

SECTION 1: INTRODUCTION

1.1 PROPOSED DEVELOPMENT

This Environmental Impact Statement (EIS) provides supporting information to accompany a Waste Licence Application (WLA) to the Environmental Protection Agency (EPA) by Roadstone Limited in respect of a proposed inert soil recovery facility at a quarry void at Milverton, Skerries, Co. Dublin using imported and site-won soil and stone.

The location of the application site is indicated on an extract from the 1:50,000 scale Ordnance Survey Discovery series map of the area, reproduced as Figure 1.1.

The waste licence application provides for the placement, compaction and capping of approximately 1,300,000m³ of inert soil and rock. Of this approximately 300,000m³ will be sourced from existing overburden stockpiles on site, leaving a net import requirement of approximately 1,000,000m³. The inert soil and rock to be placed or recycled at this facility will be sourced from construction and demolition sites where inspection and/or testing have indicated that no contamination is present. The inert materials will be imported by permitted waste contractors.

It is likely that minor quantities of other inert materials, principally oversize or recovered (i.e. crushed and screened) concrete and bricks will be imported to the application site and used to construct temporary haul roads as and when required. These materials could be imported directly to site or sourced from construction and demolition waste recovery facilities operated by the Applicant, principally that at Huntstown Quarry.

1.2 THE SITE

1.2.1 Site Location

The site to which this Waste Licence Application refers is located entirely within the townland of Milverton, Co. Dublin, approximately 7.5km south-west of the town of Skerries. The plan extent of the lands owned by Roadstone Ltd is outlined in blue on a 1:5,000 scale map of the area, reproduced as Figure 1.2. The plan extent of the application site is also outlined in red on the same figure.

1.2.2 Site Description

The application area covers an area of approximately 7.9hectares (19.0acres) and comprises a limestone quarry with perimeter screening / overburden mounds and some ancillary site infrastructure (offices, sheds, hardstand areas etc.)

Ground levels across the site follow the (original) surrounding ground, falling west and north from locally higher ground between approximately 42mOD and 30mOD (Malin) along the eastern boundary to around 30mOD along the western and northern site boundaries. The existing quarry void covers an area of approximately 3.9 hectares (9.4 acres). The existing floor level in the quarry lies at approximately -12mOD and its depth from existing ground level typically varies from 38m to 42m along its northern and western faces to over 50m along its southern and eastern faces. Following cessation of dewatering and pumping in 2008, water level in the quarry is approximately 10m deep and currently lies at around -2mOD.

No restoration works have been undertaken since rock extraction activities and associated added value activities (principally concrete production) were suspended at the quarry in late summer 2008.

1.2.3 Site Access

Traffic access to the application site is primarily via the M1 Motorway and the Lissenhall Interchange. 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 ring road around Lusk village before arriving at the site after a distance of approximately 10km.

It is likely that only a relatively minor proportion of traffic to the site will run southwards along the R127 Regional Road, through Balbriggan and Skerries village.

Traffic movement within Roadstone's landholding is initially over a short section of paved road between the existing site entrance and the concrete production area. Thereafter traffic crossing the landholding runs over a network of unpaved haul roads.

1.2.4 Surrounding Land Use

The application site is located on the periphery of an expanding suburban town. The surrounding lands have a variety of land uses. The lands immediately surrounding the site to the east, south and west are agricultural fields, used predominantly for tillage.

A residential farmhouse and a cluster of farm buildings occur approximately 40m immediately west of the site, along the R127 Regional Road. The main Dublin to Belfast rail line runs approximately 80m-100m east of the application site at its closest point. There is a narrow area of poorly drained scrubland on sloping ground around a stream on the northern side of the R127 Regional Road, opposite the existing site entrance. The lands further north and upslope, comprise an agricultural field and a line of one-off residential houses along a local road.

At a greater distance from the application site, the lands on all sides typically comprise agricultural grassland or tilled fields interspersed with one-off private residential development. Approximately 200m beyond the north-eastern corner of the site, there are a number of residential housing estates on the outskirts of Skerries village. Skerries Golf Club is located approximately 60m (at its closest point) beyond the southern site boundary, on the southern side of the existing local road.

Existing land-use in the vicinity of the application site, including residential development, is shown on the land-use map in Figure 1.1.

