grant Permission subject to 18 no. conditions. The most significant of these in the context of the appeals received are considered to be as follows:

- Condition No.2 clarifies the reduced area of extraction from 31.3 ha. to 30.8ha. as per the details received on 7th April, 2020.
- Condition No.4 clarifies that the permitted extraction of up to 360,000 tonnes per annum.
- Condition No.6 relates to site reinstatement.
- Condition No.7 requires the submission of a report from an independent quarry expert describing the extent of all works undertaken that year and the proposed works for the following year.
- Condition No.10 relates to groundwater and sets out requirements for monitoring and the protection of groundwater by way of refuelling and maintenance arrangements for onsite equipment.

- Condition No.13 relates to noise and sets out noise requirements including relating to temporary site set up works and operational phase noise.
- Condition No.16 relates to archaeology and requires that an archaeologist oversee the stripping of topsoil.

3.3. **Planning Authority Reports**

3.3.1. Planning Reports

Initial planning report on file records the submissions received, and the internal reports prepared. The principle of the proposed development is considered acceptable having regard to development plan policy, the existing sue of the site and the fact that the existing asphalt plant, batching plant and readymix plant were considered previously and are not proposed to be removed. Fact that the site incorporates part of the Screggan Fan is noted but noted that this feature is not afforded protection at national or local level and that the GSI did not object to the proposed development. A number of deficiencies in the EIAR are identified, specifically in the areas of alternatives, biodiversity, air quality, climate, noise, and landscape. Further information consistent with the request which issued is recommended. A second report subsequent to the submission of a response to further information recommends a grant of permission that is consistent with the notification of decision which issued.

3.3.2. Other Technical Reports

Road Design – No objections.

Area Engineer – No objection subject to conditions.

Environment and Water Services Section – Further information recommended relating to noise impact. Report subsequent to further information states that no objections subject to conditions.

3.4. Prescribed Bodies

Arts Council – No response received.

Department of Culture, Heritage, and the Gaeltacht – No response received.

An Taisce – Note planning history and state that issues of compliance with the existing permission on the site require resolution.

Heritage Council – No response received.

EPA – No response received.

Geological Survey of Ireland – response states that there are two county level geological sites in the vicinity, Screggan Fan and Kilcormac Esker. Site reports of these features are enclosed. In the event of a grant of permission, notification of commencement is requested, and it is noted that the GSI are not anti quarrying as it provides significant useful information via the Geoheritage programme. Noted that the EIAR proposes mitigation of impacts on groundwater by prevention but that these measures are not detailed.

Minister for Communications, Climate Action and the Environment – No response received.

TII – Response received stating that TII has no observations to make on the development.

3.5. Third Party Observations

The following is a summary of the main issues raised in the significant number of third party submissions received in connection with the proposed development:

- Reduction in residential amenity due to noise, dust, traffic, and visual impact.
- Potential negative health impacts including from inhalation of dust and silica material,
- Potential for a secondary entrance from local road to the north,
- Potential water pollution and impact on water sources / wells,
- Adverse impact on biodiversity, including loss of hedgerows and nesting habitat for birds.

- Specific reference to presence of peregrine falcons,
- Excessive scale of development and duration (20 years),
- Excessive proximity to houses in the vicinity,
- Impact on the Screggan Fan and Offaly esker.
- Concerns regarding proposed visual impacts, berms, and restoration plan.
- Impacts of traffic and site access,
- CO2 and climate change implications of the proposed development.

4.0 Planning History

Appeal Site

Offaly County Council s.261A Ref. EUQY119 – Assessment concluded that as an EIS was submitted with application Ref. PL2/99/228; ABP Ref. PL19.201727 that EIA was undertaken at that time. Regarding AA, concluded that appropriate assessment screening concluded that the development was not likely to have had significant effects on any European site, in light of the conservation objectives for the relevant sites.

Offaly County Council Ref. 02/462; ABP Ref. PL19.201727 – Permission granted by the Planning Authority and decision upheld on appeal for the extension of an existing sand and gravel extraction operation on part of what comprises the current appeal site.

Offaly County Council Ref. PL2/99/228 - Planning permission granted to Dermot O'Kelly for the extraction of gravel at Bunaterin, Screggan on 19th of July 2001. There were 23 No. conditions attached, one these limited the life of the permission to five years. The site area was 2.66 hectares.

Adjacent Sites

Offaly County Council Ref. PL2/10/6; ABP Ref. PL19.236787 – Permission refused for the development of a single storey log cabin sales / showroom building measuring 45 sq. metres. , a second shed of 47 sq. metres and a landscaped show garden area. Permission refused for reasons related to traffic safety and retail development in a rural area.

5.0 Policy Context

5.1. National and Regional Policy

The main provisions of the ***National Planning Framework*** relating to aggregates and quarrying are contained in section 5.4 under the heading of Aggregates and Minerals where it is stated that *'aggregates and minerals extraction will continue to be enabled where this is compatible with the protection of the environment in terms of air and water quality , natural and cultural heritage and the quality of life of residents in the vicinity and provides for appropriate site rehabilitation.'*

National Policy Objective 23 states that it is policy to facilitate the development of the rural economy through the support of a number of sectors, including *'…the energy and extractive industries'*, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage.

The ***Regional Spatial and Economic Strategy for the Eastern and Midlands Region*** references the extractive industry at a number of locations and Policy RPO6.7 states that it is policy *'To support local authorities to develop sustainable and economically efficient rural economies through initiatives to enhance sectors such as ….extractive industries….*'

The ***Guidelines for Planning Authorities on Quarries and Ancillary Activities*** published in 2004 recognise the importance of the industry to the economy and also the potential environmental impacts that can be associated with such developments. The guidelines contain a number of provisions that are relevant to the proposed development and the following sections are particularly noted:

Section 1.5 relates to community consultation and promotes the development of good relationships with local communities through a range of measures including consultation, making details of the development available prior to submission and the appointment of a specific staff to address complaints and an environmental management committee in the case of larger developments.

Section 3 of the Guidelines covers the environmental implications of developments and the principal environmental impacts that occur are listed at Appendix A. Environmental impacts identified include noise, dust / air quality, water supplies / groundwater and natural heritage. In the case of dust, it is noted that residents up to 0.5km from the source can be impacted although '*continual or severe concerns about dust are most likely to be experienced within about 100 metres of the dust source'*.

5.2. Development Plan

The applicable development plan is the ***Offaly County Development Plan, 2014-2020***. A *Draft Offaly County Development Plan, 2021-2027* has been prepared and has been on public display. The development was assessed by the Planning Authority in accordance with the provisions of the 2014-2020 plan and the following provisions of this plan are considered to be of relevance to the proposed development:

Section 2.8.6 relates to sand and gravel extraction and this section recognises the importance of the sector in terms of employment and as an input into the building industry while also recognising the potentially significant environmental impacts that can arise.

The section specifically states that:

It shall be the council policy to ensure that those extractions which would result in reductions in visual amenity of areas of high amenity (Map 7.17) or damage to areas of scientific importance or of geological, botanical, zoological and other natural significance including all designated European sites (see Maps in Chapter 7) shall not be permitted.

The following policies are noted:

Policy RDP-03 *It is council policy to favourably consider proposals for the expansion of existing industrial or new business enterprises in the countryside where the proposal is (a) and appropriate size and scale, b) does not negatively impact on the character and amenity of the surrounding area and c), has regard to and complies with other guidelines / standards including traffic, noise and environmental considerations. This policy will generally relate to enterprises which are rural resource based and which have the potential to strengthen rural areas.*

Policy RDP-14 states that *it is council policy to ensure those extractions (quarries / sand and gravel pits) which would result in a reduction of the visual amenity of areas of high amenity or damage to designated sites, habitat types or species will not be permitted. It is council policy that all such workings should be subject to landscaping requirements and that worked out quarries should be rehabilitated to a use agreed with the Planning Authority which could include recreational, biodiversity or other end of life uses…..'.*

Policy RDP-16 states that *it is council policy to continue to protect existing resource based industry from encroachment by residential development, for example mining, quarrying, gravel pits, peat extraction and intensive agriculture.'*

The landscape of the county is classified in terms of low, medium, and high landscape sensitivity. The extension area is located entirely within an area that is identified as low sensitivity and the characteristics of such areas is stated in Table 7.11.2 of the Plan as follows:

'County Offaly is largely a rural county which comprises of predominately flat and undulating agricultural landscape coupled with a peatland landscape. Field boundaries particularly along roadside verges which are primarily composed of mature hedgerows typify the county's rural landscape.'

The following provisions of the ***Draft Offaly County Development Plan, 2021-2027*** are noted:

Policy BLP-09 states that '*It is Council policy to protect from inappropriate development and maintain the character, integrity and conservation value of features*

or areas of geological interest as contained in the scheduled list of geological heritage sites identified in Table 4.12 Offaly Geological Sites.' This list in Table 4.12 includes the Screggan Fan.

5.3. Natural Heritage Designations

The following are the closest European sites to the appeal site:

- The Charleville Wood SAC (site code 000571) which is located c.2.2km to the east of the appeal site at the closest point.
- Clara Bog SAC (site code 000572) is located approximately 7km to the north west of the appeal site.
- The Clonaslee Eskers And Derry Bog SAC (site code 000859) is located approximately 8km to the south of the appeal site.
- Slieve Bloom Mountains SPA (site code 004160) is located c.10.5km to the south of the site at the closest point.
- The River Barrow and River Nore SAC (site code 000572) is located c.11.5km to the south east of the appeal site at the closest point.

5.4. EIA Screening

The application is accompanied by an EIAR and section 8.0 of this report below relates to EIA.

The proposed development relates to the extraction of sand and gravel from an extraction area of c.31.3 ha. and therefore, exceeds the threshold set out in Class 2 of Part 2 of the Fifth Schedule of the Planning and Development Regulations, 2001 (as amended).

6.0 The Appeal

6.1. Grounds of Appeal

The following is a summary of the main issues raised in the two third party appeals received:

Mr Fionnan Cummins

- That the scale of development at over 60 ha. is excessive.
- The changes to the proposed development now sought would bring the site boundary to within 20 metres of the appellants home and the area of quarrying to within 100 metres.
- That the adverse effects from noise and dust will be unacceptable.
- That the proposed development will adversely affect air quality, human health.
- Noted that section 14.2 of the EIAR states that the quarried material may contain up to 2 percent silica and that there may be layers of higher silica encountered.
- Noted that the HSA state that inhalation of fine dust containing silica can cause lung damage that in severe cases can be debilitating or even fatal. This risk applies to workers on the site as well as surrounding residents.
- That section 3.3 of the DHLG Guidelines for Planning Authorities note the number of dust sources arising from quarrying and that dust nuisance can arise up to 0.5 km from the source. The proposed extraction area will be within 0.5km of the appellants home and the closest area of proposed extraction within 100 metres which is considered unacceptable.
- That Plate 5 and Plate 6 show noise levels in the rear garden of the appellants house approaching 70dBA which would destroy residential amenity.
- The WHO Environmental Noise Guidelines for the European Region (2018) indicates a threshold of 53dBA for significant annoyance and 43dBA for impact on sleep. These levels will be significantly exceeded even with mitigation.

- Noted that the noise limits specified in the conditions attached by the council exceed the WHO limits.
- That the noise from the day time operations of the quarry may impact on night time workers who need to sleep during the day.
- That no public consultation regarding the proposed development was undertaken. No environmental monitoring committee as suggested in the quarry guidelines has been undertaken.
- That the existing quarry has cement and block manufacturing facilities which may be expected to increase with the proposed development.
- That traffic from the development should only use the N52 access and not the local road and use of local roads by heavy traffic would endanger local traffic and populations including young children.
- Noted that the Board previously refused permission for a single storey log cabin sales / showroom development which accessed onto the N52 (ABP Ref. PL19.236787) on the basis of traffic safety. The current proposal will generate significantly more traffic than this refused development and would similarly interfere with the safety and free flow of traffic on the public road.
- That the scale and proximity of the proposed development is such that it could give rise to structural impacts / subsidence on the appellants house.
- That the proposed development is contrary to the provisions of section 2.8.6 of the development plan which relates to Sand and Gravel Extraction and the potential impact on the scenic, recreational and amenity value of the county's natural landscape.
- Policy RDP 14 of the Plan states that sand and gravel extraction developments that impact negatively on the visual amenity of areas of high amenity or designed sites will not be permitted. As per Maps 7.1 and 7.2 of the development plan the proposed development lies within and will impact high amenity and special areas of conservation. Map 7.15 indicates that the area is of moderate landscape sensitivity. The site is also close to the medieval settlement of Lynally and Rahan church.

- That Policy RDP16 seeks to protect resource based industry from encroachment by residential development. The corollary should also be the case.
- That condition No.2 attached to ref. PL19.201727 restricts the proposed development to a period of 20 years. It is considered that this was the original intention and the basis on which permission was granted and should be honoured.

Mr Brian Curley

- That the site is located in an area that includes a geological site – the Screggan Fan. The current development plan does not afford any protection to this feature, however there is an objective in the draft 2021 – 2027 plan to protect this feature.
- That an audit of the geological heritage sites of County Offaly produced in 2016 included Screggan Fan. This report is stated in the executive summary to provide a detailed study to replace the provisional listing identified in the 2014-2020 development plan.
- This development will lead to risk for one of the most scenic parts of the Screggan Fan despite the lack of concerns from the Heritage Officer.
- That NHO-99 of the current plan states that it is an objective of the council to seek the preservation of important features of geological interest identified in Appendix Y. Submitted that the audit undertaken in the above 2016 study supersedes Appendix Y.
- Screggan Fan is identified in Table 4.12 of the 2021-2027 draft plan as a site that is a county geological site, and which have been adopted into the national geological plan. The sites identified in Table 4.12 include sites identified in the Irish Geological Heritage programme for protection.
- Submitted that while the new draft plan has not yet been published, there is no difference between the spirit of the 2014 plan and the requirements of the 2017 plan.

- Submitted that it is astounding that the planning authority has ignored its own draft plan regarding the Screggan Fan. The proposed development is clearly contrary to the provisions of BLP-09 of the draft plan.
- That the report of the Planning Officer notes the submission received from GSI, however the submission from Sean and Eileen Curley was available on file.
- The above submission clearly noted that the GSI was incorrect to state that there were two County Geological Sites (CGSs) in the vicinity of the application site – Screggan Fan and Kilcormac Esker. The Screggan fan is not in the vicinity of the site.
- That the last time that an An Bord Pleanala inspector visited the area they observed that the landscape is not of high scenic value and there are no scenic routes. An assessment of the current application should include views from the Screggan Road to the north of the site and from Blackwood Forest where the Screggan Fan meets Blackwood forest.
- That the Screggan Fan has already been ripped apart by the bypass road and the proposed development should not be permitted.

6.2. Applicant Response

The following is a summary of the main issues raised in the response of the first party to the grounds of appeal:

Response to Appeal of Mr Brian Curley

- That the County Geological Site Report published in 2016 (Copy attached with response as Appendix A) identifies that the Screggan Fan is a geologically important site that is important in giving an understanding of the final stages of the last ice age and that the fan is interpreted as representing a large glacial lake. Dropstones such as the Screggan Fan can only be recorded as they are exposed by excavation so it is submitted that the proposed development will add to the knowledge of the site for which it is considered important.

