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INTRODUCTION

Background

- 11.1 This Environmental Impact Assessment Report (EIAR) addresses the potential impacts on material assets of the proposed soil and stone waste recovery activities on the western side of Huntstown South Quarry. These activities will facilitate backfilling of the quarry to surrounding ground level and the ultimate restoration of the quarry to grassland.
- 11.2 The existing parent permission for the Huntstown Quarry Complex (Planning Ref. FW12A/0022 and An Bord Pleanála Ref. No. 06F.241693) was granted in August 2014 and provides for continuation of quarrying activity for 20 years up to 2034. That permission also includes provision for the restoration of all quarry voids within the Huntstown Quarry complex, including the South Quarry, by backfilling to former (original) ground level by placement and recovery of naturally occurring soil and stone waste generated by construction and development activity across the Greater Dublin Area.
- 11.3 In order to facilitate the transfer and re-location of soil waste recovery activities from the North Quarry (where they are currently ongoing) to the South Quarry, a waste licence review application is to be submitted to the EPA to provide for the following :
- importation of soil and stone waste to the western side of Huntstown South Quarry at a maximum rate of 750,000 tonnes per annum (as permitted by Planning Ref. FW12A/0012);
 - extension of the licensed site boundary to incorporate the proposed waste recovery area on the western side of the South Quarry and the haul roads leading to / from it;
 - an increase in the total permitted (lifetime) soil and stone waste intake to the (extended) waste facility to 18.76 million tonnes;
 - continued use of pre-existing site infrastructure to support recovery activities; and
 - re-routing of traffic flows via existing internal haul roads (i.e. within the quarry complex) to access the backfilling / recovery area at the South Quarry.
- 11.4 No new infrastructure is required to facilitate transfer and re-location of established soil waste recovery operations from Huntstown North Quarry across to the western side of the South Quarry or the extension of the waste licence boundary to include this area.
- 11.5 It is currently envisaged that backfilling of the South Quarry will commence in early 2023, at which time it is expected that the ongoing backfilling of the North Quarry to surrounding ground level will be largely complete and the importation, backfilling and recovery of soil and stone waste at that location will cease.
- 11.6 Further details on the proposed development (site infrastructure, operations, environmental management systems, and controls etc.) are provided in Chapter 2 of this EIAR.
- 11.7 In undertaking this study, due regard has been had to aspects such as infrastructure and economic activities in the vicinity of the Huntstown quarry complex. The study has also had regard to the EPA publication 'Guidelines on the Information to be contained in Environmental Impact Statements' (EPA, 2002).

Scope of Work / EIA Scoping

- 11.8 This Chapter of the EIAR addresses the impact of the planned future activities on surrounding material assets. According to the EPA¹ (2003),
“Resources that are valued and that are intrinsic to specific places are called ‘material assets’. They may be of either human or natural origin and the value may arise for either economic or cultural reasons”.
- 11.9 The more recent EPA publication *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (Draft)* (2017) states that in EU EIA Directive 2011/92/EU the material assets topic was taken to include architectural and archaeological heritage. The more recent EIA Directive 2014/52/EU now includes those heritage aspects as components of cultural heritage. The guidelines also state that:
“Material assets can now be taken to mean built services and infrastructure. Traffic is included because in effect traffic consumes roads infrastructure. Sealing of agricultural land and effects on mining or quarrying potential come under the factors of land and soils”.
- 11.10 The specific headings in the guidelines in relation to material assets refer to built services, roads and traffic and waste management. Chapter 12 of this EIAR addresses architectural heritage, archaeological heritage and cultural heritage separately to this Chapter. Impacts on soil resources are addressed in Chapter 6 of this EIAR.
- 11.11 This material assets impact assessment comprises the consideration of existing resources pertinent to the proposed development and the planned extension of the waste licence area that are not addressed elsewhere in this EIAR and the likely development impacts on those resources. On this basis, this Chapter addresses built services and waste management. Built services are understood to refer to electricity, telecommunications, gas, water supply infrastructure and sewerage.

Methodology

- 11.12 This EIAR Chapter has been prepared having regard to the following guidelines:
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning and Local Government, August 2018)
 - Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (Draft), EPA, August 2017;
 - Advice Notes for Preparing Environmental Impact Statements (Draft), EPA, September 2015;
 - Guidelines on the Information to be contained in Environmental Impact Statements (EPA, 2002); and
 - Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (EPA 2003).
- 11.13 The scope of this material assets assessment considers qualitative and quantitative analysis, a review of relevant literature and professional judgement in relation to impact on material assets. Where relevant, this approach is adopted in the following stages in the assessment methodology.

Stage 1: The Baseline Assessment

- 11.14 This assessment has been informed by consideration of the characteristics of the surrounding area, which has been prepared by way of a desk-based study using published information from a range of

¹ EPA (2003), Advice Notes on Current Practice

sources that are referenced throughout this Chapter and observations made during site visits. The baseline assessment has sought to:

- describe the location and extent of material assets; and
- describe the nature and use of the asset.

