

## **3 POPULATION AND HUMAN HEALTH**

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### **3.1 INTRODUCTION**

This Remedial Environmental Impact Assessment Report (rEiAR) has been prepared to accompany a substitute consent application for an existing quarry at Hempstown Commons, Co. Kildare (the 'Development'). The Development is located within the administrative boundary of Kildare County Council, (KCC).

This chapter of the rEiAR has been prepared by WSP Ireland Consulting Ltd (WSP) and assesses the impacts to human health and population of the previous activities relating to the development and operation at the site between 29 December 2019 and the present day.

#### **3.1.1 TECHNICAL SCOPE**

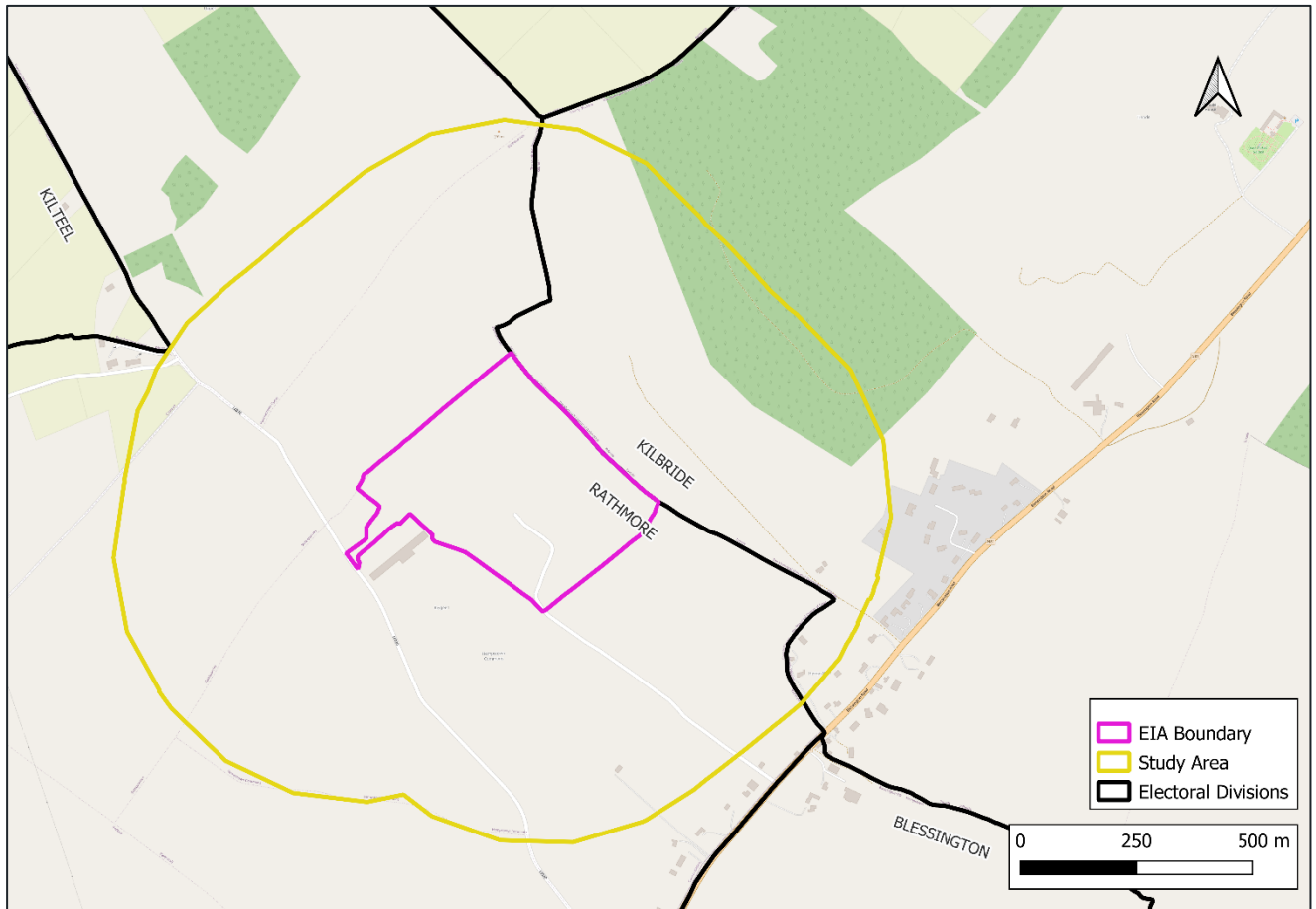
The technical scope of this assessment is to consider the potential impacts and effects on the surrounding human environment that could have resulted because of the quarrying related activities carried out at the Development. This assessment considers the potential sources of change resulting from Development activities detailed in the Chapter 2 (Project Description). It also records remedial mitigation measures undertaken or proposed to be undertaken.

Effects of a development on the environment can impinge upon the surrounding human environment, directly and indirectly, positively and negatively. Direct effects may include such matters as safety, air and water quality, noise, landscape quality and road traffic. Indirect effects pertain to such matters as ecology and biodiversity, heritage and archaeology. These matters form discreet sections of this rEiAR in their own right and corresponding mitigation measures are comprehensively provided in those sections.

