



Development

Permission is sought for a new sand and gravel extraction development on an overall site of c.32.2 hectares and comprises:

Extraction of sand and gravel with excavation (dry and wet workings) occurring within a c.17.2 ha active area (location to vary over the operational phase) and related mobile processing activities that includes crushing, washing and screening and all ancillary works, plant and structures (including closed circuit silt disposal lagoons);

Stockpiling of overburden (topsoil, subsoil and waste), raw and finished aggregates (prior to processing on-site / transportation off-site);

Staff facilities including prefabricated canteen facility and welfare facilities (located within an existing agricultural shed);

Ancillary site works including hardstand areas, bunded and covered fuel tanks, weighbridge, wheelwash, and packaged waste water treatment system;

Perimeter landscaped screening berms; A new vehicular access point onto the L8006 including boundary treatment and signage;

Landscaping and full restoration of the site with the establishment of a terrestrial and freshwater wildlife habitat;

The proposed extraction operational period is for 12 years with 2 years to complete restoration (total duration sought 14 years).

This application is accompanied by an Environmental Impact Assessment Report and Natura Impact Statement.

Location Racefield, Ballyshannon, Kilcullen, Co. Kildare.

Planning Authority Kildare County Council

Planning Authority Reg. Ref. 19/1097

Applicant(s) Kilsaran Concrete (trading as Kilsaran Build)

Type of Application Permission

Planning Authority Decision Refuse permission

Type of Appeal First Party

Appellant(s) Kilsaran Concrete

Observer(s) 77 observations submitted in relation to this appeal. A further 3 observations were deemed invalid.

Date of Site Inspection 14/05/2020

Inspector A. Considine

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1.0 Introduction

- 1.1. Planning permission is sought to develop a new sand and gravel extraction development on an overall site of c.32.2 hectares, including all associated services and facilities. The overall Kilsaran landholding in this location is indicated at 58.2ha.

2.0 Site Location and Description

- 2.1. The subject site is located approximately 2.8km to the west of Calverstown and approximately 1km to the south of Kildare in a rural area in the southern area of County Kildare. The site lies in the townland of Racefield and between the M7 to the north and the M9 to the east. The town of Kilcullen lies approximately 10km to the north east and the Curragh and the Irish National Stud and Gardens are located approximately 7km and 9.5km also, to the north.
- 2.2. Access to the site is via the local road network in the area with frontage along the L8006/L8007 to the north. This local road runs from the R418 (Athy – Kilcullen Road) to the east of the site towards the network of local roads ultimately connecting to the R415 regional road located to the west of the site. The local road is wide enough for two cars to pass and there are no road markings, no footpath or public lighting. There are a number of existing gates into the landholding noted along the public road.
- 2.3. The site is currently under grass and the wider area is very rural in nature with agriculture and equine facilities being the primary uses. To the south of the site, the lands are under forestry and the Eaglehill Stream flows approximately 250m to the south of the proposed excavation area of the site. To the north west, there is a high voltage electricity line traversing the site, and there is a tower located within the site. The site comprises a number of fields all of which are enclosed with mature hedgerow boundaries.
- 2.4. There are a number of residential properties in the vicinity of the site, with Ballyshannon Demesne sharing a boundary with the site to the east. Racefield House lies within the proposed development site boundaries. The topography of the site is generally level with the site levels rising from approximately +85mOD to

approximately +101mOD, sloping towards the west and south west towards the Eaglehill Stream.

3.0 Proposed Development

Permission is sought for a new sand and gravel extraction development on an overall site of c.32.2 hectares and with an extraction area of 17.2ha. Permission is sought for an operational period of 12 years with 2 years to complete restoration (total duration sought 14 years). An Environmental Impact Assessment Report (EIAR) and a Natural Impact Statement (NIS) have been submitted.

3.1. The planning application was accompanied by the following documents:

- Application form and relevant plans and particulars
- Planning Report
- Environmental Impact Assessment Report
- Appropriate Assessment Screening Report and Natural Impact Statement

4.0 Planning Authority Decision

4.1. Decision

The Planning Authority decided refuse permission for the proposed quarry for 4 stated reasons as follows:

1. It is considered the local road network serving the proposed development is substandard in terms of condition, capacity, width and surface, and is inadequate to accommodate the type and volume of traffic movements generated by the proposed development. It is considered therefore that the proposed development would endanger public safety by reason of a traffic hazard and would, therefore, be contrary to the proper planning and sustainable development of the area.
2. The applicant has not sufficiently demonstrated that they can carry out or have the adequate consent to carry out necessary Highway Safety Measures for the L8006, the L8007 and the R418 to accommodate the increased HGV traffic and

address the deficiencies in the local road network and the R418. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

3. Having regard to the location of the proposed site in close proximity to residential dwellings, and to the lack of adequate baseline information presented in respect of these sensitive receptors in the application, it is considered that the proposed development, notwithstanding the mitigation measures proposed in the Environmental Impact Assessment Report received, would seriously injure the amenities of properties in the vicinity by reason of dust, traffic and general disturbance, would depreciate the value of properties in the area and would materially contravene policies E12 and E13 of the Kildare County Development Plan 2017-2023 which seek to ensure that such developments do not impinge on the environmental quality and the visual and residential amenity of the area. The proposed development, would therefore, be contrary to the proper planning and sustainable development of the area.
4. The Applicant has not demonstrated to the satisfaction of the Planning Authority that the qualifying interests of the European Site, the River Barrow and River Nore SAC, site code 002162, will not be adversely affected by the proposed development. Accordingly, the proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

4.2. Planning Authority Reports

4.2.1. Planning Reports

The planning report provides a full description of the development and details of the site location as well as the policy context. The report summarises all of the 229 third party submissions as well as technical reports submitted in relation to the proposed development and includes a planning assessment of the proposed development.

The report also notes that a pre-planning consultation was held with the applicant.

The report concludes that ‘the establishment of a quarry on land currently used for agricultural purposes for decades, in a rural community where there is no industrial activity will result in a significant change to the rural character of the area.’ The report

also considers that the effects on the local road network, local amenity and community are 'significant and profound over a long period of time'. Issues are also raised in relation to the NIS and EIAR and the report recommends that permission be refused.

The Planning report includes an Appropriate Assessment Screening Report and an Environmental Impact Assessment (EIA). The Board will note that Kildare County Council also engaged the services of Golder Associates (UK) Ltd. to assist in the examination of the EIAR and AA submitted in terms of a Consultant Ecologist and Consultant Hydrogeologist. The A/Senior Planner and Director of Planning countersigned the Planning Officers reports, supporting the recommendation for refusal. This report informed the decision of the Planning Authority to refuse planning permission for the proposed quarry.

The Chief Executive of Kildare County Council also provided a written statement in relation to the proposed development.

4.2.2. Other Technical Reports

Area Engineer: The report requires further information be submitted in relation to roads issues.

Water Services: Recommends the inclusion of conditions.

Environment Section: The report requires further information be submitted with regard to drawings, welfare facilities, a Hydrogeological Risk Assessment, revised air report, restoration plan which covers all aspects of restoration of the site. Information is required in terms of the importation of any waste into the site during restoration works.

Chief Fire Officer: No objections subject to conditions.

Heritage Officer: The report considers that the EIAR has adequately considered the impact of the proposed development on the archaeology of the area and has provided relevant and appropriate mitigation measures. Further information is required in relation to the impact of the proposed development on the potential of Dun Aillinne attaining World Heritage Status, which should be assessed by an expert in World Heritage Designation. In the event of a grant of permission, a condition

should be included to ensure that all mitigation measures outlined in Section 7 of the EIAR are carried out.

Roads, Transportation and Public Safety Department: The report makes a number of comments in relation to Chapter 10 of the EIAR noting a number of concerns as follows:

- Part of the traffic and speed surveys were carried out over the June bank holiday weekend and when the local primary school was closed.
- The road pavement on the local roads need to be increased in width to cater for the increase in HGVs.
- The Road Safety Audit did not adequately consider or mitigate the effect of the development on the local primary school children travelling to and from Ballyshannon NS.
- Serious concerns are raised in relation to road widths on the L8006 and L8007 which range from 7.2m to 3.88m, and less than 5.1m over a substantial section of the road towards the site entrance.
- The AADT did not calculate %HGV figures
- From the information provided, it is submitted that the development will provide 102 HGV movements per day at the site. The HGV figures submitted have been underestimated.
- Serious concerns raised in relation to the capacity of the junction of the R418 / L8007, which is located near the primary school. It is considered that the development will lead to a traffic hazard to road users at this junction.

In terms of mitigation measures proposed, the report states as follows:

- More information required on the Ctrack Vehicle Tracking System proposed to manage HGV movements.
- More information required in relation to the proposed passing bays, including control of the land.
- The pavement upgrade is noted, however the road pavement needs to be increased in width to cater for the increase in HGVs which will include land acquisition / third party agreements. Traffic management details required.

- Details relating to the ongoing maintenance of verges required.

The Roads, Transportation and Public Safety Department has concluded that the development would increase traffic in an area with deficient roads, without adequate provision for vulnerable road users. The proposal is not suitable and would create additional hazards. The infrastructure proposals are inadequate to justify the intensification of traffic on this rural community. It is recommended that permission be refused for the following two stated reasons:

1. The traffic movements generated by the proposed development would endanger public safety by reason of a traffic hazard and would therefore be contrary to the proper planning and sustainable development of the area.
2. The development is premature without necessary Highway Safety Measures for the L8006, L8007 and R418, to accommodate the increased HGV traffic. There are also deficiencies in the infrastructure for Vulnerable Road Users travelling to and from Ballyshannon National School.

4.3. Prescribed Bodies

Health & Safety Authority: No observations submitted.

Irish Water: The submission makes a number of observations in relation to the proposed development.

Health Service Executive: The report comments only on Environmental Health Impacts as outlined in the EIAR and the adequacy of the EIAR from an Environmental Health viewpoint. The following is a summary of the report:

- The EIAR is adequate in terms of the description of the development.
- The HSE was unable to find any reference in the EIAR to the requirement for later consents for the proposed extraction facility.
- Acknowledges that the development has the potential to cause 'medium term adverse local impacts during the operational phase'.
- The EIAR includes an assessment of alternatives.
- The EIAR includes an assessment of descriptions of the physical environment in terms of population and human health, groundwater, surface water, traffic

and air-dust – noting that the HSE was unable to locate details of independent baseline air quality monitoring undertaken in the preparation of the EIAR, air-noise – noting that the development will result in a 3dBA increase in noise levels at properties long the haul route resulting in a doubling of the sound intensity at the affected properties. The EIAR categorises this change in noise level as ‘slight/moderate’.

The report concludes making a number of recommendations.

An Taisce: The submission states that Section 35 of the P&D Act needs to be applied. All compliance issues relating to the applicants other quarries need to be addressed.

DoCH&G: The Department of Culture, Heritage and the Gaeltacht requests that further information be submitted to include a report of the geophysical survey and test excavations.

4.4. Third Party Observations

There are 229 third party observers noted on the planning authority file as detailed in the Planning Officers report. The issues raised are summarised as follows:

- Roads and traffic issues, including flooding and impact on public transport
- The road is not capable of accommodating the proposed development in terms of the proposed volume of HGVs and the existing road widths
- Residential amenity issues including visual impacts and devaluation of property in this densely populated area
- Scale of development in the rural area and the impact of removal of natural hedgerow boundaries
- Deficient infrastructure to accommodate the development
- Impact of dust and noise in terms of the health of residents
- Impact of vibrations on the structural integrity of property
- Impact on biodiversity, wildlife and protected species

- Impact on Kildare's Equine Industry and noise sensitive thoroughbred racehorses as well as existing farming businesses in the vicinity including dairy farms.
- Impacts on existing businesses on the access routes to the site, including in Kilcullen.
- The employment generated by the proposed development is low in comparison to the bloodstock and equine industries in the area.
- Impact on historical significance and archaeology of the area
- Impact on private wells and groundwater as well as surface waters and rivers
- Proximity of primary school to the site – 1.5km
- Impact on the aquifer and water supply
- Visual impacts on the landscape and the loss of high-quality agricultural land
- Impacts on tourism in the area
- Proposal does not comply with the County Development Plan
- Lack of public consultation or engagement from the applicant
- Operating hours
- Concerns raised in relation to closure and restoration costs
- Questions the mineral reserve volume and composition.
- Concern raised in relation to the number of quarries in the County.
- Issues raised in relation to the EIAR and Planning Report.
- Cumulative impacts associated with other similar development at Ballysax, Kilcullen and Halverstown
- Concerns raised in relation to the future of the site given the applicants operations in other areas – where a permission was granted for 10 years and extended by a further 22 years. On one site, the development has intensified to include a tile making facility.
- The applicant has purchased a number of farms in the area. It is understandable that people would presume that a grant of permission may only

be the start of a very significant quarrying activity throughout this area. The applicant should be asked their future plans for the land bank they are purchasing.

- The development will impact the locals from using the roads for walking and cycling due to the increased levels of traffic and the narrow nature of the roads. Local Bush Cycling Club has an underage group which is unlikely to survive due to safety concerns in permission is granted.
- Impacts on the current inadequate surface water system on the local roads which are prone to flooding.
- The applicant has a history of non-compliance
- Haul routes not clearly identified. Proposals to limit lorries to 4 per hour and evenly spread over the course of a day lacks credibility and in no way correlates to how other quarries operate.
- Planning permission has been refused in the past for a house on the grounds that it would attract more traffic to the area.

5.0 Planning History

5.1. Subject site:

None.

A pre-planning consultation is noted to have been held on the 27th of June 2019 in relation to the proposed development. The minutes of the meeting are on file and are summarised as follows:

- Applicant Overview:
 - The site will consist of 57.8 acres
 - Excavation rate of 250,000 tonnes per annum for 12 years and an additional 2 years restoration.
 - All traffic will be Kilsaran traffic only with 45 trucks per day entering and exiting the site.
 -

- PAs contribution:
 - Roads issues and necessary assessments to be carried out.
 - Noted no record of monuments, protected structures or NIAH buildings within 1km of the site.
 - Low sensitivity area.
 - Advised that ABP has in the past refused permission due to the removal of too much hedgerow so this needs to be addressed in application.
 - A coherent restoration plan required.
 - Environment Section noted that they don't see dust, noise or contamination issues.

6.0 Policy Context

6.1. National Guidelines

Quarry and Ancillary Activities, Guidelines for Planning Authorities, DoEHLG, 2004:

6.1.1. 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 25km of urban areas where most construction takes place.

6.1.2. Chapter 2 identifies appropriate development plan policies and objectives with regard to the development of quarries.

6.1.3. 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 | • Natural heritage |
| • Dust deposition / air quality | • Landscape |
| • Water supplies and groundwater | • Traffic impact |

- Cultural heritage
- 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.

6.1.4. Chapter 4 refers to the assessment of planning applications and Environmental Impact Statements. It provides guidance on the information to accompany an application and the inclusion of possible planning conditions.

6.1.5. Chapter 5 refers to the implementation of the registration procedures set out in Section 261 of the Act.

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

6.1.6. 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.

6.1.7. These environmental management guidelines also represent a summary of current environmental management practices for quarries and ancillary facilities (including manufacturing of concrete and bituminous mixes/asphalt products, and processing of dimension stone). They are based on a review of current environmental management practice in Ireland, the UK and Europe. Under each of the key environmental issues, good environmental practice is summarised together with recommendations for the use of environmental management systems (EMSs), and emission limit values (ELVs), where appropriate.

Guidelines on the Information to be contained in Environmental Impact Statements' EPA, 2002:

6.1.8. These guidelines provide developers, competent authorities and the public at large with a basis for determining the adequacy of Environmental Impact Statements within the context of established development consent procedures and also serve to

address a wide range of project types and potential environmental issues. The accompanying 'Advice Notes on Current Practice (in the preparation of Environmental Impact Statements, 2003') subsequently provide further detail on many of the topics covered by the Guidelines and offer guidance on current practice for the structure and content of Environmental Impact Statements. The Board will note that the subject site is a sub-threshold development.

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

6.1.9. 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 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.

Regional Planning Guidelines for the Greater Dublin Area, 2010-2022:

6.1.10. The area of the subject site is identified as being the hinterland area in the RPGs and these guidelines are designed to steer the future growth of the region over the medium to long term and to implement the strategic planning frameworks set out in the National Spatial Strategy (NSS), 2002 and National Development Plan, 2007-2013. The Guidelines recognise that the mineral resources of the region, especially aggregates, contribute largely to the economy and the construction industry and there is a need to protect the sustainability of these assets.

6.2. Development Plan

6.2.1. The Kildare County Development Plan 2017 is the relevant policy document. Chapter 14 of the CDP deals with Landscape, Recreation and Amenity. The subject site is located within the Landscape Area known as Central Undulating Lands, with a section to the west located within the Southern Lowlands. Both of these Landscape Character Areas are Class 1 Sensitive landscapes with the capacity to generally

accommodate a wide range of uses without significant adverse effects on the appearance or character of the area.

6.2.2. Table 14.3 identifies the likely compatibility between a range of land-uses and Principle Landscape Areas. The table advises that sand & gravel extraction has high compatibility in such landscapes. In addition, table 14.4 identifies the likely compatibility between a range of land-uses and proximity to Principle Landscape Sensitivity Factors, noting that sand and gravel extraction is considered likely to be compatible with great care with regard to agricultural land with natural vegetation.

6.2.3. Chapter 10 of the plan deals with Rural Development and section 10.4.9 deals with mineral resources. This section acknowledges that mineral resources are generally located within the rural area. It is also acknowledged that the industry can have damaging environmental effects and that permission will only be granted where the Council is satisfied that residential and natural amenities will be protected, pollution will be prevented and aquifers and groundwater safeguarded.

