

## 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 Dublin Limited for continued operation of its existing construction and demolition waste recovery facility at Fassaroe, Bray, Co. Wicklow and the backfilling of the adjoining, worked out quarry void using imported and site-won inert soils.

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 backfilling of the existing quarry void using approximately 750,000 tonnes of inert soil and stone. It also provides for processing and recovery of approximately 20,000 tonnes of inert construction materials per annum (principally concrete, block, brick, paving stones, granular fill, ceramics etc.) for re-use as secondary aggregate on off-site construction projects.

The inert materials to be imported for recovery 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.

### 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 Fassaroe, Co. Wicklow approximately 1.5km west of Bray town and 2km east of Enniskerry village. The plan extent of the lands owned by Roadstone Dublin Ltd. is outlined in blue on a 1:10,560 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 site covers an area of approximately 21.4 hectares (51.5 acres). The site is located within an existing construction materials production facility operated by Roadstone Dublin Ltd. The existing construction and demolition waste recovery facility is located at the northern end of the application site, on lands which have been partially levelled. The quarry void to be backfilled using inert soil and stone is located at the eastern end of the application site.

Ground levels across the site follow that of the (original) surrounding ground, falling south-eastwards from approximately 95mOD to 74mOD (Malin), toward the Cookstown and Dargle Rivers. The existing quarry void covers an area of approximately 4.5 hectares (10.8 acres) and its depth from existing ground level varies from 18m at its northern / north-eastern end to 10m at its southern / south-eastern end.

No restoration works have been undertaken since sand and gravel extraction activities ceased at the quarry in the mid-1990's. As a result, some vegetation cover has become established over the quarry side slopes, where these have remained stable.

Aggregate processing and value added production activities are currently undertaken within the application site. The principal aggregate processing activity is the washing and screening of imported sand and gravel, while the principal value added activity is the production of readymixed concrete. The Dublin City Council watermain carrying drinking water from the Roundwood reservoir to the city runs through the middle of the application site, as shown in Figure 1.2.

#### 1.2.3 Site Access

Traffic access to the application site and Roadstone Dublin's existing facilities at Fassaroe is obtained via the Fassaroe Junction on the N11 National Primary Road. Traffic turning off the N11 runs for a short distance (approximately 600m) over the local road network, travelling initially

westwards and then turning south on a public road (Kilbride Road) until it comes to a small roundabout junction with Fassaroe Avenue, a private road, approximately 930m long, leading to the entrance to Roadstone Dublin's landholding.

Traffic movement to the existing C&D waste recovery facility within Roadstone Dublin's landholding is initially over a section of paved road between the existing site entrance and the block yard. Thereafter traffic continuing onto the existing recovery facility runs over a network of unpaved haul roads.

#### 1.2.4 Surrounding Land Use

The application site, including the existing construction and demolition waste recovery facility, are located within a largely agricultural area.

The lands within Roadstone Dublin's landholding, immediately to the north and east of the application site are typically used for crop growing while those to the north-west, west and south-east of the application site are set as grassland. The Cookstown River and R117 Regional Road between Bray and Enniskerry run some distance beyond and parallel to the southern property boundary. The ground sloping down to the Cookstown River is covered by dense tree growth.

Immediately beyond Roadstone Dublin's landholding, the lands to the north-west and west are set as grassland, while

There are a number of large, isolated residences located along the opposite side of Fassaroe Avenue, to the east and south-east of the landholding. There is also a cluster of residences located immediately north of the landholding, along either side of Berryfield Lane. Enniskerry FC's football pitch is located on the northern side of Berryfield Lane. Although a large tract of land to the north of Berryfield Lane has been zoned for industrial and related uses, no development has yet taken place.

Other land uses in the immediate vicinity include a materials recovery facility for household, commercial and construction and demolition waste operated by Greenstar Ltd., approximately 400m beyond the north-eastern boundary of Roadstone Dublin's landholding. (Waste Licence Ref. No. W053-01). There is an electricity substation and a number of telecom transmission towers located approximately 350m west of the application site, along Berryfield Avenue.