#### **3.1.2 GEOGRAPHICAL AND TEMPORAL SCOPE**

The geographical study area for the assessment covers the EIA boundary (the Site) (identified on Figure 3-1) and with a study area of 500 m around the EIA boundary. In the context of this rEiAR, the EIA boundary contains lands which form the existing quarry area and some areas which extend beyond the working areas. The study area defined for the population and demographic trends is the Electoral Division (ED) of Rathmore.

The baseline for this rEiAR has been set to 29 December 2019, and the rEiAR process has assessed impacts from that date to the present. This assessment period equates to approximately five years and is identified as 'short-term' duration (those lasting one to seven years).



**Figure 3-1 - Site study area with electoral divisions**

## 3.2 LEGISLATIVE AND POLICY CONTEXT

### 3.2.1 LEGISLATION

This assessment has been made with cognisance to relevant legislation, including but not limited to:

- European Union Directive 2011/92/EU as amended by Directive 2014/52/EU – these Directives required that certain private and public projects which are likely to have significant resultant environmental impacts are subject to a formalised Environmental Impact Assessment prior to their consent;
- European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI No. 296 of 2018) which amended the Planning and Development Act, 2000, and the Planning and Development Regulations, 2001. The 2014/52/EU Directive was transposed into Irish law through this Directive;
- The European Communities (Environmental Liability) Regulations 2008 (as amended) - These Regulations (SI 547/2008) transpose EU Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage. The purpose of these Regulations is to establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage. The Environmental Protection Agency (EPA) is designated as the competent authority for all aspects of these Regulations; and

- The Environmental Protection Agency Act 1992 and the Protection of the Environment Act 2003 – which detail the requirements associated with general pollution control and activities that come under integrated pollution prevention and control.

### 3.2.2 RELEVANT POLICIES AND PLANS

The Site is within the administrative boundary of Kildare County Council (KCC). The Kildare County Development Plan 2023-2029 (KCDP) acknowledges that mineral reserves are generally located within the rural area, and that the nature of the extractive industry is such that the industry must be developed where those resources occur.

The Plan also recognises that the industry can have damaging environmental effects and states that permission will only be granted where KCC is satisfied that residential and natural amenities will be protected, pollution will be prevented, and aquifers and groundwater safeguarded.

To ensure this, KCC notes that planning applications must account for potential environmental impacts as stated in their Mineral Resources & Extraction Industry Policy, as follows:

- **RD P8:** Support and manage the appropriate future development of Kildare's natural aggregate resources in appropriate locations to ensure adequate supplies are available to meet the future needs of the county and the region in line with the principles of sustainable development and environmental management and to require operators to appropriately manage extraction sites when extraction has ceased.

### 3.2.3 RELEVANT GUIDANCE

This assessment has been made with guidance from the 'Guidelines on the information to be contained in environmental impact assessment reports', published by the EPA in May 2022.

## 3.3 ASSESSMENT METHODOLOGY AND SIGNIFICANCE CRITERIA

### 3.3.1 ASSESSMENT AIMS

Having regard to the EPA's 2022 guidelines; the characteristics and context of the lands that are the subject of this rEIAR; and the retrospective nature of the development, this rEIAR chapter aims to identify the likely significant impacts that the development has and may have had on the 'quality of life' and are discussed under the following headings:

- Populations;
- Employment;
- Amenity (including Tourism);
- Land Use and Development Patterns; and
- Human health and Health and safety.

### 3.3.2 QUALITATIVE ASSESSMENT METHOD

As identified in Chapter 1 (Introduction) of this rEIAR, a common framework of assessment criteria and terminology has been used based on the EPA's draft Guidelines on the Information to be Contained in EIARs (EPA, 2022). This common framework follows a 'matrix approach' to environmental assessment which is based on the characteristics of the impact (magnitude and nature) and the value (sensitivity) of the receptor.

The sensitivity of communities and populations has been included and has been conservatively attributed a 'High' sensitivity. These descriptions for value (sensitivity) of receptors are provided in Table 3-1 and Table 3-2.

**Table 3-1 - Environmental value (sensitivity) and descriptions.**

Value (sensitivity) of receptor / resource	Typical description
High	High importance and rarity, national scale, and limited potential for substitution.
Medium	Medium or high importance and rarity, regional scale, limited potential for substitution.
Low	Low or medium importance and rarity, local scale.
Negligible	Very low importance and rarity, local scale.

**Table 3-2 - Environmental value (sensitivity) and descriptions for assessment groups**

Group	Receptor / resource	Designated value (sensitivity) of receptor / resource
Populations / Communities	All individuals located in a particular location (this can be local, regional or at a national scale), and groups of people living in the same place or having a particular characteristic in common.	High
Private Dwellings	Residential property	High
Community land and facilities, and other lands	Designated local green space / valued community facility.	High
	Undesignated local green space / non-essential community facility	Low
	Derelict or unoccupied buildings or lands.	Low
Local Businesses	Businesses where viability is likely to be permanently jeopardised by a short disruption or worsening of trading conditions.	High
	Businesses where profitability may be harmed by a short or medium-term disruption or worsening of trading conditions.	Medium
	Businesses that could continue to operate without substantial harm if affected by a disruption or worsening of trading conditions.	Low
	Businesses that could continue to operate relatively unharmed if affected by a disruption or worsening of trading conditions.	Negligible