6.2.4. Section 10.7 deals with Extractive Industry and it is noted that the aim of the plan is 'to ensure that adequate supplies of aggregates are available to meet the future needs of the county and region in line with the principles of sustainable development and environmental management. This chapter includes the relevant policies and objectives including:

El 2: Recognise the role and facilitate the exploitation of County Kildare's natural aggregate resources in a manner which does not unduly impinge on the environmental quality and the visual and residential amenities of an area, while continuing to regulate the extraction of aggregates and to seek the delivery of environmental benefits in the form of sustainable habitat creation in conjunction with the restoration phases of development.

El 3: Facilitate the sourcing of aggregates for and the operation of the extractive industry in suitable locations, subject to the protection of landscape, environment, road network, heritage, visual quality and amenity of the area.

El 4: Ensure that extraction activities address key environmental, amenity, traffic and social impacts and details of rehabilitation. In the assessment of planning

applications for new development, intensification of use or diversification of activity, the Council will have regard to the nature of the proposal, the scale of activity proposed, the impact on the adjoining road network, the effect on the environment including important groundwater and aquifer sources, natural drainage patterns and surface water systems and the likely effects that any proposed extractive industry may have on the existing landscape and amenities of the county, including public rights of way and walking routes.

El 5: Ensure that development for aggregate extraction, processing and associated concrete production does not significantly impact the following:

- Special Areas of Conservation (SACs).
- Special Protection Areas (SPAs).
- Natural Heritage Areas (NHAs).
- Other areas of importance for the conservation of flora and fauna.
- Zones of Archaeological Potential.
- The vicinity of a recorded monument.
- Sensitive landscape areas as identified at Chapter 14 of this Plan.
- Scenic views and prospects.
- Protected Structures.
- Established rights of way and walking routes.

El 6: Consult with the Geological Survey of Ireland (GSI), with regard to any developments likely to have an impact on Sites of Geological Importance listed in the County Development Plan (Chapter 12).

El 7: Require submission of an Appropriate Assessment under Article 6 of the Habitats Directive where any quarry / sand and gravel extraction is likely to have an impact on a Natura 2000 site (see Chapter 13).

El 8: Require relevant planning applications to be accompanied by an Environmental Impact Statement. An Ecological Impact Assessment (EcIA)

may also be required for sub-threshold development to evaluate the existence of any protected species/habitats on site.

EI 9: Require a detailed landscaping plan to be submitted with all planning applications indicating proposed screening for the operational life of the site. The predominant use of native plant species in the proposed landscaping plan is encouraged.

EI 10: Require detailed landscaping and quarry restoration plans to be submitted with each application. Habitats and species surveying shall be carried out and shall influence the restoration plan for the site.

6.2.5. Chapter 17 of the Plan deals with Development Management Standards with Section 17.9.6 dealing with Extractive Industry.

6.3. Natural Heritage Designations

There is no designated site within the proposed development site. The site is located approximately 3.9km to the east of the River Barrow and River Nore SAC (Site Code 002162).

The Pollardstown Fen SAC (& pNHA)(Site Code: 000396) lies approximately 9.1km to the north of the site and Mouds Bog SAC (Site Code: 002331) (& pNHA Site Code: 000395) lies approximately 12 km to the north. The Dunlavin Marshes pNHA (Site Code 001772) lies approximately 6.1km to the east.

7.0 The Appeal

7.1. Grounds of Appeal

This is a first party appeal against the decision of the Planning Authority to refuse planning permission for the proposed development. The appeal submits that the road network was assessed as part of the application and considered by the applicant to be sufficient to accommodate the proposed development. The submission includes proposals to clarify and amend the development in order to address the concerns raised, including addressing perceived shortcomings in the EIAR and NIS.

The grounds of appeal are presented in response to each reason for refusal and are summarised as follows:

- 7.1.1. Reason 1: public safety issue on local roads
- Trafficwise Report submitted with appeal to provide clarity on areas in which the Planners and the Roads Department reports outlined shortcomings.
 - Measures are proposed to increase the width of the carriageway to a minimum of 5.5m and generally to the desired 6m width to address the reason for refusal. It is considered that the increase in works proposed to the road have been fully assessed by the EIAR as originally submitted and hereby supplemented.
 - The increased work to the roads would not change the conclusion of the NIS.
 - The new report also clarifies points in relation to the quality of baseline surveys, additional baseline surveys, the Road Safety Audit and the numbers of HGV movements, including concerns regarding the number of movements at the junction of the L8007 and the R418.
 - The works proposed will ensure that the local road network serving the development would be brought to the standard desired by the Council and would therefore not endanger public safety by reason of a traffic hazard.

7.1.2. Reason 2: adequate consent to carry out necessary road measures.

- Road improvements and modifications are common to facilitate development. The proposed road works are entirely within Council controlled land.
- Conditioned road improvement works, at the cost of the developer, in order to facilitate a development are entirely appropriate.

7.1.3. Reason 3: Impact on visual and residential amenity. In responding to this reason for refusal, the appellant has presented the appeal under a number of headings as follows:

- Population & Human Health:
 - Neither the HSE nor the Environment Section of Kildare Co. Co. raised any concerns in relation to Human Health.
 - The preparation of the EIAR was carried out in accordance with the relevant guidelines.
 - The findings of the EIAR are that, with the appropriate mitigation measures imposed, there will be no significant adverse impact to human health.
 - In terms of the amenity of the local community from use of the local road for recreational purposes, a Stage 1 Road Safety Audit was undertaken. Mitigation measures – which include scheduling HGV movements outside peak school activities - will address the vulnerable road users.
 - Noise issues were dealt with and the potential for negative mental impacts have been designed out of the development through a restriction on working hours, the use of earthen berms and the siting of the processing plant away from residential properties.
 - The contention that human health has not been adequately addressed is completely unfounded and with the net improvement to road safety, there are no grounds to refuse the proposed development based on any

significant adverse impacts to human health impacting on residential amenity.

- Biodiversity:
 - Mitigation measures are presented in the EIAR to address potential impacts to the aquatic environment.
 - To respond to the information requests of the PA, an update on the Habitat Restoration Plan, details of the habitat balance assessment to include both hedgerows and other habitats in the area lost and gained by the proposed development and clarification on the sediment control measures for the management of overburden stockpiles is provided.
 - Upon cessation of the extraction operations, the site will be restored to a landscaped habitat capable of supporting many local terrestrial and aquatic habitats and associated wildlife.
 - Given the nature of the proposed operations, which include wet working methods for extraction below the water table and the creation of a pit void filled with standing groundwater, it is not possible to implement progressive or phased restoration during the operation phase.
 - The gradual land take will not have a dramatic sudden impact on the fauna of the area and will allow them to adapt to the pit workings and relocate to adjoining lands.
 - As large scale changes or loss of habitat will have been largely completed by the restoration phase, it is considered unlikely that during the restoration of the site that there would be any further significant negative impact on habitats within the site.
 - There will be development of semi-natural habitats prior to the construction stage in isolated areas and later as the planting on the restored site matures. Overburden storage areas will be seeded with non-agricultural grasses and plants resulting in a net gain of 8ha.
 - A number of less intensively managed fields to the south of the extraction area with a total area of 4.3ha will be re-wilded. This does not form part of

the application but can be included as a condition of permission if the Board requires.

- The net loss of hedgerow habitat is 1km which is not deemed to be a significant impact above local level.
- There is no valid reason to refuse the proposed development on the grounds of biodiversity.
- Water (Hydrogeology & Hydrology)
 - Notes that water quality and hydrogeology are not cited as any reasons for refusal but seeks to respond to the FI requests of the PA and associated bodies.
 - Additional clarification is presented in the appeal document.
 - The submission addresses the omission of a reference to the Kildoon River in Section 6.3.9 of the EIAR does not change the outcome of the assessment as it is appropriately described and discussed within Chapters 5 and 7 of the EIAR.
 - The importance classification of 'High' assigned to the Curragh PWS Source Protection Zone and Lipstown Narraghmore Groundwater Supply remains valid due to the potable water source supplying >1000 homes.
 - The development will result in an annual groundwater loss of 19,802m³. This will be offset by rainwater gain of 44,349m³ which will result in a net gain of approximately 24,547m³. There are no other discharges to groundwater which will ensure the protection of groundwater quality with no significant adverse impacts from pollutant sources.
 - Water management system on the site is a closed loop system with all water retained on site. There will be no discharge to surface water from the proposed development.
 - Full details of proposed monitoring regime are provided.
 - There is no predicted adverse impact to human health and the wider environment.

- Air Quality & Climate
 - The appeal seeks to submit clarification on perceived misunderstandings in relation to dust and the assessment of same in the EIAR.
 - The proposed development will result in an increase of AADT of less than 2% and therefore impacts of the changes in traffic along the R418 have been scoped out.
 - Results of dust monitoring are provided, and mitigation measures identified.
 - The EIAR concludes that operational related dust from the proposed development is likely to result in a 'Medium – Term Slight Adverse' impact of the single property located within 100m of the extraction area, without additional mitigation measures in place. Supplemental mitigation is proposed for this property.
 - Third party references to fine silica dust have wrongly attributed the proposed development with production of crystalline silica dust and associated the medical lung condition of silicosis.
 - The underlying subsoil of quaternary sediments comprise primarily till derived from limestones, underlain by the limestone derived sand and gravel deposits, with a small area of lacustrine sediments in the south west of the landholding. The deposits at the site are dominated by limestones and not silica dominated rock types.
 - The local roads were scoped in as the proposed development will result in an increase of AADT of 8.6% on the L-8007 and 15.3% on the L8006.
 - Impacts were presented in the EIAR.
 - The contention by the PA that dust may pose a risk to residential amenity is completely unfounded.
- Noise & Vibration
 - The PA report stated that no notable issues are raised in relation to noise.

- Noise mitigation measures are to be implemented during the operational phase of the development.
- Scoping of the proposed development for noise and vibration was carried out as part of the EIA process and the need for baseline vibration was scoped out as no blasting is proposed, there is no evidence that existing receptors are currently affected by environment vibration and based on previous experience, extraction at sand and gravel facilities gives rise to little or no vibration. No vibration assessment is therefore required.
- In terms of the proposed AADT volumes on the roads, and the screening methodology in DMRB, on the basis that none of the criteria were achieved, a baseline vibration assessment was scoped out.
- It is requested that the Board dismiss any suggestion that the absence of a vibration survey may be employed as a reason for refusal.
- Cultural Heritage
 - The appeal document provides details of a review of the Heritage Officers submission and provides an overview of the justification of the 'Outstanding Universal Value' (OUV) of the Royal Sites of Ireland for inclusion on the tentative World Heritage Site list.
 - Dun Ailinne is located 4.5km to the north east of the proposed development site.
 - The nature of the proposed development means that it will not be visually prominent or dominant in the landscape.
 - The photomontage from Dun Ailinne shows that the presence of existing field boundaries would render the site barely detectable, prior to any mitigation measures.
 - It is concluded that the proposed development will not impact on the potential of Dun Ailinne attaining World Heritage Site Status.

- An archaeo-geophysical survey was carried out and submitted in support of the appeal. Test excavations under licence will be carried out in early 2020.
- Landscape
 - Findings from the visual impact assessment identified that overall the predicted magnitude of impact on high sensitivity receptors is no change, which would result in no effect.
 - A visual assessment is provided in the appeal submission.
 - Predicted effects of the site access will be localised, short term, adverse on receptors travelling on the L-8006 during construction phase.
 - During the operational phase, effects will be limited by the proposed screen mounding along the northern boundary.
 - The appeal includes a visual assessment from Dun Ailinne.
 - The appeal concludes that the proposed development will have no adverse impact to landscape or visual amenity in the area.
- Other Matters
 - Reference to the Environment Section of Kildare County Councils request for further information in terms of any restoration of the site to agricultural land and details of waste to be imported for the restoration.
 - Section 3.8 of the Volume II of the EIAR clearly sets out the proposed restoration of the site as an ecological resource rather than the infilling of the site.
- Residential Amenity & CDP Policies
 - The EIAR, NIS and application documents, coupled with clarifications provided in the appeal clearly demonstrate that there is no substance to the claim that the development will significantly impact upon the residential amenity in the area and lead to devaluation of property.

- The development will not unduly impinge on the environmental quality and the visual and residential amenity of the area as per Policy E13.
- The planned restoration phase plans to convert an existing agricultural land use to a sand and gravel pit for a 12 year period, after which the site will be restored as an ecological resource.
- Impact on the Equine Industry
 - An extremely robust assessment of the proposal has been undertaken and it is demonstrated that the proposals will not have a negative impact on the nearby residents. Therefore, it also will not have an impact on the equine industry.
 - The proposed development accords with Policy ECD 24 of the Development Plan.

7.1.4. Reason 4: Inadequate demonstration that the qualifying interests of the European Site, the River Barrow and River Nore SAC, site code 002162, will not be adversely affected by the proposed development.

- It is unclear how the PA arrived at their conclusion that the NIS and EIAR have not fully or adequately demonstrated that the proposed development will not have an adverse impact on the qualifying interests of the SAC.
- The appeal restates and clarifies the findings of the NIS.
- Mitigation measures presented represent best practice for the protection of the ecological aquatic environment given the sensitivity of the downstream SAC.
- The appeal submits that there is no validity to the contention by the PA that the application does not demonstrate that the qualifying interests of the River Barrow and River Nore SAC will not be adversely affected by the proposed development and there is no reasonable determination presented in the PA documentation how such a conclusion may be drawn.

7.1.5. It is requested that the PAs decision to refuse permission for the proposed sand and gravel quarry be overturned and that the Board grant permission for the proposed sustainable development.

7.1.6. The appeal includes a number of appendices as follows:

- Appendix A: Outline Habitat Restoration Plan
- Appendix B: Foul Drainage System Drawings
- Appendix C: Combined Trial Pit Details and Petrographic Report
- Appendix D: Proposed Site Layout Drawings
- Appendix E: Geophysical Survey Report
- Appendix F: Proposed Security Gates Drawing.

7.2. Planning Authority Response

The Planning Authority submitted a response to the first party appeal advising as follows:

7.2.1. The Roads, Transportation and Public Safety Department notes the applicants' proposals to improve the road width to a minimum of 5.5m but in general to the desired 6m width throughout the haul route along the L8006 and L8007. The Traffic Wise Report which clarifies points in relation to the quality of the baseline surveys, additional baseline surveys, road safety audit, no. of HGV movements and addresses concerns regarding HGV movements at the junction of the L8006 and the R418.

7.2.2. However, the main concerns raised in the original report remain and refusal continues to be the recommendation as the proposed development would endanger public safety by reason of a traffic hazard and would be contrary to the proper planning and sustainable development of the area.

7.2.3. The Planning Authority also note the amendments and clarifications within the appeal documents. The response also notes the comments of the Roads Department of Kildare County Council. The report concludes that notwithstanding the amendments and clarifications, having regard to the nature and scale of the

proposed development, it would seriously injure the amenities of properties in the vicinity by reason of dust, traffic and general disturbance, would depreciate the value of properties in the area and would materially contravene policies E12 and E13 of the Kildare County Development Plan 2017-2023 which seeks to ensure that such developments do not impinge in the environment quality and the visual and residential amenities of the area.

It is requested that the Councils decision to refuse be upheld by the Board.

7.3. Observations

There are 77 observations noted in relation to this appeal. The issues raised reflect those presented to the Planning Authority during its assessment of the proposed development and are summarised as follows:

- Impact of a large commercial development in this rural area
- Roads issues including road widening proposals, haul routes and impacts on existing roads infrastructure. The L8007 road is liable to flooding.
- Impact on schools
- Impact on visual and residential amenity, as well as impact on property values and local water supplies
- Dust impacts on health
- Impacts on equine industry and existing dairy farms
- Impacts on wildlife and watercourses.
- Lack of information regarding the landbank of the applicant in the area
- Issues raised with proposed restoration plan
- Issues with EIAR
- Questions on the life of the proposal raised given the landbank and previous applications at existing quarry sites to extend their lifespan
- Impacts on heritage of the wider area raised

- Impact of invasive plant species which are present on Kilsaran site approximately 3km from the subject site
- Use of screen berms not considered to be appropriate in terms of visual amenity
- There is an overconcentration of Kilsaran sites in the area, and the applicant claims to have 100+ years of aggregate in reserve throughout Ireland (website).
- The development does not accord with a number of objectives of the Kildare County Development Plan
- The applicant has a history of non-compliance.

7.4. Further Responses

Inland Fisheries Ireland submitted a response to the first party appeal raising a number of concerns in relation to the proposed development. The response is summarised as follows:

- IFI have reviewed the aquatic survey report submitted. An inspection of the Ballysax Little Stream in January 2020 highlighted that large trout are resident in the watercourse and that the habitat represents excellent salmon spawning / nursery habitat.
- Eaglehill Stream has salmonid potential.
- In relation to the water quality recorded at the streams, further inspections throughout both catchments are proposed to identify and rectify the agricultural source contributing to unsatisfactory biological conditions.
- Details of the water usage of the sand-washing plant and loss of water to evapotranspiration discussed.
- Concerns raised in relation to the water deficit associated with the operation of the wheel wash, which IFI considers may be significant, especially during the summer months.

- IFI notes that the majority of sand deposits on site are below the groundwater level. The applicant is asked to quantify the expected water losses to evapotranspiration during summer months.
- The applicant has not quantified the combined water deficits associated with various operations on site. IFI have concerns that the combined water deficit of all operations may be multiples of the 1.9l/sec and may, during prolonged dry spells, represent a significant loss in the base flows of the Eaglehill and Ballysax Little streams.