- Noted that the portion of the fan that is impacted by the proposed development measures c.31.2 ha. of which 9.2ha. was approved at the time that the fan was identified and designated as a county geological site, indicating that the GSI accepts that the fan may be quarried without necessarily impacting on its geological heritage.
- That the 31.2ha. area has to be seen in the context of the overall 196 ha. footprint of the fan. The combined take with the N52 works comprises approximately 40.3 ha. and therefore, approximately 21 percent of the fan.
- Noted that County Geological site (OY025 – Screggan Fan) is not recognised by the site report for its landscape significance.
- Submitted that both the 2014-2020 Offaly County Development Plan and 2021-2027 Draft Plan refer to the need to preserve '*the important features of geological interest within the county*' (2014-2020 plan) and *'to protect from inappropriate development maintain the character, integrity and conservation value of features or areas of geological interest'*, (2021-2027 draft plan). Submitted that the recording of dropstones will help to achieve these policies and will enhance the knowledge of the fan. Submitted that the proposed development is in line with the policies of both plans.
- Submitted that Kilsaran have an excellent record of working with GSI and will continue to facilitate access for GSI staff at the site.
- Regarding the statement of the appellant that the GSI had made an incorrect statement that the Screggan fan was in the vicinity of the proposed development rather than directly impacted, the correspondence with the GSI (attached as Appendix B to the response submission) clearly stated that the fan would be directly affected by the proposed development. Submitted that the GSI is fully aware of the location of the fan and did not make an error in its response and assessment on the basis of incorrect knowledge regarding the location of the development relative to the feature.
- That two drawings showing the detail of the proposed layout and one showing the location of the fan were submitted to GSI at the time of consultation in July 2016. Stated that the GSI have confirmed by letter that they are aware of the

proposed development, that they are satisfied with the grant of permission subject to their personnel being facilitated access for inspections and being informed of any dropstones encountered at the site, (see letter at Appendix C)

- Submitted that issues raised in the letter from the GSI relating to groundwater have been addressed in the submitted EIAR. Specifically, the following is noted:
    - That the impact of the development on the Argall Spring public water supply to the west of the site was identified as a sensitive receptor in the EIAR and the likely impact with mitigation assessed as being not significant.
    - Karst features in the vicinity of the site ere identified in the EIAR.
    - The location of the gravel and bedrock aquifer beneath part of the site is identified in the EIAR. Noted that this aquifer is separated from the sand and gravel above proposed to be extracted by a silt / clay layer known as lack which restricts permeability and impact on the aquifer below.
    - That the proposed extraction area is not located within the identified source protection zones of either the Argyll Spring or the Holimshill PWS. Mitigation to protect groundwater and groundwater sources are set out in the EIAR.
    - The proposed development will not impact on the water table and therefore no dewatering issues or impacts on private water supplies or groundwater flows are considered likely to arise.
    - That contrary to the statement of the GSI letter, the recorded area of surface water flooding referenced does not overlap with the proposed development site.
    - Regarding requests by the appellant that the inspection undertaken by representative of An Bord Pleanala would include views from specified points, it is submitted that the fan does not represent a particularly remarkable landscape within the county.

Response to Appeal of Mr Fionnan Cummins

- That the development would not be excessively close to the appellants property. The distance between the property and the edge of the extraction area would be 108 metres and to the edge of the screening berm c.81 metres.
- Submitted that the site is proposed to be extracted on a phased basis over the eastern and northern extension areas. Figure ABP-1 shows the proposed phasing. The site will be progressively reinstated. This approach allows for a minimisation of area to be disturbed at any one time and the retention of lands in agricultural use as long as possible.
- On the basis of extraction of c.360,000 tonnes per annum, the annual extraction area would be c.0.6ha. from Area 2 and 1.4 ha. from area 3.
- That the separation distance to Residence R27 (appellants property) would be significant in early phases. It would only come to within the 108 metres of the property at the end of the final phase in year 18.
- That a significant range of mitigation measures to protect human health are proposed. A comprehensive dust monitoring programme has been undertaken at the site since 2002 and these indicate that TA Luft standards have been met at the site. The dust standard specified in the existing permission (130ug/m2/day) are being complied with.
- That the noise impact assessment undertaken for the EIAR included that appellants property at group 2 of the assessment and found that the noise limit of 70dBA for soil stripping, berm construction and site reinstatement would be met at this location. The noise impacts were also considered to be acceptable having regard to the IEMA noise assessment methodology and for the cumulative assessment (extraction and reinstatement of other areas) undertaken in response to the request for further information.
- Tables 6-9 of the response to the grounds of appeal sets out the most significant potential cumulative noise impacts for the appellants property (R27 and identified as N1 in the noise assessment). In this analysis the worst case cumulative noise level at the appellants property is calculated to be 52.4dB LAeq during Phase 2D and 3D restoration in Year 18 to 20.

- Table 10 shows that the worst case cumulative day time noise impact would be 60 dBA LAeq during temporary site set up and perimeter berm construction in years 10 to 16. This is below the 70dB limit set out in the 2006 EPA guidance and the 2004 DoHELG Quarry Guidance.
- The reference by the appellant to WHO noise limits are noted, however the WHO standards relate to exposure to environmental noise and the proposed development would not generate noise that would comprise '*environmental noise*' as envisaged in the WHO Guidance as it would be intermittent rather than continuous.
- That a pre planning consultation meeting was held with the Planning Authority prior to the submission of the application.
- While a notice was erected at the laneway to the local road to the north of the site this was for information purposes and no access via this entrance is proposed.
- That the quarry manager is available as a point of contact with any member of the public who wishes to raise concerns.
- That continuous monitoring is undertaken at the site, Condition No.19 requires the preparation of a monitoring and compliance statement and an Environmental Management Plan is implemented at the site.
- The concerns regarding cumulative impacts are noted however it should be noted that it is not proposed to increase the level of extraction at the site and, with the exception of the new sand plant in the extended area, the proposed development would remain largely as existing. The extension proposed will serve the existing plants on site including the concrete and block manufacturing.
- The new sand plant is required as the material in the extension areas does not contain any coarse aggregate and therefore a new plant without crushing is required. Stated that the combined output of the two plants will remain the same as the existing.

- Regarding potential cumulative impacts, all other quarry operations are over 1km from the site and such that cumulative dust impacts are not likely to arise. Impacts on ecology / biodiversity are not anticipated to occur outside of the site and there are no pathways for other plans or projects to result in cumulative impacts.
- Regarding the impact on the Screggan Fan, the extent of this feature that would be impacted by the proposed development and the works to the N52 is c.40.3ha. out of a total area of c.196 ha. Submissions from the GSI indicate that this feature is representative of this part of the county and that the aim of the GSI is not to prevent further quarrying as the process of extraction provides GSI with valuable data.
- The issue of cumulative impact of the asphalt and concrete production plants along with aggregate imported to the site was addressed in the response to further information (RFI Item 7). The asphalt plant on site currently operates in accordance with an Air Pollution licence. Monitoring results from the existing plant show compliance with these limits.
- Trackout related dust and PM10 emissions from the site are considered to be negligible post mitigation.
- Climate change impacts associated with the development are also considered to be negligible at 1.9million kg of CO2 per annum relative to national emissions.
- Regarding traffic, as there is no proposed increase in output from the site there will not be any change in the existing traffic levels. The level of traffic is not considered to be material in the context of the capacity of the surrounding road network. No access to the local road to the north is proposed.
- Subsidence or vibration impacts are not considered to be likely impacts due to the separation distance to the nearest part of the pit face, the relatively shallow nature of the face and height of extraction in this area (9-10 metres) and the method of extraction proposed using a front end loader and no blasting. Existing vibration monitoring undertaken at the site show that the level is very low.

- Regarding the contention that the proposal would be contrary to section 2.8.6 of the county development plan, the site has demonstrated a history of operating within environmental limits and no increase in extraction rate is proposed. The potential impacts on landscape and on the Screggan Fan were acknowledged in the report of the Planning Officer.
- That the site is not located within any NHA, pNHA, SAC or SPA. Map 7.15 of the Plan identifies the site as being within a low sensitivity area and not moderate as stated by the appellant. It was acknowledged as part of the response to further information that there is an area of high amenity that passes through the existing permitted quarry area. The area within the site did not form part of an esker and has been removed on foot of the permitted extraction at the site and such that it can therefore be argued that the area of scenic amenity value related to this designation will not be impacted by the proposed development.
- As the site does not impact on any AHAs then the proposal is consistent with the requirements of section 7.9 of the Plan and AHAP-01 and AHAP-02 and would not impact on any views.
- Regarding compliance with Policy RDP-16 of the plan regarding encroachment of residential development into resource based industries, developments such as tat on the appeal site cannot be sited in alternative locations or moved. They are directly connected to the resource. The proposed development has had due regard to all considerations set out in section 8.13 of the Plan including the departmental guidelines on quarries and ancillary activities, EPA Guidance on Environmental Management in the Extractive Industry and the fact that the Planning Authority favours the use of existing licenced quarries over green field sites and that there is a presumption against new quarry developments on the County's Eskers.

6.3. Planning Authority Response

Submission received from the planning authority noting the contents of the third party appeal and drawing the Boards attention to the technical reports on the council file.

- Submission received from the Planning Authority stating that the content of the appeal is noted, and the attention of the Board is brought to the technical reports on file.

6.4. Further Responses

6.4.1. Third Party Response to First Party Submission

The following is a summary of the main issues raised in the third party responses to the first party observations on the grounds of appeal:

Brian Curley

- That the erection of a site notice does not constitute public consultation,
- That the sections contained in the first party submission regarding the Screggan Fan are repetition of the original report compiled by SLR Consulting. The issues raised in the appeal regarding the Screggan Fan remain unanswered.

Dr Fionnan Cummins

- That the quoted separation distance of 108 metres between the berm and the property boundary is the maximum on an angled boundary. The closest part of the garden would be c.100 metres from the berm.
- That the rear garden is of significant amenity value and includes structures not shown on the plan.
- There are no proposals for the security of the agricultural lands between the appellants property and the advancing pit and if it will remain in agricultural use.

- That the noise impacts are significant from the temporary berm construction comprising 2 months per year between years 10 and 16.
- Dust remains a concern and the DEHLG Quarry guidelines clearly indicate that dust impacts can extend far beyond site boundaries, with reference to continual or severe concerns regarding dust within 100 metres. The appellants home would be within 100 metres and the garden within 75 metres.
- That the information presented in the response regarding surveyed dust are not such that average figures cited can be verified. The figures appear to relate to a five day working week when the facility operates six days.
- It is not clear that the response is referencing the correct EPA document regarding dust and concerns remain regarding silica and have not been adequately addressed in the response. It is submitted that the quoted EPA Guidance with regard to non-scheduled materials apply to this form of development on the basis that silica is a scheduled mineral.
- Noted with concern the reference to the extension area having a high percentage of sand as sand has a high concentration of silica. The material to be extracted is essentially fine particulate matter with 'little or no aggregate'. Silica containing dusts is a '*scheduled mineral'* and therefore the dust limits cited should not apply as they are only relevant to non-scheduled minerals.
- Regarding noise, the noise modelling for the appellants property is noted to be based on a noise monitoring location that is at the west side of the existing quarry and far removed from his property (c.700 metres away).
- That there is a lack of clarity with regard to the sound contour mapping and the identification of individual properties on these maps.
- That the noise levels in Table 10.1 are average noise and it is not clear what the peak noise would be.
- Table 11 indicates that noise levels will exceed 55 dBA per hour for 8 weeks per year from years 10 to 16 giving a cumulative time of 88 weeks that would impact significantly on amenity.

- Reference is again made to the issue of the WHO noise guidelines. These provide a threshold of 53dBA as a threshold for significant disturbance / annoyance and that sleep can be disturbed above 45dBA. The modelling data shows noise impacts up to 70dBA at the appellants property.
- That the conditions attached by the Planning Authority exceed those in the WHO Guidelines.
- That the day time noise levels may impact on shift or night time workers.
- That as none of the issues raised regarding residential amenity were addressed in the response submission that Kilsaran must accept the issues raised.
- Repeat that no consultation as per the requirements of the Quarry guidelines was undertaken.
- That the response from Kilsaran indicates that the majority of the extension area is sand based and there will therefore be a high percentage of silica. This reflects experience in the appellants garden where there is fine sand present.
- Regarding cumulative impacts, there is a small quarry located properties R34 and R35 and less than 300 metres from the site boundary. There is also a quarry operated by Condron Concrete approximately 1.3km from the site.
- Noted that the dust emissions cited relate to those from the existing equipment on the site but do not provide any information on the newly proposed sand plant and new extraction which will be largely sand. The additional sand plant and extraction area does not appear to be accounted for in Tables 14 and 15.
- That the increase in GHGs as a result of the proposed development would be 7.3 times the current yearly total annual emissions from the existing operation. Submitted that the 0.003 percent increase in national GHG emissions is not correct.
- That the figures cited regarding GHG emissions contradict the statement of the first party that there would be no increase in traffic generated by the

development relative to the existing. The level of traffic appears to be 25 times the existing level.

- That employment on site appears to add to 57 rather than the 32 stated when account is taken of the 25 persons employed in the concrete batching operation and block production.
- That the response regarding potential subsidence does not inspire confidence. Similarly, the basis for the statements regarding vibration impacts does not relate to the situation in the vicinity of the appellants property.
- Reference again to section 2.8.6 of the development plan and the potential impact on the Screggan Fan.
- That the proposal will have a very significant negative impact on views from their property.

6.4.2. **Planning Authority Response to First Party Submission**

Planning Authority submission stating that the details of the response to the third party appeals is noted and that the Boards attention is brought to the technical reports on file.

7.0 Planning Assessment

7.1. This planning assessment should be read in conjunction with the subsequent sections of this report relating to Environmental Impact Assessment (EIA) at Section 8.0 and Appropriate Assessment (AA) at Section 9.0. The following are considered to be the main issues in the assessment of this appeal:

- Principle of Development and Related Issues,
- Impact on Residential Amenity,
- Traffic and Access,
- The Screggan Fan

7.2. Principle of Development and Related Issues

7.2.1. The proposed development comprises an extension of an existing permitted sand and gravel development which was granted by the Board under Ref. PL19.201727. The proposed development would therefore represent an extension of an existing permitted development.

7.2.2. At a national and regional level, National Policy Objective NPF 23 of the National Planning Framework states that it is an objective to facilitate the development of the rural economy through the development of a number of identified sectors, including extractive industries while also protecting the landscape and built heritage of rural areas. The proposed development would in my opinion be consistent with this objective as it would lead to the retention of the existing c.35 jobs on the site and the contribution of the existing pit at Bunaterin to the local economy as well as the provision of an important resource and product to the construction sector.

7.2.3. The applicable development plan is the *Offaly County Development Plan, 2014-2020*. A *Draft Offaly County Development Plan, 2021-2027* has been prepared and has been on public display but has not been adopted as at the date of writing this report. The development was assessed by the Planning Authority in accordance with the provisions of the 2014-2020 plan. Section 2.8.6 of the 2014-2020 plan relates to sand and gravel extraction and this section recognises the importance of the sector in terms of employment and as an input into the building industry while also recognising the potentially significant environmental impacts that can arise. The section specifically states that:

> *'It shall be the council policy to ensure that those extractions which would result in reductions in visual amenity of areas of high amenity (Map 7.17) or damage to areas of scientific importance or of geological, botanical, zoological and other natural significance including all designated European sites (see Maps in Chapter 7) shall not be permitted.'*

The issue of the landscape and visual impact of the proposed development is considered in more detail in the section below under the heading of EIA, however the issue as to whether the proposed development would or would not impact on an area of high amenity was expanded upon on foot of the request for further

information issued by the planning authority. This clarified that there are high amenity designations that impact on the appeal site but that these areas cover the existing permitted extraction area and have been excavated. The areas of extraction for which permission is sought in the current application will not directly impact on identified areas of high amenity. Similarly, and as will be detailed in subsequent sections of this report, the proposed development is considered to be such that it would not have a significant negative impact on geology or geological feature, ecology, or European designated sites. For this reason, the form of development proposed is considered to be consistent with the requirements set out in 2.8.6 of the development plan.

7.2.4. ***Policy RDP-03*** of the 2014-2020 plan states that it is council policy to favourably consider proposals for the expansion of existing industrial or new business enterprises in the countryside where the proposal does not impact negatively on the character or amenity of surrounding areas. ***Policy RDP-14*** states that it is council policy to ensure those extractions (quarries / sand and gravel pits) which would result in a reduction of the visual amenity of areas of high amenity or damage to designated sites, habitat types or species will not be permitted. The landscape and visual impact of the proposed development and the potential impact on character and amenity is considered fully in subsequent sections of this report, and as will be demonstrated, the principle of the proposed development is consistent with these policies.