Existing land-use in the vicinity of the application site, including locations of residences, is shown on the land-use map in Figure 1.3.

### 1.3 LAND OWNERSHIP

Roadstone Dublin Ltd. is the holder of the freehold title to the lands around the former quarry at Fassaroe. Its total landholding extends to approximately 69.6hectares (167.7acres). The extent of its land ownership is shown on Figure 1.3.

### 1.4 THE APPLICANT

Roadstone Dublin Ltd. is part of the CRH Group, a leading publically listed building materials company. The company is Ireland's leading supplier of aggregates, construction and road building materials and employs several hundred people throughout the Greater Dublin Area.

Roadstone commenced extraction of sand and gravel in the Fassaroe area in the late 1950's. Sand and gravel reserves at the original sand and gravel quarry were exhausted in the mid-1990's and since that time, sand and gravel for the existing processing and value added activities has been imported to the site from other Roadstone Dublin facilities around Leinster.

### 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.

Planning permission for the existing construction and demolition waste recovery facility within the application site was granted by Bord Pleanála on appeal in July 2004 (Wicklow County Council Planning Ref. No. 03/9501). An application (for renewal of the existing planning permission) is currently under consideration by Wicklow County Council.

Roadstone Dublin has operated a construction and demolition waste recovery facility at the application site since 2004. The facility is operated in accordance with the conditions attaching to a waste permit (Reference Number ESS/15/8/12) issued by Wicklow County Council for an initial three year period in 2004. The waste permit was subsequently renewed for a further three year period by Wicklow County Council in July 2008 (Ref. No. ESS/15/8/12-339). A separate waste permit application was submitted to Wicklow County Council in May 2008 to provide for partial backfilling of the existing quarry. This waste permit was issued, with conditions, in April 2009.

A planning application to provide for the backfilling and restoration of the existing void at Fassaroe was submitted to Wicklow County Council in July 2008 (Planning Register Reference No. 08/1258). A final decision to grant planning permission for this activity was issued by Wicklow County Council on 4 March 2009.

## 1.6 PLANNING CONTEXT

### 1.6.1 Wicklow County Development Plan (2004-2010)

The planning and development controls pertaining to the application site are those outlined in the current Wicklow County Development Plan (2004-2010).

Section 6.5.4 of the Wicklow County Development Plan identifies the control criteria to be placed on extractive industry development. These include a statement that *'the working, landscaping, restoration and aftercare of the site will be carried out to the highest standards in accordance with an approved scheme. The scheme will incorporate progressive restoration that does not include landfill, industrial, commercial, domestic waste nor illegal waste of any kind'*. The proposal for a waste recovery facility at Fassaroe is fully consistent with the stated policy objective in that it provides for

- (i) backfilling and restoration of the existing quarry using imported inert soil and stone and
- (ii) establishment and implementation of environmental management systems for the duration of the waste recovery activities at the site.

Section 9.5.4.2 of the Plan states that *'it is the intention of the Council to ensure the promotion of waste minimisation, re-use and recycling'*. Section 9.5.4.2.3 states that the Council *'will promote re-use and recycling schemes in accordance with the principles of sustainable development'*. The proposal for a waste recovery facility at Fassaroe is fully consistent with the stated policy objective in that it provides for

- (i) re-use / recovery of inert soils for site restoration purposes and
- (ii) establishment of an inert waste recovery facility in close proximity of a major centre of economic activity in South County Dublin and North Wicklow.

The County Development Plan identifies a number of sites of geological and geomorphological interest in the vicinity of the application site. The listed sites include

- (i) the Fassaroe Delta which is located immediately beyond the north-west arm of the Fassaroe Junction on the N11 National Primary Road
- (ii) a sub-glacial channel, known as the Scalp, along the channel of the Glenmunder River to the north of the application site and
- (iii) the Dargle River Valley to the south of the application site.

