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INTRODUCTION

Background

- 4.1 This Chapter of the Environmental Impact Assessment Report addresses the potential effects on population and human health of the proposed establishment and operation of a materials recovery / recycling facility and inert landfill at Ballinclare Quarry, Kilbride, Co. Wicklow which comprises three key elements
- a soil washing plant to win aggregate from imported soil and stone;
 - a construction and demolition (C&D) waste recycling facility to produce aggregate from construction and demolition waste (principally concrete); and
 - an engineered (i.e. lined) landfill to facilitate backfilling and restoration of the existing quarry void with inert waste (principally soil and stone).
- 4.2 The planning application site, hereafter referred to as the application site or the site, is located approximately 2.5km to the north-west of the small settlement of Kilbride and c. 2.5 km south of the village of Glenealy. The larger settlements of Rathdrum and Wicklow town are located 5.5 km to the west and 6 km to the north-east, respectively. The M11 motorway runs in a north-south direction c. 400 m to the east of the site.
- 4.3 The application site comprises a large disused quarry void, a former processing area in the south-eastern corner of the site and a concrete paved area to the west of the site access road, some areas of grassland and scrub (within which settlement ponds are located) as well as substantial tree belts surrounding the site.
- 4.4 The proposed development at Ballinclare Quarry provides for the provides for the importation, re-use, recovery and/or disposal of a range of inert wastes generated by construction and development projects in Counties Wicklow, Dublin and Wexford as well as the re-use of excess, non-waste by-product materials (principally uncontaminated soil and stone).
- 4.5 The proposed soil wash plant will be set up and operated at the former concrete / asphalt production yard in the south-eastern corner of the application site. This plant will principally recover sand and gravel and recycled (secondary) aggregates from more granular soil intake and claybound C&D materials. Aggregates will be won from imported non-waste by-product as well as from inert waste materials.
- 4.6 The proposed construction and demolition (C&D) waste recovery facility will be set up and operated across the existing paved area to the west of the existing site access road. The principal wastes to be recycled at this facility will include concrete (ready-mixed, reinforced, blocks and/or pavement slabs), bricks and bituminous mixtures (hardened asphalt returns and road planings).
- 4.7 All aggregates from waste will be of construction grade and will comply with an engineering specification and the End of Waste criteria for recycled aggregates recently published by the EPA.
- 4.8 It is proposed to backfill the existing quarry to original / surrounding ground level by importing and placing inert waste, principally soil and stone, in a lined landfill facility and in so doing, re-establish the original landform which existed prior to quarrying. The landfilling and restoration activities will be undertaken on an ongoing, progressive basis and on completion, the final landform will be restored to a native woodland habitat.
- 4.9 As part of the proposed development, suitable uncontaminated, undisturbed, natural soil waste and/or soil by-product (i.e. non-waste) which conforms to an engineering

specification will be imported for re-use in the construction of the basal and side clay liners required for the inert landfill.

4.10 Some uncontaminated topsoil waste and/or topsoil by-product will also be imported for use in the final restoration of the backfilled landform. Topsoil will be temporarily stockpiled at the landfill facility as required, pending its re-use as cover material.

4.11 The proposed development provides for the following:

- Installation and operation of a soil washing plant at the former concrete / asphalt yard to produce construction grade sand and gravel aggregate from imported excess soil and stone. The soil washing plant comprises a loading hopper, a number of soil screens in series with connecting conveyor systems, a primary wastewater treatment tank (thickener), a buffer tank holding sludge and recycled water, an elevated plate press and filter cake discharge area;
- Construction of a close-sided industrial shed (portal frame structure with roof mounted solar panels) at the existing paved area to the west of the access road to house crushing and screening equipment and process / recycle inert C&D waste (principally solid / reinforced concrete, bricks, ceramics and solid bituminous waste mixtures);
- Use of external paved and hardstanding areas surrounding the C&D waste processing shed for the external handling and storage of both unprocessed and processed C&D wastes;
- Separation of any intermixed solid construction and demolition (C&D) wastes (principally metal, timber, PVC pipes and plastic) prior to its removal off-site to authorised waste disposal or recovery facilities;
- Substantial backfilling of the existing quarry void to a maximum level of 80mOD through disposal of imported inert soil and stone waste and residual fines from the soil washing process and the use of non-waste soil by-product for engineering, capping and/or landscaping purposes
- The progressive restoration of the completed landfill landform to long-term native woodland habitat;
- Continued use of established site infrastructure and services including, site / weighbridge office, staff welfare facilities, surface water run-off and wastewater treatment systems, weighbridge, garage / workshop, wheelwash, hardstand areas, fuel and water storage tanks to service the proposed development;
- Clearance of vegetation and felling of a number of mature trees to facilitate widening of the internal site access road and make provision for off-road queuing of inbound HGVs within the application site boundary;
- Decommissioning of any remaining fixed plant and infrastructure associated with former rock extraction or concrete / asphalt production activities;
- Off-site removal of any waste materials or bulky wastes associated with former quarrying or production activities;
- Installation of a new weighbridge along the inbound lane of the quarry access road;
- Installation of an additional wheelwash facility on the eastern side of the former concrete / asphalt yard;
- Modification / upgrade of existing drainage channel along the site access road, Installation of silt trap and hydrocarbon interceptor to treat run-off and provision of additional pumping capacity to transfer run-off from existing surface water pond at site entrance to quarry sump

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 - Modification / upgrade of existing drainage channel along the site access road, Installation of silt trap and hydrocarbon interceptor to treat run-off and provision of additional pumping capacity to transfer run-off from existing surface water pond at site entrance to quarry sump

- Installation of a silt trap and hydrocarbon interceptor at the proposed C&D waste recovery facility to treat run-off prior to being pumped to the soil wash plant or surface water ponds elsewhere on site.
 - Installation of a sub-surface concrete wastewater holding tank;
 - Construction and establishment of an on-site (passive) wetland treatment system and any associated drainage infrastructure to treat / polish water collected from the active backfilling / landfilling cells prior to its discharge off-site to the Ballinclare Stream;
 - Re-use of an existing storage shed as a dedicated waste inspection and quarantine facility to inspect and store suspect waste consignments as required. Any waste which has been accepted at the facility and which is likely (on basis of visual inspection) or confirmed (on basis of compliance testing) to be non-compliant with waste acceptance criteria for the facility will be temporarily stored at this location pending results of further waste classification testing and a decision as to how and where they should ultimately be disposed of or recovered;
 - Re-alignment, upgrading and ongoing maintenance of internal haul routes across the application site;
 - Temporary stockpiling of topsoil pending re-use as cover material for final restoration of the inert landfill / backfilled quarry void;
 - Implementation of a series of measures to enhance local biodiversity including the retention of habitats and features of biodiversity value (e.g. ponds, buildings), quarry face retention for nesting peregrine falcon, establishment of an artificial sand martin colony, creation of roost space / deployment of bird boxes for bats, creation of habitat / erection of bird nest boxes for breeding / roosting birds and erection of fence along the site perimeter to include access points for mammals.
 - Environmental monitoring of noise, dust, surface water and groundwater for the duration of the landfilling and restoration works and C&D waste recovery / recycling activities and for a short period thereafter;
 - All ancillary site works, landscaping and perimeter fencing.
- 4.12 The proposed maximum intake rate of soil and stone (waste and by-product) for aggregate processing / recovery / recycling and landfilling / disposal is 550,000 tonnes per annum. The maximum rate of C&D waste recovery is 50,000 tonnes per annum. At a maximum combined intake rate of 600,000 tonnes per annum, activities will generate an average of approximately 9 to 10 HGV return trips per hour every working day.
- 4.13 The development proposal provides for the routing of all traffic to and from the proposed development along the L1157 Local Road. It also includes provision for a comprehensive road improvement scheme along the entire length of the L1157 leading up to the application site, including road widening to 6.0m everywhere along its length, with road strengthening and repair overlay and road markings where required.
- 4.14 Under the routing proposal, the majority of the HGVs travelling to the proposed development from Dublin and North Wicklow will use the M11 Motorway, exiting at Junction 18 and joining the R772 Regional Road southbound. After travelling south for approximately 4km, traffic heading for the facility will turn right, off the R772, and onto the L1157 at the ghost island junction beside the Junction 18 Coffee Shop and Green Angel Skincare premises at Kilbride. The access junction to the quarry and proposed development is located along the L1157, approximately 2km north-west of the R772 junction.
- 4.15 It is estimated that only a minor proportion of HGV traffic will arrive from the direction of Arklow and North Wexford. This traffic will use the M11 Motorway, exiting at Junction 19

to turn onto the R772 Regional Road at Jack Whites Pub. It will then travel north for approximately 5km, turn left off the R772 and onto the L1157, and continue thereafter up to the quarry and proposed development.

- 4.16 The proposed haul route requires all HGV traffic departing the proposed facility to turn left and follow the upgraded L1157 back to the junction with the R772 Regional Road, and from there continue toward the national motorway network.
- 4.17 Further details on the proposed development (site infrastructure, operations, environmental management systems, and controls etc.) are provided in Chapter 2 of this EIAR.

Scope of Work / EIA Scoping and Guidance

- 4.18 The EPA guidelines in relation to the preparation of EIAR¹ advise the following in respect of assessments of development impacts on population and human health:
- assessment of land-use planning, and demographic issues or detailed socio-economic analysis is not generally required;
 - economic development or settlement patterns are only relevant if they give rise to new development and associated effects;
 - human health should be considered in the context of the relevant environmental topics addressed by the EIAR;
 - the effects on human health via relevant pathways (such as air, soil and water) should be considered in the context of accepted standards for exposure, dose or risk; and
 - other health and safety issues are addressed under other EU directives.
- 4.19 The Institute of Environmental Management and Assessment (IEMA) issued two new guidance documents in 2022 on the assessment of human health within EIA as follows:
- Effective Scoping of Human Health in EIA; and
 - Determining Significance for Human Health in EIA.
- 4.20 Section 1.11 of the IEMA Guidance on the Effective Scoping of Human Health in EIA recommends that if there is no potential for likely significant population effect, human health should be scoped out of the EIA. The guidance makes clear that the topics of population and human health are separate technical topics. The assessment of socio-economic conditions addressed through the topic of 'Population' provides baseline information on which an assessment of sensitivity of human health can be made, therefore it is considered appropriate that both topics are covered within this chapter.
- 4.21 On the basis of the guidelines outlined above, the scope of this section of the EIAR covers a range of factors including a review of population dynamics and local land uses to determine the potential for impacts on general wellbeing and quality of life. The potential for health impacts due to changes in the environment are assessed in the context of the specialist environmental topics addressed by this EIAR.
- 4.22 Table 4-1 of this Chapter sets out an initial review of the wider determinants of health identified within the guidance on scoping of human health and how these have the potential to be impacted by the proposed development. The initial assessment within Table 4-1 provides a framework in order to focus the assessment of human health impacts on areas of most relevance.

