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INTRODUCTION

- 3.1 The proposed development being examined in this Environmental Impact Assessment Report (EIAR) is an application for a rock quarry extension at Mullymagowan townland, which has previously been granted planning permission P. Ref. 12/101. The previous planning permission expired on 13 January 2023. With the allowance for extension of the relevant planning period by 56 days1 during the Covid-19 emergency the planning permission will finally expiry on 10 March 2023. No rock extraction has been undertaken within the P. Ref. 12/101 extraction area.
- 3.2 This planning application seeks to allow the extraction of rock within the proposed quarry extension area for a period of 15 years, followed by a further period of 2 years to complete restoration works. Following extraction operations and final restoration works it is proposed that the application site will provide a permanent water body and a naturally regenerated wildlife habitat area.
- 3.3 The proposed development being applied for under this planning application comprises of:
 - Quarry extension development for rock extraction and associated processing over an area of c. 4 hectares within an overall planning application area of c. 4.9 hectares as previously permitted under P. Ref. 12/101 (P. Ref. 17/383) and never commenced;
 - A time period of 15 years is being sought to allow the previously permitted extraction be completed plus 2 years to complete restoration works (total duration sought 17 years);
 - The development proposed seeks to utilise existing ancillary buildings and facilities including weighbridge, wheelwash, portacabin office/canteen/toilet, waste water treatment system, processing plant, site entrance and all other associated site works, and ancillary activities as currently permitted by P. Ref. 07/827; and
 - Final restoration of the worked out guarry to a permanent water body and naturally regenerated wildlife habitat area.
- 3.4 As the application site is for an extension to an existing and established quarry operation, there is no requirement for any new site infrastructure or facilities as part of this application.
- 3.5 In the consideration of alternatives below, the issues of alternative sources of aggregates; and alternative site locations have been addressed.

NEED FOR THE DEVELOPMENT

Construction Aggregates

- 3.6 Natural mineral resources are utilised for the production of raw materials, referred to as aggregates in the construction industry. These are important, valuable and highly prized resources in the sector.
- 3.7 Limestone, Greywacke and Shale aggregates are traditionally used as the principle raw materials for the production of cement, blocks, bricks, pre-cast materials and other construction materials given their ability to achieve high structural quality.
- 3.8 The application site contains proven reserves of rock that are used to produce a range of construction aggregates including high polished stone value (PSV) chippings which are of the required quality for use in national and high-speed roads. The chippings that are produced on-site following extraction



¹ DHPLG Circular PL05/2020 dated 9 May 2020

- have been used to supply a number of local authorities for their road projects. Products from the site are also used as sand for sports pitches / arenas, as well as in the manufacture of concrete products at the processing plant in the existing quarry.
- 3.9 The recovery in output in the Irish construction since 2013 has led to increased demand for construction aggregates and it is anticipated that demand will increase further in coming years given the pressure on the construction sector to increase residential housing output and other major infrastructural developments. The National Development Plan (NDP) was reviewed throughout 2021 and published on 4th October 2021. The NDP 2021-30, launched in Páirc Uí Chaoimh, sets out a 10year €165 billion programme of capital investment aimed at upgrading Ireland's infrastructure, enhancing our economic capacity and promoting balanced regional development.
- 3.10 "Essential Aggregates: Providing for Ireland's needs to 2040" (published by the ICF in 2019) was an industry led call for Government to ensure that Ireland's future supply of aggregates is planned, monitored and managed in a sustainable manner, to provide for Ireland's future infrastructure development.
- 3.11 The report identified that demand for aggregates in Ireland at 12 tonnes per capita was twice the EU average, due to Ireland's infrastructural deficit, dispersed pattern of settlement and resulting large road network. The Federation warned that scarcities of some aggregates were already emerging in the Eastern and Midland regions, due to natural shortages, a lack of forward planning and delays and other shortcomings in the planning process. The report also highlights that:
 - "Ireland has abundant natural reserves of high-quality aggregates, but their future accessibility must be planned for and protected by Government. A lack of future planning and priority in the planning process and delays in achieving prospective quarry planning permissions will result in future shortages in the supply of some types of construction aggregates in certain areas of the country. The future supply of aggregates needs to be prioritised and addressed in a planned manner if we are to reach the ambitious construction targets as laid out in Project Ireland 2040".
- The supply of high-quality aggregates has presented problems for the Irish construction sector in the 3.12 past and continues to do, principally as a consequence of:
 - the relative shortage of such permitted resources nationally;
 - their distance from key markets;
 - their occurrence in environmental sensitive areas;
 - their proximity to other established / sensitive land-uses (e.g. isolated rural housing); and
 - deficiencies in connecting road transport infrastructure.
- 3.13 The single most critical factor influencing the siting of a sand and gravel pit is the occurrence of the natural resource at the development location. It is a recognised truth in the extractive sector that natural resources must be worked where they occur.
- 3.14 In the case of the application site, there are extensive proven rock deposits and resource investigations carried out as part of the previous permission (P. Ref. 12/101) indicate that there is an **extractable** reserve of approximately 3.75M tonnes of rock underlying it.
- 3.15 The previous planning permission covering the proposed quarry extension area is due to expire in early 2023, but no rock extraction has been undertaken within the P. Ref. 12/101 extraction area. This planning application seeks to allow rock extraction in the proposed quarry extension area for a period of 15 years, followed by a further period of 2 years to complete restoration works. The site is located in an area favourable to extraction activities, due to, inter alia:



- long and established history of rock extraction at the wider landholding with an established history of extraction at this location for well in excess of 50 years;
- existing quarry is a source of high quality shale rock used predominantly to produce high value polished stone value (PSV) chippings for local authority projects, as well as other products for use in the general construction industry;
- ongoing level of construction and development activity in the surrounding region is generating ever increasing demand for construction materials;
- within an appropriate topographic setting i.e., very well screened from surrounding areas due to the natural topography and mature vegetation on and surrounding the site;
- there are no designated nature sites, national monuments or protected buildings within or adjacent to the application site;
- located with good access to the regional and national roads network;
- best practice industry standard extraction methods have been proven in the existing quarry;
- low development costs because infrastructure already in place;
- historically the quarry at Mullymagowan has been a source of direct and indirect employment in the local area and the proposed extension of the existing quarry will enable continued employment;
- the proposed extraction area is located in a rural area, with few dwellings within the immediate vicinity of the application site; and
- proposed development to be carried out by a long established and experienced operator in the extractive and ancillary concrete manufacturing industry.
- 3.16 The development will provide a secure supply of crucial construction materials (aggregates) products to the surrounding region and will be a significant contributor to both the local and regional economy.

Project Ireland 2040

- 3.17 Project Ireland 2040 is the government's long-term overarching strategy to build a more resilient and sustainable structure. It is comprised of the 20-year National Planning Framework (2018) and includes the National Development Plan 2021-2030 a ten-year strategy for public capital investment.
- 3.18 The National Planning Framework 2018 is the high-level strategic plan for influencing future growth and development up to the year 2040. The framework is intended to guide public and private investment, to protect and enhance the environment and create and promote opportunities.
- 3.19 It states that:

"Extractive industries are important for the supply of aggregates and construction materials and minerals to a variety of sectors, for both domestic requirements and for export. The planning process will play a key role in realising the potential of the extractive industries sector by identifying and protecting important reserves of aggregates and minerals from development that might prejudice their utilisation. Aggregates and minerals extraction will continue to be enabled where this is compatible with the protection of the environment in terms of air and water quality, natural and cultural heritage, the quality of life of residents in the vicinity, and provides for appropriate site rehabilitation."



3.20 The extractive industries are considered not just important as a source of supply to a variety of sectors both domestic and for export; aggregates are an essential requirement for Irelands future. Project 2040 will not happen without aggregates.

Cavan County Development Plan 2022-2028

- The Cavan County Development Plan (CCDP) 2022-2028 is the current County Development Plan. 3.21
- 3.22 Section 12.12 of the CCDP 'Quarrying,' acknowledges the need for extractive industries in terms of supply of aggregate materials for the construction sector and its important contribution to the economy. It is stated that Cavan County Council will ensure that all natural resources are exploited in an environmentally sound and sustainable manner, and the need for applications for mineral extractions to be accompanied by details of issues such as noise, dust, vibration, visual intrusion, water pollution, traffic generation and rehabilitation management.