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 the application site or Roadstone Dublin's wider landholding. The nearest SACs to the site are the woodland at Ballyman Glen, approximately 600m north of the site (at its nearest point) and Knocksink Wood, approximately 2km west of the application site. The Dargle River Valley, approximately 1km south-east and south of the site and Powerscourt Woodland, approximately 1.5km south-west of the application site (at its nearest point) are both designated as proposed NHAs. The Dargle

Glen is also identified in the County Development Plan as an area to be considered for a Special Amenity Area Order.

There are no tree protection orders in place for any trees or woodlands in the vicinity of the site. The County Development Plan indicates that the woodland on either side of the R117 Regional Road immediately beyond the southern boundary of Roadstone Dublin's landholding will be considered for preservation.

The archaeological heritage policy set out in Section 6.2.1 of the County Development Plan states that the Council will have regard to the Record of Monuments and Places (RMP) when dealing with development applications. The plan states that no development will be permitted in the vicinity of a recorded feature where it seriously detracts from the setting of the feature or is seriously injurious to its cultural or educational value.

Records held by the National Monuments Service of the Department of Environment, Heritage and Local Government indicate that there is a national monument within Roadstone Dublin's landholding at Fassaroe, immediately to the west of the existing site entrance. There is no remaining evidence of this monument at ground level and available evidence suggests that the monument was destroyed at some time in the past by quarrying and/or related activities.

In addition to this monument, there are a further 7 national monuments immediately beyond Roadstone Dublin's landholding. These include

- (i) 2 crosses and 1 font beyond the north-western corner, on the eastern side of Kilbride Road, north of the roundabout junction with Fassaroe Avenue;
- (ii) 2 associated with the former castle at St. Valery beyond the eastern boundary, on the eastern side of Fassaroe Avenue;
- (iii) 1 possible enclosure immediately beyond the southern boundary, on the southern side of the Cookstown River
- (iv) 1 barrow / earthwork beyond the western boundary

The architectural heritage policy set out in Section 6.2.2 of the County Development Plan states that the Council will seek to protect buildings and areas of architectural heritage value from inappropriate development. The County Development Plan identifies two protected structures in the immediate vicinity of the application site:

- (i) a country house in the Dargle Valley, to the south of the application site, described as a three bay, two storey villa and
- (ii) a residence known as St. Valery to the south-east of the application site, described as an early, gothic revival house of circa 1810 with a crenellated tower.

The County Development Plan indicates that the townland of Fassaroe lies within a designated area of Outstanding Natural Beauty. Section 10 of the County Development Plan does not identify any protected views or prospects into or out of the application site.

## 1.6.2 County Wicklow Waste Management Plan (2005-2010)

The County Wicklow Waste Management Plan (2005-2010) indicates that in 2004, approximately 500,000 tonnes of construction and demolition (C&D) waste was collected within the county. The plan recognises however that a considerable volume of additional C&D waste is likely to be imported to permitted waste sites across County Wicklow from construction sites elsewhere within the Greater Dublin Area.

In its review of implementation of the former waste management plan, Section 3 of the current plan notes that a number of waste permits for beneficial use of C&D waste or soil and stone for land reclamation have been issued by Wicklow County Council. Notwithstanding this however, Section 9 of the plan states that there is insufficient capacity for the management of C&D waste at appropriately permitted waste sites and that this has given rise to a number of problems including:

- unsuitable lands with poor road access being targeted for landfilling / reclamation
- fly-tipping of C&D waste in rural and upland areas
- backfilling of quarries and sand quarries without necessary consents.

