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FIGURES

INTRODUCTION

11.1 This chapter of the Environmental Impact Statement addresses the impact on surrounding material assets of the proposed backfilling and restoration of the North Quarry by Roadstone Wood Ltd at its Huntstown Quarry complex at Finglas, Dublin 11.

11.2 This study is prepared as part of an Environmental Impact Statement providing supporting information to accompany a Waste Licence Application (WLA) by Roadstone Wood Ltd. to the Environmental Protection Agency in respect of the proposed inert waste recovery facility at Huntstown.

11.3 In undertaking this study, due regard has been had to aspects such as infrastructure, economic activities and property values 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'* (EPA, 2002).

RECEIVING ENVIRONMENT

Outline and Methodology of Baseline Study

11.4 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 residential housing in the area. Information presented is based primarily on observations made during a site visits to the area in July / August 2010 and information obtained from local sources, including the internet.

Site Context

11.5 The quarry complex at Huntstown operated by Roadstone Wood Ltd. straddles several townlands, principally Kilshane and Huntstown, in north-west County Dublin. The site is located approximately 2.5 km northwest of the Dublin suburb of Finglas, 2km north-west of the interchange between the N2 dual Carriageway and the M50 Motorway and 3.5km north-east of Blanchardstown village, Dublin 15. The site is currently accessed from the R135 Regional Road, known locally as the North Road (the former N2 National Primary Road), to the east and the Kilshane Road to the west.

11.6 A small number of existing residences are located in close proximity to the proposed inert waste recovery facility. The nearest residential property is located approximately 170m west of the application site on Kilshane Road. A further five residential properties are also located immediately to west of the application site along Kilshane Road.

11.7 Within 500m of the site, there are a further six residences, all located to the east of the site along the North Road. The existing housing pattern in the vicinity of the site is shown on Figure 11-1.

11.8 The Regional Planning Guidelines for the Greater Dublin Area 2004-2016 indicate that the proposed inert waste recovery facility lies within the 'Metropolitan' area. Given its location along designated Transportation Corridors, specifically the N2 Dual Carriageway and the M50 Motorway, the proposed facility also lies in close proximity to, and within easy reach of, designated 'Consolidation Towns' within the Metropolitan Greater Dublin Area.

Infrastructure

Roads

11.9 Traffic to and from the proposed waste facility will generally travel along the North Road (the R135 Regional Road and former N2 National Primary Road). Traffic coming from Dublin City Centre or the nearby M50 Motorway turns onto the N2 Dual Carriageway and travels a short distance before turning (west) off a dedicated slip road onto the North Road.

11.10 Thereafter traffic continues south for a short distance along the North Road before turning right (west) via a dedicated right–turn junction onto the access road leading into the Huntstown Quarry complex. This access road also serves the Huntstown Power generating plant operated by Viridian which is located within the Huntstown Quarry complex.

11.11 Traffic travelling south from Ashbourne to the waste recovery facility exits the N2 Dual Carriageway at the Cherrymound Interchange and continues south along the North Road, through Kilshane Cross, to the right-turn junction with the access road into the Huntstown Quarry complex. Some additional traffic accesses the quarry complex via a local road, known as the Kilshane Road, to the west.

11.12 The main road arteries in the area immediately around the Huntstown Quarry complex are : :

- North / North-west — Kilshane Road
- South-west — Cappagh Road
- South — M50 Motorway
- East — R135 Regional Road (North Road)
  N2 Dual Carriageway / N2 National Primary Road

Metro West

11.13 The proposed route of the Metro West urban light rail transport system runs parallel to the M50 motorway beyond the southern boundary of Roadstone Wood's landholding, as indicated on Figure 11-1. The proposed light rail scheme will link the principal towns/suburbs along the western fringes of Dublin (beyond the M50 Motorway) including Tallaght, Lucan and Blachardstown to the proposed Metro North scheme serving Dublin Airport and Swords.

11.14 Metro West will not encroach on Roadstone Wood's landholding, nor on the waste license application area. The proposed inert waste recovery facility will not have any impact on the construction or operation of the Metro West scheme.

Utilities

11.15 A Combined Cycle Gas Turbine (CCGT) power plant, operated by Viridian, is located within the Huntstown Quarry complex, immediately east of the application site. The access road from the North Road used by quarry traffic at Huntstown is shared with the power plant.

11.16 The combined output of the Huntstown Power Plant is 747 MW which provides up to 20 per cent of the total electricity fed into the national transmission grid system. With the introduction of the Single Electricity Market, all power from the plants is sold into the wholesale electricity market servicing all electricity customers on the island.

11.17 A gas pipeline serving the Huntstown power plant runs north-east of the application site. No gas pipeline crosses the waste license application area or the Roadstone Wood landholding itself.

