

CHAPTER 3

ALTERNATIVES

Lagan Materials Ltd.

Aghamore Near, Aghamore Far and Carrownamaddoo townlands, County Sligo

EIAR – Recommencement and Deepening of Existing Quarry and Associated Processing Area

May 2021



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INTRODUCTION

- 3.1 In the consideration of alternatives below, the issues of alternative sources of aggregates; and alternative site locations / designs / layouts have been addressed.
- 3.2 The current planning application is for recommencement / deepening of an existing quarry and recommencement of stone processing (crushing and screening) in the existing processing area. The existing quarry area is located in an area favourable to extraction activities, due to, *inter alia*:
- Established long history of extraction and related activities at this location (activities commenced at this location in the 1950's);
 - Proven limestone reserves – refer to EIAR Chapter 6;
 - Located with direct access to the regional and national roads network – refer to EIAR Chapter 14;
 - Best practice industry standard extraction and processing methods being used;
 - Low development costs due to existing infrastructure already in place at the site and the application is for recommencement and extension (by deepening) of a long established quarry development.
- 3.3 The application site is within an area covered by the Sligo & Environs Development Plan 2010-2016. Appendix A to the Sligo County Development Plan 2017-2023 states that the written statement and the objectives maps, including zoning objectives, pertaining to the Sligo & Environs Development Plan 2010-2016, have been appended to the County Development Plan.
- 3.4 The majority of the application area is assigned the land-use zoning 'NR – natural/mineral resource reservation' within the Sligo & Environs Plan, and part of the site is assigned the land-use zoning 'BUF – buffer zone'.
- 3.5 Section 6.8 of the appended Sligo & Environs Plan also addresses mineral extraction and natural resources and includes specific objective (O-NR-1) to protect the natural resource reservation and existing quarrying operations at Aghamore Near, Aghamore Far and Carrownamadoo.
- 3.6 It is noted that there are a large number of construction related projects proposed for Sligo Town in the Regional Spatial and Economic Strategy (RSES) for the Northern and Western Region, in which the town is identified as having the vision and capacity to be a Regional Growth Centre of scale. These projects include housing (RPO 3.7.37 and RPO 3.7.38), road infrastructure (RPO 3.7.40, RPO 3.7.41, RPO 3.7.43 and RPO 3.7.54) – refer to separate Planning Report submitted with the Planning Application. A secure supply of aggregates is critical to implementation of these plans.

ADDITIONAL INFORMATION

- 3.7 As outlined in Chapter 1 a planning application was submitted to Sligo County Council (Plan File Ref. No. 18/345 / ABP Ref. 305821-19) in August 2018 for similar development to that proposed as part of this application. In October 2019 Sligo County Council granted planning permission for the development (subject to 23 no. conditions). 2 no. third party appeals of the decision by Sligo County Council to grant permission for the proposed quarry development were made to An Bord Pleanála

(ABP-305821-19). An Bord Pleanála refused permission for the proposed development on the 30th June 2020 for 2 no. reasons – refer to Chapter 1 for further details.

- 3.8 In order to comprehensively address the reasons for refusal, and further comments contained within the An Bord Pleanála Inspectors Report a number of additional surveys / site investigations, field work and assessments have been carried out.
- 3.9 This Chapter 3 of the EIAR has been updated as follows:
- Alternative locations section has been updated to include the recently published Regional Spatial and Economic Strategy (RSES) for the Northern and Western Region;
 - Alternative design / layouts section has been updated to include the aggregate processing area.

DO NOTHING ALTERNATIVE

- 3.10 If no further works within the planning application area were carried out, the existing site would be restored to natural habitat after-uses as per the previously permitted proposals.

ALTERNATIVE SOURCES OF AGGREGATES

- 3.11 In the medium term there are no real alternatives to the current land-based sources of construction aggregates.
- 3.12 Until such time as end of waste criteria in respect of Construction & Demolition materials is agreed, these materials cannot be relied upon and for the foreseeable future there are no real alternatives to primary land-won aggregates.
- 3.13 Notwithstanding the above, the volume of C&D materials suitable for recycling into secondary aggregates would be considered very low in comparison to the overall demand for aggregates. The demographic spread of the population results in only the large urban centres potentially being capable of generating sufficient volumes of construction and demolition (C&D) waste to justify a commercial operation producing secondary aggregates going forward.
- 3.14 In the longer term (>25 years), there may be some scope for extraction of minerals from marine sources.
- 3.15 In the absence of significant volumes of aggregates from recycled / secondary and marine sources, it is clear that land-based deposits (such as the proven reserves at Aghamore Near, Aghamore Far and Carrownamaddoo townlands) will continue to be the main source of construction aggregates in Ireland, including Sligo and the northwest / west region.

ALTERNATIVE LOCATIONS

- 3.16 The current planning application is for the recommencement / deepening of an existing established quarry and recommencement of aggregate processing (crushing and screening) within the existing processing area, located to the east of the local road that bisects the site.