Group	Receptor / resource	Designated value (sensitivity) of receptor / resource
Non-motorised users	All non-motorised users utilising roads and networks, including pedestrians, cyclists, horse-riding, etc.	High
Human health	Health receptor that would be likely or expected to be directly affected. Receptor is well placed to take advantage of beneficial impacts, and/or is not well placed to deal with any adverse impacts.	High
	Health receptor that would be likely to be indirectly affected. Average ability to maximise beneficial impacts or cope with adverse impacts.	Medium
	Health receptor that would be unlikely to be affected. Receptor is not well placed to take advantage of beneficial impacts, and/or is well placed to deal with any adverse impacts.	Low
	Health receptor that would be unlikely to be affected or effects would be temporary in nature, or which would be anticipated to have a slight or no effect on human health.	Negligible
Vehicle travellers	Public transport, motor vehicles	Low

A description of the significance categories used is provided in Table 3-3. Effects that are either **Large or Profound are considered to be Significant**, and effects that are **Moderate, Slight or Imperceptible are considered to be Not Significant**. How the level of effect is determined, based on the environmental value and magnitude of impact, is explained in Section 1.8.2 of Chapter 1.

**Table 3-3 - Significance categories and typical descriptions.**

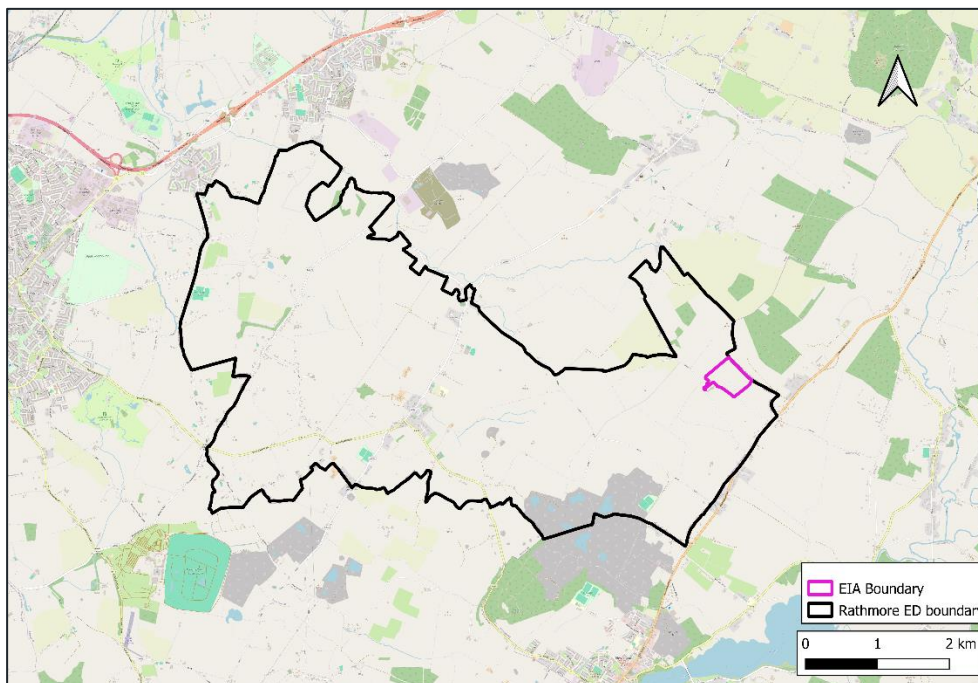
Significance category	Typical description
Profound	<p>An effect which obliterates sensitive characteristics.</p> <p>Only adverse effects are usually assigned this level of significance. These factors are key issues in the decision-making and consent process. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance which are likely to suffer a most damaging impact and loss of resource integrity. However, a major change in a site or feature of local importance may also be included in this significance category.</p>
Large	<p>An effect which, by its character, magnitude, duration or intensity alters a significant proportion of a sensitive aspect of the environment.</p> <p>These can be beneficial or adverse effects and are considered to be very important issues which are likely to be substantial in the decision-making process.</p>
Moderate	<p>An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.</p>

Significance category	Typical description
	These are beneficial or adverse effects which may be important but are not likely to be central to decision-making or consent. The cumulative effects of these factors may influence consent or decision-making if they should lead to an increase in the overall adverse effect on a particular resource or receptor.
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.  These beneficial or adverse effects may be raised as local factors. They are unlikely to be critical in the decision-making process but are important in enhancing the subsequent design of the project.
Imperceptible	An effect capable of measurement but without significant consequences.  No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error

### 3.4 BASELINE AND SUBSEQUENT CONDITIONS (29 DEC 2019 TO PRESENT)

#### 3.4.1 SURROUNDING ENVIRONMENT

The Site is located in the east of County Kildare, south of the border with Co. Wicklow. The Site is located within the townland of Hempstown Commons and located north of the N81, ca. 4 km to the northeast of Blessington. As noted, the Site is located with Rathmore ED, the boundary of which has been provided in Figure 3-2.