¹ Environmental Protection Agency (2022). *Guidelines on the Information to be contained in Environmental Impact Assessment Reports*. Environmental Protection Agency, Johnstown Castle Estate, Co. Wexford

Table 4-1
Wider Determinants of Health and Proposed Development

Categories	Wider Determinants of Health	Commentary
Health related behaviours	Physical activity	No changes likely as a result of proposed development
	Risk taking behaviour	No changes likely as a result of proposed development
	Diet and nutrition	No changes likely as a result of proposed development
Social Environment	Housing	Increased supply of aggregates has potential to support increased housing supply
	Relocation	No changes likely as a result of proposed development
	Open space, leisure and play	No changes likely as a result of proposed development
	Transport modes, access and connections	Potentially enhanced by proposed changes to HGV routing and by local road upgrade / improvements
	Community Safety	No changes likely as a result of proposed development.
	Community identity, culture, resilience and influence	No changes likely as proposed development activities are similar to those which were previously extant at quarry (and currently permitted)
	Social participation, interaction and support	Scope to increase or improve on back of projects supported by a community fund which will be established as part of the proposed development
Economic Environment	Education and training	Not relevant to application site / proposed development
	Employment and income	Proposed development will be a source of local rural based employment (both direct and indirect) and will support wider infrastructure delivery in Ireland
Bio-physical Environment	Climate change mitigation and adaptation	Re-use, recovery and recycling of waste and by products contributes to circular economy, conserves natural resources and offers scope to contribute to reduction in carbon emissions
	Air quality	Potential for local air quality impacts from dust emissions on site and traffic emissions on local roads. No disturbance / extraction of in-situ bedrock hosting naturally occurring asbestos and ultimately long-term backfill of quarry will cover any exposed veins.
	Water quality or availability	Potential for contaminants in waste and/or run-off to impact on surface water and/or groundwater

Categories	Wider Determinants of Health	Commentary
	Land quality	Backfilling of land increases availability of land for variety of uses. Quality of land / soil cover to be achieved through strict management and licensing of backfilling / landfilling activities
	Noise and vibration	Potential for local impacts from site-based activities and HGV traffic
	Radiation	Potential exposure to naturally occurring radon gas
Institutional and Built Environment	Health and social care services	No changes likely as a result of proposed development
	Built environment	Increased supply of aggregates has potential to support enhancements to wider infrastructure
	Wider societal infrastructure and resources	Increased supply of aggregates has potential to support enhancements to wider infrastructure

Consultations / Consultees

- 4.23 As this development constitutes Strategic Infrastructure Development (SID), a formal pre-application consultation exercise was undertaken between July and September 2024 with a number of prescribed bodies on the advice / directions of An Bord Pleanála, including Fáilte Ireland, the Health Service Executive (HSE), the Environmental Protection Agency and Wicklow County Council. Consultations with Wicklow County Council were principally with officials from the Environment and Roads Departments.
- 4.24 Feedback obtained from Prescribed Bodies is detailed and addressed in the relevant technical chapters of the EIAR. Feedback of most relevance to Population and Human Health was received from Fáilte Ireland and the Health Service Executive (HSE), summary details of which are presented in tabular format in Table 4-2 below.

Table 4-2
Feedback Received from Prescribed Bodies

Prescribed Body	Feedback Provided	EIA Consideration
Fáilte Ireland	EIA should follow the Fáilte Ireland (2023) guidelines on Tourism in EIA	Guidance followed
	Provide details of the potential impacts on National Botanic Gardens at Kilmacurragh (c. 1km southwest) and Avondale – Beyond the Trees (c. 6.5 km southwest)	Potential impacts identified and assessed in this Chapter
HSE	Consider wider determinants of health and wellbeing and examine all likely significant impacts, positive and negative	Refer to Table 4-1
	Nearest sensitive receptors should be identified, including any potential newly permitted	Identified in Figure 4-1

Prescribed Body	Feedback Provided	EIA Consideration
	Early and meaningful public consultation should be undertaken	Public consultation exercise undertaken - feedback obtained is discussed below
	Ensure drinking water sources, including private wells, are identified and protected	Cross reference made with EIAR Chapter 7 (Water)
	Ensure the potential for cumulative impacts is identified	Prospective / permitted projects identified and potential for cumulative impacts addressed in EIA

- 4.25 Further details in respect of pre-planning consultations undertaken with prescribed bodies are presented in the Consultation Report accompanying this planning application.
- 4.26 Members of the public were invited to attend a locally held public information and consultation event on 21 August 2024. The notice advertising the event was distributed by means of a leaflet drop to local residents and included details of the dedicated project website and an email address for submission of observations and feedback. Prior notice of the public consultation event was also provided by way of an advert in the Wicklow People local newspaper on 14 August 2024.
- 4.27 The event was an informal and open forum, with a series of display boards available for inspection, presenting details of the proposed development, visualisations / photomontages and information on environmental topics. Company representatives were available for question / discussion in relation to any potential concerns, and input and feedback was sought in respect of potential refinement of development proposals to reduce or minimise concerns about potential development impacts.
- 4.28 c. 40 individuals attended the public consultation event and a total of 31 written submissions were received via a dedicated consultation website.. The vast majority of comments / concerns raised in submissions received from the local community were in relation to the increase in traffic volumes on the local road network and perceived safety risks to the local community which might arise therefrom.
- 4.29 Concerns were also raised in respect of a range of other issues including implications for climate from traffic emissions, operational management, the control of waste intake, potential for illegal / hazardous waste intake to site and potential for noise and air quality impacts. Submissions also raised concerns around potential flood impacts, groundwater contamination, impacts on peregrine falcon, control of invasive species and road upgrade / improvement proposals.
- 4.30 Further details in respect of pre-planning consultations undertaken with the local community are presented in the Consultation Report accompanying this planning application. The concerns raised in the course of the public consultation are also addressed in respective Chapters of this EIAR.
- 4.31 The Applicant has noted that many of the comments made in respect of the proposed development indicate a level of distrust within the local community, for example, in relation to criticism of the lack of information on the community event, its poor timing in the summer months, and complexity of information being provided. There was also significant mistrust of the Local Authority and regulatory bodies (including the EPA). Notwithstanding this however, Kilsaran is committed to ensuring open communication throughout the life of this project and wishes to foster a positive working relationship with the local community in which local concerns are freely shared and addressed to the fullest extent possible.

- 4.32 Human health and amenity issues such as traffic, noise, air and water emissions are predominantly assessed in relevant topic chapters of this EIAR, the conclusions of which are summarised in this Chapter in order to address potential impacts for the local population and human health. Other general population issues raised during consultation in relation to tourism, economic impacts and distribution of community funds are also discussed under relevant headings within this Chapter.

Contributors / Author(s)

- 4.33 This Chapter was written by Lynn Hassett, an Associate with SLR Consulting Ireland. Lynn holds a BSc in Applied Ecology (2000) and an MSc in Environmental Impact Assessment (2001) and in her current role, acts as an EIA Co-ordinator for SLR Consulting Ireland.
- 4.34 Lynn has 15 years of experience in EIA across the not-for-profit, public and private sectors in the UK and Ireland. She has worked on the production and co-ordination of EIARs accompanying planning applications and also on the review of EIARs on behalf of planning authorities processing such applications. She is also a Practitioner Member of the Institute of Environmental Management and Assessment (IEMA) and has been a member since 2001. She is also a Full Member of the Institution of Environmental Sciences, which she joined in 2023.

Limitations / Difficulties Encountered

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

REGULATORY BACKGROUND

Legislation

- 4.36 There is no specific legislation relevant to this Chapter of the EIAR. However, the information provided within the Chapter is informed by
- Section 37D and 171A of the Planning and Development Act, 2000 (as amended);
 - Article 94 and Schedule 6 of the Planning and Development Regulations, 2001 (as amended); and
 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.
- 4.37 The legislation relevant to human health protection is set out within the technical EIA Chapters relevant to each environmental pathway (noise, air, soil, water, etc). The guidance in relation to human health protection is predominantly set out within World Health Organisation Guidelines and Limits.
- 4.38 The WHO works worldwide to promote health, keep the world safe and serve the vulnerable. Its goal is to ensure that a billion more people have universal health coverage, to protect a billion more people from health emergencies and provide a further billion people with better health and wellbeing. It has a wide remit, from setting limits to prevent danger to human health, to providing responses to health emergencies, and promoting health and wellbeing.
- 4.39 The Institute of Public Health (IPH) is an organisation that informs public policy to promote health and wellbeing and reduce health inequalities in Ireland and Northern Ireland. It has previously provided comments on draft legislation on EIA and has been represented on the working group for the IEMA guidance on human health in EIA. It has its own guidance

on stand-alone Health Impact Assessments² (HIAs), however, the guidance is clear that EIA does not have to adopt all the HIA methods and tools. The IPH set its Strategic Objectives 2020-2025 in order to be able to fulfil its role to its best potential in informing public health policy. The Institute supports the national implementation of the UN Sustainable Development Goals, including SDG3, which focuses on good health and wellbeing. Taking opportunities to enhance wellbeing is a common thread in the IPH and IEMA guidance on human health assessment.

- 4.40 There is no policy or validation requirement to undertake HIA for the proposed development, therefore this Chapter of the EIA aligns to HIA principles, as identified in the IPH Guidelines, including considering wider determinants of health, considering existing inequalities of health and encouraging stakeholder engagement.
- 4.41 The Healthy Ireland Framework was launched by the Irish Government in 2013, with a focus to deliver a vision where 'everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone's responsibility'.
- 4.42 The Healthy Ireland Strategic Action Plan 2021-2025 identifies 6 themes to deliver the vision and identifies relevant government departments as well as specific implementation actions. A network of Healthy Cities and Counties is intended to be developed to deliver the Framework at a local level. One of the commitments within the Strategic Action Plan is to publish a Healthy Cities and Counties Strategic Development Plan.
- 4.43 The Healthy Ireland Framework is delivered within each local authority area through the Local Community Development Committee (LCDC). The Wicklow Local Economic and Community Plan (LECP) 2024-2029 was published by the LCDC in 2024 to guide local economic and community development in County Wicklow within the timeframe of the Plan.
- 4.44 Wicklow County Council published the 'Healthy Wicklow Action Plan 2018 2021' in line with the 'National Activity Plan' and 'Healthy Ireland' framework. The plan outlines a strategy to assess the requirements of Wicklow residents and set outs objectives to improve the overall health and wellbeing of the entire community residents. It has four key goals as follows:
- Increase the proportion of people who are healthy at all stages of life;
 - Reduce health inequalities;
 - Protect the public from threats to health and wellbeing; and
 - Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland.

