An Bord Pleanála

Inspector's Report

ABP-309078-21

Development	(1) Continuation of previously permitted development including extraction and processing on site, (2) relocation of access road and lateral extension of extraction area permitted under TA70175 (PL17.227088), (3) overburden storage area, (4) construction and demolition waste recovery facility, and (5) restoration of site to beneficial ecological after use and agriculture.
Location	Tromman, Rathmolyon, Co. Meath
Planning Authority	Meath County Council
Planning Authority Reg. No.	TA200655
Applicant(s)	Kilsaran Concrete, t/a Kilsaran Build
Type of Application	Permission.
Planning Authority Decision	To grant.
Type of Appeal	Third party.
Appellant	Eco Advocacy.
Observer(s)	Residents of south County Meath.
Date of Site Inspection	25th May 2021
Inspector	Deirdre MacGabhann

Contents

1.0 Site Location and Description

1.1. The c.50.2ha appeal site is situated in the townland of Tromman, c.6.5km south of Trim and 2km west of Rathmolyon, County Meath. It lies to the north of the R156 and to the west of Tromman Quarry, under separate ownership (operated by Keegan Quarries). Access to the site is direct from the R156, via a c.400m long access road. The access road is bound by a mature treeline on its eastern side. It leads to the quarry's weighbridge and associated office. To the south east of the office are two disused buildings, originally associated with Trammont House. Beyond the weighbridge, the internal access road leads to the paved car park area adjacent to the quarry's central site facilities and offices, and to the north of the offices, the washing and screening plant and stockpile storage area (processed aggregates). To the north of the central area is the concrete batching plant, concrete block yard and block storage yard. To the north east of block yard are the site's closed circuit settlement lagoons. The agricultural lime production plant and lime storage sheds are located to the west of the concrete block plant.

1.2. The quarry void lies to the west of the access road. It is broadly rectangular in shape and is worked in four benches c.65m ADO, c.49mAOD, c.36mAOD and c.26mAOD. Quarry faces are progressively advancing in a southerly and north easterly direction. The quarry floor is used for primary crushing and screening. Secondary processing is carried out to the rear of the offices (above). To the west of the quarry void is an are which is used for the storage of concrete product manufacturing returns.

1.3. The quarry is worked dry, with groundwater pumped from the void to the water management system at surface level, along the western boundary of the quarry. This comprises a small reed bed settlement pond, settling pond and gravel filter bed, hydrocarbon interceptor and rock filter system, with outflow to a ditch along the western boundary of the site with discharge to the stream along the northern boundary of the site, Rathmolyon/Moynasboy stream. This small watercourse runs in an east west direction along the northern boundary of the appeal site. The waterbody discharges into Knightsbrook River, approximately 5km north east of the site and this river joins the River Boyne just east of Trim. A quarry sump is located on the quarry floor to collect surface water falling over the void area and any inflows of groundwater.

1.4. The site lies in a rural area that is characterised by agricultural land uses, strong field boundaries, one off houses and farms along the local road network. The quarry is not visible from the Regional road, passing the site, due mature vegetation alongside the county road and along the southern boundary of the appeal site. Nearest sensitive receptors are situated to the south and west of the quarry, along the R156. To the west and north the quarry is bound by agricultural land.

2.0 **Proposed Development**

2.1. The proposed development, as amended by way of significant further information (submitted on the 28th September 2020 and re-advertised on the 10th October 2020), comprises:

- The continued use of the previously permitted developments under PA refs. TA180039, TA150309, TA70175 (PL17.227088), TA/30258 (PL17.206229), 00/2156 (PL17.125619) and 98/1981 (PL17.111632) including extraction and processing on site, to include washing (with closed system of silt lagoons), screening, crushing, storage, stockpiling, related ancillary buildings and facilities, including concrete batching and blockmaking.
- Lateral extension to the quarry extraction permitted under PA ref. TA70175 (PL17.227088) of c.3.5ha to provide an overall extraction footprint of c.19.2ha and extraction of rock within the extension area to the same depth as the permitted quarry floor level (c.24mAOD). Annual extraction rate to remain at 800,000 tonnes per annum. The quarry will be worked in a number of benches to c.65m AOD, c.49m AOD, C.36m AOD and c.26mAOD.
- Realignment of the existing internal access road over a distance of 400m, to release rock reserves for extraction and relocation of the existing weighbridge and office.
- Provision of overburden storage area along eastern boundary of the site (c.0.8ha), located to the east of the aggregate washing plant.
- Provision of a construction and demolition (C&D) waste recovery facility for the importation, storage, processing and recovery of waste concretes arising from concrete plants operated by Kilsaran and from existing waste concrete

stockpiled on site (from previous operator). This is proposed on a c.3.9ha site to the north west of quarry void and includes a hardstanding area for stockpiling and crushing of waste materials and a waste inspection/quarantine shed (to the north east of the welfare facilities/offices) (Figure 2-2, EIAR). The recovery of C&D waste will be carried out on an intermittent basis according to waste accumulation and demand for recycled products. Returned concrete will be recycled through a mobile crushing plant. The application provides for the processing of up to 35,000 tonnes of waste concrete per annum, with the recovery operations to run concurrent with the duration of the quarry extraction operations (i.e. for 10 years).

- Restoration of the site to a combination of beneficial ecological and agricultural afteruses. It is stated in the EIAR that the majority of restoration works will be carried out on permanent completion of extraction works as the majority of the site is used for extraction and processing purposes. However, c.4,080sqm, in two blocks (south east and north west of the re-located access road), will be planted with oak, birch and hazel, as compensation for removal of the tree line from the eastern boundary of the access road, within the first 1-2 years following receipt of planning permission (Figure 2-2).
- All associated site works.

2.1.1. The permission is sought within an overall application site of c.50.2ha and for a period of 10 years plus 2 years to complete restoration works (total 12 years). It is stated in the application form that there are no proposals for any increase in extraction depth below 24mAOD, extraction rate, additional site facilities or HGV traffic levels over existing, except for a very modest addition of HGV traffic associated with concrete returns to the proposed C&D facility.

2.1.2. The planning application includes:

- Environmental Impact Assessment Report (EIAR).
- EIAR Non-Technical Summary.
- Appropriate Assessment Screening Report and Natura Impact Statement (NIS).
- Planning Statement.

- EIAR Portal Registration Confirmation Notice (Portal ID 2020066).
- Updated bat survey (response to request for FI) and mitigation measures for bat species.

3.0 Planning Authority Decision

3.1. Decision

3.1.1. On the 30th November 2020 the planning authority decided to grant permission for the development, subject to 26 conditions. These include:

- C2 – Development to comply with the conditions set out under previous stated permissions.
- C3 - Extraction to cease on or before 10 years from date of final grant.
- C4 – Total volume of material to be extracted not to exceed 800,000 tonnes/pa, no extraction outside of the area illustrated on layout drawings and no extraction below 24mOD.
- C5 – Requires ongoing operation of wheelwash, maintenance of the haul road and watering of hard-surfaces.
- C6 – Requires implementation of mitigation measures set out in EIAR and NIS.
- C7 – Requires provision of specified sightlines and signage on the access road and public road.
- C8 – Limits the intake of construction and demolition waste to 35,000 tonnes/pa, requires details on how intake will be recorded, and limits wastes permitted in facility to concrete, bricks, blacktop, tiles and ceramics.
- C9 – Requires proposals for the management of stockpiles to be submitted with a view to reducing their visual impact.
- C10 – Sets out requirements for the management of surface water.
- C11 – Requires the monitoring of groundwater levels in neighbouring private wells and remedial actions in the event of impacts on existing wells.
- C12 – Requires a review of the surface water monitoring regime for the discharge outfall to Rathmolyon/Moynasboy Stream, updated ecological

survey of site area to be stripped, employment of an Ecological Clerk of Works to monitor site stripping and blasting, to ensure activities are carried out in accordance with best practice and minimise impacts on species, and provision for habitat for nesting Peregrine Falcon in site restoration plan and more natural gradients to waterbodies.

- C13 – Stipulates hours of operation.
- C14 – Requires site to be managed in accordance with an Environmental Management System and specifies emission limits for dust and noise levels at site boundaries, arrangements for refuelling and storage of potential pollutants, provision of a complaints register and restoration of potable water supplies if affected.
- C15 – Controls the use of operational sirens.
- C16 – Requires an annual noise survey.
- C17 and C18 – Set out procedures for blasting operations and emission limits for noise and vibration.
- C19 – Set out requirements for monitoring (groundwater, surface water flow, noise, dust), provision of an annual environmental audit, quarterly reports in respect of prescribed monitoring and remediation where necessary.
- C20 – Requires restoration in accordance with the plans submitted, planting of hedging along site boundaries in the first planting season following grant of permission and specifies a timescale for restoration .
- C21 – Requires annual aerial photograph.
- C22-C26 – Require payment of development contributions and bond.

3.2. Planning Authority Reports

Planning

- 30th July 2020 – Refers to the planning history of the site, including how the development differs from that refused by the Board under ABP-301385-18 (TA170519), policy context, submissions and representations received. It identifies the key planning considerations as planning history, principle of development, siting, layout and design, access, traffic and parking, site

services, ecology and environment, appropriate assessment and environmental impact assessment. It considers the merits of the development under these headings and is generally satisfied with these aspects of the development. The report recommends further information in respect of bat activity, measures to protect Peregrine Falcon and the need for realignment of the internal haul road, where a significant tree line exists.

- 30th November 2020 – The report refers to the further information submitted, and the observations made by third parties. It considers that the matters raised have been adequately addressed, including that additional mitigation measures are proposed in respect of bat species and Peregrine Falcon, the widespread presence and high breeding success of Peregrine Falcon within active hard rock quarries, the absence of significant landscape or visual impacts with the removal of the proposed tree line, the absence of significant impacts on bat roosting habitat and the potentially significant volume of high purity limestone that would be sterilised if the access road were not relocated (the report notes that reports from DAU and Heritage Officer remain outstanding). The report recommends granting permission subject to conditions.

Other Technical Reports

- Transportation (25th June 2020) – Recommends applicant be required to trim hedgerows to achieve sight lines at site access (160mx3m); provide a Stop sign and markings at the access point; provide advance signage on the public road; and pay a special development contribution of €105,000 (road upgrading and strengthening).
- Water Services (28th June 2021) – No objections subject to conditions, prior to commencement, details of remedial actions to be undertaken if impacts on wells arise, surface water treatment details and discharges to comply with up to date discharge licence and all works to comply with GDSDS.
- Environment – Notes no increase in extraction depth, rate or infrastructure. C&D facility, to be subject to a Waste Facility Permit and Article 28 application to EPA (for end-of-waste status). No impacts on European sites are anticipated and NIS is acceptable. No assessment of alkalinity, total hardness, calcium or magnesium in discharge waters or effect on

downstream macroinvertebrate communities (Rathmolyan/Moynasboy Stream). It recommends that these are reviewed as part of the Discharge Licence Review and form part of the conditions of the permission. Concerns regarding timescale of ecological surveys, importance of establishing exact nesting location of any Peregrine Falcon on site and disturbance avoided during nesting season. Raises concerns regarding lack of more recent bat surveys but welcomes retention of Trammont House buildings. Recognise the survey work done to ensure works do not have an impact on groundwater wells or hydrology off site. Discharge license review should include review of the parameters tested (above), capacity of settlement lagoons to accommodate increase in pumping and in-combination effects with adjoining quarry. Restoration plan should include efforts to provide nesting habitats for Peregrine Falcon. No objections subject to conditions (reflecting above concerns).

- Chief Executive (30th November 2020) – Considers that the EIA carried out and reported on in the Planning Reports (30th July 2020 and 30th November 2020) has given full consideration to the EIAR submitted, all submissions and observation made in relation to environmental effects. It considers that the EIA contains a fair and reasonable assessment of the likely significant effects of the development on the environment and is adopted as the assessment of the planning authority.

3.3. Prescribed Bodies

- Department of Culture, Heritage and the Gaeltacht (DCHG)(6th July 2020) - Recommends further information in respect of bats currently occurring on the site (new survey between May and August) and measures to preserve the status of Peregrine Falcon as a breeding species on the site.
- Irish Water (26th May 2020) – No objections.

3.4. Third Party Observations

3.4.1. Third party observations raise the following issues.

- Quarrying is energy intensive and generates emissions. Inconsistent with current policy direction to reduce environmental impacts. Low level of employment, scarred landscape. Loss of agricultural land.
- Development is required to be consistent with EU Directives (Waste, Energy Efficiency, Renewable Energy and EIA).
- EIA Report insufficiently rigorous. It is not possible to determine the full scope of the impact of the development.
- Project splitting with concurrent application under PA ref. AA191263 (application for quarrying at Forde de Fine, >30km to the north east of the appeal site) and no assessment of cumulative effects with other quarries.
- Development results in larger lateral extension area, and is closer to road than that refused under PA ref. TA170519 (ABP-301385).
- Loss of 195m mature trees line. Impact on historic landscape, visual impact of adjoining quarries, habitats and species (including bats). Inadequate bat mitigation measures.
- Permission conflicts with condition of permission granted under PL17.227088 (TA/70175), to cease operation and restore quarry after 15 years. Quarry should be restored to agriculture, as per original grant of permission. Restoration should be progressive. Risk of pollution of groundwater if left as a lake. Risk of drowning. Question extent of restoration which was required to have taken place, and that which has taken place, to date.
- Since January 2019, the quarry has been functioning without a valid permission. Need for retention/application for substitute consent.
- Unauthorised dumping of overburden on adjoining land with loss of Fenland. Overburden should be used to fill quarry void.
- Piecemeal development of quarry. Depth of quarry originally arose from progressive grants of planning permission and administrative error in 2003.
- Significant landholdings in the locality, risk of future piecemeal development and uncertainty for community. Impact on land values.
- Extent of compliance with previous conditions of permissions granted. In the event of non-compliance, future permissions should be refused.

- Proximity to River Boyne SAC.
- Significant volume of HGVs on the public road (noise, dust, safety, stone spills). Impact on amenity of the area (use of roads by walkers, horses, cyclists). HGV movement outside of permitted working hours. Applicant's assessment of traffic movements is lower than observed traffic levels. Batching traffic requirements should be included in traffic analysis (sand and gravel input). Cumulative impact of all quarry operations in the area required. Environmental and health effects associated with emissions from diesel engines/plant.
- Cumulative impact of dust locally, dirt on the public road/driveways and hedges. Higher level of dust permitted (350mg/m^2/day) than in original permission, PL17.111632 (130mg/m^2/day). Unacceptable noise limits for operation of quarry. Noise from HGVs traffic on local roads and tonal bleeping of quarry vehicles. Excessive lighting (impact on humans, birds, bats and wildlife). Cumulative impact of blasting. No notification of blasts. Impact on structural integrity of local houses (including Cummings property to the south/southwest of the site).
- Development contrary to CSOBJ7 of Meath County Development Plan 2013-2019 (stated to refer to the development of sustainable communities but refers to promoting rural economic development by recognising the need to advance long term sustainable social and environmental development of rural areas, encouraging economic diversification and facilitating growth of rural enterprises).
- Absence of strategic planning for quarry development. Tight concentration in south of the county. Further development would constitute over development.
- Concerns regarding loss of remaining eskers at Castletown and Moate Hill.
- Planning application should have been invalidated.
- Old buildings on the stie (associated with Trammont House) should not be allowed to fall into disrepair (photographic survey of buildings was required under PA ref. 98/1981).
- Re-alignment of access road not reconsidered in response to FI.

- Matters raised in observations not addressed by PA or in FI (including unauthorised disposal of material on adjoining land and loss of fen habitat).
- Visual impact of overburden pile to the west and north west of the quarry.