8.0 Planning Assessment

8.1. Introduction

Having regard to the nature of the proposed development, the details submitted with the planning application and appeal documents, together with my site inspection, I conclude that issues arising for consideration should be addressed under the following headings:

- The principle of the proposed development & compliance with policy
- Roads & traffic
- Residential & general amenity issues
 - Residential amenity
 - Noise
 - Air Quality
 - Impacts on Groundwater and Water Supply
 - Visual Impacts and landscape
- Other issues
 - Biodiversity
 - Impacts on Archaeology & Heritage
 - Hours of operation
 - Development Contributions

The Board will note that Environmental Impact Assessment and Appropriate Assessment are presented in separated sections.

8.2. The principle of the proposed development & compliance with policy:

8.2.1. National and Regional Guidance, including the Regional Planning Guidelines for the Greater Dublin Area, 2010-2022, and the Quarries and Ancillary Activities, Guidelines for Planning Authorities, DoEHLG, 2004, recommend that local

authorities identify and protect important strategic mineral reserves in development plans while also acknowledging the economic importance of the quarry industry in supplying the construction sector with aggregates and stone. It is accepted that major infrastructure projects will create a demand for aggregates that will support the continuing economic and social development of the country and maintain Ireland's international competitiveness. In addition, the Regional Planning Guidelines for the Greater Dublin Area, 2010-2022, also acknowledge that the mineral resources of the region, especially aggregates, contribute largely to the economy and operational aspects of the construction industry (buildings and infrastructure).

8.2.2. In terms of compliance with the current Kildare County Development Plan, 2017, the Board will note that the Plan recognises the importance of the extractive industry in economic and employment terms to the county through the provision of raw materials to the constructive industry. The aim of the plan, Objective 10.7, is to ensure that adequate supplies of aggregates are available to meet the future needs of the county and region in line with the principles of sustainable development and environmental management.

8.2.3. The objectives relating to the extractive industry seek to ensure that the extractive industry minimises and / or mitigates any adverse visual and / or environmental impacts on the built or natural environment through adherence to the EPA publication Environment Management in the Extractive Industry (Non-scheduled minerals) (2006) and any subsequent revisions and the requirements of the Programme of Measures from the River Basin Management Plans Objective EO 3 refers. The Plan further considers the proposed locations of quarries in relation to landscape and identifies protected views, scenic routes and amenity areas. Policies relating to the extraction industry also require the protection of landscape, environment, road network, heritage, visual quality and amenity of the area. Policy EI 5 also seeks to ensure that development for aggregate extraction does not significantly impact on designated sites, sensitive landscapes, areas of importance for conservation of flora and fauna, established rights of way and walking routes.

8.2.4. The subject site is located within an area of Co. Kildare which has been designated as a Rural Housing Policy Zone 2. The rural area is characterised by one

off houses on large sites and farm holdings on the local road network in the vicinity. The public road network in the vicinity comprises a network of local roads which are narrow and can accommodate two cars passing slowly. The speed limit of the road is 80km/p/h, and there are no road markings or verges in the vicinity of the site.

- 8.2.5. The subject site is located within the Landscape Area known as Central Undulating Lands, with a section to the west located within the Southern Lowlands. Both of these Landscape Character Areas are Class 1 Sensitive landscapes with the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area.
- 8.2.6. Table 14.3 of the CDP identifies the likely compatibility of land uses within landscape areas, and it is noted that the extraction of sand and gravel is considered to have a high compatibility in the subject landscape. In addition, Table 14.4 considers the likely compatibility between a range of land-uses and proximity to Principle Landscape Sensitivity Factors, noting that sand and gravel extraction is considered likely to be compatible with great care with regard to agricultural land with natural vegetation.
- 8.2.7. Chapter 10 of the plan deals with Rural Development and section 10.4.9 deals with mineral resources. The Plan acknowledges that mineral resources are generally located within the rural area. It is also acknowledged that the industry can have damaging environmental effects and that permission will only be granted where the Council is satisfied that residential and natural amenities will be protected, pollution will be prevented and aquifers and groundwater safeguarded.
- 8.2.8. Section 10.7 of the Plan deals with Extractive Industry and it is noted that the aim of the plan is 'to ensure that adequate supplies of aggregates are available to meet the future needs of the county and region in line with the principles of sustainable development and environmental management. This chapter includes the relevant policies and objectives relating to the extractive industry and relate to a number of environmental factors which are to be considered when assessing a proposed extraction development. The full text of the relevant policies are included above in section 6.2.4, page 18, of this report. Overall, the plan requires that the exploitation of natural aggregate resources is carried out in a manner which does not

unduly impinge on the environmental quality, the visual and residential amenities of an area, seeks the delivery of environmental benefits in the form of sustainable habitat creation in conjunction with the restoration phases of development.

8.2.9. In addition, the Plan requires the operation of the extractive industry in suitable locations, subject to the protection of landscape, environment, road network, heritage, visual quality and amenity of the area. Consideration is also required in terms of the scale of activity proposed, the impact on the water environments, including aquifer sources and natural drainage patterns, and impacts on public rights of way and walking routes. Development for aggregate extraction, processing and associated concrete production should not significantly impact on protected sites or protected structures, or on Sites of Geological Importance listed in the County Development Plan. EIA and AA will be required where necessary and detailed landscaping and quarry restoration plans are to be submitted with each planning application.

8.2.10. In terms of the above, I am satisfied that in principle, the proposed development can be considered as being acceptable and in general compliance with national, regional and local policies. There are a number of site-specific issues however, which will require to be addressed further in terms of the proposed sand and gravel extraction development. In particular, the Board will note the details of the reasons for refusal by the Planning Authority in terms of the impact of the development on the local road network, on the visual and residential amenity of the area and potential effects on European Sites. These, and other site-specific issues will be dealt with further below in this assessment.

8.3. Roads & Traffic:

8.3.1. The subject site is located in a rural area of Co. Kildare, to the south of Kildare and to the west of Kilcullen. The site is accessed over a network of local roads which currently supports the existing residential and farming enterprises in the wider area. The Transportation Department of Kildare County Council determined that the proposed sand and gravel extraction development gives rise to significant concerns, particularly with regard to the narrow width and alignment of the road, the proximity

and number of residences on the road and the fact that the Road Safety Audit did not adequately consider or mitigate the effect of the development on the local primary school children travelling to and from Ballyshannon National School.

8.3.2. The Transportation Department also raised concerns in terms of the figures presented in the TIA, concluding that the increase in traffic will be greater if HGVs are used to transport material. The report concludes that the proposal is not suitable and would create road safety hazards for all road users. The development would require third-party landholder agreement to carry out the extensive works to the roads. It is considered that the infrastructural proposals presented are inadequate to justify the intensification of traffic on the rural community and the report recommends that permission be refused for 2 stated reasons.

8.3.3. The development identifies an overall site area of 32.2ha and proposes to extract 17.2ha with a total extraction volume of approximately 3,000,000 tonnes of aggregate over a period of 12 years. This amounts to 250,000 tonnes per annum and the appellant advises that this equates to 36 loads per day – averaged at 28 tonne loads. The Planning Report submitted in support of the proposed development has concluded that a maximum number of HGV trips generated by the proposed development is expected to be 72 per day. No figures of staff trips or other miscellaneous trips are provided. The plans provide for 5 car parking spaces and an area for bicycle parking.

8.3.4. The assessments presented in support of the proposed development also sought to address the condition of the roads, including the capacity to accommodate the traffic generated by the development, and in particular, the HGV movements to and from the site. A Junction Capacity Assessment was also carried out on the R148 / L8007 junction. The assessment found that the junction will operate below the 0.85 threshold for both am and pm peak times concluding that the development would have no significant impact on the capacity of the junction. There is a serious concern however regarding the increase in HGV turning movements at this junction, particularly given the proximity of Ballyshannon National School. The PAs Transportation Department, following their analysis, concluded that this increase in turning movements will lead to a traffic hazard to road users at this junction.

8.3.5. Having undertaken a site inspection, I would advise that traffic volumes on the local road network in the vicinity of the subject site is small and no HGVs were noted during my visit, which extended to a number of hours. I also note that in order to achieve the necessary 160m sight distances to the east of the proposed access to the site, it is proposed to remove 170m of existing hedgerows. To the west of the proposed entrance, it is proposed to cut the hedgerow and lower the boundary treatments in order to achieve the necessary sight distances. The entrance to the site will include a 9.81m wide security gate, which will be set back approximately 15-20m from the existing road edge.

8.3.6. Further to the above, and the extensive removal of hedgerow boundary, the Board will note that the road widths to the east of the proposed site entrance reduces to approximately 3.88m in places. The width of the local roads range from 3.88m to 7.2m and have widths of less than 5.1m for extensive sections of the road. In terms of the proposals to provide laybys, the Board will note that that the PA consider that it is possible that third party consents may be required and that further details are required in relation to same. I note that the appellants advise to the contrary, submitting that all necessary infrastructural works will be carried out on public roads and land in the ownership of the Council. However, no further details in terms of how the necessary laybys are to be constructed have been submitted. In terms of the scale of the infrastructural works required to the public road network in order to accommodate the proposed development, together with the lack of any real or clear details as to how said infrastructure might be provided, I am inclined to agree with the Transportation Department of Kildare County Council. As such, I would have serious concerns in relation to the ability of the existing road network to accommodate the scale of the development proposed as well as the impact the development would have on the local road network, as well as on the amenity of the wider rural area, and current vulnerable road users.

8.3.7. The proposed haul routes from the site to the major road network in the area have been identified in Chapter 10 of the EIAR, Section 10.4.4. It is indicated that all trucks arriving with material will use the R418, L-8007 and L-8006. It may have been a typo in terms of the statement 'trucks arriving with material' as it is unclear what materials will be brought to the site, but it is submitted that vehicles leaving the sand

and gravel quarry will turn right at the entrance and will travel over the L-8006 towards and the M9 to sites in Dublin.

8.3.8. As indicated above, an assessment of the junctions affected by the development is also presented in the EIAR and concludes that all are operating within capacity. It is further submitted that the additional traffic generated by the development on the R418 will be insignificant in the context of the overall flow on the Regional Road. The assessment submits that if permitted, the development will result in an increase in traffic volumes of 8.6% on the L-8007 and 15.2% on the L-8006. Of particular note, are the figures from the traffic survey carried out by the first-party. On the local roads, the traffic survey noted an existing daily average of 12 heavy vehicles on the L-8006.

8.3.9. The Board will note the submissions from local residents and the concerns raised in relation to the traffic issues arising from the operation of a sand and gravel quarry of the scale proposed at this location. The narrow nature of the road is a concern given the intended use of additional HGVs to transport the quarried materials from the site. There is just about enough room for a car and HGV to pass slowly and I have raised the issue that two HGVs could not pass each other comfortably on the local road above. In addition, I would note that the road does not currently support a significant level of HGV traffic. The development if permitted, will result in the number of HGVs using the local road rising from 12 daily to 84. This is not insignificant. The width, alignment and condition of the existing road network in the vicinity of the site compounds the concerns in relation to the impact of the development on the local road network.

8.3.10. I note the mitigation measures proposed in the EIAR with regards to road safety. Overall, I consider that the estimated volume of traffic that would be generated by the proposed development would represent a significant increase in the existing traffic movements on the immediate local road network. Given the condition, nature and carrying capacity of the existing local road, together with its narrow width, lack of road markings and the existing level of HGV traffic, I do not consider that the traffic movements generated by the proposed sand and gravel

quarry, can be accommodated without endangering public safety by reason of traffic hazard and resulting in an obstruction to road users.

8.4. Residential & general amenity issues

Residential Amenity:

- 8.4.1. There are a number of residential properties located in proximity to the subject appeal site. The third-party observations submitted against the proposed development, cite the impact on residential amenity as a significant concern. Impacts on residential amenity including noise, dust, visual impacts, devaluation of property as well as impacts on the local road network.
- 8.4.2. I refer the Board to policy EI 2 of the CDP which states that it is the policy of the Council to 'recognise the role and facilitate the exploitation of County Kildare's natural aggregate resources in a manner which does not unduly impinge on the environmental quality and the visual and residential amenity of an area, while continuing to regulate the extraction of aggregates and to seek the delivery of environmental benefits in the form of sustainable habitat creation in conjunction with the restoration phases of development.'
- 8.4.3. The operation of a quarry presents a difficulty in that it is a necessary and vital resource for the future development of the area but where that operation gives rise to concerns, residential, environmental, and visual considerations have to be weighed against economic, employment and development considerations. It is required that the Board consider whether or not the operation of the quarry results in significant adverse effects on the local community.
- 8.4.4. There are a number of elements of the proposed development which have the potential to negatively impact the existing residential and general amenities of the area. I have discussed the potential impacts to the road network above and will consider the visual impacts associated with the proposed sand and gravel extraction facility further in this report. In addition, operational impacts in terms of noise, vibration and dust, as well as impacts on archaeology, groundwater, property values, visual amenity and landscape are issues which require to be considered.

Noise

- 8.4.5. The subject site is located in a quiet rural area of Co. Kildare. The process of quarrying generates a variety of noises which have the potential to impact on the residential amenity of local residents. While blasting is not proposed as part of the current proposed development, other activities associated with quarry operations include mobile crushing, screening and processing of aggregate and the use of other machinery, have the potential to generate noise.
- 8.4.6. Chapter 9 of the EIAR deals with noise and vibration and the grounds of appeal submission supplements the information submitted. The reports seek to describe the receiving environment and notes the houses located within 1km and 2km of the site. A noise survey is indicated as having been carried out on the 18th of June 2019 at seven locations. The recorded average ambient noise levels ranged between 41dB(A) L_{Aeq} at Noise Monitoring station N6 (adjacent to the eastern site boundary) and 67dB(A) L_{Aeq} at Noise Monitoring station N1 (adjacent to Dowling's Bar on the R418 to the east of the site). The primary source of noise was bird-song and livestock, road traffic and children playing in the nearby schoolyard. It is concluded that subject to mitigation, there will be a medium term slight adverse impact for sensitive receptors along the haul route and within the immediate environs of the site as a result of the proposed development.
- 8.4.7. The appeal submission advises that additional noise monitoring was carried out at 4 locations within the site boundaries between April and August 2019, and in addition to the 7 identified locations surveyed on the 18th of June. It is submitted that noise from road haulage trucks will result in an increase in the baseline noise environment by less than 3dB. The impact of this traffic is not expected to give rise to significant noise nuisance with the changes in noise levels at receptors categorised as 'slight/moderate change. The first party concludes that the proposed development will accord with the EPA Guidance on Quarries and Ancillary Activities suggested noise limit values of 55dB(A) and 45dB(A) for daytime and night-time respectively. The guidelines advise that in areas of higher background noise levels, the EPA recommends that ideally, if the total noise level from all sources is taken into

account, the noise level at sensitive locations should not exceed a L_{Aeq} (1 hour) of 55 dB(A) by daytime and a L_{Aeq} (15 minutes) of 45 dB(A) by night time.

8.4.8. The above mentioned guidelines acknowledge that most quarries are situated in areas of low background noise and that it is appropriate to consider this when setting noise limits. It is further stated that complaints can be expected where the noise levels from quarrying operations are between 5 to 10dB above background noise levels.

8.4.9. By its nature, the operation of an extractive industry generates noise. In terms of the predicted change in noise levels, I refer the Board to Table 9.13, page 194 of the EIAR. From this table, it would appear that the predicted operational noise levels at noise receptors will be 51dB L_{Aeq} . It is submitted that as this is within the ambient limit of 55dB L_{Aeq} , and therefore, the development will be compliant with the guidance and will not have an adverse impact on the noise climate in the vicinity. However, having regard to the baseline noise survey results, the Board will note that the average dB L_{Aeq} at locations N5, N6 and N7 is 45dB L_{Aeq} , 41dB L_{Aeq} and 42dB L_{Aeq} respectively. This will result in an increase of 10, 14 and 13 dB L_{Aeq} , which I consider to be significantly above the 5 to 10dB above background noise levels which is likely to give rise to complaints.

8.4.10. I have serious concerns that the development, if permitted would represent a significant impact on the existing residential amenities of the properties in the vicinity of the site, particularly those located adjacent to the proposed site.

Vibration

8.4.11. The EIAR notes that in the case of nominally continuous sources of vibration, such as traffic, vibration is perceptible at around 0.5mm/s and may become disturbing or annoying at higher magnitudes. It is concluded that the operational phase of the development will not generate perceptible vibrations. The issue of vibration is not discussed further in the EIAR.

8.4.12. Concern was raised in terms of the potential impact of the HGV traffic, and associated vibration, on a stone building which is located on the haul route and is occupied as a home. It is submitted that traffic induced vibration levels do not cause

damage to buildings and the applicant commits to carrying out a pre-construction structural survey on the property, with further surveys carried out in year 5, 10 and following cessation, subject to the landowners agreement. These surveys will be carried out at the expense of the applicant and the cost of any remedial works identified will be borne by the applicant.

8.4.13. I note that the PA is not satisfied with this proposal, and I would concur. The EIAR in this regard is inadequate and would not provide any comfort to the owners of the stone house during the operational phase of the development. In the absence of any assessment, I consider that the development would significantly impact on the residential amenities of the occupants of this house.

Air Quality:

8.4.14. The issue of air quality and dust was raised by third parties in terms of human health and the potential impacts on the equine industry in the area. Surveys were carried out from April to July 2019 and the results show that levels were below the 350mg/m²/day limit as recommended in the EPAs Environmental Management in the Extractive Industry guidelines. The daily average over the 4 month period is 161mg/m²/day, with the highest level recorded in May with 574.0 at location D2 and 342.0 at location D3. Location D2 lies approximately 110m from the residence to the south east of the site. Given the nature of the proposed development, there is potential for dust emissions being generated at the site.

8.4.15. The Board will also note the third-party concerns in terms of air quality and the potential impacts associated with the production of crystalline silica dust and associated medical lung condition of silicosis. While I acknowledge these concerns, I note that the deposits at the site are dominated by limestones and not silica dominated rock types. The composition of the site geology was tested and found to be 97% limestone with only trace levels of other materials. There is no significant impact to human health from Respirable Crystalline Silica at the site.

