Inspector's Report
ABP-317704-23

Development	Extraction of sand, stone and gravel over a 10 year period with all associated site works. Environmental Impact Assessment Report (EIAR) submitted with application.
Location	Rooskagh Townland, Bellanamullia, Athlone, Co. Roscommon.
Planning Authority	Roscommon County Council
Planning Authority Reg. Ref.	22526
Applicant	Eamonn Harney
Type of Application	Permission
Planning Authority Decision	Grant Permission
Type of Appeal	Third Party
Appellants	Pat McManus Sarah Jane Macken
Observers	None
Date of Site Inspection	6th March 2024

Inspector	Ian Campbell

1.0 Site Location and Description

1.1. The appeal site is located within a rural area, c. 2km south-west of Bealnamulla and c. 6km west of Athlone.

1.2. The appeal site has a stated site area of 6.9 Ha and is located on the southern side of a narrow private road[1] c. 180 metres in lenght, which connects to the L-2025 north-east of the appeal site. The L-2025 in turn connects to the R362 at a location c. 1 km north-east of the appeal site. The access road also serves Kildea's Concrete which is located to the immediate north of the appeal site. The lands to the east and south are indicated as being within the applicant's ownership/control, as depicted by the blue line boundary.

1.3. The appeal site is broadly rectangular in shape and is currently in agricultural use. Access to the appeal site is via a gated entrance along the northern site boundary, opposite the entrance to Kildea's Concrete.

1.4. The surrounding area comprises agricultural lands. The greatest concentration of dwellings is to the west of the appeal site, along the L-2026. The closest dwellings to the appeal site are indicated[2] as being c. 46 metres (from the northern boundary of the appeal site); c. 110 metres and c. 169 metres (from the north-western boundary of the appeal site); c. 170 metres and c. 174 metres (from the western boundary of the appeal site) and c. 199 metres (from the eastern boundary of the appeal site). Cloonakilla National School is located c. 1 km north-east of the appeal site.

1.5. The appeal site has an undulating topography. The highest point on the appeal site, a mound/hillock in the centre, has a topographical level of c. 72 metres (OD Malin). Levels on the appeal site fall from this area to c.55 metres (OD Malin) along the roadside boundary to the north, c. 60 metres (OD Malin) along the western site boundary and c. 54 metres (OD Malin) along the southern boundary. The lowest point of the appeal site is along the eastern site boundary where topographical levels are indicated as being c. 49 metres (OD Malin). There are trees and hedgerows throughout the appeal site. Field drainage ditches are indicated to the east and south of the site. These ditches are not within the red line boundary of the site.

[1] A right-of-way is indicated over the private access road (see Site Location Map 1 & 2). The particulars submitted with the planning application/appeal indicate that the applicant has legal entitlement to use this road.
[2] See *Drawing No. 032*.

1.6. A watercourse, which flows from west to east, is located c. 210 metres south of the appeal site. This watercourse is a tributary of the Mihanboy Stream.

2.0 **Proposed Development**

2.1. The proposed development comprises;

- The stripping and storing of topsoil and the extraction of sand, stone and gravel on a site with an area of 6.938 Ha./extraction area 4.9 Ha[3]. Excavation over the area to a general depth varying from 49 metres (OD Malin) along the eastern boundary to a depth of c. 51 metres (OD Malin) on the western boundary. The proposal is intended to produce aggregates for use in road construction and for concrete products.
- Processing (crushing and screening) of sand, stone and gravel using mobile plant within the site.

The following ancillary development is also proposed;

- Office (33 sqm) (see *Drawing no. 030*).
- Welfare Facilities (9 sqm) see *Drawing no. 031*).
- Well (see *Drawing no. 003*).
- Settlement pond (see *Drawing no. 021*) .
- Refuelling pad (see *Drawing no. 020*).
- Petrol oil interceptor, serving the refuelling pad (see *Drawing no. 020*).
- Fencing and signage (see *Drawing no. 012 and 017*).
- Landscaping/screening.
- Lighting.
- Wastewater storage.
- Tank for site offices (see *Drawing no. 022*).
- Weighbridge (see *Drawing no. 019*).

[3] Page 9 of the EIAR states that the extraction area is 6.96 Ha. This appears to be a typographical error noting consistent reference in the particulars to 4.9 Ha.

- Wheel wash (see *Drawing no. 018*).
- Ancillary site works.
- Restoration of site to agricultural land.

The roadway within the site leading from the site entrance to the hardstanding area and the staff/visitor car parking area is surfaced in tarmacadam.

The volume of extracted material is stated as 466,766 m3 (c. 46,676 m3 pa/90,000 tonnes pa). Extraction is to occur over 5 no. phases, each comprising c. 93,350 m3 of material. The applicant is seeking a duration of 10 no. years in respect of the permission.

The applicant is proposing to widen the private access road from its current width of 4.5 metres to 6 metres.

The following information in relation to the working of the quarry is provided in the particulars submitted with the application, including the EIAR:

- The area at the entrance of the site will be stripped of topsoil and stockpiled on site. The initial sand and gravel will be sold to the agricultural industry for haul roads and will not require screening and washing. Impermeable silt from this area will be used for the lining of the surface water lagoon.
- The material will be extracted by means of excavators and dump trucks. No blasting will be required.
- The site will be worked from east to west.
- Topsoil and overburden from the site will be stockpiled and will be used in the restoration of the quarry in a phased basis in order to return the site to agricultural use.
- The invert of the extraction will be 2-3 meters above the high water table. Quarrying will be 'dry' i.e. above the water table.
- The operation of crushing will occur once every 6 weeks and will last for a two-week period.
- Kildea Concrete have agreed to take large proportion of sand for use in the manufacturing of their concrete products, thereby reducing HGV's from the road network.

- *Drawing no. 034* indicated details of haul route (i.e. 98% of HGV traffic from site towards M6, Roscommon, Athlone, Ballinasloe and 2% of HGV traffic towards R362).
- Proposed hours of operations are 08.00 - 18.00hrs Monday to Friday and 09.00 - 17.00 hrs Saturday.
- The quarry will provide direct employment of up to 6 no. people and indirect employment for up to 40 no. people in areas such as crushing contractors, HGV drivers, maintenance contractors, etc.
- Wastewater will be collected from toilets and sinks in an impermeable holding tank fitted with an alarm. The contents of the tank will be emptied weekly and removed to a licensed/permitted waste facility for treatment.
- Potable water is provided to the site via a connection to the public water supply.
- The water used for the weighbridge and washing of sand will be constantly recycled from the surface water lagoon, and will need to be topped up.
- Fuel oil will be delivered to site via fuel truck and mobile machines will fuel atop an impermeable fuel pad. The mobile crusher will be fuelled in-situ within the extraction area.
- Traffic using the L-2025 will be controlled by the site office and there will be no queueing on the public road. The private access road will be widened and finished with bitumen macadam.
- The site will have an environmental monitoring program when operational. Water, noise and dust monitoring will be carried out on a regular basis.
- 4 no. water monitoring wells were installed as part of the hydrogeological assessments, and these will be monitored by an independent laboratory.
- The site will be restored to agricultural use, specifically the site will be covered with the stockpiled soil and reseeded as grassland. All existing boundary fences and hedgerows will be retained and machinery removed from the quarry void. Levels on the site will generally match the lands to the east.

2.2. The planning application was accompanied by the following;

- Cover Letter.

- Planning Report.
- EIAR (Appropriate Assessment Screening report is contained in Chapter 5).
- Landscape Rationale.

3.0 Planning Authority Decision

3.1. Request for Further Information and Clarification of Further Information

Prior to the decision of the Planning Authority to GRANT permission for the proposed development, the Planning Authority requested Further Information and Clarification of Further Information.

3.1.1. Further Information was requested on the 21st of November 2022 as follows:

Item 1: revise Chater 5 'Biodiversity' of EIAR to include an ecological impact assessment.

Item 2: increase height and depth of buffers/berms, with particular attention to the highest point of the site.

Item 3: (a) confirm how site will be excavated (i.e. horizontally or vertically) and (b) clarify practicalities of extracting from east to west given that plant, internal road etc. will be located within this area.

Item 4: clarify details of slope stability monitoring, referred to as mitigation in Chapter 6 'Land, Soils and Geology' of EIAR.

Item 5: submit a detailed phased restoration plan.

Item 6: resubmit Chapter 4 'Population and Human Health' with the correct title.

3.1.2. Further information[4] submitted on 12th of December 2022:

Item 1: revised Chater 5 'Biodiversity' of EIAR submitted. This revised chapter consists of an ecological impact assessment.

[4] The Further Information submitted by the applicant was deemed significant and was readvertised in accordance with Art. 33 of the Planning and Development Regulations, 2001, as amended.

Item 2: applicant notes that the buffers accord with technical guidance and best practice and that the berms are adequate for their intended purpose. Noise and dust predictive modelling incorporates the proposed topography of the quarry and that there is no requirement to increase the height and depth of the berms.

The applicant notes that the drawings submitted under PA. Ref. 21/463 are not in all instances directly comparable to those included with the current application, and that the current planning application is not reliant on any information from PA. Ref. 21/463. The applicant notes that the berms are very similar compared to those previously proposed and that some section drawings are taken from the opposite viewpoint.

The design levels of the perimeter mounds are those show on Ronan MacDiarmada & Associates Ltd. *Drg. 1614 No.01* - Landscape Plan & Sections. Amended Collins Boyd Engineering Ltd. *Drgs. Nos. 22.137-14 & 22.137-16* fully correlate with landscaping *Drg. 01*. and the highest level on each berm is now indicated.

Item 3: extraction will have vertical and horizontal components and these cannot be separated. It is feasible to construct the mounds as proposed. Extraction direction is informed by the EIAR and it is feasible to excavate in the manner and sequence shown.

Item 4: the management of slope stability will be informed by the nature of the excavated material. Indicative values for slope stability have been generated and it is intended to abide by same. Slopes will be surveyed using modern equipment to check for slippage and corrective action take where necessary.

Item 5: restoration details are shown in Appendix 2 of the EIAR. It is proposed to carry out restoration in a single phase.

Item 6: revised Chater 4 'Population and Human Health' to EIAR submitted.

3.1.3. **Clarification of Further Information was requested on the 24th February 2023 as follows:**

Item 1: submit technical justification demonstrating how dust and noise modelling influenced the height and depth of the berms, and whether or not further quantified increases in the height of berms would reduce dust and noise emissions. In the absence of this, increase the height and depth of berms/buffer.

Item 2: there is a reduction in the height of berms compared to the previous planning application on the site (PA. Ref. 21/463 refers). Submit revised sections indicating the height of the berms relative to the existing topography and proposed finished excavated levels, with revised sections corresponding with the 6 no. sections shown on the Landscape Plan.

Item 3: in the event of vertical excavation, given the topography of the site there is potential for quarrying activity to be exposed giving rise to noise and dust impacts. Confirm if, and demonstrate how, this scenario has been accounted for when determining the height of the berms.

Item 4: in order to minimise impacts submit details providing for the phased restoration of the quarry, and expected timeframes for each phase.

3.1.4. **Clarification of Further information[5] submitted on 27th April 2023**

Item 1: revised site sections *drawings 22.137-14,15,16* outline proposals to raise the height of the berms by 2m along the entire length of the north-western, north-eastern and south-eastern boundaries. The increase in the height of the berms will result in an increase in the width of the berms. Letter from AONA environmental attached indicating that there is a marginal reduction in environmental impacts arising from same.

Item 2: landscape sections and accompanying landscape rationale (Ronan MacDiarmada & Associates Ltd.) submitted which have been updated to reflect the 2m increase in the height of the berms. Drawings now also show the existing ground level along the complete section and the height of berms measured from the existing ground level and finished excavated levels (base of berms).

Item 3: almost all of the material being extracted will be done from machinery working at the final excavated level of the sand pit floor and will be carried out by loading shovel (*Drawing 22.137-036* illustrates this). The loading shovel is completely screened by the berms. The nature of the material being excavated will mean that the material to be extracted will naturally fall to sand pit floor meaning loading shovels will always be working at a low level. As the sand pit progresses in a south-westerly direction the

[5] The CFI was also deemed significant and subsequently readvertised in accordance with Art. 35 of the Planning and Development Regulations, 2001, as amended.

topsoil layer will need to be gradually striped off and stored in stockpiles for later restoration. This operation will be carried out by excavator and dumper. The depth of material being extracted will be approximately 300mm which is a very small percentage of the overall extraction. This operation only needs to be carried out once per year a will only take a few days.

Item 4: as the sand pit progresses from phase 1 to 5 ongoing preparations for the final restoration will be carried out (see *drawing 22.137-037*). Topsoil stripped from the top of the sand pit will be stockpiled along the edges of the sand pit floor. An area at the centre of the sand pit will not be covered with topsoil until all the material has been extracted and final restoration has commenced this is to leave a free draining sandy area in which machinery and plant can manoeuvre around the pit face and haul material to the processing area. This area is to be graded and levelled to the required finished levels which will receive a minimum of 300mm of topsoil at final restoration, which needs to be brought from only a short distance from nearby stockpiles. It is in the applicants interest to complete the full restoration of the site as this will result in the creation of high quality farmland.

3.2. Decision

The Planning Authority issued a Notification of Decision to GRANT Permission on the 6th of July 2023 subject to 28[6] no. conditions. The following conditions are of note;

C5 – requires height of berms to be increased and details of same submitted.

C6 – requires that berms be constructed within 3 months of commencement.

C7 – requires restoration of quarry to be agreed with PA. C7(c) stipulates that restoration shall not be carried out in a single phase.

C8 – requires dust monitoring plan to be agreed with PA.

C11 – stipulates noise emission limits.

C12 – stipulates hours of operation.

C13 – requires the submission of quarterly environmental reports to PA.

[6] The PA's Notification of Grant of Permission contains 2 no. conditions numbered 7.

C15 – requires annual audit to be undertaken and submitted to PA.

C18 – requires the well to be installed and constructed as per Institute of Geologists of Ireland document submitted with the application and with EPA Advice Note 14.

C19 – stipulates that should groundwater be encountered during excavation that a Discharge Licence is sought from RCC.

C23 – requires slope stability monitoring.

C26 – Special Development Contribution.

3.3. Planning Authority Reports

3.3.1. Planning Reports

3.3.2. The first report of the Planning Officer generally reflects the issues raised in the request for Further Information. The report notes;

- the depth and height of berms need to be increased to address noise and dust impacts.
- pertinent information in relation to biodiversity is missing, including ecological impact assessment, habitats map, and site survey.
- the proposal is not considered to give rise to an undue impact on the local road network.

Request for Further Information recommended.

3.3.3. The second report of the Planning Officer notes;

- concern remains in relation to the height of the berms and their effectiveness to address impacts from noise and dust. An increase in the height of the berms is required.
- a single phase of restoration is not acceptable.

Request for Clarification of Further Information recommended.

3.3.4. The third report of the Planning Officer notes;

- the berm to the south-west has not been addressed by the applicant. This, and the issue of berms in general, can be addressed by condition.

- revised landscaping plans providing for semi-mature planting should be conditioned.
- no timeframes for restoration have been provided. Timely restoration of the quarry is an important issue and can be addressed by condition.
- a Special Development Contribution, as recommended by the Road's Section, should be included to address the impact from HGV's on the road network and for junction improvements.

3.3.5. The report of the Planning Officer recommends that permission is GRANTED consistent with the Notification of Decision which issued.

3.3.6. Other Technical Reports

Environment Department – **initial** report recommends conditions in relation to noise, dust, operational aspects of the proposal and monitoring. **Second** report refers to recommendation contained in the initial report.

Roads Section – report recommends standard conditions. Report also recommends a condition requiring the payment of a Special Development Contribution.

Athlone Municipal District Office – **initial** report recommends standard conditions. **Second** report notes no further comment.

3.4. Prescribed Bodies

None.

3.5. Third Party Observations

The report of the Planning Officer refers to observations having been received in relation to the planning application, Significant Further Information and Significant Clarification of Further Information. The issues raised in the observations are summarised in the report(s) of the Planning Officer as follows:

Initial Application:

- Noise and dust impacts.
- Dust modelling is not site specific.

- Traffic impacts/safety concerns.
- Impacts on biodiversity.
- Landscape/visual impacts.
- Impact on hydrology/pollution of Cross River and water table/local water supply.
- Increase in greenhouse gas emissions.
- Information in previous application misleading/proposal is the same of previous application on the site.
- Concerns regarding the management of the proposed quarry.
- Proposal will impede access to amenities.
- Flood risk.
- Inaccuracies in information submitted.
- Impact on cultural heritage.
- Product produced will not be of use to manufacture of concrete.
- Washing has not be referred to in public notices
- Impact on European sites/Appropriate Assessment required.
- Impact on archaeology.
- Lack of public consultation.

Further Information & Clarification of Further Information (i.e. issues not previously raised include):

- No phased restoration of quarry proposed.
- Adequacy of information for dust and noise modelling.
- Impact on agricultural land as a resource.
- Concerns re. future ownership of quarry/compliance with planning.
- Development will impact solar farms in area.
- Inconsistences in application, inc. distance to school, traffic analysis and surface water calculations.
- No information on type of sand and gravel to be extracted.

