### **SECTION 3: HUMAN BEINGS**

### 3.1 INTRODUCTION

This section of the Environmental Impact Statement addresses the impact of the proposed waste recovery facility at the limestone quarry at Milverton, Skerries, Co. Dublin on the surrounding human environment. The Environmental Impact Statement is being prepared in support of an application by Roadstone Dublin Ltd. for a waste licence to provide for backfilling and restoration of the quarry using imported inert soils and stones.

In undertaking this study, regard has been had to the requirements of the EPA publication 'Guidelines on the Information to be Contained in Environmental Impact Statements' for waste facilities, and includes, but is not limited to consideration of the economic activities, existing amenities and sensitive receptors in the vicinity of the site.

### 3.2 RECEIVING ENVIRONMENT

# 3.2.1 Outline of Baseline Study and Methodology

The baseline study of the area, with regard to Human Beings, involved study of the Census Report (1996, 2002 and 2006) information for Skerries and the Greater Dublin Area; Live Register Statistics from the Irish National Organization of the Unemployed and other local information sources.

The townland of Milverton, in which the proposed inert soil recovery facility is located within the District Electoral Division (DED) of Skerries-Holmpatrick in north County Dublin, within the administrative area of Fingal County Council. However, as Milverton lies 1.5 km southwest of Skerries, this study will largely focus on Skerries and its immediate environs. It is considered that the future growth and development of Skerries will have the strongest influence on the lives of those currently living and working in and around the Milverton area.

A survey of existing residential housing in the Milverton area was undertaken as part of this study. Ordnance Survey maps and aerial photography were also examined. Local knowledge of recent and potential future housing development in the area was also used to establish the local housing pattern.

# 3.2.2 Site Context

The limestone quarry at Milverton operated by Roadstone Dublin Ltd. is located in the south-eastern corner of Milverton townland, in north County Dublin Milverton is located approximately 1.5 km southwest of Skerries and 5 km north-east of Lusk, Co. Dublin. The site is currently accessed from the R127 Regional Road running between Lusk and Skerries.

A small number of existing residences are located in close proximity to the proposed waste recovery facility. The nearest residential property is a rented house owned by Roadstone Dublin which lies immediately north of the quarry, within its landholding. Other residential property is located immediately to the west and east of the site, along the R127 Regional Road and along the local road leading to Skerries Golf Course which lies beyond the southwestern corner of the site. At a greater distance (>0.5km) to the north-east of the application site, beyond the Dublin to Belfast rail line, there is well established suburban development on the western fringes of Skerries (Hillside). The existing housing pattern in the vicinity of the site is shown on Figure 3.1.

The Regional Planning Guidelines for the Greater Dublin Area 2004-2016 identifies Skerries within the 'Hinterland' area. Given its location along a designated Transportation Corridor, specifically the main Dublin to Belfast rail line, the town of Skerries is designated an appropriate location for future residential development within the Greater Dublin Area. However, the current Fingal County Development Plan for 2005-2011 does not identify Skerries as a major development centre over the life of the plan.

The zoning objective for the application site and the surrounding lands identified by the Fingal County Development Plan 2005-2011 is to protect and provide for the development of agriculture

and rural amenity. Lands immediately east of the site and the nearby railway line are zoned for new residential development under the Hacketstown Skerries Local Area Plan adopted in 2007.

The Local Area Plan also makes provision for the future construction of a southern relief road linking the R127 Regional Road (to Lusk) west of Milverton Quarry, to the R128 Regional Road to Rush. The proposed link road, which runs south of the quarry, will relieve restrictions on access to Skerries imposed by the existing narrow rail bridge on the R127 Regional Road east of Milverton Quarry. The proposed zonation of lands in the vicinity of the application site is shown on the extract from the Fingal County Development Plan in Figure 3.2 (with ring road superimposed).

# 3.2.3 Demography

The proposed waste recovery facility is located within the limestone quarry operated by Roadstone Dublin Ltd. in the townland of Milverton. The site lies in the District Electoral Division (DED) of Skerries - Holmpatrick, in which some 1,360 people reside. This DED is relatively rural in nature and demographic trends in the area generally mirror those in Skerries town, Fingal and north County Dublin generally. The current population of Skerries is 9,535.

Demographic trends for Skerries - Holmpatrick, Skerries and Fingal over the past ten years, are shown in Table 3.1a and 3.1b below. These indicate that, over this period, there has been a marked decrease in the population of Skerries-Holmpatrick and a moderate increase in the population of Skerries itself.