7.2.5. ***Policy RDP-16*** states that it is council policy to continue to protect existing resource based industry from encroachment by residential development, for example mining, quarrying, gravel pits, peat extraction and intensive agriculture. The appellants (Mr Cummins) contend that this policy should equally relate to situations where extractive industry encroaches onto housing such as in the vicinity of the appeal site. The purpose of Policy RDP-16 is intended as a control on the siting of new housing in the vicinity of existing quarries and sand and gravel pits in recognition of the economic importance of such reserves and the location specific nature of the industry. In my opinion it is not applicable to the situation at the appeal site and consideration of the protection of existing residential development and the impact on residential amenity will be assessed under the relevant headings including noise, air quality and visual amenity.

7.2.6. I also note the reference made by the appellant (Mr Cummins) to Condition No.2 attached to ABP Ref. PL19.201727 which specifies that the permission would be for a period of 20 years after which the site would be reinstated. The permission granted under ref. PL19.201727 was for the development as proposed at that time and was granted for a 20 year period in accordance with the time period sought. There is nothing in that grant of permission which determined the suitability or otherwise of the extension areas which form the subject of the current application and the current proposal has to be assessed on its merits. The fact that the original permission was granted for 20 years does not in my opinion have any material impact on the current assessment.

7.2.7. I note the concerns expressed with regard to the level of consultation undertaken by the first party and specifically the contention of the third party appellants (Mr Cummins) that the requirements of the Section 28 guidance Quarries and Ancillary Activities - Guidelines for Planning Authorities (2004). Under the heading of Community Consultation (Section 1.5) the Guidelines do stress the importance of consultation with the public and that concerns are addressed at an early stage in the process. While the first party makes reference to the consultations undertaken with the Planning Authority, it would appear that no or very limited engagement was had with local residents. While pre consultation discussions are to be encouraged, the fact that such an approach is promoted in the Quarry Guidelines document does not make such an approach mandatory. I note that the first party state that the quarry manager is available as a point of contact with any member of the public who wishes to raise concerns, however the conditions attached to Ref. PL19.21727 require the submission of 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. In the event of a grant of permission it is recommended that a condition requiring the submission of an updated EMS would be attached and this EMS could include proposals relating to noise suppression and monitoring, dust, and details of the site manager / point of contact for residents. In the event of a grant of permission it is also recommended that the developer be required by way of condition to provide details of a contact person who would be responsible for complaints to all residents within 500 metres of the site.

7.2.8. Finally, the assessment of the potential air pollution impacts arising from the proposed development raises the issue of the composition of the material to be extracted and the extent of silica material in the material. The third party submissions of Mr Cummins raise particular concerns with regard to the health implications of dust generated by the extracted material arising from a high silica content. These concerns are exacerbated by the high percentage of sand that is stated in the response to the grounds of appeal to be on site, and the appellant queries whether the material to be extracted is such that it comprises a scheduled mineral and therefore such that the emission limit values specified in the EPA Environmental Management Guidelines in the Extractive Industry should not apply . as they relate only to non-scheduled minerals.

7.2.9. The submissions of the first party on file in relation to this issue cite the fact that the definition of minerals contained in the Minerals Development Acts as specifically excluding sand. This comment is noted and the full definition as per the Act is as follows:

> *"minerals" means all substances, including scheduled minerals, that occur naturally in or on land, or that occur in extractive waste, and includes, if the substances are worked, the cubic space formerly occupied by those substances but does not include—*
>
> *(a) topsoil,*
>
> *(b) turf or peat,*
>
> *(c) water,*
>
> *(d) petroleum, or*
>
> *(e) stone, gravel, sand, or clay, other than a type of stone, gravel, sand, or clay that is a scheduled mineral.*

7.2.10. Therefore, while the first party is correct that the definition of minerals in the act excludes sand, it does include scheduled minerals. Scheduled minerals are listed in the Schedule to the Act and includes 'silica sand'. This is defined in the Act as meaning *'sand of sufficient purity to be suitable for use in the manufacture of glass or ceramics'*. In order to be considered a silica sand the material must contain at least 95% SiO2 and less than 0.6% iron oxide. If the sand does not meet this criteria, it will

qualify as what's often called *'regular'* sand. The information on file including the first party response to the grounds of appeal does not specifically address the issue as to whether the sand that is proposed to be extracted at the Bunaterin site is or is not '*silica sand'* and if this is the case then a lower dust limit may be applicable. In terms of specific standards for silica, the 2016 Occupational Safety and Health Administration in the US (OSHA) have identified a Silica Dust Permissible Exposure Limit (or OSHA PEL) which reduces silica dust exposure from 250 to 50 micrograms per cubic meter of air. This limit however applies to silica dust derived from cutting, grinding, or crushing material containing silica and very small particles much smaller than ordinary sand are generated. The proposed activity on site comprises the continued extraction of sand and gravel at the site and the new sand processing plant proposed to be located at the northern end of the existing extraction area is specifically stated at 2.34 and 2.35 of the EIAR to not include crushing such that very small particles are likely to be generated.

7.2.11. As set out in section 14.2 of the Response to Further Information submitted by the first party to the Planning Authority, the material at the appeal site is limestone based and the primary element is therefore calcium carbonate and not silica which is more associated with sandstone or quartzite rock types. The silica content of limestone based material such as that at the appeal site is stated to be very low at less than 2 percent. Excavation of the material is proposed to continue to be by means of front loader and would be undertaken on a phased basis such that extraction area would only come within c.108 metres of the appellants property at the final stage of excavation and such that the statement of the appellant that they would be living within 100 metres of the development for 20 years is not correct. In my opinion there is no indication from the application documentation or first party submissions that the sand to be extracted at the site is likely to be potentially hazardous to staff or surrounding receptors and I note that the potential that the existing operation would result in a potential health impact is not reflected in the working method for existing staff on site or in the existing dust deposition limits specified in the existing permission at the site (Ref. PL19.201727) and that the assessment of the first party is that no silicosis risk on any assessed receptors in the vicinity of the site will arise, (Pg.6 of first party response to grounds of appeal). For these reasons I consider that the use of the normal ELV of 350ug/ m2/ day averaged over a 30 day period is

appropriate in this case and this is the position adopted in the assessment of dust / air quality contained at section 8.4.4 of this report below and which informs the assessment of the impact on population and human Health contained at section 8.2.

7.2.12. In the event that the Board is not satisfied with the response of the first party on this issue it may wish to seek further clarification regarding the composition of the sand material in the proposed extraction area, whether it comes within the definition of silica sand as set out in the schedule to the Minerals Development Act and the applicability of the 350ug/m2/ day limit at sensitive receptors.

7.3. Impact on Residential Amenity

7.3.1. The third party appeal submitted by Mr Cummins sets out a number of reasons which it is considered that the proposed development would have a significant negative impact on residential amenity. The main issues raised relate to dust, noise, visual impact and the excessive scale of development and proximity to residential properties. Issues relating to air quality (noise and dust) and visual impact are addressed at section 8.0 of this report below under the heading of EIA, and this part of the assessment should be read in conjunction with these sections.

7.3.2. With regard to dust, as set out at 8.4.4 of the EIA below, the existing ***dust*** environment at the site is such that dust emissions are low. The nature of the extraction method with a front loader and the separation distance between the closest dust generating source on the site and sensitive receptors, including the appellants property, are such that significant dust impacts are not considered likely to arise. It should also be noted that dust sources are not proposed to extend to within 100 metres of the appellant's house, and for the majority of the phased extraction the separation distance between dust sources and the appellant's property will be significant. The assessment of dust impacts presented in the EIAR concludes that no significant adverse dust related impacts are predicted to arise at any sensitive receptors in the vicinity of the site and I agree with this assessment.

7.3.3. Similarly, in the case of ***noise***, as detailed at 8.4.4 of the EIA below, the predicted noise impacts arising at noise sensitive locations including the appellants property are below the 55dBA daytime emission limit value (ELV) in the worst case scenarios at the latter phases of the development when the extraction area is closest to his

property. The reference made by the third party appellant (Mr Cummins) to WHO noise limits are noted however these limits relate to continuous process sources and not intermittent noise emissions such as would be generated at the appeal site. Site set up and berm construction activities would result in temporary exceedances of noise ELVs, however the assessment undertaken indicates that the maximum at the appellants property would be 60dBA which is significantly below the ELV of 70dBA for such works and would be for a temporary period of maximum 8 weeks per annum at the later phases of the development (years 10-16). Overall, subject to mitigation the impact of the proposed development in terms of noise and dust is considered to be acceptable, consistent with recognised ELVs and such that no significant negative impacts on residential amenity would be generated.

7.3.4. In the case of both issues (dust and noise), the impacts would be temporary, and, in the case of the appellants property, the maximum impacts predicted would only arise in the final phase of the development. In both cases conditions setting limits for these ELVs would be attached and compliance would be monitored by the Planning Authority.

7.3.5. The specific issues raised by the third party appellant (Mr Cummins) with regard to the composition of the material to be extracted and the potential for dust generated by the extraction and processing activities on site to result in the generation of silica dust with associated health impacts has been addressed at section 7.2 above. In summary, I do not consider that the nature of the material to be extracted which is derived from limestone and the extraction and process activities proposed on site are such that silica dust that would potentially impact negatively on human health are likely to arise. I also do not consider on the basis of the information available that the material to be extracted at the site constitutes a scheduled material for the purposes of the Minerals Development Act.

7.3.6. In terms of ***visual amenity***, the impacts arising on all receptors will be temporary and due to the phased extraction method, impacts will likely be limited for the majority of the project. Mitigation in the form of boundary planting and berm construction is proposed that would significantly mitigate visual impacts on surrounding residential properties that are highly sensitive receptors. In the case of the third party appellant (Mr Cummins), his property is located such that as per the revised extraction area submitted as part of the response to further information, the

closest part of the extraction would be located in excess of 100 metres from his property (108 metres). The proposed berm at the northern end of the site would be located c.80 metres from Mr Cummins property, and the distance between the berm and the boundary of the appellants property would be up to 55 metres. Even at the last phase of the proposed development therefore, there would be a significant separation between the extraction area and the appellants house, and the berm would act to significantly mitigate the negative impact on visual amenity even at the later phases of the development. For these reasons, and as detailed at section 8.5 below under the heading of EIA – Landscape, I do not consider that the proposed development will have a significant negative impact on views from residential properties in the vicinity of the site, including that of the third party appellant. Post site restoration the visual impacts would be imperceptible.

7.3.7. I note the concerns of the appellant with regard to the ***use of the lands*** that will remain between their property and the advancing extraction area. The response of the first party indicates that it is intended that these lands would remain in agricultural use as long as feasible and I do not see how additional security issues over and above the current situation would be likely to arise.

7.3.8. With regard to the potential for ***traffic*** generated by the propose development to lead to a loss of residential amenity, it is noted that the existing traffic levels are not proposed to be increased from the existing as the rate of extraction and importation of materials to and from the site are not proposed to change from existing rates. Traffic associated with the proposed development will not generally use local roads in the vicinity of the site and it has been clarified by the first party that the existing agricultural access from the site to the local road will not be used in connection with the proposed development. The existing site access provides direct access onto the N52 national secondary road and given the limited additional traffic generated by the development relative to the existing volumes on this road, traffic generated by the proposed development is not therefore considered likely to have a significant negative impact on residential amenity.

7.4. Traffic and Access

7.4.1. A Traffic and Transportation Assessment of the proposed development is presented at Chapter 14 of the EIAR. The existing site access connects with the N52 National secondary Road to the south of the site. This road (N52) connects the M7 in the vicinity of Nenagh with the M1 to the north east of the site and is an important national route.

7.4.2. Analysis of the traffic impacts of the proposed development is informed by traffic surveys undertaken at the site access in September 2019. The results of these surveys, and other surveys undertaken in 2009, are presented in the EIAR.

7.4.3. The results of the 2019 survey indicate that the existing average two way flow on the N52 in the vicinity of the site access is 6,241 vehicles over the 12 hour period from 07.00am to 19.00 hrs. Surveys indicate that the traffic associated with the existing development on the site account for a total of 2.8 percent of the traffic on the N52, down from 3.8 percent at the time of the 2009 survey. The impact of the proposed development on the national road network and the N52 in particular is not therefore considered to be significant in terms of the capacity of these roads.

7.4.4. Table 14-11 of the EIAR sets out the product inputs to the site (concrete and asphalt production) and associated HGV traffic. Traffic generated by the operation on site is set out in Table 14-12 and is based on a permitted maximum annual extraction at the site of 360,000 tonnes with account taken for 135,000 tonnes used in the on site production giving an off site transport of 225,000 tonnes. The daily HGV generated by the existing operation is estimated at 89 per day and was recorded at 86 in the 2019 survey and 101 in the 2009 survey.

7.4.5. The junction of the existing site access to the N52 is characterised by a ghost Island priority layout with a left turn deceleration lane. As set out at Table 14-17, the existing junction layout is generally compliant with DMRB standards for such junctions and is considered to be acceptable. The records presented in the EIAR do not indicate any particular trend of collisions in the vicinity of the access and the analysis presented of the morning and PM peak period junction capacity (PICADY analysis) indicates very low ratio of flow to capacity, with the RFC calculations for the design year being virtually identical to the existing capacity calculations.

7.4.6. The output from the proposed development will not change relative to the existing and operation of the existing on site equipment is proposed to remain. While an additional sand processing plant on site is proposed this will not increase the capacity of sand processed or the volume of output and hence traffic on the site. The analysis undertaken indicates that the existing site access is safe and consistent with required design standards and the volume of traffic generated by the development can easily be accommodated at the junction. The site discharges traffic directly onto the national road network (N52) with easy onward access to the primary road network. No significant levels of traffic are likely to be attracted to the local or regional road networks in the vicinity of the site. Site traffic generated by the proposed development would continue to use the existing roads and access routes and there would not be any material change in traffic on the local road network arising. For these reasons the proposed development is considered to be acceptable from a traffic and transportation perspective.

7.4.7. I note that the appellants raise a number of issues regarding traffic and site access arrangements. Firstly, as highlighted above, it is not proposed that the existing access to the local road to the north of the site would be used in the development and there will not therefore be traffic accessing the local road to the north of the site. Regarding increased traffic that could be generated and the potential for the existing cement and block manufacturing facilities to expand with the proposed development, the application documentation is clear that this will not be the case. The existing cement and block making operations will continue on site but there will be no increase in the amount of aggregate extracted per annum at the site or in the amount processed in the existing on site plant. No increase in traffic will therefore arise due to changes in the operation of the on site plant. Finally, I note reference by the appellants to the fact that the Board previously refused permission for a single storey log cabin sales / showroom development which accessed onto the N52 (ABP Ref. PL19.236787) on the basis of traffic safety and that this should act as a precedent in the current assessment. The existing site access and traffic generated is existing and is serving a form of development for which there is policy support in the development plan. I do not therefore consider that the case cited by the appellant is comparable to the existing proposal or such that it would act as a precedent.

7.5. Geology – The Screggan Fan

7.5.1. The primary issue raised in the submission received from Mr Brian Curley is that the proposed development would have a significant additional negative impact on an important geological feature in the area, the Screggan Fan, that this feature is also an important landscape element and that its destruction would be contrary to the provisions of both the current *Offaly County Development Plan, 2014-2020* and the Draft Plan.