- Lack of clarity on where product will be used.
- Omission of relevant mitigation measures.
- Poor vegetation along boundaries which would block noise and dust.
- Frustration re. timelines for decision.
- Dust flow diagrams required.

4.0 Planning History

Appeal Site:

PA. Ref. 21/463 – Permission for extraction of sand, stone and gravel. Environmental Impact Assessment Report (EIAR) submitted with application. (Deemed Withdrawn).

Adjoining Area/Kildea's Concrete:

PA. Ref. 19/361 & ABP. Ref. 305523-19 – Retention permission GRANTED for removal of excavated material and construction of extension to concrete slab.

PA. Ref. 16/411 – Permission GRANTED for concrete batching plant.

Lands to south-west:

PA. Ref. 21/350 - Permission GRANTED for solar farm, to operate as an extension to permitted solar farm permitted under PA. Ref. 20/36.

5.0 Policy Context

5.1. National Policy

5.1.1. *National Planning Framework*

National Policy Objective 23 - facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.

5.2. Regional Policy

5.2.1. Regional Spatial and Economic Strategy (Northern and Westerns Regional Assembly) 2020 – 2032

The RSES notes the requirement in the region to accommodate housing for between 160,000 and 180,000 additional people (see Section 7.6).

5.3. Section 28 Guidelines

5.3.1. *Quarry and Ancillary Activities, Guidelines for Planning Authorities, DoEHLG, 2004*

These guidelines note the economic importance of quarries and the demand for aggregates arising from the needs of the construction industry with particular reference to house building and infrastructure provision. It is further noted that aggregates can only be worked where they occur and that many pits and quarries tend to be located within 25 km of urban areas where most construction takes place. Chapter 3 identifies the potential environmental issues associated with the development of the extractive industry/quarries and recommends best practice/possible mitigation measures in respect of: Noise and vibration; Dust deposition/air quality; Water supplies and groundwater; Natural heritage; Landscape; Traffic impact; Cultural heritage; and Waste management. The Guidelines also recommend Environmental Management Systems (EMS) as a quality assurance system to measure a company's operations against environmental performance indicators. Chapter 4 refers to the assessment of planning applications and Environmental Impact Statements[7]. It provides guidance on the information to accompany an application and the inclusion of possible planning conditions.

5.3.2. *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, August 2018*

These guidelines coincide with the making of the European Union (Planning & Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) and the coming into operation of the Regulations on 1st September 2018 in order

[7] Now referred to as 'EIAR'.

to transpose the Directive into Irish law. The Guidelines replace Guidelines for Planning Authorities and An Bord Pleanála on carrying out environmental impact assessment issued by the DoECLG in 2013. The purpose of the guidelines is to give practical guidance on procedural issues and the EIA process arising from the requirements of Directive 2014/52/EU.

5.4. Other Relevant Guidance

Environmental Management Guidelines, Environmental Management in the Extractive Industry (Non-Scheduled Minerals), EPA, 2006

These guidelines are intended to complement existing national guidance and to be of assistance to operators, regulatory authorities, and the general public (They are also complemented by the 'Environmental Management in the Extractive Industry – Guidelines for Regulators'). The guidelines provide general advice and guidance in relation to environmental issues to practitioners involved in the regulation, planning, design, development, operation and restoration of quarry developments and ancillary facilities.

5.5. Development Plan

5.5.1. The Roscommon County Development Plan 2022-2028 is the relevant development plan. The appeal site is <u>not</u> subject to any specific land-use zoning under the Roscommon County Development Plan 2022-2028.

5.5.2 The provisions of the Roscommon County Development Plan 2022 - 2028 relevant to this assessment are as follows:

<u>Volume 1</u>

(Chapter 6: Economic Development)

Policy Objective ED 6.17

> *Facilitate the extraction of minerals and aggregates and associated processing where such activities do not have a significant negative impact on the environment, landscape, public health, archaeology or residential amenities of neighbouring settlements and where such operations are in compliance with all national regulations and guidelines applicable to quarrying and mining activities.*

Policy Objective ED 6.18

Ensure that the development of aggregate resources (stone and sand/gravel deposits) is carried out in a manner which minimises effects on the environment, including the Natura 2000 network and its sustaining habitats (including water dependent habitats and species), amenities, infrastructure and the community, and can demonstrate environmental enhancement through habitat management plans/ecological restoration.

Policy Objective ED 6.19

Support adequate supplies of aggregate resources to meet the future growth needs of the county and the wider region where there is a proven need for a certain mineral/aggregate and to exercise appropriate control, while addressing key environmental, traffic and social impacts.

Policy Objective ED 6.20

Require appropriate restoration of quarried lands and encourage the reuse of worked out quarries for ecological and geological benefit and / or for recreational, educational and agricultural purposes.

Chapter 10: Natural Heritage

Policy Objective NH 10.25

Minimise visual impacts on areas categorised within the County Roscommon Landscape Character Assessment including "moderate value"," high value", "very high value" and with special emphasis on areas classified as "exceptional value" and where deemed necessary, require the use of Visual Impact Assessment where proposed development may have significant effect on such designated areas.

Chapter 12: Development Management Standards

Paragraph 12.21 (Extractive Industries) - It is recognised that the location of such industries is dictated by the availability of the resource and hence each application will be determined on its own merits.

Associated Documents of Roscommon County Development Plan 2022 - 2028

Landscape Character Assessment - the appeal site is located in Landscape Character Area (LCA 35) Brideswell Esker Belt, which is described as having a moderate landscape value and comprising '*predominantly low lying and flat with just a few low hills… the overall image of this landscape is one of bogs and eskers experiencing localised development pressure from nearby urban area'.* Under the heading 'forces of change' the LCA notes that there has been considerable quarrying activity in the esker belt of this LCA, which has brought about considerable landscape change, and while the quarry pits themselves might be screened from public roads, the dust created by vehicles emerging from the quarry is clearly evident and creates an adverse visual impact.

Section 3.4 'Extractive Industry' of the Landscape Character Assessment, an accompanying document to the Roscommon County Development Plan 2022 – 2028, notes that '*the visual impact of quarries upon the landscape can be significant and mitigation measures must be sufficiently robust to ensure that the activity does not irreparably damage the attributes of any particular Landscape Character Area'.*

5.6. **Natural Heritage Designations**

- River Shannon Callows SAC (Site Code: 000216) – c. 5.2 km east.
- Middle Shannon Callows SPA (Site Code: 004096) – c. 5.4km south-east.
- River Shannon Callows pNHA (Site Code: 000216) – c. 5.3 km south-east.
- Lough Ree SAC (Site Code: 000440) – c. 5.4 km north-east.
- Lough Ree SPA (Site Code: 004064) – c. 5.1 km north-east.
- Lough Ree pNHA (Site Code: 000440) - c. 5.2 km north-east.
- Castlesampson Esker SAC (Site Code: 001625) – c. 2.5 km south-west.
- Castlesampson Esker pNHA (Site Code: 001625) – c. 2 km south-west.
- Ballynamona Bog & Corkip Lough SAC (Site Code: 002339) – c. 3km north-west.

5.7. **EIA Screening**

5.7.1. Schedule 5, Part 2, 2(b) of the Planning and Development Regulations 2001, as amended and Section 172(1)(a) of the Planning and Development Act 2000, as amended provides that an Environmental Impact Assessment (EIA) required for: -

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

5.7.2. The proposed development comprises the extraction of sand, stone and gravel with an extraction area of 4.9 Ha. An EIAR was submitted with the application (see paragraph 7.6 below).

6.0 **The Appeal**

6.1. **Grounds of Appeal**

2 no. third-party appeals against the decision to grant permission have been received.

The grounds of appeal raised by Pat McManus can be summarised as follows;

- The proposed development, which is adjacent to an existing concrete plant, would negatively affect the amenity of residences and farms in the area, as a result of noise and dust. The existing concrete plant, emissions from which are not monitored, would add to the impact from the proposed development in terms of noise and dust.
- RCC have not addressed concerns in relation to road safety and the additional traffic which the proposal will create. Traffic from the proposal will affect the operation of the appellant's farm, the safety of residents in the area, and will impact children travelling to/from school who are required to walk on the verge of the L-2025 in order to access public transport.
- The proposed development could affect the appellant's ability to draw water from his well, and also private wells in the area.

The grounds of appeal raised by Sarah Jane Macken can be summarised as follows;

- RCC have been prevented from making an objective decision due to legal proceedings initiated against them.

- Parties have been deterred from making observations to the proposal.
- The proposal would generate dust c. 1km from a school.
- The information submitted with the application is inaccurate as regard distance to the school.
- The proposed development is similar to that proposed under PA. Ref. 21/463.
- The observation submitted in respect of planning application is included in the appeal submission, issues raised include;
    - RCC are compromised in the adjudication of the planning application. RCC should have declared that it was the subject of legal proceedings.
    - The issues raised in the previous planning application have not been addressed in the current planning application, specifically the proposal to use a washing system in an environmental fragile area, with no attempt to capture spills once off the concrete apron; sections of the EIAR have been edited/changed while the signing page is the same; the school has been described as being both 1.1 km and 3 km from the site; impact of dust on school given the size of the quarry and distance to the school; and the impact from 50,000 truck movements at a dangerous junction.
    - The similarities between the previous planning application PA. Ref. 21/463 and the current application make it impossible for observers to make submissions.

6.2. Applicant Response

The applicant has submitted a response in respect of the third party appeal submissions.

<u>Response to Pat Mc Manus's appeal.</u>

- The EIAR conclusively proves that dust from the quarry will not adversely affect nearby residences.
- The proposed development will not dis-improve the situation in relation to traffic safety/condition of road network.

- The well will be intermittently used and the quantities of water extracted in a single event are unlikely to exceed 20m3. The down drawn will not be measurable at a radius outside the site boundary and will therefore have no effect on the appellant's well.
- The issues raised in the appeal are minor in nature and the intention of the appeal is to delay the proposed development. The Board should consider if the appeal falls within Section 138.

The applicant also makes the following points in relation to the Board's assessment of the proposed development, and specifically in relation to specific planning conditions of the PA –

- The application should be assessed on its own merits and there is no benefit in comparing this application to PA. Ref. 21/463.
- The application contains so much information that should the Bord grant permission there should be less rather than more conditions attached.
- There are no plans for surface water to discharge onto the public road and there is therefore no requirement to manage its disposal in this regard.
- The Board should allow a further two years for restoration.
- The option should be made available to reach an agreement with the Planning Authority to extend the operation of the quarry for a reasonable period to allow complete excavation and full restoration to agricultural use.
- Annual rather than quarterly monitoring should be adopted.
- The imposition of a special development contributions for road infrastructure should be assessed by the Board.

<u>Response to Sarah Jane Macken's appeal.</u>

- The Board are requested to consider whether the appellant is acting as a proxy for another party, and to consider if the appeal meets Section 138 of the Planning and Development Act. The requirement to provide an acknowledgment of submission is not included with the attached documents with the planning appeal form.

6.3. **Planning Authority Response**

None received.

6.4. **Observations**

None received.

7.0 Assessment

7.1. Having examined the application details and all other documentation on file, including the appeals, and the applicant's response(s) to same, and having inspected the site, and having regard to the relevant national and local policy and guidance, I consider the main issues in relation to this appeal are as follows:

- Principle of Development
- Impact on Residential Amenity
- Impact on Landscape and Visual Amenity
- Traffic Impact
- EIA
- Appropriate Assessment
- Issues Arising

7.2. **Principle of Development**

7.2.1. The proposed development comprises the extraction of sand, stone and gravel, the processing and screening of same using mobile plant and the restoration of the quarry to agricultural land. The appeal site is not subject to any specific land-use zoning under the Roscommon County Development Plan 2022-2028. Policy Objective ED 6.17 of the Roscommon County Development Plan 2022-2028 seeks to facilitate the extraction of minerals and aggregates and associated processing where such activities do not give rise to significant negative impacts, while Policy Objective ED 6.19 seeks to support adequate supplies of aggregate resources to meet the future growth needs of the county and the wider region subject to addressing potential

impacts. I note that the Quarry Guidelines, 2004 also acknowledge the economic importance of quarries and the demand for aggregates arising from the needs of the construction industry, and that aggregates can only be worked where they occur. Having regard to the provisions of development plan policies ED 6.17 and ED 6.19 and the provisions of the Quarry Guidelines, 2004, I am satisfied that the principle of the proposed development is acceptable at this location. Potential impacts on amenity and the environment are addressed further below.

7.3. Impact on Residential Amenity

7.3.1. Concerns are raised by the appellants in relation to the impact of the proposed development on the amenity of residences in the area arising from the operation of the proposed quarry, primarily as a result of noise and dust. I note that Policy Objective ED 6.17 of the Roscommon County Development Plan 2022 – 2028 seeks to facilitate the extraction of minerals and aggregates and associated processing where such activities do not have a significant negative impact on the residential amenities of neighbouring settlements. The greatest concentration of dwellings is to the west of the appeal site, along the L-2026 (see paragraph 1.4 for separation distances to dwellings in the vicinity).Given the nature of the proposed development and proximity to dwellings in the area there is therefore potential for impacts on the amenity of dwellings in the vicinity.

7.3.2. In relation to noise, mitigation measures are set out in the EIAR, including restricting working times to daytime hours; enforced 10 kmph speed limit within the site; the use of noise reduced plant; and the earthen mounds. The Quarry Guidelines and the EPA's Environmental Management in the Extractive Industry set out a recommended standard of 55dB(A) LAeq (1 h) for daytime noise and 45 dBA LAeq (1 h) for night-time at the nearest sensitive receptor. The guidelines also note that it may be appropriate to permit higher noise ELVs (Environmental Limit Values) for short-term temporary activities such as construction of screening bunds, etc. where these activities will result in a considerable environmental benefit. Predicted noise levels at noise sensitive receptors (dwellings) are modelling in the EIAR and are in accordance with the recommended noise limits above. Some impacts may arise during the construction phase of the proposal however these will be short-term in duration, c. 3 - 6 months and the source of the noise will be in excess of 220m from the nearest

dwelling. If permission is being contemplated it is recommended that a specific condition be attached to limit noise levels in accordance with the guidelines. I note that cumulative effects, including from the adjacent concrete plant, have been included in the noise modelling and shown not to exceed the recommended limit value of 55 dB(A). Having regard to the forgoing, I am satisfied that subject development will not result in significant adverse impacts on the amenity of dwellings in the vicinity as a consequence of noise.

7.3.3. In respect of dust, the EIAR sets out mitigation measures to prevent significant dust emission from the proposed quarry. These include the use of a water bowser to dampen down the site; the sweeping/wetting of roadways; the use of a 10kmph speed limit within the site; the use of a wheel and underbody wash; and positioning stockpiles so that they are not exposed to winds. I note that winds from the south-easterly to southerly to south-westerly to westerly direction are indicated as occurring most frequently. The nearest properties are to the west of the site and are therefore upwind of the prevailing wind direction. Significant dust impacts on these properties are therefore unlikely. The nearest properties to the north-east and east of the site, i.e. downwind of the prevailing wind direction are more than 250m away and are therefore unlikely to experience a significant dust impact. I note that the sandpit walls and screening bunds will also provide increased dust mitigating effects. There are currently no Irish statutory standards or EPA guidelines relating specifically to dust deposition thresholds for inert mineral/aggregate dust. Dust emissions have been modelled in the EIAR. There are a number of methods to measure dust deposition but only the German TA Luft Air Quality Standard relates a specific method (i.e. Bergerhoff) of measuring dust deposition with dust nuisance. The proposed sand and gravel quarry development will not result in an exceedance of the Dust Deposition Rate limit recommended by the TA Luft Air Quality Standard for sensitive receptors of 350 mg/m/day, or the Air Quality Standard limit values for PM10 or PM 2.5. I am therefore satisfied that the subject development will not result in significant adverse impacts on the amenity of dwellings in the vicinity as a consequence of dust.

7.3.4. Having regard to the above, I am satisfied that the proposed development accords with the requirements of Policy Objective ED 6.17 of the Roscommon County Development Plan 2022 – 2028.

7.4. Impact on Landscape and Visual Amenity

7.4.1. See Paragraph 7.21 (below).

7.5. Traffic Impact

7.5.1. See Paragraph 7.22 (below).

7.5.2. I note that the EIAR refers to achievable sightlines of 160 metres at the junction with the L-2025. This appear to be a typographical error Sightlines of 90 metres in either direction are indicated on *Drawing no. 010A Proposed Site Masterplan*, and other drawings. The sightline requirement for access onto local roads is 90 metres from a setback of 2.4 metres. I note that the proposal accords with the requirements of the Roscommon County Development Plan 2022 – 2028 (see Figure 12.4).

7.6. Environmental Impact Assessment

7.6.1. Statutory Provisions

7.6.2. Schedule 5, Part 2, Class 2(b), requires EIA for the extraction of stone, gravel, sand or clay, where the area of extraction would be greater than 5 hectares. The proposed development comprises the extraction of sand, stone and gravel with an extraction area of 4.9 Ha. An EIA has been submitted.