Year	Skerries	Skerries Holmpatrick	Total	Fingal	
1996	5,704	1,635 She	7,339	167,683	
2002	7,612	1,537, 2017	9,149	196,413	
Change 1996-2002	33.5%	all Pitted 6.0%	24.7	17.1%	

Source: Census of Population 1996, 2002, C.S.O.,

Year	Skerries High	Skerries Holmpatrick	Total	Fingal	
2002	7,612	1,537	9,149	196,413	
2006	<b>8</b> ,175	1,360	9,535	239,992	
Change	7.4%	-11.5	4.2%	22.2%	
2002-2006	7.4/0	-11.5	4.2 /0	<i>LL.L</i> /0	

Source: Census of Population 2002, 2006, C.S.O..

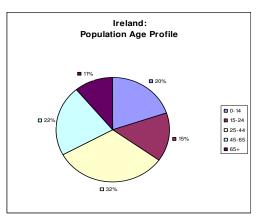
Table 3.1a and 3.1b: Recent Population Trends

The population of Skerries Town recorded in the 2006 Census was 7.4% higher than that recorded at the time of the 2002 Census, while that within the Fingal County Council area increased by 22.2% over the same period. Population projections estimate that the population of Fingal will rise to at least 260,000 by 2010. Other estimates put this higher, up to 280,900 by 2011. In conjunction with this local and regional trend in population growth, there will be an associated increase in demand for housing as Skerries falls within the Dublin "commuter belt".

The age profile at local and national level is indicated in Table 3.2 below.

	Total	0-14	15-24	25-44	45-65	65+
Skerries Town	9,535	2,194	1,382	2,998	2,117	844
		23.0%	14.0%	32.0%	22.0%	9.0%
State	4,239,848	864,449	632,732	1,345,873	928,868	467,926
		20.0%	15.0%	32.0%	22.0%	11.0%

Source: Census 2006



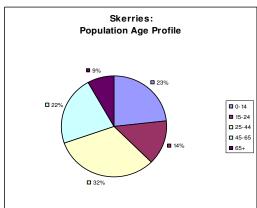


Table 3.2: Age Profile

All age groups in Skerries are similar, or in slight variance with State averages. A high proportion of the local population (32%) comprises adults in the traditional household formation age category, in the 25-44 age group. This group is made up mostly with young people working or studying or working-age parents. The second highest proportion of the population comprises people in the 44-65 age group (22%), which comprises mostly older adults, including working parents. A higher proportion of adults in the younger and older age groups relative to the national average is often characteristic of populations in urban areas.

Combining the 0-14 and 65 plus age groups gives an indication of the level of dependency within an area. The result is that the Skerries has a level of dependency of 32% compared to the State average of 31%. The implication of the dependency ratio is that there is an increased requirement for support services in the community such as schools, healthcare etc.

Recent population increases in the Skeries area suggest that the area is favoured by young adults of household formation age and young family units. This is most likely to reflect its proximity to an expanding urban centre in Greater Dublin and its proximity to an established, well serviced public transport corridor.

# 3.2.4 Employment

Census data indicates that a significant proportion of the working population of Skerries do not work in the town itself. Travel to work figures from Census 2006 indicates that over 65% of the working population in Skerries Town travels in excess of 10 kilometers to work and that only 6% travel 5 to 10 kilometers. Census 2006 figures also show that 32% of workers in Dublin County and City travel more than 25 kilometers to work, compared with 15.6% of workers nationwide.

Given that Skerries is a dormitory town within the Greater Dublin Area, many of the jobs are located and affected by the employment conditions within the Greater Dublin Area. According to the March 2009 Live Register statistics provided by the Irish National Organization of the Unemployed (INOU), there were 87,814 persons in County Dublin and 371,271 in the State.

A breakdown of the industry in which those at work are employed is provided below in Table 3.3 overleaf. Employment by Industry in Skerries follows a national pattern with the highest participation in the clerical and government workers sector, professional sector and sales sector reflecting the generally urbanised nature of this area. The level of participations in other sectors of employment is either in line with the national average or slightly lower.

	Sta	ite	Skerries Town		Fingal		Greater Dublin	
Agriculture	88,414	4%	5	0.3%	1,211	1%	842	0.1%
Manufacturing	245,234	12%	30	1.5%	11,000	9%	43,413	7.9%
Building and Construction	183,429	9%	4	0.2%	7,402	6%	31,751	6%
Clerical / Govt Workers	365,670	18%	675	34%	31,005	24%	120,557	22%
Communication and Transport	114,919	5%	26	2%	9,134	7%	32,698	6%
Sales	284,164	14%	325	16%	19,800	15%	86,668	16%
Professional	342,414	16%	487	24%	22,217	17%	100,704	19%
Service	224,964	11%	273	14%	12,361	10%	55,464	10%
Other	230,918	11%	170	8%	14,591	11%	72,272	13%

Source: Census 2006

Table 3.3 : Employment by Industry

#### 3.2.5 **Economic Activities**

There are three principle types of economic activity prevalent in the Milverton area:

- Agriculture
- 2. Industry

 Industry
Leisure Industry
Agriculture
Agriculture
The lands located immediately around the application site are used for agricultural purposes, typically tillage and grazing. With the exception of the application site and isolated residential housing, almost the entire extent of Milverton townland is used for agricultural purposes, with only a small proportion of forestry.