7.5.2. Firstly, in terms of policy, there is no specific provision contained in the current *Offaly County Development Plan, 2014-2020* that seeks the protection of this feature. As noted by the appellant, an audit of the geological heritage sites of County Offaly produced in 2016 included Screggan Fan. This report was a joint publication by Offaly and Laois County Councils and the Geological Survey of Ireland (GSI) and contains reports on a number of geological sites including the Screggan Fan which is identified as a site of county geological importance. As noted by the appellant, the report, provides a detailed study of sites to replace a provisional listing based on desk study which was adopted in the current 2014-2020 CDP, along with strong policies to protect it and enhance access where feasible. It is not however specifically referenced or included by way of variation in the 2014-2020 County development plan. Policy NHO-99 of the current plan states that it is an objective of the council to seek the preservation of important features of geological interest identified in Appendix Y which does not reference the Screggan Fan and I do not agree with the appellant that the sites identified in the 2016 study supersedes Appendix Y.

7.5.3. The sites identified in the 2016 GSI report, including the Screggan Fan, are included in Table 4.12 of the Draft 2021 – 2027 plan and Policy BLP-09 states that '*It is Council policy to protect from inappropriate development and maintain the character, integrity and conservation value of features or areas of geological interest as contained in the scheduled list of geological heritage sites identified in Table 4.12 Offaly Geological Sites'*. In conclusion therefore, in terms of policy protection, the Screggan Fan geological site is not specifically identified for protection in the current statutory plan for the area, however the draft plan proposes that sites including the Screggan Fan would be protected from '*inappropriate development'*.

7.5.4. With regard to the appropriateness of the proposed development and its potential impact on the Screggan Fan feature there are in my opinion a number of issues that should be noted. Firstly, in terms of extent relative to the feature, the proposed development measures c.31.2 ha., of which 9.2ha. was previously approved and has been substantially worked. This 31.2ha. area has to be seen in the context of the overall 196 ha. footprint of the fan and, while the construction of the N52 Tullamore bypass also impacted on the fan, the combined area measures approximately 40.3 ha. or approximately 21 percent of the fan feature. The second factor that is noted is the nature of the feature and the potential benefit of excavation to the understanding of the history of the feature. This is recognised in the 2016 GSI report which identifies that the Screggan Fan is a geologically important site that is important in giving an understanding of the final stages of the last ice age and that the fan is interpreted as representing a large glacial lake. Dropstones deposited in the Fan give important information on its evolution and can only be recorded if they are exposed by excavation. It is therefore submitted that the proposed development will add to the knowledge of the site for which it is considered important. The first party contend that the recording of dropstones will help to enhance the knowledge of the fan and that the proposed development is therefore in line with the policies of both plans. I note and agree with this view and on this issue note the correspondence between the first party and the GSI submitted as part of the first party response to further information. In my opinion this correspondence clearly indicates that the GSI were made aware of the fact that the proposed development would have a direct impact on the Screggan Fan and such that there is not any ambiguity with regard to the knowledge available to the GSI regarding potential impact as contended by the appellant. It is also in my opinion clear from the correspondence contained at Appendix C of the First Party Response to the Grounds of Appeal that the GSI are satisfied with the grant of permission subject to their personnel being facilitated access for inspections and being informed of any dropstones encountered at the site. Finally, there is no indication in the current Offaly County Development Plan, the Draft Development Plan or the 2016 GSI Report that the Screggan Fan site is identified for its landscape significance. As is discussed in more detail in the section below relating to EIA- Landscape, based on my observations of the site including from the local road to the north and having regard to the landscape designations

contained in the current and draft plan, I do not consider that the landscape in the vicinity of the site is particularly distinctive or of a high sensitivity such that the proposed development would be unacceptable in terms of landscape or visual impact.

7.5.5. Having regard to the above, it is my opinion that the proposed development would not have an unacceptable impact on the geological feature that is the Screggan Fan or that the proposed development would constitute 'inappropriate development' as referenced in Policy BLP-09 of the Draft Offaly County Development Plan, 2021-2027.

8.0 **EIA**

8.1. **Introduction**

8.1.1. The requirement for the submission of an EIAR in this case derives from Class of Part 2 of the Fifth Schedule of the Planning and Development Regulations, 2001 (as amended) which states that the following shall be development for the purposes of Part 10 of the Act (requiring EIA):

(b) Extraction of stone, gravel, sand, or clay, where the area of extraction would be greater than 5 hectares.

8.1.2. The application is accompanied by an EIAR prepared by SLR Consulting Ireland. The contributors to the EIAR are listed at Table 1-1 of the EIAR, and the document comprises two volumes, the first which contains the non-technical summary. The second volume contains the main sections of the EIAR and includes figures, plates, and appendices as appropriate at the end of each chapter.

8.1.3. The application has been prepared under the provisions of the 2014 EIA Directive and I have undertaken an examination of the information presented by the applicant including the EIAR and the submissions made during the course of the appeal. A summary of the results of the submissions made by the Planning Authority, prescribed bodies, appellant's, and observers has been set out at sections 3.0 and 6.0 of this report. The main issues raised with regard to EIA can be summarised as follows:

- That the proposed development will adversely affect air quality, particularly with regard to noise and dust and would have an adverse impact on human health.
- Particular concern regarding the potential for the release of silica in dust emissions and the potential health impacts of this.
- Noted that the noise limits specified in the conditions attached by the council exceed the WHO limits.
- That no environmental monitoring committee as suggested in the quarry guidelines has been undertaken for the existing development.
- Negative traffic and road safety implications of the development.
- Potential for structural impacts / subsidence to houses adjacent to the site.
- Negative impact on landscape, visual amenity, and cultural heritage.
- Negative impact on a local geological site – the Screggan Fan.

These issues relating to EIA and the submitted EIAR are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation.

8.1.4. With regard to ***Alternatives***, as the EIAR is submitted in accordance with the requirements of Directive 2014/52/EU, what is required is a description of the reasonable alternatives studied by the developer which are relevant to the project and its specific characteristics and '*an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment*'. Consideration of alternatives is presented at Section 3 of the submitted EIAR and incorporates the following:

- Consideration of the do nothing scenario / alternative which would result in the existing development on the site continuing until the existing permission expires in August 2023. This is not considered to be a viable or desirable alternative given the ongoing high demand for aggregate and the favourable characteristics of the existing Bunaterin site as listed in Paragraph 3.8 of the

EIAR. These include the availability of an existing resource at the site, ready access to the national road network, good screening of the existing site and topographical context and the fact that the operation is existing and operated by an experienced contractor. The 'do nothing' scenario is also referenced under each of the relevant chapter headings relating to factors of the environment.

- Consideration of alternative sources and locations. Notwithstanding other potential sites, the subject site is considered appropriate given the existing reserves, the availability of lands for expansion, the existing infrastructure on site and the low environmental impact of expansion.
- Alternative designs and layouts including the phasing of working. Submitted that the proposed phasing and design of works are such that impacts on the environment would be minimised.

8.1.5. The information relating to alternatives provided in the EIAR was amended on foot of the request for further information issued by the Planning Authority and a revised Chapter 3 was provided at Appendix C of the response to further information. This revised chapter on alternatives is slightly more comprehensive that the original EIAR text and includes consideration of the do nothing alternative, the need for the development in terms of the supply of aggregates to the construction industry and the current lack of alternatives to land based sand and gravel sources. Alternative locations to the existing facility are addressed, however it is noted that the existing plant on site has not reached the end of its serviceable life. Finally, alternative layouts and the justification for the proposed direction and phasing of works is provided.

8.1.6. It is my opinion that the information provided by the applicant sets out the main viable alternatives that relate to the proposed development and provides an assessment of the main reasons for the option chosen having regard to the impact on the environment, and particularly on residential properties, the landscape and ecology. The information is therefore in my opinion consistent with the requirements of the 2014 EIA Directive (2014/52/EU).

8.1.7. The EIAR details for each factor of the environment the relevant person or persons who prepared the relevant chapter and details their qualifications and experience.

8.1.8. With regard to the ***vulnerability of the project to Major Accident Hazards, Natural Disasters and Climate Change***, the appeal site is not located close to and the proposed development is not connected with any Seveso establishment or activity. The issue of hazards and the potential impact of unplanned events is considered in each of the chapters in the EIAR with respect to the relevant fact of the environment. The nature of the proposed development is such that the development is not vulnerable to a major accident hazard. No element of the proposed development is located within an identified flood extent area and no flood events are recorded for the immediate vicinity of the site. Having regard to these factors, it is considered that the risk of major accident hazards or potential implications arising from natural disasters and climate change are negligible.

8.1.9. In conclusion, I am satisfied that this EIAR has been prepared by competent experts to ensure its completeness and quality and that the information contained in the EIAR and supplementary information provided by the first party, adequately identifies and describes the direct, indirect, and cumulative effects of the proposed development on the environment and complies with the requirements of Article 94 of the Planning and Development Regulations, 2001 (as amended).

8.2. Population and Human Health

8.2.1. Population and Human health impacts arising from the proposed development are addressed at Chapter 4 of the EIAR and the residential receptors the subject of assessment at presented at Figure 4-1 of the EIAR.

8.2.2. The proposed development has the potential to impact on local populations in terms of employment, the impact that the development would have on amenity and on human health by way of impacts relating to noise and dust / air emissions. The impact of the proposed development on these latter factors of the environment is addressed in more detail in subsequent sections of this EIA, and the impact on human health is considered in light of these factors.

8.2.3. The proposed development has the potential to impact positively on local economic development and the local economy. The development would result in the existing on site employment of c.32 persons being retained and it is envisaged that this employment / economic impact would be medium term lasting throughout the

operational phase of the project up to year 18. Some on site employment would remain in the final two years of the project with site reinstatement works. The proposed development would also have indirect positive economic impacts in terms of facilitating other construction and development projects in the local area and region, as a necessary input into economically important development projects and in terms of indirect positive impacts on local suppliers.

8.2.4. During the operational phase of the development, there would be potential impact on human health arising from noise and air quality issues and also potentially from impacts on water quality and changes in traffic. With regard to water quality, the proposed development is not connected to any ***surface water*** courses in the vicinity of the site and no significant negative impacts on such watercourses are predicted to arise such as would impact on local populations or human health. Mitigation measures in the form of best construction practice around the storage and servicing of equipment and materials are proposed and stockpiles of materials are proposed to be managed to ensure that erosion and discharge of sediment is not a potential issue.

8.2.5. With regard to ***groundwater***, the operations at the site have potential to pollute groundwaters and to impact on local water supplies that are from groundwater sources. The extraction operation is proposed to remain a minimum of 1 metre above the water table and such that there would be no direct impacts on groundwater generated. Mitigation in the form of measures to ensure that groundwaters are not contaminated are proposed and these include measures to ensure that the storage, servicing / refuelling, and operation of on site plant and equipment is undertaken in a way that minimises the risk of contamination of groundwater. On site storage of fluids and oils / fuels is proposed to be within bunded areas. The proposed extended extraction areas are located outside of the identified source protection areas around the public water supplies in the vicinity of the site. No significant negative impacts on groundwater are predicted to arise such as would impact on local populations or human health.

8.2.6. ***Traffic*** generated by the proposed development is not predicted to be different from current levels and no new access points to the site are proposed to be created. The site has direct access onto the national secondary road network (N52) and no

significant impacts in terms of traffic or associated disturbance are predicted to arise such as would impact negatively on human health.

8.2.7. With regard to ***noise***, the predicted noise impacts from the operational extraction at the site have been the subject of detailed modelling as presented in Chapter 10 of the EIAR. A detailed assessment related to noise is set out at 8.4.4 of this EIA below. Post mitigation, noise levels at the identified noise sensitive locations are predicted to be within the normally accepted emission limit values of 55dBA LAeq during the day and 45dBA LAeq at night. Some temporary set up works and berm construction activity will result in noise levels that exceed these ELVs, however such noise levels are short term in nature being a maximum of 8 weeks per annum and will impact individual receptors only when development moves in close proximity to that source during the course of the phased development of the site. In all cases, such noise impacts would be below the 70dBA ELV for such works and significantly below this level in most circumstances. Having regard to these factors, and to the detailed assessment undertaken in Section 8.4.4 below, no significant impacts in terms of noise are predicted to arise such as would impact negatively on human health.

8.2.8. With regard to ***dust and emissions to air***, the predicted impacts are the subject of assessment at Chapter 8 of the submitted EIAR and are the subject of detailed assessment at Section 8.4.4 of this assessment below. Existing dust emissions at the site are not significantly negative and the results of the assessment of likely impacts from the proposed development indicates that dust impacts on the identified sensitive receptors located within 500 metres of the site would not be significant and would not be above the standard 350ug/m2/day emission limit value when measured at the site boundaries. The concerns of the third party appellants with regard to the potential for silica to be present in the material to be extracted at the site is noted and has been discussed in detail in section 7.2 of this report above. As detailed in that analysis, on balance, having regard to the nature of the material on site being derived from limestone, the particle size, the processes proposed to be undertaken on site and the separation from sensitive receptors, it is not considered that significant negative health impacts are likely to arise. Emissions from the plant at the site has been the subject of assessment in the EIAR and are not considered likely to give rise to significant impacts on air quality. It is specifically noted in this

regard that the emissions from the asphalt plant on the site are within the parameters set out in the Air Emissions Licence for this plant and that the location of this plant is not proposed to change in the proposed development. In conclusion, no significant impacts in terms of air including dust emissions are predicted to arise such as would impact negatively on human health.

8.2.9. In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on population and human health. The existing sand and gravel operation at Bunaterin was permitted by An Bord Pleanala under Ref. PL19.201727 and EIA of the proposals was undertaken by the competent authority who determined that the predicted environmental impacts were acceptable. Given the limited impacts predicted under this factor of the environment I do not consider that significant cumulative impacts are likely to arise when the proposed development is considered together with other permitted plans and projects in the vicinity.

8.3. **Biodiversity**

8.3.1. This section relating to biodiversity should be read in conjunction with section 9.0 below under the heading of Appropriate Assessment – Screening.

8.3.2. Biodiversity is addressed at Chapter 5 of the EIAR submitted and at Appendix 5A that sets out the relevant planning policy and legislation and associated figures. The assessment presented identifies a zone of influence of the project that extends to 2km from the site and which has been identified based on the fact that there are no identified hydrological (surface water) pathways between the site and surrounding areas. Specifically, there are no surface water features on or in close proximity to the site and the proposed development would not result in excavation below the water table. Given the nature of the proposed development, the identified zone of influence is considered appropriate.

8.3.3. The assessment contained in the EIAR was based on a desk survey and walkover field survey of the site. The results of the field assessment in terms of habitats is presented at Figure 5.2 of the EIAR and the majority of the site where the extended

extraction area is proposed comprises lands that are in active agricultural use for arable crops and associated hedgerows. Within the existing part of the site the habitats have all been modified and comprise active quarry / mine area and artificial lakes and ponds.

8.3.4. A notable habitat in the vicinity of the site is ***the Blackwood*** located to the west of the site. Part of this area immediately adjoins the existing extraction area and part the northern extension proposed in the current application. The blackwood is an important habitat in an area generally characterised by farmland and agricultural lands and the area is particularly significant as a habitat potentially used by a range of mammals, potentially including pine martin and badger. The proposed development would not result in any direct loss of this habitat and extraction is proposed to be set back by a minimum of 15 metres from the boundary with the woodland area to mitigate the potential impact on trees and the structure of the woodland. Excavation at the site is proposed not to extend below a level lower than approximately 1 metre above the maximum recorded water table and it is not considered that the proposed development will have a significant adverse impact on the hydrology of the woodland such as would significantly impact on ecology or biodiversity value of the woodland.

8.3.5. The site did not record any sightings of amphibians during the site survey. A number of ***mammals*** have previously been recorded in the vicinity of the site and specifically the Black Wood area to the west. Specifically, pine martin, badger, and red squirrel, however none of these species were however observed during the site walkover survey. The area of the site is not recorded as having bat species as per the National Biodiversity Data Centre records, however the site does contain a significant extent of hedgerows and trees that are proposed for removal as part of the development and which could be potentially significant breeding and foraging habitat for bats. The most significant bird species observed at the site is sandmartin with sightings in both the proposed extended area and the existing extraction area. Buzzard and peregrine are other notable species which have been observed in the vicinity of the site.