7.6.3. EIA Structure

This section of the report comprises the environmental impact assessment of the proposed development in accordance with Planning and Development Act 2000 (as amended) and the associated Regulations, which incorporate the European directives on environmental impact assessment (Directive 2011/92/EU as amended by 2014/52/EU).

Section 171 of the Planning and Development Act, 2000 (as amended) defines EIA as:

> a. consisting of the preparation of an EIAR by the applicant, the carrying out of consultations, the examination of the EIAR and relevant supplementary information by the Board, the reasoned conclusions of the Board and the integration of the reasoned conclusion into the decision of the Board, and

b. includes an examination, analysis and evaluation, by the Board, that identifies, describes and assesses the likely direct and indirect significant effects of the proposed development on defined environmental parameters and the interaction of these factors, and which includes significant effects arising from the vulnerability of the project to risks of major accidents and/or disasters.

Article 94 of the Planning and Development Regulations, 2001 (as amended) and associated Schedule 6 set out requirements on the contents of an EIAR.

This EIA section of the report is, therefore, divided into two sections. The first section assesses compliance with the requirements of Article 94 and Schedule 6 of the Regulations. The second section provides an examination, analysis and evaluation of the development and an assessment of the likely direct and indirect significant effects of it on the following defined environmental parameters, having regard to the EIAR and relevant supplementary information:

- population and human health,
- biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive,
- land, soil, water, air and climate,
- material assets, cultural heritage and the landscape,
- the interaction between the above factors, and
- the vulnerability of the proposed development to risks of major accidents and/or disasters.

The assessment provides a reasoned conclusion and allows for integration of the reasoned conclusions into the Board's decision, should they agree with the recommendation made.

7.7. Issues Raised in Respect of EIA

The following issues pertaining to EIA have been raised in the appeal submissions;

- similarities between the EIAR submitted with the current planning application the previous planning application on the site under PA. Ref. 21/463.

- concerns in relation to noise, dust, traffic and water.

7.8. Compliance with the Requirements of Article 94 and Schedule 6 of the Regulations 2001

Compliance with the requirements of Article 94 and Schedule 6 of the Regulations is assessed below.

Article 94 (a) Information to be contained in an EIAR (Schedule 6, paragraph 1)	
A description of the proposed development comprising information on the site, design, size and other relevant features of the proposed development (including the additional information referred to under section 94(b).	The proposed development is comprehensively described in Chapter 2 of the EIAR and depicted in the associated drawings. Information is included on the site, design, size and features of the development. The EIAR also describes the operation and restoration of the development. I am satisfied that adequate detail has been provided to enable decision making. It is noted that the proposal does not involve demolition works.
A description of the likely significant effects on the environment of the proposed development (including the additional information referred to under section 94(b)).	An assessment of the likely significant direct, indirect, and cumulative effects of the development is carried out for each of the environmental parameters set out in the Regulations. I am satisfied that the assessment of significant effects is comprehensive and robust and enables decision making.
A description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment of the development (including the additional information referred to under section 94(b).	The EIAR includes designed in mitigation measures and measures to address potential adverse effects. These are included in each of the technical chapters of the EIAR. Mitigation measures comprises standard good practices and site-specific measures and are largely capable of offsetting significant adverse effects identified in the EIAR. Arrangements for

	monitoring (where proposed) are also included in each of the technical chapters of the EIAR.
A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment (including the additional information referred to under section 94(b))	Chapter 3 of the EIAR considers alternatives in respect of alternative locations, designs / layout and do nothing. It provides the main reasons for selecting the proposed option. I consider, therefore, that the description of alternatives is reasonable, in the context of the proposed development, and satisfactory. In examining alternatives the applicant has taken into account the potential impacts on the environment.
Section 94(b) Additional information, relevant to the specific characteristics of the development and to the environmental features likely to be affected (Schedule 6, Paragraph 2)	
A description of the baseline environment and likely evolution in the absence of the development	A detailed description of the baseline environment is included in each of the technical chapters of the EIAR. I am satisfied that the description of the baseline for each topic is sufficient to enable the assessment of likely effects and to enable decision making.
A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information, and the main uncertainties involved.	The methodology/forecasting methods are set out in the different chapters. I am satisfied that the forecasting methods are adequate. The EIAR notes that no difficulties were encountered in compiling information. I am satisfied that there are no significant deficiencies that prevent decision making.
A description of the expected significant adverse effects on the environment of the proposed development deriving from its vulnerability to risks of major accidents and/or disasters which are relevant to it.	Likely significant effects of the development on the environment, arising from its vulnerability to risks of major accidents and/or disasters are addressed in the EIAR (see Section. 4.17). Having regard to the location of the appeal site, its scale and nature of the operations I am satisfied that

	there is no significant risk of major accidents and / or disasters.
A summary of the information in non-technical language.	A non-technical summary of the EIAR is provided by the applicant and satisfactorily describes the likely environmental effects of the development.
Sources used for the description and the assessments used in the report.	Sources used for the description and assessment of environmental effects are included in each technical chapter of the EIAR.
A list of the experts who contributed to the preparation of the report.	Experts and relevant qualifications are identified in Table 1.1 of the EIAR. Further details are provided in each Chapter of the EIAR on the experts who prepared the technical assessment.

7.9. Consultations

7.9.1. The application has been submitted in accordance with the requirements of the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) in respect of public notices. There were no submissions received from statutory bodies.

7.9.2. I am satisfied, therefore, that appropriate consultations have been carried out and that third parties have had the opportunity to comment on the proposed development advance of decision making.

Compliance

7.9.3. Having regard to the foregoing, I am satisfied that the information contained in the EIAR, and supplementary information provided by the developer is sufficient to comply with article 94 of the Planning and Development Regulations, 2001.

7.10. Assessment of Likely Significant Effects

7.10.1. This section of the report sets out an assessment of the likely environmental effects of the proposed development under the following headings, as set out Section 171A of the Planning and Development Act 2000, as amended:

- Population and human health.
- Biodiversity, with particular attention to the species and habitats protected under the Habitats and Birds Directives (Directive 92/43/EEC and Directive 2009/147/EC respectively).
- Land, soil, water, air and climate.
- Material assets, cultural heritage and the landscape.
- The interaction between these factors.

7.10.2. In accordance with section 171A of the Act, which defines EIA, this assessment includes an examination, analysis and evaluation of the application documents, including the EIAR and submissions received and identifies, describes and assesses the likely direct and indirect significant effects (including cumulative effects) of the development on these environmental parameters and the interaction of these. Each topic section is therefore structured around the following headings:

- Issues raised in the appeal.
- Examination, analysis and evaluation of the EIAR.
- The Assessment: Direct and indirect effects.
- Conclusion: Direct and indirect effects.

7.11. Population and Human Health

Issues Raised

Issues raised in respect of population and human health relate to impacts on residential amenity, including those arising from dust, noise and traffic safety.

Examination of the EIAR

7.11.1. Context - Chapter 4[8] of the EIAR addresses Population and Human Health, with regard to potential impacts on population and socio-economic status. Other environmental issues with the potential to impact on population and human health, such as air and climate, noise and vibration, landscape and visual impacts, water, and traffic are addressed separately in the relevant chapters of the EIAR and the relevant sections

[8] Revised/replacement chapter 4 submitted on foot of FI request (the chapter as initially submitted was erroneously named Chapter 2 – Project Description).

of this report. The chapter uses CSO data in relation to Census 2011 and Census 2016.

7.11.2. Baseline - Chapter 4 (Sections 4.9 to 4.12 inc.) describes the baseline as regards population and human health. The area, which is south-west of Athlone, is described as being characterised by dispersed residences (ribbon development along the L-2025 and L-2026) and farm buildings. Figure 4.1 indicates 76 no. dwellings, 11 no. dwellings and commercial uses, and 6 no. commercial properties within 1.5 km of the site. There is a dwelling to the north-west of the site. There is an existing concrete batching plant to the north of the site. A school is located c. 1.3 km east of the site. The site is in agricultural use and surrounded by lands which are also in agricultural use. Table 4.1 indicates that Rooskagh/Bellanullia had a population of 413 no. in the 2016 Census, an increase of 4.8% in the inter-census period, i.e. 2011 - 2016. Live Registry figures are provided in Table 4.2 and indicate a significant decline in unemployment between 2016 and 2021 for both Athlone and Roscommon County (i.e. 3,268 to 1,708 for Athlone and 3,019 to 1,816 for Co. Roscommon). Table 4.3 and 4.4 provides a breakdown for population by occupation and industry for Rooskagh/Bellanullia, the neighbouring townland of Ballynamona and for Co. Roscommon. The figures indicate the significance of agricultural/forestry as a source of employment in Rooskagh/Bellanullia.

7.11.3. Likely significant effects of the development as identified in the EIAR are summarised in the table below. I note that the assessments carried out did not identify any significant limitations.

Table 1: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Not examined in EIAR. In the absence of the proposed development it is expected that the site would continue to be used for agricultural purposes.
Construction	The EIAR notes that an evaluation of effects is examined in other chapters, and that on the basis of the findings and mitigation measures proposed in these chapters that there will be no significant adverse impacts.

Operation	The EIAR notes that an evaluation of effects is examined in other chapters, and that on the basis of the findings and mitigation measures proposed in these chapters that there will be no significant adverse impacts during the extraction/operation phase. The extraction of material will generate dust and noise. The road network is considered to have capacity to accommodate the proposed development and risk of accidents is small, and will not have will not have a significant impact on human health. The proposed development will generate direct employment for 6 no. people and will provide indirect employment for 40 no. people in the local community, including drivers/hauliers, machinery maintenance and service providers.
Restoration	The EIAR notes that an evaluation of effects is examined in other chapters, and that on the basis of the findings and mitigation measures proposed in these chapters that there will be no significant adverse impacts during the restoration phase.
Cumulative	No effects anticipated. A solar farm has been permitted south of the site (PA. Ref. 20/36 refers) but impacts arising from this development would be unlikely.

Mitigation

7.11.4. Potential impacts to human health and relevant mitigation measures are addressed elsewhere in the EIAR (i.e. Chapter 6 'Land, Soils, Geology'; Chapter 7 'Water'; Chapter 8 'Air'; Chapter 10 'Noise and Vibration'; and Chapter 14 'Traffic and Transport'). The mitigation measures relevant to Population and Human Health are summarised in Table 4.5. Monitoring measures are also detailed in Chapters 6, 7, 8, 10 and 14.

Residual Impacts

Residual Impacts are identified as the loss of agricultural land and soil during quarrying; dust deposits on adjoining lands, which is excepted to be within acceptable

limits; and noise which will be limited to normal working hours and of a type prevalent in the vicinity.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

I have examined, analysed and evaluated Chapter 4 of the EIAR and all of the associated documentation and submissions on file in respect of Population and Human Health. I have inspected the appeal site and the surrounding area. I am satisfied that the applicant's understanding of the baseline environment, by way of desk and site surveys, is comprehensive and that the key impacts in respect of likely effects on Population and Human Health, as a consequence of the development have been identified. Parties to the appeal have raised a number of issues in respect of Population and Human Health which I address in detail under subsequent sections in this report (i.e. under the heading of air and climate, noise and vibration, and traffic and transport).

The proposed development will generate direct employment for 6 no. people and will provide indirect employment for 40 no. people in the local community. The duration of the proposal would be 10 no. years. The impact to the local economy during the construction and operational phase is considered to be neutral. The potential for significant effects on human health from noise, air quality (dust) and water quality during the construction and operational phases are addressed in the relevant chapters of the EIAR. I have assessed these relevant chapters (see below) and am satisfied that effects can be avoided, managed and mitigated by measures that form part of the proposed scheme. Serious risks to human health and safety within the quarry are not envisaged as the quarrying activity would be managed in accordance with all applicable legislation and guidelines.

Conclusion

Having regard to the examination of environmental information in respect of Population and Human Health, in particular the EIAR and supplementary information provided by the applicant, I consider that the overall impact on Population and Human Health would be neutral/imperceptible due to the location of the proposed development in a rural area, remote from population centres and the proposed mitigation measures.

7.12. Biodiversity

Issues Raised

7.12.1. No specific issues are raised in respect biodiversity in the appeal submissions.

Examination of the EIAR

7.12.2. Context - Chapter 5[9] of the EIAR addresses biodiversity. The chapter has been written as an Ecological Impact Assessment (EcIA). It describes the flora and fauna present on the site. The information outlines the baseline ecological environment, provides a prediction of the likely effects, details mitigation measures and describes any residual ecological effects. The assessment of effects on biodiversity had regard to legal requirements and European, national and industry best practice guidelines. The assessment methodology included: -

- Desk Based Studies.
- Field Based Studies (undertaken 12th May 2021).

The timing of field work was considered optimal and was carried out by a qualified ecologist. The value of ecological resources was determined (see Table 5.3 for applicable criteria).

Baseline – There are 17 no. European sites within 15km of the site (see Table 5.4). No species protected under the Flora Protection Order occur within the relevant 10km2 of the site. No part of the site lies within or is adjacent to any area that is designated for nature conservation purposes.

(Habitats) The predominant land use in the vicinity of the appeal site is agriculture. The ground is firm and well drained. Improved and Semi-Improved Grassland are the dominant habitats locally. The grassland habitat within the site is dominated by improved agricultural grassland (GA1) which is generally species poor. Prior to the intensification of agriculture on the site it is likely that the site was a calcareous grassland (Dry Calcareous and Neutral Grassland habitat GS1) and elements of this habitat remain sparsely evident in certain areas of the field. The boundaries of the site are mostly defined by hedgerows (WL1), treelines (WL2), fences and dry stone walls (BL1). There are also some notable mature trees along these boundaries. A habitat

[9] Chapter 5 'Biodiversity' was submitted to the PA on foot of a request for Further Information. Chapter 5 in the EIAR submitted to the PA is an Appropriate Assessment Screening.

map is provided in Figure 5.7. In terms of ecological value, the habitat comprising Improved Agricultural Grassland is considered to be of 'no value' and the Treeline/Hedgerows are considered to be of 'local importance – higher value'.

(Fauna) No protected mammals were observed on site during the course of the field survey. The site may be used occasionally by foraging badgers however no badger setts were noted along the boundaries of the site. There are no riparian habitat within the site suitable for use by otter.

(Bats) The suitability of the site for bats is 'low-moderate'. There are no buildings within the study area that would provide suitable roosting of hibernating habitats for bats. There are some older trees with suitable micro-habitats such as fissures, cracks and ivy that may potentially provide suitable roosting or hibernating opportunities for bats and all these trees will be retained.

(Birds) A range of common passerine birds associated with agricultural areas occur around the proposed development site (see Section 5.53 of EIAR). There is a high level of noise and activity from the adjacent concrete plant. Noise from HGV's is likely to deter birds from using the site. Some birds will use the treelines and hedgerows along the site boundaries. The site is likely to be of local importance, lower value for birds.

(Amphibians, Reptiles and Invertebrates) There are no drains or wetlands within or along the perimeters of the application site, therefore the value of this site for species such as the common frog *Rana temporaria* and smooth newts *Lissotriton vulgaris* is likely to be low.

(Aquatic environment) There are no surface water features within or immediately adjacent to the main body of the application site. There are drains approximately 102m north-east and 76m south-east of the application site. These drains lead towards a tributary of the Mihanboy Stream, which is 209m south of the site. This stream flows east to join the Mihanboy and this stream then flows north-east to join the Cross River. The Cross River flows south/southeast towards its confluence with the River Shannon near Carricknaghtan.

(Impacts on Designated Sites) There are no surface water features on the site therefore there is no hydrological connectivity or source-pathway-receptor linkages between the application site and any designated sites. There will be no discharge to

any local watercourse during the quarrying operation. The site is within 10km of 6 no. sites designated as Natural Heritage Areas (NHAs and pNHAs). There is no hydrological connectivity between the application site and any NHA/pNHA.

7.12.3. Likely significant effects of the development are summarised in Table 2 below. I note that the assessments carried out did not identify any significant limitations.

Table 2: Summary of Potential Effects

Project Phase	**Potential Direct, Indirect and Cumulative Effects**
Do Nothing	Not examined in EIAR. In the absence of the proposed development it is expected that the site would continue to be used for agricultural purposes.
Construction	The quarrying will result in the loss of all grassland habitat.
Operation	The quarrying will result in the loss of all grassland habitat. Birds and mammals may be disturbed by increases in noise, traffic and human activity. The foraging habitats for bats, terrestrial mammals and birds will be reduced. Commuting paths for mammals may be fragmented. There is potential for the loss of trees within the site, should their roots become compacted from the storage of overburden or machinery. The open grassland foraging habitats for bats, terrestrial mammals and birds will be reduced. The extraction and processing of rock and associated traffic movements within the site has potential to generate dust which may have adverse effects on plants, restricting photosynthesis, respiration and transpiration, and lead to pollutants penetrating plants. A decline in plants could also indirectly effect fauna.
Restoration	Following the cessation of quarrying activities, the quarry will be restored for agricultural purposes. If the quarry lies undisturbed for

	some time areas of high biodiversity value could develop, calcareous plant species could colonise, the faces of the quarry could be colonised by sand martins or bats, and undisturbed and permanent quarry ponds could become colonised with newts and frogs.
Cumulative	Not examined in EIAR.