In view of these challenges, the current waste management plan identifies a number of objectives for the management of C&D waste, some of which include

- promotion of provision of permitted and/or licensed facilities for C&D waste and soil and stone recovery activities by the private sector;
- ensuring that all waste permitted sites accepting C&D waste, soil and stone for recovery obtain necessary planning permission;
- requiring applications for placement of soil and stone on land to include topographical survey drawings showing existing and proposed ground levels and an assessment of available void space
- having regard to the acceptance of C&D waste, soil and stone imported to sand quarries and quarries for the purposes of reinstatement, subject to all necessary statutory requirements;
- promotion of provision of mobile crushing and screening systems at existing waste facilities

It is asserted that the continuation of C&D waste recovery activities and the proposed backfilling and restoration of the existing quarry void at Fassaroe with inert soil and stone are entirely consistent with the objectives for management of C&D waste outlined in the current County Wicklow Waste Management Plan (2005-2010).

## 1.7 CONSIDERATION OF ALTERNATIVES

In view of the policy objectives outlined in the Wicklow Waste Management Plan 2005-2010, the development of waste recovery activities for inert soils and/or inert construction and demolition waste at worked out quarries is restricted to locations where such sites occur. The Applicant asserts that the application site offers clear environmental and economic advantages over other potential sites within County Wicklow as it is located close to a large economic centre (south County Dublin) and is readily accessible using the national road network. The application site is also zoned for future mixed use development by the Bray Environs Draft Local Area Plan (2009-2015) and must be backfilled and reinstated before any prospective development can begin.

## 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 ongoing works at the former sand and gravel quarry at Fassaroe will eventually result in complete backfilling of a large open void and restoration of the landscape to its original pre-extraction condition. Once the void has been backfilled, the long-term mixed use development envisaged for this site in the Bray Draft Environs Local Area Plan 2009-2015 will be able to proceed.

Backfilling the existing 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 Dublin Limited appointed John Barnett and Associates / SLR Consulting Ireland to prepare this Environmental Impact Statement in support of its Waste Licence Application for the continued operation of its C&D waste recovery facility and backfilling of the existing quarry void at Fassaroe, Bray, Co. Wicklow.

Sections 1 and 2 of this EIS comprises an introduction and detailed description of the proposal and has been prepared by John Barnett and Associates / SLR Consulting Ireland in consultation with Roadstone Dublin Ltd.

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

development and details of mitigation measures, where these are considered practicable or feasible.

The contributors who have assisted in the preparation of this EIS are identified by topic below:

<b>TOPIC</b>	<b>CONTRIBUTOR</b>	<b>COMPANY</b>
Description of Development	Derek Luby BE MSc MIEI	John Barnett and Associates / SLR Consulting Ireland
Human Beings	Aldona Binchy MSc. (Eng)	John Barnett and Associates / SLR Consulting Ireland
Flora and Fauna	Dr Patrick Ashe BSc	Consultant
Soils and Geology	Dr. Peter Glanville BA PhD.	John Barnett and Associates / SLR Consulting Ireland
Surface Water and Groundwater	Dr. Leslie Brown BSc. MSc. PhD	John Barnett and Associates / SLR Consulting Ireland
Air Quality and Climate	Aldona Binchy MSc. (Eng)	John Barnett and Associates / SLR Consulting Ireland
Noise and Vibration	Aldona Binchy MSc. (Eng)	John Barnett and Associates / SLR Consulting Ireland
Landscape	Paula McCarthy BSc	John Barnett and Associates / SLR Consulting Ireland
Cultural Heritage	Dr. Charles Mount MA	Irish Concrete Federation
Material Assets	Aldona Binchy MSc. (Eng)	John Barnett and Associates / SLR Consulting Ireland
Traffic	Matt Foy / Andrew Archer	WSP Consulting Engineers
Non-Technical Summary	Derek Luby BE MSc MIEI	John Barnett and Associates / SLR Consulting Ireland
Co-ordination of EIS	Derek Luby BE MSc MIEI	John Barnett and Associates / 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 the local environment.