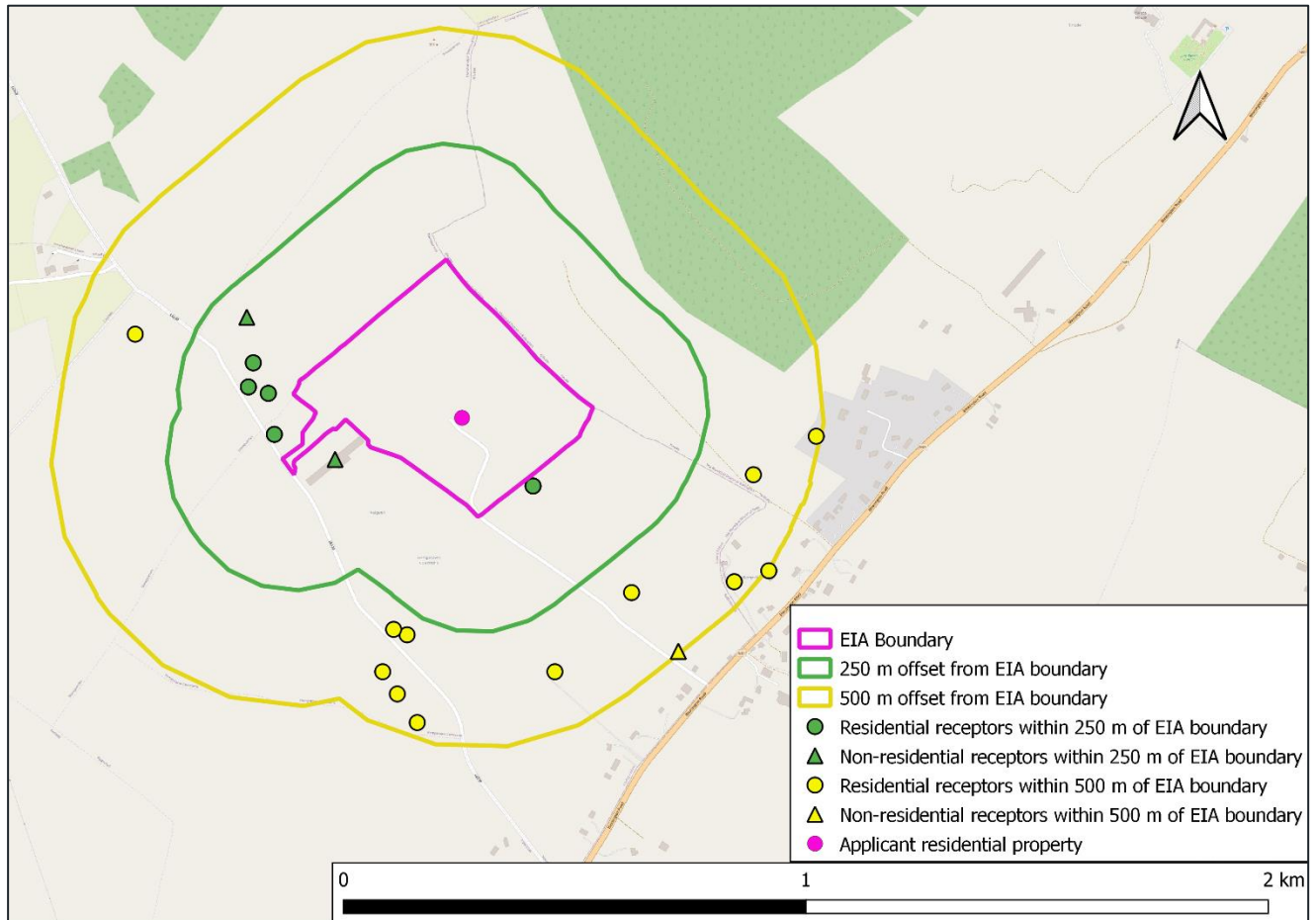
**Figure 3-2 - Rathmore ED boundary**

The lands contiguous to the boundaries of the Site are in agricultural use, predominantly pasture lands and industrial, with a precast concrete manufacturing facility (Stresslite Floors Ltd.) immediately adjacent to the west of the Site. There are scattered residential properties in the vicinity



of the Site, primarily concentrated along the Local Road L6030. The nearest school and church to the Site is located within Kilbride ca. 3 km to the east of the Site. The rural nature of the lands surrounding the Site has stayed consistent over the assessment period.

The number of residential and non-residential receptors within the study area over the assessment period has not changed, and this is mapped in Figure 3-3 below. There is a property owned by the applicant located within their land holding which has been identified.



**Figure 3-3 - Receptors mapped within study area.**

### 3.4.2 POPULATION

The Site is located within the ED of Rathmore, which has an area of ca. 24.31 km<sup>2</sup>.

Table 3-4 summarises population statistics for the State, Leinster, Kildare and the Rathmore Electoral Division (ED). The percentage population increase has been calculated between the Census periods of 2016 and 2022 (Table 3-5).

Over the census period 2016 to 2022, the population increase observed in Rathmore ED was lower than the population increase observed in the county, regionally and nationally. It is unclear why this is the case but may be considered to be due to the rural nature of Rathmore ED.

**Table 3-4 - Populations recorded during the 2016 and 2022 census period, (Central Statistics Office).**

Region	2016	2022
Ireland (National)	4,761,865	5,149,139
Leinster	2,634,403	2,870,354
County Kildare	222,504	247,774
Rathmore ED	1,142	1,175

**Table 3-5 - Population dynamics (% change) from 2016 to 2022, (Central Statistics Office).**

Region	2016 - 2022
Ireland (National)	8.13 %
Leinster	8.96 %
County Kildare	11.36 %
Rathmore ED	2.89 %

A total of 16 No. existing third-party residential dwellings are found to be currently within 500 m of the EIA boundary, of these 5 No. receptors are located within 250 m of the EIA boundary. The number of residences is based on a review of aerial photography during the assessment period, DCCA Eircode mapping and a local authority planning permission search. These figures have not changed throughout the assessment period.