8.3.6. The development will result in the removal of a significant area, c.31.3 ha. of existing agricultural lands and resulting direct loss of habitat that would be potential feeding and breeding habitat for birds and habitat for mammals. The development would

also result in the removal of approximately 1,610 linear metres of hedgerow that would have a potential impact in terms of the loss of bat and bird habitat. Similarly, the development would result in the direct loss of a treeline of c.300 linear metres located at the centre of the site and immediately to the north of the existing extraction area that could impact on bird and bat species as well as mammals. No hedgerow or treelines immediately bounding the site are proposed to be removed as part of the development.

8.3.7. Mitigation regarding the removal of ***hedgerows and treelines*** and the direct loss of agricultural lands is proposed to be incorporated into the development. Specifically, the removal of hedgerows will be undertaken on a phased basis with new hedgerow planted, albeit that most of this new planting will occur in the final years of the development. Details of this reinstatement is set out in the restoration plan detailed at Chapter 13 of the EIAR. While the area of hedgerows to be removed at c.2,690 linear metres represents approximately 17 percent of that within and bounding the site, the replacement planting will comprise c.3,145 linear metres of native species. The removal of hedgerows and the intervening period before replanting will have a moderate temporary impact in terms of habitat loss and the impact would be negligible post mitigation and full restoration of the site. Similarly, the loss of trees within the site to facilitate the proposed extended extraction area will result in the loss of c.300 linear metres of tree line with a slight temporary negative impact in terms of habitat loss. Post mitigation and the reinstatement of this area with hedgerow reinforced with trees the impact is considered to be negligible.

8.3.8. The impact on ***birds*** will arise from the loss of tree and hedgerow habitat and the loss of arable lands that would be potential breeding and foraging habitat. The development would also result in the loss of the existing pit face at the northern end of the site which is used as a nesting site for birds. The proposed development would result in the displacement of birds using these sites and, pre mitigation, would have a potentially significant local impact. It is however noted that no bird species of significant conservation importance were observed during the course of the site walkover survey and that the habitats that would be lost (notably the arable farmland) is not particularly unique or rare in the local environment. Mitigation measures comprise the phased stripping of topsoil and sub soil and therefore phased loss of arable lands, the clearing of hedgerows outside of the breeding

season and the maintenance of the existing sandmartin nesting sites on the existing north face of the site until the breeding season is over and surveying of exposed faces prior to extraction works. Mitigation is also proposed in the form of the reinstatement of hedgerows lost on site. Subject to the mitigation measures set out in the EIAR the impact of the proposed development on birds is not considered likely to be significant.

8.3.9. The loss of hedgerows during the course of the development and the period before which hedgerows are proposed to be reinstated would give rise to the loss of bat foraging habitat. The site survey indicated limited potential roost sites within the development site and there is a single bat box located on the eastern side of the proposed northern extension area. The overall suitability of the site for foraging bats is identified in the EIAR as low and on the basis of the habitats to be lost and the lack of recorded bat activity in the vicinity I would agree with this assessment. While hedgerows would be lost in the short to medium term pre full site reinstatement, the boundary hedgerows would remain in place and there would not therefore be severance of wider bat commuting routes. Short to medium term temporary impacts are therefore likely to be slight negative with long term post mitigation / site reinstatement impacts negligible.

8.3.10. Regarding other mammals, the site would result in a potential loss of ***badger*** foraging habitat albeit that no evidence of badger has been recorded during site surveys. There is therefore a potential short to medium term loss of badger habitat during the period when the site is undergoing extraction and prior to full site restoration. Such impacts are not considered likely to be significant given the availability of alternative similar habitats in the general area and post restoration of the site impacts on mammals are considered such as to be negligible. Given the nature of the site and habitats that would be permanently or temporally lost and having regard to the site survey and desk assessment undertaken it is not considered that there are any other mammal special which would be the subject of any other likely significant impacts.

8.3.11. In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on biodiversity. The existing sand and gravel

operation at Bunaterin was permitted by An Bord Pleanala under Ref. PL19.201727. In this case, EIA of the proposal was undertaken by the competent authority who determined that the predicted environmental impacts were acceptable. The issue of potential cumulative impacts on biodiversity was raised as part of the request for further information issued by the Planning Authority and specifically potential cumulative impacts on biodiversity with other quarry locations in the vicinity. As noted in the RFI (Item 5) the closest such location is located more than 1km from the appeal site. There is no hydrological connection between the appeal site and other sand and gravel extraction sites and there is not the potential for dust or other air impacts to result in cumulative impacts that could impact on biodiversity. Given the limited impacts predicted under this factor of the environment I do not consider that significant cumulative impacts are likely to arise when the proposed development is considered together with other permitted plans and projects in the vicinity.

8.4. Land, Soil Water Air and Climate

8.4.1. Land and Soils

8.4.1.1 Land and Soils are addressed at Chapter 6 of the submitted EIAR and at Appendix 6A which relates to consultations with the Geological Survey of Ireland. The site has been the subject of assessment on foot of the existing permission for extraction at the site and the proposed extension area has been the subject of additional boreholes that were undertaken in 2008. There is also significant information relating to soils, subsoils and lower material arising from the experience of the site operator in the existing extraction area.

8.4.1.2 The proposed development has the potential to impact on ***land*** and soils in a number of ways. The development will result in a reduction in the availability of agricultural land at the site. This loss of agricultural land will be progressive following the phased stripping of topsoil and extraction of the site but will ultimately result in the loss of the extended area of 31.3ha. There would therefore be a short term locally moderate negative impact on land during the excavation activity in years 1-18 during the extraction phase of the project. Mitigation in the form of the restoration of the site to a form which is stated to be suitable for beneficial agricultural use is

proposed in years 19 and 20 and post completion of this restoration the impact of the proposed development on land would be imperceptible.

8.4.1.3 ***Soils*** are proposed to be progressively removed from the site and to be stockpiles and used in screening and the construction of berms. Similarly, subsoils are proposed to be stripped and stored for reuse in the site restoration. The proposed development would therefore have a short term negative impact on soils and subsoils due to the direct loss / removal over the proposed extended extraction area. This loss would however be short to medium term and progressive in line with the development phasing. The short to medium term impact of the proposed development on soils is therefore assessed as slight to moderate negative impact. On completion of the development and restoration of the site the predicted impact on soils is considered to be imperceptible.

8.4.2. **Geology**

8.4.2.1 The geological survey information indicates that the site is underlain by limestone with Lucan formation limestone in the north east part of the site. This rock is located well below the surface with deposits of sand and gravel above, and the EIAR cites the fact that the five boreholes drilled in the proposed expansion area did not encounter rock down to a depth of c.42 metres below ground level. There are no clear karst features in the immediate vicinity of or on the site, however paragraph 6.48 of the EIAR notes the presence of a spring located to the north east of the site c.0.5km from the site boundary and the fact that there are a number of swallow holes identified on the GSI mapping in the general vicinity of the site.

8.4.2.2 A desk survey of sites identified two that are on the Geological Sites of County Offaly which are within 1km of the appeal site. The Screggan Fan is located partially within the footprint of the proposed development and a total of c.31.2 ha. of the total fan area of 196ha. is within the site boundary. Of this area, approximately 9.2 ha. has been previously excavated as it is within the area of extraction permitted under Ref. PL19.201727. Kilcormac esker is the second identified geological feature and this is located outside of the appeal site and c.200 metres from the south western boundary at the closest point.

8.4.2.3 The proposed development would have a direct impact on the Screggan Fan feature and would result in the direct loss of additional c.22 ha. of this feature. Section 7.5 of this assessment above under the heading of Geology – The Screggan Fan addresses the detailed issues raised by the third party appellants in this case regarding the potential impact of the proposed development on the Screggan Fan. While the development would result in direct loss of part of this feature, the impact would be a loss of an additional c.22 ha. out of a total area of c.196 ha. The necessity of some excavation to be undertaken in order that information regarding the feature be obtained is noted in the correspondence from the GSI that is on the appeal file, and the significance of the identification and recording of dropstones is specifically noted as a significant feature of interest. Such features can only be identified and recorded by excavation of the site. For this reason and having regard to the extent of extraction proposed relative to the size of the overall feature, I consider that the proposed development will have a moderate direct negative impact on the identified geological feature, the Screggan Fan. This impact is mitigated by the relevance of material that would be uncovered during the excavation of the site, namely the dropstones, and the relevance of these features to the GSI and to their understanding of the origins of the feature. Having regard to this mitigation, it is considered that the impact of the proposed development on the Screggan Fan would be permanent, long term and slight negative. The proposed development would not have any direct or indirect impacts on Kilcormac Esker or any other identified geological features in the vicinity of the site.

8.4.2.3 In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on Land, Soils or Geology. The existing sand and gravel operation at Bunaterin was permitted by An Bord Pleanala under Ref. PL19.201727. In this case, EIA of the proposal was undertaken by the competent authority who determined that the predicted environmental impacts were acceptable. The issue of potential cumulative impacts on the Screggan Fan was raised as part of the request for further information issued by the Planning Authority and specifically potential cumulative impacts on biodiversity with other quarry locations in the vicinity. As noted in the RFI (Item 6) the cumulative area between the existing area of

extraction on the appeal site, the proposed area of new extraction and the area lost arising from the construction of the N52 Tullamore bypass is approximately 40.3 ha. out of a total area of 196 ha. and is such that a significant cumulative negative impact is considered likely to arise. Given the limited impacts predicted under these factors of the environment I do not consider that significant cumulative impacts are likely to arise when the proposed development is considered together with other permitted plans and projects in the vicinity.

8.4.3. **Water**

8.4.3.1 The impact of the proposed development on water is assessed at Chapter 7 of the EIAR and at Appendices 7A-7F which includes details of existing borehole records and groundwater quality monitoring.

Groundwater

8.4.3.2 Groundwater in the vicinity of the site is identified as regionally important over the bulk of the site with a small area at the far northern end of the site locally important, (Figure 7-2 of EIAR). Vulnerability is identified as high over the bulk of the site and moderate in the northern part. There are a number of groundwater supply sources identified in the vicinity of the site, notably at Glaskill to the north and Heath / Cloghanbane to the south east, (Figure 7-6 of EIAR). The Agall spring water supply and the Hollimshill borehole provide public supplies in the local area of the site and the location of these sources are indicated on Figure 7-7 of the EIAR. Figure 7-7 indicates the identified source protection areas for the main water supply sources and, with the exception of a very small area on the western side of the site, the site is located outside of all such areas and in excess of 1km outside of the identified inner source protection areas. The EIAR records that all residences located within 500 metres of the site are supplied by piped water sourced from the Agall water supply.

8.4.3.3 The nature of the proposed development is such that, in common with the existing development on the site and the existing extraction area, extraction will not be undertaken below the established water table on the site and excavation will stop with a minimum of one metre depth retained to the water table. The proposed development will not therefore have the potential to have a direct impact on groundwater from the extraction activity on the site. The development will however

have the potential to have indirect impacts on groundwater arising from the storage of fuels, oils and other liquids on the site required to operate the on site equipment both fixed and mobile. Any spillage of such materials could impact negatively on groundwaters and potentially on groundwater bodies and sources in the vicinity of the site. The proposed development would also have a potential impact from onsite services such as waste water. The existing water supply to the site is from a groundwater source located on site. The proposed extraction method involves the use of front loaders and a dry operation that raises the potential for dust and particles that would get into groundwater. Similarly, the proposed phased stripping of soil from the site would increase the vulnerability of the ground water bodies below and remove the barrier to the passage of contaminants to the groundwater formed by the soil.

8.4.3.4 The analysis presented in the EIAR indicates a number of natural features in the bedrock and adjoining underlying aquifers. Most significantly, the gravel and bedrock aquifers identified as underlying the site are overlain by a layer of lack that acts as a barrier and would help to screen the underlying aquifers in the event of a spillage or discharge from operations at the site. This feature, together with the proposed dry working of the pit would act to significantly mitigate any potential impact on groundwater. In addition, mitigation is provided by existing hardstanding areas are located around the existing concrete batching plant. The existing fuel storage area is bunded to 110 percent of capacity and the refuelling area is located on a hardstanding with a hydrocarbon interceptor. These areas are proposed to continue to be used post development. No refuelling would be undertaken on the pit floor and oils and greases would be stored under cover. Good site practice in the form of inspections and maintenance regimes are proposed and spill kits and training are also proposed. Subject to the implementation of the mitigation measures as outlined in the EIAR and summarised above, I do not consider that the proposed development would have any significant temporary adverse impacts on the groundwater during the construction or operational phases of the development. Post operation and the site reinstatement phase, no significant adverse impacts are considered likely to arise.

8.4.3.5 The analysis presented in the EIAR indicates that the underlying aquifers have a high level of recharge and that the depth of working is such that there would not be any significant impacts arising on groundwater levels or availability for existing sources. It is noted that the letter from the GSI submitted by the first party raises the potential for the development to impact on the Argall Spring public water supply to the west of the site. On the basis of the information presented in the EIAR including the location of the new areas of extraction proposed in the development outside of the inner and outer source protection areas, and the presence of a clay (lack) layer between the sand and gravel deposit to be worked and the aquifers below, I do not consider that the proposed development is likely to give rise to any significant adverse impacts on public or private supplies.

Surface Water

8.4.3.6 The site is located within the catchment of the Clodiagh (Tullamore) River. The closest surface water course is the Clodiagh River which runs to the east and north of the site being approximately 2.5km from the site boundary at the closest point. There are no surface water drains or streams located on or in close proximity to the site and drainage of the lands proposed for the extension of the permitted extraction area is currently by way of percolation to ground. The Grand Canal runs east-west approximately 2.5km to the north of the site. The location of the main surface water features relative to the site are indicated on Figure 7-1 of the EIAR.

8.4.3.7 With regard to impacts on surface water, at the construction / operation phase of the project, the stripping of topsoil during the phased excavation of the site has the potential to result in runoff and siltation. Mitigation proposes that the temporary soil / sub soil storage areas would be managed and that such material will be removed in phases and reused in berm construction and other activities around the site and the development of the site progresses. Measures to manage soil and subsoil stockpiles including watering are also proposed. Subject to mitigation and having regard to the separation of the site from any existing watercourses is such that no adverse impacts on surface water bodies from the excavation of soils / subsoils is considered likely to arise. Water is proposed to be managed on site in the excavated areas by the construction of gullies and drains that collect surface water.

8.4.3.8 In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on water. The existing sand and gravel operation at Bunaterin was permitted by An Bord Pleanala under Ref. PL19.201727. In this case, EIA of the proposal was undertaken by the competent authority who determined that the predicted environmental impacts were acceptable. Given the limited impacts predicted under this factor of the environment I do not consider that significant cumulative impacts are likely to arise when the proposed development is considered together with other permitted plans and projects in the vicinity.

8.4.4. **Air and Climate**

Noise

8.4.4.1 Noise is addressed at Chapter 10 of the EIAR and at Appendices 10A and 10B. The noise assessment undertaken and presented at Chapter 10 was informed by a noise survey undertaken at 5 no. locations (N1-N5) which are indicated on Figure 10-1 of the EIAR. Figure 10-1 also indicates residential locations in the vicinity of the site and the location of the residential groups or clusters which were used in the assessment of predicted impacts. It is noted that the appellant (Mr Cummins) property is located at the northern end of the site and such that it is within Group 2 for the assessment. The closest noise monitoring location used to inform the modelling is located at N2 a short distance to the south east of the appellants property. The results of the measured noise levels at the 5 noise survey locations (N1-N5) and the summary of noise levels in the various groups of receptors identified is presented at Tables 10-6 and 10-7 of the EIAR.

8.4.4.2 I note that the appellant (Mr Cummins) has raised a number of concerns with regard to the methodology use in the noise assessment undertaken. Specifically, the appellant questions why the World health Authority noise limits are not used as the standard in the assessment undertaken, why the noise modelling for the appellants property is based on a noise monitoring location that is at the west side of the existing quarry and far removed from his property (c.700 metres away) and concerns

regarding the lack of clarity in the graphical noise contour mapping presented with the application. These concerns are noted.