## 1.11 CONSULTATIONS

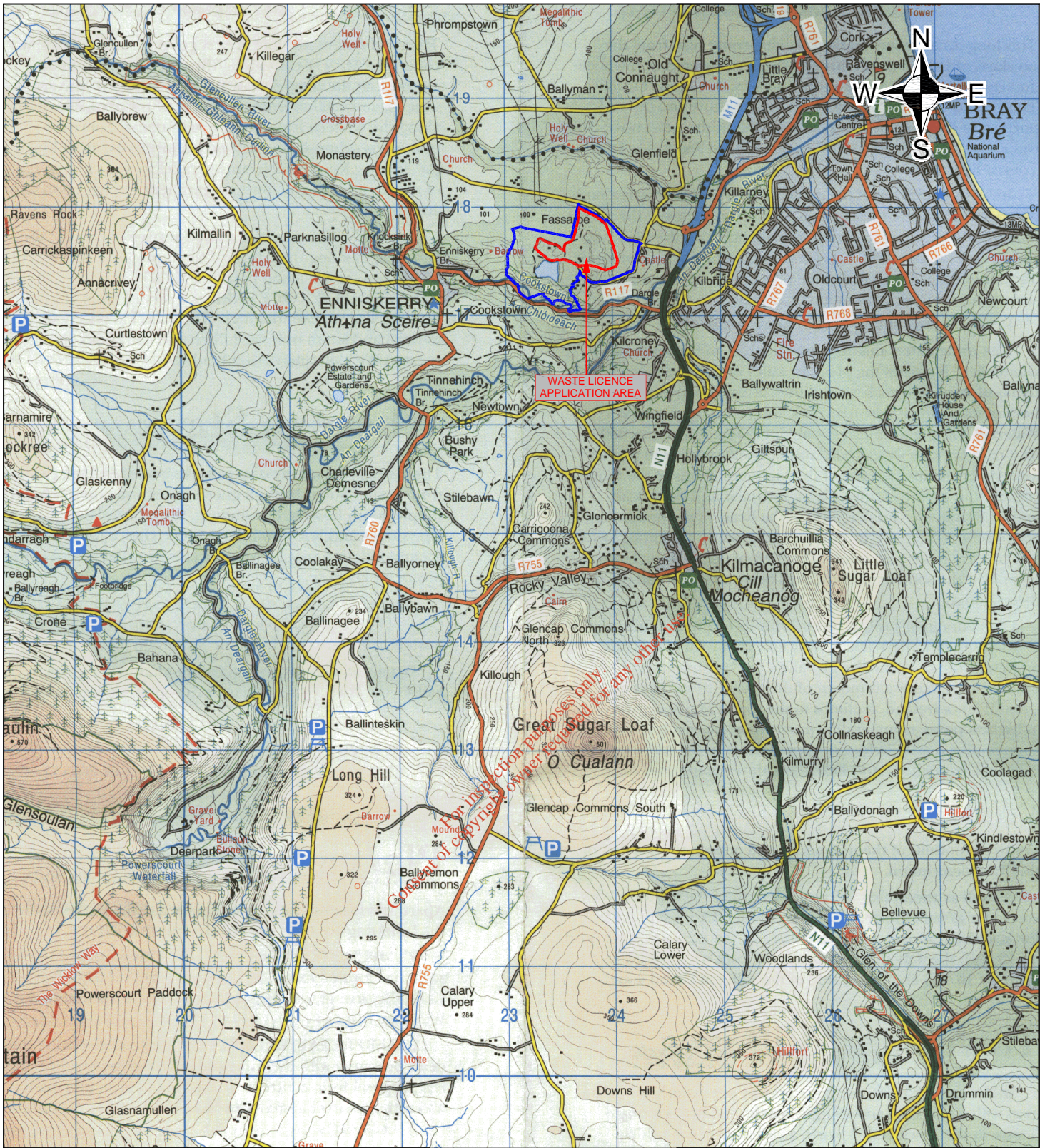
In preparing this Environmental Impact Statement, consultations were had with a number of organisations and agencies including

- Wicklow 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

## FIGURES

For inspection purposes only.  
Consent of copyright owner required for any other use.