Stage 2: Assessment of Effects

11.15 To support the assessment, expected impacts on material assets have been quantified where possible. Through a combination of qualitative and quantitative assessment, this stage describes the activities, areas, infrastructure and resources likely to be affected by the development as well as likely changes in overall land-use.

11.16 The magnitude of impacts has been assessed in a qualitative manner, based on the predicted nature of the change, the magnitude of the change and the sensitivity or value of the resource or receptor.

Stage 3: Mitigation Measures

11.17 On completion of Stage 2, measures are proposed, if necessary, to avoid and / or reduce any identified impacts on sensitive or scarce material assets.

11.18 The impacts of the proposed increase in the rate of backfilling and recovery at the South Quarry on natural resources of economic and amenity value (e.g., soil, minerals, surface water and groundwater, air, noise environment and landscape) are identified and discussed in detail in the following Chapters of this EIAR:

- Chapter 6 – Soil and Geology
- Chapter 7 – Surface Water and Groundwater
- Chapter 8 – Air Quality
- Chapter 10 – Noise
- Chapter 13 - Landscape and Visual Impact

Consultations / Consultees

11.19 Following a review of the proposed activities, existing consents and site mapping / surveys, it was considered that there was no requirement for formal external consultations to be carried out in respect of material assets for the purposes of this assessment. There was, however, some consultation with other specialist contributors.

Contributors / Author(s)

11.20 This Chapter of the EIAR was prepared by Aislinn O'Brien, a Principal Planner with SLR Consulting Ireland. Aislinn is a qualified Town Planner with over 12 years' experience. She holds a Bachelor of Arts in Economics and Spanish and a Master of Civic Design from the University of Liverpool. She is a member of the Irish Planning Institute and the Royal Town Planning Institute.

Limitations / Difficulties Encountered

11.21 No limitation or difficulties were encountered in the preparation of this Chapter of the EIAR.

REGULATORY BACKGROUND

Legislation

11.22 There is no specific legislation relevant to this Chapter of the EIAR. However, the information provided within this Chapter is informed by :

- European Union (Planning and Development) (Environmental Impact Assessment) Regulations, 2018:
- Section 37D and 171A of the Planning and Development Act, 2000 (as amended); and
- Section 94 / Schedule 6 of the Planning and Development Regulations, 2001 (as amended).

Planning Policy and Development Control

11.23 This Chapter of the EIAR is informed by the National Planning Framework (NPF) 2040, the Regional Spatial and Economic Strategy (RSES) for the Eastern Midland Regional Assembly (2020) and the current Fingal County Development Plan (CDP) 2017-2023.

Significant Risks

11.24 The proposed development provides for the restoration of a limestone quarry by backfilling it to former ground level using inert naturally occurring excess (waste) soil and stone arising from construction and development projects.

11.25 The nature and extent of the works involved do not present any risk of a major accident or disaster which would give rise to uncontrolled emissions of dangerous substances to air, land or water which could, in turn, give rise to significant adverse impacts on material assets in the surrounding local area.

RECEIVING ENVIRONMENT

Site Context

11.26 The quarry complex at Huntstown operated by Roadstone Ltd. is located in north-west County Dublin, approximately 2.5km north-west of the Dublin suburb of Finglas and 1km north-west of the interchange between the N2 Dual Carriageway and the M50 Motorway. The quarry complex is currently accessed from the R135 Regional Road, known locally as the North Road (the former N2 National Primary Road) which runs along its eastern boundary.

11.27 The site to which this waste licence review application relates lies entirely within the Huntstown Quarry complex and straddles the townlands of Coldwinters, Kilshane, Huntstown, Johnstown, Cappogue and Grange, Co. Dublin. The area to be added to the existing waste licence area extends to approximately 22.5 hectares and comprises:

- the western side of a deep limestone quarry (the South Quarry), including settlement ponds, perimeter screening and overburden mounds; and
- an existing network of internal access roads leading from existing on-site weighbridges to the proposed waste recovery area on the western side of the South Quarry.

11.28 Approximately 27 existing residential properties are located within reasonable proximity of the South Quarry. There are 10 properties along the North Road (the R135 Regional Road), the closest of which is located approximately 100m from the existing quarry access / entrance. The remaining properties are all located approximately 650m or more from the main operational area of the South Quarry.

11.29 An individual residential dwelling and a housing estate (comprising 10 properties) are located along Cappagh Road (L3080) to the south-west and south of the extended waste licence area, at a distance of approximately 40m and 300m respectively. There is also a farm dwelling located approximately 650m east of the recovery area at the South Quarry (approximately 150m from the eastern quarry face). Residential property locations and surrounding land use are shown on a plan of the local area in Figure 11-1.