8.4.4.3 Details of ***the model used, and the assumptions*** incorporated in the running of the model are presented at section 9.1.2 of the RFI submission and it is specifically noted that the assumptions used include no account being taken of the perimeter berm during construction activity. My assessment of the methodology used in the noise assessment undertaken is that it is satisfactory and consistent with recognised best practice. The noise model has been informed by noise surveys undertaken at 5 locations around the site. These locations do not have to cover all noise locations such as the appellants property in order to provide sufficient level of input to run the model and I note that N2 is located in relatively close appellants property being c.300 metres to the south east along the local road. Tables 10-10 and 10-11 of the EIAR detail the noise levels of the equipment that would be used in the extended extraction area and the noise of equipment that would continue to be used at the site and which has been inputted into the model. This information is expanded upon in the RFI where Tables 6-9 set out the equipment to be used on site and associated sound octave levels.

8.4.4.4 With regard to the use of the ***WHO noise standards*** rather than the standards set out by the Institute for Environmental Management and Assessment and EPA, the first party is correct in stating that the WHO standards relate to exposure to environmental noise and the proposed development would not generate noise that would comprise '*environmental noise'* as envisaged in the WHO Guidance as it would be intermittent rather than continuous. The standards applied in the noise assessment undertaken are therefore considered to be appropriate. In any event, it is noted that the predicted operational phase noise levels at the appellant's property (R127) in a worst case scenario are predicted to be lower than the WHO standard of 53dBA.

8.4.4.5 The comments with regard to the ***sound contour mapping*** submitted in the EIAR and RFI are noted and it is considered that these maps are not very clear or detailed such that the impact or location of individual properties, roads or other features can readily be established. The maps do however clearly indicate the appellant's property

8.4.4.6 As part of the response to ***further information*** submitted by the first party there were a number of minor changes made to the extraction area and the separation distances to third party properties including the appellant Mr Cummins property. The further information also requested that the noise assessment incorporate information available regarding the N52 and available from TII. As noted in the FI response, this information relating to the N52 is not capable of being added to the noise assessment undertaken as it is in the form of Lden and Lnight. It should however be noted that the noise survey undertaken contains representative sample locations to feed into the noise model and has accounted for existing road traffic noise such that this has been accounted for in the model outputs.

8.4.4.7 The request for further information also sought further details regarding the noise impacts arising from the construction of perimeter berms at the site and specifically the period for likely exceedance of 55dBA LAeq 1 hour on an annual basis and including the restoration phase. The results of this assessment are presented at Table 13 of the RFI and indicate that there would be no exceedances of the 55dBA limit at any of the 5 noise monitoring locations arising from temporary site set up works. Berm construction is indicated as having an exceedance of the 55dBA threshold for up to 8 weeks per annum at location N3 and at locations N1 and N2 in years 10-16. I am not completely clear that there would be no berm construction undertaken outside of these years although that would appear to be the case and it is also not clear what the number of weeks would be per annum where the 55dBA LAeq 1 hour threshold would be exceeded – it is just stated that it would be up to 8 weeks. On the basis of the information presented, the worst case scenario at the appellant's property (Mr Cummins) would appear to be that there could be periodic exceedances from the berm construction activity for up to 48 weeks during the course of the construction period (8 weeks max per annum over 6 years). These temporary construction noise impacts would have a potentially significant negative noise impact, however these impacts would be temporary, would be below the standard 70dBA limit for such works and would act to mitigate future noise and visual impacts and as such is considered acceptable.

8.4.4.8 The proposed development has the potential to impact on surrounding noise sensitive receptors due to noise generated by the setup of perimeter berms and site preparation and from the operation of the site excavation and operation of the

existing and proposed on site equipment. Before considering the output of the modelling exercise undertaken it is in my opinion worth noting the following. Firstly, the bulk of the existing on site plant will remain in its existing locations within the existing pit floor (asphalt plant, readymix plant, block plant). The only new piece of such equipment proposed in the application is the sand washing plant which would be located at the northern end of the existing extraction area. Secondly, the development will be undertaken on a phased basis, as noted by the first party, the separation distance to Residence R27 (appellants property – Mr Cummins) would be significant in early phases of the extraction and would only come to within the 108 metres of the property at the end of the final phase in year 18. Finally, the nature of the material to be extracted and the extraction process is such that this will be undertaken by excavator and front loader. There will not be any requirement for blasting.

8.4.4.9 The results of the noise assessment contained in the EIAR for cumulative operational phase noise impacts (non site set up and berm construction works) are presented at Table 10-14 of the EIAR. This presents what appears to be an average figure over the course of the proposed development and indicates that the cumulative noise level at location N2 (within which the appellants property is located as per Figure 10-1 of the EIAR) would be 48.3dBALAeq or just 0.3dBA above the existing baseline. It is also noted that none of the predicted cumulative impacts at any of the five locations analysed indicated an increase of more than 1dBA above baseline levels. With regard to the appellants (Mr Cummins) property, the response to the grounds of appeal provides a more detailed breakdown of the predicted impact. Specifically, Table 10 of this response sets out the predicted cumulative sound levels in dBA LAeq (1 hour) for the various years of the development and show it to rise from 38.3 in years 1-5 to a maximum of 52.4 in years 18-20 when the development is at its closest to this property. I note that the assessment provided in the response is slightly confusing as while the appellants property remains as location N27 (which is as per Figure 10-1 of the EIAR) the receptor is now referred to as N1 when the appellants property is clearly in group N2 as per Figure 10-1. In any event, in my opinion what the analysis presented in the EIAR (specifically Tables 10-13 and 10-14) and Section 2 of the response to the grounds of appeal show is that the impact from operational phase noise on all of the identified groups of receptors

will not be significantly negative over the period of the development. Impacts will clearly rise as the phases of the development proceed and as the area of extraction moves closer to individual receptors, but in the case of the appellants property the analysis presented indicates that the cumulative operational phase impact during operation would be below the 55dBA LAeq daytime limit and also below the WHO limit of 53dBA. There is no indication from the information presented that the 55dBA noise limit would be exceeded at any other noise sensitive location surrounding the site at any operational phase of the development. Operational phase impacts are therefore considered to be such that the negative noise impacts arising would be no more than slight negative and such that they are acceptable.

8.4.4.10 As referenced above, the temporary works required for site preparation and berm construction would result in additional short term noise impacts that would exceed the 55dBA limit for daytime hours. Table 10 of the first party response to the grounds of appeal indicates that the maximum predicted sound level from such activity would be 60dBA at the appellants property (Mr Cummins – location N27). While this would extend over up to 8 weeks per annum for a period of years 10-16 for the area in which the appellants property is located (see Table 13 of the response to further information), this impact would be short term and below the 70dBA limit set for such temporary works in the EPA Guidelines Environmental Management in the Extractive Industry (Non Scheduled Minerals) and permissible for '*short term temporary activities such as construction of screen bunds etc. where these activities will result in a considerable environmental benefit'*. Plates 5 and 6 referenced in the third party appeal submission from Mr Cummins relate to these site set up and bund construction works. The impact of these short term works is considered to be at worst moderate negative at any noise sensitive location in the vicinity of the site.

8.4.4.11 Finally, it is noted that similar to the existing extraction area, any permission granted for an extension to the area of extraction would be subject to a condition requiring the monitoring of noise at the nearest noise sensitive receptors and that monitoring results showing compliance with the relevant 55dBA day / 45 dBA night and 70dBA site set up limits would be required to be submitted to the Planning Authority.

Dust and Other Pollutants

8.4.4.12 The issue of dust is assessed at Chapter 8 of the EIAR under the heading of Air Quality and the methodology used in the assessment undertaken and set out in the EIAR is detailed at Appendix 8.1. The analysis presented at Chapter 8 sets out a screening risk assessment undertaken to determine the potential receptors that could potentially be impacted by the proposed development. A Tier 2 assessment of all properties located within 500 metres of the site has been undertaken and the results are presented in Table 8-14 of the EIAR with the methodology presented in Appendix 8A. This assessment is based on a frequency of exposure criterion (using wind direction and speed historical data), a distance to source criterion with ranking based on how close the receptor is to the dust source and a sensitivity of receptor assessment / criterion with residential locations assessed as medium sensitivity. These criteria combine to give an overall score that determines a risk evaluation ranking ranging from insignificant to moderate adverse, (see Table 8A-4 of EIAR). While not a full air dispersion model, the technique used is consistent with that set out by the Institute of Air Quality Management and is considered appropriate and acceptable.

8.4.4.13 The proposed development has the potential to impact on air quality in a number of ways, the most significant of which are as follows:

- Dust PM10, PM2.5 emissions from the extraction operation at the site including excavation of material, transfer of material during extraction,
- Generation of dust during vehicle movements around the site
- Dust arising from the operation of the plant on site including the fixed plant block batching plant, readymix plant and asphalt plant and the screening plants.
- Emission of contaminants from on site fixed and mobile equipment including the asphalt plant and the mobile equipment,
- Off site traffic related dust impacts,
- Impact of activities on ecology and habitats.

8.4.4.14 As discussed in section 7.2 of this assessment above under the heading of Planning Assessment, the issues raised by the third party appellant (Mr Cummins) with regard to the potential for the extraction area to comprise sand that has a high level of silica that would be a threat to health. As set out at that section, while the first party has not given details of the composition of the material in the extended extraction areas, there is no indication that it would comprise silica sand for the purposes of the Minerals Act. The base rock type on the site comprises limestone that has a low level of silica (typically less than 2 percent) and it is also noted that no crushing or other processing that would result in very fine particles are proposed and that the method of extraction is such that existing dust deposition levels at the perimeters of the existing extraction area of low. Progressive excavation of the site is also proposed such that no receptor off site will be located in close proximity to dust emissions for significant parts of the development.

8.4.4.15 The ***existing dust deposition records*** for the site at Bunaterin are set out at Table 8-4 of the EIAR and indicate that the existing dust deposition levels are low. As set out in the EIAR, measurements of dust are now undertaken using a Bergerhoff method under the TA Luft standard and a limit of 350ug/m2/day averaged over 30 days is the relevant standard (note this changes the method specified in the existing grant of permission Ref. PL19.201727). The figures presented in Table 8-4 relating to 2019 are generally far below this level and the maximum recorded value is 300ug at location D4 at the south east of the existing extraction area (dust monitoring locations shown in Figure 8-1 of the EIAR).

8.4.4.16 On the issue of dust measurement, I note the comments of the third party appellant that the information presented in the First Party Response to the Grounds of Appeal regarding surveyed dust are not such that average figures cited can be verified and that the figures appear to relate to a five day working week when the facility operates six days. I am not clear what issue is being raised by the appellant in this regard or how the figures presented relate only to a five day operation per week. The current extraction at the site operates on a 5.5 day basis with works 07.00 to 18.00 hrs Monday to Friday and 07.00 to 14.00 hours on Saturday. These same hours are stated in paragraphs 2.50 and 2.51 of the EIAR to be retained in the proposed development. The calculation of dust as per the TA Luft standard is on the basis of ug per square metre averaged over 30 days during existing site operation, and the

dust deposition measurements taken at the site would therefore be on the basis of dust deposited during a 5.5 day working week.

8.4.4.17 The results of the ***dust assessment*** without mitigation measures is presented in table 8-14 of the EIAR and indicates that only 2 no. of the 54 no. locations identified within 500 metres of dust generating activity are assessed as having a potential medium adverse impact. Mitigation measures are detailed at Table 8-15 of the EIAR and include measures to address issues related to excavation, on site activity of vehicles, off-site vehicle impacts and management of stockpiles. Measures include the minimisation of haul routes, vehicle speeds, use of sprays and cleaning of hard surfaces and the avoidance of works during windy weather. The mitigation measures proposed are noted, considered appropriate and are consistent with the measures currently employed at the site. Post mitigation the position presented in Table 8-17 indicates the predicted impact on all 54 locations (including the appellants property at R27) as insignificant – acceptable. As set out above, I consider that the methodology use in this assessment is appropriate and note that the results obtained are consistent with the low levels of dust recorded in the site monitoring undertaken at the site since the site became operational. It is also noted that the dust related impacts on sensitive receptors will vary due to the phased stripping and excavation of the proposed extension areas and that the periods of most significant dust related impacts will not extend to the full duration of the development. Finally, it is noted that similar to the existing extraction area, any permission granted for an extension to the area of extraction would be subject to a condition requiring the monitoring of dust deposition at the site boundaries and that monitoring results showing compliance with the 350 ug/ m2 / day limit would be required to be submitted to the Planning Authority.

8.4.4.18 The potential for the development to lead to ***off site dust impacts*** (primarily from transport from the site) is addressed in the EIAR and this notes that as per DMRB guidance (207/07) the assessment of potential impacts is not required as the development would not lead to a significant change in AADT or vehicle speeds on receiving roads. The current access arrangement to the site via the access road and directly onto the N52 is proposed to be retained and is such that the potential for dust nuisance from the off site vehicle movements is considered to be limited.

8.4.4.19 The specific impact of the ***operation of the on site asphalt plant*** on air quality was one of the items raised in the request for further information issued by the Planning Authority and this issue is addressed at paragraph 7.1 of the RFI. The results presented indicate the stack emissions from this plant in terms of Sox, NOx and PM and sets out how the recorded levels are within regulatory limits and in compliance with the air emissions licence granted for the site.

8.4.4.20 In the specific case of the appellants property, (Mr Cummins), the separation distance to this property would be significant at the early phases of the development and only come close during the last phase in year 18 where the separation distance between the extraction area and the appellants property would potentially come within c.100 metres. I note and accept the comment made by the appellant that section 3.3 of the DHLG Guidelines for Planning Authorities note the number of dust sources arising from quarrying and that dust nuisance can arise up to 0.5 km from the source, however the guidelines state that severe impacts are likely within 100 metres of the source and impacts will depend on many factors including the type of material and method of extraction. In the subject case, the material is sand and gravel and extraction by front loader which would not produce as much dust as other extraction methods. New plant proposed at the site in the form of the sand washing plant is not proposed to incorporate crushing and all existing plant will remain in their current positions within the existing extraction area and at a significant remove from the appellants property. Overall, it is my opinion that the analysis presented with the application indicate that the proposed development will likely increase the impact on the appellants property in terms of dust, however there is not in my opinion a clear basis to conclude that the proposed extension of the extraction area will likely have a significant negative impact on the appellants property in terms of dust or that the 350ug/m2/day limit would likely be exceeded.

8.4.4.21 In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on air. Given the limited impacts predicted under this factor of the environment I do not consider that significant cumulative impacts are likely to arise when the proposed development is considered together with other permitted plans and projects in the vicinity.

Climate

8.4.4.22 The issue of climate is addressed at Chapter 9 of the EIAR and Appendices 9A and 9B relating to vulnerability assessment of the development to climate change and hazards.

8.4.4.23 The proposed development has the potential to impact on climate and the production of green house gasses (GHGs) from the operation of onsite equipment which would generate emissions, the transportation of extracted material from the site to the end user destinations and also from the removal of existing landcover that currently acts as a carbon storage or sink, for example vegetation.

8.4.4.24 Table 9-5 of the EIAR sets out the climate GHG emission implications of the proposed development. The figures presented in Table 9-5 are based on the proposed maximum extraction rate of 360,000 tonnes per annum equating to 89 one way HGV movements per day and an average journey of 50km. These trip assumptions are considered appropriate and the resulting total annual CO2 emissions from the transportation aspects of the development are estimated at 1,905,473. This is estimated to comprise 0.003 percent of national emissions.

8.4.4.25 I note that as part of the response to further information the figures presented in Chapter 9 of the EIAR have been revised to account for the transportation of material to the site which is used in the operation of the asphalt and concrete plants that are existing on suite and which are proposed to continue operation as part of the proposed development. These additional inputs are stated to equate to approximately 600 one way trips per annum and lead to an increase of 262,023 tonnes of CO2 per annum which brings the total CO2 emissions from the transport based elements of the proposed development to c.2.168 million tonnes per annum of CO2.