Mitigation

7.12.4. Section 5.70 of the EIAR sets out a range of mitigation measures to address potential biodiversity impacts. These include adherence to best practice measures for extractive industries; the provision of root protection zones; the removal of hedgerow along the access road outside of bird nesting season; buffer areas adjacent to trees; the storage of chemicals and fuels in bunded areas; and the engagement of an ecologist following cessation of quarrying activities to devise a plan to achieve a high level of biodiversity on the site.

Residual Impacts

7.12.5. With the recommended mitigation measures, the proposed development will have a neutral impact on local ecological receptors. The creation of new habitats on the site will be a positive benefit to local ecology.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

7.12.6. I have examined, analysed and evaluated the information provided in Chapter 5 (as revised) and all the associated documents and submissions on file in respect of Biodiversity. I have inspected the site and the surrounding area. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts and provides a suitably comprehensive range of mitigation and monitoring measures (see Section 5.70) to reduce any potential impacts.

7.12.7. *Habitat:* The site is dominated by improved agricultural grassland (GA1) which is generally species poor and is classified as being of no ecological value. The habitats and vegetation which occur within the site are generally considered to be of low botanical value. No species of conservation importance were noted on site. The impact of the proposed development would be a loss of existing habitats on site. Having

regard to the present condition of the site, with no special concentrations of flora or fauna, I am satisfied that the impact of the proposed development on habitats would not be significant.

7.12.8. *Mammals:* No protected mammals were observed on site during the course of the field survey. No badger setts were noted along the boundaries of the site and there are no habitats within the site suitable for use by otter. The loss of habitat would result in reduced foraging opportunities for mammals however, similar habitats are widely available in the surrounding area. In the long term the restoration phase is likely to create replacement habitats. Given the nature and characteristics of the appeal site I am satisfied that the impact on terrestrial mammals would not be significant.

7.12.9. *Bats:* The suitability of the site for bats is deemed to be 'low-moderate'. There are no buildings on the site and the proposal does not entail tree removal. Older trees within the site which are identified as potentially providing suitable micro-habitats suitable roosting or hibernating opportunities for bat are to be retained. I am satisfied that the impact on bats would not be significant.

7.12.10. *Birds:* Whilst birds will use the treelines and hedgerows along the site boundaries, noise from adjoining uses is likely to act as a deterrent to birds using the site and overall the site is considered to be of local importance/lower value for birds. I am satisfied that the impact on birds would not be significant.

7.12.11. *Amphibians, Reptiles and Invertebrates:* The value of this site for species such as the common frog *Rana temporaria* and smooth newts *Lissotriton vulgaris* is likely to be low. I am satisfied that the impact on amphibians, reptiles and invertebrates would not be significant.

Conclusion

7.12.12. Having regard to the examination of environmental information in respect of Biodiversity, in particular the EIAR and supplementary information provided by the applicant and the appeal submissions, I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the species potentially impacted by the proposed project and provides a suitably comprehensive range of

mitigation measures (see Section 5.70) to reduce any potential impacts to non-significant levels. Whilst not specifically addressed in Chapter 5 of the EIAR, having reviewed the planning history in the vicinity I am satisfied that there is no potential for cumulative effects given the nature of permitted/planned construction activity in the vicinity of the site. Therefore, I am satisfied that subject development will not give rise to significant direct, indirect, or cumulative effects on the Biodiversity of the site or the area.

7.13. Land, Soil, Water, Air and Climate

7.13.1. The format of my assessment follows the headings as set out in the Planning and Development Act, 2000, (as amended). Having regard to the information provided in the applicant's EAIR the following Sub-headings are used:

- Soils and Geology
- Water (Surface and Groundwater)
- Air and Climate
- Noise and Vibration

7.14. Soils and Geology

Issues Raised

7.14.1. No specific issues are raised in the appeal(s) regarding the impact of the proposed development on Soils and Geology.

Examination of the EIAR

7.14.2. Context - Chapter 6 addresses the impact on Land, Soils and Geology and considers any direct or indirect effects on these resources arising from the proposed development. The chapter outlines the methodology used, sources of information and the assessment criteria. Table 6.3 provides a summary of borehole logs carried out during site investigations. The methodology involved a Desk Study, including the collation and review of available information pertaining to the site including previous environmental studies or databases relevant to the local area (see page 72 of EIAR) and a Site Walkover on the 27th of April 2021 which enabled the visual examination of the geological, geomorphological and land use characteristics of the site and its setting in the locality. Four boreholes were drilled in late April 2021 around the perimeter of

the proposed site in order to establish the water table and possibly bedrock depths and also to install standpipes to enable groundwater samples to be undertaken.

7.14.3. **Baseline -** The highest point of the site, at c.72m, is formed by a distinctive cone shaped peak feature. A ridge of high ground runs south westwards from the central high point to the western boundary at a height of 67.5m. The topography slopes steeply from the high point and the ridge of high ground downwards to the south with the southern boundary ranging in height from 52m in the south-east corner to c. 60m in the south-west corner. Similarly, the ground slopes downwards in a northern direction from the central high point and ridge with the ground heights along the northern boundary ranging from 48m in the north east corner up to about a height of 60.5m in the central part of the northern boundary before it slopes down to a height of about 57.5m in the northwest corner.

7.14.4. In relation to soils and subsoils, the study area is located on the eastern end of a sharp crested ridge or esker feature which is part of the Athlone Esker System. GSI Mapping identifies the site as being in an area of Hummocky Glaciofluvial Esker Sediments Physiography. The surrounding soils within the development area are described as 'Gravels derived from limestone', while the area along and to the east of the site is underlain by "Tills derived from Limestone'. EPA/Teagasc Soil Information System (SIS) soil mapping indicates that the local area, including the proposed quarry site, has a 'Mullabane (1100MB)' Soil Association that is described as "coarse loamy drift with limestone" and which are widely distributed in the area and nationally.

7.14.5. In relation to bedrock geology, the area under the proposed quarry site is identified as being underlain by the Lower Carboniferous aged Dinantian Pure Bedded Limestone (DPBL) comprising of Undifferentiated Visean Shelf Limestones (VIS). There are no bedrock outcrops identified by the GSI mapping in the local area.

7.14.6. In terms of soft or unstable ground and geo-hazards, the GSt Karst Mapping does not identify any features in the site area or general locality. There is no evidence that potentially soft or unstable materials are present in any part of the site or local area. There are no recorded landslide events within or in the vicinity of the site. The natural fluvioglacial esker sands and gravels underlying the site tend to be very compacted,

well drained, and stable once excavated. The EPA website shows that there are no licensed waste facilities and no Industrial Emission Licensed Facilities in the general area. A review of the on-line GSI and EPA web mapping indicates that there are a number of other active or historical sand and gravel quarries in the locality (within 5km) and the area has a High to Very High Potential for Aggregate Resources.

7.14.7. Regarding groundwater, the groundwater table was identified at depths of 46m (east side) to 49m (west side) bgl in the boreholes drilled on the site for the hydrogeological assessment. The proposed excavation depth is 49m (east side) rising to 52m (west side) so that the floor of the quarry does not intersect the water table and a thickness of natural unsaturated material is maintained between the quarry floor and the underlying water table. The underlying limestone units are classified as a regionally important aquifer.

7.14.8. Likely significant effects of the development are summarised in Table 3 below. I note that the assessments carried out did not identify any significant limitations.

Table 3: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Should the quarry not proceed then the potential sand and gravel reserves will not be excavated, and the area will remain as a hilly agricultural grass land fields.
Construction	Release of sediment run-off from work areas, potential occurrence of unstable soil from quarry faces and fuel spills from site machinery.
Operation	The ground level will be lowered across most the site area, decreasing the depth of overburden over the underlying bedrock and water table, which will increase the vulnerability of the groundwater to potential surface contamination. Potential sediment management issues arising from dust generation and suspended sediment runoff in surface water. There will also be risk of contamination of soils, bedrock and the underlying aquifer from oil or fuel leaks from machines and vehicles on the site.

	The creation of quarry faces and storage of stockpiles will risk instability.
Restoration	No impacts envisioned.
Cumulative	The cumulative operational impacts of the proposed development alongside the operation of Kildea Concrete on the adjacent site is considered insignificant as the scale and footprint of the development areas is extremely small when compared to the soil and geological attributes which are very widespread both in a local and regional context and no significant cumulative adverse impact are anticipated to occur. Possible operational and commercial benefits may accrue from having an aggregate user located so close to the aggregate source.

Mitigation

7.14.9. Mitigation and monitoring measures are outlined in Section 6.5.1/Table 6.8 and 6.5.3. respectively. Mitigation measures include maintaining the working area to a minimum; limiting access roads to the active areas of the quarry; dampening working areas; maintaining the height of stockpiles to a minimum; landscaping as soon as possible after completion; implementing best practice in relation to refuelling; and the use of bunds and spill kits. Monitoring measures comprise visual inspection of quarry faces to check the nature of the aggregates being exposed and to ensure slope stability.

Residual Impacts

7.14.10. No significant residual impacts are anticipated, including from the agricultural use of the lands.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

7.14.11. I have examined, analysed and evaluated the information provided in Chapter 6 and all the associated documents and submissions on file in respect of Land, Soils and Geology. I have inspected the site and the surrounding area. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts and provides suitably comprehensive range of mitigation and

monitoring measures in Section 6.5.1/Table 6.8 and 6.5.3. to reduce any potential impacts.

7.14.12. The potential impact of the proposed development on the land and soils/geology is primarily the extraction of inert soils/subsoils and gravel deposits, which will decrease the depth of overburden over the underlying bedrock and water table, increasing the vulnerability of the groundwater to potential surface contamination. The extraction/quarrying phase will also create sediment management issues in terms of potential dust generation and suspended sediment runoff in surface water and there will also be risk of soil contamination from oil or fuel leaks from machinery and vehicles on the site. Surface water will be directed to a settlement pond system prior to its re-use as wash water or percolation to ground. No suspended solids will leave the site and all waters will ultimately percolate to ground. The creation of steep exposed quarry faces, whilst a long term to permanent negative effect would be mitigated by adequate benching, toe barriers and re-soiling for vegetation cover. Possible scenarios which may create a serious pollution or accident risk would include the loss of bulk fuel or oils during re-fuelling machinery during quarrying or the collapse of large unsupported soil stockpiles and/or the failure of steep quarry faces. The potential volume of fuel loss would be relatively small, in the 10's rather than 100's of litres, and the duration of the impact would be temporary to short term. The other potential 'worst case scenario' would involve the collapse of soil from a stockpile or exposed excavation face which could pose a human health risk for operators working on the site. It is considered that this scenario would be very unlikely once stockpile heights and their location are managed and any steep excavations are minimised. Slope stability in sediment quarries are not envisioned as posing the same human health risks as those posed in rock quarries. I concur with the EIAR that the proposed development would have a negligible impact on land, soil and geology.

Conclusion

7.14.13. Having regard to the examination of environmental information in respect of Land, Soil and Geology, in particular the EIAR and supplementary information provided by the applicant, I am satisfied that the main significant direct and indirect effects arise during the operational phase of the development and that these effects can be mitigated by the measures set out in Section 6.5.1/Table 6.8, which for the most part comprise the

application standard good practices, and by the monitoring outlined in Section 6.5.3. There is no potential for cumulative effects given the nature of permitted/planned construction activity in the vicinity of the site. Therefore, I am satisfied that subject development will not give rise to significant direct, indirect, or cumulative effects on Soils and Geology of the site.

7.15. Water (Surface and Groundwater)

Issues Raised

7.15.1. One of the appeal submissions raises concerns in relation to the potential for the proposed development to affect the appellant's ability to draw water from his well, and also to affect other private wells in the area. An appellant also queries the proposal to use a washing system in an environmental fragile area, without attempting to capture spills off the concrete apron.

Examination of the EIAR

7.15.2. Context - Chapter 7 addresses the impact on Water (Hydrology and hydrogeology) and considers any direct or indirect effects on this resource arising from the proposed development. In this chapter the existing baseline conditions and character of the hydrological and hydrogeological characteristics of the site and local catchment are presented and the anticipated potential impacts from the proposed development are identified and discussed. Mitigation measures are proposed, residual impacts are assessed, and any relevant monitoring options are considered. The methodology and scope of the assessment involved the completion of a desk study and site walkovers and the installation of monitoring boreholes and groundwater sampling. The desk study included the collation and review of available information pertaining to the site such as any hydrological studies or databases relevant to the locality (see page 93). The site walkover was undertaken on the 27th of April 2021 and enabled the visual examination of the geological, geomorphological and land use characteristics of the site and its setting in the locality. Four boreholes were drilled in late April 2021 to establish the water table and possibly bedrock depths and also to enable groundwater samples to be taken.

7.15.3. Baseline – There are no surface water drainage features within the site. The nearest drainage features are drainage ditches c. 90m to 130m to the east and c. 70m to 90m

to the south of the site. The site is comprised of well drained fluvio-glacial sediments made up of boulder clays, sands and gravels and there is very good natural percolation to ground.

7.15.4. In terms of catchments, the site is located within the area defined by the EPA as the Water Framework Directive (WFD) Upper Shannon (Mid Shannon) Catchment, (Hydrometric Area 26G). The relevant sub catchment for the site area is the Shannon (Upper)_SC-100. The site is located within the smaller sub-catchment of the Mihanboy_010 River Water Body which flows from west to east c. 200m south of the site. This stream section joins another branch of the Mihanboy watercourse c. 600m south-east of the site and flows north-eastwards for c, 1.4km before it joins the Cross (Roscommon)_030 river system. There is no direct connection between the site and these waterbodies as all local drainage percolates to ground. The nearest drains are manmade ditches which were very overgrown and stagnant when inspected.

7.15.5. In terms of water quality status, the WFD River Water Body Bio-Status 2013 to 2018 identifies that the Mihanboy _01 watercourse had a 'Moderate Status' indicating moderate water quality. The Cross River is also classified as being of 'Moderate Status''. The WFD River Water Body 3rd Cycle (2021-2027) identifies both the Mihanboy_010 and Cross River water bodies having an 'At Risk' Status due to the water body quality being ranked as 'Moderate Status' and 'at risk' of not achieving the 'High Status' required. The main pressures effecting the water courses in this area relate to hydromorphological and extractive activities associated with the extraction and drainage management of peat deposits. Impacts from extractive industry activities include potential sediment/siltation pollution and alteration to the physical environment.

7.15.6. In relation to hydrogeology and aquifer classification, the site is identified by the GSI mapping as being underlain by carboniferous aged Visean Shelf Limestones (VIS) which are hydro-stratigraphically classified as undifferentiated Dianantian Pure Bedded Limestones (DPBL). These thick bedrock sequences tend to be massive and thickly bedded, with a shallow dipping orientation and karstified. These geological units are classified by the GSI as a "Regionally Important Aquifer with karstic (conduit) flow", (Rkc). The EPA identify the local area as underlain by the Funshinagh Groundwater Body (WFD) which is described as regionally productive bedrock with a Good Water Status which is identified as being 'At Risk' of not maintaining that status for the WED

3rd Cycle due to Anthropogenic pressures. No large groundwater abstractions or water supplies or GSI Groundwater Source Protection Schemes are identified in the general proximity (within 5km) of the proposed site area. The GS Borehole Database does not identify any boreholes in the vicinity of the site however there is one on the adjacent Kildea Concrete Plant site which provides process water for that facility.

7.15.7. In relation to site hydrogeology, four new monitoring boreholes were drilled on the boundaries of the proposed site area to quantify the groundwater level and where possible the depth to bedrock. Groundwater quality, when tested was found to be good (see results in Appendix 7.6).

7.15.8. Regarding, groundwater vulnerability, SI Vulnerability Mapping in the site area has identified a High (H) Vulnerability rating over the whole study area with Moderate Vulnerability (M) areas of less permeable ground, (M), identified outside the eastern boundary.

7.15.9. In terms of groundwater flow direction, the water table heights indicate that the groundwater gradient flows from the west-northwest towards the east-southeast. It is likely that the area would provide some base flow to the Cross River catchment via the underlying limestones.

7.15.10. Flooding, OPW records do not show any historic flood points on the site or in the general locality of the site, no flooding issues are identified in the catchment of the Mihanboy watercourse or the Cross River.

7.15.11. Likely significant effects of the development are summarised in Table 4 below. I note that the assessments carried out did not identify any significant limitations.

Table 4: Summary of Potential Effects

Project Phase	***Potential Direct, Indirect and Cumulative Effects***
Do Nothing	The lands will remain in agricultural use. Groundwater will remain highly vulnerable, and surface drainage will remain the same.
Construction	Not specifically addressed in EIAR.
Operation	The main risks arise from pollutants, e.g. fuel losses, to ground entering the hydrological cycle via the groundwater or by surface

	water runoff contaminated by fine sediments or hydrocarbons, directly impacting the local surface water regime. Changes to the topography and surface water drainage of the site increase groundwater vulnerability due to decreased soil and subsoil cover over the aquifer. Changes to ground levels which result in less steep topography would have positive effect in terms of run-off characteristics.
Restoration	Once reinstated to agricultural use, potential impacts from over application of chemicals, fertilizers and/or slurry.
Cumulative	No cumulative impacts to the water attribute are envisaged. The potential for cumulative impacts to arise from the adjacent concrete plant are insignificant as the adjacent site is in a different surface water catchment area and is also 'dry' operation with no interaction with the under lying aquifer, apart from using an on-site borehole to provide wash and process water to the site.