Planning Policy and Development Control

Wicklow County Development Plan 2022-2028

- 4.45 The new Wicklow County Development Plan (CDP) 2022-2028 came into effect on 23 October 2022.
- 4.46 Chapter 9 of the Plan, on 'Economic Development', set out objectives for the sustainable development of Wicklow's economy that are relevant to and implementable through a land-use plan. It states that sustainable economic development requires balance in terms of location and diversity of economic activity, as well as the protection of the environment and people's quality of life.

² <https://www.publichealth.ie/reports/health-impact-assessment-guidance-manual>

Waste Management

- 4.47 The most relevant policies of the CDP in relation to the proposed development at Ballinclare Quarry and waste management include the following:
- **CPO 15.3** - To facilitate the development of existing and new waste prevention and recovery facilities and in particular, to facilitate the development of 'green waste' recovery sites; and
 - **CPO 15.6** - To facilitate the development of sites, services and facilities necessary to achieve implementation of the objectives of the Regional Waste Management Plan.
- 4.48 Section 2.3.5 of Appendix 1 sets out the required development management criteria that must be met for successful applications for disposal facilities for inert materials. Criteria include demonstrating a proven need for such facilities, lack of adverse impacts on landscape or designated sites, lack of detrimental impact on residential amenity and lack of significant traffic impact.
- 4.49 Despite the reference to improved recycling of construction and demolition waste elsewhere in the plan, it is noted that the specific criteria described in relation to inert waste disposal facilities do not relate to any ancillary activities pertaining to the operation of sorting, handling and recycling of waste.

Extractive Industry

- 4.50 In addition to policy and objectives in respect of waste management, in view of the fact that the proposed development also provides for the production of construction grade recycled aggregates, it is considered that some provisions in respect of the extractive industries are also pertinent to this planning application.
- 4.51 There is a Strategic Objective in relation to the Extractive Industry included in the current CDP which is:
- "To support and facilitate the exploitation of County Wicklow's natural aggregate resources in a manner, which does not unduly impinge on the environmental quality, and the visual and residential amenity of an area (see Map 09.05, Crushed Rock Aggregate Potential)."*
- 4.52 Appendix 1 of the CDP identifies the Development and Design Standards required in respect of various types of development. Guidance provided in respect of extractive industries (from Page 43) states that applications for extractive related development shall be facilitated by the Council as long as the following criteria are met:
- The environment and the landscape will be safeguarded to the greatest possible extent during all life cycle stages of the process;
 - Such operations have good access to, or are within reasonable distance of, the national or regional road network and do not adversely affect the residential or tourism amenity of the area;
 - Satisfactory provision will be made for a beneficial after use of the land that does not conflict with other planning objectives for the area; and
 - The working, landscaping, restoration and after care of the site will be carried out to the highest standards in accordance with the approved scheme.
- 4.53 It is stated, however, that these criteria will be taken into account considering the anticipated reduced demand for aggregates that will come about through improved recycling of C&D waste (such as that specifically provided for in the development proposal for Ballinclare Quarry).

- 4.54 Appendix 1 of the CDP requires that all applications for new extraction, or expansion of existing permitted and licenced sites, shall have regard to the Planning Act and associated Regulations to determine the requirement for EIA. Where EIA is required, Wicklow County Council identifies a comprehensive list of information that should be included regardless of the scope of the EIAR. This includes, amongst other topics, details on processing of materials, ancillary operations and development, access and transport, environmental effects of the proposal and details of restoration, after care and after use.
- 4.55 Section 9.5 of the CDP also identifies a number of objectives for the development of the rural economy, including the extractive sector, which list the following objectives in relation to control of the extractive industry:
- **CPO 9.52** – To facilitate and encourage the exploration and exploitation of minerals in the County in a manner, which is consistent with the principle of sustainability and protection of residential, environmental and tourism amenities;
 - **CPO 9.53** – To encourage the use, development and diversification of the County's indigenous natural dimensional rock industry, particularly where it can be shown to benefit processing, craft or other related industries;
 - **CPO 9.54** – To support and facilitate the development of related and spin-off industries of the extractive industry such as craft and monumental stone industries and the development of the mining and industrial tourism heritage. Consideration will be given to the development of such related industries within or in association with existing operations of worked out mines or quarries, at locations such as the disused granite quarries at Ballyknockan, where this does not conflict with other objectives and objectives of the plan.
 - **CPO 9.55** – To have regard to the following guidance documents (as may be amended, replaced or supplemented) in the assessment of planning applications for quarries and ancillary facilities:
 - 'Quarries and Ancillary Activities: Guidelines for Planning Authorities' (2004, DoEHLG);
 - 'Environmental Management Guidelines- Environmental Management in the Extractive Industry' (Non-Scheduled Minerals)', EPA 2006;
 - 'Archaeological Code of Practice between the DoEHLG and the Irish Concrete Federation' 2009;
 - 'Geological Heritage Guidelines for the Extractive Industry', 2008; and
 - 'Wildlife, Habitats and the Extractive Industry – Guidelines for the Protection of Biodiversity within the Extractive Industry'; NPWS 2009.

Technical Standards

- 4.56 There are no technical standards relevant to this Chapter of the EIAR. Technical standards, if any, are those that are relevant to each environmental pathway (noise, air, soil, water, etc). These are identified and addressed in separate EIAR Chapters.
- 4.57 This Chapter of the EIAR was prepared utilising Census data for 2016 and 2022, for electoral divisions that both encompass the application site, and areas immediately surrounding it. All calculations and data are taken from this CSO data.

Significant Risks

- 4.58 The proposed waste development at Ballinclare Quarry is a relatively conventional project providing for the processing of soil and stone and C&D wastes to produce recycled aggregate at dedicated, purpose-built facilities, as well as landfilling / backfilling of a former hard rock quarry using inert waste and by products, principally inert soil and stone.

- 4.59 The nature and extent of the activities and operations 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 the population, human health or amenity in the surrounding local area.

RECEIVING ENVIRONMENT

Site Context

- 4.60 The application site at Ballinclare Quarry straddles the townlands of Ballinclare and Carrigmore townlands in Co. Wicklow, approximately 2.5 km to the northwest of the small settlement of Kilbride, 2.5 km south of the village of Glenealy and 7.5km southwest of the town of Wicklow. The existing quarry development and site infrastructure was permitted by way of Wicklow County Council Planning Ref. 07/795, dated February 2008, and subsequently by Wicklow County Council Planning Ref. 14/2118, dated January 2016.
- 4.61 The area surrounding the application site is typically rural in character and dominated by forestry and undulating agricultural land. Residential property in the vicinity of the application site generally comprises farmsteads and isolated / single rural dwellings along the local road network. The nearest dwellings to the landholding boundary are located to the south, west and north of the site, along the local road network.
- 4.62 A belt of woodland separates the application site from most receptors to the south and rising topography and/or woodland separates it from all receptors to the north. A watercourse, the Potters River, flows to the north and east of the site. Existing land use and residential receptors in the vicinity of the application site are shown on Figure 4-1.
- 4.63 When the quarry was operational, traffic travelling to the site from the north turned off at Junction 18 of the M11 Motorway (beside the Beehive Inn in Coolbeg) and travelled south-westwards for approximately 3.8km along the L1113 Local Road before then turning east to run along a short stretch (0.6km) of the L1157 Local Road to the quarry entrance. Traffic travelling to the site from the south turned off R772 Regional Road (the former N11 National Primary Road) at the former Tap Restaurant at Kilbride (now Junction 18 Café / Green Angel Skincare) and travelled north-westwards along the L1157 Local Road up to the quarry entrance. At its closest point, the M11 Motorway runs approximately 0.4km to the east of the quarry.
- 4.64 The application site straddles the two townlands of Ballinclare and Carrigmore. The most localised level of demographic data available is at the Electoral Division (ED) level, which can be obtained through Census of Ireland statistics published by the Central Statistics Office (CSO).
- 4.65 Ballinclare Quarry is located in the Electoral Division (ED) of Dunganstown West. However, the Glenealy ED and Dunganstown South ED adjoin the application site to the north and to the south / east respectively. These two ED's will be referred to collectively hereinafter as the "surrounding ED's". The ED boundaries around the application site are shown in Figure 4-2.

Study Area

- 4.66 For the purposes of this Population and Human Health assessment, a study area has been defined as a 1 km buffer radius around the application site boundary shown in Figure 4-1. The figure identifies residential and other community receptors within this area. Although population and human health effects would not expect to be experienced to a 1 km distance, the radius has been selected to facilitate a conservative assessment and to ensure that a range of community services and facilities representative of the local area were included and assessed.

Baseline Study Methodology

- 4.67 The baseline study in respect of Population and Human Health comprises a desk-top review of CSO census information³ (2016 and 2022) for Dunganstown West ED, the surrounding EDs, County Wicklow and the State to enable a comparison of the situation in the local area with wider trends.
- 4.68 In addition to census data from the CSO, the following sources have also been used to collate relevant information for the assessment:
- Myplan.ie (<http://myplan.ie/index.html>);
 - Historic Environment Viewer (<http://webgis.archaeology.ie/historicenvironment/>);
 - Wicklow County Development Plan 2022-2028;
 - the environmental topic chapters of this EIAR;
 - OS Maps;
 - Google Maps Satellite imagery;
 - openstreetmap.org; and
 - Live Register Statistics.
- 4.69 The potentially sensitive residential and other receptors identified in the vicinity of the application site from the information sources identified above are shown in Figure 4-1.

Environmental and Heritage Designations

- 4.70 There are no designated nature conservation sites (Special Areas of Conservation (SAC), Special Protection Area (SPA) Natural Heritage Area (NHA) or proposed Natural Heritage Area (pNHA) within or immediately adjacent to the application site. The closest such sites are the Deputy's Pass Nature Reserve SAC (Site Code 000717) and the Glenealy Woods pNHA (Site Code 001756), which, at their closest point are located approximately 1.6 km and 1.1km to the north-west of the application site respectively. Further detail in respect of designated nature sites is provided in Chapter 5 of this EIAR (Biodiversity).
- 4.71 There are no recorded monuments located within or immediately adjacent to the application site. The nearest recorded monuments are located ca. 200 m to the west, in a field which does not immediately adjoin the application site. These are identified as
- A church (townland of Kilmanoge) (NMS Ref. WI030-014);
 - A graveyard (townland of Kilmanoge) (NMS Ref. WI030-014001);
 - A holy well (townland of Kilmanoge) (NMS Ref. WI030-14002)
- 4.72 Although there are no Protected Structures within the application area, there are two located within the wider study area. These are:
- Westaston Demesne Country House (Structure No. 30-18), a late-17th Century house which now in ruins, located approximately 0.9km to the south-west of the application area.
 - Coolacork Country House (Structure No. 31-06), a late 18th Century house located approximately 0.95km to the north-east.
- 4.73 There are no structures identified on the National Inventory of Architectural Heritage (NIAH) within the application site. The nearest structure identified by the NIAH is a two-storey former gate lodge at Westaston Demesne (Structure No. 16403005), located

³ Available from Small Area Population Statistics at <https://visual.cso.ie/?body=entity/ima/cop/2022&boundary=C04167V04938&guid=2ae19629-1edc-13a3-e055-000000000001>

approximately 1.3 km southwest of the site. Further detail on the built heritage of the local area is presented in Chapter 12 of this EIAR (Cultural Heritage).