4.0 Planning History

4.1. The planning history of the subject site includes the following:

- PA ref. 98/1981 (PL17.111632) – **Permission granted** for quarry on a site of 37ha, to include quarrying on 9.9ha and associated processing, staff facilities, settlement ponds, outfall and access road.
- PA ref. 00/2156 (PL17.125619) – Appeal against conditions associated with the planning authority's **grant of permission** for a concrete batching plant, block manufacturing building and associated infrastructure. The Board directed the planning authority to remove condition nos. 9 and 10 of the permission.
- PA ref. TA20222 – **Permission granted** for asphalt plant.
- PA ref. TA30258 (PL17.206229) – Appeal against conditions associated with the planning authority's **grant of permission** for the extension of the existing quarry over an area of 12.36ha and reconfiguration of the site, retention of plant and equipment at locations which differed from permitted locations and retention of sand manufacturing facility and settlement lagoons (overall site 33.90ha). The Board directed the planning authority to amend condition nos. 16 and 17.
- PA ref. TA/70175 (PL17.227088) – **Permission granted** for the extension and deepening of the existing quarry over 16.1ha.
- PA ref. TA150309 – **Permission granted** for substation building (ESB supply room and switch room).
- PA ref. TA160094 – **Permission granted** for an agricultural lime production and storage unit (lime production plant, storage shed)
- PA ref. TA170159 (ABP-301385-18) – **Permission refused** for the continued use of the existing quarry, lateral extension of 1.8ha (overall footprint c.16.8ha), deepening of extraction area (in part) by two benches to c.0mAOD,

realignment of the internal access road to release underlying rock reserves, overburden storage area along eastern boundary (c.1.1ha), construction and demolition waste recovery facility (3.9ha site), hardstanding area for stockpiling and crushing waste materials and waste inspection/quarantine shed, restoration of site to combination of beneficial ecological and agricultural afteruse, total site area 49.4ha, for a period of 21 years. Reasons (1) with operation of the adjoining quarry, risk of pollution of surface water bodies, adverse impact on water supplies and base flows in surface water bodies (2) risk of significant effects on River Boyne and River Blackwater Special Area of Conservation and Special Protection Area.

- PA ref. TA180039 – **Permission granted** for an agricultural lime production and storage unit (lime production plant, storage shed and enclosed screens).
- PA ref. TA180336 – **Permission granted** to extend the duration of the permission (TA70175, PL17.227088 - extension by deepening to the existing quarry over an area of 16.1ha), with permission to expire on the 15th January 2024.

4.2. Under PA ref. TA200151, the Keegan quarries applied for permission for the further development of the quarry, to include a lateral extension of the existing void (1.9ha) and extraction to a depth of 13mAOD. The planning authority has refused to consider the application on the grounds that an application for substitute consent is pending with the Board (PL17.305049).

5.0 Policy Context

5.1. National/Regional Planning Policy

- **National Planning Framework, 2018** – Recognises the importance of the extractive industries for the supply of aggregates and construction materials to the State and for export. National Policy Objective 23 facilitates the development of the rural economy by supporting sustainable and economically efficient sectors, including extractive industries, whilst noting the importance of maintaining and protecting the natural landscape and built heritage. National Policy Objective 53 supports the circular economy, with a

view to maintaining the value of materials and resources for as long as possible and reducing or eliminating waste.

- **Quarries and Ancillary Activities. Guidelines for Planning Authorities. DEHLG, 2004.** Recognise the importance of aggregates as a significant natural resource and the industry's contribution to economic development in the state. Recognise that the operation of quarries can give rise to land use and environmental issues which require to be controlled and mitigated through the planning system. The guidelines set out best practice in terms of identifying and managing these issues.
- **Environmental Management Guidelines. Environmental Management in the Extractive Industry (Non-scheduled Minerals). EPA, 2006**. Provide guidelines on good practices in the industry and recommend emission limit values.
- **Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region 2019-2031** – This regional plan aims to support the rural economy, including traditional sectors such as extractive industries. The Plan also supports the country's transition to a circular economy and waste reduction.

5.2. Meath County Development Plan

5.2.1. The current development plan for the subject site is the Meath County Development Plan 2013-2019. It will shortly be superseded by the Meath County Development Plan 2021-2027, adopted on the 22nd September 2021, which comes into effect on the 3rd of November 2021. Relevant policies of the current County Development Plan are summarised below. I note that the policies of the Meath CDP 2021-2027 continue the thrust of these policies with regard to aggregates, environmental protection and waste minimisation:

- **Core Principle 3** Promotes the sustainable economic development of the County in accordance with the Economic Development Strategy for County Meath 2014-2022.
- **Core Principle 4** Safeguarding the cultural, natural and built heritage and natural resources, including biodiversity, of the County.

- **Core Principle 7** Protects and supports rural areas though careful management of physical and environmental resources and appropriate, sustainable development.
- Policies in respect of Rural Areas:
    - **ED POL 17** Promotes rural economic development by advancing long term sustainable social and environmental development, encouraging economic diversification and facilitating growth of rural enterprises.
    - **ED POL 19** Recognises the contribution rural employment makes to the growth of the economy and promotes this by encouraging rural enterprise and diversification and the promotion of certain types of rural enterprise, especially those which are rural resource dependent (including the extractive industries).
- Policies in respect of Extractive Industry and Building Materials Production:
    - **RD POL 21 – 27** – To facilitate the exploitation of the county's natural resources subject to appropriate amenity and environmental safeguards (see attachments).
- Policies in respect of Landscape Character Assessment:
    - **LC SP 1** – To protect landscape character, quality and local distinctiveness in accordance with relevant government policy and guidelines and the recommendations included in Meath Landscape Character Assessment.
    - The County's Landscape Character Assessment is set out in Appendix 7 of the Plan. The subject site is situated in Landscape Character Area 6, the Central Lowlands, which is described as having High landscape value and Medium sensitivity.
- Policies in respect of Waste Management:
    - **WM POL 7 –** To encourage the recycling of construction and demolition waste and the reuse of aggregates and other materials in future construction projects.
    - **WM OBJ 1 –** To facilitate the provision of appropriate waste recovery and waste disposal facilities in accordance with relevant legislation.

- **WM OBJ 13 –** To support the development of facilities for commercial waste, including C&D waste in accordance with the requirements of the North East Waste Management Plan.

- Policies in respect of natural heritage seek to maintain it and the amenity of the county by promoting the preservation and enhancement of native and semi-native woodlands, groups of trees and individual trees (NH POL 16 and NH POL 18).

5.3. Natural Heritage Designations

5.3.1. The appeal site lies c.250m to the east of the Tromman stream, which is designated as part of the River Boyne and River Blackwater Special Area of Conservation (site code 002299). It discharges to the River Boyne c. 2.5km to the north west of the site, where the River is also designated as a Special Protection Area (River Boyne and River Blackwater SPA, site code 004232). To the South of the quarry, c.9km, is the Royal Canal, a proposed Natural Heritage Area (site code 002103) and c.2.2km to the south east of the site is Rathmolyon Esker, also a proposed Natural Heritage Area (site code 000557). Rathmolyon stream to the north of the appeal site, into which the site discharges, ultimately outfalls into the River Boyne c.10km down stream where the River is designated as an SAC and SPA (River Boyne and River Blackwater SAC/SPA).

5.4. EIA Screening

5.4.1. The application for the proposed development includes an Environmental Impact Assessment Report (EIAR). It is submitted on the basis that the proposed development comprises the continued and extended extraction of limestone from an overall extraction footprint of c.19.2ha and warrants EIA as it exceeds the 5ha threshold set out in paragraph 2 of Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended).

6.0 **The Appeal**

6.1. **Grounds of Appeal**

6.1.1. There is one third party appeal in respect of the proposed development. Grounds of appeal are:

- Precedents. Permission refused in 1990 for a small scale service garage and workshop (PA ref. 90/247). Subsequent permission for extensive quarrying inconsistent with the reasons for refusal of PA ref. 90/247. Similar application was refused by the Board under ABP-301385-18.
- Unauthorised development. Lack of public participation on application for extension of duration (PA ref. TA180336). No reference to TA180336 in application for proposed development. Extension for duration should have been invalidated as there was already a permission to operate. Current application does not take account of unauthorised disposal of overburden on neighbouring lands and fen habitat. Regularisation of such a breach is contrary to European law. Material should have been reinstated in the quarry and prevent creation of lake. Concern that lack of enforcement by the planning authority will give rise to self- monitoring re compliance.
- Further information. Response to FI downplayed the activity/significance of bats and Peregrine Falcon, despite significant concerns of DCHG and Environmental Department of PA. No alternative haul route provided to avoid removal of trees. No acknowledgement that trees important. Trees abate effect of the two quarry operations.
- Planning application. Wording of current application differs from that previously sought in 2018. Significantly larger lateral extension sought and no reference to larger extension area in description of development. Proximity of quarry to road. Moderate increase in overburden storage area. . Risk of future applications to further extend working life of quarry, in conflict with original permission and extensions (PL17.111632, PL17.227088 and TA160094).

- Planning reports. Disregarded letters from the public. No inferences should be drawn from the lack of responses by prescribed bodies. No response from Heritage section of PA.
- Appellant's analysis of issues.
    - Lack of clarity regarding location of site (Castletown is an adjoining townland).
    - Heritage - Loss of original Tudor house on appeal site. Impact on quarrying on Cummins house (structural damage to buildings and vulnerability of buildings to future disturbance). Two surviving buildings associated with Trammont House have been allowed to fall into disrepair. Buildings are worthy of conservation. Condition no. 28 of PA ref. 98/1981 (PL17.111632) required a condition survey. Trees to be removed formed part of driveway to Tudor house. Buildings on site pictured in Irish Concrete Foundation's Environmental Code, 2005.
    - Natural heritage – Inappropriate loss of trees in an elevated area of lands. Green lung between the two quarries (dust screen). Were originally part of the amelioration of earlier grants of permission (PA ref. 98/1981). Provide important habitat for species, including 5 bat species and rare 'whiskered bat'. Specimen walnut tree has been felled. Conflict with NH POL 16 and 18 (preservation of trees). Caution quarrying to the edge of the woodland (further loss of trees). Numerous coppices of trees (bat habitat) removed from site, and adjoining quarry. Outdoor lighting is incompatible with bat activity. Question means to soft fell trees. Bat boxes cannot compensate for loss of habitat. Mitigation measures are insufficient. Site is an important European site. Proximity of development to River Boyne SAC and discharge of quarry waters to waterbody.
    - Duration of, and piecemeal approach to, development – Third extension of permission. Development of resultant scale would not have been granted permission in the first instance. Quarries have had significant impacts and have exceeded original permitted time limits and area set out in original applications and should cease.

- Depth and errors – Depth of quarry has progressively increased by permissions granted and error in 2003 (to 4mAOD not 54mAOD). No evidence hydrogeologist input to PA assessment (impact on water table and drinking water supplies).
- Restoration – Proposed restoration to beneficial ecological and agricultural after use contradicts condition of permission granted in 1999 (PL17.111632) which required restoration to agriculture and/or leisure. Significant amount of agricultural land lost to quarrying in the area. Backfilling would best protect groundwater aquifer. Viability of agricultural use if thin layer of material to be spread over land. PA should establish what reinstatement was to have taken place to date and what has taken place. Risk of accidents if restored to lakes.
- Compliance with previous planning permissions - Compliance with previous conditions of permissions granted, including financial obligations, bonds, monitoring records, all other obligations of permissions.
- Amenity – Impact on amenity of area, including for those living, walking in the area. No longer possible to exercise horses on the roads (quarry traffic and blasting).
- Truck movements – Unacceptable volume of trucks on the R156, with safety issues for traffic (other vehicles, walkers and cyclists) and particulate matter. Noise from passing trucks (in particular, empty trucks). Truck movements to and on site from 6am. Take issue with the stated truck movements in EIAR. Need to include batching traffic in assessment. Cumulative impact of quarry operations in the area. Use of traffic data from 2016 concerning as high levels of traffic observed on the R156 in recent years. Quarries continues to operate as normal during Covid. Any traffic count should be by third party and over various dates to ensure consistency. Significant transport levies previously proposed remain outstanding.
- Noise/traffic – Unacceptable noise limit specified by the Board in 17.111632. However, primary issue is noise from traffic (volume of

trucks) on R156, in particular from unladen quarries and tonal bleeping from reversing trucks.

- Lighting – Excessive nightime lighting for humans, birds, bats and other wildlife.
- Development Plan – Inconsistent with CSOBJ7.
- Covid 19 lockdown – Operation of quarry during lockdown and impact on people living in the area, in particular the elderly (fear of virus spread).
- Diesel – Environment and health effects of diesel emissions.
- Nuisance – Dust from quarries on roads, verges, gullies and hedges. Emission limit for dust has increased since original permission (PL17.111632), from 130mg/m^2/day to 350mg/m^2/day. Absence of assessment of cumulative effects of both quarries (blasting). Impact of blasting on residents, dogs and horses. Lack of notification in advance of blasting. Impact on structural integrity of local houses.
- Strategic planning - Absence of strategic planning in respect of quarrying in south County Meath, resulting in high proliferation in the area. Many unauthorised and little enforcement action taken. Further quarrying would constitute over development. Loss of Rathmolyon esker and risk to other eskers. Unsustainable nature of quarrying (limited employment, landscape impact, lack of restoration). Significant land banks in the area around the quarry, causing concern for public, in particular with absence of reinstatement.
- Impact of discharge from quarry on downstream waters (excessive calcium).

6.2. Applicant Response

6.2.1. The applicant responds to the matters raised in the appeal (1st February 2021). The applicant largely repeats the arguments set out in the EIAR and further information. Additional comments or arguments are referred to in my assessment below, as necessary.

6.3. Planning Authority Response

6.3.1. The planning authority responds to the appeal made on the 2nd February 2021 and make no new comments on the matters raised.

6.4. Observations

6.4.1. Observations were made on the appeal by Residents of south County Meath (1st February 2021), with 30 letters of support from the community. The following new issues are raised in the observation:

- Bat species – Anything over 3 lux is considered harmful to bat species (1 lux for Daubenton's). Bats need to maintain 30ºC at roosting sites, bat boxes do not reach this temperature. Proposed maintenance of 'dark corridors' around the periphery of the site conflicts with current practice (significant lighting with spillage). Whiskered bats are extremely sensitive to light. Inadequate bat survey (no map of foraging/commuting routes, route between nightime roosts to forage areas, no 2020 survey, no information on date of 2020 survey, no lux level analysis, no information on feeding location of species, no sound analysis files for species). Lighting not in accordance with Bat Conservation Ireland or Eurobats guidelines. No meaningful protection to existing bat roosts (buildings allowed to decline, considerable lighting, no specific details on feeding and commuting bats subsequent to 2017 reports). Current status of bats unclear and raises concerns that current operations are deleterious to bat species.
- Peregrine Falcon – No appropriate assessment of this Annex 1 species on the site. No proposed protection of nesting sites or mitigation measures for species. Dependence on use of another quarry site is inappropriate. Concerns that past failure to comply with measures to protect bats suggest that applicant will not implement measures to protect Peregrine Falcon leading to loss of nesting potential.
- Cumulative assessment – No joint assessment of quarry and adjoining Keegan quarry. Should be treated as one entity.
- Water – Watercourse to the north of the site has run dry on occasion, likely to be attributed to quarrying.

- Societal impacts – Large scale of quarry development in south Meath, with retention and extensions. No meaningful enforcement of unauthorised developments. Development should be refused under section 35 of the Planning and Development Act 2000 (as amended), (past failures to comply) or reasons set out in Schedule 4 of the Act (reasons for refusal which exclude compensation).

6.5. Further Responses

6.5.1. In their response to the Board's circulation of third party observations, the **planning authority** state that they have no further comments on the appeal (1st March 2021).

6.5.2. On the 4th February 2021, the **appellant** comments on the applicant's response to the appeal. This includes:

- Plates 2 and 3, used by the applicant in response to the appeal, belong to the appellant and the applicant does not have permission to use them. Images have been used to misinterpret the facts and should be discounted.
- Applicant ignored many matters raised by the appellant.
- Bat survey undertaken at sub-optimal time.
- Peregrine Falcon survey out of date.
- Recent lighting installed at quarry not consistent with BCI guidelines.
- 95%ile flow used to calculate mass balance and assimilative capacity is an over estimate.
- No information on predicted inflows of water to quarry.
- No assessment of effect of quarrying on surface water flow in Rathmolyon/Moynasboy stream.
- No assessment of impact of discharge waters on risk of downstream flooding.
- Significant increase in discharge waters proposed. Site is currently unlicenced and application should be invalidated. Risk that the proposed development will lead to further, and unquantified, increase in discharge.
- Applicant omits useful non-native trees from planting scheme.

6.5.3. On the 1st March 2021, the observer **Residents of South County Meath**, make comments on the applicant's response to the appeal. Issues raised repeat matters set out in previous submissions. New matters are:

- Lack of monitoring of wells in the vicinity of the site.
- Kilsaran has concrete returns facility at Clonee.
- Adverse effects of lime on health.