- 3.17 The alternatives available to the Applicant relate to:
- Further development (into lands that do not currently have the benefit of an established quarry land use) and final restoration of the existing established quarry;
- or
- Development of a new replacement 'greenfield' quarry in Sligo to serve the established clients and markets in this region.
- 3.18 At the current time, there is no suitable alternative replacement quarry location available to the applicant in County Sligo. It is generally accepted that the overall timeframe for development of a 'greenfield' quarry site (from initial site selection, land acquisition, preparation of a planning application and accompanying EIAR, through planning process and site development to extraction of aggregates) takes between 5 and 10 years.
- 3.19 Notwithstanding the above, recommencement and deepening of the existing quarry would be beneficial in planning terms by eliminating the need for:
- Continued extraction of materials from other quarries within the county, should the applicant be unable to develop a new 'greenfield' site in the event that the existing quarry is not authorised to recommence operations. This would result in faster depletion of aggregate resources at these other quarry locations and potentially result in future intensification of those operations;
 - Development of a 'greenfield' site at some other location within the county where there is little or no previous extractive industry land use;
 - Haulage of materials by road from other quarries within, and outside the county, with potentially longer haulage distances and increased traffic levels on the wider road network.
- 3.20 The development of the existing limestone quarry at Aghamore Near, Aghamore Far and Carrownamaddoo townlands will assist in facilitating extraction from an existing established and proven aggregate resource, with no significant increase in environmental emissions.
- 3.21 This development is not like a factory for example that can be located at many locations; this is a resource tied development. Aggregates can only be worked where they exist and where the environmental effects of working such resources can be managed to an acceptable level.
- 3.22 The ambitious plans and projects set out in the RSES, and referenced above, are reliant on a secure supply of aggregates and associated quarry products. At the current time the region is limited to only one operational quarry of sufficient scale to supply the region. The proposed recommencement of quarry operations at this site are required to ensure a continued reliable and competitive supply of quarry products to enable development and completion of the plans and projects set out in the RSES.

Reduction in Greenhouse Gas Emissions

- 3.23 Typical greenhouse gas emissions for HGV's are 0.71266 kgCO₂e/km.
- 3.24 The quarry at Aghamore is located in close proximity (c. 5 km) to Sligo town and is the closest quarry of sufficient scale to supply aggregates to construction projects in the town.

- 3.25 The recommencement of quarrying activities at the application site would see a reduction in GHG emissions from aggregates being delivered to construction projects in Sligo town, resulting in a net gain in respect to the existing situation where aggregates are hauled over greater distances than is proposed as part of this development.
- 3.26 On the basis of the above, it is considered that the recommencement of development (and final restoration) of the existing quarry, subject to continued implementation of best environmental management practice and compliance with appropriate planning controls (i.e. planning conditions and recommended emission limit values for the sector) is preferable in an overall planning context, compared to the development of a new replacement 'greenfield' site at some alternative location in Sligo.

ALTERNATIVE DESIGNS / LAYOUTS

- 3.27 Alternative designs, including alternative layouts within the site were considered. No changes to the previously permitted quarry extraction area have been proposed as part of this EIAR. Quarry deepening will be carried out within the previously permitted area only (no lateral extension proposed) and this is considered to best minimise the potential impacts on the environment from noise, dust, visual impacts.

Extraction Area

- 3.28 Lands adjoining the quarry extraction area are owned by the applicant – refer to Figure 1.2, and these lands may be suitable for rock extraction at a future date.
- 3.29 These adjoining lands are currently in agricultural use and have not previously been used, or proposed to be used, for quarry development. Extensive site investigations will be required to prove the limestone reserves within these lands. Any future planning application to allow extraction within these lands will require an Environmental Impact Assessment to be carried out. This process (site investigations and EIAR) will take a minimum of 2 – 3 years to complete.
- 3.30 The most immediate available and suitable stone reserves available for extraction at the quarry are the proven reserves contained within the footprint of the existing quarry extraction area, below the current quarry floor level – refer to Chapter 6: Soils and Geology. These reserves have previously been permitted to an extraction level of – 34.5mOD and have been subject to recent extensive environmental assessments and site investigations.
- 3.31 Extraction of the stone reserves from below the quarry floor will not result in any additional land-take and will not result in any significant environmental impact. This EIAR demonstrates that the proposed recommencement and deepening of the existing quarry development, and recommencement of activities within the associated processing area, can be carried out without any significant impact on the surrounding environment, and within the recommended environmental emission threshold values for these types of development.

Aggregate Processing Area

- 3.32 The existing aggregate processing area is located on the eastern side of the local road. Previously, when operational, activities in this area were undertaken adjacent to the Aghamore stream. As part of this application it is proposed to provide a buffer strip, c. 25 metres in width, between the processing area and the Aghamore stream, along with construction of a berm to ensure that no

surface water run-off from the processing area enters the stream. No activities (processing, stockpiling, etc.) will be carried out within the buffer strip.

ALTERNATIVE PROCESSES

- 3.33 Lagan Materials Ltd. are a company with expertise and experience in the field of quarrying and aggregates production.
- 3.34 As this planning application is for recommencement / deepening of an existing established quarry and the recommencement of aggregate processing within the existing processing area, alternative processes are not considered relevant in this instance.