Population

- 4.74 The application site is located in central Wicklow and on the periphery of the Greater Dublin Area. Its location close to the national motorway network means it enjoys ready access to Dublin and can benefit from its proximity to the city and gain some economic spill-over from it.
- 4.75 The change in population numbers from 2011 to 2022, as per the Census data for the Electoral Division covering the application site, the surrounding EDs combined, County Wicklow and the State are outlined in Table 4-3 below.

Table 4-3
Population Change 2011 – 2022⁴

	2011	2016	% Change 2011-2016	2022	% Change 2016-2022
Dunganstown West ED	453	458	+1.1%	481	+5.0%
Surrounding EDs	3,590	3,627	+1.0%	3,815	+5.2%
Co. Wicklow	136,640	142,425	+4.1%	155,851	+9.4%
Ireland	4,588,252	4,757,976	+3.7%	5,149,139	+8.2%

- 4.76 The area around the application site has shown significant population growth since 2016, albeit at a lower rate than within Wicklow County or the State. The lower proportional growth rate most likely reflects the rural nature of the EDs studied.

Employment

- 4.77 The closest Social Welfare Office to the application site is located in Wicklow Town, Co. Wicklow. According to the May 2024 Live Register statistics⁵, there were 1,031 persons on the live register in Wicklow Town. This figure has been broadly stable since about the third quarter of 2018.
- 4.78 Between early 2009 and then there had been much higher unemployment, which would have coincided with the national economic downturn which followed the Global Financial Crisis of 2008. More than double the existing unemployment numbers were recorded during some months over that period, the highest being 2,365 during July 2012. By comparison, there were 764 on the register in October 2006, during which Ireland was experiencing an economic boom.
- 4.79 As previously noted, the application site is located in the ED of Dunganstown West and abutted by Electoral Divisions of Dunganstown South and Glenealy. According to the 2022 census results, the Duganstown West ED had a total population of 481. Of the 375 people who were over the age of 15,
- 246 people were at work;

⁴ <https://visual.cso.ie/?body=entity/ima/cop/2022>

⁵ CSO Live Register Data <https://data.cso.ie/>

- 3 were looking for their first job;
- 12 were unemployed;
- 39 were students and 29 were looking after home / family;
- 60 were retired; and
- 9 were unable to work due to illness or disability, working at home, retired, unable to work, or other.

4.80 The working population of Dunganstown West ED and the wider county is categorised by occupation type in Table 4-4 below. The table indicates that in Dunganstown West ED, the highest proportion of workers are in skilled trades occupations. This also applies in the surrounding ED's. Collectively the proportion of such workers is higher than in the wider county and the State as a whole.

4.81 The Dunganstown West ED has a marginally higher proportion of process, plant and machine operatives than in comparison areas. It is also noted that there is a relatively small proportion of workers in the ED in Sales and Customer Services occupations.

Table 4-4
Persons at Work in Local EDs, Co. Wicklow and State by Occupation (CSO 2022)

	Dunganstown West ED		Surrounding EDs		Co. Wicklow		State	
Occupation	No.	%	No.	%	No.	%	No.	%
Managers, Directors and Senior Officials	21	8%	206	11%	7,189	10%	192,679	8%
Professional Occupations	49	19%	341	18%	14,949	20%	507,044	20%
Associate Professional and Technical Occupations	36	14%	259	14%	10,183	14%	292,273	12%
Administrative and Secretarial Occupations	22	9%	183	10%	7,003	9%	229,737	9%
Skilled Trades Occupations	50	19%	307	17%	9,621	13%	313,921	13%
Caring, Leisure and Other Service Occupations	16	6%	136	7%	5,673	8%	183,584	7%
Sales and Customer Service Occupations	8	3%	85	5%	4,240	6%	154,238	6%
Process, Plant and Machine Operatives	21	8%	103	6%	4,078	5%	172,521	7%
Elementary Occupations	15	6%	131	7%	5,572	7%	203,532	8%
Not stated	20	8%	108	6%	5,791	8%	247,044	10%

- 4.82 A breakdown of the industry in which those at work are employed is provided in Table 4-5 below. As can be seen, local residents are principally employed in the professional services, commerce / trade sectors and agriculture / forestry / fishing sectors and collectively, these three sectors combined employ well over half of the local workforce.
- 4.83 There is a notably higher percentage of local people employed in the agriculture / forestry / fishing sectors relative to the surrounding EDs, the wider County and the State as a whole. Employment in other sectors is broadly in line with that in the rest of the county, albeit with a slightly lower proportion of those working in the commerce and trade sector, and manufacturing industries than at County and State level.

Table 4-5 Persons at Work in Local EDs, Co. Wicklow and State by Industry (CSO 2022)

	Duganstown West ED		Surrounding EDs		Co. Wicklow		State	
Industry	No.	%	No.	%	No.	%	No.	%
Agriculture, forestry and fishing	30	12%	88	5%	2,091	3%	82,228	4%
Building and construction	13	5%	140	8%	4,453	6%	134,482	6%
Manufacturing industries	17	7%	123	7%	6,300	9%	273,102	12%
Commerce and trade	53	22%	470	27%	18,222	26%	552,642	24%
Transport and communications	24	10%	166	10%	6,717	10%	212,383	9%
Public administration	11	4%	84	5%	3,284	5%	131,639	6%
Professional services	60	24%	406	24%	17,043	25%	568,105	24%
Other	38	15%	245	14%	10,861	16%	365,716	16%

Social Infrastructure

- 4.84 The villages of Glenealy and Kilbride act as a social and cultural hub for those living in the area surrounding Ballinclare Quarry. There is a primary school in Glenealy and churches in both villages. The nearest Garda stations are located in the towns of Rathdrum and Wicklow. The area is served by the HSE services located in the Wicklow Primary Health Centre, approximately 7.5 km northeast of the application site. The nearest general hospitals are St. Colmcilles in Loughlinstown and St Vincents, both in south County Dublin. As is typical in rural areas, there are also smaller community HSE and private healthcare services interspersed across the region.
- 4.85 There is a community hall with adjoining community sports facility located in Glenealy village. Barndarrig GAA club grounds are located approximately 1.5 km southwest of the application site, while Avonmore AFC (soccer) grounds are located a short distance further on, approximately 2.75 km to the southwest. Oak Hill Cricket Ground in Kilbride is located approximately 2.75 km to the southeast of the application site. The Wicklow GAA

Centre of Excellence hosts a modern gym, 6 full size pitches and meeting rooms approximately 4.7 km to the northwest.

- 4.86 There are a small range of retail outlets and local services provided in Glenealy, including a convenience store and pub. There are further retail services located in Rathdrum Village. As is typical of rural Ireland, there are also a number of other small local based enterprises scattered across the surrounding area. A more comprehensive range of retail and health facilities are located in Wicklow town, approximately 7.5 km to the northeast.

Tourism and Recreation

- 4.87 The Kilmacurragh National Botanic Gardens are located approximately 1 km to the southwest of the application site. Kilcandra Stud is located approximately 1.7 km to the southwest. In the wider area there are many more tourist attractions which align to County Wicklow' branding as 'Garden of Ireland', including for example, Wicklow Equi Tours (providing horse riding holidays and trekking) located approximately 4 km to the north and Avondale Forest Park, located approximately 6.5 km to the southwest. There are also camping resorts (such as Hidden Valley), hiking trails (such as Deputy's Pass) and numerous stud farms / equestrian facilities interspersed in the wider rural area which surrounds the application site.
- 4.88 The Kilmacurragh National Botanic Gardens and Avondale Forest Park both attract significant tourist visitors to the area, with the former having attracted 123,000 visitors in 2023 and Avondale attracting 354,000 (as advised by Fáilte Ireland during in the course of pre-application consultations). During public consultation, these two attractions were repeatedly identified as valued tourist assets by local residents in the local area, albeit they are also large generators of traffic, in particular since the opening of the Avondale treetop walk in 2022.

Indices of Deprivation

- 4.89 Pobal is an organisation that works on behalf of Government to support communities and local agencies in achieving greater social inclusion and development. The organisation produces mapping information on deprivation indices⁶ in order to identify areas in need of social / community investment. The overall levels of deprivation have been based on census data in relation to demographic profile, social class composition and labour market situation.
- 4.90 According to the deprivation indices based on 2022 census data, Dunganstown West ED is categorised as marginally above average (i.e. slightly advantaged). Similarly, the surrounding EDs of Dunganstown South and Glenealy, as well as the wider County of Wicklow, are all classified as marginally above average in terms of deprivation indicators.

General Health

- 4.91 Table 4-6 below resents the results of the 2016 census in relation to the self-reported health status of Dunganstown and surrounding ED residents as well as those in County Wicklow and the State.

⁶ <https://maps.pobal.ie/WebApps/DeprivationIndices/index.html>

Table 4-6
Self-reported Health Status : Local EDs, Co. Wicklow and State (CSO, 2022)

Self-reported Health Status	Dunganstown West ED	Surrounding EDs (combined)	County Wicklow	State
Very Good	62%	58%	56%	53%
Good	28%	29%	29%	30%
Fair	5%	9%	8%	9%
Bad	1%	1%	1%	1%
Very Bad	1%	0%	0%	0%
Not Stated	3%	3%	5%	7%

- 4.92 The health status of 'Very Good' reported in the Dunganstown West ED was at notably higher proportion than at both County and State level. In general, the reported quality of health within the local EDs was much better than that reported by residents across the wider county and State.

Radon

- 4.93 The majority of the application site is located within an area mapped by the EPA⁷ as being within a risk area where 1 in 5 homes are likely to have high radon levels, where there are legal requirements for radon testing in workplaces. The southwestern portion of the site is within a risk area where 1 in 10 homes are likely to have high radon levels, where testing for radon in workplaces is recommended.