1.3 LAND OWNERSHIP

Roadstone Ltd. is the holder of the freehold title to the lands around the quarry at Milverton. Its total landholding extends to approximately 8.6hectares (20.7acres). The extent of its land ownership is shown on Figure 1.1.

1.4 THE APPLICANT

Roadstone Ltd. (formerly Roadstone Wood Ltd.) was founded by the Roche Brothers in the 1930's and became part of Cement Roadstone Holdings (CRH) plc in 1970, following the merger of Roadstone and Cement Ltd. The company is Ireland's leading supplier of aggregates, construction and road building materials and employs several hundred people at 65 locations throughout the country.

It is understood that excavation and blasting of limestone at this site has been undertaken at this site for several decades. A company within the CRH group acquired the quarry in 1986 and it has been operated by Roadstone Ltd. (and its predecessor companies) since the early 1990's. Quarrying and related added value production activity (most notably concrete production) was suspended at the site in summer 2008.

1.5 PLANNING HISTORY

No planning permission was ever issued in respect of quarrying activities at the application site as it was established and operating prior to the introduction of planning controls under the Local Government (Planning and Development) Act of 1963.

This current proposal to backfill the quarry with in-situ and imported inert soil and stones is part of the quarry restoration works which were previously notified and agreed with Fingal County Council as part of the quarry registration process undertaken in accordance with Section 261 of the Planning and Development Act of 2000 (Condition No. 13 of Planning Ref. Q/05/003).

Following a European Court Judgement against Ireland in 2008, which identified shortcomings in the State's transposition of the EU Environmental Impact Assessment (EIA) and Habitats Directives into Irish law, amending legislation ('Section 261A') was introduced via the Planning and Development (Amendment) Act of 2010 to ensure that the regulation and control of quarries had due regard to the requirements of the two Directives.

A review of the planning status of the quarry undertaken by Fingal County Council in 2012, in accordance with the requirements of Section 261A, determined that Roadstone Ltd. should make an application for a form of retrospective consent (known as 'Substitute Consent') accompanied by a remedial Environmental Impact Statement (rEIS) and Natura Impact Assessment (rNIS). In its review of Fingal County Council's decision however, An Bord Pleanála set this finding aside and determined that no further action was required in order to regularise the planning status of the quarry.

1.6 PLANNING CONTEXT

1.6.1 Need for the Development

The proposed restoration and backfilling of the quarry void at Milverton using imported waste soil and stone generated by construction and development works at off-site locations is classified as a waste recovery activity under national and EU waste management legislation. The proposed activity is classified as recovery as it permits waste to serve a useful purpose (in this instance facilitating the restoration of previously quarried lands) and conserves natural resources which would otherwise have to be used to achieve the same result. As a recovery activity, it is to be preferred over the disposal option, which is least favoured under the Waste Framework Directive.

While excess soil and stone generated by construction or development projects should ideally be re-used on other development projects, this is very often not practical or viable on account of:

- (i) The poor engineering properties of many soils which makes them unacceptable for re-use;
- (ii) The limited local demand for engineering grade soils when they become available at a particular point in time; and
- (iii) The uneconomic (financial) and unsustainable (environmental) costs which would otherwise be incurred in transporting such bulky, low value material to more distant markets or buyers.

In such circumstances, the only feasible alternative to managing this particular waste stream is to recover it as close to source as possible.

The most recent National Waste Report, for 2011, published by the Environmental Protection Agency, estimates that 3,003,691 tonnes of construction and demolition waste was produced and collected in Ireland in that year, making it the single largest source of waste generated in the State. Of this approximately 2,498,946 tonnes was managed at authorised waste facilities, with approximately 500,000 tonnes of collected construction and demolition waste being largely unaccounted for.

Of the managed construction and demolition waste, the 'soil and stone' fraction accounted for 1,538,903 tonnes or approximately 62% of the total and of this, 98% was recovered at authorised (i.e. licensed or permitted) waste facilities. In view of the fact that:

- (i) Significant volumes of inert soil and stone are generated by construction and development activities;
- (ii) Up to 500,000 tonnes of construction and demolition waste collected in the State annually cannot be accounted for;
- (iii) Regulations are placing increased restrictions on the grant of planning permission and issuing of waste facility permits for deposition of soil and stone waste on prime agricultural land or reclamation of valued wetland habitats; and
- (iv) Many pre-existing inert waste recovery facilities close on an annual basis when they have reached their design capacity and/or their waste facility permit has expired.