Mitigation

7.15.12. Mitigation measures are set out in Section 7.5.3. and 7.5.4 (i.e. end use phase). They include maintaining the areas where soils and subsoils are removed to a minimum; prohibiting machinery from re-entering completed areas; use of designated access routes within the site; channelling any sediment laden run-off through the quarry drainage system to the pond for reuse; implementing good practice to prevent fuel leaks; using a mobile fuel bowser, bunds and employing the use of spill kits; and application of agricultural best practice at end use stage/when site restored to agricultural use. Monthly groundwater monitoring is recommended (Section 7.5.5).

Residual Impacts

7.15.13. Residual impacts from the proposed development are not anticipated.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

7.15.14. I have examined, analysed and evaluated the information provided in Chapter 7 and all the associated documents and submissions on file in respect of Water. I have inspected the site and the surrounding area. I am satisfied that the information

submitted in the EIAR adequately demonstrates an understanding of the potential impacts and provides suitably comprehensive range of mitigation measures in Section 7.5.3 and 7.5.4 to reduce any potential impacts. Monitoring in the form of the use of information from the boreholes to record the depth of the water table on a monthly basis is proposed (see Section 7.5.5).

Surface Water

7.15.15. There is no uncontrolled connection between the surface water and the local drainage ditches which form part of the Mihanboy watercourse, and no discharges or runoff are proposed. I am satisfied that the proposed development would have a negligible impact on surface water.

Groundwater

7.15.16. The potential impact of the proposed development on the hydrological and hydrogeological regime is indicated as primarily short-term pollution risks during the development and excavation works with longer term changes in topography which will affect the long term surface water runoff and aquifer vulnerability. The excavation works will decrease the depth of subsoil over the underlying bedrock which will increase the sites aquifer vulnerability. A horizon of at least 3m thickness of unsaturated natural sediments is proposed to be left below the quarry floor so the existing classification of the sites High Vulnerability will not change. The excavation of inert soil/subsoil during the operational phase will result in the potential for fuel spills to ground which could percolate to the groundwater and suspended sediment runoff. I agree that the scale and temporary nature of such an impact would not be of a sufficient magnitude to affect either the use or integrity of the aquifer. Furthermore, there is no direct connectivity to the local watercourses so the impact magnitude would be considered negligible. Changes to the local topography result in less steep and undulating surfaces and are considered to be a long term positive/negligible impact. The potential occurrence of suspended sediments in rainfall runoff from earthwork activities in the excavation areas will only pose an environmental risk if the site was directly connected to the local watercourse. Silty wash water will however be managed and controlled and this activity does not pose an environmental risk and would have an negligible impact. There are no groundwater abstractions or dewatering works proposed. The only interaction will be the development of a shallow sump into the surface of the water table to provide small intermittent volumes of wash water so there

will be no change to the existing groundwater flow direction or aquifer potential, and I consider that such effects would be negligible. The future use of the lands for agricultural activities could have a negative impact if good agricultural practices are not followed however adherence to good agricultural practices will reduce this potential effect to an imperceptible impact. I am satisfied that the proposed development will not result in a significant negative impact on groundwater.

7.15.17. Concerns are raised by an appellant that the proposed development will impact on local private wells. A shallow sump is proposed on the eastern boundary of the site to provide wash water to the quarry. This sump will periodically pump water from the top of the water table. In response to the appellant's submission the applicant notes that the well will be intermittently used and that the quantities of water extracted in a single event are unlikely to exceed 20m3. I am satisfied that this element of the proposal will not create any significant draw down outside the immediate area, nor will it change the aquifer potential, or result in significant effects on wells in the vicinity of the site. The use of a washing system and potential impacts from same are raised in one of the appeal submissions. Water for the washing of excavated material will be sourced from the sump and water will be reused/recycled using the lagoon/ponds with an overflow to a soakaway. I am satisfied that this aspect of the proposal would not result in significant adverse impacts.

Wastewater

7.15.18. It is proposed to contain, store and then remove any wastewater from the site's welfare facilities so no treatment or percolation management is required for sewage. I am satisfied that this aspect of the proposal would not result in significant adverse impacts.

Flood Risk

7.15.19. The site is not indicated as being within an area at risk of flooding. Having regard to the information submitted I am satisfied that the appeal site is not at risk of flooding and would not increase the risk of flooding of adjacent sites.

Conclusion

7.15.20. Having regard to the examination of environmental information in respect of water, in particular the EIAR and supplementary information provided by the applicant, I am satisfied that the main significant direct and indirect effects arise during the

operational phase of the development and that these effects can be mitigated by the measures set out in Section 7.5.3 and 7.5.4. There is no potential for cumulative effects given the nature of permitted/planned activity in the vicinity of the site. Therefore, I am satisfied that subject development will not give rise to significant direct, indirect, or cumulative effects on water.

7.16. Air and Climate

Issues Raised

7.16.1. The appellants raise concerns in relation to the generation of dust from the proposed operation of the quarry. The appellants also note that dust emissions form the adjacent concrete plant are not monitored.

Examination of the EIAR

7.16.2. Context - Chapter 8 of the EIAR assesses the likely impacts of the proposed development in the context of air quality and dust. The chapter outlines the methodology used, sources of information, and the assessment criteria. The assessment of the potential air quality and dust impact has been undertaken with reference to the Quarries and Ancillary Activities Guidelines for Planning Authorities (April 2004), published by the Department of the Environment, Heritage and Local Government and the Guidance on the Assessment of Mineral Dust Impacts for Planning (May 2016 (v1.1)) published by the Institute of Air Quality Management (IAQM).

7.16.3. Chapter 9 in the EIAR comprises a Climate Impact Assessment, addressing potential climate impacts from the proposed development. The assessment sets out the legislative framework in relation to climate.

7.16.4. Baseline - The dominant wind direction is from the SE-S-SW. Background air quality in the area is very good quality and the site is located in the 'Zone D' area, as denoted by the EPA. The surrounding lands can be characterised as suburban to rural in nature with land uses in the area identified as agricultural, extractive, industrial and residential (single dwellings). The extractive industry is an established land use in the surrounding area. Kildea Concrete is located north of the site. Other quarries are noted as being located <4km west of the proposed site. Background air quality and dust deposition

rates are influenced by these quarries as well as existing local traffic and agricultural activities, etc.

7.16.5. In relation to Climate, Chapter 9 of the EIAR sets out the machinery and equipment which will be used on the site and sets out the weather/climatic trends for the area.

Potential Effects

7.16.6. Likely significant effects of the development are summarised in Table 5 below. I note that the assessments carried out did not identify any significant limitations.

Table 5: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Not assessed in EIAR.
Construction	The short-term construction phase (3-6 months) will have a slight to minor dust impact. The proposed office is in excess of 200m from the nearest residential property.
Operation	The stripping of topsoil, excavation of sand and gravel, crushing and screening of aggregates, and the transport of sand, gravel and finished products will result in point emissions. Wind can carry dust particles beyond site boundaries. Fine materials from lorries can be deposited along public roads. The climate chapter notes that emissions associated with the development are assessed as having a slight impact over a long term period.
Restoration	Dust deposition impacts from de-commissioning of the sandpit site may result in short-term dust deposition impacts. Such activities will include movement of stockpiles, internal bund construction, restorative planting works, de-commissioning of plant and equipment, etc.
Cumulative	No quarrying takes place on the site to the north (Kildea Concrete) with all aggregate transported to the site for production purposes. Processes on the adjacent site are all wet processes and dust-free. Stockpile storage and lorries accessing Kildea Concrete are a

	potential dust source. The potential dust impact of the Kildea Concrete site has been assessed using Aermod modelling software. The cumulative impact of the Kildea Concrete site and the proposed sand and gravel quarry has been assessed using Aermod modelling software, see attached Dust Dispersion Modelling Report (Appendix 8.A) indicates there will be no significant cumulative dust impact of the Kildea Concrete site and the proposed sand and gravel quarry. Emissions associated with the development and other activities in the vicinity are likely to significant.

Mitigation

7.16.7. Section 8.5 of the EIAR sets out mitigation measures to prevent significant dust emission from the proposed quarry. These include the use of water bowser to dampen down the site; the sweeping/wetting of roadways; the use of a 10kmph speed limit within the site; the use of a wheel and underbody wash; and positioning stockpiles so that they are not exposed to winds.

7.16.8. Section 9.6 (Chapter 9) of the EIAR sets out mitigation measures in respect of emissions, including adherence to good practice, e.g. the switching off of plant when not in use; regular servicing of plant; energy audits and preference to the purchase of plant with low emissions. Monitoring for dust deposition is proposed (see Section 8.5.3).

Residual Impacts

7.16.9. No residual impacts are indicated in relation to air quality and dust. The EIAR does not refer to residual impacts in respect of Climate.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

7.16.10. I have examined, analysed and evaluated the information provided in Chapter 8 and Chapter 9 and all the associated documents and submissions on file in respect of Air Quality and Dust, and Climate. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts generated by the proposed development and provides a suitable range of mitigation and monitoring measures.

7.16.11. The extraction of sand and gravel and associated HGV traffic movements will result in dust deposition. I do not consider that the construction phase of the proposal

will result in significant dust impacts noting the duration of this phase and the distance between the initial site works and residences (i.e. in excess of 200 metres). Processing operations (i.e. crushing, screening, washing, stockpiling activities and vehicle movements) are to be located on the sandpit floor and the distance to the site boundary and the depth below existing ground level will significantly reduce the potential for dust emissions from the site. The stockpile area will be located west of the topsoil storage area which will further assist in containing dust emissions within the site boundaries. The conveyors on the crushing plant will be covered to prevent dust escaping. It is not anticipated that the washing of the quarried sand and gravel will result in significant dust emissions. The EIAR notes that the contribution of the crushing, screening and transfer operations to ambient dust, PM10 and PM2.5 concentrations in the area will be minimal because of the particle size of the dust that will be generated by the crushing and screening operations will be substantially larger than 10 um and that frequent wetting of surfaces will suppress dusts emissions during dry and windy weather. This assumption is considered reasonable. The sandpit walls and screening bunds will also provide increased dust mitigating effects. The majority of properties in the area to the west of the site and are upwind of the prevailing wind direction and it is therefore unlikely that these properties will experience a significant dust impact. The nearest property to the north-east and east of the site, i.e. downwind of the prevailing wind direction, are more than 250m away and are therefore unlikely to experience a significant dust impact. The DoEHLG guidance outlines that "residents living in proximity to quarries can potentially be affected by dust up to 0.5km from the source, although continual or severe concerns about dust are most likely to be experienced within about 100m of the dust source". The closest dwelling to the site is indicated as being c. 46 metres from the northern site boundary, however the provision of berms along the northern site boundary and the other measures, including the wetting of surfaces, will minimise the impact from air borne dust on this property to non-significant levels.

7.16.12. Dust deposition impacts from de-commissioning (e.g. movement of stockpiles, internal bund construction, restorative planting works, de-commissioning of plant and equipment, etc.) will result in short-term dust deposition impacts these works will be carried out during an 8 week window per annum and given their duration I am satisfied that significant impacts will not arise as a result.

7.16.13. A detailed dust dispersion modelling assessment (as attached Dust Dispersion Modelling Report in Appendix 8.A) has been carried out. The assessment assesses the potential worst-case dust impact at the receptor properties within 500m of the site boundary and is based on the use of the EPA approved Aermod modelling software. The assessment includes 3 no. scenarios, the adjacent Kildea Concrete site, i.e. the baseline; the proposed quarry; and a cumulative assessment/scenario of the dust potential from the proposed quarry site layout and the adjacent Kildea Concrete site. Aermod dispersion modelling software has been used to predict the annual mean and 24 hour PM10 concentrations, the annual mean PM2.5 concentrations and the dust deposition rates at sensitive receptors in proximity to the proposed quarry site. The impact of dust deposition, PM10 and PM2.5 concentrations on sensitive receptor locations in proximity to the site was found to be negligible and the proposed development will not result in an exceedance of the recommended dust deposition rate limit for sensitive receptors of 350 mg/m/day, as recommended by the EPA in their guidance Environmental Management in the Extractive Industries (April 2006), or the Air Quality Standard limit values for PM10 or PM 2.5. On the basis of the predicted traffic flows and as the site is not within an Air Quality Management Area (AQMA) and as the existing local air quality is of good quality, an Air Quality Impact Assessment for traffic generated by the development was not carried out. I consider this reasonable.

7.16.14. I note that Section 3.3 of the Quarry Guidelines sets out a number of best practice mitigation measures to prevent dust creation at source, one such measure includes paving road surfaces. I note that the access road within the site is paved.

7.16.15. There are also potential impacts for people working within the quarry due to exposure to fine dust. Serious risks to human health are not envisaged as the quarrying activity would continue to be managed in accordance with all applicable legislation and guidelines, including Safety, Health and Welfare at Work (Quarry) Regulations 2008.

7.16.16. There is potential for future climate change to alter meteorological conditions, increasing wind speeds, longer dry periods and increased rainfall. Increased rainfall is likely to reduce the risk of dust nuisance as dust emissions are dramatically reduced during wet conditions. However, increased wind speed and dry periods have the potential to cause adverse impacts. Any increase of dust deposition concentrations would be reported through dust monitoring and, if necessary, additional dust

minimisation and suppression measures would be put in place. I am satisfied that climate change would not have a significant impact on dust.

7.16.17. One of the appellants notes that the adjacent concrete plant is not subject to dust monitoring. I note that processes within Kildea's plant are wet processes and that dust from this plant have been included in modelling undertaken in the EIAR.

7.16.18. Having regard to the information submitted which is robust and evidence based and subject to the implementation of mitigation measures to supress dust, I am satisfied that the impact of fugitive dust on sensitive receptors is not significant.

7.16.19. Emissions (Greenhouse Gass emissions), associated with the development (see Chapter 9) are assessed as having a slight impact over a long term period. Subject to the mitigation measures set out at Section 9.6 I am satisfied that the proposed development would not give rise to significant emissions.

Conclusion

7.16.20. Having regard to the examination of environmental information in respect of Air Quality and Dust, and Climate, in particular the EIAR and the appeal submissions, I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potent impacts on air quality and climate generated by the proposed project and provides suitably comprehensive range of mitigation and monitoring measures in Section 8.5 and Section 9.6 to reduce any potential impacts to non-significant levels. In relation to dust, the is no potential for cumulative effects when considered alongside the adjacent concrete plant, and having reviewed the planning history in the vicinity I note the absence of permitted or planned construction activity in the vicinity of the site which would significantly contribute to dust/emissions, and also the significant distance of the development from other existing, permitted, or proposed quarries. Therefore, I am satisfied that subject development will not give rise to significant direct, indirect, or cumulative effects on air quality. The EIAR notes that emissions (see Chapter 9) associated with the development and other activities in the vicinity are likely to significant, however having considered the mitigation measures proposed, and noting the duration of the proposed development, I am satisfied that that proposed development will not give rise to significant direct, indirect, or cumulative effects on climate.

7.17. Noise and Vibration

Issues Raised

7.17.1. Concerns are raised in one of the appeal submissions that the proposed development would negatively affect the amenity of residences and farms in the area as a result of noise, and the appeal also notes that the existing concrete plant would add to the noise impacts.

Examination of the EIAR

7.17.2. Context - Chapter 10 of the EIAR assesses the likely impacts of the proposed development in terms of noise and vibration. The chapter outlines the methodology used, sources of information, and the assessment criteria. Sand and gravel will be extracted by means of excavators and dump trucks and processed within the site using mobile plant. Machinery and equipment to be used is described on page 221. All traffic will enter the landholding via the site office and weighbridge and use a macadam road surface up to the infrastructure area in the centre of the processing area.

7.17.3. Baseline - A noise survey was undertaken in proximity to the nearest residential properties to the site on 24th of May 2021 to establish the background noise levels in the area. Noise levels have previously been recorded in close proximity to similar quarry activities and this information has been used to allow for accurate noise prediction modelling at the site. Table 10.2 of the EIAR outlines the noise generating sources within a quarry and the level of noise that these sources are likely to generate. A prediction of the specific noise levels at the surrounding residential properties from the proposed site using CadnaA noise prediction software has been undertaken. A comparison of the predicted noise levels at the surrounding residential properties (Noise Sensitive Receptors [NSR's]) with the relevant Quarries and Ancillary Activities, Guidelines for Planning Authorities, April 2004, Department of the Environment, Heritage and Local Government. (DoEHLG Guidance) has been undertaken. The noise and vibration impact assessment has been undertaken with regard to:

- Quarries and Ancillary Activities, Guidelines for Planning Authorities, April 2004, Department of the Environment, Heritage and Local Government. (DoEHLG)

- Environmental Management Guidelines Environmental Management in the Extractive Industry (Non-Scheduled Minerals), Environmental Protection Agency (2006)
- EPA - Guidelines on the Information to be Contained In Environmental Impact Assessment Reports - 2022

The Environmental Protection Agency (EPA) has produced a Guidance Note for Noise in Relation to Scheduled Activities (EPA, 1996). In relation to quarry developments and ancillary activities, it is recommended that noise from the activities on site shall not exceed the following noise ELVs at the nearest noise-sensitive receptor:

- Daytime: 08:00-20:00 h LAeq (1 h) = 55 dB(A)
- Night-time: 20:00-08:00 h LAeq (1 h) = 45 dB(A)

Potential Effects

7.17.4. Likely significant effects of the development are summarised in Table 6 below. I note that the assessments carried out did not identify any significant limitations.