Sensitive Receptors

- 4.94 As previously noted, the application site is surrounded by mostly agricultural and wooded land, with a number of isolated residential properties and agricultural holdings located across the local area, principally along the local road network.
- 4.95 As can be seen from Figure 4-1, there are 15 residential receptors within 500m of the application site boundary, with a further 22 dwellings within 1,000m, the majority of which are located to the north and west. The closest residential properties are:
- Two properties located approximately 30m from the southwestern property boundary, close to the T-junction between the L1113 and L1157 Local Roads (Ref. R1 and R2);
 - Three properties located approximately 30m to 200m from the northwestern property boundary, closest to the existing Wicklow County Council compound and the T-junction with the local road to Deputy's Pass / Glenealy (Ref. R4, R5 and R6);
 - A property located approximately 200m beyond the ridgeline which delineates the northern property boundary of the application site (Ref. R7); and
 - A property located approximately 250m beyond the eastern property boundary, close to the right (eastern) bank of the Kilmacurragh Stream (Ref. R8).

⁷ <https://gis.epa.ie/EPAMaps/Radon?&lid=EPA:RadonRiskMapofIreland>

- 4.96 The noise and dust impact assessments undertaken during this EIA process have been carried out with reference to these representative properties for the identification of potential effects arising from the proposed development.
- 4.97 The baseline information presented in the preceding sections has not identified any particular sensitivities in relation to human health. The deprivation indices in the area do not highlight the area as disadvantaged and self-reported health status is positive and better than the national situation. The scale of community facilities and amenities available to local residents is considered to be in proportion with their rural location. The proposed development, itself, will not introduce new communities to the local area and is not expected to create any additional demand on services.
- 4.98 A further review of Table 4-1 in the context of the baseline population confirms that the main potential for the proposed development to cause negative impacts to human health is through the potential for noise emissions and emissions to air, land and water. These issues have been addressed in detail in the respective environmental topic chapters of this EIAR and summary conclusions in relation to the resulting impact on human health are presented below.
- 4.99 The proposed development has potential to have a significant positive influence on the local rural economy through the provision of direct and indirect employment opportunities at the application site. This has potential knock-on effects including contribution to the economic sustainability and potential wellbeing (work / life balance) of the local population.

IMPACT ASSESSMENT

Evaluation Methodology

- 4.100 The evaluation of effects on employment, human health and amenity comprises a qualitative assessment based on both quantitative and qualitative analysis of potential effects on the environment undertaken in other Chapters of this EIAR. The assessment also takes into account a review of relevant literature, assessments and professional judgement in relation to impact on population and human health.
- 4.101 The duration of the proposed landfilling activities is ultimately dependent on the rate of inert waste importation versus materials recovery and re-use but is expected to be between 16.25 and 21.5 years. This assumes an average intake and placement rate for materials at the inert landfill facility of between 300,000 and 400,000 tonnes per annum (in addition to a maximum rate of C&D waste recovery of 50,000 tonnes per year).
- 4.102 Soil washing activities will cease in advance of the final phase of landfilling across the former concrete / asphalt production areas. C&D waste recovery activities at the paved area to the west of the access road will cease on completion of landfilling and restoration activities at the application site.
- 4.103 The location and intensity of associated environmental impacts at receptors may vary somewhat as the inert landfilling activities move across the application site over time. The proposed rate of inert waste intake and the period over which these activities proceed means that the duration of any associated effects will be localised and time limited (generally temporary to short term).

Population

- 4.104 Given the nature of the proposals which do not introduce any new communities or housing to the area, and the relatively low level of workers that will be based at the application site at all stages of the proposed development, it is considered that the proposed development will have negligible impacts on the make-up of the local population.

Employment and Economy

Construction Stage Impacts

- 4.105 Prior to commencement of the materials recovery / recycling and inert landfilling activities at the application site, the following site preparation works will be required:
- Securing existing site perimeter with additional fencing / planting as required; (including deer fence);
 - Completing the dewatering of the quarry void in advance of engineering (lining) works and inert waste landfilling activities;
 - Felling of a small number of mature trees along the western side of the existing internal access road to facilitate its widening and construction of 2 internal queuing lanes for HGVs;
 - Modification / upgrade of existing drainage channel along the site access road to facilitate construction of additional queuing lane and the increase in paved area along site access road.
 - Installation of silt trap and hydrocarbon interceptor to treat run-off and provision of additional pumping capacity to transfer it from existing surface water pond at site entrance to quarry sump;
 - Installation of a silt trap and hydrocarbon interceptor at the proposed C&D waste recovery facility;
 - Cutting and mulching of any existing scrub and vegetation across the proposed development footprint and off-site removal to authorised waste facilities (to be undertaken in phases prior to commencement of works in designated areas);
 - Decommissioning and dismantling of any other legacy infrastructure from prior development (e.g. production plant, metal, WEEE, additives etc.) and removal off-site to other Kilsaran production sites or authorised waste facilities as required;
 - Reconfiguration of existing site office and re-establishment of staff welfare facilities;
 - Installation of new weighbridge at the northern end of inbound lane along internal access road;
 - (Re-)commissioning the existing wheelwash facility on outbound lane of site access road and construction of an additional wheelwash facility on the eastern side of former concrete / asphalt yard (in the south-eastern corner of the site);
 - Minor repair / maintenance / upgrading works to existing bunded fuel storage area and concrete slab with sub-surface drainage to hydrocarbon interceptor and soakaway area;
 - Maintenance and continued use of previously approved septic tank and wastewater treatment facilities and installation of sub-surface concrete wastewater holding tank (to augment existing capacity);
 - Maintenance and continued use of existing (Siltbuster) water treatment plant to treat off-site discharge from sump in quarry floor and/or water balancing ponds;
 - Excavation, clearance and levelling of existing ground at proposed wetland area and construction of the wetland treatment area;
 - Installation and commissioning of the soil washing plant in the former concrete / asphalt yard;
 - Construction of the proposed concrete portal frame structure (~~open on two sides~~) at the C&D waste recovery facility at the paved area to the west of the access road;

- Construction / installation of surface water drainage infrastructure between the inert landfill area, recovery shed and C&D waste recovery area, existing settlement ponds and proposed wetland area;
- Upgrading of existing internal access roads across the site leading to the initial landfill cell (Phase 1A) on the western side of the quarry, the soil washing plant, C&D waste recovery facility and wetland area;
- Establishment of biodiversity enhancement features; and
- Establishment of environmental control and monitoring infrastructure.

4.106 This initial phase would likely provide temporary direct employment for at least three to four people, of whom two are likely to be general operative / plant or machinery operators and one or two who will perform the duties of a site manager / works co-ordinator.

4.107 There will also be indirect employment of contractors in undertaking the preparatory / site establishment works and installing new site infrastructure, to be project managed by the site manager / works co-ordinator. The direct and indirect employment generated by the construction phase is likely to have a knock-on impact on the local economy in terms of additional spend in local retail establishments. It is considered that this will have a direct, temporary and minor positive effect with no significant effect on the environment

Operational Stage Impacts

4.108 The subsequent operational phase of the proposed development will entail:

- Establishment and operation of a materials recovery / recycling facility and inert waste landfill to process and re-use imported by-product materials and to recovery or disposal of imported soil and stone / C&D wastes;
- The annual importation of up to 550,000 tonnes of soil and stone, both as inert waste and non-waste by-product material;
- The annual importation of up to 50,000 tonnes of inert C&D wastes, which will principally comprise concrete (ready-mixed, reinforced, blocks and/or pavement slabs), bricks and bituminous mixtures / hardened asphalt;
- Production of recycled aggregates from C&D waste and processing of excess natural / waste soils at the soil washing plant;
- Landfilling of inert, predominantly soil and stone waste at discrete lined landfill cells across the existing quarry footprint void, at a typical rate of between 300,000 and 400,000 tonnes per year and the progressive restoration of the former quarry to a landform substantially similar to that which originally existed at the application site;
- The separation of any intermixed C&D waste (principally concrete, metal, timber, PVC pipes and plastic) inadvertently imported to site prior to removal off-site to authorised waste disposal or recovery facilities;
- Temporary stockpiling of imported topsoil pending re-use as cover material for the final stage of landfilling;
- Seeding of the final landform with a native grass mix prior to implementation of native woodland planting scheme.

4.109 The proposed development will support the direct employment of at least 6 people (and up to a maximum of 15 people) on a full time equivalent (FTE) basis. One individual will be nominated as the facility / site manager and will be required to manage and oversee site operations. Another will be appointed as deputy manager. Remaining staff will be employed in a variety roles and undertake various site duties, operating plant and machinery, processing plant, waste inspections, record keeping etc.

- 4.110 Staff will be employed for the duration of the on-site operations (which will be dependent on rate of inert waste intake). Employment will cease on completion of landfill and restoration activities and cessation of inert C&D waste recovery operations.
- 4.111 The proposed development will also indirectly support and sustain employment for hauliers servicing the construction and waste management industries, as well as providing occasional employment for sub-contractors, maintenance contractors and environmental monitoring personnel and advisors as required.
- 4.112 In addition, the proposed development will contribute indirectly to supporting and sustaining both the local and regional economy through the provision of required additional waste disposal and recovery capacity for inert soil and stone / C&D wastes generated by construction and development activities.
- 4.113 The employment impacts associated with the operational phase of the proposed development are therefore considered to have a long-term, direct and minor positive effect with no significant effect on the environment

Post – Operational Stage Impacts

- 4.114 Following the cessation of landfilling operations, the restoration works and final seeding on the completed landform will be undertaken, site infrastructure decommissioned and plant / materials / waste removed off-site.
- 4.115 Establishment maintenance will be carried out for a period of up to 3 years following implementation of the native woodland planting scheme. This will provide some intermittent, short-term employment for landscaping contractors over the restoration period.
- 4.116 The employment impacts associated with the post-operational phase of the proposed development are therefore considered to have a short-term, direct and indirect and positive effect with no significant effect on the environment.

Human Health / Health and Safety

- 4.117 Ultimately, all of the effects of a development on the environment impinge upon human beings. Direct effects relate to matters such as land, water and air quality, noise, and changes to landscape character. Indirect effects relate to such matters as flora, fauna and biodiversity.
- 4.118 The potential for impacts on human health has been assessed based on the technical assessments of the EIAR, which identify potential pathways for respective impacts to human receptors.