11.18 Telecommunication services (fixed line telephone and broadband) are available at the Huntstown Quarry.

11.19 Several electricity power-lines (10Kv, 38Kv, 110Kv and 220Kv) traverse the Roadstone Wood landholding, mainly to the south and east. One electricity power-line (110Kv) crosses the waste license application area in a north-west to south-east direction as shown on Figure 11-1. All powerlines crossing the landholding run to the adjoining ESB 220kV sub-station located immediately north-west of the M50 / N2 Motorway Interchange.

11.20 A potable water supply is provided to the existing site office and canteen via a Local Authority water main. Water for production of construction materials is sourced from sumps across the quarry complex, principally sumps on the quarry floors.

11.21 The Huntstown and Kilshane area are supplied with potable water from Ballycoolin reservoir, approximately 2km west of the application site. The North Fringe Water Supply Scheme completed in 2007 involved the construction of a Water Tower and ground level reservoir, adjacent to the M50 Motorway at Sillogue, approximately 3.5km east of the application site, and 36km of watermains. This scheme improved both the water supply and the pressure in the North City and South Fingal areas.

11.22 Sewage from the existing facilities at Huntstown is treated at a septic tank located in the centre of the Huntstown Quarry complex. Wastewater from aggregate processing and concrete production processes are managed in-situ either by recycling or by passing through silt traps and/or settlement ponds prior to discharge to local watercourses.

Existing and Future Land Use

11.23 The area surrounding Roadstone Wood's landholding comprises a mix of rural agricultural lands to the north and east and large scale industrial development in the form of several business / technology and industrial parks to the west and south-west.

11.24 A limited amount of low density residential housing is present along the local road network and some small scale local enterprises are located along the North Road (R135 Regional Road) as indicated on Figure 11-1.

11.25 A large proportion of the lands around Roadstone Wood's landholding which are currently used for agricultural purposes are zoned for future development by the current Fingal County Development Plan 2005-2011. The lands to the north-east of the landholding however are zoned as greenbelt between the continuous urban environment and surrounding large towns.

11.26 A recycling facility Kilshane Cross Recycling Park, located to the north-east of the application site was developed in recent years by Fingal County Council. It is envisaged that this facility will provide for future treatment / composting of brown bin waste and for recycling of construction and demolition waste.

11.27 Lands immediately north-west of the landholding are zoned ST to facilitate opportunities for science and technology based employment.

11.28 Lands immediately to the south of the landholding are zoned ST1 to facilitate opportunities for science and technology based employment and associated and complementary use in a high quality environment in accordance with the approved local area plan.

11.29 Lands to the south-east of the landholding, at the M50/N2 Interchange are zoned for distribution, warehouse, storage and logistics facilities that require good access to the major road network.

Housing

11.30 Residential housing in the area immediate surrounding the application area comprises one-off houses located along the local road network. Most housing in the study area has been established for several (>5) years. No lands within the vicinity of the site are zoned for residential purposes on the current Fingal County Development Plan (2005-2011). The nearest large scale settlements to the application site are at Finglas, approximately 2.5km to the south-east, and Blanchardstown, approximately 4km to the west.

Groundwater

11.31 The Huntstown Quarry complex and the application area straddle a locally important aquifer. The aquifer characteristics and use are discussed in detail in Chapter 6 of this Environmental Impact Statement.

Heritage

11.32 There are a number of recorded monuments and protected structures in the vicinity of the Huntstown Quarry complex and the application site. These are identified and discussed in detail in Chapter 9 of this Environmental Impact Statement.

IMPACT OF PROPOSED WASTE FACILITY

Short Term Impacts

11.33 As the application site has functioned as a limestone quarry for many decades, 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 have arisen up to the relatively recent past.

11.34 The proposed Huntstown waste recovery facility will require importation of 7,200,000 tonnes of material to backfill the existing quarry void. This is equivalent to approximately 360,000 HGV movements (at 20 tonnes per load) in order to completely backfill the quarry void. Roadstone Wood has defined a relatively optimistic scenario where it would be possible to fill the void at the North Quarry over an 18 year period. Although it is likely that it could take longer to fill the quarry void, as a result of recent scaling back in construction activity, the 18 year scenario is considered sufficiently onerous for modelling and assessment of traffic impacts.

11.35 Assuming an annual average intake of up to 400,000 tonnes / year corresponds to an average hourly trip rate of 7 HGV movements into and 7 HGV movements out of the North Quarry per hour. Should the rate of backfilling accelerate to 750,000 tonnes / year on account of a large scale development or infrastructure project (such as Metro North or Dart Underground), the hourly HGV trip rate could increase to approximately 13 HGV movements into and 13 HGV movements out of the quarry per hour. The projected level of traffic increase will not adversely impact existing traffic capacity along the existing road network. Further assessment of the likely traffic impacts arising from the operation of the proposed waste recovery facility is presented in Chapter 12 of this Environmental Impact Statement.