7.0 Planning Assessment

7.1.1. Having examined the application details and all other documentation on file, including all of the submissions received in relation to the appeal, and inspected the site, and having regard to relevant national, regional and local planning policies, I consider that the main planning issues in this appeal are:

- Impacts on amenity.
- Visual impact.
- Impacts on bat species and Peregrine Falcon.
- Traffic.
- Impact on heritage.
- Impacts on ground and surface water.
- Restoration.

7.1.2. A number of these matters are addressed in detail in the Environmental Impact Assessment and/or Appropriate Assessment sections of this report and are only commented on here briefly.

7.1.3. A number of other matters have been raised in this appeal and I comment on these below:

- Precedents. Parties to the appeal refer to an earlier planning application made in respect of the site, under PA ref. 90/247 (small scale garage) and PA ref. TA170159/ABP-301385-18 (continuation of quarrying at the appeal site and its lateral extension), both of which were refused. In each case, the planning applications were considered on their merits and in the context of national, regional and local planning policies in existence at the time. The

current development, which also proposes the continuation of quarrying and its lateral extension, differs significantly from the previous proposed in terms of the depth of quarrying (reduced from previous application and in line with existing permission), time period (reduced) and extension area (slight increase). Both the applicant's EIAR and response to the appeal address the Board's reasons for refusing permission under ABP-301385-18 (impact on surface waters and European sites). It is appropriate, therefore, that this application be considered on its merits.

- Planning application/Notices. The appellant refers to differences in the statutory notices between the between the current planning application and ABP-301385-18, the omission of reference to the application for permission to extend the duration of permitted development under TA180336 and lack of clarity regarding the location of the development. The government's development management guidelines in respect of statutory notices specifically state '*The purpose of the* [public] *notices …. is to inform the public of the proposed development and alert them to its nature and extent… public notices should give a "brief description" of the nature and extent of the developmen*t' (section 3.4, Development Management, Guidelines for Planning Authorities, 2007). The statutory notices for the proposed development adequately describe the location of the development (Tromman townland) and provide a brief description of the development alerting the public to it. Application drawings clearly indicate the location and extent of the extension area (e.g. Drawing nos. 2, 3 and 4). There is no requirement in law that the statutory notices for the subject application refer to all previous planning applications made in respect of a site.
- Unauthorised development/compliance with conditions – Parties to the appeal raise concerns regarding (a) the lack of public participation on the application to extend the duration of PA ref. TA180336, (b) the previous unauthorised disposal of overburden on adjoining lands, (c) the level of compliance, with conditions of previous permissions (d) unlicenced nature of site, and (d) the level of monitoring and enforcement action in respect of quarrying in the County.

In April 2018, under PA ref. TA180336, the applicant sought permission under section 42 of the Planning and Development Act 2000 (as amended) to extend the duration of the permission granted under TA/70175/PL17.227088 which was due to expire in January 2019. Permission subsequently granted for an extension for a period of 5 years to January 2024.

The Planning and Development Act, and the associated Planning and Development Regulations 2001 (as amended), do not require public participation. Issues of alleged overburden disposal arise in respect of land outside of the appeal site and scope of the appeal. Compliance with conditions of a permission is a matter for the planning authority and are outside of the legal remit of the Board. Further, there is no information on file to indicate lack of compliance with conditions of the permissions under which the subject quarry operates. Conditions of the permissions granted in respect of the quarry, have required surface water to be managed in accordance with the requirements of the planning authority, to ensure that the development does not give rise to adverse effects on the environment. Currently water is discharged from the quarry under licence from the local authority (under section 4 of the Local Government (Water Pollution Act), 1977 as amended). Discharge rates are in excess of limits set out in the licence. This issue is stated in the EIAR and in April 2020 an application was made to the local authority for an increase in discharge volumes to reflect actual discharge rates. Breaches of licence conditions a matter for the local authority.

- Public submissions. The appellant states that the planning report disregarded letters from the public. I note that there is specific reference to these submissions in section 4 of the Planning Report dated 30th July 2020 and the concerns raised. Matters raised are also addressed in this report.
- Piecemeal development. Parties to the appeal raise concerns regarding the piecemeal nature of the quarrying on the appeal site and on adjoining lands, the extension of the duration of quarrying in the area, the absence of reinstatement and the risk of future development. Whilst I am mindful of these concerns, in particular due to the potential for adverse environmental effects from quarrying, the applicant (like any landowner) is entitled to bring forward progressive applications for development, and it is the role of the

planning system to adjudicate on these in the interest of proper planning and sustainable development. The issues of reinstatement and duration of development are considered below.

- Project splitting. Submissions on file refer to project splitting with the concurrent application under PA ref. AA191263. This refers to a Kilsaran development at Ford de Fine at Naul in County Meath. This site lies c.36km to the north east of the appeal site and is not likely to rise to project related cumulative environmental effects or, therefore, to constitute project splitting under legislation in respect of environmental impact assessment. The issue of cumulative impact assessment with the adjoining quarry is considered in the EIA section below.
- Depth of quarrying. Parties to the appeal refer to the planning history of the appeal site and adjoining lands and the increasing depth of quarrying. The appellant emphasises that the permission being sought (quarrying to a depth of 24m) should be seen in the context of the progressive depth of the quarries (see paragraph 95 to 97 of the appeal). In my assessment of this appeal, I am mindful of this context and of the existing permission which provides for extraction to a depth of 24mAOD. Potential effects on hydrogeology and hydrology are examined below.
- Strategic planning. Strategic planning in south Meath in respect of quarrying falls outside the remit of the Board and is a matter from the planning authority. Notwithstanding this, the development comes forward in a national and local planning policy context which recognises the importance of the extractive industry and facilitate its development subject to environmental safeguards.
- Loss of eskers in the Rathmolyon area lies outside the scope of the appeal.
- Alternative sites. I note that parties to the appeal refer to the applicant's existing concrete returns facility at Clonee. It may be that such a facility is in place, nonetheless, the applicant is entitled to bring forward an application for the development at the appeal site and national, regional and local planning policy documents support an increase in such facilities.

- Realignment of the access road. In response to the request for FI, and in response to the appeal, the applicant has considered the realignment of the access road to the site, and it has been stated that such an option would sterilise the reserves which are the subject of the application.

7.2. Impact on amenity

7.2.1. In the Environmental Impact Assessment section of this report the environmental effects of the subject development on the local population and human health are considered. In summary, whilst I would accept that the operation of the proposed development, in conjunction with the adjoining quarry, detracts from the amenity of the area, having regard to the relatively modest number of properties in the immediate vicinity of the appeal site, the distance of these (generally) from the subject site, the provision of landscaped perimeter berms separating the site from adjoining properties, the proposed location of on site activities (including at depth) and the means to minimise, manage and mitigate impacts and subject to additional conditions in respect of noise monitoring, I am satisfied that the proposed development is unlikely to give rise to significant adverse effects on amenity by way of operational vibration, noise, dust or adverse effects on water supply and water quality. Increases in traffic above existing permitted levels are moderate and traffic movements (hours of operation), can be controlled by condition. Visual effects will arise with the loss of mature trees on the site which are visible from and contribute to the landscape character of the area. However, these effects will be offset in the longer term by additional tree planting within the site and have to be balanced with loss of access to proven reserves and the potential environmental effects of establishing a new quarry elsewhere.

7.3. Visual impact

7.3.1. Parties to the appeal argue that loss of 195m of mature trees on elevated lands will have significant visual effects, acting as a buffer between the sites and contravening previous undertakings. They also refer to the visual impact of the overburden piles on site.

7.3.2. The appeal site lies in the 'Central Lowlands' Landscape Character Area 6 (LCA) and to the west of LCA 13 'Rathmolyon Lowlands'. Both are identified as being of 'High Landscape Value'. LCA 6 is identified as a landscape of regional importance and LCA13 national importance. Policies of the County Development Plan seek to protect landscape character, quality and local distinctiveness in accordance with relevant government policy and guidelines and the recommendations included in Meath Landscape Character Assessment.

7.3.3. As stated in the EIA section of this report, the existing quarry is generally well screened in views from the public road, by a combination of perimeter bunds, mature boundary vegetation and trees and hedgerows within the wider landscape. The proposed development will result in the loss of significant trees from elevated lands within the appeal site, and its wider context. Loss of these trees will increase the intervisibility of the two quarries and result in an adverse effect on limited views of the site from the public road network. However, externally the subject site and the adjoining quarry will remain largely screened by the surrounding perimeter berms and established trees on the boundary of the site and within its wider context. Visually, the loss of the mature trees will be offset in the medium to longer term with the maturing of additional planting proposed within the site, along its eastern boundary and on perimeter berms to the south west (Figure 2-2).

7.3.4. Having regard to the foregoing, and whilst I accept there will be local visual effects of the development, I do not consider that these are significant or that they will adversely impact on landscape character of the Central Lowlands. I consider therefore that the subject development is consistent with the policies of the County Development Plan which seek to protect landscape character. In principle, I would accept that the development contravenes previous undertakings, however this is approach is reasonable as it is progressed via a planning application and the environmental and visual effects of the consequences of such changes are assessed via this process.

7.4. Impacts on Bat species and Peregrine Falcon

7.4.1. These matters are dealt with in section 8.0 of this report, Environmental Impact Assessment, and for the reasons stated, I conclude that no adverse effects on bat species or Peregrine Falcon will arise as a consequence of the development.

7.5. Traffic

7.5.1. The effect of the development on HGV traffic on public roads is addressed in the EIA section of this report. Having regard to the continuation of quarrying within the permitted annual extraction limit, the modest increase in traffic associated with the construction and demolition waste recovery facility, and subject to conditions of the permission, I do not consider that HGV movements will substantially increase on the public road network or, therefore, give rise to a serious risk of traffic hazard or dis-amenity for road users, over and above existing levels.

7.6. Impact on heritage

7.6.1. For the reasons stated in the EIA section of this report, I do not consider that the proposed development will give rise to significant effects on cultural heritage, by virtue of the loss of the treeline originally associated with Trammont House or as a consequence of structural damage to properties in the vicinity of the site.

Impacts on Ground and Surface water

7.6.2. Parties to the appeal raise concerns in respect of the proposed development on groundwater, Rathmolyon/Moynasboy stream and the River Boyne and River and River Blackwater SAC. These matters are assessed in the EIA and AA sections of this report and for the reasons stated, I am satisfied that the proposed development will not give rise to adverse effects on these waterbodies.

7.7. Restoration

7.7.1. The appellant raises concerns regarding:- the restoration of the appeal site to a beneficial ecological afteruse and agriculture, arguing that it should be returned to agriculture (consistent with PL17.111632); the reinstatement of lands that should have taken place to date; the risk of accidents and risk to groundwater if restored to

a lake; the loss of agricultural land in the county as a result of quarrying; the productivity of future agricultural land and the absence of useful of non-native trees in planting scheme.

7.7.2. Policy RD POL 26 seeks to ensure that all quarries are rehabilitated to suitable land uses, with biodiversity of the site considered in the first instance when preparing restoration plans. In this instance, the applicant proposes that the processing area is restored to agriculture, the settlement ponds and C&D areas are allowed to naturally revegetate and the quarry void, on the southern side of the site, to infill with water. Around the perimeter of the site existing boundary vegetation will be retained and within the site, new hedgerows are proposed (Drawing 7 Proposed Landscape and Restoration Plan). Works are to be completed on permanent completion of extraction works.

7.7.3. Condition no. 7 of PL17.111632 required the development to be completed within a period of 15 years and for the site to be restored for agriculture, within 2 years of the quarry ceasing to be used for extraction of limestone. This permission was granted in 1999 and has been subsequently superseded by other planning permissions which have been sought and granted on the site (see Planning History above). These have permitted a progressively longer timescale for the working of the quarry and alternative restoration plans, with restoration also following cessation of quarrying. Of note, and as stated by the appellant in response to the appeal, the subject proposals to restore the site to a mix of ecological and agricultural afteruses are consistent with the restoration plan permitted under PA ref. TA70175/PL17.227088, which proposed restoration to a southern lake and northern pasture land.

7.7.4. In addition to the foregoing, the proposed uses, natural habitat and agriculture, are both appropriate afteruses listed in the EPA's Environmental Management Guidelines for the Extractive Industry, and are appropriate given the rural location of the site. Issues regarding loss of agricultural land are not significant, at a site level, or cumulatively, given the relatively modest extent of quarries compared to agricultural land in County Meath. The adequacy of restoration of pastureland and access to the site, to protect public safety and groundwater quality, can be addressed by condition.

7.7.5. The appellant argues that the omission of tree species which have naturalised on the island e.g. beech, hornbeam, walnut, provides for a bland landscape. In response the applicant refers to policies NH POL 14 and 17 of the County Development Plan which encourage the use of native species and states that the woodland planting proposed in compensation for the trees along the access road, comprises native silver birch, hazel and pedunculate oak, with the silver birch and hazel included as nurse species, providing shelter for the oaks which will ultimately grow much bigger than the other two. The applicant's approach is consistent with the policies of the County Development Plan and will ultimately provide mature oak trees which support a significant number of native species and contribute to the site's biodiversity (Irish Wildlife Trust).

8.0 Environmental Impact Assessment (EIA)

8.1.1. The applicant's Environmental Impact Assessment Report (EIAR) comprises two volumes, a Non-Technical Summary, and the main report providing a technical assessment of environmental effects. I have carried out an examination of the information presented by the applicant, including the EIAR and the submissions made during the course of the application and appeal. A summary of the submissions made by the planning authority, prescribed bodies and observers is set out above. The main issues raised specific to EIA are impacts on:

- Residential amenity.
- Landscape.
- Biodiversity (bat species and Peregrine Falcon).
- Ground and surface water.
- Traffic.
- Heritage.

8.1.2. These issues are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation, including conditions.

8.1.3. I am generally satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality and that the information contained in the EIAR and supplementary information provided by the developer, adequately identifies and

describes the direct, indirect and cumulative effects of the proposed development on the environment and complies with the requirements of Section 94 of the Planning and Development Regulations, 2001 (as amended). Of note, the EIAR adequately contains:

- The information specified in paragraph 1 of Schedule 6, including a description of the proposed development, the likely significant effects on the environment for the following parameters, mitigation measures and reasonable alternatives:
    - population and human health,
    - biodiversity,
    - land, soil, water, air, climate,
    - material assets, cultural heritage and landscape.
- As necessary, additional information specified in paragraph 2 of Schedule 6 is provided, relevant to the proposed development and to the environmental features likely to be affected.
- A summary in non-technical language of the information required above,
- Details of sources used for the descriptions and assessments included in the report, and
- Details on the experts who contributed to the preparation of each element of the report and their competence/experience.

8.1.4. More detailed comments on the EIAR are set out below under each individual environmental topic. I do not consider that the subject development is particular at risk of major accident or natural disaster e.g. flooding, earthquake etc.

8.2. Difficulties Encountered

8.2.1. Each Chapter of the EIAR refers to limitations/difficulties encountered in preparing the EIAR. No significant difficulties are identified.

8.3. Alternatives

8.3.1. Alternatives to the proposed development are considered in section 3 of the EIAR within a wider context of the National Planning Framework 2018, the on-going need

for aggregates in the country and increased demand/statutory requirement for recovery and reuse of construction and demolition waste. Alternatives considered are, do nothing, alternative sources to land-won aggregates, alternative locations and alternative designs. In accordance with Schedule 6 of the Planning and Development Regulations, 2001 (as amended) I consider that the options considered comprise reasonable alternatives which are relevant to the proposed development. Further, having regard to the on-going need for aggregates in the economy, the absence of alternatives to land-won resources, the site specific nature of aggregates and the established use of the site, I consider that it is reasonable that the proposed option is brought forward for development.

8.4. Population and Human Health

8.4.1. Residential properties in proximity to the appeal site are indicated in Figure 4-1. They are largely located along the public roads to the north, east, west and south of the site. The nearest residential properties lie immediately south and south west of the appeal site and proposed extension area. Scoil Mhichil Naofa is c.900m to the south east of the site in Kill.