Construction and Operational Stage Impacts

- 4.119 The initial site establishment / construction phase of the proposed development will require some preparatory site works and installation of new site infrastructure. The operational stage of the development will principally entail the importation and recovery of inert / C&D wastes at the waste recovery shed and soil washing plant, the importation, unloading, placement and disposal of inert wastes at the landfill facility and environmental management activities.
- 4.120 During these stages, the potential impacts on air, noise, land and water may include the following:
 - the generation of dust and/or air borne particulates, particularly during extended periods of dry weather, through the unloading and placement of inert soil and stone / C&D waste at the waste management facility, from stockpiled C&D waste and recycled aggregates at the recovery facility and the movement of haulage trucks and/or earthmoving equipment across the application site;

- the generation of noise by the movement and operation of haulage trucks and earthmoving plant and activities at the C&D waste recovery facility and soil washing plant;
 - a risk of importing potentially contaminated materials to the facility and placing them in or on land;
 - a risk of accidental leakage or spillage of materials such as fuel / oil into the underlying soil / bedrock and ultimately to groundwater.
- 4.121 There is relatively high radon potential within the central part of the application site. Radon gas is not considered harmful in the open air and workplace testing is required in indoor or underground locations where workers spend more than 100 hours per year⁸. The EPA (2019) Protocol for the Measurement of Radon in Homes and Workplaces focusses solely on the measurement of indoor radon concentrations and that “it should be noted that outdoor workplaces would not be expected to have elevated radon concentrations and therefore no radon measurements are required”.
- 4.122 The main work at the site takes place outdoors, hence the risk of radon in general is extremely low. However, if planning permission is granted radon testing will be organised for on-site structures, and corrective measures implemented as required.
- 4.123 As outlined in each of Chapters 6, 7, 8 and 10 of this EIAR, a number of mitigation measures are proposed to control and minimise these effects and to ensure that the residual effects of the proposed development on human health during the construction and operational phases are acceptable and not significant. On this basis, it is considered that, with implementation of the proposed mitigation measures, there would be no likely significant temporary or permanent effects on human health during either the construction or operational stages of this development. The landscape and visual assessment has concluded that the proposed development will not result in significant changes to landscape or views.
- 4.124 The technical assessments within the chapters above have concluded that the predicted changes in pollutants are well within statutory standards and WHO guidelines. The potential for non-threshold effects is noted and is considered to be of a very low level over the period of the proposed development, therefore the magnitude is predicted to be low. In accordance with the significance matrix proposed by the IEMA Guide to Determining Significance for Human Health in EIA, therefore, the potential for effects on human health is considered to be minor adverse (not significant). On this basis, it is considered that there would be no likely significant temporary or permanent effects on human health during the construction / operational stage following mitigation.
- 4.125 Should planning permission be granted for the proposed development, the Applicant envisages that a community fund will be established and administered by community representatives and stakeholders. Subject to review and agreement, this fund could be used to establish a number of initiatives to promote and support health and wellbeing in the local community.
- 4.126 Table 4-1 indicates that the aggregate supply that will be obtained by way of the proposed development is in line with Government policy objectives and will help to achieve ambitions for delivery and enhancement of waste treatment infrastructure. The proposal to recover and recycle excess soils and building materials at the C&D waste recovery facility and soil washing plant is supportive of the Government’s aspiration and the recognised need to transition to a circular economy.

⁸ <https://www.epa.ie/environment-and-you/radon/radon-testing/#d.en.82887>

- 4.127 The facility will be operated in line with strict industry controls for health and safety which will ensure that the potential for impacts will be negligible.

Post – Operational Stage Impacts

- 4.128 Following cessation of recovery and landfilling activities and the final restoration of the landform to native woodland, any potential effects on air, noise, land and water would cease and there would be no consequent effects on human health or health and safety.

Social Infrastructure, Tourism and Recreation

- 4.129 Potential effects on the social infrastructure and amenity of local residents surrounding the application site could arise from general disturbance such as changes in demand for local services and from potential environmental emissions from site activities. Given the nature and scale of the proposed development, it is not considered likely that any additional pressure will be placed on community services such as schools and health facilities. Local retailers are likely to gain slightly from increased spend available from local workers and indirect service providers.
- 4.130 Potential emissions arising as a result of the proposed development relate mainly to potential nuisance from noise, dust, traffic, and visual effects. All such effects would however be limited, occurring for the duration of waste activities at the application site and will effectively cease on completion of the inert landfilling and restoration activities (at which time any C&D waste recovery activities will also cease).
- 4.131 In terms of impacts on tourism and equine facilities identified in the environment baseline, the earlier conclusions in relation to residential amenity are considered to also apply to them.

Construction and Operational Stage Impacts

- 4.132 The activities to be undertaken during the construction / site establishment stage are outlined previously under the 'Employment and Economy' sub-heading. These activities will give rise to an increase in intermittent van / HGV movements over the local road network, which will also have the potential to generate noise and dust, which could potentially cause disturbance to human receptors (including tourist visitors to the area).
- 4.133 The activities during the operational stage outlined previously under the 'Employment and Economy' sub-heading also have the potential to generate dust and noise as a result of site-based activities and traffic movements over the local road network. Site based activities could also impact surface water and groundwater and give rise to some visual and landscape impacts, particularly at later stages, as backfilled ground levels rise against the back face of the former quarry.
- 4.134 During the public consultation exercise, the recent growth of traffic numbers associated with local tourist attractions was cited as a concern in cumulation with the proposed development. Consultation with Fáilte Ireland also highlighted the potential for traffic associated with the proposals to impact tourism. Chapter 14 provides an assessment of the traffic network, the traffic related impacts of the proposed development and proposed measures to improve road infrastructure and enhance road safety. From the conclusions of that assessment it can be inferred that there will be an imperceptible effect on residential and tourism amenity, an effect capable of measurement but without significant consequences⁹.

⁹ Definition as per EPA (2022) Guidelines on the information to be contained in Environmental Impact Assessment Reports

- 4.135 As outlined in Chapters 6, 7, 8, 10 and 13 of this EIAR, a number of mitigation measures are proposed to control and minimise dust, noise and water emissions and effects on views (and any associated disturbance) at the closest sensitive receptors and to ensure that the residual effects of the proposed development on residential / tourist amenity are acceptable and not significant for the duration of the construction and operational phases.
- 4.136 Existing perimeter vegetation and trees will be untouched for the duration of the operational phase of the proposed development. It is considered important to maintain the existing perimeter vegetation and woodland in place as it significantly reduces any visual disturbance to the landscape as well as also providing screening for air and noise emissions arising from the proposed waste management activities on-site. In general, the layout and phasing of the proposed development has been developed to provide a high degree of protection for local amenity.
- 4.137 A community benefit fund in association with the project will be administered by Wicklow County Council should planning permission be granted for the proposed development. This will have potential to create opportunities for health and wellbeing initiatives in the area. As requested by a number of locals during the consultation exercise, the request for the fund to be targeted to and handled directly by the local community rather than administered by the local planning authority is noted. It is anticipated that the proper allocation of the community benefit fund will provide for initiatives for community projects and enhanced wellbeing for local people.

Post – Operational Stage Impacts

- 4.138 Following completion of landfilling operations, the final restoration, seeding and planting works on the completed landform will be undertaken, site infrastructure decommissioned and plant / materials / waste removed off-site. C&D demolition waste recovery activities will also cease on completion of these activities.
- 4.139 The assessment of landscape and visual impacts presented in Chapter 13 of this EIAR concluded that the proposed development will, on completion, have an overall permanent neutral to minor positive impact on the local landscape character and on local views into the application site and would not be significant.
- 4.140 On this basis, it is considered that over the post-operational stage, there would be no likely long-term significant effects on amenity arising from the proposed development.

Traffic

- 4.141 The proposed development will generate traffic movements along the L1113 and L1157 local roads and along the R772 Regional Road and the M11 Motorway for the duration of the proposed inert landfilling and C&D recovery activities at the quarry.
- 4.142 Based on these assessments and having regard to local traffic flow characteristics and the changes arising after the M11 motorway opened in 2015, Wicklow County Council expressed its preference for all HGV traffic to and from the proposed waste facility at Ballinclare Quarry to be routed for the shorter distance along the L1157 Local Road (amending the one-way system that previously routed inbound quarry traffic along the L1113 Local Road and outbound quarry traffic along the L1157).
- 4.143 In light of this feedback, the Applicant has elected to route all traffic to and from the proposed materials recovery / recycling facility and inert landfill at Ballinclare Quarry along the L1157 Local Road. It has also made provision for a comprehensive road improvement scheme along the length of the L1157 leading up to the quarry, including road widening to 6.0m over most of the route length, with road strengthening and repair overlay and road markings. Further details in respect of consultations with the Roads Authority and the proposed road upgrade works to be undertaken in advance of soil / C&D waste intake to the proposed facility, are provided in Chapter 14 (Traffic) of this EIAR.

- 4.144 Under the current proposal, the majority of the HGVs will travel to the application site from Dublin and North Wicklow using the M11 Motorway, exiting at Junction 18 and joining the R772 Regional Road southbound. After travelling south for approximately 4km, traffic heading for the site will turn right from the R772 and onto the L1157 Local Road at the ghost island junction near the Junction 18 Café / Green Angel Skincare premises at Kilbride. The access junction to the proposed development is located along the L1157, approximately 2km north-west of the R772 junction.
- 4.145 Only a minor proportion of HGV traffic will travel to the application site from Arklow and North Wexford. This traffic will use the M11 Motorway, exiting at Junction 19 to turn onto the R772 Regional Road at Jack Whites Pub. It will then travel north for approximately 5km and turn left, off the R772, and onto the L1157 Local Road and continue up to the proposed development.
- 4.146 Under the proposed (amended) haul route, all HGV traffic departing Ballinclare Quarry is required to turn left and follow the upgraded L1157 Local Road back to the R772, and from there return to the motorway network.
- 4.147 An assessment of these impacts on the local road network, presented in Chapter 14 of this EIAR, concluded that, with the proposed road upgrade and improvement works along the L1157 Local Road in place, no likely significant effect on road / traffic safety or on the capacity of local roads or junctions will arise were the development to proceed.
- 4.148 On completion of inert landfilling / waste recovery activities and final restoration works, there will be a permanent reduction in HGV traffic movements over the public road network and through the access road junction between the R772 and the L1157 Local Road, with consequent improvement for the human environment.

Land Use

- 4.149 A key long-term benefit of the proposed inert landfilling activity and post-closure activities will be the restoration of lands to native woodland. These effects are considered to be permanent, minor and positive. An assessment of landscape and visual impacts associated with the proposed development is presented in Chapter 13 of this EIAR.