8.4.16. I also note the requirements of the Environmental Health Service in terms of mitigation and monitoring. The appellant has submitted that monitoring will continue within the site, but no monitoring will be carried out at the local national schools or nursing home due to the distance from the site. In this regard, I consider that the

applicant has not fully considered the potential impacts associated with the haulage of the material extracted from the site and the traffic generated. Should the Board be minded to grant permission in this instance, I would recommend that the requirements of the EHS be conditioned fully, including monitoring at the schools and nursing home.

Impact on groundwater and water supply:

- 8.4.17. The Board will note that it is intended to extract sand and gravel below the water table level. The aquifer at the subject site is identified as a Locally Important aquifer where bedrock is moderately productive only in local zones. The vulnerability of the aquifer is classified as Moderate by the GSI, however, site investigations estimates that the bedrock is encountered at 60mAOD with at least 15m of clay dominated soil between the bedrock and the sand/gravel. This would suggest a low vulnerability classification. An assessment of potable water supplies in the area indicates that all residential properties are connected to a piped supply with private wells likely used only for agricultural purposes.
- 8.4.18. The maximum dry working depth is c9.5m while the wet working depth is to be a maximum target depth of c7 to 8m. The final extraction depth is indicated as being 83.0m AOD while the existing site levels within the extraction area ranges from 93m to 101m. Five boreholes were drilled across the site and the water table depth results in each is provided in Table 6.4 in the EIAR. The subject site is located approximately 4km to the south of, and downgradient of, the Outer Protection Area of the Curragh camp Public Water Supply. A second Source Protection Area for the Lipstown Narraghmore Groundwater Supply, is located approximately 5km to the south, and downgradient, of the site, with a third SO for the USK/Gormanstown GWS located approximately 11km to the west and downgradient of the subject site.
- 8.4.19. The assessment included in the EIAR in terms of hydrogeology and hydrology concluded that subject to mitigation, there is no predicted significant residual impact to hydrogeology or hydrology. I am satisfied that the information presented is acceptable. Should the Board be minded to grant permission however, I would consider it reasonable to include the existing private wells used for agriculture in any future sampling plan. This can be dealt with by way of condition.

Visual Impact & Landscape:

- 8.4.20. Given the nature of the proposed development, the visual impacts can be significant. The subject site is located within the Landscape Area known as Central Undulating Lands, with a section to the west located within the Southern Lowlands. Both of these Landscape Character Areas are Class 1 Sensitive landscapes with the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area. The closest High Amenity Area is located approximately 4.9km to the north, The Curragh. The EIAR identifies two scenic routes within 5km of the site, and five historic gardens and designed landscapes within 3km.
- 8.4.21. Table 14.3 of the Kildare County Development Plan identifies the likely compatibility between a range of land-uses and Principle Landscape Areas. The table advises that sand & gravel extraction has high compatibility in Class 1 landscapes. In addition, table 14.4 identifies the likely compatibility between a range of land-uses and proximity to Principle Landscape Sensitivity Factors, noting that sand and gravel extraction is considered likely to be compatible with great care with regard to agricultural land with natural vegetation.
- 8.4.22. The applicant submitted a visual impact assessment, including a number of photomontages as part of the EIAR. A further montage was submitted as part of the Grounds of Appeal. Mitigation measures to reduce visual impacts include screening of vegetation establishment, particularly proposed spoil / storage heaps along the northern and western boundaries and compensation of landscape impact where possible. Other mitigation has been built into the design and specific landscape proposals will be put in place during the restoration phase. The proposals will see the removal of approximately 1.9km of internal hedgerows and treelines within the subject site. As previously noted, the site is located within Class 1 Sensitive landscapes.
- 8.4.23. The proposed development will result in a distinct and permanent alteration to the topography and vegetation of the site, which comprises a number of relatively level agricultural fields and their associated hedgerow boundaries. The restoration

plan for the site proposes that the pit will not be infilled and will become an ecological reserve.

8.4.24. In terms of the above, I would consider that the principle of the proposed quarry would accord with the stated policy requirements relating to the protection of the landscape in this area of Co. Kildare. I would also consider that the proposed mitigation measures to construct a berm along parts of the boundary of the site, will work to minimise the visual impacts associated with the proposed sand and gravel extraction facility.

8.4.25. I would not agree however, that the potential visual impacts associated with the proposed development could be considered negligible as suggested in the EIAR. The berms will alter the existing characteristics of the area and will represent a visual impact in this landscape, particularly at local level. However, given the class of the landscape in which the proposed development is to be located, I am satisfied that the proposed development is acceptable in terms of visual impact.

Conclusion:

8.4.26. Overall, I consider that the proposed sand and gravel facility at this site would seriously injure the amenities of properties in the vicinity by reason of traffic, noise, air quality, visual impacts and general disturbance and would depreciate the value of properties in the area. The development would, therefore, materially contravene policies E12 and E13 of the Kildare County Development Plan 2017-2023

8.5. Other Issues

Biodiversity:

8.5.1. The Board will note the submission of a NIS in support of the proposed development. In addition, Chapter 5 of the EIAR deals with biodiversity. The site does not lie within any designated site, but is hydrologically connect to the River Barrow and River Nore SAC (Site Code: 002162) via the Eaglehill Stream, which is located approximately 250m to the south of the site, and Kildoon River. Habitats present on the site include improved agricultural grassland, hedgerows, treelines and arable crops. The EIAR also notes the proximity of the site to the Eaglehill Stream

and existing drainage ditch system within the site. In terms of flora, the EIAR notes that no protected species were recorded during the site survey.

8.5.2. In terms of fauna, I consider that the species most likely to be impacted by the proposed development are bats and badgers. The bat survey submitted in support of the proposed development, identified a high level of activity from 4 different bat species. The preliminary ground level roost assessments identified 12 habitats with features suitable for roosting bats and these trees and hedgerows were ranked in terms of their potential following the visual assessment. A Badger Survey noted the presence of 11 potential badger setts with one active sett noted, foraging evidence, access runs, tracks and prints. While I acknowledge the assessment in terms of the bats and badgers, I have concerns in terms of the conclusions and the extent of impacts arising due to the proposed extensive removal of treelines and hedgerows within the site.

8.5.3. In terms of impacts on birds, the EIAR lists a total of 35 bird species recorded within the survey area. 10 of these species are of conservation concern, with 8 of the red and amber listed species considered to be 'probable' or 'confirmed' breeders within the site. The EIAR recommends that any disturbance to the site should occur outside the breeding season as activity during the breeding season has the potential to significantly and negatively impact local breeding bird populations. Any works to remove hedgerow and treeline habitats during the breeding season could potentially impact on the conservation status of bird species locally, in the absence of mitigation.

8.5.4. I have a real concern in terms of the robustness of the EIAR in terms of assessing the potential impacts of the proposed development on the biodiversity of the site. In particular, I am concerned that the EIAR has not adequately dealt with the potential impacts of the removal of the hedgerow and treeline habitats on bats or breeding birds on the site. In addition, and while I acknowledge the proposals in terms of mitigation, compensation and enhancement, there is no doubt that the development works are likely to have a significant impact on birds, bats and badgers in the short and medium term and at a local level.

Impacts on Archaeology & Heritage:

8.5.5. It is noted that the closest recorded monuments are a cluster within the Ballyshannon Demesne to the east of the site and includes five sites as follows:

- A church (RPM KD028-058002) 830m east of the site
- Graveyard (RPM KD028-058004) 830m east the site
- Anglo-Norman Motte (RPM KD028-058001) 910m east of the site
- Unclassified Castle (RPM KD028-003002) 885m east of the site and south of the church, graveyard and motte site
- Bastioned Fort (RPM KD028-003001) surrounded the site of the castle.

None of these sites will be impacted directly by the proposed development.

8.5.6. In terms of architectural heritage, no protected structures are located within the boundaries of the site. The site does include Racefield House and its associated farmyard and barns, but this vernacular house is not identified as a protected structure. The development does not propose the demolition of the house, which is a late 19th Century three-bay, two storey farmhouse with central single storey porch, or the existing stone buildings within the yard.

8.5.7. It is the stated policy of the County Development Plan to encourage the protection, retention, appreciation and appropriate revitalisation of the vernacular heritage of the county (policy VA1 refers). Policy VA 2 seeks to resist the demolition of vernacular architecture while VA 4 seeks to preserve the character and setting of vernacular buildings. In this regard, consideration must be paid to the potential visual impacts associated with the development on the setting of Racefield House particularly in the medium term.

8.5.8. St. James Church at the Ballyshannon Demesne, approximately 775m to the east of the site, is the closest protected structure to the site, RPS no. B28-24, and NIAH no. 11902811. This now disused church lies on the site of an earlier medieval church (RPM KD028-058002).

8.5.9. In terms of assessing the potential impact of the development on the archaeology of the site, I note the intention of the applicant to carry out a geophysical

survey and pre-development testing in accordance with the requirements of the Department of Culture, Heritage and the Gaeltacht. These surveys are proposed to be undertaken when appropriate ground conditions are in place. I also note the appeal documentation which sought to address the requirement that these surveys should be undertaken prior to a positive decision issuing. I would note that the data in this regard remains incomplete with the surveys ongoing by the applicant. In terms of the requirements of the National Monument Service, I am concerned that an assessment of impacts on heritage would be incomplete without the benefit of the full survey data.

8.5.10. In the absence of the relevant data, I am slow to conclude that, subject to archaeological monitoring of all topsoil removal, the development will not unduly impact on potential archaeology of the area. With regard to the potential impacts of the development of Racefield House, in terms of vernacular heritage, I would have concerns that the development would adversely impact the setting and visual amenity of this property, contrary to the requirements of the County Development Plan and the proper planning and sustainable development of the area.

Hours of operation:

8.5.11. The proposed hours of operation are submitted by the first party as being 08:00 hours to 18:00 hours Monday to Friday and 08:00 hours to 14:00 hours on Saturdays. No operations will occur on Sundays.

8.5.12. In terms of hours of operation, the Board is referred to Section 4.7 of the 'Quarries and Ancillary Activities, Guidelines for Planning Authorities, 2004' which states the following:

'It is recommended that normal operations should be confined to the hours between 07:00 and 18:00, Monday to Friday inclusive (excluding Bank Holidays) or as may be agreed with the planning authority, and between 07:00 and 14:00 on Saturdays, with no quarrying, processing or associated activities being permitted on Sundays or public holidays. Where market conditions to the nature of particular ancillary processes (such as concrete batch manufacture) would require greater flexibility of working hours, it is imperative

that such flexibility be discussed with the planning authority at the pre-application stage, and addressed in the planning application’.

8.5.13. Should the Board be minded to grant permission in this instance, I am satisfied that the hours of operation can be dealt with by way of condition.

Development Contributions:

8.5.14. The development is a class of development which is identified in the Development Contribution Scheme, 2015-2022 of Kildare County Council. The Development Contribution Scheme with regard to quarrying / extractive industry, provides that:

‘Contributions will be charged at a rate of €0.25 per m³, based on proposed extraction volumes’

8.5.15. In this regard, should the Board be minded to grant planning permission, a condition requiring the payment of a development contribution under the development contribution scheme, should be included.

8.6. Conclusion

Overall, I consider that the proposed development is not acceptable at this location due to the impacts on:

- Road network
- Residential amenity, including air quality, dust, noise and vibration
- Visual amenity & Landscape
- Biodiversity of the area.

In the absence of clear data, I consider it difficult to conclude on the potential impacts, or not, on the archaeology of the site.

9.0 Environmental Impact Assessment

9.1. Introduction

9.1.1. This application was submitted after the 1st September 2018, the date that Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment was transposed into Irish legislation as part of the provisions of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018). These Regulations transpose the requirements of the EIA Directive into planning law, providing a clear definition of EIA, further clarity regarding the process and the need to identify, describe and assess the direct and indirect significant effects of the project on specified environmental factors. The Minister for Housing, Planning and Local Government has published updated 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out environmental impact assessments (EIA)', replacing the 2013 Guidelines.

9.1.2. The new legislation did not make any changes to Annex I or II of Directive 2011/92/EU, which identifies projects for the purposes of EIA. Therefore, Schedule 5 of the Planning and Development Regulations 2001-2019, for the purposes of EIA, still applies. The proposed development falls within the category of prescribed development for the purposes of Part 10 under Schedule 5. Part 2(2) of Schedule 5 of the Planning and Development Regulations 2001 relates to 'Extractive Industry' and part (b) states as follows:

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

9.1.3. I note that the development relates to an extraction facility which covers a total site area of 32.2 hectares, and which will have an extraction area of 17.2ha. The development will involve the extraction of sand and gravel from the site over a period of twelve years. The proposed development, therefore, comprises a development which requires the submission of a mandatory EIAR as it exceeds the threshold of 5ha set out under Part 2(2)(b) of Part 2 of Schedule 5 of the Planning and Development Regulations 2001-2019.

9.2. Environmental Impact Assessment Report:

9.2.1. The EIAR submitted with the planning application is presented in three volumes including a non-technical summary (Volume 1), main report (Volume 2) and appendices (Volume 3). Volume 2, Section 3 of the EIAR provides 14 chapters and seeks to address all environmental matters associated with the proposed development in a grouped format. The EIAR is advertised in the public notices and I have read this EIAR in its entirety.

9.2.2. The EIAR seeks to:

- Describe the proposal, including the site, and its surroundings, as well as the development's design and size;
- Describe the likely significant effects of the project on the environment;
- Describe the features of the project and measures envisaged to avoid, reduce and, if possible, remedy significant adverse effects;
- Describe the main alternatives studied and the main reasons for the choice of site and development, taking into account the effects on the environment.
- A non-technical summary is also provided.
- The EIAR also includes, at Section 1.9, details of the EIAR Project Team Contributors involved in the preparation of the document.

9.2.3. **Volume I** of the EIAR includes a Non-Technical Summary in a separate volume (Vol. I). The NTS provides a preamble and seeks to describe the proposed development, as well as provide a summary of the findings about each of the environmental topics that are examined in the EIAR. The information presented is in clear and non-technical language. I am satisfied that the NTS is generally acceptable.

9.2.4. **Volume II** of the EIAR is presented under the following chapter headings:

- | | |
|------------------------------|---------------------------------|
| 1. Introduction | 5. Biodiversity |
| 2. Alternatives | 6. Land, Soils & Geology |
| 3. Project Description | 7. Water |
| 4. Population & Human Health | 8. Air Quality & Climate Change |

9. Noise & Vibration

12. Cultural Heritage

10. Traffic & Transportation

13. Landscape

11. Material Assets (Built Services)

14. Interactions & Cumulative Impact

9.2.5. **Chapter 1** of Volume II deals provides an introduction to the proposed development, provides information in relation to consultations and the EIAR Study Team as well as the legislative and EIA process.

9.2.6. **Chapter 2** deals with alternatives considered, and identifies alternatives in terms of locations, layouts, designs in terms of restoration options and alternative processes. The EIAR sets out the key environmental and practical considerations which influenced the design of the proposed development and alternative layouts on the subject lands.

- In terms of alternative locations, it is submitted that the development is resource based and therefor, aggregate can only be extracted where it occurs. It is further submitted that mitigation suggests that it is preferable that extracted material is processed where it is extracted. It is submitted that the applicant has considered a number of sites in the Kildare area but due to confidentiality processes, it is not possible to disclose the locations of these sites. These sites were discounted for a number of reasons including environmental effects, unsuitable deposits, landowner selling to a competitor, access issues, proximity to market and proximity to built up areas.
- In terms of alternative layouts, it is submitted that the design and phased layout that was chosen is considered to best minimise the potential impacts on the environment from noise, dust and visual impacts. Alternative designs for the processing plant were considered before the final designs were chosen. It is submitted that the proposed layout will see the retention of internal hedgerows for as long as possible. In considering alternative layouts, the applicant considered the sensitive receptors in the environment, other site constraints including the ESB exclusion zone around the 400kV Moneypoint-Dunstown power line which traverses the site at the north western area and three site entrance options.

- In terms of alternative designs, the EIAR deals with remediation proposals, including a 'do nothing' or no restoration scenario. Other alternatives include:
 - infilling with virgin material
 - infilling with waste material – inert soil and stone waste material
 - infilling with Article 27 Material – soil and stone by-products materials
 - restoration to park land – no filling and the pit void undergoes some restoration to facilitate park land for the community. Such park land may include walking paths, fishing amenity, etc.
 - restoration as an ecological resource – similar scenario as the parkland but no public access.

The EIAR concludes that the restoration of the site as an ecological resource is the preferred option for the site.

- In terms of alternative processes, the consideration is confined to alternative processing of the aggregate products that will be produced at Racefield. The method of extraction will be dry and wet-working with a long-reach excavator. Material will be processed using mobile plant.
- The EIAR concludes that having regard to the reasonable alternatives considered, the development as proposed is the preferred option.

9.2.7. **Chapters 3 to 14** of the EIAR provides a description of the development and sets out the need for the development. The chapters seek to address the main likely significant direct and indirect effects arising from the proposed development, and the interaction of the environmental aspects in accordance with the requirements of Schedule 6 of the Planning & Development Regulations, 2001 as amended. Chapter 14 considers the interactions by means of cross referencing each environmental aspect against all other aspects considered.

9.2.8. I am satisfied that the EIAR has been prepared by competent experts, is generally complete and of acceptable quality, and that the information contained in the EIAR and supplementary information provided by the developer, adequately identifies and describes the direct and indirect effects of the proposed development on the environment and complies with article 94 of the Planning and Development Regulations 2001-2019 for the majority of environmental aspects considered.