"The County contains a wealth of natural resources including many raw materials critical to the construction industry. The Council acknowledges the need for extractive industries in terms of supply of aggregate materials for the construction sector. This industry material yields an important contribution to the economy. Such material is a significant natural resource and it is important to safeguard this material for future use, whilst also ensuring that impacts on the environment and the community are acceptable. Cavan County Council will ensure that all natural resources are exploited in an environmentally sound and sustainable manner."

DO NOTHING ALTERNATIVE

- 3.23 In a 'do-nothing scenario,' the proposed operational activities to extract rock within the proposed quarry extension area beyond the expiry date for planning permission P. Ref. 12/101 would not be carried out.
- 3.24 The remaining in-situ rock within the proposed quarry extension area (i.e. that underlying the area covered by previous planning permission P. Ref. 12/101) would not be extracted and there would be a loss of the proven reserve and a valuable aggregate supply.
- 3.25 Any alternative extraction area for aggregates is likely to require the provision of new linked infrastructure.

ALTERNATIVE SOURCES

- 3.26 For the foreseeable future there are no real alternatives to primary land-won aggregates. At present, the use of secondary (recycled) aggregates in Ireland is at an early stage in development. The volume of C&D waste suitable for recycling into secondary aggregates is low in comparison to the overall demand for aggregates. The demographic spread of the population results in only the large urban centres generating sufficient volumes of construction and demolition (C&D) waste to justify a commercial operation producing secondary aggregates.
- 3.27 In the longer term, there may be some scope for extraction of sand and gravel from marine sources as an alternative source supply.
- 3.28 In the absence of a significant increase in the sources of recycled / secondary and marine sources, it is clear that land-based deposits (such as the proven reserves at the quarry at Mullymagowan) will continue to be the main source of construction aggregates in the surrounding region. This application



site is also known to have a valuable high PSV aggregate product which is more scarcely found and is therefore even more important at the local and regional scale.

ALTERNATIVE LOCATIONS

- 3.29 This development is not like a factory or other commercial enterprise that can be located at many potential locations. It is a resource-based development and therefore the aggregates can only be worked (extracted) where they are present in-situ.
- 3.30 It is further recognised within paragraph 4.13 of the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment prepared by the Department of Housing, Planning and Local Government in August 2018:
 - "For example, some projects may be site specific so the consideration of alternative sites may not be relevant."²
- 3.31 Aggregates can only be worked where they exist and where the environmental effects of working them can be minimised. However, this is not the only prerequisite which determines a suitable location for an aggregates site. Others include a willing seller, distance from market, required quality and quantity to justify capital investments, etc. It is usually the case that a number of these prerequisites are not met, and the alternative is discounted.
- 3.32 Typically, the alternatives available to an applicant in respect to quarry developments relate to:
 - further development (increase of the existing quarry footprint and/or deepening) and final restoration of the existing established quarry which has been in operation for over 50 years;
 - development of a new replacement 'greenfield' quarry site to serve the established clients and markets in this region.
- 3.33 In this case, neither of the above apply as the Applicant simply seeks to extend an existing quarry with existing permitted processing and ancillary facilities in-situ. No appropriate alternative location has been identified at the current time that meets the suitability of this identified resource.
- 3.34 The proposed development of the site is deemed appropriate for the following reasons:
 - proposals to remain as previously permitted operations and footprint of P. Ref. 12/101;
 - existence of processing and ancillary quarry infrastructure in association with P. Ref. 07/827;
 - suitability of the proven shale reserves for the quality of chippings required for local authority road projects, many of which are critical to the delivery of Project 2040;
 - easy access to regional and national road infrastructure in key transport corridor, namely with dedicated link road to the R165 and easy access to the N3 primary route; and
 - low environmental impact: topography assists with screening of the development (no significant visual intrusion), no significant impact on any recorded monuments within the application area; and not within a designated ecological or landscape area, etc.