### 2. Industry

There has been active extraction of limestone at Milverton Quarry dating back many years, with a quarry indicated at this site on the first edition Ordnance Survey map of the area, dating from around the 1830's. It is a long established activity and has provided employment in the area up to relatively recently. Quarrying and concrete batching activities were suspended at the application site in August 2008 in response to a downturn in economic activity. The retail stone paving outlet at the site which traded as Roadstone Retail also closed at the same time.

The only other quarry in the surrounding area is an abandoned limestone quarry in Ballykea townland approximately 1.5kilometres from Skerries on the R128 Regional Road to Rush. There are old disused copper mines located in Loughshinny, approximately 3 kilometres south-east of the application site.

The wider area beyond the proposed waste recovery site includes Skerries town, which functions as a retail and service centre and has a thriving business community. Skerries originally grew out of a busy fishing port. Skerries Harbour continues to service a small fishing community and is known as a landing port for Dublin Bay prawns. The manufacturing of lace was also important to the local economy in the past. More recently, a shirt factory operated in the town for several decades before closing in 1987. At present, there is no significant medium to large scale industrial activity in the Skerries Area.

#### 3 Leisure Industry

Skerries Golf Club is located at Hacketstown, approximately 0.5 km south of the application site. It was founded in 1905 and attracts golfers from across Ireland. Given its proximity to Dublin Airport, it is also an attraction for tourists travelling to the Dublin area from overseas. The 18-hole, 6107m, par 73 parkland course has undulating fairways and mature trees and on good days offers golfers views extending from the Mourne Mountains to Howth and the Wicklow Mountains.

Skerries is a picturesque, long-established coastal village and as such, is a local tourist attraction which typically attracts day trippers out of Dublin. Attractions include the Skerries Mills heritage park (with preserved / restored watermill and windmills), the islands lying immediately offshore, a long sandy beach, a grass promenade which runs the length of the beach, Red Island Scenic Park and a children's playground. Several restaurants and pubs are located in and around the harbour area, as is the sailing club. A colony of grey seals also resides around the harbour area and attracts visitors. There are a small number of existing guesthouses, hotels and other related tourist facilities located in and around Skerries.

## 3.2.6 Existing Amenities

As previously noted, the Milverton area is predominantly rural in nature. It has no churches, schools, retail outlets (apart from Roadstone's recently closed paving shop) or service industry.

There are a wide variety of recreational, social, community and sport facilities in Skerries, which are available to local residents in Milverton. Apart from the golf course, these include an indoor sports arena (for badminton, basketball, volleyball, table tennis etc.), an outdoor all weather football pitch, gym and tennis courts located at Skerries Community Centre. There is a rugby club and sailing club in the town, as well as riding stables and a pitch and putt course.

The Fingal County Development Plan indicates that the townland of Milverton lies within the designated coastal landscape character area. Appendix B of the Plan identifies and characterises a number of landscape groups within Fingal. Milverton is included within the Skerries hinterland (LG5). This area, in contrast with flatter areas along the coast, is considered to be more pronounced from a landscape perspective, with a ridge of higher ground running some distance inland, to the west. The elevated nature of the ground and its enhanced visibility means that it is deemed to be sensitive to the effects of development.

The Skerries area is rich in historic amenities. These include:

- The Skerries Mills industrial and heritage centre and town park comprises a watermill, a 5-sail windmill and 4-sail windmill with associated mill races, mill pond and wetlands.
- The Martello Tower on Red Island, just east of the harbour, is one of a series built in the 1800's as a defence against a possible Napoleonic invasion.
- Milverton Demense dominates the Skerries hinterland and commands extensive views of the surrounding area.
- Ardgillan Demense, approximately 2km north-west of Skerries is a large country house with castellated embellishments standing on an elevated site with extensive sea-views. The demesne consists of 82 hectares of rolling pastureland, mixed woodland and gardens.
- The ruins of a large church and castle at Baldongan, approximately 2km south-west of Skerries
- St Patrick's Island, where legend holds that St. Patrick first landed in Ireland in 432AD

The Skerries Islands, a group of three small uninhabited islands located between 0.5km and 1.5km off the coast, are designated Special Protection Areas (SPA's) for wild birds. Shenick Island and St. Patrick's are of similar size, while Colt Island is smaller. The islands are of high ornithological importance for both breeding seabirds and wintering waterfowl, with six species having populations of National Importance. In addition, there is also an Internationally Important population of Brent Goose.