9.3. Environmental Impact Assessment

9.3.1. This assessment has had regard to the application documentation, including the Environmental Impact Assessment Report, and all other supporting reports submitted, as well as all written submissions. In accordance with the requirements of Article 3 of the EIA Directive and Section 171A of the Planning and Development Act, 2000 (as amended), the environmental assessment is carried out against the following factors:

- (a) population and human health,
- (b) biodiversity, with particular attention to protected species and habitats protected under the Habitats Directive and the Birds Directive,
- (c) land, soil, water, air and climate,
- (d) material assets, cultural heritage and the landscape,
- (e) the interaction between the above factors.

9.3.2. Population and Human Health

The EIAR, Chapter 4, seeks to address impacts associated with the development on population & human health. It is advised that impacts on population and human health as a result of the proposed development have also been considered in other chapters of the EIAR including in relation to water, air, noise and traffic. The EIAR notes that the site is located in an area where the average population density is lower than that of the county or state, and presents information with regard to the age profile and home ownership, as well as employment trends in the area of the site. The EIAR also seeks to set out the baseline amenity conditions of the local areas and refers to community engagement to collate information on sensitive receptors for analysis and assessment.

The NIS submitted in support of the proposed development notes the linear pattern of residential development on the local road network. There are 56 residential properties identified within 1km of the site, with the closest lying approximately 45m from the proposed extraction area. There are 2 national schools also identified within 2km of the site.

Section 4.4 of the EIAR sets out the assessment of impacts on population and human health. The report notes that under the do-nothing scenario, the site will remain in its current state and continue to be utilised for agricultural activity in keeping with the surrounding agriculture activity and land use. The EIAR advises potential significant impacts arising in terms of population and human health as follows:

- An increase in baseline noise levels resulting from onsite activities
- Possible dust emissions
- Traffic disruption and associated congestion
- Noise, air quality and congestion impacts as a result of construction traffic and movements.

In terms of the Construction / Operation phase, the following impacts are considered likely:

- The development does not include a residential element and will not result in an increase in the permanent population of the area. It is expected that the workforce will travel from existing places of residence rather than reside in the immediate vicinity, however some local employment is expected. Some workers may consider living in the area during the operation phase which may potentially result in a temporary increase in the local population.
- In terms of employment, the enabling phase of the development may result in short term local employment. During the extraction phase, the development will generate low levels of direct employment.
- With regard to the community, the EIAR submits that the construction phase will have reasonably insignificant effects on the local community. The extraction phase will have a potential negative impact on the immediate local environment, businesses and residents living in the immediate vicinity. The local temporary impacts arising are advised as follows:
 - Increased vehicular traffic
 - Increased noise and dust arising from both site operations and traffic.

Mitigation measures are proposed to be implemented to minimise the impacts in terms of traffic and are presented in additional chapters of the EIAR. It is submitted that with the mitigation measures built in, the operational phase of the development is not considered to have a significant noise or dust impacts on the community.

- In terms of human health, the EIAR notes that this issue is also included in other chapters. It is generally concluded that the potential for impact to human health is negligible with mitigation in place.

In terms of the Restoration phase, the following impacts are considered likely:

- The restoration plan does not involve infilling and the site will be restored as an ecological resource. The works involved in restoring the site will be focused on the banks and water body which is specialised and not labour intensive. This phase of the development will have no significant effect on the population, employment, local community or public health.

Standard mitigation measures are proposed to be applied during the construction and operational phases to minimise community disruption and include spraying the roads, removal of any material spillages, covering HGV loads during dry weather and establishing channels of communication between the applicant, Kildare County Council and resident communities. In addition, car parking is to be provided within the site for all operatives and wheel-washing facilities will be provided.

Chapter 4 of the EIAR concludes that subject to mitigation measures, there are no discernible residual impacts arising.

I propose to assess further, the impacts of the proposed development on population and human health as part of my assessment of other environmental aspects below, particularly as they relate to noise and traffic. I do have concerns in terms of the conclusions of the EIAR and the potential impacts on population and human health, in line with those concerns raised by the Planning Authority.

9.3.3. **Biodiversity**

Chapter 5 of the EIAR deals with biodiversity and the Board will note that a Natura Impact Statement (NIS) was submitted in support of the proposed development application. There is no designated site within the proposed development site. The

site is located approximately 3.9km to the east of the River Barrow and River Nore SAC (Site Code 002162). The EIAR notes that the site is hydrologically connected to the SAC via the Eaglehill Stream and the Kildoon Stream, which lies approximately 125m to the south of the proposed site.

Habitats present on the site include improved agricultural grassland, arable crops, hedgerows, treelines and a conifer plantation located to the south of the site. Also identified on, and in proximity to, the site include a number of drainage ditches to the west and south of the site which discharge into the depositing / lowland river (Eaglehill Stream) and Calcareous Springs were noted on the bank of the Eaglehill Stream during surveys. In terms of flora, the EIAR notes that no protected or invasive species were recorded during the site survey.

In terms of impacts on habitats and flora, the operational phase will result in loss of hedgerow within the site which is deemed significant at the local lower level only. There is potential for significant negative impact to water bodies as a result of the development through potential for increased sedimentation. With regard to the restoration phase, the EIAR submits that as the excavation will have been undertaken for circa 12 years, large scale changes or loss of habitat will have been largely completed by the restoration phase. It is therefore concluded that the restoration phase is unlikely to result in any significant negative impact on habitats within the site. As the area restores naturally, and through planting and support works, there is a potential positive impact for habitats. It is further proposed to reinstate new hedgerows around the perimeter of the pit which will offset the net loss in hedgerow habitat from the proposed development. The impact is not considered to be significant above local level.

While I acknowledge the assessment in terms of the potential impacts of the development on habitats and flora, I have concerns in terms of the conclusions reached in terms of the proposed extensive removal of treelines and hedgerow. The Board will note that Kildare County Council engaged the services of Consultant Ecologists to assess biodiversity matters associated with the proposed development. Concerns were raised in this report which are reflected in the PAs assessment of the proposed development and their environmental impact assessment. The first-party appeal seeks to address the issues and concerns raised and provides clarity in terms of the length of hedgerow to be removed. The development will result in the

loss of 1.9km of hedgerow within the site – the existing field boundaries – which have been identified as being moderate to low value to commuting and foraging bats. I consider this loss to be significant, particularly given the time scale for the proposed operation of the excavation works.

In terms of fauna, the following is relevant:

BATS: The applicant carried out a number of Bat surveys which identified a high level of activity from 4 different bat species. The preliminary ground level roost assessments identified 12 habitats with features suitable for roosting bats and these trees and hedgerows were ranked in terms of their potential following the visual assessment. In addition, it is submitted that all hedgerows were assessed for their suitability for bat commuting and foraging.

In terms of impacts, the loss of internal hedgerows is submitted to have potential for a temporary negative impact, which is not considered significant at local level. In terms of the restoration phase, the EIAR submits that there is potential to develop suitable bat roosts, with potential for positive impacts for bats.

While I acknowledge the assessment in terms of the bats, I have concerns in terms of the conclusions and the extent of impacts arising due to the proposed extensive removal of treelines and hedgerows, which have been identified as being suitable for roosts within the site. The assessment is described as a preliminary ground level roost assessment. I again refer to the timeframe of the operation of the proposed excavation site and in this regard, would not agree that the impact would not be significant.

Badgers: In the preparation of the EIAR, the applicant undertook a badger survey in February and September 2019. The survey noted the presence of 11 potential badger setts with one active sett noted, foraging evidence, access runs, tracks and prints.

While I acknowledge the assessment in terms of the badgers, I again have concerns in terms of the conclusions and the extent of impacts arising due to the proposed extensive removal of treelines and hedgerows within the site. Mitigation measures proposed to minimise impacts on the identified badger sett are noted, but the commuting and foraging routes will be significantly impacted

by the removal of hedgerows. Overall, I am not satisfied that the development would not result in a significant negative impact on badgers.

Otters: The site surveys noted no evidence of otters within the site or in the wider area. The EIAR presumes that the species forages / commutes along the downstream river network.

Having regard to the set back of the subject site from the waterbodies in the vicinity of the site, I am generally satisfied that the development is acceptable in terms of the protection of otters.

Birds: In terms of impacts on birds, the EIAR notes that monthly breeding birds survey visits between May and July 2019 and Table 5.14 of the EIAR lists a total of 35 bird species recorded within the survey area. 10 of these species are of conservation concern, with 8 of the red and amber listed species considered to be 'probable' or 'confirmed' breeders within the site.

In terms of impacts on birds, the EIAR recommends that any disturbance to the site should occur outside the breeding season as activity during the breeding season has the potential to significantly and negatively impact local breeding bird populations. Any works to remove hedgerow and treeline habitats during the breeding season could potentially impact on the conservation status of bird species locally, in the absence of mitigation. Mitigation measures proposed include the timing of works to clear vegetation on the site is to occur outside the breeding season.

Other Protected Mammals: The EIAR notes that although there is potentially suitable habitat for Irish Hare, none were observed during the field surveys. While there was no visual sightings or field signs of hedgehog or pygmy shrews, it is considered that they may occur on the site. The survey noted evidence of rabbit, fox and rat. These species are not afforded wildlife protection and are not addressed further in the EIAR.

Amphibians & Reptiles: The EIAR identified the presence of frog spawn and tadpoles alongside rank riparian grassland near the Eaglehill Stream, but no adult frogs were encountered. Smooth newt or common lizard were not recorded, and no targeted survey was undertaken as it is considered that the

conditions are not conducive for smooth within the site. Optimal habitat for the common lizard is present within the proposed development site.

Invertebrates: No specific butterfly surveys were conducted and the EIAR submits that no notable species were noted during the field study. The Marsh Fritillary butterfly was encountered but its food source habitat was not recorded on the site. No freshwater pearl mussels or clawed crayfish were noted during the aquatic survey.

Fish: In support of the proposed development, the Board will note that the applicant prepared an Aquatic Survey Report (Appendix 5.1 of the EIAR) which was prepared to investigate the macroinvertebrate community and habitat quality of the Eaglehill Stream with regard to a number of protected species including salmon, lamprey and white clawed crayfish, amongst other species. It is noted that the Eaglehill Stream is a heavily modified drainage ditch along its entire length and no spawning or juvenile salmonid/lamprey habitat were observed and the habitat conditions were not supportive for crayfish. Fair crayfish habitat was observed. The EIAR notes that there is potential for significant impact to fish through the increased sedimentation which may occur when site clearance and excavation works are ongoing.

Mitigation Measures:

As part of the Impact Assessment, the EIAR considers a do-nothing scenario as well as potential impacts after consideration of inherent mitigations measures which have been incorporated into the design of the proposed development. These mitigation measures include:

- Avoidance of direct impacts to the Eaglehill Stream
- Avoidance of direct impact to localised spring habitat
- Clearance of limited internal field boundaries outside nesting season
- Enhancement of the wildlife value of the existing agricultural site through the development of a biodiversity pond.

- Protection of peripheral hedgerows and plantation woodland from loss of vegetation and excessive light spill, noise and dust to the benefit of bats, birds and other wildlife
- The environmental controls outlined in Section 3.7.4 of the EIAR.

The mitigation measures with regard to biodiversity are identified in Section 5.6 of the EIAR and relate to pollution prevention as well as ecological measures to address habitat loss and alterations and impacts on fauna. The EIAR concludes that provided all mitigation measures are implemented in full, residual impacts at local level are predicted in relation to:

- Permanent net removal of scrub and some hedgerow during site clearance.
- Disturbance or displacement to foraging bats, and nesting birds during both construction and operation.
- Enhancement of the terrestrial and aquatic habitat range and function following the implementation of the restoration plan.

The EIAR also notes that outside the surface water, ground water, noise and dust monitoring during the construction and operation phases, no additional biodiversity monitoring is proposed during these phases. Once the restoration phase is implemented, any bat boxes that are installed will be monitored for a period of not less than 2 years to ensure that they are being used by bats. Any hedgehog boxes installed will also be monitored. Any necessary relocation of the bat boxes will be carried out under licence. I would accept that the restoration proposals may have potential for a positive impact on the biodiversity of the site.

I have a real concern in terms of the robustness of the EIAR in terms of assessing the potential impacts of the proposed development on the biodiversity of the site. In particular I am concerned that the EIAR has not adequately dealt with the potential impacts of the removal of the hedgerow and treeline habitats on bats, badgers or breeding birds on the site. In addition, and while I acknowledge the proposals in terms of mitigation, compensation and enhancement, there is no doubt that the development works are likely to have a significant impact on birds and bats in the short term and at a local level.

9.3.4. Land, Soils, Geology & Hydrogeology

In terms of likely significant impacts arising with regard to soils and geology, I refer the Board to Chapter 6 of the submitted the EIAR. Direct impacts are likely to arise during construction of the proposed development, notably as the proposed development will involve site excavations as part of the operation phase, with excavations requiring overburden stripping, which has an average depth of 3.1m across the site. Ground investigations also show that the average thickness of the silty sand and gravel deposits across the site is approximately 8.1m.

An evaluation of the impacts on soils and geology is presented in the EIAR with baseline conditions set out in section 6.3, with the baseline conditions for the hydrogeology of the site presented in section 6.3.7. In terms of impacts arising, the EIAR sets out the risks to land, soil, geology and hydrogeology as follows:

- Accidental emissions and release of potentially hazardous substances that may affect the quality of groundwater and / or soils.
- Short-term effects on groundwater quality through infiltration of surface run-off within or adjacent to the construction area.
- Loss of soil reserves through the construction of hardstanding and structures on the site.

The proposed development will also include both dry and wet working. The processing system for washing sands and gravels following extraction will require circa 6.8m³ of water per hour which will be sourced from a groundwater sump within the extraction area. The extraction of 68m³ per working day is considered to have a negligible impact on groundwater flows and levels across the site and the wider hydrogeological body.

Similarly during the wet working, it is considered that the operation will have a negligible change in groundwater flow. Given that the sediment arising from wet working will be controlled within the water body of the pit, it is not considered that it will have an adverse impact for groundwater or any linked surface water body, including the Eaglehill Stream, in the area. In addition, it is submitted that the gravel bed around the pit void will effectively filter out any suspended sediment within the

standing water, breaking any potential pathway between the pit source and the surface water bodies, including drainage ditches.

The removal, and stockpiling of, overburden also has the potential to impact the aquifer as it reduces the material overlying the bedrock, increasing the vulnerability of the groundwater and to increase potential or sediment run-off.

Mitigation measures are proposed and include good construction management and compliance with best practice guidelines. The EIAR concludes that based on the impact assessment and implementation of mitigation measures, there is no predicted significant residual impact to land, soils and hydrogeology.

The Board will note that the PA engaged a consultant Hydrogeologist to assess this element of the EIAR. The report notes that the information presented in the EIAR could be clearer and recommends that further information be sought. The Board will also note the submission of the Environmental Health Services who also raised concerns in terms of the information presented and lack of reference to a physical survey having been undertaken. The first-party appeal seeks to address these concerns – Section 5.3.3 of the Appeal document refers.

The EIAR has presented adequate information in relation to the proposed development in terms of land, soils, geology and hydrogeology, including mitigation and monitoring proposals. I also acknowledge the efforts to address the concerns raised in relation to private wells in the vicinity of the site.

9.3.5. **Water (Hydrology & Flooding)**

Chapter 7 of the EIAR presents baseline information on the local hydrology and seeks to assess the likely significant effects of the proposed activities on the receiving water environment. Quarrying activities can pose a significant risk to surface waters as runoff from such operations are likely to be contaminated with sediments and possibly hydrocarbons. The EIAR notes the drainage ditches and the watercourses in the immediate vicinity of the site. The Eaglehill Stream and the Brownstone Stream both discharge to the Kildoon River, which is part of the Tully River Network and which lies within the catchment of the River Barrow.

The EIAR submits that there is potential for impacts on surface water run-off in terms of accidental spillages during refuelling and maintenance activities and an increase in suspended solids and potential for contaminated run-off entering the closed circuit

lagoons or proposed soakaway during the operation phase. A suite of mitigation measures are proposed and the EIAR concludes that with the mitigation, the probability of fine sediment discharge to surface water run-off impacting on the local hydrology is imperceptible.

In terms of flood risk, the subject site does not lie within any river or coastal flood zones. Neither is the site identified as being at risk of pluvial flooding. An assessment of the OPW flood mapping website notes that the nearest flood event occurred approximately 750m to the east of the site and on the local road L6090. Remedial works have been carried out by Kildare Co. Co which appears to have resolved the flooding issue here. I would note that the Water Services Section of Kildare County Council has raised no concerns in this regard.

Residual impacts associated with the water environment are considered unlikely.

In terms of impacts on surface water, the Board will note the report submitted from Inland Fisheries Ireland in response to the first party appeal, in terms of the lack of information provided in terms of the water deficit associated with dust suppression at the proposed crushers, as well as the sand-washing plant cycle. The IFI consider that the applicant has not quantified the combined water deficits associated with various operations on site. IFI have concerns that the combined water deficit of all operations may be multiples of the 1.9l/sec and may, during prolonged dry spells, represent a significant loss in the base flows of the Eaglehill and Ballysax Little streams.

The concern is based on the salmonid potential of the Eaglehill Stream and the excellent salmon spawning / nursery habitat in the Ballysax Little Stream. In particular, the concern of the IFI relates to the proximity of the site to tributaries of the Finney Rover, an important salmon spawning tributary of the River Barrow. There is a difference of opinion in terms of the quality of the habitat observed in both streams. The EIAR suggests that no spawning or juvenile salmonid / lamprey habitat were observed within 3 sample sites in the Eaglehill Stream, while poor to no habitats were observed at a sample site in the Ballysax Little Stream. The IFI indicated that the photo submitted of site 4 show a wide gravelled stream which represents good quality salmonid habitat. An inspection, by IFI, of the Ballysax Little

Stream in early 2020 found large trout resident and that the habitat represents excellent salmon spawning / nursery habitat.

I accept that the IFI survey was carried out after the preparation and submission of the EIAR and NIS. However, the matter of impact on the Qualifying Interests of the SAC require further consideration, in my opinion.