 $^{^{2}}$ Guidelines for Planning Authorities and An Bord Pleanála on carrying out EIA, August 2018

- 3.35 The development of the proposed quarry extension at Mullymagowan will provide for extraction from a proven aggregate resource within an established wider operation, with least potential for increase in environmental emissions.
- 3.36 On the basis of the above, it is considered that the proposed development, subject to implementation of best environmental management practice and compliance with appropriate planning controls (i.e., planning conditions and standard emission limit values for the sector) is preferable in an overall planning context.

ALTERNATIVE DESIGNS / LAYOUTS

- 3.37 A formal pre-planning consultation was held between planning staff of Cavan County Council and representatives of SLR Consulting Ireland and P&S Civil Works Ltd. on 10 August 2022. The views of the Council representatives have been taken into account in the finalisation of the design of the proposed development, and during the EIA process as a whole.
- 3.38 Alternative designs, including alternative layouts within the site were considered during preparation of the planning application, with attention being paid to the direction of the working. The design layout that was chosen for the proposed development was considered to best minimise the potential impacts on the environment from noise, dust, visual and landscape impacts.
- 3.39 Good layout design is evident at the existing approved quarry (P. Ref. 07/827), which is largely removed from views from the public road network and local residential properties. The existing processing plant that would be utilised by the proposed development is well set back from the public roads and are therefore screened from view due to this and the topography of the area.
- 3.40 There are no new structures (processing or manufacturing plants / or ancillary welfare facilities) required or proposed as part of this planning application.

Residential Consideration

- 3.41 Within the proposed quarry extension area, the extraction area will be worked in a westerly direction until the final footprint of 4.0 hectares is reached. A final quarry floor level of c. 110m AOD will be achieved.
- 3.42 The closest third-party residences to the site are primarily located to the north and south of the site along the public road network. 11 occupied third-party residences³ are located within 500m, with the closest being 180m northwest and the majority being of the order of 400m from the site. The closest property to the application site, which is located 26m west, is owned by the applicant.
- 3.43 The in-situ rock that is proposed to be worked from within the quarry extension area is situated within the wider landholding/existing quarry site, with intervening topography and dense vegetation providing screening to these local residences. Machinery within the quarry working areas will be mobile and the existing processing plant that is well screened within the existing quarry site will be utilised, affording maximum screening to the closest residential receptors.
- 3.44 Further to this, no extraction operations are planned for Sundays or Public Holidays.



³ According to myplan.ie accessed 22 November 2022

Ecological Consideration

- 3.45 Overburden that will be removed at the early stage of development (prior to extraction activities) will be used to create a permanent landscaped screening berm around the perimeter of the proposed quarry extension area. It will be planted at an early stage with locally occurring species to enhance the ecological potential of the screening berm and to allow any faunal species an opportunity to adapt to the ongoing site activities as they colonise the new habitat.
- 3.46 The proposed quarry extension will be worked in a series of benches, and it is proposed that restoration works will be undertaken on permanent completion of extraction works to ensure that new ecological habitat will be able to establish without disturbance from site activities.

Landscape & Visual Consideration

- 3.47 Due to the history of extraction workings at the wider landholding, there are existing screening berms along some of the external perimeters of the existing site which are well established with mature vegetation. The natural topography of the site also assists with screening the site from external views.
- 3.48 Furthermore, the proposed quarry extension area is located centrally within the existing landholding and accessed from the established quarry haul road.
- 3.49 The proposed landscape screening berms to be formed around the perimeter of the site from the overburden material removal in the quarry extension will be planted, and as the vegetation matures will assist in screening the application site from external views along the L7503 road, which is located at the western edge of the landholding (therefore where the greatest potential for change to landscape and visual exists).

ALTERNATIVE PROCESSES

- 3.50 P&S Civil Works Ltd is primarily a civil engineering company with expertise and experience in the field of quarrying, aggregates production and concrete manufacturing.
- 3.51 The consideration of alternative processes is confined to alternative manufacturing process for the products that will be produced. In general, the alternatives are only subtly different.