### 3.4.2.1 Population Age Distribution

Table 3-6 summarises the percentage population distribution by age for the State, County Kildare and Rathmore ED for the 2016 and 2022 census periods.

**Table 3-6 - Population Age Distribution, (Central Statistics Office)**

Year	Area	% Aged 0-14	% Aged 15-29	% Aged 30-44	% Aged 45-64	% Aged 65+
2022	Ireland (National)	20.1	18.2	21.3	24.1	16.3
2016	Ireland (National)	21.1	19.2	22.1	23.3	14.3



Year	Area	% Aged 0-14	% Aged 15-29	% Aged 30-44	% Aged 45-64	% Aged 65+
2022	County Kildare	23.0	17.5	22.0	23.0	14.5
2016	County Kildare	24.0	18.5	23.0	22.0	12.5
2022	Rathmore ED	22.5	16.0	21.5	25.0	15.0
2016	Rathmore ED	23.5	17.0	22.5	24.0	13.0

### 3.4.2.2 Population Density

Table 3-7 summarises population densities for the State, Leinster, Co. Kildare, and the Rathmore ED. The population densities have been calculated between the Census periods of 2011, 2016 and 2022.

As expected from the increased populations, the population densities also increased in the State, province and county areas of the Census periods. The population density of the Rathmore ED is much lower than that observed in the state and Province and County which reflects the rural nature of the area.

**Table 3-7 - Population Density (persons per square kilometre) from 2016 and 2022, (Central Statistics Office)**

Area	Size (km <sup>2</sup> )	Population Density 2016	Population Density 2022
Ireland (National)	70,273	67.76	73.27
Leinster	19,800	133.05	144.97
County Kildare	1,695	131.27	146.18
Rathmore ED	24.2	47.19	48.55

### 3.4.2.3 Households

Table 3-8 summarises the number of households and persons per household for the State, Kildare and the Rathmore ED. The statistics have been calculated for the Census periods 2016 and 2022.

It can be noted that the average size of households in Rathmore ED and Kildare are above the average household sizes identified in the State for the same periods.

**Table 3-8 -: Households from 2016 to 2022, (Central Statistics Office).**

Area	2016			2022		
	No. of households	No. of people	Average no. of people per household	No. of households	No. of people	Average no. of people per household
Ireland (National)	1,702,289	4,676,648	2.7	1,841,152	5,149,139	2.8
Kildare	73,596	220,923	3.0	82,793	247,774	3.0
Rathmore ED	353	1,170	3.3	367	1,175	3.2

### 3.4.3 EMPLOYMENT

#### 3.4.3.1 Employment at the Site

The impacts of the Site on employment have been assessed qualitatively based on the number of jobs which the Site has created. The Site has provided direct and indirect employment. Direct jobs include the workforce employed by the applicant directly at the site during the assessment period. Indirect employment includes those created in the supply chain to provide input (e.g. fuels), specialist labour (e.g. contract drivers) and services (e.g. equipment maintenance) for the site and workforce. Direct employment is in the categories of plant operators (4 No.), and administrative staff at the weighbridge (2 No.).

#### 3.4.3.2 Principal Status

Table 3-9 summarises the employment status of the persons aged 15 years or older in County Kildare and the Rathmore ED. Between the period of 2016 and 2022 it is evident that the percentage of those 'At Work' has stayed relatively consistent within the respective populations. This is likely corresponding to the rise in population during the period. If the sum of the 'Long term unemployed' and 'Short term unemployed' categories from 2022 is compared to the 'Unemployed having lost or given up previous job' category from 2016, we can see that unemployment has dropped in County Kildare but has remained at approximately the same level in Rathmore ED during the period of 2016 to 2022.

**Table 3-9 - Principal Status of Persons 15 years and older in County Kildare and Rathmore ED, in 2016 and 2022, (Central Statistics Office)**

Status	Kildare 2016	Kildare 2022	Rathmore ED 2016	Rathmore ED 2022
At work	56.79%	59.06%	59.76%	59.40%
Retired	11.18%	13.06%	10.92%	14.80%
Student	12.17%	11.81%	15.33%	14.59%

Status	Kildare 2016	Kildare 2022	Rathmore ED 2016	Rathmore ED 2022
Looking after home/family	8.57%	6.89%	9.59%	6.89%
Unable to work due to permanent sickness or disability	3.70%	3.91%	1.43%	0.92%
Long term unemployed	N/A	2.24%	N/A	1.64%
Short term unemployed	N/A	1.57%	N/A	1.02%
Unemployed having lost or given up previous job	6.46%	N/A	2.98%	N/A
Looking for first regular job	0.83%	0.81%	0.00%	0.51%
Other	0.31%	0.65%	0.00%	0.21%

### 3.4.3.3 Employment industry

Table 3-10 summarises the percentage of persons aged 15 years or older per employment industry in County Kildare and the Rathmore ED. Given that this ED is mainly rural and does not contain any towns or cities it is expected that the percentage of the population involved in agriculture, forestry and fishing would be more than the county average. Employment industries where the percentage of persons in Rathmore ED are above the county average include; agriculture, forestry and fishing, building and construction, commerce and trade, and public administration. The 'Other' employment category was found to be lower in Rathmore ED than the county average, therefore it is considered that the employment industries of the working population of Rathmore ED are better described in the defined criteria.