Unplanned Events

- 4.150 According to the EPA guidelines, unplanned events, such as accidents, can include “*spill from traffic accidents, floods or landslides affecting the site, fire, collapse or equipment failure on the site*”. The 2014 EIA directive refers to “*major accidents, and/or natural disasters (such as flooding, sea level rise, or earthquakes)*”.
- 4.151 In this instance, the vulnerability of the proposed development to accidents, unplanned events or natural disasters is relatively limited owing to
- the relatively straight-forward nature of the proposed site establishment, materials recovery / recycling, inert landfilling activities and long-term restoration works;
 - the inert nature of the waste materials to be handled on-site and the relatively isolated, rural location of the proposed works;
 - the proven capability and performance of the plant, equipment and technologies to be used in executing the works and
 - the well-established procedures which will be employed to manage and control the works.
- 4.152 Unplanned events in relation to the proposed development could potentially relate to:
- instability arising from over-steep placement of imported soils at the application site;
 - spill from vehicles moving within the site;

- flooding.

- 4.153 Instability arising from over-steep placement of imported inert soils and stones at the application site will be minimised by site management procedures which limit the height and gradient of slopes developed in them. Localised instability in the imported materials within the application site could have a potential impact on human health and safety of personnel working there. This will be managed and mitigated through the implementation of site health and safety regulations and active management of the works (as referenced above). Any instability in the imported materials, were it ever to arise, is likely to be localised at small areas within the landfill footprint and unlikely to have any significant impacts on employment, human health or amenity beyond the site.
- 4.154 Chapter 14 of this EIAR indicates that the local road network would not be significantly impacted by traffic generated by the development. The risk of an accident resulting in a fuel or oil spillage is considered to be no greater in relation to the proposed development than for previously permitted extraction activities any other form of pre-existing development that relies on the transportation of goods and materials by HGVs. The potential for significant impacts on employment, human health in the wider population or amenity as a result of a fuel spillage on a local road is likely to be low and relatively localised and any potential impacts would be temporary.
- 4.155 The risk of flooding is considered separately in Chapter 7 (Water) of this EIAR.

Cumulative / Synergistic Impacts

- 4.156 Cumulative impacts are those which result from incremental changes caused by other past, present or reasonably foreseeable actions, together with those generated by the proposed development. Therefore, the potential impacts of the proposed development cannot be considered in isolation but must be considered in addition to impacts already arising from existing or planned development.
- 4.157 A review of Wicklow County Council's online planning portal and An Bord Pleanála case files identifies six prospective development projects within a 5km radius of the application site which have either applied for or have been granted planning permission. Of these one (a sand and gravel pit) is for substitute consent and another (for land raising) is for an extension of time which means that development impacts associated with them are already extant and would therefore be reflected in baseline environmental surveys.
- 4.158 Of the remaining projects, one (WCC Planning Ref. 23/60497) is located 2 km south-east of the application site and relates to a land raising project, which envisages importation of a maximum of 24,000 tonnes of soil per annum for a maximum of two years. In light of the limited time duration and the fact that it is unlikely to involve the use of the same local roads as the Ballinclare Quarry, it is considered that there is no potential for cumulative effects with this project.
- 4.159 The remaining three projects are all considered either too small in scale or too distant from the application site to generate any potential adverse cumulative effects for population, employment, human health or amenity beyond the application site.
- 4.160 As previously noted, planning permission for the existing landfill facility at Ballynagran was extended by five years from 2021 to 2026 (by Planning Ref. 20/21). As all environmental impacts associated with the Ballynagran facility are well established, they are deemed to be included or reflected in the findings / measurements obtained by baseline surveys undertaken for the purposes of this environmental impact assessment. These impacts will remain in existence and no further change is likely to arise in the local environment. As such, no cumulative impacts with that development need to be assessed or considered.

- 4.161 Taking a wider perspective, with continued economic growth, there is likely to be a general increase in HGV traffic levels generated by other development across the region and this will contribute to incremental increases in traffic volumes over time. The implications for road capacity and traffic safety are considered separately in Chapter 14 (Traffic) of this EIAR. The traffic assessment concludes that the proposed development will not have any likely significant adverse impact on traffic safety across the local road network over the lifetime of the project.
- 4.162 As can be seen in the table above, the most substantial of the third-party proposals in the planning pipeline relate to a substitute consent application for an existing facility, therefore it is also included in the baseline surveys. . Planning application reference WCC 23/801 relates to an extension of time for an existing project, which is similarly included in baseline surveys.
- 4.163 Planning application reference WCC 23/60497 is located 2 km southeast of the application site. It relates to an agricultural improvement project, which proposes a maximum of 24,000 tonnes per annum for a maximum of two years. In light of this, and the fact that it is unlikely to involve the use of the same local roads as the proposed development at Ballinclare Quarry, it is considered that there is no potential for cumulative effects with this project. The other developments identified in Table 4-6 are sufficiently small in scale and distant from the application site to not represent potential for adverse cumulative effects.
- 4.164 From the wider context, the traffic implications of HGVs from a range of projects operating in the wider area contribute to incremental increases in traffic volumes. Future impacts on road capacity are considered in the Traffic Impact Assessment presented in Chapter 14 of this EIAR. That assessment concludes that the proposed development would not have any likely significant adverse impact on road capacity and traffic safety across the local road network.

Interaction with other Environmental Receptors

- 4.165 As mentioned above, all environmental factors ultimately impact upon, and interact with human beings to some degree or other. These impacts are discussed in detail in the relevant Chapters of this EIAR as follows:
- Chapter 6 – Land, Soils and Geology
 - Chapter 7 – Water (Hydrology and Hydrogeology)
 - Chapter 8 – Air Quality
 - Chapter 10 - Noise
 - Chapter 11 - Material Assets
 - Chapter 13 - Landscape
 - Chapter 14 -Traffic

Transboundary Impacts

- 4.166 Given the location of the application site, it is not anticipated that the impacts of the proposed development would have any significant transboundary effects on population and human health.

‘Do-nothing Scenario’

- 4.167 In a ‘do-nothing scenario’, the proposed material recycling / recovery and inert landfilling activities would not proceed at the application site and the bare, disturbed landform which currently exists across much of the site would remain unchanged, with only very slow and gradual recolonization of natural vegetation occurring over time, given the absence of any soil medium or nutrients to support plant growth.

- 4.168 In dry periods, in the absence of any site management practices, dust emissions could arise from the site on an ongoing basis and any surface water bodies / groundwater would be vulnerable to impacts from any future human activities at the site. Were the quarry void to re-flood if dewatering were to cease in the absence of prospective development, it would likely have elevated arsenic levels (as previously) and this could present a risk to groundwater quality around the quarry and to any groundwater wells or surface water bodies which are either connected to it or fed by it. Further detail on this aspect is presented and discussed in Chapter 7 (Water) of this EIAR.
- 4.169 In a do-nothing scenario, the opportunity to develop materials / C&D waste recovery and recycling infrastructure would also be lost, and with it, the opportunity to contribute to national objective of promoting and developing a circular economy.

MITIGATION MEASURES

- 4.170 Mitigation measures to be adopted during the materials recycling / recovery, inert landfilling and restoration activities will aim to minimise any impacts of the proposed development on surrounding sensitive receptors (primarily those associated with noise, dust and traffic). These measures are discussed in the following chapters of this EIAR:
- Chapter 6 – Land, Soil and Geology
 - Chapter 7 - Water (Hydrology and Hydrogeology)
 - Chapter 8 - Air Quality
 - Chapter 10 - Noise
 - Chapter 11 - Material Assets
 - Chapter 13 - Landscape
 - Chapter 14 - Traffic
- 4.171 As will be seen from a review of the relevant EIAR Chapters, these mitigation measures include, but are not limited to, the following:
- the use of a mobile water bowsers and potential automated sprinkler systems (if required) to suppress dust during dry weather and as required;
 - using wheelwash facilities to prevent the deposition of dust on the public road;
 - restricting landfilling and C&D recovery activities to specified working hours only;
 - maintaining plant and equipment and managing on-site work activities to ensure compliance with specified noise emission levels;
 - the retention, maintenance (and strengthening) of existing boundary hedgerows, vegetation and screening berms to provide acoustic, dust and visual screening;
 - the refuelling of plant and machinery over designated sealed and drained surfaces.
- 4.172 Radon testing can be undertaken at on-site structures and, should elevated radon gas levels be detected, remedial measures such as enhanced ventilation or installation of a radon sump can be implemented by agreement with an EPA registered radon tester.
- 4.173 In addition, to the proposed mitigation measures, it is anticipated that impacts associated with the proposed materials recycling / recovery, landfilling and restoration activities will be controlled by further conditions attached to any planning permission granted by An Bord Pleanála and/or conditions attached to any waste licence issued in respect of the proposed development by the Environmental Protection Agency in due course.
- 4.174 Waste disposal and recovery activities and all associated environmental emissions will be subject to continuous, ongoing monitoring to ensure compliance with emission limit values (ELV's) set by planning and/or waste licensing consents.

RESIDUAL IMPACT ASSESSMENT

Construction and Operational Stage

- 4.175 Review of the identified potential impacts on the receiving environment following implementation of appropriate mitigation measures at the application site indicates that there are no significant residual impacts with respect to population, human health and amenity during the construction and operational stages of the proposed development.
- 4.176 It is therefore considered that, subject to implementation of the mitigation measures outlined in Chapters 6, 7, 8, 10, 13 and 14 of this EIAR, the proposed development will not cause any significant impact on the population, human health and amenity of the surrounding area.

Post – Operational Stage

- 4.177 As all potential impacts on the receiving environment are eliminated following cessation of activities at the application site, the proposed development will have no significant residual impacts with respect to population and human health during the post-operational stage.
- 4.178 The assessment of landscape and visual impacts presented in Chapter 13 of this EIAR concluded that the proposed development will, on completion, have an overall permanent neutral to minor positive impact on the local landscape character and on distant views into the application site.

MONITORING

- 4.179 As outlined in Chapters 7, 8 and 10 of this EIAR, environmental monitoring in respect of noise, air quality (dust), surface water and groundwater will be undertaken as part of this development proposal.
- 4.180 Noise, dust, surface water and groundwater monitoring locations will be established / reinstated around the application site at the outset of the proposed development and continue for the duration of the on-site activities and for a short aftercare period thereafter. Environmental monitoring locations will be reviewed on an ongoing basis and changed where and as / when necessary. All environmental monitoring results will be submitted to Local Authorities and the EPA on a regular basis, in accordance with consent requirements, for review and record purposes.
- 4.181 Full details of the monitoring programmes that will be initially implemented at the application site are provided in the relevant Chapters of this EIAR.

REFERENCES

Central Statistics Office (2022) Census Data 2011, 2016 and 2022

Wicklow County Council (2022) Wicklow County Development Plan 2022-2028.

Planning and Development Act, 2000 (as amended).