Infrastructure and Utilities

Roads

11.30 The key elements of the existing road network around the existing quarry complex at Huntstown comprise :

- The R135 Regional Road to the east, which previously served as the N2 National Primary Road (up to May 2006). This road, known locally as the North Road, intersects the N2 Dual carriageway to the north via a roundabout junction and a short section of link road to the Cherryhound Interchange. It forms a cul-de-sac to the south, where it is severed by the M50 Motorway.
- a local road, known as the Kilshane Road which runs to the north of the quarry complex and which connects to the Cappagh Road to the west of it;
- The M50 Motorway which runs approximately 350m to the south / south-east of the existing quarry complex.

The layout of the road network is shown on Figure 11-1 and is described further below.

11.31 The N2 Dual Carriageway between the M50 Motorway and Cherryhound interchange runs immediately east of the R135 Regional Road. It continues northwards from the Cherryhound interchange as the M2 Motorway to the north of Ashbourne Co. Meath. From there, it becomes the N2 National Primary Road and continues northwards as a single carriageway road through the counties of Meath, Louth and Monaghan to the border with Northern Ireland.

11.32 Much of the road network around the Huntstown quarry complex has been upgraded over the past decade and a half. The N2 Dual Carriageway / M2 motorway opened in May 2006 and led to a large and immediate reduction in traffic levels along the former N2 National Primary Road (now the R135 Regional Road) immediately east of Huntstown Quarry. Upgrading of the M50 to provide three lanes of traffic in both directions was completed in 2010, as was the upgrading of the interchange with the N2 Dual Carriageway to provide for a free-flow interchange.

11.33 The existing R135 Regional Road (North Road) comprises of a single carriageway road generally of about 7.5m width with hard shoulders of varying width. The alignment essentially runs straight from the existing quarry entrance northwards up to the roundabout junction with the link road to the N2 Cherryhound Interchange and beyond. It runs southwards to the point at which it is severed by the M50 motorway at Finglas.

11.34 A speed limit of 50kph applies along the existing R135 Regional Road. This speed limit applies to traffic which travels between the roundabout junction between the R135 and N2 Link Road and the existing entrance to the quarry.

11.35 Traffic coming to the backfill and recovery areas at the South Quarry from Dublin City Centre or the nearby M50 Motorway turns onto the N2 Dual Carriageway and travels a short distance (north) before turning (west) off a dedicated slip road at Coldwinters and south, onto the North Road.

11.36 Thereafter, traffic continues 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 and the Anaerobic Digestion plant, both located within the Huntstown Quarry complex and operated by Energia (formerly Viridian).

- 11.37 Traffic travelling to the South Quarry from Ashbourne and other locations to the north exits the N2 Dual Carriageway at the Cherryhound Interchange, travels east along the Cherryhound-Tyrellstown Link Road and then continues south along the R135 Regional Road, through Kilshane Cross, to the right-turn junction with the access road into the Huntstown Quarry complex.
- 11.38 Traffic from Blanchardstown and the N3 Dual Carriageway to the west travels along the recently constructed N2 / N3 Link Road to the Cherryhound Interchange and then continues across to and south along the R135 Regional Road.

Proposed Extension of LUAS Cross-City to Finglas

- 11.39 The Transport Strategy for the Greater Dublin Area 2016 - 2035 includes provision for the proposed northward extension of the Luas Cross City scheme from its existing terminus at Broombridge to a new terminus to be located north of Finglas, along the N2 and close to the M50 interchange.
- 11.40 The Finglas LUAS scheme will not encroach on Roadstone's landholding at Huntstown. The backfilling activities at the South Quarry and the prospective increase in rate of waste intake thereto will not have any impact on the planned future construction or operation of the Finglas LUAS scheme.

Power Utilities

- 11.41 A Combined Cycle Gas Turbine (CCGT) power plant, operated by Energia, is located within the Huntstown Quarry complex, immediately north of the internal road leading to the South Quarry. This road, which runs to / from the R135 Regional Road is used by quarry and waste recovery traffic at Huntstown and is also shared with the power plant.
- 11.42 Electricity output from the Huntstown Power Plant can be up to 747MW and can constitute up to 20 per cent of the total amount of electricity fed into the national transmission grid system. With the introduction of the Single Electricity Market, all power from the plant is sold into the wholesale electricity market servicing all electricity customers on the island of Ireland.
- 11.43 An Anaerobic Digestion (AD) Plant which is also operated by Energia is located to the south of the same internal road leading to the South Quarry and can be accessed directly from it, although much traffic is routed to the rear of the plant. The AD plant converts organic / food waste into a methane rich biogas which is then used to generate renewable electricity. The power output from plant is typically of the order of 5MW.
- 11.44 A 300mm diameter gas transmission pipeline serving the Energia power generation plant runs across the Roadstone landholding from the Cappagh Road. It runs initially west and south of the North Quarry and then runs south and east of the blockyard and up to the power plant, as indicated in Figure 11-1. A smaller distribution pipeline also runs from the Cappagh Road to the asphalt plant in the central production / infrastructure area, as shown in Figure 11-1.
- 11.45 Telecommunication services (fixed line telephone and broadband) are available at Huntstown Quarry and in the surrounding area.
- 11.46 Three high voltage lines (1 No. 110kV and 2 No. 220kV) traverse the application site and the internal access roads leading to the backfill and recovery areas at the South Quarry, as indicated on Figure 11-1. All powerlines crossing the Roadstone landholding run to the adjoining ESB 220kV sub-station located at Baleskin, to the east, immediately north-west of the M50 / N2 Motorway Interchange.