**Table 3-10 – Percentage of persons in work by industry, 2022 (Central Statistics Office)**

Industry	Kildare	Rathmore ED
Agriculture, forestry and fishing	2.58%	5.71%
Building and construction	6.97%	9.69%
Manufacturing industries	11.80%	10.38%
Commerce and trade	26.93%	30.62%
Transport and communications	9.20%	8.30%
Public administration	6.36%	8.65%

Industry	Kildare	Rathmore ED
Professional services	23.62%	19.55%
Other	12.55%	7.09%

#### 3.4.3.4 Local employment centres

As previously described, the Site is situated adjacent to the Kildare-Wicklow border, north-west of the N81 secondary road. The Site is in close proximity to town centres such as Blessington, Kilbride and Naas.

The Site is also well positioned in the greater Dublin area and this location in a regional context has continued influence on the economic activity of the area. Public transport linkages and the N81 road provide vital linkages and strengthen the area's status as a commuter zone and also as a centre for economic investment and activity.

Using the N81 road, Dublin city centre is only 50 minutes away by car, while Blessington can be reached in approximately 5 minutes. Naas is only a 20-minute drive using the R410 road. Such ease of access increases the attractiveness of the area as a commuter destination for the greater Dublin area.

#### 3.4.4 AMENITY (INCLUDING TOURISM)

The immediate area surrounding the Site is primarily agricultural land and therefore has limited amenities. A large proportion of public amenities, recreational clubs/areas, and areas of tourism value in the vicinity of the Site are concentrated in and around the town of Blessington. Some of the main areas have been identified and described in this section.

Sport and recreational grounds within the vicinity the Site include the Blessington Association Football Club, which is located approximately 2 km south-west of the Site; the Blessington Gaelic Athletic Association is also located approximately 3.5 km to the south-west and the Kilbride GAA club, approximately 3km to the southeast of the Site

The Pollaphuca Reservoir (Liffey Lake) is located east of Blessington, ca. 4 km south from the Site. It offers opportunities for sports and recreation with the Three Castles Rowing Club and The Avon Activity Centre. It also acts as an attractive area for walking and mountain biking along tracks such as the Blessington Greenway.

There are two formal gardens open to visitors, June Blake's Garden and Hunting Brook Gardens, 1.8 km and 2 km to the east of the Site respectively. June Blake's Garden also offers holiday accommodation on site.

The above clubs and amenities are utilised by the wider east Kildare and west Wicklow areas and not just limited to the local population of surrounding area.

#### 3.4.5 LAND USE

The Site comprises lands which are currently used for quarrying activities and are classified in Corine Landcover (EPA, 2018) as 'Mineral Extraction Sites' (Figure 3-4).

The lands surrounding the Site can be characterised as rural in nature, with land uses in the area being agricultural, industrial, forestry and single-house residential. The lands contiguous to the

boundaries of the Site are in agricultural use, predominantly pasture lands and industrial, with a precast concrete manufacturing facility (Stresslite Floors Ltd.) immediately adjacent to the west of the Site. The boundaries of the lands owned comprise hedgerows and areas of scrub.

There are 18 no. scattered residential properties within the study area, primarily concentrated along the Local Road L6030 and off the N81.

There are no waste licenced or IE/IPC Licenced facilities within 1 km of the Site.



**Figure 3-4 - Corine Landcover classification**

### 3.4.6 HUMAN HEALTH

Table 3-11 summarises the general health of the percentage of persons the State, Kildare and the Rathmore ED. In the 2022 Census there was a greater percentage of persons in the Rathmore ED (91.2 %) who classified themselves as being in 'Good' or 'Very Good' health in comparison with the average for the State (82.9 %).

The percentage of persons who classified themselves as being in 'Bad' or 'Very Bad' health in Rathmore ED (1 %) was lower than those in the State and Kildare (1.7 % and 1.5 % respectively).

**Table 3-11 – General Health percentage of the population (Central Statistics Office)**

General Health	State (%)	Kildare (%)	Rathmore ED (%)
Very Good	53.2	56.8	61.9

General Health	State (%)	Kildare (%)	Rathmore ED (%)
Good	29.7	29.2	29.3
Fair	8.6	7.7	6.2
Bad	1.4	1.2	0.7
Very Bad	0.3	0.3	0.3
Not Stated	6.7	4.7	1.7

As noted, there are no waste licenced or IE/IPC Licenced facilities within 1 km of the Site. Within 5 km of the Site, there are five EPA regulated activities;

- Dillonsdown (waste facility), 2.7 km south-west;
- Roadstone Dublin Remediation Landfill, 3.0 km south-west;
- Glassco Recycling Limited, 3.3 km north-west;
- Arthurstown Landfill, 4.7 km north-west; and
- PDM timber Treatment Limited, 4.9 km north.

There are no upper or lower tier SEVESO sites within 5 km of the Site. The closest SEVESO site is Johnston Logistics Ltd, which is an upper tier SEVESO site and is located approximately 7 km to the north of the Site.

#### 3.4.6.1 Health and Safety

The Site Manager is responsible for safety management on the Site. Shillelagh Quarries Ltd. are committed to health and safety at their operations. The Shillelagh Quarries Ltd. (SQL) site manager is responsible for the working environment, traffic management, emergency procedures, first-aid arrangements and safe systems of work.

