SECTION 11: MATERIAL ASSETS

11.1 INTRODUCTION

This study addresses the impact of the proposed backfilling and restoration of the limestone quarry which is in the ownership of Roadstone Limited at Milverton, Skerries, Co. Dublin on material assets in the surrounding locality. This study is intended to accompany the application by Roadstone Ltd. to the Environmental Protection Agency in respect of the proposed Waste Recovery activities.

In undertaking this study, due regard has been had to aspects such as infrastructure and economic activities in the vicinity of the site, and the impact of the proposed backfilling and restoration of the quarry. The study has also had regard to the EPA publication '*Guidelines on the Information to be contained in Environmental Impact Statement' (March 2002)*.

11.2 RECEIVING ENVIRONMENT

11.2.1 Outline and Methodology of the Baseline Study

The baseline study of the area with regard to material assets involved a general assessment of the local road network around the application site, economic activities, commercial properties and housing in the area. Information presented is based primarily on observations made during an initial site visit to the area in January 2009 and then again in May 2014 and information obtained from local sources, including the internet.

11.2.2 Site Context

The application site lies in the townland of Milverton, in North County Dublin, within an area designated by the Fingal County Development Plan as 'The Skerries Hinterland'. The application site is located approximately 1.5km south-west of Skerries and approximately 5km north-east of Lusk.

The town of Skerries is located on a designated Transportation Corridor. As the town and surrounding area is well served by public transport and specifically the rail line to central Dublin, it is considered by the Fingal County Development Plan to be an appropriate location for residential development. The current County Development Plan 2011-2017 designates Skerries a development centre within the category of 'Moderate Sustainable Growth Towns' and sets out a development strategy for the town.

The current Fingal County Development Plan 2011-2017 identifies the land zoning objective for the application site at Milverton as being '*to protect and promote in a balanced way, the development of agriculture and rural-related enterprise, biodiversity, the rural landscape, and the built and cultural heritage'*. The lands beyond the eastern site boundary, to the east of the nearby rail line, are zoned for new residential communities by the Hacketstown Local Area Plan. This plan was published by the Planning Authority in June 2007 and sets out a strategy for development of the subject lands. Its key objective is to provide an attractive housing district at the southern edge of Skerries within walking distance of Skerries train station.

11.2.3 Infrastructure

Traffic access to the application site is primarily obtained via the M1 Motorway and the Lissenhall Interchange. The Lissenhall Interchange has recently been upgraded to include for a significant capacity enhancement at the junction as part of an overall upgrade scheme for the M1 motorway between Junction 3 (Swords South) to Junction 4 (Lissenhall / Swords North) where an additional lane was added in each direction. Following a traffic modelling exercise, an optimal upgrade scheme was identified with the introduction of slip roads through the roundabouts at the signalised dumbbell junction.

Traffic turning off the M1 runs northwards along the R132 Regional Road (the former N1 National Primary Road) before turning right onto the R127 Regional Road at Blake's Cross. Traffic

continues north along the R127 and diverts along the recently opened ring road around Lusk village before arriving at the site after a distance of approximately 10km. Access to the site may also be obtained by running southwards along the R127 Regional Road from Balbriggan and through the centre of Skerries.

10kV overhead electricity lines run along the southern boundary of the application site. The main Dublin to Belfast railway line runs north-south a short distance beyond the eastern boundary of the application site.

11.2.4 Land Use

The area surrounding the application site is predominantly rural in nature and is undeveloped except for some limited low density residential housing and some outdoor leisure facilities.

The application site was, when operational, the only established employment / industrial facility in the rural fringe around Skerries. The principal agricultural activities on the lands surrounding the application site are tillage (crop growing) and cattle grazing. Some agricultural land immediately east of the rail line is currently zoned for residential development by the Hacketstown Local Area Plan. Other agricultural lands to the north-east of the site are likely to be zoned for future development by the Townparks Local Area Plan, currently prepared but not yet adopted.

Skerries Golf Club is located to the south of the application site and is accessed by a local road. Housing patterns are typically scattered and of low density around the application site. As might be expected, residential, retail and commercial densities increase eastwards away from the site and towards Skerries.

Most of the tourist interest in the area is associated with the attractiveness of the local coastal landscape along the 'North Dublin Costal Corridor'. Historical tourist attractions and facilities are mostly focused mostly on the nearby town of Skerries which benefits from the "day-tripper" and "stay-over visitor" markets. Local land use is indicated on Figure 11.1

11.2.5 Housing

Residential housing in Skerries and indeed the Milverton area is considered as part of a much larger market in the Greater Dublin Area. Most housing in the study area has been established for several (>5) years. The proximity of the Milverton area to both Skerries and the Greater Dublin Area with their large employment centres and population growth pressures are significant drivers of future development of housing in the area.