9.3.6. **Air Quality & Climate**

The EIAR notes that the subject site lies within 'Zone D' category based on the EPA Clean Air for Europe Directive. Dust nuisance and impact on air quality is identified as the primary potential impact arising from the proposed development which has the potential to give rise to local impacts during the operational phase due to excavation works and increased traffic.

Dust levels arising from the operational phase of the development is likely to result in a 'Medium-Term Slight Adverse' impact for the property located within 100m of the extraction area without additional mitigation in place. This property lies 22m from the site boundary, and 35m from the extraction area.

In terms of road traffic, the operation of the facility will give rise to 72 truck movements in total to and from the site daily (traffic section of EIAR). It is submitted that the predicted increases in emissions as a result of the associated road traffic relative to the background air quality is classed as imperceptible with the increases and air quality impact from traffic classed as negligible.

Mitigation measures are detailed in the EIAR and include a number of measures which include screening mounds, water spraying of plant, material loads, stockpiles and roads, as well as wheel washing of vehicles exiting the site, machine maintenance and maintenance of overburden storage areas. The report concludes that residual impacts, subject to the implementation of mitigation measures, in terms of air quality are likely to be negligible in terms of dust and traffic.

In terms of the information presented and the nature of the development proposed, it is not considered that the EIAR has adequately addressed the impacts in terms of air quality and in particular, the impacts associated with dust arising from the proposed development, on adjacent properties.

Existing climate data for the study area is derived from the Met Eireann 30-year averages (1981-2010). In terms of the impact of the development on climate, it is submitted that given the location and physical characteristics of the proposed

development, the main potential risks of flooding, wind, rain and weather events are reduced. The report concludes that, subject to mitigation measures, residual impacts of the development will result in 79,482 tonnes of CO₂ in greenhouse gas emissions which will result in a 'permanent slight adverse impact'.

The Board will note that the Planning Authority was not satisfied with this section of the EIAR due to limited details in terms of mitigation measures, and the reliance on mitigation measures to address impacts. It is further considered that a representative level of sensitive receptors around the site has not been included. The Board will also note that the issue of Dust, and impacts on residential amenity, was included as a reason for refusal.

In support of the appeal, the Board will note that Section 5.3.4 of the Appeal report, seeks to address the impact of the proposed development on Air Quality and Climate. It is submitted that the applicant proposes a series of baseline and operational air quality surveys for the first year of operation to verify the impacts as presented in the EIAR. All data gathered will be shared and if further information had been sought, this information would have been provided. Results from baseline dust monitoring which was undertaken from April 2019 to July 2019 are submitted and would indicate that the daily average over the four month period is 161mg/m²/day, with the highest level recorded in May with 574.0 at location D2 and 342.0 at location D3. Location D2 lies approximately 110m from the residence to the south east of the site.

The general guideline of 350mg/m²/day as an annual average is used to prevent dust nuisance at sensitive receptors using the Bergerhoff Method, and which is employed by the EPA in Ireland. As such, it is submitted that the baseline levels of dust in the area would not give rise to dust nuisance from current agricultural practices. The sites dust management will be in line with industry guidelines and mitigation measures are presented and are standard for the prevention of dust nuisance. Monitoring will continue within the site, but it is submitted that no monitoring will be carried out at the local national schools or nursing home due to the distance from the site.

In terms of the third party submissions and concerns raised in relation to air quality and health concerns relating to fine silica dust from the proposed development, the appeal submits that these have wrongly attributed the development with the

production of crystalline silica dust and associated medical lung condition of silicosis. The deposits at the site are dominated by limestones and not silica dominated rock types. The composition of the site geology was tested and found to be 97% limestone with only trace levels of other materials. There is no significant impact to human health from Respirable Crystalline Silica at the site.

I am generally satisfied that the grounds of appeal have sought to deal with the matter of air quality and climate. I remain concerned however, with regard to roads and traffic issues and impacts on residential amenity.

9.3.7. **Noise & Vibration**

The nature of the proposed development gives rise to a variety of noise sources and Chapter 9 of the EIAR deals with noise issues, noting the noise limits set out under appropriate guidance. The chapter describes the existing environment and identifies all houses within 1km and 2km of the site. Noise monitoring, on the 18th of June 2019 during daytime hours 09:00 to 19:00, was carried out at 7 locations within and in the vicinity of the subject site. The recorded average ambient noise levels ranged between 41dB(A)_{LAeq} at Noise Monitoring station N6 (adjacent to the eastern site boundary) and 67dB(A) _{LAeq} at Noise Monitoring station N1 (adjacent to Dowling's Bar on the R418 to the east of the site). The primary source of noise was bird-song and livestock, road traffic and children playing in the nearby schoolyard.

It is noted that potential noise sources on the site include a variety of mobile and fixed plant as well as the increase in traffic, which is predicted to result in an increase of less than 3dB (A) on baseline noise levels at properties along the L8006, L8007 and the R418.

The EIAR submits that mitigation measures for noise control will be implemented and there will be a medium term slight adverse impact for sensitive receptors along the haul route and within the immediate environs of the site. No assessment of cumulative impacts is presented.

In the appeal submission, the applicant provides additional information in relation to noise and vibration, including results from noise surveys which were carried out between April and August 2019 at 4 noise monitoring locations within the subject site. These 4 locations do not correlate with the 7 identified locations submitted as part of the EIAR. In terms of supplemental noise mitigation, the applicant commits to

the siting of the mobile processing plant an additional 50m from the site boundary, and further from residential property.

By its nature, the operation of an extractive industry generates noise. In terms of the predicted change in noise levels, I refer the Board to my planning assessment above at pages 40 and 41 which deal with noise. I have concluded that the increase of 10, 14 and 13 dB L_{Aeq} , at locations N5, N6 and N7 will be significantly above the 5 to 10dB above background noise levels which will give rise to complaints. In this regard, I have serious concerns that the development, if permitted would represent a significant impact on the existing residential amenities of the properties in the vicinity of the site, particularly those located adjacent to the proposed site by reason of noise.

I am further concerned that the full detail of noise surveys did not seem to form part of the full EIAR picture in terms of noise, given the information submitted as part of the appeal submission. This omission raises questions regarding the robustness of the EIAR in my opinion.

Vibration:

In terms of vibration, the EIAR notes that in the case of nominally continuous sources of vibration, such as traffic, vibration is perceptible at around 0.5mm/s and may become disturbing or annoying at higher magnitudes. It is concluded that the operational phase of the development will not generate perceptible vibrations. The issue of vibration is not discussed further in the EIAR.

Following concerns of the PA, and in particular regard to the potential impact of vibration on a stone house which is on the proposed haul route, the Appeal document notes that no such concern was raised at pre-planning consultation stage. It is submitted that the need for baseline vibration assessment was scoped out of the EIAR as there will be no blasting at the site, there is no evidence to suggest that the existing receptors are currently affected by appreciable environmental vibration and based on previous experience, there is little or no vibration associated with the operation of sand and gravel extraction facilities.

In direct response to the concerns for the stone building, the appellant submits that traffic induced vibration levels do not cause damage to buildings. While it is considered that there is no need for a baseline vibration survey, the applicant

commits to carry out a pre-construction structural survey on the identified property, subject to landowner agreement. A further survey will be carried out at 5 and 10 years and following the cessation of the activity and the cost of any remedial works which may be identified will be borne by the applicant.

I note that the PA is not satisfied with this proposal, and I would agree. The EIAR in this regard is inadequate and would not provide any comfort to the owners of the stone house during the operational phase of the development. In the absence of any assessment, I consider that this section of the EIAR is inadequate.

9.3.8. Traffic & Transportation

Chapter 10 of the EIAR deals with Traffic & Transportation. The EIAR provides details of traffic surveys carried out in the vicinity of the site, with the survey reports presented in Appendix 10.1 of Volume III of the document. In addition, a pavement condition survey and a Stage 1 Road Safety Audit were undertaken of the local roads. The detail of these surveys is presented Appendix 10.2 and 10.3 of Volume III. A Traffic & Transport Assessment was prepared in support of the proposed development. The assessment concludes that the development requires 160m of unobstructed visibility at the proposed entrance. Adequate sightlines will be available in both directions once the hedgerows are cleared and the boundary treatments lowered. The EIAR notes that the 85% percentile speed on the L8006 was 70.4km, which is below the speed limit for the road.

The EIAR submits that the proposed development will result in the extraction of approximately 3,000,000 tonnes of aggregate over a period of 12 years. This amounts to 250,000 tonnes per annum and the appellant advises that this equates to 36 loads per day – averaged at 28 tonne loads. The Planning Report submitted in support of the proposed development has concluded that a maximum number of HGV trips generated by the proposed development is expected to be 72 per day. No figures of staff trips or other miscellaneous trips are provided. The plans provide for 5 car parking spaces and an area for bicycle parking.

An assessment of the exiting road network, including the local roads L8006 and L8007 as well as the regional road, the R418, was undertaken by the applicants. A traffic survey was carried out between the 28th of May and the 3rd of June 2019 on the L8006 and the R418. The weekly average daily flows are presented in Table

10.1 and Table 10.2 of the EIAR. Of note, on the L8006, the figures suggest a total traffic volume of 472 light vehicles and 12 HGVs using the public road in the vicinity of the site. An assessment of the junctions affected by the development is also presented in the EIAR and concludes that all are operating within capacity.

Mitigation measures proposed include the management of HGV movements on the local roads and the construction of passing bays. The width of the local roads reduces to 3.88m in places and the Board will note the concerns raised by the Transportation Section of Kildare County Council in relation to the proposed development. In an effort to address the concerns raised, the applicant, through the appeal submission, sought to provide clarity in terms of proposed improvements to the road widths as well as clarification on the baseline surveys for the development.

In terms of impacts on the road network, the submitted EIAR concludes that the development, subject to mitigation, is acceptable. It is further submitted that the additional traffic generated by the development on the R418 will be insignificant in the context of the overall flow on the Regional Road. The assessment submits that if permitted, the development will result in an increase in traffic volumes of 8.6% on the L-8007 and 15.2% on the L-8006. I have concerns in this regard. Given the narrow nature of the local road network, together with the proposal to increase the number of HGVs using the local roads from 12 to 84 in the context of daily averages, I consider that the impacts arising are significant.

Having considered all of the information presented in support of the proposed development, I am satisfied that impacts on traffic arising from the proposed development in conjunction with existing, planned or proposed developments, are likely to arise, given the scale of the proposed development. I also note the concerns of the Planning Authority in terms of roads and traffic issues arising. The road network serving the site currently supports a small volume of HGVs. Overall, I do not consider that the existing road network is suitable to accommodate the development, notwithstanding mitigation measures proposed.

9.3.9. **Material assets**

Chapter 11 of the EIAR deals with Material Assets. The description of Material Assets in the EPA Guidelines, 2002, include architectural, archaeological and cultural heritage, designed landscapes, natural resources of economic value,

buildings and structures and infrastructure. Having regard to the format of the EIS submitted, these aspects of the environment are covered under a number of chapters as follows:

Chapter 6: Land, Soils, Geology & Hydrogeology

Chapter 7: Water (Hydrology & Flooding)

Chapter 10: Traffic

Chapter 12: Cultural Heritage

Chapter 13: Landscape & Visual

Chapter 11 of the EIAR deals with material asset issues which are not already covered in other chapters, as follows:

- Land use & property: the subject site comprises agricultural and undeveloped land in a rural area. The area is described as having a relatively low population density and the EIAR describes the surrounding environment and developments.

The potential impacts arising are deemed to be short-term to medium-term in duration with slight/moderate adverse impacts. The impacts are not considered significant however and the impacts are presented in Table 11.4 of the EIAR. On cessation of the operation on the site, it is considered that the restored ecological feature will result in a positive material asset in the long term for biodiversity.

- Agriculture: The subject site comprises agricultural land, with fields contiguous to the site having a mixture of tillage and pasture uses. The proposed development will result in the loss of the agricultural use of the application lands.
- Commercial & Industrial Development: The EIAR notes that there are approximately 100 commercial properties within 3km of the subject site, including those within the adjacent villages and settlements. Other extractive industries and recycling facilities are also noted as being located +4km from the site. Reference is also made to the equine industry as well as tourism and hospitality businesses in the vicinity of the site.

- **Utilities:** The 400 kV Moneypoint – Dunstown power line traverses the site and there will be engagement with the ESB in terms of exclusion and safe operating distances in terms of health and safety. An electricity supply will be required to service the proposed development and the existing supply to Racefield House, located on the site, is noted.

Fuel for use in the machinery on the site will be stored within the site compound which will be locally banded.

In terms of telecommunications, it is noted that there is an existing telecom connection at Racefield House and such services, including broadband, are available in the area. It is concluded that the development will not have a significant impact on telecommunications infrastructure.

With regard to water services, there is an existing connection to the public water main at Racefield House and the unoccupied house is connected to a septic tank. The applicant intends to install a proprietary wastewater treatment system to serve the development and water for the processing of gravels will be sourced from groundwater, operating as a closed looped system.

- **Roads & Traffic:** I refer the Board to section 10.3.8 of this report which deals with matters relating to roads and traffic. Chapter 11 of the EIAR concludes that overall, activities at the site will not result in a significant impact on road infrastructure, traffic and access in the immediate and surrounding areas of the site.
- **Waste management:** At present, there is no waste being generated at the site over and above typical agricultural waste volumes and streams. Waste arising on site will be from the canteen or the maintenance of on-site mobile plant. All waste generated will be segregated at source and removed by a licenced waste collector.

There are no predicted significant residual impacts on material assets during the construction, operational or restoration phases of the development. Other than my concerns in relation to roads and traffic, as well as visual impacts, I would generally agree with this conclusion.

9.3.10. Cultural Heritage

Chapter 12 of the EIAR deals with cultural heritage. The EIAR notes the proximity of Ballyshannon Demesne, a former demesne landscape which was created at the site of a Fitzgerald castle and 17th Century fortification to the east. There are no registered monuments within the proposed development site, but it is acknowledged that the site lies within a landscape which is rich in pre-historic burial monuments, medieval defensive sites and ecclesiastical sites. The closest monuments are a cluster within Ballyshannon Demesne, located to the east including as follows:

- A church (RPM KD028-058002) 755m east of the site
- Graveyard (RPM KD028-058004) 830m east the site
- Anglo-Norman Motte (RPM KD028-058001) 910m east of the site
- Unclassified Castle (RPM KD028-003002) 885m east of the site and south of the church, graveyard and motte site
- Bastioned Fort (RPM KD028-003001) surrounded the site of the castle.

National Monument Dun Ailinne (RPM KD028-038001 and PO no. 200/1954) is located 5.4km to the north east of the site. There are no protected structures within the site boundary and the closest protected site is St. James Church at the Ballyshannon Demesne, approximately 775m to the east of the site, RPS no. B28-24, and NIAH no. 11902811. This now disused church lies on the site of an earlier medieval church (RPM KD028-058002).

A cultural assessment has been included in terms of townland boundaries, townland names and folklore and reference is made to previous archaeological investigations in the area. Details of field surveys is also included, relating to all 17 fields in the ownership of the applicant.

In terms of impacts, the construction/operation phase will involve some activity within the farmyard of Racefield House. With mitigation measures, no impacts are anticipated to the house and structures. Groundworks and other proposed activities, including the removal of hedgerows, topsoil and overburden within the working area have the potential to directly impact subsurface remains, however, ploughing of fields may have reduced the potential for the survival of subsurface remains. There is potential for a slight visual impact towards the hill of Dun Ailinne, National

Monument. However, mitigation measures in the form of proposed screening mounds on the northern perimeter of the site will alleviate this issue. The excavation methods will not include blasting. The restoration phase will restore the site to a mix of terrestrial and freshwater wildlife habitat and the removal of portacabin from the farmyard has a low potential for impact on Racefield House and structures. No further impacts are anticipated in terms of archaeology and cultural heritage.

In terms of mitigation, it is proposed to carry out a geophysical survey and pre-development testing in accordance with the requirements of the Department of Culture, Heritage and the Gaeltacht. These surveys are proposed to be undertaken when appropriate ground conditions are in place.

With regard to residual impacts, the EIAR submits that during the construction phase, a mechanism for recording, protecting and where necessary resolving any newly revealed sites as a result of the geophysical survey and test excavation works will be agreed with the National Monuments Service. Planting regimes can take years to successfully establish and a monitoring programme will be put in place to ensure that any failures are detected and replaced. In terms of the restoration phase, no significant residual archaeological, architectural or cultural heritage impacts arise.

I am generally satisfied that the applicant has sought to address the archaeology and heritage of the area. However, I would also note the requirements for a geophysical survey and pre-development testing to be undertaken prior to the issuing of a final decision. In support of the appeal, the applicant has submitted a survey, with the report included in Appendix E of the appeal document. It is notable that the survey is incomplete and ongoing. The areas covered in this report relate primarily to lands outside the proposed extraction area as well as those fields which lie to the east of the subject site. Should the Board be minded to grant permission, it may wish to seek further information in order to facilitate the submission of the full survey for consideration in this regard. The EIAR is incomplete in this regard, in my opinion.

In addition, I am concerned that the impact of the development on the setting of Racefield House has not been fully explored. While I accept it is not a protected structure, I refer the Board to the requirements of policies VA1, VA2 and VA4 of the Kildare County Development Plan as they relate to the vernacular heritage of the county.

9.3.11. Landscape & Visual

Chapter 13 of the EIAR deals with landscape and Visual. The subject site is located within the Landscape Area known as Central Undulating Lands, with a section to the west located within the Southern Lowlands. Both of these Landscape Character Areas are Class 1 Sensitive landscapes with the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area. The EIAR identifies 2 scenic routes within 5km of the site including

- Scenic Route No. 25: located approximately 1.3km to the south east of the site providing views to the north west of the Kildare Plains from the R418 south of Moortown House to Tippeen Lower.
- Scenic Route No. 35: located approximately 5km to the north of the site and comprising views of Dun Ailinne from the R418 from Moortowncastle to Knockbounce.