It is necessary to ensure that new and/or replacement facilities are brought on stream to service the construction and development industries and to accommodate existing and future demand for the recovery of inert waste generated by their activities.

The establishment and operation of an inert soil waste recovery and recycling facility at Milverton will facilitate continued high level of re-use and recycling of inert soils and stones in North Dublin and around the Greater Dublin Area and help avoid needless disposal of such waste at licensed disposal facilities.

The proposed development also supports the endeavours of the National Construction and Demolition Waste Council (NCDWC) and its Voluntary Construction Industry Initiative which places responsibility on each participant in the construction industry to implement best practice in waste management by promoting waste prevention and reduction and materials re-use and recycling.

In view of the above, the proposed waste recovery facility is considered an essential element of infrastructure, necessary to achieve the aims and objectives of local and national waste policy, as well as recognised best practice for waste management in the construction and development industries.

1.6.2 Fingal County Development Plan (2011-2017)

The planning and development controls pertaining to the application site are those outlined in the current Fingal County Development Plan (2011-2017).

The zoning map for the area around the application site (Map 5 – Skerries) indicates that lands at the quarry and immediately west, south and east of it are all zoned 'RU', the stated objective for which is *'to protect and preserve, in a balanced way, the development of agriculture and rural-related enterprise, biodiversity, the rural landscape and the built and cultural heritage'*. Quarrying and extractive industries are permitted in principle under this zoning. The lands immediately north of the site, on the northern side of the R127 Regional Road are zoned 'HA', the zoning objective of which is to *'provide for the protection of high amenity areas'*.

Section 5.2 of the County Development Plan and the Green Infrastructure Map (Sheet 15) identify the application site at Milverton as a potential Nature Development Area, where opportunities exist to enhance local biodiversity. Section 5.3 of the plan and the Green Infrastructure Map identify the site as a County Geological Site (CGS) in recognition of the geological heritage value of rock formations exposed in the quarry face.

The Fingal County Development Plan indicates that the townland of Milverton lies within the designated coastal landscape area. There are no protected views or prospects into or out of the application site identified in the Plan. While there are protected views of the sea and/or coast along the local public road network immediately south-west of Skerries Golf Club, the application site is almost completely indistinguishable from surrounding countryside and does not intrude into these views.

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 classified as being highly sensitive to development.

Section 4.5 of the County Development Plan addresses construction and demolition waste and sets an objective to increase the proportion of construction and demolition waste recycled to 85% by 2013 in accordance with national policy guidance. Objective WM13 states that Waste Management Plans should be prepared and submitted as part of a planning application for medium to large sized development projects.

The proposed soil recovery facility at Milverton is consistent with the stated waste policy objectives in that it provides for:

- (i) Re-use / recovery of inert soils for site restoration purposes;

- (ii) Future development of the application site in the long-term; and
- (iii) Establishment of an inert waste recovery facility in close proximity to a major centre of economic activity in North County Dublin.

There are no designated or proposed Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or proposed Natural Heritage Areas (NHA's) within or contiguous to Roadstone's landholding at Milverton. The nearest nature conservation sites to the application site are the offshore SPA's at the Skerries Islands and the proposed Natural Heritage Areas (pNHAs) at Knock Lake, the Bog of the Ring and Loughshinny Coast approximately 5.5km west northwest, 6km west and 2.5km east southeast of the site respectively. Of the three proposed NHA sites, those at Knock Lake and the Bog of the Ring are designated on ecological grounds while that at Loughshinny is a geological heritage site. There are no tree protection orders in place for any trees or woodlands in the vicinity of the site.

Records held by the National Monuments Service of the Department of Environment, Heritage and Local Government indicate that there is a cist (a Bronze / Iron Age burial structure) located immediately beyond the eastern boundary of the application site (Ref. DU0005-032). There are no other national monuments located within 1km of the site. This is also identified as a protected structure in the Fingal County Development Plan (Appendix A, No. 233).