11.2.6 Groundwater

The published geological memoir states that the bedrock hydrogeology in this region of Ireland is dominated by secondary fissure permeability and specifically that of the Holmpatrick Formation. This bedrock is classified as a locally important karstified bedrock. The bulk permeability of the formation is low, with groundwater storage and movement mainly constrained to the upper weathered horizons of this rock formation and associated fractures / faults within it.

Groundwater vulnerability maps published on the EPA website indicate that the site is located in an area with high to extreme Groundwater Vulnerability status. The groundwater vulnerability reflects the potential for rapid groundwater movement through quaternary deposits into the underlying bedrock, primarily because they are either absent or relatively thin (<3m).

The excavation has intersected the groundwater table and had sequentially lowered it around the periphery of the excavation with each quarry bench. There are minor groundwater inflows to the quarry that drain to the floor, where they are contained. During quarrying operations water was pumped from the quarry floor as and when required in order to maintain dry conditions on the floor; the pumps had an estimated discharge rate of 5l/s in order to maintain dry conditions on the quarry floor.

The quarry void extends to between 8m and 12m AOD. At present there is c. 10m of water in the quarry void and the water level is at approximately 2m AOD. During quarrying there were a

number of small groundwater seepages on the quarry faces, and both direct precipitation and influent groundwater was pumped out from a sump on the quarry floor.

It is understood that potable water supply to most residential properties in the Milverton area is provided by the Local Authority, with none of the properties sourcing it from a private groundwater well.

11.3 IMPACT OF SCHEME

11.3.1 Short-Term Impacts

As the application site has functioned as a limestone quarry for more than 30 years, it is considered that its future operation as a waste recovery facility is generally unlikely to give rise to any additional short-term impacts on material assets, over and above those which existed up to the closure of the quarry.

The anticipated average level of HGV traffic to and from the site could be up to double that which existed up to 2008, when quarrying and production of construction materials at the site was suspended. The HGV traffic could also cause some mud and soil to be carried onto the local road network.

In addition to HGV movements, there may be some minor additional traffic movement associated with employees and visitors attending the site. Some additional traffic movement is also likely to arise in the very short term at the outset of the development, when additional site infrastructure is being installed. The impact of these traffic movements on local residential amenity is assessed as moderate, negative and temporary given the previous significant levels of HGV traffic carried by these roads up to the relatively recent past. Further assessment of the likely traffic impacts arising from the operation of the proposed waste recovery facility is presented in Chapter 12 of this EIS.

Given that a quarry was operated at the application site up to the middle of 2008, the proposed waste recovery facility is unlikely to give rise to a greater environmental impact on the amenity value of surrounding area, most notably at Skerries Golf Club. Given that established tourist and/or leisure activities in the area are mostly concentrated on Skerries town and harbour, there is also unlikely to be any impact on local tourism or amenities when waste recovery activity is being undertaken.

The proposed quarry backfilling activity at the site presents a number of risks to groundwater including fuel spillage, increases in suspended solids in run-off and placement of a rogue load of soils. These risks are addressed in more detail in Chapter 6 of this Environmental Impact Statement.

There may be some intermittent short-term impact on the residential amenity of the property immediately beyond the northern boundary of the application site as backfilling proceeds on the northern side of the quarry void. The most likely short-term impact will be a minor increase in ambient noise and dust levels. These impacts are classified as minor and temporary in nature and are discussed in more detail in Sections 7 and 8 of this Environmental Impact Statement.

11.3.2 Long-Term Impacts

The proposed backfilling and restoration of the quarry will largely restore the landscape to its original, pre-extraction state, but for a section of the upper eastern quarry face which will remain exposed in order to retain the existing nesting habitat for falcons. Backfilling activities will not impact on, or interfere with, any established agricultural activities at surrounding landholdings. On completion, the backfilling works will provide a final landform which is more appropriate for possible future development (should that be appropriate).

In the long-term, backfilling the quarry void with a significant depth of inert impermeable, cohesive soil (predominantly glacial till) will increase protection to, and reduce the vulnerability of, the

existing groundwater aquifer to contamination risks associated with accidental chemical spills and agricultural or animal wastes.

Given that all materials used to backfill the existing quarry void will be inert and that specific measures will be implemented to ensure this, there will be no long term risks of soil or groundwater pollution and no detrimental impacts on land values or residential property value. It is arguable that the backfilling of a large quarry void may actually enhance property values in the immediate vicinity of the site in the longer term.