An area between Loughshinny and Skerries is designated a Proposed Natural Heritage Area (pNHA) on the grounds of its dry grassland habitat. This coastal area is also of notable geological interest, comprising a variety of rock types, typically conglomerates, limestones and shales.

# 3.2.7 Sensitive Receptors

At the present time, the principal sensitive receptors in the vicinity of the application site comprise approximately 10 private properties immediately beyond the application site and within 250m of the site boundary. These properties are identified on Figure 3.1. A larger number of residential properties are located at a greater distance beyond the application site (up to 500m) and are also identified on Figure 3.1

### 3.3 IMPACT OF THE SCHEME

The proposed waste recovery facility at Milverton will require importation of inert soil and stones from construction sites across North County Dublin, Meath and Louth. The imported soil and stones will be used to backfill the quarry void. Some inert concrete and brick and/or recovered construction and demolition waste (secondary aggregate) will be imported occasionally to construct temporary internal haul roads across the Milverton site as and when required.

The duration of the quarry backfilling works is expected to be of the order of 7.5 years, but is ultimately dependent on the rate of infilling. The location and intensity of associated environmental impacts will vary only very slightly according as the active backfilling area moves across the site over time.

Ultimately, all of the effects of a development on the environment impinge upon human beings. Direct effects relate to matters such as water and air quality, noise, and changes to landscape character. Indirect effects relate to such matters as flora and fauna.

The impact of the proposed waste recovery facility on human beings is addressed in the following sub-sections by means of an appraisal of the effects of the development on the environment in general, of which human beings are an integral part.

# 3.3.1 Short-Term Impacts

The impacts on human beings will arise mainly through environmental factors that are detailed in other sections of this EIS, most notably noise and air quality (including dust). While there will be negligible or no impact on much of the local residential housing identified on Figure 3.1, there may be some very minor, limited impact at the residences closest to the application site (most notably those fronting onto the R127 Regional Road) when the active backfilling and restoration works are being undertaken at the northern end of the facility.

The noise and dust impacts which are likely to arise at these residential properties are associated with operational activities, specifically backfilling with soil and stones. These impacts are likely to be only marginal and are classified as temporary, minor and negative.

The potential and/or predicted impacts are detailed elsewhere in this EIS (Section 6 - Water, Section 7 – Air, Section 8 – Noise, Section 10 – Landscape and Section 11 – Material Assets).

The importation of inert materials via the existing local road network may have adverse implications for existing traffic levels or the safety of traffic movements along the R127 Regional Road, principally south of the site, as HGV traffic travels to and from the Dublin area, and to a lesser extent to the north of the site as it moves to and from Balbriggan via Skerries. This impact is considered separately in Section 12 of this EIS.

The movement of HGV traffic along the R127 Regional Road may also have a temporary minor to moderate negative impact on existing noise and dust levels, depending on the intensity of traffic movements.

The proposed restoration of the former quarry will have a very minor positive impact as regards existing employment levels. It is envisaged that the number of dedicated staff permanently employed at the facility will be one and possibly two, depending on the rate of backfilling. Qualified contractors will be brought on site to carry out any necessary infrastructure construction works. Environmental monitoring will generally be undertaken by Roadstone Dublin's in-house staff.

# 3.3.2 Long-Term Impacts

The principal long-term impact of infilling of the existing void and backfilling to former ground level will be the removal of an unsightly feature in the landscape and reinstatement of the site to its pre-extraction landform. This impact is classified as permanent, minor and positive.

At the end of the quarry backfilling operations, there will be a long-term, permanent reduction in HGV traffic movements over the local road network leading to and from the site, with consequent improvement of the human environment.

# 3.3.3 Interaction with other Environmental Receptors

As mentioned above, all environmental factors ultimately impact upon, and interact with human beings. These impacts are discussed in detail in the relevant sections of this EIS.

### 3.4 MITIGATION MEASURES

Mitigation measures to be adopted during the quarry backfilling will relate primarily to minimising any impacts of the project on surrounding sensitive receptors. These measures are discussed elsewhere in this EIS, in the sections to which they relate.

It is anticipated, in view of the continuation of quarrying activities at this site up to only relatively recently, that waste recovery activities will not give rise to any increased noise or dust nuisance at the nearest residential properties. Noise and dust impacts will be mitigated to a considerable degree, as they were during the quarrying operation, by someoning berms constructed along the northern and western boundaries. In the unlikely event that emissions exceed permit threshold concentrations or adjoining residents complain of nuisance, the existing screening berms can be raised or planted in order to suppress emission levels further.

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