8.4.2. The appellant and observers raise concerns regarding impacts on amenity by way of HGV traffic, dust, dirt on the public road and noise (from blasting and HGVs), health effects of diesel fumes and lime dust, absence of notification in advance of blasting, impacts on the structural integrity of properties, early operation of the quarry (HGV movements), impacts on groundwater and water supplies and landscape effects. Concerns are also raised regarding cumulative effects with the adjoining Keegan quarry and other quarries in the area. These impacts are largely dealt with individually in specific topic sections of this report and are summarised or addressed below:

- The proposed development entails the extension of the quarry in terms of area and duration. There is no proposed increase in output or HGV movements associated with the existing quarry operation. However, a small number of additional HGV trips will arise from the C&D facility (16 HGVs/day). The effect of the development will be to extend the duration of the development, thereby, with the adjoining quarry, maintaining a high level

of HGV traffic on the public road network in the area of the site and adding to it slightly (C&D facility). Whilst this will continue to detract from the amenity of the area, there is no significant increase in traffic and the Board has previously determined that the level of HGV traffic movements associated with the existing quarry is acceptable.

- Having regard to the absence of any evidence of substantial dust deposition or spillage of materials outside the area of the site, monitoring information on the past performance of the quarry, the nature of the proposed development which comprises a lateral extension to existing quarrying activities with no increase in output, the proposed mitigation measures and extent of vegetation surrounding the site, I am satisfied that the proposed development is unlikely to give rise to significant levels of dust or particulate matter to the detriment of property of health in the area of the site.
- The additional 10 HGV movements/day, associated with the proposed C&D facility, are unlikely to add significantly to background levels of particulate matter or nitrous oxide.
- The agri-lime plant on site comprises an enclosed milling unit with water used as a suppressant if required. Milled material is also stored within a structure. Having regard to these arrangements, together with proposed mitigation measures, boundary screening and distance of plant from residential property it is unlikely that lime dust would have a significant effect on public health.
- Having regard to my inspection of the appeal site (which was operational at the time of inspection), its location and layout relative to adjoining property, monitoring data on noise and vibration presented by the applicant and the conservative assessment of likely effects of the development, I am satisfied that noise and vibration levels arising from the proposed extension are generally unlikely to adversely affect nearby sensitive receptors. However, I recommend additional monitoring near receptors R5 and R6 given their proximity to the C&D facility and absence of noise monitoring in this area.
- Information on file indicates that advance notice is given of blast events. Going forward the matter can be further addressed by condition and is, thereafter, a matter for enforcement.

- The proposed development includes provision of replacement lighting along the realigned access road, with no additional lighting within the site, and nightime lighting to be limited up to 2 hours in winter months. In addition, biodiversity mitigation measures include use of any artificial lighting to be informed by guidance produced by Bat Conservation Ireland (low intensity and provision of dark commuting corridors). The proposed measures are not unreasonable, and I do not consider that the development would add significantly add to light pollution in the area of the site.
- On the basis of the information on file, it would appear that quarrying of the subject site, in combination with the adjoining quarry, has impacted on well water at residential properties to the south/south west of the site. Further, having regard to the applicant's conceptual model of the hydrology and hydrogeology of the site, and predicted effects of dewatering to facilitate extraction from the extension area (again in conjunction with the adjoining quarry), there is a risk of further effects on well supplies. These effects are not considered unreasonable, given the conservative approach adopted in the assessment, the availability of alternative public water supplies, mitigation measures in the event of effects on well water and the temporary nature of the proposed development.
- The proposed development will result in the loss of mature trees on an elevated part of the appeal site and trees which separate the site from the adjoining quarry. Mitigation measures include compensatory tree planting within the site and perimeter planting (including the hedgerow that separates the two quarries). Having regard to these measures, and the general lack of visibility of the site in the wider landscape, I consider that with time visual separation between the quarry sites will be maintained and that the proposed development will not significantly detract from landscape character or visual amenity of the area. Control of the height of overburden and C&D storage mounds can be addressed by condition.

8.5. **Biodiversity**

8.5.1. Section 5 of the EIAR deals with biodiversity. Baseline information on the site has been obtained from desk top survey and habitat and species specific surveys (bat

and Peregrine Falcon), which have been updated during the course of the application. A habitat plan of the site is presented in Figure 5-2. Of note, this includes 180m treeline, WL 2, of high conservation value, to be removed from the proposed extension area, hedgerow WL 1 to be removed to the south west of the extension area and two former stone outbuildings associated with the former Trammont House, to the east of the proposed extension area which, together with the adjacent trees, are used bat species. The River Boyne and River Blackwater SAC/SPA lies c.250m to the west of the site (Figure 5-1) at its nearest point and discharge waters from the quarry void outflow to Rathmolyon/Moynasboy stream. This stream ultimately discharges, c.10km downstream to the River Boyne at Trim, where the river is designated as the River Boyne and River Blackwater SAC/SPA. Of the bird species observed on the site, Peregrine Falcon, listed in Annex I of the EU Birds Directive, were observed in 2020, potentially indicative of pre-nesting activity.

8.5.2. Loss of treeline and hedgerow. WL 2, the 180m treeline to be removed from the proposed extension area includes mature trees, sycamore, horse chestnut, beech, copper beech, holly, Turkey oak and common lime. The short length of boundary hedgerow to be removed to the southwest of the extension area includes mixed tree species (section 5.76 EIAR). In order to mitigate the effects of the loss of the 180m treeline (WL 2) compensatory landscape planting of oak woodland is proposed to the north west and south west of the tree line (Figure 5-3). Mitigation of the loss of hedgerow (WL 1) will be via planting of 150m of hedgerow along the new perimeter berm. The EIAR acknowledges that the loss of WL 2 will not replace in the short to long term the loss of mature trees. However, no ecologically significant residual adverse effects are predicted in the loss of these habitats, largely due to replacement planting in the short term and maturation in the long term.

8.5.3. In response to the request for FI, the applicant argues that there is no alternative to the loss of the mature treeline, as its removal facilitates access to the underlying reserves, which are the raison d'etre of the planning application.

8.5.4. Having regard to the foregoing, I would accept that the loss of WL 2 is an inevitable consequence of any grant of permission to extend the quarry. Further, the mature trees within the treeline contribute significantly to the habitats present on the site (impacts on bat species are considered below) and its loss will result in a deleterious

effect on the biodiversity of the site. However, such effects will be local to the area of the site affected and will not extend to the wider environment. Further, I would accept that the effect of the development will be mitigated in the longer term by the maturation of the proposed compensatory oak woodland, hedgerow planting and in the restoration of the site.

8.5.5. Bat species. Bat species listed Annex IV of the EU Habitats Directive, transposed into national law in the European Communities (Birds and Natural Habitats) Regulations 2011 are given strict protection, along with their breeding and resting places, with provision for derogation (by the National Parks and Wildlife Service), provided that there is no satisfactory alternative, and the derogation is not detrimental to the maintenance of the population of the species concerned at a favourable conservation status.

8.5.6. The EIAR refers to a bat survey that was originally undertaken of the proposed extension area in 2016/17 (Appendix 5-B). It identified the bat roost resource within the study area as the buildings associated with former Trammont House and treeline WL 2. From the survey data, it concluded that the buildings were used by a low number of common pipistrelle bats for hibernating purposes and as a potential day roost for soprano pipistrelle. Further, five trees in the treeline were considered to provide moderate to high suitability for roosting bats, but the survey did not confirm the use of these by roosting bats at the time of survey. Based on the bats confirmed as roosting in the area, the bat roost resource (buildings and treeline) was considered to be of Local (higher) value. The bat habitat resource was considered to be of County value for *Myostis sp.* (highly likely whiskered bat), with the area forming part of the core sustenance zone (CSZ) for the species (i.e. the 1km area around a communal roost for this bat species), and Local (higher) value for all other observed species (common pipistrelle, soprano pipistrelle, Leisler's bat and Daubenton's bat). CSZs for these species range from 2-3km (see attachments).

8.5.7. The subsequent survey, August 2020 (FI response) generally found the description of trees within the study area to be valid with the exception of two trees which were downgraded due to loss of roosting feature or loss of tree. The two buildings were also noted to have fallen into further disrepair. The survey confirmed that a small number of Brown long eared bats were roosting in Building 2, a small number of pipistrelle bats in external fascia of Building 1. It also found that the line of trees is

used by bats for foraging, with only limited roosting habitat generally within ivy growth (with this habitat suitable for transient individual bat roosts, rather than maternity roosts or hibernation roosts). Species identified as using the site are Common Pipistrelle, Soprano pipistrelle, Nathusius' pipistrelle, Brown Long eared bat, Leisler's bat and Myotis (likely to be a Whiskered Bat).

8.5.8. The 2016/7 survey work included visual survey of potential roosting features, roost detection and activity reports with dawn and dusk surveys (May 2016) and winter hibernation (January 2017). The 2020 survey was carried out in August and also included visual survey of potential roosting features, roost detection and activity reports with dawn and dusk surveys. The two surveys, collectively provide information on bat activity at the site during the winter and summer months and survey times are consistent with best practice guidelines (Bat Surveys for Professional Ecologists, Bat Conservation Trust, 2016). The updated bat survey was carried out in August 2020, 3 months in advance of decision making and the applicant also proposes, further survey in advance of works. This approach would be consistent with the Chartered Institute of Ecology and Environmental Guidelines on the lifespan of ecological reports and surveys.

8.5.9. Parties to the appeal raise concerns that the survey work does not provide specific information on foraging/commuting routes of bat species, feeding location of species or sound analysis files for species. This information is not specifically included in the EIAR, however, it is acknowledged in the EIAR that the development area forms part of the foraging area for bats roosting in the buildings and part of the wider foraging territory for bats in the area. It is evident from the information on file and from inspection of the site, that loss of the existing treeline takes place in a wider area where a range of habitats for bat species are present, including broadleaved woodland adjacent to the treeline to be removed, immature woodland and hedgerows on the external boundaries of the quarry, with these features connecting into the wider landscape. This context, together with the relatively modest extension area, the typically larger core sustenance zones for bat species (including *Myotis* species) and the comments below, I would conclude that loss of habitat is unlikely to adversely affect bat species utilising it and the wider area. It is not common practice for sound analysis files, which require professional interpretation, to be included EIARs.

8.5.10. The Department of Culture, Heritage and the Gaeltacht's report on the Status of EU Protected Habitats and Species in Ireland 2019 refers to each bat species occurring on the appeal site. Each is identified as having 'favourable conservation status' except for Nathusius' pipistrelle which has 'unknown status' (uncertainty about its range and population, but no apparent pressures on the species). With regard to Whiskered Bat (Myotis mystacinus) it is stated that there are records of the species throughout the country, but it is not common, and its distribution appears to be naturally dispersed and disjointed.

8.5.11. In essence the consequence of the development is the potential for disturbance to roost habitat associated with Trammont buildings (proximity of works), loss of transient roost habitat and loss of foraging habitat for bat species, including those roosting in Trammont buildings. Impacts on bat species are likely to occur at a local level (given the generally favourable national conservation status). Proposed mitigation measures include:

- Updated surveys and reinspection of all trees with high roosting suitability, prior to works being carried out in the extension area, and where necessary works proceeding under derogation licence (if bats are found to be roosting),
- Provision of alternative roosting sites (15 bat boxes on retained mature trees),
- Planting of two blocks of oak woodland, to the north west of the Trammont buildings and to the south of the realigned access road,
- Consideration given to the creation of glades and scalloped edge to the immature woodland to the south of the extension area (Figure 5-3, EIAR),
- Use of any artificial lighting to be informed by guidance produced by Bat Conservation Ireland (provision of dark commuting corridors).
- Cutting ivy at ground level (dies back), soft felling of trees (where limbs are cut and left grounded overnight to allow bats to make their way out), presence of ecologist/bat worker when ivy is removed,
- Sensitive reroofing of Buildings 1 and 2 and well placed wooden fascia on Building 1, to help create a more permanent habitat.

8.5.12. Proposed mitigation and compensatory measures are reasonable in the context of the bat resource likely to be affected. For instance, bat boxes and bat houses are

generally inappropriate substitutes for significant roosts in buildings (Bat Mitigation Guidelines for Ireland, Irish Wildlife Manual No. 25, DEHLG 2006), but in this instance they are proposed to provide potential roosts habitat rather than replacement roosts. Compensatory planting may provide beneficial habitat in the long term but is unlikely to be used by roosting bats in the short to medium term. Therefore retention and infill planting of the hedgerow to the east of the proposed realigned road (as proposed in the initial Landscape phase of the development, Drawing 7) would be important to provide a corridor for bat movement and connectivity to Buildings 1 and 2. Sensitive reroofing and external works to Building 1 and 2 could also support future use of the structures by bat species. The appellant raises concerns regarding the impact of strong lighting that has been erected at the quarry and the deleterious effect of this on bat species. The adverse effect of lighting on bats is acknowledged by the applicant mitigation measures specifically include that the use of artificial lighting is informed by the guidance produced by Bat Conservation Ireland, with no use of short-wave frequent (UV) light etc. 'where possible' (applicant's response to appeal). In practice the quarry operates at times of the year with lighting and there will be a level of lighting affect/spill already, with species already moving away from the site or possibly habituating to it. I consider, therefore, that if the Board are minded to grant permission the issue of lighting could be addressed by condition.

8.5.13. The DAU raised concerns regarding the initial bat survey, but did not make further comments on the application or the appeal (consulted by the board on the 9th February 2021). I would infer from this that the Department has no significant concerns regarding impacts on bat species.

8.5.14. Having regard to the foregoing, I consider that the proposed development will is likely to have an adverse effect on bat species utilising the site for foraging, and potentially for roosting. However, such effects are likely to be significant at a local level only. Further, mitigation measures have the potential to reduce the significance of these impacts, if designed and implemented in accordance with best practice and under the supervision of the National Parks and Wildlife Service, including arrangements for lighting at the site. In addition, if the Board are minded to grant permission for the development they may wish to include a condition which requires on going monitoring of bat species using the site and the efficacy of mitigation

measures, with a view to ensuring that the site continues to support bat species for the duration of the development.

8.5.15. Peregrine Falcon. Parties to the appeal argue that the applicant has downplayed the activity/significance of Peregrine Falcon, the survey is out of date/inadequate, there is no appropriate assessment of the species, there is a reliance on the adjoining quarry for mitigation and that there is no proposed protection of nesting sites or mitigation measures for the species. They also raise concerns regarding implementation of mitigation measures.

8.5.16. Peregrine Falcon is also protected under the Habitats Directive and is an Annex 1 species. The EIAR states '*In February 2020 three individuals were seen (1 female and 2 males) which is potentially indicative of pre-nesting activity'* and, therefore, identifies that the presence of a breeding pair is a possibility. It is also stated that the species successfully nests in many active and disused quarries and can tolerate quarrying provided that nest sites are retained. The EIAR recommends a watching brief in respect of any breeding presence, with the location of any eyries ascertained at the start of the nesting season to ensure that they are not affected by any extension activities. In response to the FI request, on foot of comments by the DAU, the applicant refers to the previous surveys of the site, under TA170159 (ABP-301385-18), and states that whilst the presence of the species was recorded in the May 2016 survey, no evidence of breeding was noted at the time and the birds seen in the 2020 survey were observed flying over the quarry in a easterly direction. The applicant refers to other suitable nesting sites in the area and therefore, that the siting of the species within the quarry, of itself, would not trigger needs for mitigation. Notwithstanding this, the applicant proposes a watching brief for Peregrine Falcon comprising completion of an annual Peregrine Falcon survey (in accordance with 'Hardy *et al* (2013) 'Raptors: A Guide for Surveys and Monitoring. Scottish Natural Heritage') in March to early April by an appropriately experienced ecologist to check for occupancy and to assess the status of Peregrine Falcon at the site in a given year. In the event of an eyrie being identified on a face to be directly affected by the proposed lateral extension, such works would be undertaken outside of the nesting season following confirmation by ecologist that all nesting activity had ceased (to include further monitoring visits to the site to ensure that all young have fledged, item 1, FI). The EIAR also refers to the establishment of an appropriate buffer zone from

any nesting site for the duration of nesting season and annual planning for at least two options for face progression to enable quarry options to progress.

8.5.17. The DAU raised concerns regarding the absence of measures to conserve Peregrine Falcon on the site during the planned expansion, but did not make further comments on the application or the appeal (consulted by the board on the 9th February 2021). I would infer from this that the Department has no significant concerns regarding impacts on bat species.

8.5.18. Having regard to the foregoing, notably the absence of breeding of the species on the appeal site and the comprehensive measures put forward for mitigation, in the event of nesting, I am satisfied that the proposed development, by itself, or in conjunction with the adjoining quarry is unlikely to result in a significant adverse effect impact on this species. As proposed by the planning authority, mitigation measures can be required by condition and enforcement of these will be a matter for the planning authority. Appropriate assessment is not required in respect of Annex I species which occur outside of a Natura 2000 site.