A stone building described as an 'engine room' at the front of Milverton Quarry is included on the Record of Protected Structures in the Fingal County Development Plan (Appendix A, No. 232). This structure is deemed to be of industrial architectural interest and the effect of its protected status is that any works or material alteration, either external or internal, requires planning permission.

A local area plan was published in June 2007 for the Hacketstown area to the south west of Skerries, immediately east of the main Dublin to Belfast rail line, and approximately 60m east of the application site at its closest point. The local area plan was originally due to extend up to 2015, but this has recently been extended out to 2019 by Fingal County Council. This plan principally provides for residential and amenity development of the area. It also envisages that Skerries Southern Relief Road will be constructed between the R127 and R128 Regional Roads in order to open up access to the proposed development lands. The proposed ring road runs immediately beyond the southern boundary of the application site, as indicated in Figure 1.3.

1.6.3 Dublin Waste Management Plan (2005-2010)

Waste management planning in the Greater Dublin region is subject to the policies and goals set out in the current Dublin Waste Management Plan (2005-2010), jointly published by the Local Authorities of Dublin City, Dun Laoghaire-Rathdown, Fingal and South Dublin. The waste management plan for the region was adopted in 2005 and although originally intended to cover the period 2005 to 2010, still remains in force. The plan will continue to remain in force until such time as it is superseded by the regional waste management plan for the newly configured East and Midlands region, at some time in 2015.

Section 10.3.3 of the Dublin Waste Management Plan (2005-2010) identifies that a large proportion of construction and demolition (C&D) waste in the Dublin region is deposited on land and that this activity is viewed as a 'recovery' activity inasmuch as the soil is nominally being used for beneficial agricultural use. The plan states however that '*a better approach (and more sustainable land use) would be to have a smaller number of waste management points for example situated in old quarries*', where amongst other activities the '*soil could be used to reinstate and restore the quarry*'. The plan further states that it is necessary to consult with stakeholders in the construction industry '*to encourage the establishment of a number of additional large scale waste processing facilities eg. in old quarries*'.

Section 19.2 of the Waste Management Plan outlines a number of objectives in respect of C&D waste recovery infrastructure. These include

- Provision of additional facilities in the Greater Dublin Region to cater for C&D waste at *existing quarries* and other suitable locations – these should include front-end removal and recycling of recoverable waste and limited to disposal of non-recoverable waste (soil) only;

- Use of soil material for beneficial use where possible. Examples of beneficial use identified by the plan include quarry re-instatement;
- Placement of restrictions on placing of C+D waste on agricultural land. Only soil will be considered for placement on land and then only where larger, alternative authorised waste facilities are not already in place.

The Applicant asserts that the development of an inert soil recovery facility at Milverton quarry is consistent with the provisions of the Dublin Waste Management Plan identified above.

The most recent annual progress report on the Dublin Waste Management Plan (2005-2010), published in 2012, indicates that in 2010, approximately 1,675,000 tonnes of construction and demolition (C+D) waste was collected within the four local authority areas within the Dublin region, of which by far the largest proportion (over 67%, or 1,125,000 tonnes) comprised soil and stones. Of the total tonnage of soil and stones, only 21% was recovered at licensed or permitted waste facilities within the City and County of Dublin. The remaining 79% was recovered at facilities outside Dublin, in surrounding counties.

1.7 CONSIDERATION OF ALTERNATIVES

In view of the policy objectives outlined in the Dublin Waste Management Plan 2005-2010, the development of waste recovery activities for inert soils and/or inert construction and demolition waste at quarries is restricted to locations where such sites occur.

The Applicant asserts that the application site offers clear environmental and economic advantages inasmuch as it is located close to a large economic centre (north County Dublin) and is readily accessible using the existing national and regional road network.

1.8 DIFFICULTIES ENCOUNTERED IN EIS COMPILATION

This Environmental Impact Assessment was compiled on the basis of published regional and local data and site-specific field surveys. No difficulties were encountered in compiling the required information.

1.9 ENVIRONMENTAL GAIN

The proposed backfilling at the quarry at Milverton will, when complete, substantially restore the existing site to its original ground level. The lands will also eventually be restored to agricultural use, most likely as grassland.

Closing the site and allowing the quarry void to flood to create a deep surface water body, would in time attract children, teenagers and/or young adults for uncontrolled and unsupervised swimming, particularly in summer months. Backfilling the quarry with inert soil and stone mitigates against this potential health and safety risk and also ensures that Roadstone Ltd., as site owner and operator, can achieve clean closure and restoration of the quarry, with no residual liabilities or development constraints.