8.4.4.26 Emissions from the on site plant is not specifically addressed in the section relating to Climate at Chapter 9 of the EIAR. The sections on Air Quality (Chapter 8 of the EIAR) and the response to further information (Section 7.1) do present emission figures for the asphalt plant for Sox, NOx, and PM but its not presented in the form of GHG emission or amount of CO2. No specific assessment is undertaken for the GHG impacts arising from the operation of mobile equipment at the site. In my

opinion, relative to the emissions generated by off site transport these impacts are not likely to be significant.

8.4.4.27 Similarly, the impact arising from the stripping of vegetation to facilitate the proposed development is likely to be very minor and is in any event a phased impact and a temporary one pending site reinstatement.

8.4.4.28 I note that as part of the third party submission to the first party response to the appeal (received from Mr Cummins), it is contended that the traffic figures presented by the first party contradict the information in the EIAR that there would be no increase in traffic and that the level of traffic would be 25 times the existing level. It is further stated that the level of GHG emissions from the development would be 7.3 times the existing level. This submission is noted, however the appellant appears to be taking the figure provided for the existing input to the site to serve the existing on site plants (600 one way trips leading to an impact of c.262,000 tonnes of CO2 per annum) and taking this as the total existing traffic generated by the existing operation. From Tables 5 of the RFI and Table 16 of the first party response to the appeal I am clear that this is not the case and that the proposed development would not lead to an increase in extraction level and associated traffic or an increase in the traffic associated with inputs to serve the existing on site plant. Overall traffic generated by the proposed development will not therefore materially change relative to the existing level and CO2 emissions will therefore similarly not materially change from the existing situation.

8.4.4.29 Given the level of CO2 generated by the existing facility and predicted to be generated by the proposed development, and accounting for some additional impact arising from the operation of on site fixed and mobile plant at the site, the level of GHG emissions is not significant at a national or regional level and is such that the overall impact is predicted to be slight negative.

8.4.4.30 In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on climate. Given the limited impacts predicted under this factor of the environment I do not consider that significant cumulative

impacts are likely to arise when the proposed development is considered together with other permitted plans and projects in the vicinity.

8.5 Material Assets, Cultural Heritage, and the Landscape

Material Assets

8.5.4 Consideration of Material Assets is presented at Chapter 11 of the EIAR and there are a number of potential impacts arising that can be considered under this heading.

8.5.5 Firstly, the proposed development would result in the direct ***loss of existing agricultural land*** that is currently in agricultural use. As set out above under the heading of land, this impact would be mitigated by the phased nature of the development and the proposed reinstatement of the site to facilitate agricultural use post development. The impact in terms of direct loss of agricultural land while slight negative in the short term would not be a significant long term impact.

8.5.6 The proposed extension to the extraction area does have the potential to result in the ***severance of existing agricultural lands*** and access issues for remaining agricultural lands. The layout of the eastern and northern extension areas is such that such issues are not considered likely to arise.

8.5.7 With regard to ***roads***, the site will retain the existing access to the N52, and no new road improvements works are proposed or are considered necessary to facilitate the proposed development. The site is located such that there is easy access onwards to the M6 national primary road. Traffic volumes will not increase relative to existing levels and the development will not result in the use of local roads or a significant negative impact on existing roads infrastructure arising from HGV trips generated at the site. The existing road network in the vicinity of the site has demonstrated the capacity to accommodate traffic generated by the development.

8.5.8 The development would not have any impact on ***site services*** with existing phone, electricity and ground water connections proposed to be retained. As noted under the heading of water, the development is not considered likely to have any negative impacts on existing water supplies in the vicinity of the site.

8.5.9 Concerns regarding vibration and the potential impact of the proposed development on the structural stability of adjacent residential properties was raised by one of the appellants (Mr Cummins). This issue is specifically addressed in the response to the grounds of appeal submitted by the first party and I note the fact that there is no blasting or other extraction activities that would lead to significant vibration at the site. This is verified by the existing vibration survey undertaken regarding the existing extraction activity at the site which uses the same type of extraction methodology. The separation distance between the last phase of extraction and the appellants property would be greater than 100 metres at the final phase of the overall development and the height / depth of the extraction face in this location would be approximately 10 metres. Given this relationship and the nature of the material to be extracted I would agree with the first party that the risk of structural issues at receptors in the vicinity of the site is very low. In the event of a grant of permission the Board may wish to include a condition requiring the undertaking of a pre and post development structural survey on houses in this area at the northern end of the site.

Cultural Heritage

8.5.10 Cultural heritage is addressed at Chapter 12 of the EIAR and Appendix 12A lists the sites in the vicinity of the appeal site that are included on the record of monuments and places. The assessment contained in the EIAR is stated to be based on a desk assessment of available records and a field inspection.

8.5.11 The sites that are included on the record of monuments and places and which are in the vicinity of the appeal site are indicated in Figure 12-1 of the EIAR. This indicates that there are no recorded monuments within the appeal site that would potentially be impacted by the proposed extended extraction area. There is an existing monument (Shanvalley Linear Earthwork) that is located at the south east end of the site and which partially extends into the site area. No new or additional works beyond those which are already permitted under Ref. PL19.201727 are however proposed in this area. In any event the monument is located outside of the extraction area and the constructed berm and there will therefore not be any direct or indirect impacts on this earthwork.

8.5.12 The next closest archaeological feature is an earthwork recorded as located c. 120 metres to the north of the site boundary in the townlands of Claragh and Fertaun. No direct or indirect impacts on this monument are considered likely to arise. No other recorded monuments as identified in Figure 12-1 are located such that they would be impacted by the proposed development.

8.5.13 Condition No.21 attached to Ref. PL19.201727 required archaeological monitoring of the existing extraction area and this was undertaken under licence. No archaeological material has been recorded at the site during the permitted development at the site and visual surveys of the site have not indicated any likely archaeological features. Mitigation in the form of archaeological monitoring of the stripping of soil and sub soil from the new extraction areas is proposed. Subject to this mitigation I do not consider that the proposed development is likely to have a significant impact on archaeology.

Landscape

8.5.14 Landscape is addressed at Chapter 13 of the EIAR and Figures 13-1 and 13-2 of the EIAR set out the Landscape baseline and the Zone of theoretical visibility. Further details regarding landscape were submitted as part of the response to the further information request issued by the Planning Authority. This response specifically identified that there is an area of high landscape amenity as per the 2014-2020 Offaly County Development Plan which extends into the site and this replaces the statements contained in the EIAR that there are no areas of high landscape sensitivity located within the boundary of the site. While this area of high landscape amenity is present, it should be noted that this overlaps with the area of the site where extraction was permitted under Ref. PL19.201727 and which has already been excavated.

8.5.15 As per the above, there are no identified areas of high landscape sensitivity located within the part of the site where new extraction is proposed. The 2014-2020 Offaly County Development Plan contains a number of policies relating to high landscape sensitivity areas. Specifically, Policy RDP-14 states that *it is council policy to ensure those extractions (quarries / sand and gravel pits) which would result in a reduction*

of the visual amenity of areas of high amenity or damage to designated sites, habitat types or species will not be permitted. .'.

8.5.16 In the case of the additional extraction areas proposed in the current application, these extension areas are located entirely within areas that are identified as low sensitivity (see Map 7.15 of the development plan) and the characteristics of such areas is stated in Table 7.11.2 of the Plan as follows: '*County Offaly is largely a rural county which comprises of predominately flat and undulating agricultural landscape coupled with a peatland landscape. Field boundaries particularly along roadside verges which are primarily composed of mature hedgerows typify the county's rural landscape.'* These low sensitivity areas are stated to '*…have the capacity to absorb a range of new development'*.

8.5.17 With regard to ***protected views***, these are listed in Table 7.11 of the development plan and the views that are closest to the appeal site are V05 which is a view from the N52 to the south of the site in the direction of the Slieve Bloom Mountains and v19 which is a view from local road L2011 to the north of the site across the Grand canal. Both of these views are away from the appeal site and not such that they would be impacted by development on the appeal site. There are no other identified views that could potentially be impacted by the proposed development. There is a scenic route that runs from Blue Ball in the direction of Shannonbridge and which runs to the west of the appeal site at a distance of approximately 3km.

8.5.18 The assessment of ***visual impact*** submitted with the application indicates the potential views from 6 no. locations in the vicinity of the site and these are indicated at Figures 13-3 and 13-4 of the EIAR. Revised viewpoint locations and views D, E and F are presented as part of the response to further information submitted with the application and are illustrated at Appendix E of the RFI. These account for the areas of high amenity that are identified to the west of the appeal site with one area extending into the existing worked area of the quarry.

8.5.19 In terms of potential landscape and visual impacts there are a number of issues of note. The existing extraction area is very well screened from the surrounding area. No views of the site are available from the N52 and the existing extraction area is not visible from the local road to the north east and the existing extraction area is well screened from surrounding lands by existing boundary berms and planting. The

proposed development will involve the phased stripping and excavation of the site and comprehensive proposals have been submitted for the reinstatement of the site. The general topography in the vicinity of the site is relatively flat with a number of slight hummocks. The calculated theoretical zone of theoretical visibility (ZTV) was undertaken and is presented at Figure 13-2 of the EIAR. This indicates that the main areas of potential views are located in relatively close proximity to the site (up to c.0.5km) and extending further to the west as represented by the yellow shading on Figure 13-2. In practice, existing vegetation not accounted for in the ZTV analysis and the relatively flat topography mean that the actual visibility would be significantly lower than illustrated in Figure 13-2.

8.5.20 The proposed development has the potential to impact on receptors in the vicinity of the site. In particular, the visual analysis undertaken and illustrated in Figure 13-2 illustrates a number of residential clusters that could be impacted, namely along the local road to the north of the site (VRG2), the N52 to the south east (VRG1) and the local road to the west (VRG3). The proposed development also has the potential to impact negative on the existing lowland agricultural character of the area of the site and the slightly undulating (hummocked) landscape in the northern extension area associated with the Screggan fan geological feature. The impacts can be distinguished between impacts during the operational phase of the quarry and post operational / reinstatement stage impacts.

8.5.21 In terms of ***landscape impacts***, during the operational phase, the development has the potential to impact on the existing landscape arising from soil and subsoil stripping, phased extraction of material and site reinstatement works. The site has a low landscape sensitivity and is not such that it is of a particular uniqueness or distinctiveness. The landform arising from the Screggan Fan at the northern extraction area is noted however the undulations and landscape impact on the ground of the fan are barely visible on the ground and certainly not in my opinion a distinctive landscape feature. The sensitivity of the landscape in the vicinity of the site is generally low and the extraction areas are low sensitivity. The change in landscape that will arise from the extraction and reinstatement works will be medium term and temporary and the actual zone of visual impact from which the change in landscape would be observed is limited by the flat topography and the existing boundary vegetation. The overall operational phase landscape impact of the

proposed development prior to mitigation is therefore considered to be minor adverse. Mitigation in the form of phased extraction and berm planting along the northern end southern boundaries together with the boundary berm construction would act to mitigate any residual landscape impacts during the operational phase such that the residual impact would be negligible adverse. Post site reinstatement, the site is proposed to be reinstated to facilitate agricultural use. Post such reinstatement, the landscape impacts arising are considered to be imperceptible.

8.5.22 With regard ***to visual impacts***, the proposed development would not impact directly on any protected views or routes as identified in the development plan. The proposed development would have a potential negative impact on views from a number of sensitive receptors located in the vicinity of the site and specifically those located to the north, south east and west of the site and identified as VRG2, VRG1 and VRG3 respectively on Figure 13-2. Viewpoints A-E submitted with the application indicate the existing and likely future views from these locations and while the sensitivity of the residential properties in these locations to impacts on views is high, the magnitude of the impacts prior to mitigation is considered to be low resulting in a moderate negative temporary impact during the operational and reinstatement phases. Mitigation in the form of the phased extraction of the site will limit the time period of negative visual impacts. Hedge planting and berms around the perimeter of the site will act to significantly mitigate negative visual impacts arising for sensitive receptors in the vicinity. Overall, the negative impact on views from surrounding visually sensitive locations is assessed as low negative and temporary.

8.5.23 With regard to roads, there would be some potential impact on views from the N52 to the south, however subject to mitigation this impact is considered to be negligible given the low sensitivity of this view and the screening afforded by boundary planting and berm construction. Similarly, views from the local road to the north east are assessed as negligible.

8.5.24 Post site restoration the impact on views is assessed as negligible. Site restoration will involve the restoration of the site to agricultural use and all equipment and structures are proposed to be removed from the site and excavation areas regraded to a maximum of 1 in 2 slope.

8.5.25 In conclusion, on the basis of the information submitted with the application including that in the EIAR, the submissions on file and observations at the time of inspection of the site, I do not consider that the proposed development would have any significant adverse direct or indirect effects on material assets, cultural heritage and the landscape. Given the limited impacts predicted under this factor of the environment I do not consider that significant cumulative impacts are likely to arise when the proposed development is considered together with other permitted plans and projects in the vicinity.

8.6 Reasoned Conclusion

8.6.4 Having regard to the examination of environmental information contained above, and in particular the EIAR and supplementary information provided by the developer, including the response to further information submitted to the Planning Authority, and the submissions from the Planning Authority, prescribed bodies, appellants and observers in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated as follows:

- The proposed development would have potential negative impacts on surrounding sensitive receptors with regard to air quality. Subject to mitigation in the form of on site practices to control dust generation and the phased extraction of the site, boundary treatment and the temporary nature of the impacts and attenuation by distance it is not considered that these impacts would be significantly negative.
- The proposed development would have potential negative impacts on groundwater and groundwater water supply sources that would be mitigated by the distance from such sources and onsite storage arrangements and operational practices that would minimise the risk of discharge of fuels, oils, or other contaminants to groundwater.
- The proposed development would have the potential to impact negatively on human health arising from the emission of dust, noise, and potential impact on

water supply sources. Emissions to air are not considered to be significantly negative post mitigation and the nature of the extracted material being based on limestone is not such that the material extracted would constitute a scheduled mineral and lead to the generation of fine silica material that could be hazardous to human health.

- The proposed development would have potential negative impacts on the landscape and views in the vicinity of the site. These potential impacts would be successfully mitigated by screening of the site including through berm construction and boundary planting and by attenuation by distance.

Having regard to the above, I am therefore satisfied that the proposed development would not have any unacceptable direct, indirect, or cumulative impacts on the environment.

9.0 Appropriate Assessment - Screening

9.1. Compliance with Article 6(3) of the Habitats Directive

9.1.1. The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under Part XAB, Section 177U of the Planning and development Act, 2000 (as amended) are considered fully in this section.

9.2. Background to Application

9.2.1. The first party has submitted a screening report for Appropriate Assessment as part of the Planning application. This report is titled 'Appropriate Assessment Screening Report, prepared by SLR Environment and dated September, 2019.

9.2.2. The Stage 1 Screening report was prepared in line with current best practice guidelines and provides a description of the proposed development (Section 4.0) and identifies European sites located within a possible zone of influence of the development (Section 5.0). The application is also accompanied by an EIAR (including Appendices) which includes sections on biodiversity (Chapter 5), Land Soils and Geology (Chapter 6), , Water (Chapter 7) and Air Quality (Chapter 8).

9.2.3. The applicants AA Screening Report concluded (Paragraph 5.20) that *'we therefore submit that the competent authority, in this case Offaly County Council, can determine that appropriate assessment is not required, as the proposed project, individually or in combination with other plans and projects, will not have a significant effect on any Natura 2000 sites'*.

9.2.4. Having reviewed the documents and submissions I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development aloe or in combination with other plans or projects on European sites.

9.2.5. The project is not connected with or necessary for the management of a European site and therefore it needs to be determined if the development is likely to have significant effects on a European site(s). The proposed development is examined in relation to any possible interaction with European sites designated special

conservation areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European sites.