Table 6: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Not assessed in EIAR.
Construction	Construction of the car parking, access road and office will last for c. 3 - 6 months and will have a slight to minor noise impact. The areas of construction are c. 220m from the nearest residential property.
Operation	The modelling indicates that noise levels at the closest sensitive receptor would be within the criterion of 55dB $L_{Aeq, 1hr}$. No blasting is proposed and there will be no vibration or air-overpressure as a result.
Restoration	Noise levels from decommissioning will result in short-term noise impacts. Such activities will be subject to a higher noise limit of 70 dB(A) as distinct from normal site operations. Such activities may include overburden removal, bund de-construction, restoration

	works, de-commissioning of plant and equipment, etc. Typically, such works will be carried out during an 8 week window.
Cumulative	The predicted cumulative noise level at the nearest representative properties (NSR 4, NSR 6 and NSR 9) including noise from the concrete plant to the north is shown to be less than the DoEHLG Guidance limit value of 55 dB(A). At all other properties in the area a lower cumulative noise level will occur.

Mitigation

7.17.5. Mitigation measures are set out in Section 10.5 of the EIAR and include restricting working times to daytime hours; enforced 10 kmph speed limit within the site; the use of quite working methods when appropriate; use of noise reduced plant; use of earth mounds; silencing of reversing alarms; complaint monitoring and employment of best practice noise measures. Section 10.6 refers to noise monitoring and notes that once operational, noise monitoring surveys will be undertaken (if required).

Residual Impacts

7.17.6. It is considered that noise levels associated with the proposed development would not contribute any significant noise impact at noise-sensitive locations.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

7.17.7. I have examined, analysed and evaluated the information provided in Chapter 10 and all the associated documents and submissions on file in respect of Noise and Vibration. I have inspected the site and the surrounding area. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts generated by the proposed development and provides a suitable range of mitigation and monitoring measures.

Noise

7.17.8. The Quarry Guidelines and the EPA's Environmental Management in the Extractive Industry set out a recommended standard of 55dB(A) L_{Aeq} (1 h) for daytime noise and 45 dBA L_{Aeq} (1 h) for night-time at the nearest sensitive receptor. The guidelines also note that it may be appropriate to permit higher noise ELVs (Environmental Limit Values) for short-term temporary activities such as construction of screening bunds, etc, where these activities will result in a considerable environmental benefit. Over the differing phases of excavation, the location of on-site activities will vary. This results in a range of noise levels at the nearest noise sensitive receptor (houses). There will also be mobile sources of noise within the quarry and the intensity of activity will vary depending on demand. Noise levels also include HGV movements. A noise assessment was undertaken for 11 no. noise sensitive receptors (dwellings) - see Figure 10.1 for receptor locations. A baseline noise survey was carried out in proximity to the site on the 24th of May 2021, to establish the background noise levels in the area. Noise measurements were taken on public lands in proximity to the nearest houses but also in close proximity to the surrounding roads. Table 10.5 of the EIAR sets out predicted noise levels at each noise sensitive receiver location. The modelling includes an indicative location for proposed excavation, mobile crushing and screening and loading and delivery operations during each phase. Predicted noise levels are in accordance with a suggested noise limit of 55 dB(A) during the continuous activity over a 1 hour period. There will be short-term construction phase impacts from the construction of the car park, access road and the office. These impacts will last for c. 3 - 6 months and will have a slight to minor noise impact, being located in excess of 220m from the nearest dwelling. The proposed development also includes the construction of berms. The EIAR has not provided the potential noise from this activity. However, given the temporary nature of the works and the overall benefit from this feature I am satisfied that the impact would be negative and not significant.

Vibration

7.17.9. There will be no blasting undertaken on site and therefore, there will be no vibration or air-overpressure impact. I am satisfied that there would be no significant impact from vibration.

Conclusion

7.17.10. Having regard to the examination of environmental information in respect of Noise and Vibration, in particular the EIAR and the appeal submissions, I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts on noise and vibration generated by the proposed project and provides suitably comprehensive range of mitigation and monitoring measures in Section 10.5 and 10.6 (monitoring) to reduce any potential impacts to non-significant levels. Cumulative effects have been included in the noise modelling and shown not to exceed the DoEHLG Guidance limit value of 55 dB(A). I am satisfied that subject development will not give rise to significant direct, indirect, or cumulative effects on noise and vibration.

7.18. Material Assets, Cultural Heritage and the Landscape

7.18.1. The format of my assessment follows the headings as set out in the Planning and Development Act, 2000 (as amended). Having regard to the information provided in the applicants EAIR the following Sub-headings are used:

- Material Assets
- Cultural Heritage
- Landscape and Visual Impact Assessment
- Traffic and Transport Assessment

7.19. Material Assets

Issues Raised

7.19.1. No concerns were raised in the appeal submissions relating to material assets.

Examination of the EIAR

7.19.2. Context - Chapter 11 of the EIAR 'Material Assets' outlines the effects of the proposed development on material assets. Material assets are described as being resources that are valued and are intrinsic to specific places. Cultural heritage and infrastructure are subsequently addressed in Chapters 12 and 14. The chapter addresses the impacts of the proposed development on electricity/telecommunications, gas, water, sewerage and waste management.

7.19.3. Baseline - The area is characterised by dispersed housing and farm buildings. There is a concrete batching plant to the north. The site can be served with electricity and there is good mobile and broadband coverage in the area. There is an existing water supply on site which is adequate to supply the proposed service buildings in the proposed development. All waste generated indirectly from the extraction processes such as batteries, oil filters, obsolete or broken-down plant, and waste generated from the office and canteen will be stored securely on site prior to collection by an approved waste collection agent. There will be no waste arising from the direct extraction of material from the proposed development. The topsoil will be stored on site for future reuse and restoration. All the remaining materials have some commercial value and will be sold for use off site.

Potential Effects

7.19.4. Likely significant effects of the development are summarised in Table 7 below. I note that the assessments carried out did not identify any significant limitations.

Table 7: Summary of Potential Effects

Project Phase	**Potential Direct, Indirect and Cumulative Effects**
Do Nothing	Not addressed in EIAR. In the absence of the quarry the lands would remain in agricultural use.
Construction	Not addressed in EIAR.
Operation	Impacts from the generation of waste will be temporary and slight. There are existing private sewage treatment plants on the lands to the north however it is unlikely that the proposed development will affect their operation. Adherence to HSA Quarry Safety Guidelines SHWW Quarry regulations 2008 will reduce risk from instability of excavation and the separation distances will offer protection to roads and existing services.
Restoration	Following restoration there will not be any effects from waste.

Cumulative	No cumulative impacts anticipated when considered in conjunction with permitted solar farm. The quarry may have a positive implication for the solar farm representing a source for aggregate.

Mitigation

7.19.5. There are no mitigation measures proposed. Mitigation measures contained Chapter 14 of the EIAR address potential impacts on transport and traffic.

Residual Impacts

7.19.6. No residual impacts are anticipated.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

7.19.7. I have examined, analysed and evaluated the information provided in Chapter 11. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts on Material Assets. Services are available, or can be provided to the site. Waste generated from the proposed quarry is not significant and will be removed off site by authorised agents. Topsoil will be reused within the site. Impacts on existing services in the area are not significant.

Conclusion

7.19.8. Having regard to the examination of environmental information in respect of Material Assets, in particular the EIAR and the appeal submissions, I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts on material assets generated by the proposed project. I agree with the EIAR that mitigation measures are not required. I am satisfied that subject development will not give rise to significant direct, indirect, or cumulative effects on material assets.

7.20. ***Cultural Heritage***

Issues Raised

No issues were raised by the third parties regarding cultural heritage.

Examination of the EIAR

7.20.1. **Context** - Chapter 12 of the EIAR addresses Cultural Heritage. A study area comprising the site and the 500m of surrounding lands was determined to be appropriate. Beyond this area a development of this nature would have no direct/indirect impacts. The Cultural Heritage components of the study comprise the results of a survey and evaluation of selected sites of archaeological and architectural heritage. A programme of intrusive Archaeological Testing was undertaken. As part of a documentary/cartographic search sources were examined from which a list of sites and areas of Archaeological Heritage interest/potential was compiled (see page 243 and 244). A preliminary detailed field survey was undertaken in mid-April 2021, with a further inspection carried out in early-May 2021. These entailed a surface reconnaissance of the subject lands and inspections of the surrounding lands. An attempt was also made to identify previously unrecorded sites of cultural heritage potential within and in the immediate environs of the proposed development area. Sites/features of cultural heritage potential identified on the basis of the paper survey were inspected in an attempt to confirm their locations on the ground and to determine, if possible, their likely extent.

7.20.2. **Baseline** – (Archaeology) The closest archaeological monument/site is a Cist (SMR No:R0051-105; Creagh Td), c. 310m to the south. There is a Redundant Record site (SMR No: R0051-020) c. 245m to the south. No 'stray' artefacts are listed in the Topographical Registers of the National Museum of Ireland as having been discovered from the site or immediate environs. No archaeological investigations have been reported as having been undertaken within the proposed development lands or wider Cultural Heritage Study Area. A programme of Archaeological Testing was undertaken under licence within the general extent of the proposed development lands in early May 2021. 17 no. test trenches were excavated within the general extent of the site. No subsurface features of archaeological interest/potential were uncovered. Visual inspections of the topsoil during excavation and subsequent raking-through of the spoil did not result in the recovery of any artefacts of interest.

7.20.3. (Architectural Heritage) There are no structures listed in the RPS of the Development Plan as being located within the site or wider study area and there are no significant historical events associated with the site which have the ability to be impacted upon by the proposed development.

Potential Effects

7.20.4. Likely significant effects of the development are summarised in Table 8 below. I note that the assessments carried out did not identify any significant limitations.

Table 8: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	If the quarry is not developed on the site then the site will remain in agricultural use.
Construction	The site/adjoining area are of very low/negligible archaeological potential and it is predicted that the proposed development will not cause any impacts with respect to any features or monuments of archaeological heritage interest.
Operation	The site/adjoining area are of very low/negligible archaeological potential and it is predicted that the proposed development will not cause any impacts with respect to any features or monuments of archaeological heritage interest.
Restoration	Not addressed in EIAR.
Cumulative	None envisioned[10].

Mitigation

7.20.5. Mitigation (or monitoring) measures are not proposed.

Residual Impacts

7.20.6. Residual impacts are not envisioned.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

7.20.7. I have examined, analysed and evaluated the information provided in Chapter 12 and I have inspected the site and the surrounding area. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential

[10] Page 258 of the EIAR refers to masterplan lands north of Enfield Relief Road. This appears to be a typographical error.

impacts on cultural heritage. The site and adjacent area are of very low/negligible archaeological potential. Test trenching on the site yielded no evidence of archaeology. I am satisfied that the proposed development would not give rise to significant impacts on cultural heritage.

Conclusion

7.20.8. Having regard to the examination of environmental information in respect of Cultural Heritage, in particular the EIAR and supplementary information provided by the applicant I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding cultural heritage context of the site and surrounding area. Noting that the site and adjacent area are of very low/negligible archaeological potential, and on the basis of the site testing results I am satisfied that mitigation measures and monitoring are not required. Similarly, given the low archaeological potential on the site/in the vicinity there is no potential for cumulative effects. Therefore, I am satisfied that subject development will not give rise to significant direct, indirect, or cumulative effects on Cultural Heritage.

7.21. **Landscape and Visual Impact**

Issues Raised

7.21.1. No issues were raised in the appeals in relation to landscape/visual impact.

Examination of the EIAR

7.21.2. Context - Chapter 13 of the EIAR addresses Landscape and Visual Impact. The chapter comprises a Landscape and Visual Impact Assessment (LVIA). The assessment was carried out in accordance with the methodology prescribed in the Guidelines for Landscape and Visual Impact Assessment, 3rd edition, 2013 (GLVIA) published by the UK Landscape Institute and the Institute for Environmental Management and Assessment. The following Methodology was used in this assessment:

- A desk top study of the proposed site and its environs, including reviewing aerial photography and ordinance survey documents.
- A site survey was undertaken to determine the character of the landscape and the surrounding area, including site visits during June 2021.

- An assessment of the proposed development was carried out by examining the layout plans, elevations, and sections to determine the impacts of the development.
- An evaluation of these impacts was carried out in accordance with the criteria set out in the EPA guidelines.

7.21.3. Baseline - The area in the vicinity of site is characterised as an open field system with existing native hedgerows and occasional stone walls. The landform rises to a height of 72m in the centre of the subject site. There are several quarries in the local vicinity which has brought about considerable landscape change. The site is directly adjacent to a concrete plant. Eskers are a prominent feature of the area and the site is located in the Landscape Character Area 35 - the Brideswell Esker Belt. The site is located within a landscape of moderate value. There are no protected views or scenic routes on or near the site. There are no buildings on the site.

Potential Effects

7.21.4. Likely significant effects of the development are summarised in Table 9 below. I note that the assessments carried out did not identify any significant limitations.

Table 9: Summary of Potential Effects

Project Phase	**Potential Direct, Indirect and Cumulative Effects**
Do Nothing	Should the development not proceed it is likely that the site would remain in its present state, a field system. The landscape buffer and hedge and tree planting would not occur.
Construction	Principle impacts are envisaged as occurring during the operational phase.
Operation	The removal of landform and hedge will be negative at first however over time, as the proposed landscape measures mature, it will present a greater landscape buffer and habitat than is currently in existence. Although the development of the site initially will be negative, the planting of trees and hedgerows will result in a positive impact. A landscape buffer of 5 - 8m is proposed along the entire perimeter of

	the subject site, adding to the landscape quality and providing for habitat renewal. Visual impact from 8 no. receptor locations noted as negative in short term to neutral-positive in medium term.
Decommissioning	Not addressed in EIAR. It is noted however that post extraction phase the site will be used for agricultural purposes.
Cumulative	No impacts are anticipated.

Mitigation

7.21.5. Mitigation measures are outlined in Section 1.7.2 and comprise, the reintroduction of the native hedgerows and trees; the augmentation of existing hedgerows with native hedge planting; and the provision of a landscape buffer of 5 - 8 m to surround the subject site. It is envisioned that there would be no impact during the construction phase. Section 2.0.0 sets out monitoring measures, including that a landscape architect will oversee the project and inspect trees.

Residual Impacts

7.21.6. Residual impacts are not envisioned. Over time proposed landscape measures will provide a positive visual impact and biodiversity enchantments.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

7.21.7. I have examined, analysed and evaluated the information provided in Chapter 13 in respect of Landscape and Visual Impact. I have inspected the site and the surrounding area. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts and provides suitably comprehensive range of mitigation and monitoring measures (see Section 1.7.2 and 2.0.0 respectively) to reduce any potential impacts within the appeal site.

7.21.8. The LVIA examined the impact of the proposed development from 8 no. visual receptors. These receptors are located along the local road network (i.e. L-2025 and L-2026), and vary from locations in close proximity to the site up to a distance of c. 1km from the site. I am satisfied that the receptor locations are representative. It is acknowledged that the proposed development would likely be visible from short

distance viewpoints VP1, VP, 2, VP 3, VP 4 and VP5, however, due to the context of the surrounding rural area, the existing road network and the existing concrete plant I am satisfied that the impact would not be significant. I agree with the assessment of impact in respect of the 8 no. receptors, which range from negative in short term to neutral-positive in medium term, and the assertion in the LVIA that the development of the site whilst entailing the removal of a landform will be negative initially, but as the proposed landscape measures mature, it will present a greater landscape buffer and habitat than is currently in existence. I am satisfied that the impact of the proposal on the landscape will be moderate - significant in the short term, with slight impacts in the long term.

Conclusion

7.21.9. Having regard to the examination of environmental information in respect of Landscape and Visual Impact, in particular the EIAR and the appeal submissions, I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the impact of the proposal on the receiving landscape generated by the proposed project and provides suitably comprehensive range of mitigation and monitoring measures in Section 1.7.2 and 2.0.0 to reduce any potential impacts to non-significant levels. I am satisfied that subject development will not give rise to significant direct, indirect, or cumulative effects in the context of the receiving landscape. I am also satisfied that the proposed development accords with Policy Objective NH 10.25 of the Roscommon County Development Plan 2022 – 2028.

7.22. Traffic and Transport Assessment

Issues Raised

7.22.1. Issues relating to traffic and transportation have been raised in the appeal submissions, specifically, concerns in relation to road safety and the additional traffic which the proposal will create; the impact of traffic from the proposal on the operation of the appellant's farm, the safety of residents in the area, and children travelling to/from school, who are required to walk on the verge of the L-2025 in order to access public transport; and the impact of 50,000 HGV movements at a dangerous junction. I also note that the Roads Department recommended that a Special Development Contribution be attached in relation the strengthening of the local road to cater for the proposal and for junction improvements.