Backfilling the existing quarry void will also provide for better protection of the underlying groundwater resource, which is currently extremely vulnerable due to the absence of any protective soil cover.

1.10 CONTRIBUTORS

Roadstone Limited appointed SLR Consulting Ireland to prepare this Environmental Impact Statement in support of its Waste Licence Application for the proposed backfilling of the quarry void at Milverton, Skerries, Co. Dublin.

Sections 1 and 2 of this EIS comprise an introduction and detailed description of the proposed development and has been prepared by SLR Consulting Ireland in consultation with Roadstone Limited.

Sections 3 to 11 of the EIS provide details of existing environmental receptors, and for each receptor, provides an assessment of the potential environmental impact of the proposed

development and details of mitigation measures, where these are considered necessary. The contributors who have assisted in the preparation of this EIS are identified by topic overleaf:

TOPIC	CONTRIBUTOR	COMPANY
Description of Development	Derek Luby BE MSc MIEI	SLR Consulting Ireland
Human Beings	Shane McDermott BSc. MSCS Aldona Binchy MSc. (Eng)	SLR Consulting Ireland
Flora and Fauna	Steve Judge MSc. MIEEM Dr Patrick Ashe BSc PhD.	Consultant
Soils and Geology	Dr. Peter Glanville BA PhD.	SLR Consulting Ireland
Surface Water and Groundwater	Dr. Peter Glanville BA PhD Dr Leslie Brown BSc. MSc. PhD	SLR Consulting Ireland
Air Quality and Climate	Aldona Binchy MSc. (Eng)	SLR Consulting Ireland
Noise and Vibration	Aldona Binchy MSc. (Eng)	SLR Consulting Ireland
Landscape	Anne Merkle Dipl-Ing. MLL Paula McCarthy BSc MSc	SLR Consulting Ireland
Cultural Heritage	Dr. Charles Mount MA	Irish Concrete Federation
Material Assets	Shane McDermott BSc. MSCS Aldona Binchy MSc. (Eng)	SLR Consulting Ireland
Traffic	Derek Luby BE MSc MIEI Matt Foy BAI	SLR Consulting Ireland / WSP Consulting Engineers
Non-Technical Summary		SLR Consulting Ireland
Co-ordination of EIS		SLR Consulting Ireland

Table 1.1 Contributors to Environmental Impact Statement

Each contributor has been fully briefed about the proposal and the background to it. They have also visited the site and are familiar with it and the local environment.

1.11 CONSULTATIONS

In preparing this Environmental Impact Statement, consultations were had with a number of organisations and agencies including:

- Fingal County Council (Planning and Environment Sections);
- Environmental Protection Agency (Office of Licensing and Guidance);
- Geological Survey of Ireland (to discuss geological heritage and aquifer classification).

Other consultations and informal discussion held by contributors in undertaking their environmental impact assessments are detailed in the specialist environmental sections of the EIS, together with details of relevant archives and documentation held by state agencies and organisations