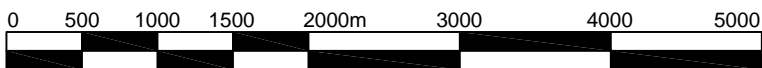


**LEGEND**

- Applicants Land Interest (c. 65.1 ha)
- Waste Licence Application Area (c. 21.4 ha)

**NOTES**

1. Extract from Ordnance Survey Discovery Map No. 50
2. Ordnance Survey Ireland Licence No. SU 0000709 (c)  
Ordnance Survey Ireland / Government of Ireland



Metres  
1:50,000

0059.00017.18.FIG 1.1.0.SITE LOC PLAN



SLR CONSULTING IRELAND  
7 DUNDUM BUSINESS PARK  
WINDY ARBOUR  
DUBLIN 14  
T: +353-1-2964667  
F: +353-1-2964676  
www.slrconsulting.com

---

**ROADSTONE DUBLIN LTD.  
WASTE LICENCE APPLICATION**

---

**FASSAROE WASTE RECOVERY FACILITY  
FASSAROE, BRAY, CO. WICKLOW**

---

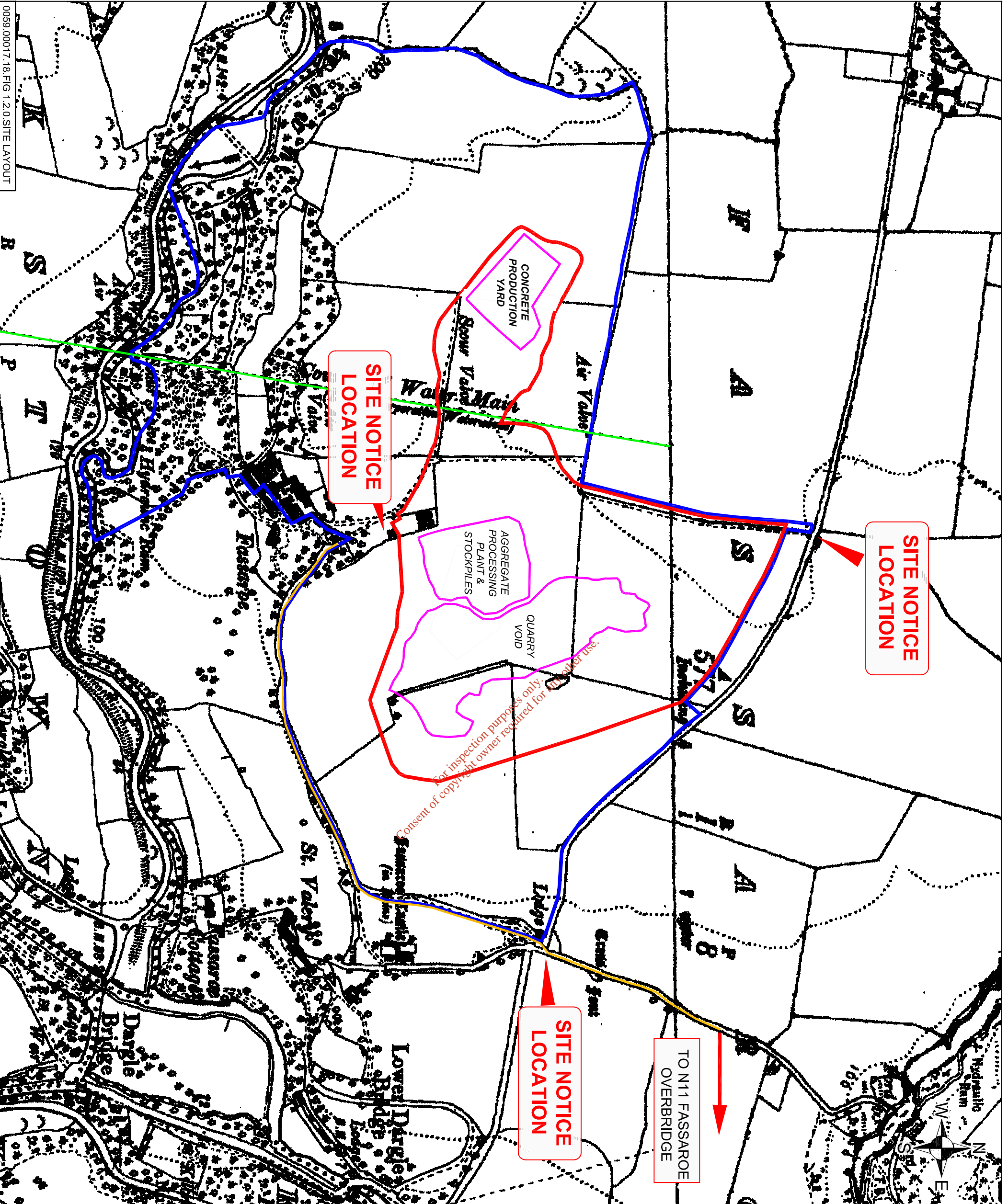
**SITE LOCATION MAP**

---

**FIGURE 1.1**

Scale 1:50,000 @ A4	Date APRIL 2009
------------------------	--------------------





- NOTES
1. Based on OSI 6inch Sheet No. 21
  2. Ordnance Survey of Ireland Licence No. SU 0000709 (c) Ordnance Survey of Ireland & Government of Ireland

LEGEND	
	Applicant's Land Interest (c. 65.1 ha)
	Waste Licence Application Area (c. 21.4 ha)
	Access Road
	Dublin City Council Watermain

TO N11 FASSAROE OVERBRIDGE

SITE NOTICE LOCATION

SITE NOTICE LOCATION

SITE NOTICE LOCATION

Consent of copyright owner required for all other use.