Examination of the EIAR

7.22.2. Context - Chapter 14 of the EIAR addresses Traffic and Transport[11]. The chapter comprises an assessment of existing and purposed traffic conditions, traffic generation and trip distribution arising from the proposed development, an operational assessment of junctions in the vicinity, and an assessment of road safety, specifically sightlines and internal layout. Traffic counts were undertaken on the 14th of April 2021 between 0700 and 1900 hours. Count information was obtained at the junction with the access road to the site/L-2025 and the junction between the R362 and L-2025. To account for lower traffic flows due to Covid-19 restrictions a TII traffic counter off the N6 west of Junction 11 was used to reflect normal traffic flows (i.e. factored up by 21%).

7.22.3. Baseline – The Peak traffic flow figure for the access road/L-2025 junction is 156 (AM) and 162 (PM). The Peak traffic flow figure for the R362/L-2025 junction is 548 (AM) and 514 (PM). RSA data indicates that there have been no collisions at the location of the existing access/junction with L-2025 or at the R362/L-2025 junction in the previous 12 years. Sightlines of 160[12] metres (from a 3 metre set-back) are available at the junction onto the L-2025. The private access road is c. 180 metres in length, c. 4.5 metres in width with pull-in areas for HGVs.

Potential Effects

7.22.4. Likely significant effects of the development are summarised in Table 10 below. I note that the assessments carried out did not identify any significant limitations.

Table 10: Summary of Potential Effects

Project Phase	Potential Direct, Indirect and Cumulative Effects
Do Nothing	Not addressed in the EIAR, however the baseline data for the access road/L-2025 and R362/L-2025 junctions are set out at pages 316 – 318 of the EIAR. This information reflects junction capacity in the absence of the proposed quarry. The proposed development is

[11] Page 305 of the EIAR refers to the proposal as the restoration of a disused sand pit. This appears to be a typographical error.

[12] This appears to be a typographical error. The drawings submitted indicate sightlines of 90 metres in either direction.

	estimated to result in 4,500 trips per annum. In the event that the proposed quarry is not developed these trips would not be undertaken within the local road network.
Construction	Not addressed in EIAR.
Operation	Data for the access road/L-2025 and R362/L-2025 junctions are set out at pages 316 – 318 of the EIAR. In the AM peak hour the R362/L-2025 junction will be at capacity, resulting in queues and delays for a 15-minute period between 09:00 and 09:15. The junction will however reach capacity with or without the proposed development.
Restoration	Not addressed in EIAR.
Cumulative	Baseline figures in the traffic counts capture traffic generated by Kildea Concrete. Forecasting and has also taken account of traffic generated by Kildea Concrete and the construction of a permitted solar farm in the vicinity.

Mitigation

7.22.5. No mitigation measures are proposed in the EIAR.

Residual Impacts

7.22.6. No residual impacts are identified in the EIAR in relation to Traffic and Transport.

Analysis, Evaluation and Assessment: Direct and Indirect Effects

7.22.7. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts of the proposal on traffic and transport. The proposed development will generate 4,500 HGV trips per annum, which based on a 300 day working year equates to an average of 15 HGV trips per day (30 per day when consignments are considered on an in/out basis). The proposal will employ 4 no. employees generating 4 no. trips per day (8 no. trips on in/out basis).

7.22.8. The assessment has used TII medium range forecasting and has also taken account of traffic generated by the construction of a permitted solar farm in the vicinity. Capacity assessment using PICADY software has been used to calculate junction capacity for AM and PM Peak hour. Junction analyses to assess the effects of traffic generated by

the proposed development has been undertaken for the existing L2025/Kildea Concrete Plant priority junction and the existing R362/L2025 priority junction. The analysis shows that:

- The existing L2025/Kildea Concrete Plant priority junction currently operates within capacity with no queues and minimal delays.
- The existing L2025/Kildea Concrete Plant priority junction will operate within capacity with no queues and minimal delays when the development is operational in 2023, year of opening, 2028, five years after opening and in 2033, ten years after opening.
- The existing R362/L2025 priority junction currently operates within capacity with no queues and minimal delays during the PM peak hour. In the AM peak hour, the junction is at capacity which results in queues and delays at the junction. This occurs during a 15-minute period between 09:00 and 09:15 and is a result of school traffic carrying out a U-turn at the existing junction.
- The existing R362/L2025 priority junction will operate within capacity with no queues and minimal delays when the development is operational in 2023, year of opening, 2028, five years after opening and in 2033, ten years after opening during the PM peak hour. In the AM peak hour, the junction is at capacity which results in queues and delays at the junction during a 15-minute period between 09:00 and 09:15.

Conclusion

I have had regard to the examination of environmental information in respect of Traffic and Transport, in particular the EIAR and supplementary information provided by the applicant and the appeal submissions. I am satisfied that the information submitted in the EIAR adequately demonstrates an understanding of the potential impacts of the proposed project on traffic and transport. The R362//L-2025 junction is currently operating at/close to capacity but will exceed its capacity for the design years 2028 and 2033 with and without the proposed development. Noting the trips generated by the proposed development and the extent of queuing attributable to the proposed development during these Peak AM periods I am satisfied that the proposed development will not result in significant impacts on the receiving road network,

including junctions in the vicinity, and will not result in significant queuing of traffic on the road network/at the junctions examined.

7.23. ***Interaction and Cumulative Effects***

Chapter 15 addresses Interactions. It is acknowledged that all aspects of the environment are likely to interact to some extent and to varying degrees of complexity. Occurrences of interactions between environmental topics have been addressed in each chapter. Table 15.1 provides a matrix of interactions between environmental topics.

7.23.1. I have considered the interrelationships between factors and whether these might as a whole affect the environment, even though the effects may be acceptable on an individual basis. I generally agree with the findings of Chapter 15 in relation to the identification of interactions.

7.24. ***Cumulative Impacts***

7.24.1. Given the location of the proposed development it is unlikely that the proposed development would occur in tandem with the development of other sites, with the exception of Kildea's Concrete and the permitted solar farm. It is, therefore, concluded that the cumulation of effects from the planned and permitted development and the proposed development would not be likely to give rise to significant effects on the environment other than those that have been described in the EIAR and considered in this EIA.

7.25. ***Reasoned Conclusion on the Significant Effects***

7.25.1. Having regard to the examination of environmental information set out above, to the EIAR and other information provided by the applicant, and to the submissions on the file, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- ***Population and Human Health:*** The overall impact on population and human health would be neutral/imperceptible due to the location of the proposed development in a rural area, remote from population centres and the proposed mitigation measures. Positive impacts to the local economy during the

construction and operational phase of the proposed quarry. The potential for significant effects on human health from noise and vibration, air quality (dust) during the construction and operational phases can be avoided, managed and mitigated by measures that form part of the proposed scheme.

- ***Biodiversity***: Having regard to the low ecological value of habitats on the site, the absence of species of conservation importance on the site (flora and fauna), the impact of the loss of habitat and disturbance of species during the construction and operational phase is not significant. The potential for effects on biodiversity during the construction and operational phases can be avoided, managed and mitigated by measures that form part of the proposed scheme.

- ***Land, Soils, Water, Air and Climate:*** The decrease in the depth of overburden will increase the vulnerability of groundwater to contamination. Mitigation measures will prevent the pollution of ground water and surface water and will prevent negative impacts on the water quality from the operation of the site.

  Noise and dust emissions will have a short-term negative impact on adjoining residential properties. Mitigation measures will control of release of dust and reduce noise emissions to within acceptable limits.

- ***Material Assets, Cultural Heritage and the Landscape:*** The removal of landform will be negative initially but overtime and with the implementation of mitigation measures the quality of the landscape will be improved and the visual impact of the proposed quarry reduced. The planting of trees and hedgerows will result in a positive impact and will provide for the creation of new habitats.

7.25.2. The EIAR has considered that the main significant direct and indirect effects of the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. The assessments provided in the individual EIAR chapters are satisfactory to enable the likely significant direct environmental effects arising as a consequence of the proposed development to be satisfactorily identified, described and assessed. I am satisfied that the EIAR has adequately addressed the indirect effects of the proposed development on the receiving environment.

7.8. **Appropriate Assessment (Screening)**

7.8.1. Description of the project

7.8.2. I have considered the proposed development in light of the requirements of S177U of the Planning and Development Act 2000 as amended.

7.8.3. The proposed development comprises the extraction of sand, stone and gravel and associated site works on a site with an area of 6.938 Ha./extraction area 4.9 Ha (see paragraph 2.1 above for full description). The invert of the extraction will be 2-3 meters above the high water table, quarrying will be 'dry' i.e. above the water table. A lagoon/settlement pond, lined with impermeable silt (0.5 m min thickness), will be used to store wash water on the site for quarry operations. Water used for the weighbridge and washing of sand will be recycled from the lagoon. Excavators will be fitted with GPS to ensure that they do not breach the clay layer. In case the lagoon overflows an overflow pipe connecting to a soakaway will be used. The proposal does not entail discharge to any watercourse. Wastewater from toilets and sinks will be collected in an impermeable holding tank and removed for off-site treatment. Fuel oil will be delivered to the site and mobile machines will fuel machinery on an impermeable fuel pad[13]. There will be no fuel bowser kept on the site. The mobile crusher will be fuelled within the extraction area. It is proposed to restore the site to agricultural use.

7.8.4. A walkover of the site was undertaken by an ecologist in May 2021. The site is dominated by improved agricultural grassland (GA1). There are no surface water drainage features within the site. Drains, c. 102m north-east and c. 76m south-east of the application site, lead towards a tributary of the Mihanboy Stream, which is 209m south of the site. This stream flows east to join the Mihanboy and flows north-east to join the Cross River. Water table heights (observed in the boreholes) indicate that the groundwater flows from the west-northwest towards the east-southeast. The site is underlain by a "Regionally Important Aquifer with karstic (conduit) flow".

[13] A refuelling methodology is appended to the Cover letter.

7.8.5. The application was accompanied by an Appropriate Assessment Screening report.[14] The AA Screening report described the habitats present on the site, water features in the area. The AA Screening report identified 17 no. European sites within a 15 km zone of influence of the development site and notes that the development site has no connectivity to any of the European sites identified, that there will be no direct or indirect emissions to any European sites, and that such is the distance from European sites that significant effects will not arise. The AA Screening report concludes that the proposed development[15], individually or in combination with other plans or projects, will not have a significant effect on any European site.

7.8.6. The subject site is located c. 5 km west of River Shannon Callows SAC (Site Code: 000216) and Middle Shannon Callows SPA (Site Code: 004096), c. 5 km south-west of Lough Ree SAC (Site Code: 000440) and Lough Ree SPA (Site Code: 004064), c.2.5 km north-east of Castlesampson Esker SAC (Site Code: 001625) and c. 3 km south-east of Ballynamona Bog and Corkip Lough SAC (Site Code: 002339). There is no hydrological connectivity between the development site and any European site.

7.8.7. Potential Impact Mechanisms

Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following are considered to be the relevant potential impact mechanisms:

- The uncontrolled release of pollutants to ground water (e.g. run-off, silt, fuel, oils, etc.) during the construction and operation phase of the proposed development and subsequent impacts on water quality sensitive habitats of River Shannon Callows SAC (Site Code: 000216), Middle Shannon Callows SPA (Site Code: 004096), Lough Ree SAC (Site Code: 000440), Lough Ree SPA (Site Code: 004064), Castlesampson Esker SAC (Site Code: 001625) and Ballynamona Bog and Corkip Lough SAC (Site Code: 002339).

[14] Contained in Chapter 5 (initial version) of EIAR submitted.
[15] Section 3.8 of the AA Screening Report (at page 68 of the EIAR) erroneously refers to the extraction volume of the proposed development as being 603,200 m3, this appears to be a typographical error and has no bearing on the report. I note that the correct volume of material is referred to at the beginning of the AA Screening Report.

- Potential for the release of fugitive dust to drainage ditches in the vicinity and/or to the watercourse c. 210 metres south of the development site, and subsequent impacts on water quality sensitive habitats of River Shannon Callows SAC (Site Code: 000216), Middle Shannon Callows SPA (Site Code: 004096), Lough Ree SAC (Site Code: 000440), Lough Ree SPA (Site Code: 004064), Castlesampson Esker SAC (Site Code: 001625) and Ballynamona Bog and Corkip Lough SAC (Site Code: 002339).

7.8.8 Likely Significant Effects on European Sites (alone)

There are no watercourses or drainage ditches within the site and therefore there is no hydrological connection between the development site and any European sites. Groundwater flows eastwards, in the opposite direction of the closest European site, Castlesampson SAC. Considering the distance between the site and Castlesampson SAC and the direction of groundwater flow there is therefore no connectivity between the site and Castlesampson SAC via groundwater. Similarly, should any pollutants enter groundwater, noting the distances concerned between the site and nearby European sites, they would be subject to dilution and dispersion, rendering any significant impacts on water quality unlikely. The closest watercourse is c. 210 metres south of the development site and at this distance the deposition of dust in significant quantities would be unlikely. Whilst the proposed development may result in the deposition of dust in nearby drainage ditches, which in turn connect to the watercourse south of the site and ultimately connect to River Shannon Callows SAC and Middle Shannon Callows SPA, noting the separation distance between these drainage ditches and River Shannon Callows SAC and Middle Shannon Callows SPA, in excess of 5km, and the effects of dilution and dispersal, there is no likelihood of significant effects on River Shannon Callows SAC and Middle Shannon Callows SPA. The site does not contain suitable habitat for birds associated with Lough Ree SPA or Middle Shannon Callows SPA. Should birds associated with any nearby SPA's use the site there are ample alternative lands nearby. I note that the best practice measures would be adhered to at both construction and operational stage. Such measures/practices are not mitigation measures intended to reduce or avoid any harmful effect on any Natura 2000 site and would be employed by any competent operator, notwithstanding any proximity to any Natura 2000 site. I conclude that the proposed development

would have no likely significant effect 'alone' on any qualifying interest of River Shannon Callows SAC, Middle Shannon Callows SPA, Lough Ree SAC, Lough Ree SPA, Castlesampson Esker SAC, and Ballynamona Bog and Corkip Lough SAC, or any European site.

7.8.9. Likely significant effects on the European site(s) 'in-combination with other plans and projects'

Having reviewed Roscommon County Council's planning portal (see paragraph 4.0 above) there are no proposed or permitted projects that could result in impacts in combination with the proposed development. There is no evidence on file of any plans that could impact in combination with the proposed development. I conclude, therefore, that the proposed development would have no likely significant effect in combination with other plans and projects on the qualifying features of River Shannon Callows SAC, Middle Shannon Callows SPA, Lough Ree SAC, Lough Ree SPA, Castlesampson Esker SAC, and Ballynamona Bog and Corkip Lough SAC, or any European sites. No further assessment is required for the project.

7.8.10. Overall Conclusion- Screening Determination

In accordance with Section 177U(4) of the Planning and Development Act 2000 (as amended) and on the basis of objective information I conclude that that the proposed development would not have a likely significant effect on any European Site either alone or in combination with other plans or projects. It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] is not required.

This conclusion is based on:

- The nature and extent of the proposed development.
- Distance from European Sites.
- The weakness of connectivity between the development site and European Sites.

No measures intended to avoid or reduce harmful effects on European sites were taken into account in reaching this conclusion.

7.9. **Issues Arising**

7.9.1. Water Framework Directive - the purpose of the Water Framework Directive (WFD) is to protect and enhance all waters as well as water dependent wildlife and habitats, with the aim to achieve 'good' water quality status for all waters subject to the WFD and to mitigate against the risk of a decline in the water body quality status. The WFD River Water Body 3rd Cycle (2021-2027) identifies both the Mihanboy_010 and Cross River water bodies having an 'At Risk' Status due to the water body quality being ranked as 'Moderate Status' and 'at risk' of not achieving the 'High Status' required. The main pressures effecting the water courses in this area include impacts from extractive industry activities including potential sediment/siltation pollution. Having regard to the information provided, including the mitigation measures provide for in the EIAR (Section 7.5.3 and 7.5.4) I am however satisfied that the proposed development would comply with the provisions of the WFD.

7.9.2. Initial Application Process/Observations - concerns are raised in one of the appeal submissions in relation to the objectiveness of RCC's decision in relation to the proposed development and also in relation to parties being deterred from making observations to the proposal. In my opinion these issues are outside of the scope of this appeal. The above assessment represents my *de novo* consideration of all planning issues material to the proposed development.

7.9.3. Applicants comments on planning conditions of Planning Authority – the applicant raises a number of issues in relation to planning conditions attached by the RCC in their response to the appeal submissions (see paragraph 6.2 above). I note that a valid appeal by the applicant in relation to specific planning conditions has not been received. In my opinion it would not be appropriate for the Board to consider the issues raised by the applicant on the back of a response to a third party appeal as to do so would provide a mechanism for the applicant to inadvertently challenge specific aspects of the permission other than through an appeal as provided for under Section 127 of the Planning and Development Act, 2000, as amended. Irrespective of the applicant's submission in relation to the planning conditions of the Planning Authority the appropriateness of C26 (Special Development Contribution) is addressed as part of this assessment (see paragraph 7.9.9 below).