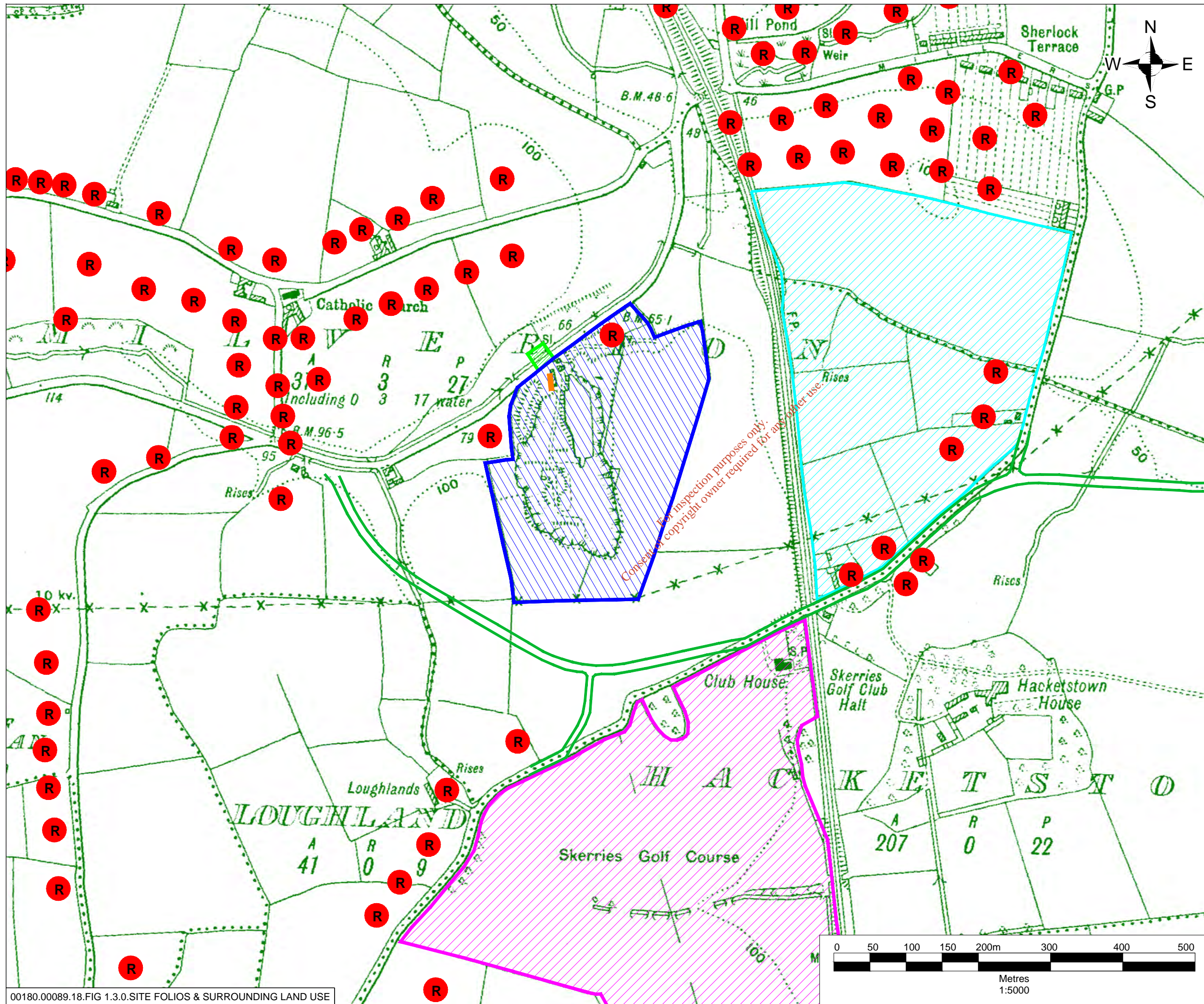
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FIGURES

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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

	Unregistered Land Held By Deed (c. 8.6ha)
	Folio 4097 (c. 0.06ha)
	Skerries Golf Club
	Quarry
	Proposed Southern Relief Road
	Engine Room
	Outline of LAP Lands
	Residence Locations