The subject site is not located within a High Amenity Area and the closest one, the Curragh, is located approximately 4.9km to the north of the site. Five historic gardens and design landscapes are identified within 3km of the site.

Direct impacts to the landscape will arise as a consequence of the proposed development, with the loss of an area of farmland and mature hedgerows. The visual assessment submitted in support of the proposed development, includes a series of photomontages which seek to represent the proposed development from 6 vantage points in and around the site. The EIAR submits that the proposed development will have no predicted impacts from 5 of the 6 viewpoints, while Viewpoint 1, located to the northwest of the site on the L8006, will have a moderate – major temporary adverse effect during the construction phase of the development. It is further submitted that the restoration phase will have no direct impacts on scenic routes or protected views, historic gardens or designed landscapes. There will be a minor to moderate beneficial impact at viewpoint 1.

Mitigation measures to reduce visual impacts are presented in Section 13.4 of the EIAR and include screening of vegetation establishment, particularly proposed spoil / storage heaps along the northern and western boundaries and compensation of

landscape impact where possible. Other mitigation has been built into the design and specific landscape proposals will be put in place during the restoration phase.

Predicted residual impacts include the blending of the development in the wider landscape with a beneficial residual landscape character impact. In terms of the visual impact on sensitive receptors, the beneficial impact on existing views will continue post remediation. It is submitted that the landscape character and visual context around the landscape southeast of Kildare has the capacity to absorb a development of this scale in landscape and visual terms.

The Board will note the concerns of the PA in relation to the potential visual impact of the development in the context of Dun Ailinne as well as at the proposed entrance to the site. The appeal documentation seeks to address these concerns and the submission includes a photomontage from Dun Ailinne. The Board will also note the policy objectives pertaining to the area as well as the landscape character and sensitivity of the area. I note that the Kildare County Development Plan includes Table 14.3, which identifies the likely compatibility between a range of land-uses and Principle Landscape Areas. The table advises that sand & gravel extraction has high compatibility in such landscapes. In addition, table 14.4 of the Plan identifies the likely compatibility between a range of land-uses and proximity to Principle Landscape Sensitivity Factors, noting that sand and gravel extraction is considered likely to be compatible with great care with regard to agricultural land with natural vegetation.

I would accept that the EIAR has adequately addressed the issue of visual impact.

9.3.12. **Interaction of the Foregoing**

Chapter 14 of the EIAR seeks to deal with the interactions of the environmental aspects considered and the means of reducing the impacts of the development during the operation phase of the development. The matrix presented in Table 14.1 clearly notes that there is potential for the following interactions to occur:

- Population, Human Health, Traffic and Transportation, Material Assets, Cultural Heritage and Landscape & Visual Assessment:

It is submitted that the development has the potential to impact the population and local community by reason of changes to the above environmental aspects. In particular, the EIAR refers to the increased traffic having a

potential impact on material assets and cultural heritage sites by reason of noise and dust.

It is concluded that subject to traffic management, significant disturbance is not expected to the local community.

- Human Health, Soil, Geology and Hydrogeology and Water:

It is submitted that all sensitive receptors are located upstream and therefore, no potential health impacts arise.

- Human Health, Air Quality and Climate, Noise and Vibration and Traffic and Transportation:

The EIAR acknowledges that the nature of the proposed development is reliant on HGV movements to and from the site, which have noise and air quality potential implications, and can have negative implications for Human Health. It is concluded that the traffic management measures will limit the traffic and associated implications during the 12-year operation phase.

- Biodiversity, Soil, Geology and Hydrogeology, Water and Air Quality and Climate:

Negative environmental impacts to the above factors have the potential to result in adverse effects to biodiversity. Monitoring and mitigation measures are proposed, and it is submitted that future biodiversity will be enhanced through ecological restoration of the pit void to a mix of wetland and terrestrial habitat.

- Biodiversity and landscape and Visual Assessment:

Changes to the landscape and habitats have the potential to impact biodiversity. The development has the potential to have medium term negative impacts. The proposed restoration of the void as an ecological habitat to blend the site with the natural environment will provide suitable habitats for a long-term improved biodiversity through improving the existing landscape.

- Cultural Heritage and Landscape and Visual Assessment:

The EIAR noted the potential for a visual impact towards the Hill of Dun Ailinne, a designated National Monument. This potential impact was assessed as part of the Landscape Visual Impact Assessment and it was concluded that

the magnitude of the impact would be no change. The proposed development will not directly affect protected views of Dun Ailinne.

The conclusions regarding the acceptability of the likely cumulative and main residual effects of this proposal are identified and assessed under the various headings of the main assessment above. I am generally satisfied that the significant environmental effects arising as a consequence of the development, including the residual and cumulative impacts have been identified. I have outstanding concerns however, particularly in relation to impacts on human health and population with regard to noise and vibration, dust/air quality, roads and traffic, landscape, biodiversity, water quality and potentially, archaeology.

9.3.13. Reasoned Conclusion on Significant Effects

Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the applicant, and the submission from the Planning Authority, prescribed bodies and observers in the course of the application and appeal, it is considered that the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated, as follows:

- Impact on **population and human health** arising from roads and traffic issues as well as dust and noise arising from the operational phase of the development affecting air quality. Mitigation measures are proposed. However, the impacts associated with these aspects are considered significant and negative in the context of population and human health and residential amenity. There will be a slight positive impact on population with regard to the creation of a small number of jobs.
- In terms of **biodiversity**, the development will give rise to the loss of approximately 1.9km of internal hedgerows, in addition to the roadside hedgerow to be removed to accommodate the entrance to the site, which is significant at local level. These hedgerows have been identified as being moderate to low value to commuting and foraging bats and badgers, as well as breeding birds. The hedgerows also offer the potential for roosts and setts. Works will occur outside the breeding season in order to prevent a significant negative impact on birds. The restoration plans for the site are noted, and I

would accept that the plans would promote wider biodiversity at the site which may have a positive impact.

With regard to other mammals, field surveys did not result in sightings of Irish Hare, hedgehog or pygmy shrews while there was evidence of rabbit, fox and rat. No targeted surveys were carried out in relation to amphibians, reptiles and invertebrates and mitigation measures are proposed in Section 5.6 of the EIAR and relate to pollution prevention as well as ecological measures to address habitat loss and alterations and impacts on fauna.

While I acknowledge the proposals in terms of mitigation, compensation and enhancement with regard to biodiversity, there is no doubt that the development works are likely to have a significant and negative impact on birds and bats in the operational phase of the development.

- Effects on the receiving **land, soil, geology** and **water** environments may arise during the construction and operational and restoration phases. The development includes both dry and wet working. Impacts will be mitigated through good construction management and compliance with best practice guidelines. The proposed restoration of the quarry as an ecological resource will not involve infilling of the pit void and works will focus on the banks and water body. The development will result in the permanent loss of agricultural lands.

Issues arise in relation to the potential impact of the development on surface water, and in particular, the Eaglehill Stream and Ballysax Little Stream, in terms of the water deficit associated with dust suppression at the proposed crushers and sand-washing plant, and the potential impacts to the base flows of the streams during prolonged dry spells. This concern is based on the salmonid potential of the streams, including the salmon spawning / nursery habitat in the Ballysax Little Stream. Further details are required in this regard.

- In terms of **air quality**, dust levels arising from the operational phase of the development is likely to result in a 'Medium-Term Slight Adverse' impact for the property located within 100m of the extraction area without additional mitigation in place. Emissions from increased HGV traffic on the local roads are indicated as having a negligible impact on air quality. The sites dust

management plan will be in line with industry guidelines and mitigation measures are presented and are standard for the prevention of dust nuisance.

- In terms of **noise** and **vibration**, noise monitoring was carried out at 7 locations within and in the vicinity of the site. Potential noise sources on the site include a variety of mobile and fixed plant as well as the increase in traffic, which is predicted to result in an increase of less than 3dB (A) on baseline noise levels at properties along the L8006, L8007 and the R418. Mitigation measures for noise control will be implemented and there will be a medium term slight adverse impact for sensitive receptors along the haul route and within the immediate environs of the site.

Having regard to the baseline noise survey results, the Board will note that there is a predicted increase of 10, 14 and 13 dB L_{Aeq} at locations N5, N6 and N7. I consider to be significantly above the 5 to 10dB above background noise levels which is likely to give rise to complaints. I consider that the development if permitted would represent a significant impact on existing residential amenities of properties in the vicinity of the site by reason of noise. There is an issue arising in relation to the potential impact of vibration on one stone built house on the haul route. The applicant has proposed to undertake structural surveys of the property and bear the cost of any remedial works identified. This is inadequate in my opinion and the development would impact existing residential amenities.

- In terms of **Visual and Landscape Impacts**, the proposed development will, if permitted, result in changes to the landscape. The mitigation measures proposed to reduce visual impacts are presented in Section 13.4 of the EIAR and include screening of vegetation establishment, particularly proposed spoil / storage heaps along the northern and western boundaries and compensation of landscape impact where possible. Other mitigation has been built into the design and specific landscape proposals will be put in place during the restoration phase. The site is located within a landscape character area which has the capacity to absorb a development of this scale in landscape and visual terms. There will be an impact arising at residential properties in the immediate vicinity of the site.

- In terms of **Roads & Traffic** impacts, the proposed development will result in the creation of a new entrance onto the Local Road, L8006, at a location where an 80kph speed limit applies. The local road network is narrow in places, reducing to under 4.5m in places, and the applicant proposes to create passing bays in order to facilitate the traffic associated with the development. The figures submitted in the EIAR suggest that at present, there are currently an average of 472 light vehicles and 12 HGVs using the L8006 in the vicinity of the site daily. The proposed development will result in an increase of 72 HGV movements daily on the public road. The Roads & Transportation Section of Kildare County Council has raised serious concerns in relation to the proposed development, recommending refusal of permission for two stated reasons. Mitigation measures proposed do not address the impacts on the public roads associated with the proposed development and I conclude that the existing road network is not suitable to accommodate the proposed development.
- In terms of **Cultural Heritage**, it is considered that the EIAR is incomplete due to the fact that a large area of the site has not been adequately surveyed in terms of archaeology.

In conclusion, having regard to the above identified significant effects, I am satisfied that even with the mitigation measures proposed, the proposed project would have unacceptable direct or indirect impacts on the environment as it relates to population and human health, and in particular residential amenity, noise, roads and traffic.

There are also further potential significant impacts arising in relation to the extensive removal of internal hedgerows and associated impacts on bats, badgers and breeding birds, surface waters and archaeology and cultural heritage.

Further information is required to address the potential impact of the development on surface water, and in particular, the Eaglehill Stream and Ballysax Little Stream, in terms of the water deficit associated with dust suppression at the proposed crushers and sand-washing plant, and the potential impacts to the base flows of the streams during prolonged dry spells.

10.0 Appropriate Assessment

10.1. Introduction:

10.1.1. The subject site is located outside any Natura 2000 site. The Natura 2000 sites within 20km of the site are as follows:

Site Name	Site Code	Distance to Site
Special Areas of Conservation (SAC)		
River Barrow and River Nore SAC	002162	3.9km
The Pollardstown Fen SAC (& pNHA)	000396	9.1km
Mouds Bog SAC (& pNHA)	002331 (& pNHA 000395)	12km
Slaney River Valley SAC	000781	15.6km
Wicklow Mountains SAC	002122	18.8km
Special Protection Areas (SPA)		
Poulaphouca Reservoir SPA	004063	18.8km
Wicklow Mountains SPA	004040	20.7km

10.1.2. The EU Habitats Directive 92/43/EEC provides legal protection for habitats and species of European importance through the establishment of a network of designated conservation areas collectively referred to as Natura 2000 (or 'European') sites.

10.1.3. Under Article 6(3) of the Habitats Directive, an Appropriate Assessment must be undertaken for any plan or programme not directly connected with or necessary to the management of a European site but likely to have a significant effect on the site in view of its conservation objectives. The proposed development is not directly connected with or necessary to the management of a European site. The Board will note that a Natura Impact Statement (NIS) was submitted in support of the proposed development to address the likely or possible significant effects, if any, arising from the proposed development on any European site.

10.2. Screening for Appropriate Assessment:

10.2.1. The purpose of AA screening, is to determine whether appropriate assessment is necessary by examining:

- a) whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and
- b) the potential effects of a project or plan, either alone or in combination with other projects or plans, on a Natura 2000 site in view of its conservation objectives and considering whether these effects will be significant.

The NIS considered Natura 2000 sites within 15.6km of the subject site, and Stage 1 Screening identified four European sites, on which there is the possibility of a significant effect arising from the proposed development. These sites include SACs as follows:

- River Barrow and River Nore SAC (Site Code: 002162)
- Pollardstown Fen SAC (Site Code: 000396)
- Mouds Bog SAC (Site Code: 002331)
- Slaney River Valley SAC (Site Code: 000781)

10.2.2. Table 4.2 of the Natura Impact Statement presents the full list of the sites and presents the Qualifying Interests for which the site is designated. The NIS particularly notes the closest European site is the River Barrow and Nore SAC (Site Code: 002162), which is located c3.9km to the west of the site. It is noted that this SAC is located downstream, via the first order Eaglehill Stream and the third order Kildoon Stream, of the site and the site is located within the same Catchment Management Unit as the SAC. No other European Site is located within the zone of influence of the site and within the same Water Framework Directive catchment.

10.2.3. Each site was examined in the context of location in terms of the Zone of Influence of effect from the proposed development and the distribution of the qualifying interests and Special Conservation Interests in relation to the Zol. In considering the above, and on the basis that Pollardstown Fen SAC, Mouds Bog SAC, and Slaney River Valley SAC have no hydrological pathways that could transmit or facilitate potential impacts as they are not located up or down river of the

works and are within separate groundwater bodies, the Appropriate Screening has screened out these sites.

10.2.4. The Stage 1 Screening identified the River Barrow & River Nore SAC, Site Code 002162 as the only European site on which there is the possibility of a significant effect arising from the proposed development. The Qualifying Interests associated with this SAC are identified as follows:

River Barrow and River Nore SAC	<p>Estuaries [1130]</p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Reefs [1170]</p> <p>Salicornia and other annuals colonising mud and sand [1310]</p> <p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</p> <p>Water courses of plain to montane levels with the <i>Ranunculon fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260]</p> <p>European dry heaths [4030]</p> <p>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</p> <p>Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p> <p><i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016]</p> <p><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</p> <p><i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</p> <p><i>Petromyzon marinus</i> (Sea Lamprey) [1095]</p>
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	Lampetra planeri (Brook Lamprey) [1096]
	Lampetra fluviatilis (River Lamprey) [1099]
	Alosa fallax fallax (Twaite Shad) [1103]
	Salmo salar (Salmon) [1106]
	Lutra lutra (Otter) [1355]
	Trichomanes speciosum (Killarney Fern) [1421]
	Margaritifera durrovensis (Nore Pearl Mussel) [1990]

10.3. Conclusion on Stage 1 Screening:

10.3.1. It is reasonable to conclude, on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, either individually or in combination with other plans or projects would not be likely to have a significant effect on the following European sites, in view of the sites' conservation Objectives and that a Stage 2 Appropriate Assessment is not required in respect of these sites:

- Pollardstown Fen SAC (Site Code: 000396)
- Mouds Bog SAC (Site Code: 002331)
- Slaney River Valley SAC (Site Code: 000781)

10.3.2. Through an assessment of the source-pathway-receptor model, which considered the Zol of effects from the proposed development and the potential in-combination effects with other plans or projects, the following findings were reported in the NIS:

- In the absence of mitigation measures to control surface water pollution during construction and operation of the proposed development, the potential for likely significant effects to the River Barrow and River Nore SAC cannot be ruled out;
- In the absence of mitigation to mitigate the pathway between groundwater and the surface water the potential for likely significant effects to the River Barrow and River Nore SAC cannot be ruled out;

- In the absence of mitigation, the potential for the spread of invasive alien plant species to the site by machinery cannot be ruled out.

In light of the above, a stage 2 AA was carried out. The potential impacts (direct / indirect and in-combination effects) of the development on the site are examined in light of each of the site's conservation objectives.

10.4. Stage 2 Appropriate Assessment

Potential Impacts on River Barrow and River Nore Special Area of Conservation (Site Code 002162) and Mitigation proposed

- 10.4.1. The River Barrow and River Nore SAC is located approximately 3.9km to the west of the subject site and consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains before passing through a band of Carboniferous shales and sandstones, discharging to the sea at Waterford Harbour.
- 10.4.2. The site is selected for the habitats and species listed in Annex I and Annex II of the EU Habitats Directive and identified above in Section 9.2.2 of this report. Detailed Conservation Objectives for The River Barrow and River Nore SAC (Site Code 002162) are available for the SAC with the overall objective being to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been designated.
- 10.4.3. No part of the proposed development encroaches into the SAC site and as such, the development will not result in the direct loss, fragmentation or interference with any habitats for which the SAC is designated. The NIS addresses AA in terms of the source-pathway-receptor linkages. In this context, it is submitted that the disturbance of invasive species during the construction and operation phases could lead to the dispersal of scheduled invasive species via machinery, materials, clothing or animals. In addition, the NIS notes the presence of drains within the site and the proximity to the Eaglehill Stream. In this regard, it is considered that the pollution of

groundwater from plant on site has the potential to affect the QI / SCI of the SAC during the construction and operation phases.

10.4.4. The Board will note that the applicant prepared an Aquatic Survey Report (Appendix 5.1 of the EIAR) which was prepared to investigate the macroinvertebrate community and habitat quality of the Eaglehill Stream with regard to a number of protected species including salmon, lamprey and white clawed crayfish, amongst other species. The development will not result in the disturbance of any species for which the SAC is designated. It is further noted that there was no invasive species recorded at the site.