### 3.5 CHARACTERISTICS OF THE DEVELOPMENT

The rEIAR has been prepared to accompany a substitute consent application for an existing quarry located in the townland of Hempstown Commons, Co. Kildare. A detailed Project Description has been provided within Chapter 2 of this rEIAR. The lands, which are the subject of this rEIAR (EIA boundary) extend to 18.45 ha. The quarry area that makes up the application for substitute consent planning unit currently extends to approximately 10.05 ha.

Activities at the Site involved the extraction of rock (greywacke and shale) using various excavation techniques, such as drilling & blasting and rock breaking. Blasting of rock was periodically undertaken during the review period, details of activities are contained with Chapter 2 Project Description.

### 3.6 POTENTIAL EFFECTS

#### 3.6.1 POPULATION

Potential impacts from the Site which may have affected local populations during the assessment period include nuisance from noise, vibration, dusts, landscape and visuals impacts, and impacts to groundwater. The potential extent of these will be limited to the local community surrounding the Site. As identified in Section 3.1.2., the geographical study area for the assessment covers the



development area and a study area of 500 m from the EIA boundary. Assessment of potential impacts to the population of this local community will be based on residents living closest to the Site and within this 500 m buffer area. These potential impacts have been assessed in the respective chapters of: Soils and Geology (Chapter 5), Water (Chapter 6), Air Quality (Chapter 7), Noise and Vibration (Chapter 9); and Landscape and Visual (Chapter 11).

A total of 18 No. existing residential dwellings are found to be currently within 500 m of the EIA boundary, with 6 No. of these sitting within 250 m of the EIA boundary. It is noted that population increase has taken place in the Rathmore ED during the assessment period, however this was by a smaller percentage than was seen regionally or in the State.

These receptors are valued with a 'High' sensitivity. Based on the assessment of environmental impacts (identified above) in other chapters of this rEIAR it is considered that the magnitude of impact on the population dynamics of the local community has been considered to be 'Low' and 'Adverse'.

The populations within the surrounding area have increased during the assessment period and it is considered that the Site has had a '*negligible (adverse)*' direct or indirect impact on the population size, age distribution, density and household composition in the study area or in the Rathmore ED during the same period.

Employment levels at the Site have remained the same during the assessment period, therefore the potential direct impact on local population growth due to workers migrating to the area was considered to be '*negligible (adverse)*'.

### **3.6.2 EMPLOYMENT**

The numbers of employees which the Site has directly employed over the assessment period has remained the same (ca. 6 full-time). In addition, the site has created indirect employment through roles such as site service contractors and contract truck drivers, depending on market conditions.

The Site will provide aggregates to construction sites in the vicinity which has also lead to further indirect employment. It is therefore considered that the operation of the Site has had a 'low' and '*beneficial*' impact on economic activity in the area.

### **3.6.3 AMENITY (INCLUDING TOURISM)**

As noted, factors such as air quality, noise nuisance, vibration, traffic and landscape and visual can affect the amenity of an area. These items have been assessed in dedicated impact assessments in their respective chapters of this rEIAR.

Given that any existing facilities and amenity hubs in the vicinity of the Site have developed in recent years while quarrying has been undertaken, it is unlikely that the continuance of activities at the Site has impacted the tourist potential of the local area. Further information regarding landscape and visual impact and mitigation measures is included in Chapter 11 (Landscape) of this rEIAR.

The amenity areas identified in Section 3.4.4 (which include local designated green space / community facilities) are considered valuable to the local communities and have been valued with a high environmental sensitivity. Given the distance of the amenity areas from the Site it is considered that they would have perceived a '*negligible (adverse)*' magnitude of impact during the assessment period.

### 3.6.4 LAND USE

The existing operational quarry has been in use since the mid 1940's, and quarrying activities in the lands on the opposite side of the L6030 have been identified on the OSI 1888-1913 mapping. Quarrying activities in the vicinity of the Site have gradually increased in the subsequent years. With respect to social considerations, there has been little or no change to local activities as a result of quarrying activities in the vicinity of the Site since operations began, with the mainstay of local activities being agriculturally based. Therefore, as quarrying is an established practice, the continuation of extraction activities during the assessment period has been considered to have had a '*negligible (adverse)*' impact on social consideration compared with the current dynamics.

### 3.6.5 HUMAN HEALTH

Potential impacts to human health from the effects of the Site relating to the water environment surrounding the Site include discharges to the underlying groundwater. This could result in a change in water quality depending on the activities that were undertaken. There is the potential for impacted underlying groundwater to migrate to local groundwater wells and affect the users of such water supplies.

Potential impacts to human health with regards to air quality include dust generating activities on the Site. Other impacts include increased concentrations of airborne particles and combustion emissions due exhaust emissions from diesel powered vehicles/equipment used on-site and other vehicles accessing the Site.

Impacts to human health from excess noise and vibration on-site may result in; hearing loss and various vibration syndromes of workers from high level occupational exposure. Off-site impacts include the annoyance and effects on mental health in the surrounding residential receptors.