11.3.3 Interaction with other Environmental Receptors

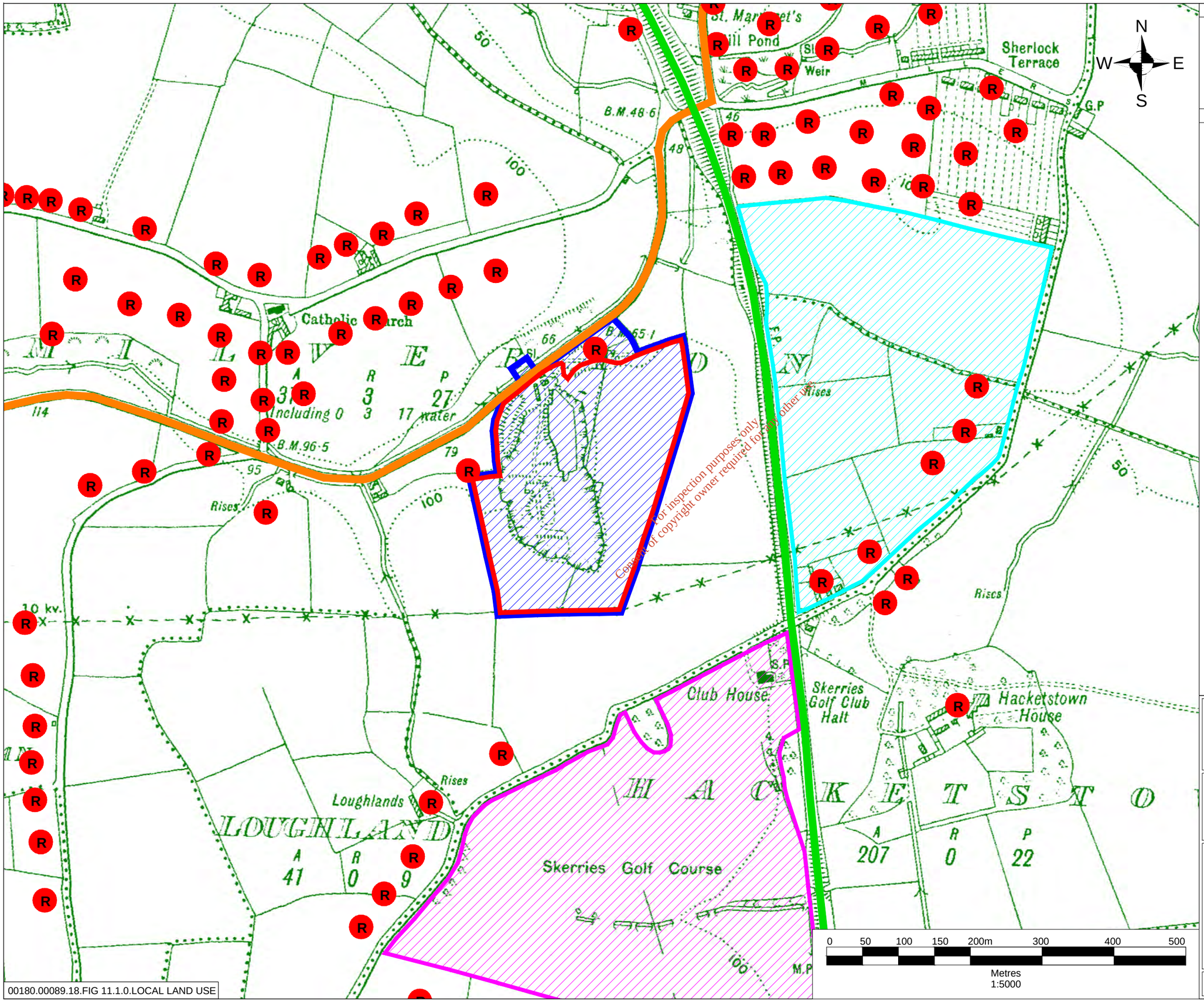
There are no additional interactions other than those discussed in the text above.

11.4 MITIGATION MEASURES

Warning notices, speed restriction signs and construction traffic signposting will be established along the existing local road network to direct traffic to the waste recovery facility. Signposting will also be erected along paved and unpaved roads within the application site in order to maintain a safe and orderly traffic regime at the site. All HGV traffic exiting the waste recovery facility will pass through a wheelwash, thereby minimising the amount of mud and soil carried onto the internal haul roads and the local public road network.

Measures to minimise groundwater, noise and dust impacts at nearby residences will be implemented when waste recovery and active backfilling operations are under way: refer to Sections 6, 7 and 8 of this Environmental Impact Statement.

FIGURES



NOTES

1. Based on OSi 25inch Dublin Sheet No. 5 & 5a

2. Ordnance Survey of Ireland Licence No. SU 0000714 (c) Ordnance Survey of Ireland & Government of Ireland

LEGEND

- Applicant's Land Interest (c. 8.6ha)
- Waste Licence Application Area (c. 7.9ha)
- Skerries Golf Club
- Quarry
- Outline of LAP Lands
- R — Residence Locations
- R127 Regional Road
- Rail Line

roadstone

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WASTE RECOVERY FACILITY,
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LOCAL LAND USE

FIGURE 11.1

Scale: 1:5,000 @ A3

Date: JUNE 2014

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