9.3. Project Scope, Main Characteristics and Potential Emissions / Effects on European Sites

9.3.1. The site is located in a rural area c.7km to the south west of Tullamore and comprises an existing operation sand and gravel quarry and adjoining lands that are proposed for expansion of the quarry activity and which are currently in agricultural use. The wider lands in the vicinity of the site are characterised by agricultural use with a generally low and gently undulating landscape characterised by fields and mature hedgerow boundaries. The site is bounded to the west / north west by the Blackwood which is an area of primarily sitka spruce planting and extending to c. 126ha. The N52 national secondary road runs to the south of the site and there is direct access from the existing quarry operation to this road. The settlement of Mucklagh is located c.1.5km to the north east of the site and there are one off houses located on the local road to the north east and south west of the site. Public water supply sources are located to the north west and south west of the site boundary with the inner source protection zones for these water sources located at more than 1km from the centre of the site. The stated area of the application site is 68.9ha. and the existing permitted area of extraction is c.35ha. The proposed extension to the extraction area is stated to measure 31.3 ha. (reduced to 30.8 ha. on foot of the response to further information submitted by the first party). There are no surface water streams in the vicinity of the site or on the site and the existing drainage on the site is direct into the ground and to groundwater. It is proposed that the final pit floor would be retained at a minimum of 1 metre above the water table.

9.3.2. A detailed description of the proposed development is set out at Chapter 2 of the EIAR and at Section 4.0 of the Appropriate Assessment Screening Report. The following is a summary of the main elements of the proposed development:

- Permission for the continued use of the previously permitted development under Ref. PL19.201727 consisting of the existing sand and gravel extraction and on site processing, related site buildings and infrastructure and access onto the N52.

- Extension of the area of extraction to the north and east of the currently permitted extraction area over an area of c.31.3 ha. (reduced to 30.8 ha. on foot of the response to further information). The proposed new area of extraction is proposed to be undertaken on a phased basis and post extraction the site would be restored to agricultural use. Extraction would be undertaken above the water table.
- Permission is proposed to be for a period of 18 years with 2 years for site restoration meaning a total duration of the permission sought of 20 years.
- With regard to volumes, the total reserve on the site is assessed at approximately 6.5 million tonnes. The extraction will be at a rate of up to 360,000 tonnes per annum which is the same as the existing rate and the input of materials to the site to be used as inputs in the concrete batching and block plants is proposed to remain at c.50,000 tonnes per annum.

9.3.3. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:

- Uncontrolled surface water or silt during the soil and sub soil stripping phase of the development, berm construction and site reinstatement works,
- Contamination of groundwater from spillages or discharges at the site from plant or equipment.
- Direct loss of habitat,
- Habitat disturbance arising from noise and dust emissions from the site generated by the extraction activity.

9.4. Submissions and Observations

No submissions or observations specifically relating to the potential impact of the proposed development on identified European sites are on file.

Details of the application were referred by the Planning Authority to the Department of Culture, Heritage, and the Gaeltacht (NPWS) however no response was received.

9.5. **European Sites**

9.5.1. The following are the closest European sites to the appeal site:

- The Charleville Wood SAC (site code 000571) which is located c.2.2km to the east of the appeal site at the closest point.
- Clara Bog SAC (site code 000572) is located approximately 7km to the north west of the appeal site.
- The Clonaslee Eskers and Derry Bog SAC (site code 000859) is located approximately 8km to the south of the appeal site.
- Slieve Bloom Mountains SPA (site code 004160) is located c.10.5km to the south of the site at the closest point.
- The River Barrow and River Nore SAC (site code 000572) is located c.11.5km to the south east of the appeal site at the closest point.

9.5.2. In the case of Clara Bog SAC, Clonaslee Eskers and Derry Bog SAC, the Slieve Bloom Mountains SPA and the River Barrow and River Nore SAC it is not considered that there is a potential pathway between the appeal site and the European site. Specifically, there are no surface watercourses located on or in close proximity to the site such as would enable a surface water connection to be established that could transfer any surface water discharges from the site or siltation from the stripping and storage of soil, berm construction or site reinstatement. An airborne pathway that could result in disturbance or negative impacts on conservation objectives of species is not considered likely given the separation distances between the appeal site and these sites. In the case of the Slieve Bloom Mountains SPA, the site is designated for a single species the hen harrier and given the lowland agriculture nature of the appeal site and the separation distance between the appeal site and the SPA (c. 10.5km) no realistic pathway is considered to be present and no impacts on the conservation objectives of the site likely to arise.

9.5.3. Having regard to the above it is considered that the following sites can be screened out of further consideration:

- Clara Bog SAC (site code 000572) is located approximately 7km to the north west of the appeal site.
- The Clonaslee Eskers and Derry Bog SAC (site code 000859) is located approximately 8km to the south of the appeal site.
- Slieve Bloom Mountains SPA (site code 004160) is located c.10.5km to the south of the site at the closest point.
- The River Barrow and River Nore SAC (site code 000572) is located c.11.5km to the south east of the appeal site at the closest point.

9.5.4. In the case of the ***Charleville Wood SAC*** (site code 000571) which is located c.2.2km to the east of the appeal site at the closest point, the following are the qualifying interests of the site:

- Alluvial forests with Alnus glutinosa and Fraxinus excelsior
- Vertigo moulinsiana (Desmoulin's Whorl Snail)

The conservation objectives are '*to maintain or restore the favourable conservation condition of the Annex I habitats and / or Annex II species for which the SAC has been selected'.*

9.5.5. The elements of the project that may give rise to impacts on the European site are considered to be as follows:

- Uncontrolled surface water or silt during the soil and sub soil stripping phase of the development, berm construction and site reinstatement works,
- Contamination of groundwater from spillages or discharges at the site from plant or equipment.
- Habitat disturbance arising from noise and dust emissions from the site generated by the extraction activity.

9.5.6. The proposed development would not have any direct impacts on the Charleville Wood SAC site and would not result in any direct loss of habitat or habitat fragmentation at the SAC site.

9.5.7. There are no surface water connections that link the appeal site and the Charleville Woods SAC site and therefore activities giving rise to surface water discharges or silt from earthworks at the site would not have any potential effects on the Charleville Woods SAC.

9.5.8. The nature of potential emissions to groundwater from the proposed development is potential spillages from equipment and plant operated at the site. Any such discharges would not be likely to be significant in volume, are unlikely to impact directly on groundwater in the vicinity of the SAC given the groundwater flows in the vicinity of the site and the separation distance and would not have potential impacts on the SAC site such as would impact on the conservation objectives of the species and habitats for which the site is designated. The proposed development would not operate below the water table and it is not considered likely that the proposed development would have any potential impact on the water table or groundwater regime in the immediate vicinity of the SAC site such that there could be any likely significant effects on desmoulins whorl snail.

9.5.9. Habitat disturbance is not considered to be an issue given the separation distance between the appeal site and the SAC. Specifically, no noise impacts are considered likely to arise given the greater than 2km separation. Similarly, while dust emissions from the site could have a potential impact on residential amenity for sensitive receptors in close proximity to dust generating activities, the history of the site is such that dust emissions have not been a significant negative issue. Dust assessment undertaken in connection with the proposed development (Chapter 8 of the EIAR – Air Quality) indicates that even in the absence of mitigation dust is not considered to be such that there would be likely significant negative impacts on sensitive receptors in the vicinity of the site and dust levels at the site boundaries are considered likely to be such that normal ELVs can be met. Dust emissions from sand and gravel operations are generally confined to within close proximity of the source and the Institute of Air Quality Management (2016) is cited in the submitted Appropriate Assessment Screening as being uncommon beyond 400 metres of the source. Chapter 8 of the EIAR (Air Quality) also makes reference to studies that

suggest that dust deposition levels would need to be in the region of 1,000ug/m2/day to impact negatively on vegetation and the separation distance of greater than 2km between the appeal site and the SAC is such that dust levels generated by the proposed development would be negligible when recorded at the SAC. . On the basis of the information available it is not considered that the proposed development would be likely to have significant effects on the Charleville Wood SAC site in light of the conservation objectives of the site.

9.5.10. There are not considered to be any other plans or projects that together with the proposed quarry development the subject of this screening assessment, could be considered likely to have in combination effects on the Charleville Wood SAC site.

9.6. Mitigation Measures

9.6.1. No measures designed or intended to avoid or reduce any harmful effects of the project on a European site have been relied up in this screening exercise.

9.7. Screening Determination

9.7.1. The proposed development was considered in light of the requirements of s.177U of the Planning and Development Act, 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually or in combination with other plans or projects would not be likely to give rise to significant effects on European site No.000571 (Charleville Wood SAC), or any other European site, in view of the site's conservation objectives, and Appropriate Assessment is not therefore required. The determination is based on the following:

- The absence of any direct effects or any impacts due to severance.
- The demonstrated lack of any hydrological connections between the appeal site and the SAC,
- The separation distance and resulting absence of indirect effects arising from any potential airborne pathway.

10.0 **Recommendation**

Having regard to the above, it is recommended that permission is granted based on the following reasons and considerations and subject to the attached conditions:

11.0 **Reasons and Considerations**

Having regard to

(a) the policies set out in the *National Planning Framework*,

(b) the policies set out in the *Regional Spatial and Economic Strategy for the Midlands and Eastern Region*,

(c) the policies of the planning authority as set out in the Offaly County Development Plan 2014-2020 and the Draft Offaly County Development Plan, 2021-2027

(d) the nature of the proposed development that comprises the extension of an existing sand and gravel extraction facility, and the planning history of the site,

(e) the distances of the proposed development to dwellings or other sensitive receptors,

(f) The proposed phased extraction and proposals for the restoration of the site.

(g) the nature and scale of the proposed development and the contents of the Environmental Impact Assessment Report, Screening for Appropriate Assessment Report and further information submitted by the applicant,

(h) the range of mitigation measures set out in the documentation received, including the Environmental Impact Assessment Report and further submissions from the Applicant to the Board in the course of the appeal,

(i) the separation distance from the site of the proposed development to sites designated as part of the Natura 2000 network and the nature of the connections between them,

(j) the topography and character of the landscape of the area and the character of the landscape in which the proposed expanded extraction area would be located and

(k) the submissions made in the course of the planning application and appeal,

it is considered that, subject to compliance with the conditions set out below, that the proposed development:

- would be in accordance with national and regional policy relating to the extractive industry,
- would be in accordance with the provisions of the *Offaly County Development Plan, 2014-2020,* including the policies relating to extractive industries, and the protection of landscapes and scenic amenity,
- would not seriously injure the visual amenities of the area or have a significant negative impact on the landscape,
- would not seriously injure the amenities or depreciate the value of properties in the vicinity of the site,
- would not give rise to a risk of pollution,
- would not detract from archaeological features or from architectural heritage,
- would be acceptable in terms of traffic safety and convenience and
- would not be prejudicial to public health.

The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

12.0 **Conditions**

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars submitted on the 7th day of April 2020, 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. All mitigation measures and environmental monitoring requirements identified in the EIAR and other plans and particulars submitted with the application shall be complied with in the development.
   Reason: In the interests of clarity and the protection of the environment.

3. The period during which the development hereby permitted may be carried out shall be 20 years from the date of this order.
   Reason: In the interests of clarity.

4. This permission authorises the extraction of up to 360,000 tonnes of material per annum at the site over the 18 years commencing on the date of this permission.
   Reason: In the interests of clarity.

5. The quarry, 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.

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

6. No extraction of aggregates shall take place below the level of the water table.
   Reason: In the interests of clarity and to protect groundwater in the area.

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 the following:
   (a) Proposals for the suppression of on-site noise.
   (b) Proposals for the on-going monitoring of sound emissions at dwellings in the vicinity.
   (c) Proposals for the suppression of dust on site and for the monitoring of dust at the site boundaries,
   (d) Proposals for the bunding of fuel and lubrication storage areas and details of emergency action in the event of accidental spillage.
   (e) Management of all landscaping,
   (f) Monitoring of ground 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 facility.
   Reason: In order to safeguard local amenities.

8. Restoration shall be carried out in accordance with a restoration plan, which shall include existing and proposed finished ground levels, landscaping proposals and a timescale for implementation. This plan shall be prepared by the developer, and shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.
   Reason: To ensure the satisfactory restoration of the site, in the interest of visual amenity.

9. Vehicles transporting material to and from the site, and accessing the site, shall use the existing access road at the southern end of the site accessing onto the N52. No quarry related traffic shall use the agricultural access onto the local road at the northern end of the site. .
   Reason: In the interest of traffic safety and residential amenity.

10. All proposed screening measures, including improvements to boundaries and the provision of any fencing and berms, shall be completed prior to commencement of extraction on site.
    Reason: In the interest of visual amenity and to safeguard the amenities of property in the vicinity during the operating phase of the development.

11. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. 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, and
    (b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all topsoil stripping associated with the proposed development.
    The assessment shall address the following issues:
    (i) the nature and location of archaeological material on the site, and
    (ii) the impact of the proposed development on such archaeological material.
    A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements prior to commencement of construction works.

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.

12. The following requirements relating to noise shall be complied with in the development:

(1) During the operational phase of the proposed development, the noise level from within the boundaries of the site measured at noise sensitive locations in the vicinity, shall not exceed:

(a) an Leq,1h value of 55 dB(A) between 0700 hours and 1800 hours, Monday to Friday and between 0700 hours and 1400 hours on Saturdays

(b) an Leq, 15 min value of 45 dB(A) at any other time. Night time emissions shall have no tonal component.

(2) During temporary site set up works such as the construction of perimeter berms and stripping of soil, the noise level measured at noise sensitive locations in the vicinity shall not exceed a limit of 70dB(A) LAeq 1 hour up to a maximum period of 8 weeks in any year.

Details of the noise monitoring locations and methodology for recording noise levels and demonstrating compliance with the above limit values shall be agreed in writing with the planning authority prior to the commencement of development.

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

13. Dust levels at the site boundary shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days (Bergerhoff Gauge). Details of a monitoring programme for dust shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Details to be submitted shall include monitoring locations, commencement date, the frequency of monitoring results, and details of all dust suppression measures.

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

14 (a) The developer shall monitor and record groundwater, noise, ground vibration, and dust deposition levels at monitoring and recording stations, the location of which shall be submitted to and agreed in writing with the planning authority prior to commencement of development.

(b) the developer shall submit quarterly reports with full records of dust monitoring, noise monitoring, and groundwater monitoring. Details of such information shall be agreed in writing with the planning authority. Notwithstanding this requirement, all incidents where levels of noise or dust exceed specified levels shall be notified to the planning authority within two working days. Incidents of groundwater pollution or incidents that may result in groundwater pollution, shall be notified to the planning authority without delay.

(c) Following submission of the audit or of such reports, or where such incidents occur, the developer shall comply with any requirements that the planning authority may impose in writing in order to bring the development in compliance with the conditions of this permission.

Reason: In the interest of protecting residential amenities and ensuring a sustainable use of non-renewable resources.

15. The developer shall submit annually, for the lifetime of the permission, a map of the progression of the phased development of the quarry and of the quarry perimeter, surveyed against established perimeter beacons, the form and location of which shall be agreed in writing with the planning authority prior to commencement of quarrying works.
Reason: In order to facilitate monitoring and control of the development by the planning authority.

16. The developer shall provide all landowners within 500 metres of the site with appropriate contact details which may be used in the event that any such landowner wishes to inform the developer of any incident, or otherwise to make a complaint in respect of an aspect of quarry operation.
Reason: In the interest of the protection of residential amenity and planning control.

17. 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, 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 An Bord Pleanála for determination.
Reason: To ensure the satisfactory restoration of the site in the interest of visual [and residential] amenity.

18. The developer shall pay to the planning authority a financial contribution of €470,008 (four hundred and seventy thousand and eight euro) 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 Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution 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. The application of any indexation required by this condition shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine.
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.

Stephen Kay
Planning Inspector

11th May, 2021