The companion chapters of this rEIAR define and assess the predicted impact of the development and set out mitigation measures from the perspective of discrete environmental factors. These chapters have determined that the assimilative capacities of those environmental factors are sufficient, with mitigation measures, to accommodate the Development without significant negative impacts and it is considered that the human health has been protected. However, for this assumption to be drawn, the mitigation measures set out in the chapters Soils and Geology (Chapter 5), Water (Chapter 6), Air Quality (Chapter 7), Noise and Vibration (Chapter 9); and Landscape and Visual (Chapter 11) of the rEIAR must be implemented.

#### 3.6.5.1 Health and Safety

The Site Manager is responsible for safety management on the Site. The predominant health and safety concerns for the human environment relates to the possibility of humans and livestock straying into the quarry area and from blast related activity at the Site.

- Fencing has been actively maintained at the Site to ensure that the risk of injury to civilians and livestock is minimised. The shared entrance gate (with Stresslite) has been to be locked and controlled by the sites' management;
- Exposed edges have been appropriately protected with low embankments and berms. These edges have also been sign-posted appropriately to identify any potential hazard; and
- Blasting has taken place at the Site using licenced and experienced operators. Site management has given advance notification of blast events to nearby residents as is standard procedure for the quarry.

SQL has been committed to implementing the provisions of the Safety, Health and Welfare at Work Act 2005, the Safety, Health and Welfare at Work (General Application) Regulations 2007, the Safety (Working At Height) Regulations 2006, the Health and Welfare at Work (Construction) Regulations 2013 and the Safety, Health and Welfare at Work General Application 2016, S.I. 36 of 2016, to ensure so far as is reasonably practicable the safety, health and welfare of all employees and other persons who may be affected by site activities. SQL is committed to providing appropriate information, training and supervision to employees who will be operating at the Site.

All site employees, contractors and subcontractors have been required to wear a minimum personal protective equipment (PPE) whilst on-site, these are steel toed boots and a high visibility jacket or vest. Other task specific PPE which has been used at the Site includes, safety glasses/goggles, hard hats, gloves and hearing protection.

The staff and local populations are both valued as 'High' sensitivity receptors. Based on the assessment of impacts (identified above) and embedded management measures employed at the Site it is considered that the Site has had a '*negligible (adverse)*' direct or indirect impact on health and safety.

**Table 3-12 - Evaluation of Impacts and their Effect Significance**

Receptor	Sensitivity	Source of Impact/Description of Change	Impact Magnitude	Level of Effect
Local Populations / Communities	High	Change in local population community size, age distribution, density and household composition due to nuisance environmental emissions from the Site.	Negligible (adverse)	Slight
Local Populations / Communities	High	Change in local population community size, age distribution, density and household composition due to quarry workers migrating to the area.	Negligible (adverse)	Slight
Local Employment	High	Provision of continuing employment at the Site over the period of 29 December 2019 – present	Low (beneficial)	Slight
Land Use and Development	Medium	Land take from rural agricultural enterprises.	Negligible (adverse)	Imperceptible
Amenity	Low	Nuisance impacts from factors such as air quality, noise, vibration, traffic and landscape and visual on community lands, sports and recreation areas, tourism and religious centres.	Negligible (adverse)	Imperceptible
Employees / Contractors	High	Health and safety management practices which may impact direct employees and sub-contractors on site.	Negligible (adverse)	Slight
Local Populations / Communities / Non-motorised Road Users	High	Health and safety management practices which may impact members of the public including non-motorised road users.	Negligible (adverse)	Slight

Receptor	Sensitivity	Source of Impact/Description of Change	Impact Magnitude	Level of Effect
Human health	High	Discharges and the introduction of contamination to the underlying groundwater thereby changing water quality.	Negligible (adverse)	Slight
Human health	High	The generation of fugitive and combustion emissions (dust, PM10, PM2.5, NO2 and SO2) from site activities thereby changing air quality.	Negligible (adverse)	Slight
Human health	High	Noise and vibration from Site activities impacting surrounding residential receptors through annoyance and effects on mental health.	Low (adverse)	Slight
Health and Safety - Employees / Contractors	High	Health and safety management practices which may impact direct employees and sub-contractors on site.	Low (adverse)	Slight

### 3.7 REMEDIAL MEASURES REQUIRED

No remedial measures to address impacts to the population and human health during the assessment period are required.

### 3.8 RESIDUAL EFFECTS

The assessment concludes that the Development did not give rise to significant adverse effects to surrounding human environment during the assessment period of 29 December 2019 to present. In all cases the residual effect is considered to be **Not Significant**.

### 3.9 CUMULATIVE EFFECTS

The cumulative effects associated with other permitted / under construction third-party developments have been considered in Chapter 15 of this rEIAR. Cumulative effects are considered to be **Not Significant**.

### 3.10 MONITORING

There is no monitoring required other than that identified in other chapters of this rEIAR.

### 3.11 DIFFICULTIES ENCOUNTERED

No particular difficulties were encountered in the preparation of this chapter of the rEIAR.

### 3.12 SUMMARY AND CONCLUSIONS

To conclude, the activities at the Site have not caused any significant adverse effects to the human environment surrounding the Site during the assessment period of 29 December 2019 to present.

### 3.13 REFERENCES

Central Statistics Office (2024). CSO Visual. Available at:

[https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-2282-13a3-e055-000000000001\\_Ireland](https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-2282-13a3-e055-000000000001_Ireland) (Accessed 19 November 2024).

EPA (2022). Guidelines on the information to be contained in Environmental Impact Assessment Reports.