10.4.5. In light of the above assessment, and in accordance with the precautionary principle, it is concluded that there is potential that the proposed development, either on its own or in combination with other developments, may have a significant effect on the SAC, and in particular, on water quality. The works would have the potential, in the absence of mitigation, to increase pollution events of surface and ground waters, which could result in temporary effects on the species/habitats for which the Natura 2000 sites are designated. There is also potential for the introduction of invasive species to the site.

10.5. **Mitigation Measures**

10.5.1. Mitigation measures are proposed to address the potential adverse effects of the development to ensure that the development will not adversely affect the identified SACs or the conservation status of protected habitats and species they support. Measures focus on the following potential pathways:

- Surface water pollution
- Groundwater migration to surface water
- Scheduled invasive species.

10.5.2. In terms of Surface Water Management, the mitigation measures are incorporated into the project design as well as the operational design and includes

- Process water closed loop system and lagoons
- A network of surface water channels
- Surface water management from stockpiles

- Water management utilities for storm water and foul water from operations.

10.5.3. In terms of surface water channels and management, the NIS submits that the surface water channels will be contoured around the edge of the pit to direct flow towards the lagoons. They will not be lined and will infiltrate to ground. They open channel proposes will consist of a trapezoid shape and sized to convey the peak surface water run-off rate for the five-year return period.

10.5.4. The storage of overburden at the western section of the pit void has the potential for uncontrolled storm water to erode the stockpiles and impact on the adjoining drainage ditches through sedimentation. In terms of mitigation in this regard, the following is relevant:

- Scheduling activities to minimise the area and period of time that soil would be exposed, particularly during wetter periods,
- Use of sediment barriers such as silt fences and / or silt curtains,
- Leave buffer strips of vegetation 5-10m wide between the stockpiles and the ditches to act as a sediment filter.

After approximately 12 months, it is submitted that the stockpiles will revegetate and the risk of sedimentation subsides.

10.5.5. A self-contained wheel wash facility will be provided at close proximity to the site entrance. This will be operational through the lifetime of the proposed operation. Wastewater arising at the proposed development will be discharged to a packaged treatment plant and percolation area. Fuel storage tanks and associated chemicals will be stored within a bund to contain potential spillages and contamination of the ground.

10.5.6. In terms of Groundwater Management, the applicant will carry out all construction and operations in accordance with the relevant guidance as they relate to fuel or chemical storage, supervision of excavations, disposal of contaminated material should it arise and containing any contaminated water. During the operation phase, the pathway for groundwater impact is through the wet working stage. It is submitted however, that any sediment generated will be controlled within the water body of the pit and will not have an adverse impact for groundwater or any linked surface water body in the area. It is concluded that research supports that any

sediment generated through wet working will be effectively 'filtered' by the surrounding gravel body ensuring no release of suspended sediment to the groundwater body or surface water bodies. No site-specific mitigation is proposed over and above the natural mitigation by filtration provided by the gravel body around the pit.

10.5.7. In terms of Invasive Alien Species Management, the NIS acknowledges that there is potential for such invasive species to enter and spread throughout the site during the construction and operation phases. The spread could occur the movement of machinery or contaminated soils. Mitigation measures will also include provision to cease activities on the site where a scheduled invasive species is accidentally introduced or becomes established during pre-construction surveys and or the construction phase. A suitably qualified ecologist / invasive species specialist will assess the site and implement / update the requirement management protocol set out in the outline Invasive Species Management Plan which will be finalised during the construction and operational phase.

10.5.8. Subject to the implementation of these measures, it is accepted that there is little potential for significant impacts on the qualifying interests for which the sites are selected, and hence, on the integrity of the sites, and residual impacts are unlikely.

10.6. In Combination Effects

10.6.1. Cumulative impacts from plans and projects in the area which may result in potential in-combination effects are considered in section 6.3.2 of the NIS. This section seeks to consider developments potentially affecting the River Barrow and River Nore SAC given their downstream hydro-connectivity to the proposed development. Section 2.6 of the NIS notes the proximity of the commercial coniferous plantation to the south of the site. Three proposed EIA proposed developments were noted within 10km of the site, which may have contributed to a cumulative impact with the proposed development, but all were refused permission or deemed withdrawn.

10.6.2. It is concluded that no significant in-combination effects are predicted to affect the River Barrow and River Nore SAC, having regard to the legal protection for the SAC as a European Site. Taking into account the mitigation measures, no residual effects will arise.

10.7. Conclusion

- 10.7.1. I have read the submitted Natura Impact Statement in its entirety, together with all other environmental reports submitted with the planning application in support of the proposed development, and I am satisfied that it generally assesses the likely significant impacts arising from the proposed development on the integrity of the River Barrow and River Nore SAC (Site Code: 002162).
- 10.7.2. I have had full regard to the Stage 2 Appropriate Assessment as set out in Section 6 of the NIS. I am satisfied that it has adequately identified and assessed the key characteristics of the potential impacts arising as a result of the proposed development, both alone and in combination with other projects, which could undermine the stated conservation objectives of the Natura 2000 site.
- 10.7.3. I am, however, conscious of the IFI submission to the Board in relation to this appeal, and in particular to the conflicting assessment of salmon spawning / nursery habitat within the Ballysax Little Stream. Salmon are a QI of the River Barrow and River Nore SAC. In terms of AA, it would appear to me that the IFI survey of January 2020 is the more recent survey, the Aquatic Survey Report submitted as part of the NIS having been undertaken on the 19th of June, 2019. The full findings of this IFI survey were not submitted and it is noted that further surveys are proposed this year.
- 10.7.4. I would note at the time of the submission of the application and appeal, the applicants survey would have been the most up to date data. There remains however, a difference in opinion in terms of the quality of the habitat.
- 10.7.5. In the interests of protecting the conservation objectives of the European Sites, mitigation measures are proposed in section 7 of the submitted NIS as part of the proposed development. Mitigation measures are proposed for both the construction and operational phases of the sand and gravel extraction facility and on implementation, it is submitted that there are no likely residual negative impacts on the River Suir SAC (Site Code 002137) and The River Barrow and River Nore Special Area of Conservation (Site Code 002162). It is concluded that the proposed development will not have a significant adverse effect on the integrity of the Natura 2000 Network.
- 10.7.6. Having regard to the nature of the subject development site, the nature of the proposed development and its location at a remove from existing Natura 2000 sites,

together with the details presented in the Environmental Impact Statement and Natura Impact Statement, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, I consider it might be reasonable to conclude on the basis of the information on the file, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site, the River Barrow and River Nore SAC (Site Code: 002162), or any other European site, in view of the site's Conservation Objectives.

10.7.7. However given the IFI submission, I conclude that there remains incomplete detail with regard to the potential impact of the development, in the context of the water deficit associated with dust suppression at the proposed crushers, as well as the sand-washing plant cycle, and the potential impacts during prolonged dry spells in the base flows of the Eaglehill and in turn the Ballysax Little Streams during such low flow events due to the potential of these watercourse to support salmon spawning / nursery habitat in the Ballysax Little Stream. As such, I cannot conclude, based on the most up to date data, that the development will not adversely affect the integrity of the European site, the River Barrow and River Nore SAC (Site Code: 002162), in view of the site's Conservation Objectives.

11.0 Assessment Conclusions

11.1. Proper Planning & Sustainable Development Assessment

Notwithstanding, and having regard to:

- the nature and scale of the development as set out in planning application documentation and the pattern of development in the area;
- the current nature of the site being agricultural land with extensive hedgerow internal field boundaries;
- the applicable legislative and policy context, including in particular the provisions of the Kildare County Development Plan 2017 – 2023
- the Environmental Impact Assessment Report, Natura Impact Statement and all other information in support of the application;
- the proposals submitted to carry out the Highway Safety Measures for the L8006, the L8007 and the R418 to accommodate the increased HGV traffic and address the deficiencies in the local road network and the R418
- the contents of the appeal, the observation and the responses to the appeal;
- the report and recommendations of the Planning Inspector including the examination, analysis and evaluation undertaken in relation to the proper planning and sustainable development, appropriate assessment and environmental impact assessment;

The Board considers that the local road network serving the quarry is substandard in terms of width, surface, condition and capacity, and is inadequate to accommodate the volume of HGV traffic and additional traffic movements generated by the proposed sand and gravel extraction facility. Notwithstanding the submissions in support of the proposed development, the Board considered that the development would endanger public safety by reason of traffic hazard and would result in an obstruction to road users. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

The Board is further satisfied that the development, if permitted and notwithstanding mitigation measures proposed, would seriously injure the existing amenities of

properties in the vicinity of the site by reason of traffic, noise, air quality, visual impacts and general disturbance, contrary to the policy requirements of the Kildare County Development Plan.

11.2. Environmental Impact Assessment

The Board completed an environmental impact assessment of the proposed development, taking into account:

- (a) the nature, scale, location and extent of the proposed development in a previous worked sand and gravel quarry;
- (b) the Environmental Impact Assessment Report and associated documentation submitted in support of the application;
- (c) all submissions, observations made in the course of the application and the contents of the appeal, observation and response from the applicant and the planning authority in the course of the appeal;
- (d) the Inspector's report.

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment.

The Board agreed with the summary and examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment report and associated documentation submitted by the applicant and submissions made in the course of the application and appeal.

The Board considered, and agreed with the Inspector's reasoned conclusions that, the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated, as follows:

- Impact on **population and human health** arising from roads and traffic issues as well as dust and noise arising from the operational phase of the development affecting air quality. Mitigation measures are proposed. However, the impacts associated with these aspects are considered significant and negative in the context of population and human health and

residential amenity. There will be a slight positive impact on population with regard to the creation of a small number of jobs.

- In terms of **biodiversity**, the development will give rise to the loss of approximately 1.9km of internal hedgerows, in addition to the roadside hedgerow to be removed to accommodate the entrance to the site, which is significant at local level. These hedgerows have been identified as being moderate to low value to commuting and foraging bats and badgers, as well as breeding birds. The hedgerows also offer the potential for roosts and setts. Works will occur outside the breeding season in order to prevent a significant negative impact on birds. The restoration plans for the site are noted, and I would accept that the plans would promote wider biodiversity at the site which may have a positive impact.

With regard to other mammals, field surveys did not result in sightings of Irish Hare, hedgehog or pygmy shrews while there was evidence of rabbit, fox and rat. No targeted surveys were carried out in relation to amphibians, reptiles and invertebrates and mitigation measures are proposed in Section 5.6 of the EIAR and relate to pollution prevention as well as ecological measures to address habitat loss and alterations and impacts on fauna.

While I acknowledge the proposals in terms of mitigation, compensation and enhancement with regard to biodiversity, there is no doubt that the development works are likely to have a significant and negative impact on birds and bats in the operational phase of the development.

- Effects on the receiving **land, soil, geology** and **water** environments may arise during the construction and operational and restoration phases. The development includes both dry and wet working. Impacts will be mitigated through good construction management and compliance with best practice guidelines. The proposed restoration of the quarry as an ecological resource will not involve infilling of the pit void and works will focus on the banks and water body. The development will result in the permanent loss of agricultural lands.

Issues arise in relation to the potential impact of the development on surface water, and in particular, the Eaglehill Stream and Ballysax Little Stream, in terms of the water deficit associated with dust suppression at the proposed

crushers and sand-washing plant, and the potential impacts to the base flows of the streams during prolonged dry spells. This concern is based on the salmonid potential of the streams, including the salmon spawning / nursery habitat in the Ballysax Little Stream. Further details are required in this regard.

- In terms of **air quality**, dust levels arising from the operational phase of the development is likely to result in a 'Medium-Term Slight Adverse' impact for the property located within 100m of the extraction area without additional mitigation in place. Emissions from increased HGV traffic on the local roads are indicated as having a negligible impact on air quality. The sites dust management plan will be in line with industry guidelines and mitigation measures are presented and are standard for the prevention of dust nuisance.
- In terms of **noise and vibration**, noise monitoring was carried out at 7 locations within and in the vicinity of the site. Potential noise sources on the site include a variety of mobile and fixed plant as well as the increase in traffic, which is predicted to result in an increase of less than 3dB (A) on baseline noise levels at properties along the L8006, L8007 and the R418. Mitigation measures for noise control will be implemented and there will be a medium term slight adverse impact for sensitive receptors along the haul route and within the immediate environs of the site.

Having regard to the baseline noise survey results, the Board will note that there is a predicted increase of 10, 14 and 13 dB L_{Aeq} at locations N5, N6 and N7. I consider to be significantly above the 5 to 10dB above background noise levels which is likely to give rise to complaints. I consider that the development if permitted would represent a significant impact on existing residential amenities of properties in the vicinity of the site by reason of noise. There is an issue arising in relation to the potential impact of vibration on one stone built house on the haul route. The applicant has proposed to undertake structural surveys of the property and bear the cost of any remedial works identified. This is inadequate in my opinion and the development would impact existing residential amenities.

- In terms of **Visual and Landscape Impacts**, the proposed development will, if permitted, result in changes to the landscape. The mitigation measures proposed to reduce visual impacts are presented in Section 13.4 of the EIAR

and include screening of vegetation establishment, particularly proposed spoil / storage heaps along the northern and western boundaries and compensation of landscape impact where possible. Other mitigation has been built into the design and specific landscape proposals will be put in place during the restoration phase. The site is located within a landscape character area which has the capacity to absorb a development of this scale in landscape and visual terms. There will be an impact arising at residential properties in the immediate vicinity of the site.

- In terms of **Roads & Traffic** impacts, the proposed development will result in the creation of a new entrance onto the Local Road, L8006, at a location where an 80kph speed limit applies. The local road network is narrow in places, reducing to under 4.5m in places, and the applicant proposes to create passing bays in order to facilitate the traffic associated with the development. The figures submitted in the EIAR suggest that at present, there are currently an average of 472 light vehicles and 12 HGVs using the L8006 in the vicinity of the site daily. The proposed development will result in an increase of 72 HGV movements daily on the public road. The Roads & Transportation Section of Kildare County Council has raised serious concerns in relation to the proposed development, recommending refusal of permission for two stated reasons. Mitigation measures proposed do not address the impacts on the public roads associated with the proposed development and I conclude that the existing road network is not suitable to accommodate the proposed development.
- In terms of **Cultural Heritage**, it is considered that the EIAR is incomplete due to the fact that a large area of the site has not been adequately surveyed in terms of archaeology.

In conclusion, having regard to the above identified significant effects, I am satisfied that even with the mitigation measures proposed, the proposed project would have unacceptable direct or indirect impacts on the environment as it relates to population and human health, and in particular residential amenity, noise, roads and traffic. There are also further potential significant impacts arising in relation to the extensive removal of internal hedgerows and associated impacts on bats, badgers and breeding birds, surface waters and archaeology and cultural heritage.

Further information is required to address the potential impact of the development on surface water, and in particular, the Eaglehill Stream and Ballysax Little Stream, in terms of the water deficit associated with dust suppression at the proposed crushers and sand-washing plant, and the potential impacts to the base flows of the streams during prolonged dry spells.

The Board is satisfied that this reasoned conclusion is up to date at the time of taking this decision.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, notwithstanding the implementation of the mitigation measures proposed in the Environmental Impact Assessment Report, the effects of the proposed development on the environment, by itself and in combination with other plans and projects in the vicinity, would be unacceptable, in regard to population and human health, and in particular residential amenity, noise, roads and traffic as well as impacts on fauna as a result of the extensive removal of internal hedgerows, and impact to surface waters and archaeology in the area.

In doing so, the Board generally adopted the report and conclusions of the Inspector.

11.3. Appropriate Assessment

In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report and concluded, on the basis of the information submitted and all other relevant submissions, in particular the submission from Inland Fisheries Ireland, that it cannot be concluded that the proposal, individually or in combination with other plans or projects, would not adversely affect the integrity of the River Barrow and River Nore SAC (Site Code: 002162), in view of the site's Conservation Objectives, in the context of the water deficit associated with dust suppression at the proposed crushers, as well as the sand-washing plant cycle, and the potential impacts during prolonged dry spells in the base flows of the Eaglehill and in turn the Ballysax Little Streams during such low flow events due to the potential of these watercourse to support salmon spawning / nursery habitat in the Ballysax Little Stream.

12.0 Recommendation

I recommend that planning permission be **refused** for the proposed development for the reasons and considerations set out below.

13.0 Reasons and Considerations

1. Notwithstanding proposals submitted to carry out the Highway Safety Measures for the L8006, the L8007 and the R418 to accommodate the increased HGV traffic and address the deficiencies in the local road network and the R418, it is considered that the local road network serving the quarry is substandard in terms of condition, capacity, width and surface, and is inadequate to accommodate the additional traffic movements generated by the proposed sand and gravel extraction facility. Notwithstanding the submissions in support of the proposed development, the Board considered that the development would endanger public safety by reason of traffic hazard and would result in an obstruction to road users. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.
2. Having regard to the location of the proposed site in close proximity to residential dwellings, it is considered that the proposed development, notwithstanding the mitigation measures proposed in the Environmental Impact Assessment Report received, would seriously injure the amenities of properties in the vicinity by reason of traffic, noise, air quality, visual impacts and general disturbance, would depreciate the value of properties in the area. The development would therefore, materially contravene policies E12 and E13 of the Kildare County Development Plan 2017-2023 which seek to ensure that such developments do not impinge on the environmental quality and the visual and residential amenity of the area. The proposed development, would therefore, be contrary to the proper planning and sustainable development of the area.

3. The Applicant has not demonstrated to the satisfaction of the Planning Authority that the qualifying interests of the European Site, the River Barrow and River Nore SAC, site code 002162, will not be adversely affected by the proposed development. Accordingly, the proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

A. Considine
Planning Inspector

17th July, 2020