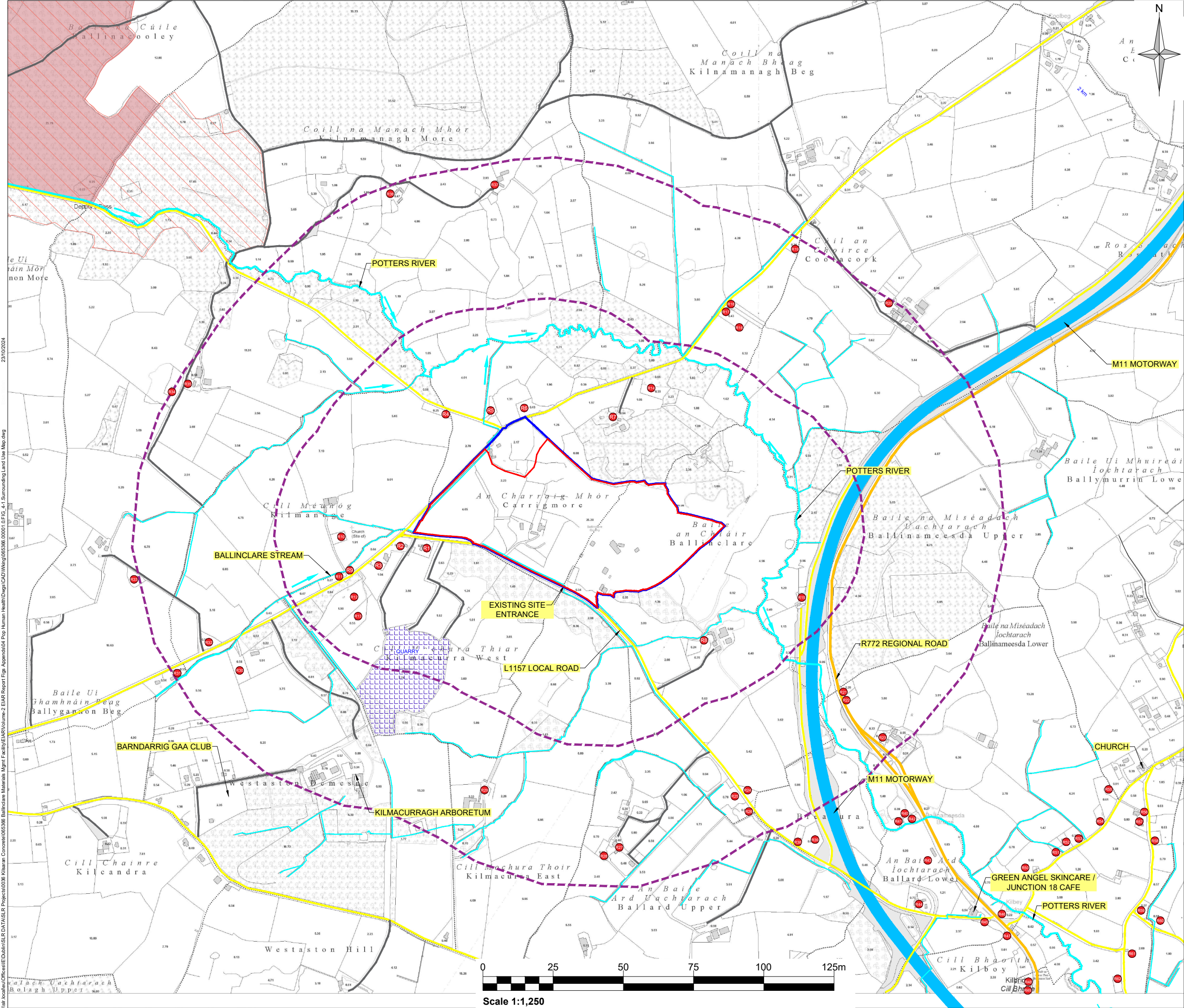
Planning and Development Regulations, 2001 (as amended).

Environmental Protection Agency (2022). *Guidelines on the Information to be contained in Environmental Impact Assessment Reports.* EPA

FIGURES

Figure 4-1: Surrounding Land Use

Figure 4-2: Electoral Divisions Around Ballinclare Quarry



Notes:
1. EXTRACT FROM ORDNANCE SURVEY 1:2,500 / 1:5,000 MAP SERIES: 4137-B & 4137-D.
2. EXISTING SITE SURVEY (MAY 2016) PROVIDED BY KILSARAN CONCRETE.

Legend:

LAND INTEREST BOUNDARY (c. 36.0 HA)

PLANNING APPLICATION AREA (c. 32.6 HA)

500m / 1km OFFSET FROM PLANNING APPLICATION AREA

R7

RESIDENTIAL LOCATION WITHIN 1KM OF PLANNING APPLICATION AREA

002274 - DEPUTY'S PASS NATURE RESERVE SAC

001756 - GLENEALY WOODS pNHA

R772 - REGIONAL ROAD

LOCAL ROAD NETWORK

ACCESS TRACKS

220KV ELECTRIC OVERHEAD LINE

RIVER / STREAMS

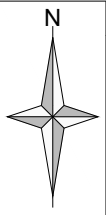
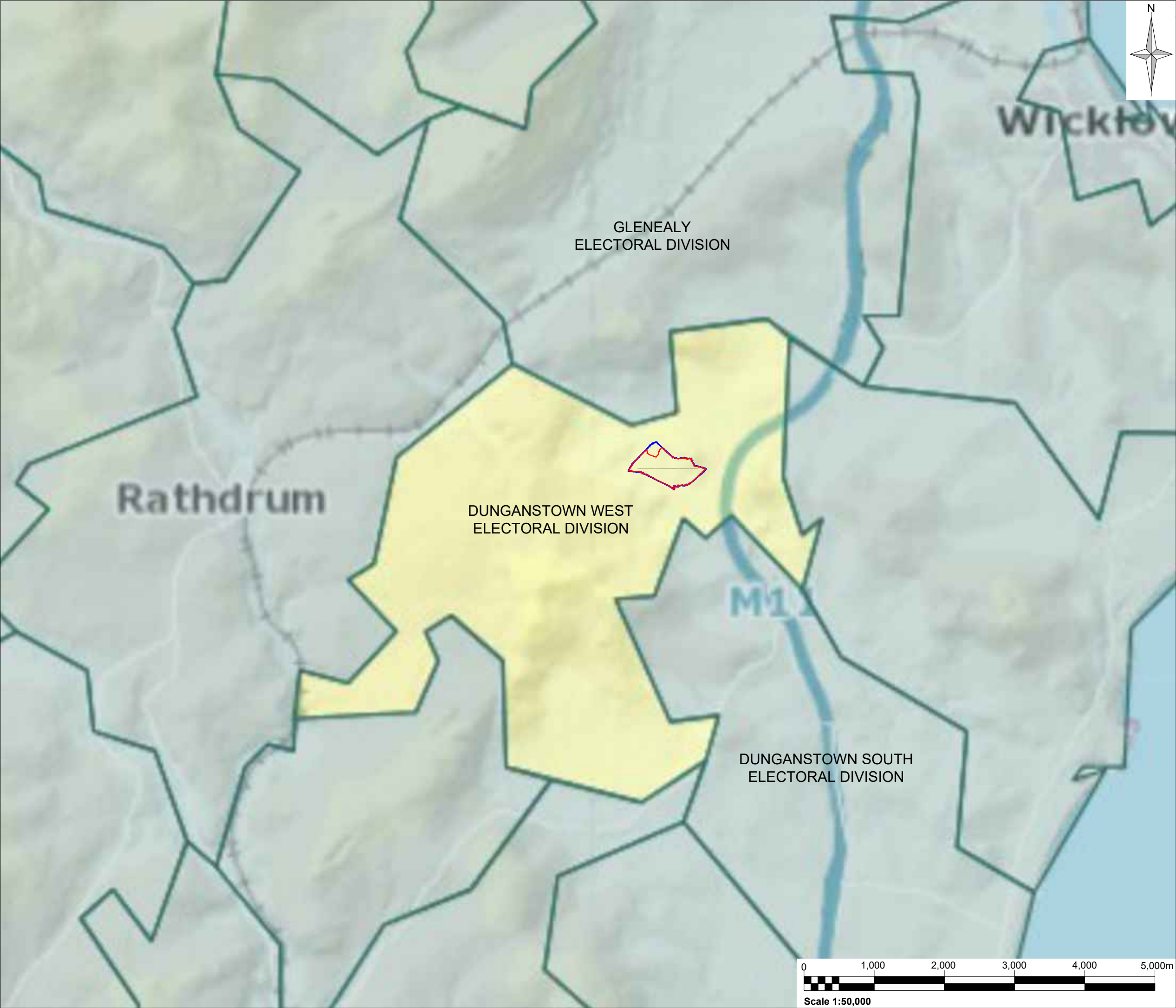
Rev	Amendments	Date	By	Chk	Auth
<div><div></div><div>www.slrconsulting.com</div></div>					
Drawing Status & Suitability Code FINAL					
Client KILSARAN CONCRETE Ballinclare Quarry, Kilbride, Co. Wicklow.					
Project Environmental Impact Assessment Report Materials Recovery / Recycling Facility and Inert Landfill					
Drawing Title SURROUNDING LAND USE MAP					
Scale 1:1,250 @ A3		SLR Project No. 065366.00001			
Designed EW	Drawn EW	Checked DL	Authorised DL		
Date 10/24	Date 10/24	Date 10/24	Date 10/24		
Drawing Number FIGURE 4-1					Rev. 2

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23/10/2024

\\slr-local\au\Offices\IE\Dublin\SLR DATA\SLR Projects\0036 Kilsaran Concrete\065366 Ballinclare Materials Mgmt Facility\EIAR\Volume-2 EIAR Report Figs\Appendix\04 Pop Human Health\Divgs\CA\DWing\065366.00001.10.FIG_4-2 Electoral Divisions.dwg



Notes:

1. Extract from CSO Census Local Statistics Interactive Mapping (www.visual.cso.ie)

Legend:

LAND INTEREST BOUNDARY (c. 36.0 HA)

PLANNING APPLICATION AREA (c. 32.6 HA)

Rev	Amendments	Date	By	Chk	Auth



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Drawing Status & Suitability Code **FINAL**

Client
KILSARAN CONCRETE
Ballinclare Quarry, Kilbride, Co. Wicklow.

Project
Environmental Impact Assessment Report
Materials Recovery / Recycling Facility
and Inert Landfill

Drawing Title
ELECTORAL DIVISIONS

Scale 1:50,000 @ A3		SLR Project No. 065366.00001	
Designed EW	Drawn EW	Checked DL	Authorised DL
Date 10/24	Date 10/24	Date 10/24	Date 10/24
Drawing Number FIGURE 4-2			Rev. 1