Water Supply

- 11.47 A potable water supply is provided to the existing site office(s) and canteen via a Local Authority water main. Water used in the production of construction materials within the quarry complex is sourced from sumps located on quarry floors.
- 11.48 The Huntstown area is supplied with potable water from Ballycoolin reservoir, approximately 2km to the west. 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 to the east, together with 36km of new watermains. The scheme helped improve both water supply and pressure across the North City and South Fingal.
- 11.49 The GSI national well database records indicate that there are 12 wells or drill holes within 1 km of the Huntstown Quarry complex. Of these, only 2 wells appear to be used for groundwater abstraction: one is developed in the Waulsortian Limestone Formation at a location approximately 1km to the south of the South Quarry while the other, also developed in Waulsortian Formation, is located approximately 1.8km to the west.

Wastewater

- 11.50 Sewage from the existing facilities at Huntstown is treated at a septic tank located in the centre of the Huntstown Quarry complex.
- 11.51 Wastewater from aggregate processing and concrete production processes are managed in-situ either by recycling in concrete production or by passing it through a surface water management system comprising silt traps and/or settlement ponds, prior to discharge off-site to a local watercourse, the Ballystruhan Stream, which flows northwards towards the Ward River. This discharge is licensed by Fingal County Council (Ref. No WPW/F/008-01) in November 2011.

Existing and Future Land Use

- 11.52 The area surrounding Roadstone's landholding at Huntstown 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.
- 11.53 A limited amount of low-density residential housing is present along the local road network. Some small-scale local enterprises are also located along the R135 Regional Road and Cappagh Road, as indicated on Figure 11-1.
- 11.54 The Huntstown Quarry complex is currently zoned for heavy industry by the current Fingal County Development Plan 2017-2023. Lands immediately to the south of the Roadstone landholding are zoned GE (to provide opportunities for general enterprise and employment).
- 11.55 Fingal County Council had previously planned to develop a waste recycling park at Kilshane Cross to the north-east of Huntstown Quarry, and although some site infrastructure was put in place, the development ultimately did not proceed as intended. This site has now been earmarked by Irish Water for future development of a Regional Biosolids Storage Facility for the Greater Dublin Area.
- 11.56 The EU Directive (96/82 EC) on the control of major accident hazards, commonly referred to as the SEVESO II Directive, was adopted on February 3rd 1999. It was transposed into Irish Law through the EC (Control of Major Accident Hazards Involving Dangerous Substances) Regulations (S.I. No. 476 of 2000), on December 21st 2000. The Directive aims to prevent major accidents involving dangerous substances and chemicals and to limit their consequences for people and the environment.

- 11.57 A Seveso site, specifically the Huntstown Power Station, is located within the Huntstown quarry complex. With respect to Seveso sites, Objective DMS183 of the current Fingal County Development Plan 2017-2023 states that
- 'In areas where Seveso sites exist in appropriate locations with low population densities, ensure that proposed uses in adjacent sites do not compromise the potential for expansion of the existing Seveso use and in particular the exclusion of developments with the potential to attract large numbers of the public.'*
- 11.58 The proposed backfilling and recovery activities will not attract a significant number of visits from members of the public and as such they will not be in conflict with, nor will they compromise any potential future expansion of the established Seveso land-use.

Settlements and Housing

- 11.59 The nearest large-scale settlements to the Huntstown quarry complex are Finglas, located approximately 2.5km to the south-east, and Blanchardstown, approximately 4km to the west. These settlements are separated from the Huntstown quarry complex by major road infrastructure comprising the M50 Motorway and a large area of industrial development to the south-west of the South Quarry and Roadstone landholding.
- 11.60 Residential housing in the surrounding local area comprises isolated one-off houses along the local road network and a cluster of houses along Cappagh Road. With the exception of the housing constructed by the Peter McVerry Trust at the Ravenswood Estate along the North Road, most of the housing in the study area has been established for several (>5) years.
- 11.61 No lands in the immediate vicinity of the site are zoned for future residential development on the current Fingal County Development Plan 2017-2023. The nearest lands with zoning for new residential development are located approximately 450m away, to the south of the South Quarry, on the southern side of the M50 motorway.
- 11.62 There are 8 properties located along the R135 Regional Road, the closest of which is located approximately 100m from the existing quarry entrance. All are located approximately 650m or more from the main backfilling and recovery area at the South Quarry.
- 11.63 Two individual residential dwellings and a row of 10 houses (Cappagh Cottages) are located to the south-west and south of the extended waste licence area, along the Cappagh Road. They are located approximately 40m and 300m from the extended waste licence boundary. There is also a farm dwelling located approximately 150m beyond the south eastern boundary of the South Quarry and Roadstone landholding. The housing pattern in the surrounding local area is shown on Figure 11-1.