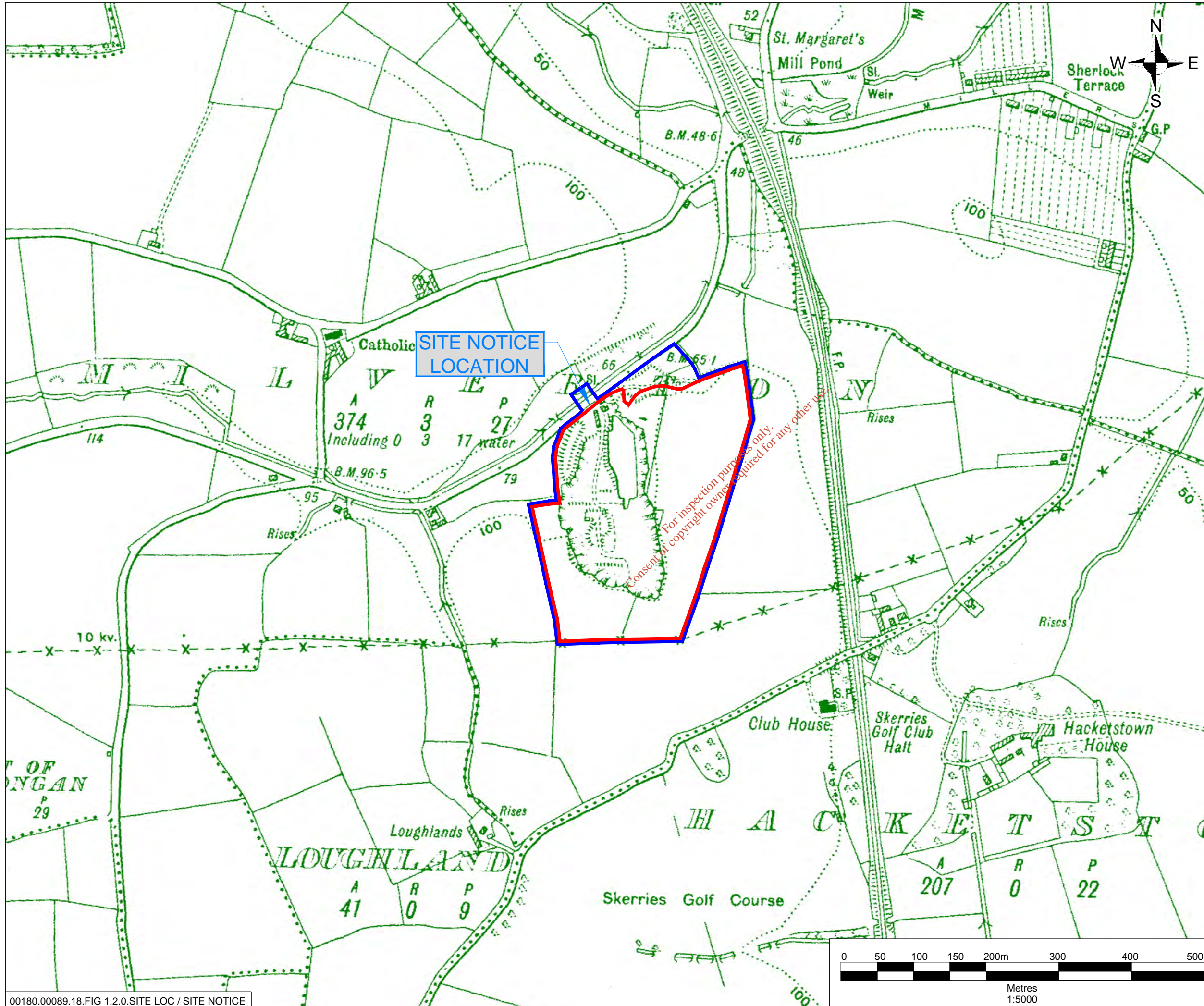



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ROADSTONE LTD.
WASTE LICENCE APPLICATION
WASTE RECOVERY FACILITY,
MILVERTON, SKERRIES, CO. DUBLIN
SITE FOLIOS AND SURROUNDING
LAND USE

FIGURE 1.3

Scale 1:5,000 @ A3 Date JUNE 2014



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

- Applicants Landholding (c. 8.6ha)
- Waste Licence Application Area (c. 7.9ha)



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ROADSTONE LTD.
WASTE LICENCE APPLICATION
WASTE RECOVERY FACILITY,
MILVERTON, SKERRIES, CO. DUBLIN
SITE LOCATION / SITE NOTICE

FIGURE 1.2

Scale 1:5,000 @ A3 Date JUNE 2014



LEGEND

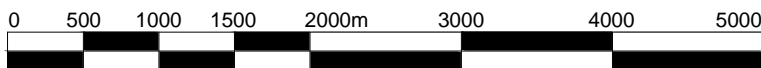
 Applicant's Land Interest (c.8.6 ha)



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NOTES

1. Extract from Ordnance Survey Discovery Map No. 43
2. Ordnance Survey Ireland Licence No. SU 0000714 (c)
 Ordnance Survey Ireland / Government of Ireland



Metres
 1:50,000

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WASTE LICENCE APPLICATION
WASTE RECOVERY FACILITY,
MILVERTON, SKERRIES, CO. DUBLIN
SITE LOCATION PLAN

FIGURE 1.1

Scale
 1:50,000 @ A4

Date
 JUNE 2014