8.5.19. Rathmolyon/Moynasboy Stream. The interaction of the proposed development with the water environment is discussed in detail below. For the reasons stated below, I am satisfied that water discharged from the site to the Rathmolyon/Moynasboy Stream will not reduce water quality downstream of the site (including water quality in the River Boyne and River Blackwater SAC and SPA at Trim, c.10km downstream of the outfall).

8.5.20. River Boyne and River Blackwater SAC. As discussed in the Water section of this assessment, impacts on the River Boyne and River Blackwater SAC and SPA, c.250m to the west of the appeal site will be negligible as there is no hydraulic connectivity between the groundwater in the bedrock as encountered at the quarry and the SAC. Dust levels will not exceed 350mg/m^2/day at the boundary of the quarry and will not be sufficient to impact on the River Boyne and River Blackwater SAC by way of sedimentation. Continuation and extension of quarrying is not anticipated to increase traffic movements in and out of the site or, therefore, air quality with adverse effects on species/habitats of interest in the SAC or SPA.

8.6. **Land, Soil, Water, Air and Climate**

8.6.1. Section 6 of the EIAR deals with geology and refers to **land, soils and geology.** The site is removed from any designated sites of geological heritage (including Rathmolyon esker which lies c.2.5km to the east of the quarry). Land take for the extension area is c.3.5ha within the overall quarry footprint of c.50.2ha. The development, with extraction to depth, will permanently impact on this resource. However, the area affected is not excessive.

8.6.2. Soil and sub-soil will be stripped from c.3.5ha in the extension area (Figure 2-1), comprising part of an existing agricultural field and perimeter berms. It will be stored on site and reused in the final restoration. Impacts will therefore be modest (small volume of soils temporarily affected). The proposed extraction of underlying Waulsortian limestone will result in a permanent loss of this resource. However, again the area affected is modest and overall impact on the Waulsortian resource is not significant. Given the modest size of the extension area, cumulative effects of the proposed development in conjunction with the adjoining quarry, on land, soils and geology will not be significant. Land take for the proposed C&D facility comprises lands already used for quarrying.

8.6.3. Potential for unplanned events (e.g. stability of faces, risk of accidents), including the risk of cumulative effects with the adjoining quarry, will be limited with proposed adherence to Safety Health and Welfare at Work (Quarries) Regulations 2008.

8.6.4. **Water.**

8.6.5. Section 7 of the EIAR deals with water (hydrology and hydrogeology).

8.6.6. Hydrogeology. The bedrock aquifer at the subject site is the Dinantian limestones, and it is classified as being a Locally Important Aquifer (LI), a bedrock which is moderately productive in local zones. Groundwater vulnerability ranges from high to extreme across the site. The quarry void is in the Longwood Groundwater Body (GWB), which is 'Not at risk' Status in the third cycle of the WFD (based on EPA monitoring data up to 2018). The GSI Conceptual Model for this GWB states '*This groundwater body is located in southwest Co. Meath around the village of Longwood. The area is low-lying with elevations ranging from 70 to 100mOD. The groundwater body is composed primarily of low permeability rocks, although*

localized zones of enhanced permeability do occur. The area of Waulsortian around Longwood defines the extent of the GWB. Recharge occurs diffusely through the subsoils and via outcrops. It takes place mainly in the upland areas where subsoils are thinner or more permeable. The aquifers within the GWB are generally unconfined, but may become locally confined where the subsoil is thicker and/or lower permeability. Most flow in this aquifer will occur near the surface. In general, the majority of groundwater flow will occur in the upper 10 m, comprising a weathered zone of a few metres and a connected fractured zone below this. However, deep water strikes in more isolated faults/ fractures can be encountered at 50-70 mbgl. Flow path lengths are relatively short, and in general are between 30 and 300 m. The regional groundwater flow direction is to the northwest although on a local scale groundwater will follow the local hydraulic gradient towards rivers in the area'.

8.6.7. Surface water. The appeal site lies within the Rathmolyon and Moynasboy stream sub-catchment of the Knightsbrook River, which forms part of the River Boyne catchment. Rathmolyon stream runs east west along the northern boundary of the appeal site. It discharges into Moynasboy Stream to the north west of the site and is treated as a single unit in the EIAR i.e. 'Rathmolyon/Moynasboy stream'. (The route of the stream differs on the ground from OSi and EPA water maps). Rathmolyon/Moynasboy stream discharges into Knightsbrook River, which outfalls into the River Boyne to the east of Trim, where the River is designated as part of the River Boyne and River Blackwater SAC/SPA (Figure 7-1). Rathmolyon stream upstream and downstream of the surface water outfall is identified as having Moderate Status in the third cycle of the WFD (based on EPA monitoring data up to 2018) and Knightsbrook stream downstream of the subject outfall At Risk status.

8.6.8. Tromman Stream runs to the south and west of the appeal site (Figure 7-5). To the west of the site, c.250m, it is designated as part of the River Boyne and River Blackwater SAC. Approximately 2.5km to the north west of the site, Tromman Stream outfalls into the River Boyne which is designated as an SAC and SPA (River Boyne and River Blackwater SAC/SPA). Tromman stream, west of the site, is Not At Risk in the third cycle of the WFD.

8.6.9. Water management. The existing quarry is worked below water table, with groundwater pumped from the quarry void to a holding tank. From here, water is

used within the site for manufacturing activities and excess is discharged via the water management system along the north western side of the site, to Rathmolyon stream, to the north of the site.

8.6.10. Surface water falling within the quarry void and elsewhere on site percolates to ground. Process water from the washing of aggregate is directed into closed settlement lagoons at the site, for reuse. Surface water from the paved block yard will be collected in sumps at the east and west of the yard and pumped to the settlement lagoons. Arrangements for the storage and management of fuel are set out in section 7.34 and the Environmental Management System for the site in Appendix 7-B. Measures are standard industry practices.

8.6.11. The proposed development entails the extension of the footprint of the extraction area over 3.5ha, with the site worked to the same level, 24mAOD as the existing quarry. Otherwise, there is no substantial change in processes on site requiring water. There will therefore be a need for site clearance and further dewatering, with the potential for effects on (a) groundwater and associated water features, and (b) discharge water bodies. It is noted that the baseline environment for the applicant's assessment is the existing Kilsaran quarry and the adjoining Keegan quarry.

8.6.12. Construction impacts. Subject to management of surface water arising during construction, via the surface water management system and the application of proposed mitigation measures, set out in section 7.268 EIAR, I am satisfied that impacts of receiving waters from contaminated runoff will not arise during construction works (soil stripping etc.).

8.6.13. Effect of groundwater pumping. The appeal site, and proposed extension area, lies in the Longwood groundwater body. GSI's conceptual model of the aquifer states that groundwater flowpaths take place primarily in the upper 10m of weathered bedrock (via fractures and fissures) with deep water strikes in more isolated faults/fractures at 50-70mbgl. Appendix 7-G of the EIAR estimates the likely effect of increased pumping from the proposed extension area on adjacent wells. The assessment uses estimates of local transmissivities based on the 2019 pumping rates, regional transmissivity values, abstraction rates and data from groundwater monitoring wells. It calculates a range of potential drawdown of between 16.7 and 25m between 50 and 100m of the lateral extension, with the effect reducing at

distance (Table 2, Appendix 7-G, EIAR). The assessment is based on the Theis model, which is more suitable to a homogenous environment, not a fissured limestone one. However it adopts a conservative approach and acknowledges that if there is no connectivity between the extension area and nearby wells, effects will be more limited. Further, the predicted impacts would appear to be consistent with the effects on wells to date in the vicinity of the site (Table 7-10 and 7-11), including the cumulative effects identified in respect of the operation of the Kilsaran quarry with the adjoining Keegan quarry (see Diagram 7-1, EIAR and Table 7-12) with most significant effects occurring in proximity to the quarry, and reduced effect with distance.

8.6.14. The EIAR considers that the proposed extension area is likely to result, in a worst case scenario, in a moderate impact on affected wells in the vicinity of the site i.e. with the potential for reduced water levels in wells in the immediate area of the site (Table 2 and Figure 1, Appendix 7-G). Properties not in the ownership of the applicant, lying closest to the quarry are R2, R5, R6, R7 and R8. These would all be affected by a potential drawdown of between 5.7m and 13.6m. The applicant's Domestic Well Survey (Table 7-9) identifies wells used for domestic supplies at R7 and R8 alongside mains supply. There is no explanation in respect of the use of well water at R2 (Kilsaran), R5 or R6 and I note that a public supply is available in the area. Notwithstanding the foregoing, the conclusions of the EIAR are not unreasonable i.e. that effects on well water, if they arise, are likely to be confined to a small number of properties in the immediate area of the site and at worst case would occur for the duration of the development. In the event of adverse effects on supplies, the applicant proposes provision of a new well or an alternative water supply (mitigation measures operational phase, section 7.270).

8.6.15. With regard to the public water supply c.1km to the south west of the site, it is stated in the EIAR that there has been no impact on this supply to date and I note that there are no concerns raised by any party in respect of effects on this supply. Further, on the basis of the characteristics of the groundwater aquifer, with its relatively short flowpaths, adverse effects on this supply as a consequence of the proposed development are also unlikely.

8.6.16. <u>Effects on groundwater quality (operation).</u> Standard mitigation measures are proposed to prevent impacts on groundwater quality during operation (section 7.270

and 7.268 of the EIAR). Subject to these measures, deleterious effects on groundwater quality are unlikely.

8.6.17. Impact on Tromman stream and downstream waterbodies. Tromman stream is situated to the south and west of the appeal site, running approximately east to west, south of the R156 and then south to north, beyond Tromman bridge (Figure 7-7, EIAR). In order to investigate the relationship between the appeal site and Tromman stream, the applicant's drilled monitoring borehole DW-H in 2018. The geographical profile of the borehole indicated overburden underlain by grey shale and limestone (section 7.145 EIAR), with water strikes in the limestone bedrock at 65m and 85m. The applicant's conceptual site model proposes that there is no hydrological connectivity between the bedrock aquifer and Tromman stream, with the water table at depth limestone bedrock not contributing to the baseflow of the stream (Figure 7-7). Further, it is stated that the southwest face of the quarry indicates the extent of unsaturated zone present at the quarry (Plate 7-2) and that the presence of groundwater at depth is also evident at Longwood, to the southwest of the quarry where groundwater flowing at depth under pressure in confined fractures.

8.6.18. No statutory body has raised concerns regarding the effect of the quarry to date on Tromman stream and the applicant's assessment of groundwater flow paths is consistent with the GSI's description of the aquifer (water strikes at depth, c.50-70mbgl). Further, in the third cycle of the WFD the waterbody is 'Not at Risk' status of meeting WFD objectives by 2027. Having regard to the information on file, the absence of concerns by statutory bodies and data presented in the EIAR, I am satisfied that there is no evidence to suggest that proposed development by itself, or in combination with the dewatering of the adjoining quarry, has or is likely to reduce flows in Tromman stream to the detriment of the waterbody.

8.6.19. Impact on Rathmolyon/Moynasboy stream. This stream runs to the north of the appeal site and discharges from the subject site and adjoining Keegan quarry outflow into this water body. Parties to the appeal raise concerns regarding the impact of quarrying on base flows, they argue that 95%ile flow of the stream as it passes the site should be used in the mass balance and assimilative capacity calculations (given its proximity to the two quarries) and that the 95%ile flows of 0.052m^3/sec used, is too high as the stream runs dry on occasion.

8.6.20. From the information on file, I would acknowledge that there is no assessment of the impact of drawdown on surface water flows, to date, in Rathmolyon and Moynasboy stream. However, the principle of extraction from the site, and adjoining quarry, to depth has already been established and none of the prescribed bodies or the Environment Section have raised no issues of concern in this regard. On a catchment basis, any water that would have contributed to base flows, will be returned to the waterbody, via discharged ground and surface water from the quarry outfall.

8.6.21. Base flows in Rathmolyon/Moynasboy stream are estimated by the applicant using an EPA online tool (section 7.72 and Appendix 7-C, EIAR), given the absence of a local gauging station on the stream. This approach taken is not unreasonable and it has not been disputed by the planning authority's Environment Section. However, I would acknowledge that flows may be overestimated. In this regard, I note the applicant's Biological Water Quality Sampling 2015-2019 report (Appendix 5-D), which states that upstream and downstream samples taken show a lack of diversity among the macroinvertebrate population and that this may have been due to a lack of water flow at sampling locations.

8.6.22. The applicant's discharge licence review application proposes an average discharge of 133m^3/hour and a maximum discharge rate of 175m^3/hr (normal daily discharge 3,200m^3/day, maximum 4,200m^3/day). The review of proposed given the increase in actual rates over licenced rates (current maximum limit 530m^3/day). It is based on actual discharge levels between 2017 to 2019. It is inferred from the information on file that the proposed development will not require an increase in discharge rate of waters. For instance, in section 7.166 it is stated '*The maximum discharge rate from the quarry will be in the order of 175m^3/hr'.* There is a lack of clarity in the EIAR with regard to how the discharge rate has been calculated. However, I note that in the monitoring data on discharge rates to date, there are natural fluctuations in discharge rates as new benches are opened up and it is assumed that the increased requirement for pumping from the proposed extension area can be accommodated within the expressed maximum discharge volume of 175m^3/hr.

8.6.23. On the basis of predicted discharges, in section 7.100 of the EIAR the applicant demonstrates how channel capacity of downstream waters has been assessed and predicts that the combined discharge of waters by both the subject development (at

maximum discharge) and Keegan quarry, represents c.0.2% to 13.6% of available capacity of Rathmolyon and Moynasboy stream and c.1.8% of Knightsbrook river (Table 7-8). It is also estimated that combined discharges from the two quarries represent a relatively small proportion of Q_{MED} flows (flood flow with a two year return, approximately equivalent to a bank flow) i.e. of c.2.6% and c.0.8% for Rathmolyon and Moynasboy stream and Knightsbrook river respectively.

8.6.24. Having regard to the foregoing it is evident that the discharges from the site appear to comprises a relatively small proportion of flows in the receiving water bodies. Further, the neither the planning authority's Environment Section nor other no statutory bodies have raised concerns regarding the past effect of the discharges on the capacity of the downstream river system.

8.6.25. The OPW's flood maps, indicate the extent of land that might be flooded by rivers in a severe flood event. The maps are based on historic flood data and refer to a 1 in a 100 year event (see attachments). The maps indicate flooding to the north of the quarry associated with Rathmolyan/Moynasboy stream and Tromman stream. Whilst it is inevitable that discharges from the quarry will add to flood volume, discharges from the quarry (and Keegan quarry) are likely to contribute to a relatively small proportion of water levels in the catchment. The Board may wish to seek further information in this regard however, I am satisfied on the basis of the relatively small contribution that discharge waters make to surface water flows in the catchment, that the discharge from the proposed development can be accommodated in terms of the capacity waterbodies and does not pose a serious risk of downstream flooding.

8.6.26. Between February and March 2020 discharge water from the site (SW01, Figure 7-1) has been monitored and physiochemical water quality was demonstrated to be good, with relevant parameters below Environmental Quality Standards. Similarly, water quality results of samples taken upstream and downstream of the quarry outfall (SW02 and SW03), indicated good physiochemical water quality (with the exception of MRP which was considered to have arisen from a local catchments source, section 7.86 EIAR). Water quality sampling at SW02 and SW03 compares favourably that that upstream of the site (SW04) and elsewhere in the catchment (SW05, SW06 and SW07). Biological water testing has been carried out at the site

since 2015 (Appendix 5-D). It also indicated little impact of the discharge waters on aquatic ecology.

8.6.27. The applicant's Assimilative Capacity assessment and Mass Balance calculation (Appendix 7-K, EIAR) indicates (a) that under 95%ile flow conditions for Rathmolyan/Moynasboy stream, with average and maximum quarry discharge, there is available assimilative capacity for all parameters in the stream from the quarry discharge waters, and (b) that during 95%ile flow conditions, all parameters are below the relevant surface water EQS/limits. The assessment utilises data on water quality and flows upstream of the site and therefore considers the cumulative effects of the development with the adjoining quarry. The results of the exercise are not unreasonable given the water quality of discharge waters and absence of biological effects on downstream waters.