IMPACT OF PROPOSED DEVELOPMENT

- 11.64 This licence review application principally provides for the restoration of the western side of Huntstown South Quarry by backfilling it with imported soil and stone waste at a maximum annual rate of 750,000 tonnes per annum (as currently permitted under Fingal Planning Ref. No FW12A/0022 and An Bord Pleanála Ref. No. 06F.241693).
- 11.65 The estimated volume of soil and stone material to be placed at the South Quarry to backfill it to former ground level is approximately 12.4 million m³ (equivalent to approximately 22.32 million tonnes). Of this, approximately 5.2 million m³ (or 9.36 million tonnes) will comprise soil and stone imported **managed as waste** which will be placed and recovered on the western side of the quarry. The balance, comprising soil and stone imported and **managed as non-waste by-product** will be placed on the eastern side of the quarry.

- 11.66 A relatively small volume, estimated at no more than 50,000m³ (90,000 tonnes) will be sourced from on-site stockpiles and/or perimeter screening berms for use in construction of the dividing berm between waste and by-product backfill areas and for final site levelling works required for the quarry restoration. An estimated 60,000 tonnes of crushed rock sourced on-site will also be required for construction of temporary haul roads and the dividing berm. All other materials required to backfill the quarry will need to be imported.
- 11.67 An estimate of the material quantities required to complete backfilling at the South Quarry is provided in Table 11-1 below: -

Table 11-1
Material Requirements

Material	Quantity (tonnes)	Source
Subsoil, stones and rock	22,320,000 tonnes	Imported
Of which	9,360,000 tonnes	
<i>waste</i>	12,750,000 tonnes	
<i>non-waste by-product</i>		
Stockpiled soil (subsoil)	90,000 tonnes	In-situ
Aggregate / Crushed Rock	60,000 tonnes	In-situ (adjoining quarry)
Topsoil	60,000 tonnes	In-situ / Imported

- 11.68 Assuming that the rate of soil and stone waste intake to the western side of the South Quarry is at the maximum limit of 750,000 tonnes per annum, it would be expected that the full complement of soil and stone waste intake on the western side of the South Quarry would be backfilled and recovered in 12 ½ years from commencement of operations early in 2023 (i.e. by mid-2035).
- 11.69 No construction and demolition waste (intermixed concrete, brick, pipes, metal, timber etc.) is imported for quarry backfilling purposes. At the present time, it is expected that minor quantities of virgin aggregate will be used as and when required to facilitate construction of temporary haul roads and movement of HGVs across any backfilled areas within the South Quarry.

Operational Phase Impacts

- 11.70 As the South Quarry site has functioned as a limestone quarry for many decades and it is considered that and planned future backfilling operations, albeit at an increased rate, will be unlikely to give rise to any additional impacts on material assets over the short to medium term, over and above those that are currently extant.

Road Infrastructure

- 11.71 The average daily trip generation of HGV traffic as a result of 750,000 tonnes of waste material intake is 125 HGV loads per day. This equates to a total of 250 HGV movements per day (two-way trips).
- 11.72 Should this waste licence review application be approved, it is envisaged that, following completion of backfilling activities at the North Quarry at some time in early 2023, the HGV trips currently generated by the ongoing backfilling and soil recovery operations at the North Quarry will be re-directed to the South Quarry recovery area.
- 11.73 The transfer and re-location of soil waste recovery activities to Huntstown South Quarry will proceed at half the importation and recovery rate to that currently permitted for the same activities at the North Quarry. The reduction in traffic movements will therefore result in a significant reduction in

traffic movements along the existing North Road (the former N2 National Primary Road) and through the existing quarry complex at Huntstown.

- 11.74 A junction capacity assessment was previously carried out to determine the impact of soil importation and recovery at an elevated rate of 1,500,000 tonnes per annum (which is ongoing for backfilling of the North Quarry) on the future utility of existing junctions on the public road network around the Huntstown Quarry Complex.
- 11.75 That analysis showed that even at the elevated importation rate of 1,500,000 tonnes per annum, the existing R135 / Elm Road signalised junction and the R135 / N2 Link Road (at Broghan) roundabout junction would continue to operate within capacity in 2023 and 2035.
- 11.76 The R135 / N2 Slip Road priority junction (at Coldwinters) and the R135 / L3125 signalised junction (at Kilshane Cross) are currently operating at capacity. With an elevated importation rate of 1,500,000 tonnes per annum, both junctions would continue to operate at capacity in 2023 and 2035, albeit with slightly extended queues and delays during the AM and PM peak hours than would otherwise arise were the importation rate reduced (or eliminated).
- 11.77 A road capacity assessment of the R135 Regional Road was also carried out previously to assess development impacts at the higher importation rate (of 1,500,000 tonnes per annum).
- 11.78 The assessment showed that in 2021, the R135 operates within capacity for a level of service D with an existing Annual Average Daily Traffic (AADT) level of 8,243 vehicles. Allowing for an increase in background traffic flows out to 2023 and 2035 and the reduction in traffic levels generated by the waste recovery activities at the South Quarry (i.e. half of present-day levels at the North Quarry), the R135 will continue to have an AADT below the recommended AADT capacity for a Level of Service D for a Type 2 Single Carriageway.
- 11.79 It is considered in light of these findings that the local public road network will operate adequately in the future, for the duration of the proposed soil waste backfilling and recovery activities at the South Quarry and that any related traffic movements across the network will have minimal impact.