7.9.4. Distance to School – one of the appeal submissions notes that the information submitted with the application is inaccurate in relation to the distance between the development site and a school in the vicinity. The applicant has referred to a school as being both 1.1 km and 3 km from the site. I note that Cloonakilla National School is located c. 1 km north-east of the appeal site. Reference to the school being 3 km from the development site appears to be a typographical error. The above assessment represents my *de novo* consideration of all planning issues material to the proposed development.

7.9.5. PA. Ref. 21/463 – it is noted in one of the appeal submissions that the proposed development is similar to that proposed under PA. Ref. 21/463. I note that PA. Ref. 21/463 was deemed withdrawn as the applicant did not respond to a request for Further Information within the prescribed period. I note that there is nothing to preclude the lodgement of a similar, or identical application for that matter, on the same site in the manner in which the applicant has.

7.9.6. Duration of Permission – the development description contained in the public notices refers to the extraction of sand and, stone and gravel over a 10 year period and to the restoration of the land to agricultural land. I note that page 17/paragraph 2.8 of the EIAR notes that a planning permission of 10 years is sought for the extraction and processing period, and a further 2 years to complete final restoration of the site. The applicant therefore indicates that they are seeking a 12 year permission for the proposed development. Noting that the development description contained in the public notices makes reference the duration of the permission sought being 10 no. years I consider that should the Board grant permission for the proposed development that a duration of 10 no. years should be stipulated. In my opinion, based on the public notices, it would not be apparent to third parties that the intended duration of the permission sought was 12 no. years. I consider a duration of 10 no. years appropriate noting the nature and extent of the proposed development.

7.9.7. Height of Berms – The Planning Authority requested the applicant to increase the height of perimeter berms at Further Information stage so as to provide an increased level of dust and noise mitigation. In response the applicant noted that the noise and dust modelling took account of the height of the berms as proposed and that the

modelling for dust and noise was within acceptable levels. The Planning Authority again requested the applicant to increase the height of perimeter berms at Clarification of Further Information stage and the applicant increased the height of the berms for the majority of the site's perimeter. The Planning Authority note that the section of berm to the south-west of the site was not increased and attached a condition (Condition no. 5 a) requiring an increase in the height of the perimeter berms by 2 metres from that as initially proposed when the application was lodged. I have reviewed the sectional drawings submitted and I am satisfied that the height of berms as submitted to the Planning Authority at Clarification of Further Information stage are appropriate. I note that the information contained in the EIAR, specifically the predictive noise and dust modelled emissions are shown to be within acceptable levels, and that these modelled emissions are based on the heights of the berms as submitted with the initial application.

7.9.8. Restoration – The Planning Authority requested details of the restoration of the site at Further Information stage. The applicant stated in response that restoration was proposed over a single stage. The preference of the Planning Authority was for phased restoration and the Planning Authority sought Clarification of Further Information in respect of this issue. The applicant's CFI response was that as the sand pit progresses from phase 1 to 5 ongoing preparations for the final restoration will be carried out and *Drawing 22.137-037* indicates the site divided into 5 phased sections. The rationale for site restoration provided by the applicant is that topsoil is to be stripped from the top of the sand pit and stockpiled along the edges of the sand pit floor, that an area at the centre of the sand pit will not be covered with topsoil until all the material has been extracted and final restoration has commenced so as to leave a free draining sandy area in which machinery and plant can manoeuvre around the pit face and haul material to the processing area. The applicant notes that this area is then to be graded and levelled to the required finished levels. Whilst the applicant describes the restoration as being carried out on a phased basis, having regard to the methodology set out by the applicant it appears that the most significant elements will be undertaken at the end of the quarrying process when the site is spent. Whilst the Quarry Guidelines recommends phased restoration of sand and gravel quarries, noting the size of the quarry and provision of robust screening around the perimeter, and noting the methodology outlined by the applicant I consider that it is appropriate and acceptable

in this instance for restoration of the site to be undertaken in a single phase. I recommend that should the Board permit the proposal that a condition requiring details of the restoration of the site is agreed with the Planning Authority.

7.9.9. Conditions of Planning Authority - the Notification of Decision to Grant Permission issued by Roscommon County Council includes a number of specific planning conditions, specifically -

C5 – requires height of berms to be increased and details of same submitted.

I do not recommend that this condition is included should the Board grant permission for the proposed development for the reasons set out above at paragraph 7.9.7.

C6 – requires that berms be constructed within 3 months of commencement.

I recommend that this condition is included should the Board grant permission for the proposed development.

C7 – requires restoration of quarry to be agreed with PA. C7(c) stipulates that restoration shall not be carried out in a single phase.

(See paragraph 7.9.8 above) I recommend that a condition is included should the Board grant permission for the proposed development requiring a restoration plan to be submitted to the Planning Authority. Restoration may be undertaken in a single phase.

C8 – requires dust monitoring plan to be agreed with PA.

I recommend that this condition is included should the Board grant permission for the proposed development.

C11 – stipulates noise emission limits.

I recommend that this condition is included should the Board grant permission for the proposed development.

C12 – stipulates hours of operation (i.e. 0700 – 1800 hrs M-F and 0800 – 1400 hrs Saturday).

I recommend that this condition, as amended, is included should the Board grant permission for the proposed development. I consider acceptable hours of operation to

be 0700 – 1800 M-F and 0700 – 1400 hrs Saturday, as suggested in the Quarry Guidelines (see Section 4.7).

C13 – requires the submission of quarterly environmental reports to PA.

The PA have included conditions in respect of dust monitoring and noise emissions (i.e. C8 and C11) which address the control of emissions of the development. I recommend to the Board that monthly monitoring returns in respect of emissions are submitted to the PA.

C15 – requires annual audit to be undertaken and submitted to PA.

I recommend that a programme of annual auditing be submitted to the PA.

C18 – requires the well to be installed and constructed as per Institute of Geologists of Ireland document submitted with the application and with EPA Advice Note 14.

I do not recommend that this condition is included should the Board grant permission for the proposed development. The mitigation measures in the EIAR are considered adequate to safeguard groundwater.

C19 – stipulates that should groundwater be encountered during excavation that a Discharge Licence is sought from RCC.

I do not recommend that this condition is included should the Board grant permission for the proposed development. A condition requiring the monitoring of groundwater adequately addresses this issue.

C23 – requires slope stability monitoring.

I do not recommend that this condition is included should the Board grant permission for the proposed development. The mitigation measures in the EIAR are considered adequate to address this issue.

C26 – Special Development Contribution.

The report of the Roads Department recommends that a condition requiring the payment of a Special Development Contribution be included in any grant of permission, C26 reflects this. The report of the Roads Department refers to a figure of €235,000 for road strengthening and junction improvements in the vicinity of the proposed development. The report refers to €40 per sqm (4 metre width) x 1.47 km in

length. I note that the rationale for the length of road is not provided, for example no map or explanation of how this length of road has been arrived at is provided. Additionally, the Planning Authority have not provided any information in relation to the nature and extent of junction improvements works. Noting the requirement for planning conditions requiring the payment of a Special Development Contribution under Section 48 (2) (c) of the Planning and Development Act, 2000, as amended, to specify the particular works to be carried out (S. 12 a), and given the ambiguity in relation to junction improvements works which the Planning Authority are seeking the applicant to contribute towards, I recommend that a condition requiring the payment of a Special Development Contribution is not included should the Board grant permission for the proposed development.

7.9.10. Limitation on extraction rates – the Quarry Guidelines (see Section 4.7 (L)) recommends against the inclusion of planning condition stipulating extraction limits annually, save for cases where they are deemed necessary to regulate environmental impacts, e.g. where traffic movements, blasting etc. have been linked to annual extraction rates and the acceptability of the development has been decided on this basis. The EIAR includes a Traffic and Transport Assessment using extraction rates to model traffic volumes, and consequently traffic impact. On this basis I consider that a condition stipulating the annual extraction rates at the site to be appropriate.

8.0 **Recommendation**

8.1. I recommend that planning permission for the proposed development should be granted for the reasons and considerations set out below.

9.0 **Reasons and Considerations**

Having regard to:

(a) European legislation, including of particular relevance, Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive) on the assessment of the effects of certain public and private projects on the environment,

(b) National planning and related policy, including:

- Project Ireland 2040 - National Planning Framework which provides 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, the quality of life of residents in the vicinity, and provides for appropriate site rehabilitation,
- The 'Quarry and Ancillary Activities, Guidelines for Planning Authorities issued by the Department of the Environment, Heritage and Local Government in April 2004,
- Environmental Management Guidelines, Environmental Management in the Extractive Industry (Non-Scheduled Minerals), EPA, 2006,

(c) Local planning policy, including:

- the provisions of the Roscommon County Development Plan 2022 - 2028,

(d) the following matters:

- the pattern of development in the area,
- the location and nature of the site,
- the Environmental Impact Assessment Report, and all other information received in connection with the application and the appeal,
- the proposals submitted to widen the private access road connecting to the L-2025,
- the contents of the appeal(s) and the responses to the appeal(s),
- the nature and scale of the development proposed, including the phased extraction, and restoration of the site.

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with the Development Plan policies, would not seriously injure the visual or residential amenities of the area, would not be prejudicial to public health, would be acceptable in terms of traffic safety and would not be likely to have a significant detrimental effect on ecology or protected species, or significant effects on the environment.

10.0 **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 received by the Planning Authority on the 12th day of December 2022 and on the 27th of April 2023. 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.	a) This grant of planning permission relates only to the area outlined on the drawings submitted on the 27th day of September 2022. All extraction and loading operations on site shall cease 10 years from the date of the grant of permission. All plant and machinery shall cease operation and shall be removed from site within 10 years of the date of this grant of planning permission. b) Restoration of the site shall be completed within 10 years of the date of grant of permission unless, prior to the end of that period, planning permission is granted for the continuance of use. c) The developer shall submit annually, for the lifetime of the permission, a map and aerial photograph 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 the interests of orderly development and to ensure the appropriate restoration of the site.
3.	The developer shall ensure that all mitigation and monitoring measures set out in the Environmental Impact Assessment Report submitted with the application, shall be implemented in full, except as may otherwise be required in order to comply with the following conditions. A single schedule of Monitoring and Mitigation Measures shall be complied and

	submitted to the Planning Authority within 1 month of a grant of permission. **Reason:** In the interest of clarity and the protection of the environment during the construction and operational phases of the development.
4.	a) The total volume of extracted material from the site shall not exceed 90,000 tonnes per annum. b) No extraction of aggregates shall take place below the level of the water table and shall be confined to a minimum of 2m above the winter water table level. c) There shall be no dewatering of groundwater at the site. **Reason:** In the interest of clarity, to ensure the overall development is carried out on a phased basis, and to protect groundwater in the area.
5.	All perimeter berms shall be constructed within 3 months of commencement of extraction. **Reason:** In the interest of visual amenity.
6.	a) 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, or, in default of agreement, shall be referred to An Bord Pleanála for determination. Restoration of the site may be carried out in a single or phased basis. b) Upon completion of restoration the applicant shall submit to the Planning Authority for their written agreement a digital topographical survey of the final restored contours.

	c) This grant of permission does not authorise the importation of materials for the restoration of the site. **Reason:** To ensure the satisfactory restoration of the site, in the interest of visual amenity, and in the interest of clarity.
7.	a) The total number of Heavy Goods Vehicle (HVG) traffic movements serving the site each day shall not exceed 30 number (two-way movements). b) A traffic counter shall be installed at the quarry and records from the counter shall be made available to the public to view. Records of traffic movement shall be maintained on site. Prior to commencement of development, the counter shall be installed and details in relation to the traffic counter and viewing shall be submitted for the written agreement of the Planning Authority. c) All HGVs departing the quarry shall do so via a wheel-wash. d) All loads of dry fine materials shall be sprayed with water or covered prior to exiting the quarry. e) During dry weather conditions, all roads within the site shall be sprayed with water at least three times a day. f) Details of road signage, warning the public of the site entrance, shall be submitted to and agreed in writing with the Planning Authority prior to commencement of development. **Reason:** To limit the volume of Heavy Goods Vehicle (HGV) traffic to and from the site and in the interests of traffic safety.
8.	a) Before extraction commences, surface water drainage arrangements and settlement facilities shall be constructed as illustrated on drawings submitted on the 27th day of September 2022.

	b) The settlement ponds shall be cleaned out at monthly intervals. Details of the proposed use, handling, and destination of the removed silt shall be submitted to, and agreed in writing with, the Planning Authority prior to commencement of development. **Reason:** In the interest of surface water drainage, to reduce the risk of water pollution, and to ensure the efficient operation of the settlement ponds.
9.	a) 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 - An LArT value of 55 dB(A) during 0700 to 1800 hours. The T value shall be one hour. An LAeqT value of 45 dB(A) at any other time. The T value shall be 15 minutes. All sound measurement shall be carried out in accordance with ISO Recommendation 1996:2007: Acoustics - Description and Measurement of Environmental Noise. b) No blasting shall take place on site. **Reason:** To protect the residential amenities of property in the vicinity.
10.	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.
11.	The total dust emissions arising from on-site operations shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days (Bergerhoff Gauge) when measured as deposition of insoluble and insoluble particulate matter at any position on the boundary of the quarry. **Reason:** To control dust emissions arising from the development and in the interest of the amenity of the area.
12.	a) The developer shall monitor and record groundwater, surface water flow, noise, ground vibration, and dust deposition levels at monitoring and recording stations, the location of which shall be agreed in writing with the Planning Authority prior to commencement of development. Monitoring results shall be submitted to the Planning Authority on an monthly basis for groundwater, surface water flow, noise, ground vibration and dust deposition. b) On an annual basis, for the lifetime of the facility (within two months of each year end), the developer shall submit to the Planning Authority five copies of an environmental audit. Independent environmental auditors approved of in writing by the Planning Authority shall carry out this audit. This audit shall be carried out at the expense of the developer and shall be made available for public inspection at the offices of the Planning Authority and at such other locations as may be agreed in writing with the Planning Authority. This report shall contain: (i) A written record derived from the on-site traffic counts of the quantity of material leaving the site. This quantity shall be specified in vehicle movements and tonnage. (ii) An annual topographical survey carried out by an independent qualified surveyor approved in writing by the Planning Authority. This survey shall show all areas excavated (and restored where applicable).

	On the basis of this, a full materials balance shall be provided to the Planning Authority. (iii) A record of groundwater levels measured at monthly intervals. (iv) A written record of all complaints, including actions taken in response to each complaint. c) All incidents where levels of noise or dust exceed specified levels shall be notified to the Planning Authority within two working days. Incidents of surface or groundwater pollution or incidents that may result in groundwater pollution, shall be notified to the Planning Authority without delay. d) 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. e) An alternative water supply shall be made immediately available by the developer, at his expense, if it becomes evident from the monitoring programme that the quality or quantity of water in the vicinity is being adversely affected. **Reason:** In the interest of protecting residential amenities and ensuring a sustainable use of non-renewable resources.
13.	The development shall be operated and managed in accordance with an Environmental Management System (EMS), which shall be submitted by the developer to, and agreed in writing with, the Planning Authority, prior to commencement of development. This shall include proposals for the following: a) proposals for the suppression of on-site noise, b) proposals for the on-going monitoring of sound emissions at noise sensitive locations in the vicinity,

	c) proposals for the suppression and monitoring of dust at prior agreed locations and on the access road, d) all fuels and lubrication shall be stored in fully bunded storage areas and proposals to deal with accidental spillage shall be submitted to the Planning Authority, e) details of safety measures for the land above the quarry, to include warning signs and stock-proof fencing, f) management of all landscaping, with particular reference to enhancing the ecological value of the woodland/grassland in buffer areas, g) monitoring of ground and surface water quality, levels and discharges, h) details of site manager, contact numbers (including out-of-hours) and public information signs at the entrance to the site. **Reason:** In order to safeguard local amenities.
14.	Scrap metal and other waste material shall be removed to an appropriately licensed facility at least annually from the site in accordance with the written requirements of the Planning Authority. Such materials shall be deemed to include scrapped vehicles, worn out conveyor belts/chains, batteries, tyres and worn out conveyor/roller shafts. **Reason:** To protect the amenities of the area.
15.	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.
16.	Prior to the commencement of development, the developer shall submit to, and agree in writing with, the Planning Authority details of the road widening of the private access road. The widening of this road shall be completed prior to any extraction of material from the site and shall be carried out at the developer's expense.

	Reason: In the interest of traffic safety.
17.	On-site operations are hereby permitted to be carried out between the hours of 0700 and 1800, Monday to Friday inclusive, and 0700 and 1400, Saturday. No activity shall take place outside these hours or on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the Planning Authority. **Reason:** To protect the amenities of properties in the vicinity of the site.
18.	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 amenity.
19.	The developer shall pay to the Planning Authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the Planning Authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the 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. Details of the application of the terms of the Scheme shall be agreed between the Planning Authority and the developer or, in default of

	such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme. **Reason:** It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Ian Campbell
Planning Inspector

12th November 2024

Appendix 1 - Form 1

EIA Pre-Screening

N/A – EIAR SUBMITTED