8.6.28. The planning authority's Environment Section accepted that the quarry was having no deleterious effect on the quality of downstream waters, based on the parameters measured. However, it raised concerns regarding the potential for effects on microbiota arising from unmeasured parameters, calcium, alkalinity and macrophytes. It recommends that these be included as parameters to be tested in the Discharge Licence Review and as part of conditions of the permission. I note that the Environment Report refers to the presence of freshwater snails downstream of the outfall, with all such species relying on calcium to grow and maintain a shell. This would be consistent with the GSI description of water in the groundwater body which has a calcium bicarbonate signature and can be considered hard to vary hard water (high mineral content). Further the presence of freshwater snails downstream of the outfall, and would suggest a discharge that is favourable to the species.

8.6.29. EPA monitoring data for the third cycle of the WFD (risk for each waterbody to meet WFD objectives by 2027), based on monitoring data up to end of 2018, provides data on Rathmolyon stream (shown as Tromman stream_010) to the north of the quarry and considers this to be 'Not at Risk'. Further north, Knightsbrook stream (Knightsbrook_20) is shown as 'At Risk', with the EPA monitoring station at 07K020400, Bridge near Laracor Crossroads, >6km downstream of the site showing a decline in water quality between 2012 and 2018. It is acknowledged by the Environment Section, and it is demonstrated in the EIAR that there are other

pressures on water quality in the catchment. These are identified in the WFD Cycle 2 report as arising from sources that are not related to quarrying (see attachments).

8.6.30. Having regard to the foregoing, I am satisfied that the quarry is not having an adverse effect on downstream water quality, including therefore the River Boyne, where the outfall from the site ultimately discharges to the river some c.10km downstream of the site. Further, if the Board grant permission for the development this would be subject to an application to the local authority for revised discharge licence, which would provide for further detailed control of discharges in conjunction with those from the adjoining quarry. Conditions of the permission can require a schedule of monitoring and reporting to safeguard matters of compliance.

8.6.31. Cumulative effects: As discussed above, the EIAR has considered the cumulative effects of the operation of the quarry on the water environment, including the effects of dewatering on groundwater and discharges to Rathmolyon and Moynasboy stream, in conjunction with the adjoining quarry. However, the EIAR does not address the cumulative impacts of the proposed development in conjunction with any planned expansion of the adjoining site. Under ABP-305049-19 an application was made to the Board for substitute consent regarding the erection and use of unauthorised structures, extraction and processing of minerals and continued used and operation of unauthorised structures on the adjoining quarry. Within this context, I consider that it is not unreasonable that the applicant confines the scope of cumulative effects to the existing environmental effects of concurrent quarrying. Any future application for development of adjoining lands would require more detailed cumulative impact assessment once the scope of any development is clarified.

8.6.32. **Air Quality.** Section 8.0 of the EIAR deals with air quality. Background air quality levels comprise data for Kilkitt, County Monaghan. This monitoring site is referred to as it is the closest air quality monitoring location to the quarry. Further, no air quality monitoring is routinely carried out in the area of the site due to the generally low levels of pollution in rural Ireland (Air Quality Zone D). The approach adopted in the EIAR to utilise data for Kilkitt as indicative of background levels is therefore not unreasonable.

8.6.33. Dust deposition monitoring records are set out in Table 8-4. These indicate dust levels generally well below the permitted standard of 350mg/m^2/day. Local wind

speed data and direction and rainfall data are shown in sections 8.70 and 8.72. Nearest sensitive receptors, comprise the River Boyne and River Blackwater SAC, 250m to the west of the site, and residential properties, agricultural buildings and Kill National School in the vicinity of the site (Figure 8-1).

8.6.34. Prior to mitigation, dust emissions arising from soil stripping, for the extension area and C&D processing area are considered to be low risk to negligible have regard to the short duration of works and meteorological conditions. An overview of the likely sources of dust during operation of the quarry (extension area, movement and processing of materials etc.) is shown in Table 8-13. Impacts on sensitive receptors are assessed based on proximity to works, wind speed and direction and meteorological conditions. Prior to mitigation, impacts range from insignificant to slight adverse (Table 8-14), with worst affects to the south west of the site i.e. no significant adverse effects are predicted. Similarly, no impacts on ecological receptors are predicted due to the levels of monitored dust deposition at site boundaries and threshold for impacts on species (1000mg/m^2/day).

8.6.35. Emissions from traffic are limited to those arising from the proposed C&D facility (no additional traffic from quarry related operations). It is stated in section 8.133 of the EIAR that the development will give rise to c.10 additional HGV trips/day, below the threshold for likely air quality impacts. This number is below the estimate used elsewhere in the EIAR (16 additional HGV trips/day), but the higher number is still below the threshold for likely air quality impacts (section 8.110).

8.6.36. With regard to larger particulate matter (PM_{10}), arising from rock extraction and processing activities and potentially giving rise to health effects, the applicant applies a worst case potential contribution of up to 5µg/m^3 from quarry activities. It is based on Technical Guidance for Local Air Quality Management and provides a worst case scenario. When added to background levels, 9µg/m^3 (Kilkitt, 2014 and 2015), predicted PM_{10} level is considered to be well below the annual objective of 40µg/m^3. Having regard to the likely fall off in concentration of emissions with distance from source, the location of the proposed extension area, perimeter bunding and vegetation and predicted levels, adverse health effects as a consequence of increases in larger particulate matter are unlikely.

8.6.37. Cumulative/synergistic impacts are considered for the proposed development in conjunction with the adjoining quarry. The EIAR refers dust deposition monitoring data in the most recent application for the development of the adjoining quarry under PA ref. TA200151 (see Planning History) and the low levels of dust arising from site activities. In view of past low levels (subject site and adjoining quarry), absence of change in quarrying and manufacturing activities (both quarries) no adverse cumulative effects are predicted. Mitigation measures are set out in section 8.157 and is section 7.2 of the response to the appeal. These are standard industry measures for controlling dust, particulate matter and vehicle emissions. With the implementation of mitigation measures, predicted impacts on sensitive receptors reduced to insignificant or acceptable.

8.6.38. Parties to the appeal raise concerns regarding the standard applied for dust emissions and dust arising from the quarry affecting properties, vegetation and roads in the vicinity of the site, increases in particulate matter from HGVs, the loss of mature trees within the which act as a dust barrier and the effect of lime dust on health. Photographs are submitted showing dust plumes within the site.

8.6.39. The EPA's Guidelines for Environmental Management in the Extractive Industry refer a dust deposition limit value at sit boundaries of 350mg/m^2/day, when averaged over a 30 day period. Dust levels are monitored against this standard at the appeal site, and it is the emission limit which has been specified in previous planning permissions. I am satisfied therefore that the dust depositions are monitored against the appropriate emission limit value.

8.6.40. Whilst I have regard to the photographs submitted by the parties to the appeal of dust emanating from the quarry, and whilst I did observe some evidence of dust on the public road and its margins, in the area of the site, there was no evidence of substantial dust deposition or spillage of materials outside the area of the site. Having regard to this, the material on file, monitoring information on the past performance of the quarry which has been carried out at monthly intervals since 2014, the nature of the proposed development which comprises a lateral extension to existing quarrying activities with no increase in output, the proposed mitigation measures and extent of vegetation surrounding the site, I am satisfied that the proposed development is unlikely to give rise to significant levels of dust or larger particulate matter (PM_{10}) to the detriment of amenity or public health in the area of

the site. With regard to emissions from HGVs associated with the proposed C&D facility, as set out in the EIAR, the additional HGV movements/day, will not add significantly to background levels of particulate matter or nitrous oxide. With regard to the impact of inhaled lime on public health, I note that the agri-lime plant on site comprises an enclosed milling unit, with water used to as a suppressant if required, with milled material also stored within a structure. Having regard to these arrangements, together with proposed mitigation measures, boundary screening and distance of plant from residential property it is unlikely that lime dust would have a significant effect on public health.

8.6.41. With regard to the loss of mature trees within the site to facilitate the lateral extension of the quarry, inspection of this area did not identify significant dust deposition i.e. the trees/area did not appear to be acting as a significant barrier between the two quarries preventing dust blow between the sites. Whilst loss of the vegetation may affect some movement of dust within the site, with proposed mitigation measures, significant effects outside of the site seem unlikely.

8.6.42. **Noise and Vibration.** Levels of noise and vibration arising from the existing quarry are presented in Table 10-7, 8 and 9, with monitoring locations and sensitive receptors shown in Figure 10-1. Data refers to the period January 2015/2017 to October 2019 and includes operational noise arising from the adjoining quarry. Monitoring demonstrates compliance with emission limit values for the permitted quarry i.e. 55dB(A) L_{Aeq} at landholding boundary (noise) and peak particle velocity of 12mm/s and air overpressure less than 125 dB (Lin) at noise sensitive location (vibration). Sensitive receptors, residents and ecological sites, are identified in Table 10-10 and Figure 10-1.

8.6.43. The noise impact assessment is based on conservative assumptions e.g. all equipment operating 100% of the time, at distances stated/closest to residential properties. Operational noise levels are shown in Table 10-11 for three principal activities, soil stripping/movement, rock extraction and processing and C&D facility (detailed calculations, Appendix 10-B). Predicted operational noise, for individual activities within the quarry, soil movement, rock extraction and processing and C&D processing, are within standard noise emission limits for temporary and operational activities 70 and 55 dB $LA_{eq, 1hr}$ (respectively) at noise sensitive locations and at ecological sites (section 10.33 EIAR).

8.6.44. Predicted cumulative effects from on-site activities (proposed noise levels from rock extraction, processing and C&D works), with background noise levels are shown in Table 10-12 (these include noise associated with the adjoining quarry). It is evident from the analysis that development would give rise to a moderate impact on a small number of receptors to the south west of the site prior to the application of mitigation measures, R3 to R7 (see Table 10-3, Relationship between Noise Impact, Effect and Significance).

8.6.45. Impacts arising as a consequence of additional HGV trips are considered to be negligible, having regard to the modest increase in HGV trips compared to standard reference values for impact assessment (section 10.93). Effects of blasting are considered to be negligible having regard to past performance, predicted levels, standard thresholds for effects on property and persons, distance of sensitive receptors from the site.

8.6.46. Section 10.143 sets out mitigation measures. These include retention of existing screening berms, regular maintenance and operation of plant on site, exhaust silencers, good housekeeping practices for the management of traffic and best practice measures for blasting. Arising from these measures a noise reduction of factor is applied to predicted noise levels (-5 $L_{Aeq, 1hr}$ dBA). Consequently, no cumulative residual short or long term adverse noise effects are predicted from either the rock extracting/processing development or C&D facility.

8.6.47. Having regard to my inspection of the appeal site (which was working during the inspection) and the wider area in which the quarry is situated and the applicant's noise impact assessment, I am generally satisfied that the development would not give rise to significant adverse effects by way of noise or vibration in the vicinity of the site, including nearby properties (vibration limits achieved are less than the levels likely to cause structural damage to properties, section 10.41, EIAR) and ecological receptors. However:

(i) I note that the EIAR does not address the cumulative effects of blasting. As blast events at the quarry are infrequent e.g. every 2/3 months, I would expect cumulative effects to be at worst case, potentially doubling the frequency of blast events, for example if the same schedule is in place at the adjoining quarry. I would accept that this adds to the cumulative effects of the

development in the area, but given the relative infrequency of combined events, I do not consider this to be unreasonable or excessive.

(ii) There is a risk that noise levels at properties to the south/south west of the site, which are most vulnerable to the effects of the proposed C&D facility in combination with noise arising from the quarry floor, may increase to the detriment of a small number of properties. Noise monitoring is based on limited data and at two locations. Should the Board be minded to grant permission for the development I would recommend an additional point to the south west of the site (proximate to R5 and R6) to enable greater scrutiny of noise levels in this location and adherence to noise limits. Subject to these arrangements I do not consider that the proposed development would give rise to significant adverse noise impacts on the environment or on residents in the area of the site.

8.6.48. With regard to noise associated with HGV movements on the public road, the proposed development will add a relatively modest number of HGV trips to existing levels. However, I would acknowledge that the effect of the development will be to increase the duration of quarrying and therefore the impact of this on the amenity of local roads and nearby properties, with higher levels of HGV traffic on local roads.

8.6.49. **Climate.** Section 9 of the EIAR deals with climate. It addresses the vulnerability of the development to climate change and greenhouse gas emissions arising from the development. It identifies the need for measures to improve resilience to extreme rainfall, flash floods, storms and wind (Appendix 9-B) and provides an estimate of likely GHG emission from the quarry per annum, 1039953.7 CO_{2e} kg or 0.0017% of Ireland's emission value for 2018.

8.6.50. Mitigation measures for climate adaption and to reduce GHG emissions are set out in Table 9-6 and 9-7. In principle the mitigation measures proposed are reasonable and monitoring is proposed to track preparedness for climate change and implementation of measures to reduce GHG emissions. The approach taken in respect of climate seems reasonable and will facilitate adaption in the face of climate change and reduction of contributary emissions.

8.7. Material Assets, Cultural Heritage and the Landscape

8.7.1. **Material assets.** Section 11 of the EIAR deals with material assets (built services and waste management, traffic is dealt with in section 12). To the south of the site (c.550m) is a high pressure gas line and c.2.6km to the north west of the site is a 400kV OHL. On site utilities include a main supply and sub-station, fixed and mobile lines, toilet facilities (with discharge to permitted septic tanks) and potable water supply from groundwater. General waste produced on site (e.g. scrap metal, used oils) are disposed of via licensed contractors. Extractive waste has a commercial value, and any waste is stored, collected, recycled and/or disposed of in accordance with the requirements of Meath County Council. Top soil is retained on site for landscaping. Waste concrete and legacy concrete waste on site will be crushed to provide granular aggregate for use in the construction industry on a 'campaign' or intermittent basis. The size of the unprocessed stockpile will vary according to availability of waste, stage of recycling operation and demand for material.

8.7.2. As the quarry will essentially be an extension of the existing quarry facility (lateral extension) with introduction of C&D facility, no impacts on built services, infrastructure, utilities, water supply or waste generation are predicted. Given separation distances, no effects on the high pressure gas pipeline or high voltage overhead line are predicted. No significant post-operative effects are predicted with restoration. Any waste generated during restoration will be disposed of in accordance with established practice on the site. Material assets are not considered to be particularly vulnerable to unplanned events. No further mitigation measures are proposed due to the absence of likely effects and no residual impacts are predicted.

8.7.3. Having regard to the nature of the proposed development and absence of significant material assets in the vicinity of the site, the analysis and conclusions of the EIAR in respect of material assets are not unreasonable.

8.7.4. **Traffic.** Chapter 14 of the EIAR deals with traffic. The assessment is based on a 2016 survey of traffic movements from the quarry (validated by weighbridge data) and on the local road network, principally the R156, R159 and R160. Survey data for 2016 is used due to the more recent effects of Coronavirus on road traffic. The survey was carried out for a 12 hour period 7am to 7pm. Operating hours are 8am

to 8pm Monday to Friday, and 8am to 2pm on Saturdays. Truck loading can take place on site between 7am and 8am Monday to Fridays.

8.7.5. The traffic survey identified that most traffic from the quarry accesses and leaves it from the east. Table 14-1 provides a summary of recorded traffic flows and percentage of HGV movements at four locations, the entrance to the appeal site (site 2), entrance to adjoining quarry (site 3) and R156/R160 junction (site 1) and R156/R159 junction (site 4). HGV movements comprise between 5.4% and 16.9% of all traffic movements. During the traffic survey, the site generated 86 HGV trips/day, for all activities, which is stated to equate to an approximate annual stone extraction rate of 450,000t. Pro-rata figures for all trips to and from the site for different activities operating at the permitted limit of 800,000t/annum are shown in Table 14-6. These equate to 159 HGV trips/day, with AM and PM peaks of 43 HGVs and 41 HGVs respectively. This compares to predicted peak AM trips of 73 no. vehicles, set out in the Traffic Impact Assessment for PL17.227088, page 14-5, EIAR.

8.7.6. Survey traffic flow adjusted for a processing rate of 800,000 tonnes/pa are shown in Table 14-8, with HGV movements comprising between 6.1% and 20.5% of traffic movements. Table 14-9 sets out traffic flow data adjusted for no production from the site. In this instance, HGV movements (in the absence of the subject quarry) comprise between 4.2% and 15.1% of traffic movements.