Utilities

- 11.80 Several high voltage overhead electricity transmission cables (110kV and 220KV) traverse a corridor to the north of the South Quarry and run broadly west to east toward the Huntstown substation. Lower voltage overhead cable and telephone cables also traverse the quarry complex.
- 11.81 The areas to be backfilled and restored on the western side of the South Quarry do not extend beneath the existing high voltage power lines and, as such, the placement and recovery of imported soil and stone will have no adverse impact on, nor will they present any risk to, the overhead transmission lines.
- 11.82 While HGV's travelling along the access route to and from the waste recovery area at the South Quarry will pass beneath the transmission lines, these movements will present no risk to existing pylon supports (which are located on undisturbed ground beyond the quarry footprint) and will have no impact on them or on the overhead powerlines supported by them.
- 11.83 A 300mm diameter gas transmission pipeline serving the Energia power generation plant runs across the Roadstone landholding from the Cappagh Road, while a smaller distribution pipeline runs from the Cappagh Road to the asphalt plant in the central production area. While HGV's travelling along the access route to and from the waste recovery area at the South Quarry will travel over this (buried) pipeline, they will have no impact on it.

- 11.84 Based on the above, it is anticipated that the proposed soil and stone intake and backfilling at the South Quarry will not result in any significant adverse short-term impact on either existing infrastructure or utilities.

Water Supply

- 11.85 The proposed restoration / backfilling activities at the South Quarry have the potential to affect groundwater quality in the underlying aquifer, and at any private wells developed therein, through lateral contaminant migration in the event of a leakage or spill. Such risk is slight however, and no greater than that associated with established extractive activities.
- 11.86 While there is also potential to affect groundwater quality in private abstraction wells where contaminants present in imported soil, in reality this risk is minimal, as only inert, uncontaminated soil will be imported for backfilling purposes.
- 11.87 In both instances indicated above, any risks to groundwater resources will be reduced following the initial backfilling stage due to the placement of inert low permeability (clay-bound) soil and stone across the floor of the existing quarry.
- 11.88 In addition to the above, reductions in quarry dewatering over time (and its ultimate cessation) will result in localised groundwater level rise and increased groundwater flow around the backfilled quarry. More detailed assessment of potential development impacts on groundwater resources and private wells is presented in Chapter 7 (Water) of this EIAR.

Existing and Future Land Use

- 11.89 Over the operational phase, the recent / current extractive activities at the South Quarry will cease and the western side of the quarry will be progressively backfilled and restored to former ground level using imported soil and stone waste. Quarries are generally considered to be temporary, albeit long-term, uses that ultimately cease once fully restored. The proposed cessation of extraction activity at the South Quarry and the effective change to temporary waste related land-use is considered appropriate, particularly as these facilitate the long-term restoration of the subject lands.
- 11.90 The backfilling of the South Quarry with imported soil could have potential effects on surrounding land uses in terms of traffic, noise and dust deposition. As outlined in relevant Chapters of this EIAR, the predicted effects following mitigation will not be significant. It is considered, therefore, that the backfilling and recovery activities will not have any significant effects on surrounding land use.

Housing and Settlements

- 11.91 There may be some intermittent impact on the residential amenity of the properties close to the south east and south western boundary of the South Quarry as backfilling and recovery activities proceed, particularly close to ground level along the extreme western side of the quarry. The most likely (temporary) impact will be a minor increase in ambient noise and dust levels. These impacts are classified as minor in nature and are discussed in more detail in Chapters 8 and 10 of this EIAR.
- 11.92 As outlined above, the nearest large-scale settlements to the (extended) waste licence facility at Huntstown are Finglas and Blanchardstown. These settlements are separated from the quarry complex by major road infrastructure comprising the M50 Motorway and a large area of industrial development to the south-west of the site. Given the distance of these settlements from the quarry complex and the intervening land uses, it is considered that the intended backfilling and recovery activities at the South Quarry will have no significant adverse effects on these settlements.