**roadstone**

ROADSTONE DUBLIN LTD.  
FORTUNESTOWN  
TALLAGHT  
DUBLIN 24

Scale 1:5,000

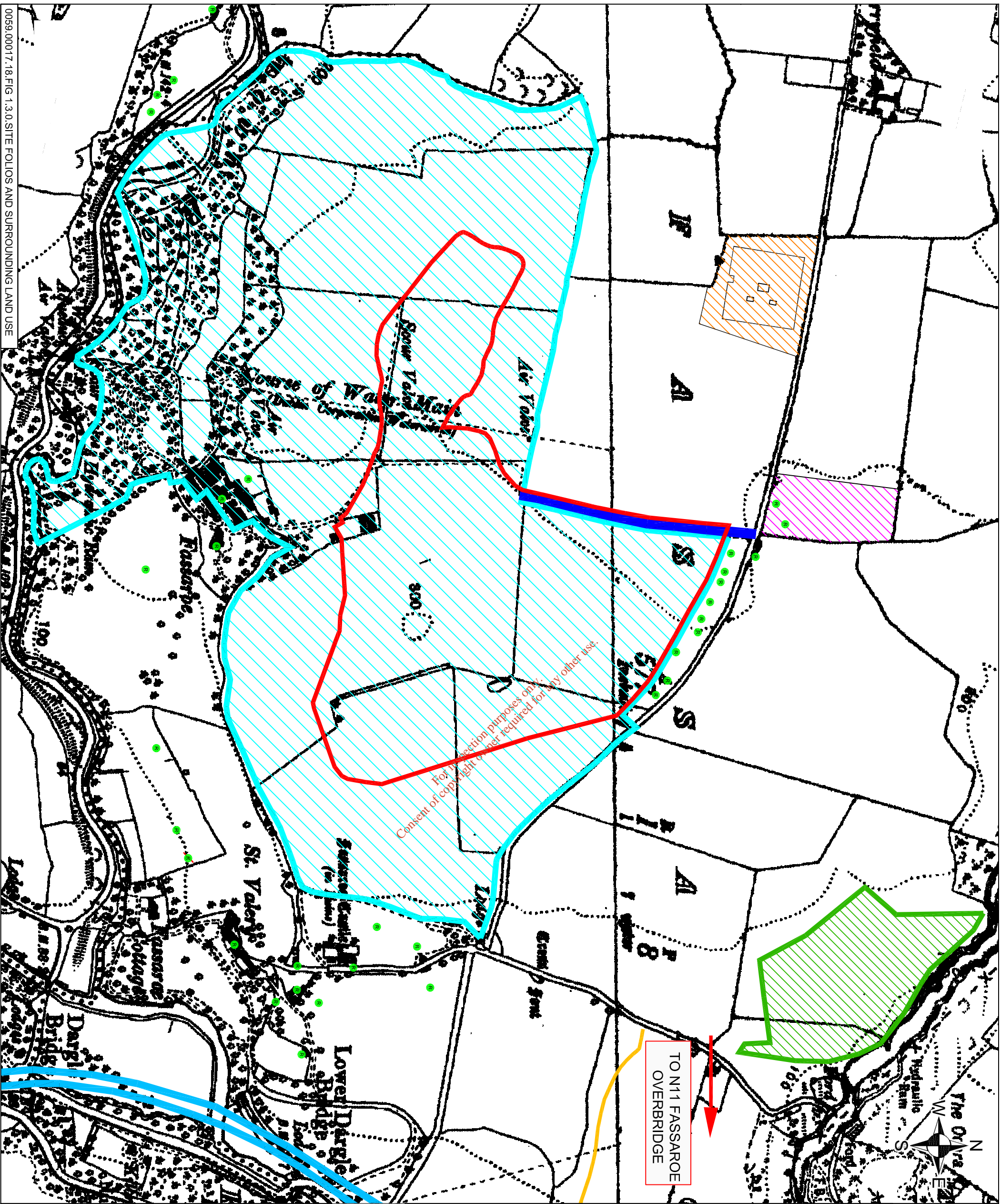
**SLR**

SLR CONSULTING IRELAND  
7 DUNDRUM BUSINESS PARK  
WINDY ARBOUR  
DUBLIN 14  
T. +353-1-2964676  
F. +353-1-2964676  
www.slrconsulting.com

ROADSTONE DUBLIN LTD.  
WASTE LICENCE APPLICATION  
FASSAROE WASTE RECOVERY FACILITY  
FASSAROE, BRAY, CO. WICKLOW  
SITE LOCATION / SITE NOTICE

FIGURE 1.2

Scale 1:5,000 @ A3 Date APRIL 2009



0059.00017.18.FIG 1.3.0.SITE FOLIOS AND SURROUNDING LAND USE

NOTES

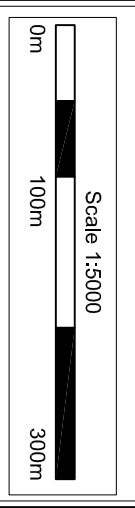
1. Based on OSI 6inch Sheet No. 21
2. Ordnance Survey of Ireland Licence No. SU 0000709 (c) Ordnance Survey of Ireland & Government of Ireland

LEGEND

	Waste Licence Application Area (c. 21.4 ha)
	Folio 4320 (Wicklow)
	Unregistered Deed of Conveyance Dated 13/06/1967
	Greenstar Waste Management Facility
	ESB Substation
	Football Pitch
	Local Road Network
	M11 Motoway
	Location of Residences

**ROADSTONE DUBLIN LTD.**  
 FORTUNESTOWN  
 TALLAGHT  
 DUBLIN 24

**roadstone**



**SLR**

SLR CONSULTING IRELAND  
 7 DUNDEMUM BUSINESS PARK  
 WINDY ARBOUR  
 DUBLIN 14  
 T: +353-1-2964667  
 F: +353-1-2964676  
 www.slrconsulting.com

ROADSTONE DUBLIN LTD.  
 WASTE LICENCE APPLICATION  
 FASSAROE WASTE RECOVERY FACILITY  
 FASSAROE, BRAY, CO. WICKLOW

SITE FOLIOS AND SURROUNDING LAND USE

FIGURE 1.3

Scale 1:5,000 @ A3 Date APRIL 2009