8.7.7. Future additional traffic generation comprises the proposed C&D facility in conjunction with the on-going operation of the quarry with lateral extension. The C&D facility is anticipated to give rise to 16 daily HGV traffic movements/day based on an annual processing rate of 35,000 tonnes and a HGV payload of 20t. The EIAR predicts that the proposed C&D facility will contribute little to the volume of HGV traffic arising from the quarry, or on the public road network, now or into the future (Table 14-12 and 14-13).

8.7.8. The EIAR concludes that (a) the impact of the proposed waste facility will be negligible in terms of existing flows, and (b) except for the duration of extraction (i.e. extension in period of quarrying), the impact of the proposed development can be considered neutral. The EIAR refers to the absence of capacity issues at junctions in the area of the site and the good generally good condition of the R156 in the

vicinity of the site and states that if the Roads Authority identify road strengthening works these should be proportional to usage. Advance warning signs of the quarry are proposed as mitigation.

8.7.9. Parties to the appeal raise concerns regarding the high volume of HGV traffic on local roads, the inappropriate use of 2016 data, early arrivals at the quarry and the omission of incoming HGVs (deliveries) and cumulative effects in impact assessment.

8.7.10. From the applicant's survey of road traffic in the area of the site I would accept the appellant's concerns regarding the high level of HGVs. Notwithstanding this, the proposed development adds little to existing permitted levels, with a small increase in movements arising from the proposed C&D facility only. The applicant's approach to using data from 2016 is not unreasonable in the current climate with Covid where vehicle trips are not representative of normal travel patterns. Further, I consider that the analysis carried out is robust in particular that it is based on traffic survey data that takes account of background levels (cumulative assessment), incoming HGVs and compares vehicle movements with weighbridge data for reference to extraction rates. As indicated in the analysis, traffic levels associated with the current use of the site are below previously predicted peak levels. However, the quarry, in conjunction with the adjoining quarry, make up a significant proportion of HGV movements on the local road network (Table 14-11). Whilst the proposed level of activity has been deemed, via previous permissions, to be acceptable, the effect of the development will be to continue this loading for a further 12 years, with its associated impacts on amenity.

8.7.11. As stated, additional traffic movements associated with the C&D facility is relatively modest. This is based on the export of 50,000 tonnes per annum and import of 35,000 tonnes per annum (Table 14-10 'Waste Recovery Facility Traffic Generation') and gives rise to 16 total HGVs per day (9 for export and 7 for import) or 32 HGV movements. Table 14-10 indicates that 50,000 tonnes per annum will be removed from the site, which would imply a processing rate in excess of 35,000 tonnes or removal of material which has already been processed. This matter should be addressed in any permission to clarify the nature of the development i.e. the applicant has applied for permission to process 35,000t/annum and it would seem reasonable, in the interest of clarity, to restrict total processing to this tonnage.

8.7.12. **Landscape**. Chapter 13 of the EIAR deals with landscape. The appeal site lies in the 'Central Lowlands' Landscape Character Area 6 (LCA) and to the west of 'Rathmolyon Lowlands', LCA 13. Both are identified as being of 'High Landscape Value', with LCA 6 having Medium landscape sensitivity and LCA 13 High landscape sensitivity (ability to accommodate change). LCA 6 is allocated regional landscape importance and LCA13 national importance. Figure 13-2 indicates the theoretical zone of visibility based on a 'bare earth' scenario. Highest levels of visibility are within 1km of the appeal site. The applicant's site survey, Figures 13-*3* to 13-6 of EIAR, indicate substantial screening by perimeter berms, roadside and intervening vegetation, with limited views of the quarry face, stockpiles and processing area (Viewpoint A, Figure 13-3) and only the C&D stockpile reaching over intervening vegetation (Viewpoints G and H, Figure 13-6). Trees to be removed from the site are visible in a number of views. Landscape effects of the development include:

- Change in landform in extraction area,
- Associated removal of trees, hedgerow and woodland (c.4,600m mature woodland, including 25 mature trees, 10,000m^2 of immature woodland, 160m of mature hedgerow; 5,160m^2 compensation woodland and 840m of hedge planting),
- Reduction in stockpiles (C&D and aggregates) as processing and reuse of C&D waste commences and aggregates are sold/used,
- Construction of temporary overburden mound to the north east of the site (11,250m^2 and no more than 8m in height).

8.7.13. Assessment of landscape effects and significance as a consequence of operation of the development (extraction and restoration) is considered to be minor to negligible (Tables 13-3 &13-4 and section 13.87), largely due to the small area of features affect in the wider landscape context and limited changes to landscape elements. Long term post operational effects are considered to be negligible as the restored site becomes a biodiversity rich landscape element.

8.7.14. Visual effects of operation are limited to four visual receptor groups to the north east (Viewpoints A & B, Figure 13-3), south east (Viewpoint C, Figure 13-4), south (Viewpoints D, E & F, Figures 13-4 & 13-5) and to the north west of the site (Viewpoint G, Figure 13-6). No additional lighting is proposed (replacement lighting

along access road) and nightime lighting will be limited to up to 2 hours in winter months. Significance of visual impact is considered to be minor at the four visual receptor groups, principally due to lack of significant alteration to composition of views, limited geographical extent of effect, distance from landscape change and temporary nature of effects. Post operational effects are deemed to be negligible/none, due to the removal of structures/mounds, restoration and natural regeneration with diminished visibility of the site.

8.7.15. Cumulative visual effects with proposals for the future development of the adjoining quarry (under TA200151) are considered to be negligible/slight gain as both developments largely remain within existing boundaries and proposals to reduce stockpiles/overburden mounds at both sites.

8.7.16. Mitigation measures at operational stage include retention of existing screening vegetation, additional woodland and hedgerow planting (Figure 13-7). No further mitigation measures are proposed with the restoration of the site (Figure 2-4, Restoration Plan). Residual impacts at operation are considered to be minor/negligible landscape and visual effects and negligible reducing to non-post operation.

8.7.17. Parties to the appeal raise concerns regarding the inappropriate loss of mature trees within the site from elevated lands. From my inspection of the appeal site and surrounding area, I consider that the EIAR correctly identifies the locations in the public domain that the existing quarry and proposed development are, and will be, most visible from. In practice, many of the theoretical views are screened by roadside and intervening vegetation (including perimeter boundary hedgerows of the quarry) such that there is relatively little visibility of the extraction area, structures associated with processing and stockpiles.

8.7.18. Trees to be removed along the access road are visible in views of the site from the public road network. These mature trees are elevated above the public road, approaching the site from the R156. When viewed from the north and south the trees are situated on a crest in the landscape (see photographs). They form part of a larger area of woodland that extends to the north and south, and to the west of the access road. The trees currently contribute to the visual screen between the two sites. Removal of the trees will result in a reduction in the visual presence of trees

on the crest in views for the site, to the detriment of landscape character, and erosion of the visual screen between the sites. This loss will be mitigated by retention of existing and planting of new trees to the north and south of the area to be removed (W8 and W5, and proposed oak woodland, Figure 13-7) and additional hedge infill planting along the eastern side of the realigned access road. In addition, the woodland context for the quarry will be augmented by additional hedgerow and woodland planting on the berm to the south of the extension area and the maturing areas of young/immature woodland also to the south of the extension area (W9 and W6, Figure 13-7).

8.7.19. Having regard to these measures, I consider that with time visual separation between the quarry sites will be maintained, reducing the visual scale of the quarry in the landscape, and that views of the quarry will be largely screened in the wider landscape such that the development will not significantly detract from the visual amenity or landscape character of the area.

8.7.20. I note that the applicant intends to store overburden on land to the north east of the site and to reduce the size of the C&D stockpile in the course of the development. There are no details on file regarding the detailed location, footprint or height of the overburden mound or the applicant's intentions with regard to the potential size of the C&D stockpile between 'intermittent campaigns' (e.g. maximum height, volume). These two landforms have the potential to be visible outside the boundaries of the site and if the Board are minded to grant permission for the development, I consider that these should be controlled by way of condition.

8.7.21. **Cultural Heritage.** Impacts on cultural heritage are considered in Chapter 12 of the EIAR. There are no features of architectural or archaeological interest on or in the immediate vicinity of the site (Protected Structures, structures listed in NIAH, Recorded Monuments, undesignated sites). Upstanding structures marked on the 1909-10 OS mapping are shown in Table 12-4 (referred to as Table 12-2 in EIAR). These include a cottage to the south west of the site, the gate lodge to Trammont House, to the east of the existing entrance to the quarry and two outbuildings associated with Trammont House to the east of the extension area (Figure 12-2). The structures are considered to have no cultural heritage significance generally due to their poor state or repair. The line of trees, to be removed as part of the subject development, is referred to in section 12.46 by way of reference to the Inspector's

report under ABP-301385-18 where it was stated that due to changes in the context for the trees i.e. heavily degraded local environment, there was insufficient residual historic or heritage value to warrant protection of the surviving feature of the Trammont House landscape. The majority of the appeal site comprises a landscape which has been excavated. Previous permissions have required archaeological monitoring and no features of significant interest have been identified. Due to the risk of sub-surface remains in the extension area (Plate 12-17) archaeological monitoring is recommended. Having regard to the absence of features of interest on or in the vicinity of the site, and recommendations in respect of archaeological monitoring, no significant impacts on cultural heritage are identified.

8.7.22. Parties to the appeal refer to the loss of the original period building on the appeal site, the poor condition of remaining buildings, loss of trees that lined the entrance to Trammont House and the absence of comments by statutory bodies.

8.7.23. The proposed development comprises the extension of an existing permitted development. Statutory bodies have been given a number of opportunities in the course of the application and appeal to raise concerns regarding the effects of the development on cultural heritage and have not made observations of submissions on the development in respect of cultural heritage.

8.7.24. Loss of the original Trammont House has been addressed previously and is not a matter for this appeal. The applicant proposes the retention of the surviving outbuildings and elsewhere in this report I recommend their repair in the interest of ecology, however, this will also serve to preserve the structures originally associated with Trammont House. With regard to tree line along the original entrance to Trammont House, albeit that the feature is degraded by the loss of Trammont House and proximity of quarrying on both sides, this feature is part of the landscape history and cultural development of the area. Its removal will result in a modest, but not significant, detrimental impact on landscape character. Otherwise, I am satisfied that the proposed development would not have any significant effects on cultural heritage.

8.8. Interactions

8.8.1. I have reviewed the main interactions identified in section 15 of the EIAR. I consider that section of the report has identified all of the key interactions and I am satisfied that these have been addressed in the individual chapters of the EIAR and in this assessment.

8.9. Reasoned Conclusion

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

- **Population and human health:** Potential impacts on the amenity of the population in the area of the site arise from the on-going use of the site for quarrying over the duration of the permission and the extension of the extraction area. Effects will be minimised by the modest increase in HGV traffic and mitigated by measures to control noise, dust, vibration and landscape effects.
- **Biodiversity:** Potential impacts on biodiversity, bat species and Peregrine Falcon may arise from removal of mature trees on the site to facilitate the extension of the extraction area. Potential impacts can be avoided by the implementation of mitigation measures to ensure that works are carried out in a manner which minimises effects of these species, compensatory and additional planting and specific measures which support the future use of the site by these species.
- **Water**: Potential impacts on ground and surface water arise from lowering the water table to facilitate quarrying and the discharge of ground and surface waters from the site, with possible impacts on well supplies and downstream water dependent habitats and species. These impacts can be mitigated by the monitoring of effects on wells supplies, compensatory measures should impacts arise and by directing discharge

waters through the surface water management system to control emissions from the site. Surface water monitoring of discharge waters shall continue and be subject to discharge licence.

- **Landscape and visual effects:** Potential landscape character and visual effects arise from the removal of mature trees from the extension area. These will be mitigated in the longer term by compensatory and additional planting and the final restoration of the site.

8.9.2. I am, therefore, satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

9.0 Appropriate Assessment

9.1. The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177U and 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section. The areas addressed in this section are:

- Compliance with Article 6(3) of the EU Habitats Directive.
- Screening the need for appropriate assessment.
- The Natura Impact Statement and associated documents.
- Appropriate assessment of implications of the proposed development on the integrity of each European site.

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

9.3. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given. The proposed development is not directly connected to or necessary to the

management of any European site and therefore is subject to the provisions of Article 6(3).

9.4. **Screening for Appropriate Assessment**

9.5. The applicant has submitted a screening report for appropriate assessment 'Appropriate Assessment Screening Report and Natura Impact Statement'. The report was prepared in line with best practice guidance and provides a description of the development and identifies European sites within a possible zone of influence of the development. The EIAR also provides an assessment of the water environment and connectivity of the site to European sites. The applicants screening report concluded that the proposed development is not considered likely to result in an appreciable effect on any European site. However, given the findings of the Board in the previous application for permission to extend and deepen the quarry (PL17.301385), a conservative approach has been adopted and it is assumed that cumulative effects may occur and have potential to be significant. It is therefore progresses to the second state of appropriate assessment, to determine if adverse effects on the integrity of Natura 2000 sites are likely.

9.6. Having reviewed the applicant's Appropriate Assessment Screening Report, the EIAR accompanying the planning application, further information and the submissions on file, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development alone, or in combination with other plans or projects on European sites.

9.7. **Description of Development.** The proposed development is described in section 2 of the EIAR, section 4 of the AA Screening Report and NIS and summarised in section 2 of this report. It comprises the continuation of extraction and processing of minerals on site, lateral extension of the quarry, realignment of the access road, provision of an overburden storage area along the eastern site boundary, construction and demolition waste recovery facility and restoration to a beneficial ecological and agricultural afteruse, for a period of 12 years (to include restoration). Taking account of the characteristics of the development in terms of its location and scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:

- Dewatering of the quarry and the risk of effects on river flow.
- Emissions to the water environment the risk of effects on downstream water quality.
- In-combination effects with the on-going operation of the adjoining quarry.

9.8. **Submissions and observations**. Parties to the appeal raise concerns regarding the proximity of the site to the River Boyne SAC and discharge of quarry waters to waterbodies. No submissions or observations are made by statutory bodies in respect of appropriate assessment or the risk of effects on European sites.

9.9. **European sites**. The proposed development is situated c.250m to the east of the River Boyne and River Blackwater SAC (Tromman stream) and c.2.50km from south east of the River Boyne and River Blackwater SPA (River Boyne). Further, the discharge waters from the quarry outfall to Rathmolyon and Moynasboy stream which ultimately discharges c.10km downstream to the River Boyne just east of Trim. At this point the river is designated both as a Special Area of Conservation and Special Protection Area (site codes 002299 and 004232 respectively). Other European sites in the wider area are substantially removed from the subject site and/or are not hydrologically connected to it.

9.10. Qualifying interests are set out below.

European Site	**Qualifying Interests**	**Distance**	**Connections**
River Boyne and Blackwater SAC	Alkaline fens, Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae), Lampetra fluviatilis (River Lamprey), Salmo salar (Salmon), Lutra lutra (Otter)	c. 250m to the north west. c. 10km to the north east,	Possibly via groundwater and airborne pollution via hydrological link

River Boyne and Blackwater SPA (004232)	Kingfisher	c.2.5km to the north west c.10km to north east via hydrological link	Possibly via groundwater via hydrological link

9.11. **Conservation objectives.** Conservation objectives for both sites are generic:

- River Boyne and Blackwater SAC – To maintain or restore the favourable conservation conditions of the Annex1 habitat(s) and/or the Annex II species for which the SAC has been selected.
- River Boyne and Blackwater SPA - To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interest for the SPA.

9.12. **Potential effects.** Dewatering of the quarry could give rise to a reduction in flow of a river waterbody if the groundwater in the quarry contributes to baseflow. Activities on site which could give rise to pollution of groundwater and/or discharge waters include:

- Hydrocarbons (mobile and stationary plant/processing machinery),
- Increased sedimentation (earthworks, extraction, crushing, processing).
- Drill and blast waste.

9.13. It is evident from the information on file and supporting material, that there is no hydraulic connectivity between the groundwater bedrock at the quarry and Tromman stream (see EIA above). Further, there is no evidence of reduced flows in the Rathmolyon and Moynasboy catchment, which discharges into Knightsbrook River and subsequently to the River Boyne. Therefore risks to downstream waterbodies can be confined to the River Boyne and River Blackwater SAC and SPA, c.10km downstream of the appeal site. Impacts at this distance are unlikely given the likelihood of dissipation and dilution of potential contaminants. However, given the concerns raised previously by the Board (under PL17.301385), the volume of discharge waters and the risk of in-combination effects with the adjoining quarry, the

risk of effects the proposed development on the European site is carried forward for detailed assessment.