Post-Operational Phase Impacts

Infrastructure and Utilities

- 11.93 In the long term, the completion of restoration works at the South Quarry at Huntstown will result in the cessation of traffic movements associated with these operations. Notwithstanding the finding that the traffic movements during the operational phase will not have any significant impacts on traffic flows and infrastructure, these will be eliminated entirely on cessation of the backfilling and soil recovery activities.
- 11.94 It is considered that backfilling and soil waste recovery activities at the South Quarry will not have any significant effects on any other infrastructure or utilities over the long-term.

Existing and Future Land Uses

- 11.95 The restoration of the South Quarry will largely return the landscape to its original, pre-extraction state. On completion, the backfilling operations will provide a final landform which is suitable for grassland-based agricultural use. This will also mean that the lands can be made available for possible long-term future development in accordance with the zoning of the site under current or future Fingal County Development Plans, should that be considered appropriate.
- 11.96 The transfer and continuation of backfilling and recovery activities to the South Quarry area will not effect, or interfere with, any established agricultural, industrial or commercial activities or residential uses at surrounding landholdings over the long term.

Settlements and Housing

- 11.97 In the long term, the backfilling operations will cease and the South Quarry will be backfilled to original ground level and restored. Notwithstanding that the effects on settlements and housing have been shown to be not significant in respect of noise and air quality, any residual effects would cease.
- 11.98 Any future development of the restored lands would have to be in accordance with the zoning of current or future Fingal County Development Plans and would also require technical / environmental appraisal and planning consent from Fingal County Council (or An Bord Pleanála on appeal).

Interaction with other Environmental Receptors

- 11.99 It is considered that there are no additional interactions, over and above those identified and discussed in the text above and outlined in summary in Chapter 14 of this EIAR (Interactions).

Cumulative Impacts

- 11.100 A search of the Fingal County Council online planning search facilities indicates that the following developments are currently seeking planning permission or have been granted planning permission in the last five years (and not yet built) in the vicinity of the (extended) waste licence area:
- The development of a construction and demolition waste recovery facility on lands within the Huntstown Quarry Complex (Planning Ref. No. FW17A/0012);
 - The prospective Irish Water Biosolids Waste Facility to be located in Newtown, on lands to the west of the R135 Regional Road and north-east of the Roadstone landholding (ABP Reference SID/02/18);
 - The construction of a 5,000m² pilot scale circular economy research and development building in the townlands of Huntstown / Coldwinters for Rathdrinagh Land Limited (Planning Ref. No. FW20A/0063); and

- The development of two data centre buildings immediately east of the Huntstown Power Station, between it and the R135 Regional Road (Planning Ref. No FW21A/0151).

11.101 Given the marked reduction in current HGV traffic movements which will occur once waste recovery activities transfer to, and commence at, the South Quarry, any traffic movements which may be generated by the above listed developments (were they to proceed) will have little or no adverse cumulative impact on junction capacity and traffic safety along the R135 Regional Road or across the local road network.

11.102 Any future backfilling and waste recovery activities at the South Quarry, alone or in combination with any or all planned future development will therefore have no potentially significant adverse effects on material assets in the local area.

MITIGATION MEASURES

Operational Phase Impacts

11.103 Based on its experience of comparable levels of demand at the North Quarry and West Quarry, Roadstone considers that there is sufficient space / capacity along the internal road network to facilitate safe and orderly queuing of HGV traffic, should it be required if periods of intense or elevated demand occur.

11.104 Any roadside vegetation which could potentially impact on visibility splays will continue to be cut back as required in order to maintain visibility for HGV traffic exiting onto the R135 Regional Road.

11.105 Mitigation of any effects arising from backfilling and recovery activities, specifically in respect of noise, air quality, ecology and cultural heritage are detailed in the relevant Chapters of this EIAR. It is considered that there is no requirement for any additional mitigation measures in respect of utilities, existing and future land uses, or settlements and housing.

Post-Operational Phase Impacts

11.106 It is considered that there are no long-term impacts associated with the proposed waste activities at the South Quarry which would require mitigation in respect of material assets (other than those identified elsewhere in other relevant chapters of this EIAR).

REFERENCES

Department of Housing, Planning and Local Government (August 2018). *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*

Environmental Protection Agency (2017). *Guidelines on the Information to be contained in Environmental Impact Assessment Reports.*

Environmental Protection Agency (2015). *Draft Advice Notes for Preparing Environmental Impact Statements*

Environmental Protection Agency (2003). *Advice Notes on Current Practice in the Preparation of Environmental Impact Statements*

Environmental Protection Agency (2002). *Guidelines on the Information to be contained in Environmental Impact Statements*

Fingal County Council *Fingal County Development Plan 2017-2023*

Planning and Development Act, 2000 (as amended).