11.36 There may be some intermittent short-term impact on the residential amenity of the properties immediately beyond the western boundary of the application area as backfilling proceeds on the western 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 Chapters 7 and 8 of this Environmental Impact Statement.

11.37 The proposed quarry backfilling activity at the site presents a number of risks to groundwater including fuel spillage, increases in suspended solids in surface water run-off and importation and placement of a rouge load of contaminated soil. These risks are assessed in more detail in Chapter 6 of this Environmental Impact Statement.

Long Term Impacts

11.38 The proposed backfilling and restoration of the worked-out quarry will largely restore the landscape to its original, pre-extraction state. 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 suitable for agricultural use and is more in keeping with surrounding land-use. It will also mean that the lands can be made available for possible long-term future development, should that be considered appropriate.

11.39 In the long-term, backfilling the quarry void with a significant depth of inert impermeable, cohesive soil (predominantly glacial till) and restoring it to agricultural land use will locally 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.

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

Interaction with other Environmental Receptors

11.41 There are no additional interactions, over and above those identified and discussed in the text above.

MITIGATION MEASURES

Short Term Impacts

11.42 Where not already in place, 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. Internal signposting will also be erected along paved and unpaved roads within the Huntstown Quarry complex in order to maintain a safe and orderly traffic regime.

11.43 All HGV traffic exiting the waste recovery facility will pass through a water bath, thereby minimising amount of mud and soil carried onto the paved internal haul roads and the local public road network.

11.44 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.

11.45 All necessary health and safety precautions will be implemented when plant and machinery are operating immediately under or in the vicinity of the overhead power lines crossing the waste licence area.

FIGURES

NORTHWEST BUSINESS PARK
KILSHANE ROAD
KILSHANE KENNELS
MITCHELSTOWN
WESTERN SITE ENTRANCE
ACCESS TO BLANC'TOWN & M3 MOTORWAY
NORTHWEST BUSINESS PARK
MITCHELSTOWN HOUSE
NORTHWEST BUSINESS PARK
CLOGHRAN
MILLENNIUM BUSINESS PARK
BALLYCOOLIN BUSINESS PARK
CAPPAGH ROAD
ROSEMOUNT BUSINESS PARK
M2 MOTORWAY
R135 REGIONAL ROAD (NORTH ROAD)
HOGAN'S CAR SALES & DONNELLY EQUIPMENT
STABLES
COLDWINTERS
JOHNSTOWN
VIRIDIAN POWER STATION (NOT OWNED BY RWL)
HUNTSTOWN (Part of)
UNIVERSAL FLORAL DISPLAY
BEECH VISTA GARDEN CENTRE
SITE NOTICE LOCATION
VETERINARY CLINIC
ESB 220 Kv STATION
M50 JUNCTION 5
M50 MOTORWAY
CAPPOGE
SCRAP YARD

N
W E
S

0 100 200 300 400m 600 800 1000
Metres
1:10,000

NOTES

1. EXTRACT FROM 1:2,500 ORDNANCE SURVEY DIGITAL SHEET NO'S. 3062-A, 3062-B, 3062-C, 3062-D, 3063-A, 3063-C, 3130-A, 3130-B,

2. ORDNANCE SURVEY IRELAND LICENCE NO. SU 0000711 (C) ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

- ROADSTONE WOOD LTD. LANDHOLDING (c. 201.8 ha)
- WASTE LICENCE APPLICATION AREA (c. 35.9 ha)
- M50 MOTORWAY
- N2 DUAL CARRIAGEWAY
- LOCAL ROAD
- NORTH ROAD (R135)
- RIGHT OF WAY
- RESIDENTIAL LOCATIONS
- HGV ACCESS ROUTES TO SITE
- OVERHEAD POWERLINES 10Kv / 38 Kv / 110Kv / 220Kv
- POSSIBLE ROUTE OF PROPOSED METRO WEST
- KILSHANE CROSS RECYCLING PARK

Roadstone WOOD
The Right Choice

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ROADSTONE WOOD LTD.
ENVIRONMENTAL IMPACT STATEMENT

WASTE RECOVERY FACILITY,
HUNTSTOWN QUARRY,
NORTH ROAD, FINGLAS, DUBLIN 11

MATERIAL ASSETS MAP

FIGURE 11-1

Scale: 1:10,000 @ A3
Date: FEBRUARY 2011

00180.15.0.18.11-1.R0.MATERIAL ASSETS.dwg