9.14. There is no potential for airborne dust arising on site to affect European sites, given the distance of the subject site from European sites and predicted levels (see EIA). For the same reason, there is no likelihood of effects by way of disturbance (noise, activity).

9.15. **Mitigation measures**. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

9.16. **Screening Determination.** Having regard to the foregoing, it has been determined that Appropriate Assessment is required as it cannot be excluded on the basis of objective information that the proposed development individually or in combination with other plans or projects will not have a significant effect on the River Boyne and River Blackwater SAC and SPA.

9.17. **Appropriate Assessment**

9.18. **Natura Impact Assessment.** The applicant has submitted a NIS 'Appropriate Assessment Screening and Natura Impact Statement'. It examines and assesses potential adverse effects of the proposed development on the River Boyne and River Blackwater SAC and SPA. the NIS was prepared in line with current best practice guidance and provides an assessment of the likely direct and indirect effects of the development on the conservation interests of the European sites by virtue of changes to water quality and chemistry. It refers to the proposed mitigation measures to protect water quality (section 6.11) and concludes that subject to these measures suspended solids and other pollutants will not be discharged to the stream during continuation and lateral extension of the development, ancillary manufacturing operations and C&D waste recovery facility, and there will be no effect on downstream water quality or adverse effects on the integrity of any Natura 2000 sites.

9.19. **Assessment of effects.** The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest of the European sites using the best scientific knowledge in the field. All aspects of the

project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

9.20. **European sites.** As stated, discharge waters from the quarry outfall to Rathmolyon and Moynasboy stream which ultimately discharges c.10km downstream to the River Boyne just east of Trim. At this point the river is designated both as a Special Area of Conservation and Special Protection Area (site codes 002299 and 004232 respectively). Conservation interests of the European sites are set out above.

9.21. **Likely effects.** As stated, activities on site could give rise to pollution of groundwater and/or discharge waters. These include hydrocarbons, increased sedimentation and drill and blast waste. The development has the potential therefore to impact on water quality and water chemistry with adverse effects on habitats and species of conservation interest in the River Boyne and River Blackwater SAC and SPA.

9.22. Water quality monitoring based on the past performance of the quarry has indicated that the quarry, alone and in-combination with the adjoining quarry, is not having an adverse effect on physical and chemical parameters or biological characteristics (see section 7.85 to 7.96 of EIAR and 'Water' section of EIA above). Further, the applicant proposes best practice mitigation measures to prevent pollution of ground and surface water. These are listed in section 7.268 of the EIAR and 6.11 of the NIS and include measures to store fuel, maintain and refuel plant and address accidental spills to minimise the risk of pollutants from entering the water environment. Water from the quarry sump will be passed through a hydrocarbon filter, settlement lagoons, reed/filter bed before discharge. Storm water falling on the site will generally be allowed to percolate to ground but that falling on the paved block yard is directed to the on-site closed system of settlement lagoons through which process wash water is managed. Monitoring of emissions to water will be undertaken as part of the environmental management system in place at the quarry. Measures are consistent with good environmental practice, set out in the EPAs Guidelines for Environmental Management in the Extractive Industry. There are currently no proposals for the further development of the adjoining quarry or statutory plans in the area that raise concerns regarding the risk of further in-combination effects.

9.23. Having regard to the foregoing, I am satisfied that that the project would not be likely to have an adverse effect on downstream water quality or, therefore, on the integrity of the River Boyne and River Blackwater SAC/SPA in view of the conservation interests of the sites. This conclusion has been based on a complete assessment of all implications of the project along and in combination with plans and projects.

9.24. **Appropriate Assessment Conclusion**

9.25. The proposed development has been considered in light of the assessment requirements of Sections 177U and 177V of the Planning and Development Act 2000, as amended. Having carried out screening for Appropriate Assessment of the project, it was concluded that it may have a significant effect on the River Boyne and River Blackwater SAC/SPA. Consequently, an Appropriate Assessment was required of the implications of the project on the qualifying features of the sites in light of their conservation objectives.

9.26. Following an Appropriate Assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the European site Nos. 002299 and 004232, or any other European site, in view of the site's Conservation Objectives. This conclusion is based on a complete assessment of all aspects of the proposed project and there is no reasonable doubt as to the absence of adverse effects.

10.0 Recommendation

10.1. I recommend that permission be granted for the proposed development subject to conditions.

11.0 Reasons and Considerations

Having regard to the policies set out in the National Planning Framework, Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region 2019-2031 and the current Meath County Development Plan, the established use of the site as a quarry, the nature, scale and form of the proposed development, the mitigation measures proposed in the Environmental Impact Statement and Natura

Impact Statement, it is considered that, subject to compliance with the conditions set out below, the proposed development would not be prejudicial to public health, would be acceptable in terms of traffic safety and convenience, would not seriously injure the amenities of the area, biodiversity or of property in the vicinity and would not create an undue risk of environmental pollution. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

12.0 **Conditions**

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars submitted on the 28th day of September 2020, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

   Reason: In the interest of clarity.

2. Except where modifications to the proposed development are required by any of the following conditions, the proposed development shall be carried out and operated in accordance with the plans and particulars of the extant permissions granted by the planning authority and An Bord Pleanála under reference numbers TA/180039, TA/150609, PL17.227088, PL17.206229, PL17.125619 and PL17.111632.

   Reason: In the interest of clarity and orderly development.

3. This permission is for a period of 10 years from the date of this order unless a separate permission for a further duration has been granted within this period.

Reason: To limit the duration and extent of the development, in the interest of clarity and amenity.

4. (a) The total volume of material extracted from the site shall not exceed 800,000 tonnes per annum.

(b) No extraction shall take place outside the proposed extraction areas illustrated on the layout drawings received on the 26th May 2020.

(c) The depth of excavation shall not exceed 24 metres Ordnance Datum.

Reason: In the interest of clarity and to protect the residential amenity of the area.

5. (a) A maximum of 35,000 tonnes of construction and demolition waste shall be processed at the waste recovery area indicted on Proposed Site Layout Drawing 5.

(b) Prior to the commencement of development, details of how this limit is to be recorded shall be submitted to and agreed in writing with the planning authority.

(c) Construction and demolition wastes, to be processed shall be restricted to Class No. 7, Part I, Third Schedule, Waste Management (Facility Permit and Registration) Regulations, 2007 (as amended).

Reason: In the interest of clarity.

6. Within one month of the date of this Order, the surface water monitoring regime on the discharge outfall to the Rathmolyon/Moynasboy Stream shall be reviewed and updated to the written satisfaction of the planning authority.

Reason: In the interest of environmental protection.

7. Within three months of the date of this Order, details for the management of stockpiles on site, over the duration of the permission, shall be submitted to the planning authority for written agreement.

Reason: In the interest of visual amenity and dust suppression.

8. Prior to the commencement of development:

(a) Existing hedges and trees shall be cut back to provide 160m sightlines, from 3m setback, in each direction at the entrance to the site, to the written satisfaction of the planning authority.

(b) The applicant shall provide a 'Stop' sign and markings at the access point and advance signage to the development, to the written satisfaction of the planning authority.

Reason: In the interest of road safety.

9. (a) Prior to commencement of development:

i. A suitably qualified ecologist shall be employed to carry out an updated ecological survey of the site to ensure no rare, protected or invasive flora and fauna are present within the area to be stripped/removed as part of the extension. This survey shall be submitted to the planning authority for written agreement in advance of any earthworks in the extension area.

ii. Details of a monitoring programme of bat species using the site shall be submitted to the planning authority for written agreement. This shall be carried out for the duration of the development and shall monitor the efficacy of mitigation measures, with remedial action taken as necessary.

(b) A suitably qualified Ecological Clerk of Works shall be present on site for soil stripping and initial blasting activities associated with the extension area. On completion of site stripping and commencement of blasting, a report shall be submitted to the planning authority by the Ecological Clerk of Works demonstrating that the works were carried out in accordance with best practice, including:

(i) The initial blasting activities has commenced outside of the breeding bird season (February 1st to August 31st) or avoided disturbance to nesting Peregrine or Raven during the breeding season,

(ii) Tree felling/site stripping works are carried out to avoid tree roosting bats, nesting birds and other protected flora and fauna, and

(iii) That tree felling was carried out in accordance with best practice for the protection of bats.

Reason: In the interest of environmental protection.

10. (a) All of the mitigation measures set out in the EIAR and NIS shall be implemented in full, except as may be required in order to comply with the conditions hereunder.

(b) Prior to the commencement of development, the applicant shall furnish the planning authority with a comprehensive list of all of the mitigation measures set out in the above reports, together with a timescale for the implementation of each measure over the lifetime of the development.

Reason: In the interest of environmental protection.

11. (a) Prior to commencement of development, the site restoration plan shall be amended to the written satisfaction of the planning authority and shall include provision of habitat for nesting Peregrine Falcon, a more natural transition to the water body and means to protect public safety (access to the site and risk of pollution).

(b) Restoration of the site shall be carried out in accordance with the details submitted with the planning application.

(c) Compensatory planting (Figure 2-2 EIAR), new hedgerows and infill planting along site boundaries (Figure 13-7 EIAR) shall be carried out in the first available planting season following the date of this Order.

(d) The applicant shall commence implementation of the site restoration plan within one month of cessation of extraction and shall complete the restoration of the site within 24 months of commencement.

Reason: In the interest of environmental protection.

12. Prior to commencement of development and for the lifetime of the permission, an aerial photograph shall be submitted annually which

adequately enables the planning authority to assess the progress of phases of extraction and a map of the progression of the phased development of the quarry and its perimeter, surveyed against established perimeter beacons, the form and location of which shall be agreed in writing with the planning authority.

Reason: In the interest of clarity.

13. (a) The development shall be operated and managed in accordance with an Environmental Management System (EMS), which shall be submitted by the developer to, and agreed in writing with, the planning authority prior to commencement of development. This shall include, but not be limited to, operational controls for dust, noise, waste management, management of landscaping, protection of groundwaters, emergency response planning, site environmental policy, environmental regulatory requirements and project roles and responsibilities.

(b) The applicant shall maintain a Complaints Register to record any complaints regarding, but not limited to, noise, odour, dust, traffic or any other environmental nuisance. The Complaints Register shall include details of the complaint and measures taken to address the complaint and prevent repetition of the complaint.

(c) Details of site manager, contact numbers (including out of hours) and public information signs shall be on display at the entrance to the facility.

Reason: In the interest of environmental protection and residential amenity.

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

(b) A monthly survey and monitoring programme of dust and particulate emissions shall be undertaken to provide for compliance with these limits. This programme shall include an annual review of all dust monitoring data, to be undertaken by a suitably qualified person acceptable to the planning authority. The results of the reviews shall be submitted to the planning authority within two weeks of completion. The developer shall carry out any amendments to the programme required by the planning authority following this annual review.

Reason: In the interest of environmental protection and residential amenity.

15. (a) Free-field noise levels attributable to the operation of the entire quarry complex, when measured at the nearest noise sensitive locations, shall not exceed 55 dB(A) Leq,1h during permitted operating hours and shall not exceed 45 dB(A) Leq, 15 min at any other time.

(b) A noise survey and assessment programme shall be undertaken to assess the impact of noise emissions arising from the operation of the entire quarry complex. The scope and methodology of this survey and assessment programme shall be submitted to, and agreed in writing with, the planning authority prior to commencement of any quarrying works on the site. It shall include additional noise monitoring in the vicinity of R5 and R6 (Figure 10-1 EIAR). The results obtained from the programme shall be submitted for review at quarterly intervals to the planning authority. The developer shall carry out any amendments to the programme required by the planning authority, following this review.

(e) Operational sirens and similar, in routine use on the site shall be modified and maintained so as not to be audible at any noise sensitive location, other than when used as a warning signal for blasting operations.

Reason: In the interest of environmental protection and residential amenity.

16. (a) A standard fixed time for blasting shall be agreed with the planning authority. It shall not take place outside of the hours 1100 to 1800 Monday to Friday inclusive. Monitoring of the noise and vibration arising from blasting and the frequency of such blasting shall be carried out at the developer's expense by an independent contractor who shall be agreed in writing with the planning authority.

(b) Prior to the firing of any blast, the developer shall give 24 hours' notice of his intention to the occupiers of all dwellings within 500 metres of the site. An audible alarm for a minimum period of one minute shall be sounded, to the satisfaction of the planning authority. This alarm shall be of sufficient power to be heard at all such dwellings. A notice shall be erected and kept on display at the entrance to the quarry stating the time and day of the next blast.

(c) Vibration levels from blasting shall not exceed a peak particle velocity of 12 millimetres/second, when measured in any three mutually orthogonal directions at any sensitive location. The peak particle velocity relates to low frequency vibration of less than 40 hertz where blasting occurs no more than once in seven continuous days. Where blasting operations are more frequent, the peak particle velocity limit is reduced to eight millimetres per second. Blasting shall not give rise to air overpressure values at sensitive locations which are in excess of 125 dB (Lin)max peak with a 95% confidence limit. No individual air overpressure value shall exceed the limit value by more than 5 dB (Lin).

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

any amendments to the programme required by the planning authority following this annual review.

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

17. (a) The wheels of all vehicles transporting aggregate from the site onto the public road shall, prior to the exit of such vehicles onto the public road, be washed in the existing wheel washing facility, which shall remain operational with an adequate supply of uncontaminated water for the duration of the development hereby permitted.

(b) In the event that carryover of mud or debris onto the public roads become a hazard to road users, the operator shall, within 3 months of a written request of the planning authority, install fixed water sprays on the haul road in accordance with a plan submitted to and approved in writing by the Planning Authority.

(c) A water bowser and adequate supply uncontaminated water shall be available at all times for use on other hard surfaced areas during dry weather. If insufficient water is available to satisfy this condition, all extraction and truck movements shall be suspended.

Reason: In the interest of amenity and road safety.

18. (a) Groundwater levels in existing neighbouring private wells as identified in the EIAR, subject to access agreements and with the owner's consent, shall be recorded every month. A log of these levels shall be submitted to the planning authority on a quarterly basis, within one month of the quarter being reported on. On the basis of monitoring, frequency of monitoring may be reviewed by the planning authority.

(b) An alternative water supply shall be made available by the developer, at his expense, immediately it becomes evident from the monitoring programme that the quality or quantity of water in the vicinity is being adversely affected. Alternative water supplies may be secured by the deepening of private wells, drilling of new wells or other such alternatives as may be specified by the planning authority.

(c) In the event of disruptions in water supply, the operation(s) causing the disruption shall be immediately reduced or ceased as appropriate until the affected water supply has been restored or replaced.

Reason: To protect and monitor groundwater in the vicinity of the site and residential amenity.

19. The quarry, and all activities occurring therein, shall only operate between 0800 hours and 1800 hours, Monday to Friday and between 0800 hours and 1400 hours on Saturdays. Truck loading activities can be undertaken between 0700 hours and 0800 hours, Monday to Saturday. No activity shall take place outside these hours or on Sundays or public holidays.

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

20. (a) The developer shall monitor and record groundwater, surface water flow, noise, ground vibration, and dust deposition levels at monitoring and recording stations, the location of which shall be submitted to and agreed in writing with the planning authority prior to commencement of development. Monitoring results shall be submitted to the planning authority at monthly intervals for groundwater, surface water, noise and ground vibration.

(b) On an annual basis, for the lifetime of the facility (within two months of each year end), the developer shall submit to the planning authority five copies of an environmental audit. Independent environmental auditors approved in writing by the planning authority shall carry out this audit. This audit shall be carried out at the expense of the developer and shall be made available for public inspection at the offices of the planning authority and at such other locations as may be agreed in writing with the authority. This report shall contain:

(i) A written record derived from the on-site weighbridge of the quantity of material leaving the site, including the quantity of C&D waste. This quantity shall be specified in tonnes.

(ii) An annual topographical survey carried out by an independent qualified surveyor approved in writing by the planning authority. This

survey shall show all areas excavated and restored. On the basis of this a full materials balance shall be provided to the planning authority.

(iii) A record of groundwater levels measured at monthly intervals.

(iv) A written record of all complaints, including actions taken in response to each complaint.

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

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

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

19. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default

of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

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

20. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory restoration of the site in the interest of visual amenity and environmental protection.

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Deirdre MacGabhann

Planning Inspector

20th October 2021