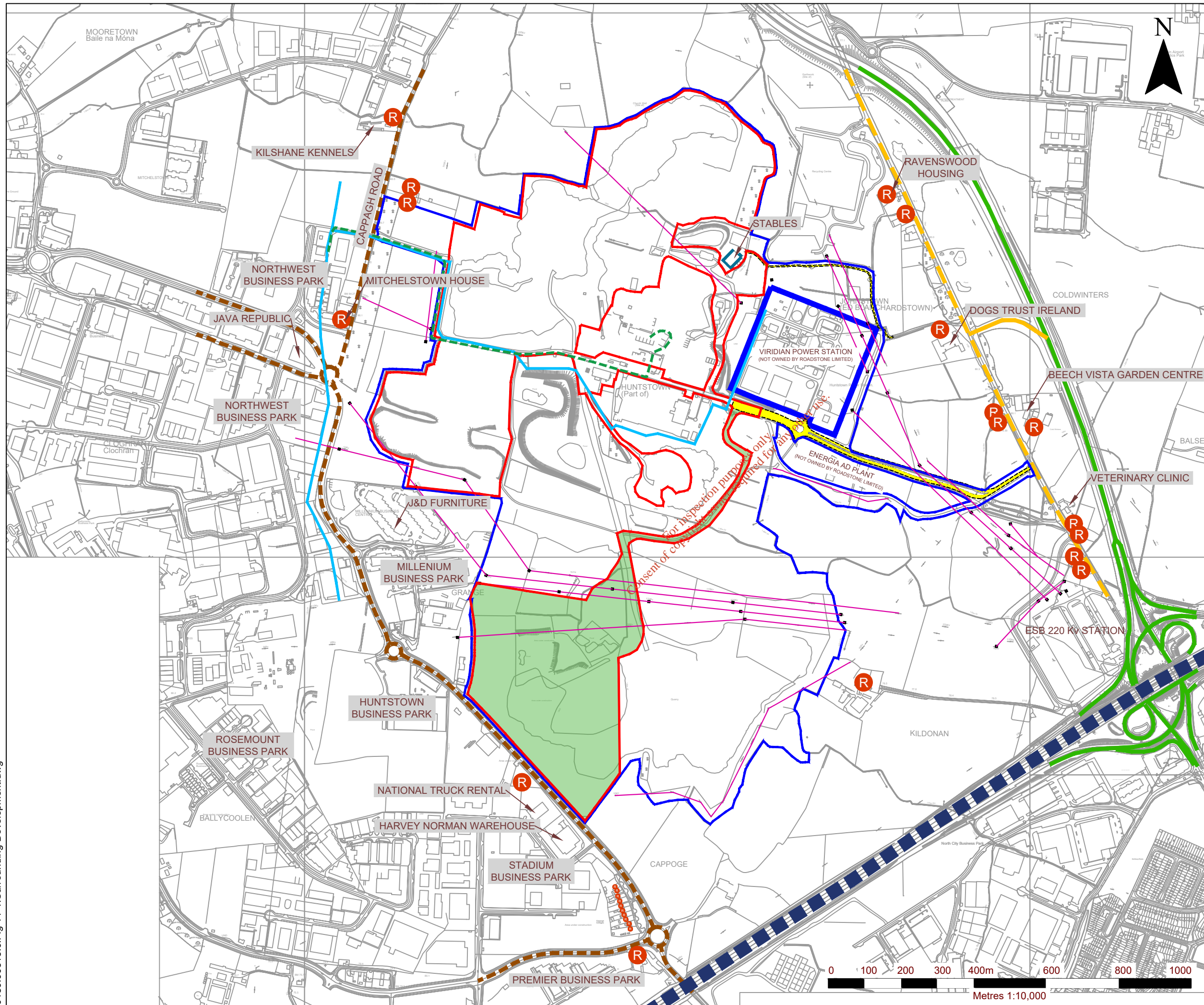
Planning and Development Regulations, 2001 (as amended).

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FIGURES

**Figure 11-1
Surrounding Development**



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. CYAL50167032 (C) ORDNANCE SURVEY IRELAND / GOVERNMENT OF IRELAND

LEGEND

	ROADSTONE LIMITED LAND INTEREST (C. 171.8 HA)
	AMENDED WASTE LICENCE AREA (COMPRISING EXISTING LICENCE AREA AND PROPOSED EXTENSION) (C. 77.5 HA)
	PROPOSED EXTENSION TO CURRENT WASTE LICENCE AREA
	N2 DUAL CARRIAGEWAY
	R135 REGIONAL ROAD (NORTH ROAD)
	LOCAL ROAD
	M50 MOTORWAY
	GAS DISTRIBUTION PIPELINE
	GAS TRANSMISSION PIPELINE
	RIGHT OF WAY
	ELECTRICITY LINES CROSSING OVER THE APPLICATION SITE
	LOCATION OF NEAREST RESIDENCES

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ROADSTONE LTD.
 ENVIRONMENTAL IMPACT ASSESSMENT REPORT
 HUNTSTOWN WASTE RECOVERY FACILITY
 NORTH ROAD, FINGLAS, DUBLIN 11
SURROUNDING DEVELOPMENT

FIGURE 11-1

Scale: 1:10,000 @ A3 Date: NOVEMBER 2021