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## INTRODUCTION

### Background

- 11.1 This chapter of the Environmental Impact Assessment Report (EIAR) relates to the potential effects of the proposed development on material assets.
- 11.2 The proposed development consists of the following:
- Quarry development and associated processing previously permitted under P. Reg. Ref. No. 99/2042 and ABP Ref. PL09.123207) to include drilling, blasting, crushing and screening of rock; and lateral extension to same, with an overall extraction area of c. 6.2 hectares with no vertical deepening below the existing quarry floor. The appropriate period of planning register reference 99/2042 was extended by order dated 03/02/2017 by P. Reg. Ref. No. 16/1246;
  - Importation of up to 35,000 tonnes per annum of processed fine aggregate, principally sand for use in readymix concrete production on site;
  - Use of buildings and structures associated with the sand and gravel pit previously granted planning permission under P. Reg. Ref. No. 03/2754 comprising of the crushing, washing and screening plant with associated silt disposal lagoons; readymix concrete batching plant including powerhouse; prefabricated office; weighbridge; workshop building with concrete laboratory and bunded fuel tanks; aggregate storage bays; and one liquid effluent treatment system unit;
  - Closure of the existing site entrance with provision of a new site entrance located to the north of the existing entrance; realignment of the main internal site access road from the new site entrance to the central processing area with provision of a new wheelwash system; acoustic fence screening (c.2m in height x 170m in length); and a new screening berm along the western site boundary;
  - Restoration of the site lands will be to a combination of beneficial agricultural and ecological after-uses;
  - All associated site works within an overall application area of c. 51.7 hectares. The proposed operational period is for 10 years plus 2 years to complete restoration (total duration sought 12 years); and
  - Provision is also made for 3 no. sections of road improvements (widening) along the haul route between the site entrance and the R148 regional road. The proposals at the identified locations include for works in the public road and verge that aim to achieve a consistent carriageway width of 6.0m along with provision of verge widening on the inside of the three bends to improve forward visibility and intervisibility for all opposed traffic including traffic generated by the proposed development.
- 11.3 For further detail of the proposed development and the application site context, refer to Chapter 2 of the EIAR.

### Scope of Work / EIA Scoping

- 11.4 Article 3(1) of the amended EIAR Directive provides the revised headings by which an EIAR is to be written. The EPA subsequently released 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports', which were finalised in 2022, and it is here that the information to be contained in the Material Assets chapter of the EIAR is provided.

11.5 Material Assets include the built services such as electricity, telecommunications, gas, water supply infrastructure and sewerage. Material assets also cover roads and traffic. These items are categorised according to construction and operational phases of the proposed development and must be accounted for in unplanned events<sup>1</sup>.

11.6 The EPA Guidelines in relation to the preparation of EIAR note the following in respect of material assets:

*“Material assets can now be taken to mean built services and infrastructure. Traffic is included because in effect traffic consumes roads infrastructure.”*

11.7 Chapter 14 of this EIAR addresses Traffic and chapter 12 addresses architectural heritage, archaeological heritage and cultural heritage. This chapter addresses built services and waste management.

### Consultations / Consultees

11.8 In preparing the Environmental Impact Assessment Report to support the previous planning application (ref. 22/83), a pre-planning consultation meeting was held between officials of Kildare County Council and representatives of SLR Consulting Ireland and Kilsaran on 9-Dec-2021 via the Microsoft Teams platform (ref. **PP5260**). Staff from the planning, roads, environment and water departments of Kildare County Council were also in attendance.

11.9 As this planning application is for development broadly covering the same development as applied for previously under P. Ref. 22/83, albeit over a smaller application area due to the removal of the onsite sand and gravel extraction element, there was no formal pre-planning meeting held with Kildare County Council.

11.10 All matters raised by Kildare County Council, including submissions raised during the previous planning application process, have been taken into consideration in the assessment of this revised application.

11.11 Following a review of published development plans and a site survey, it was considered that there was no requirement for any further formal external consultations to be carried out in respect of material assets for the purposes of this assessment. There was however significant consultation with other specialist contributors to this EIA Report.

### Contributors / Author(s)

11.12 This chapter of the EIAR was prepared by Lynn Hassett, of SLR Consulting Ireland. Lynn Hassett. Lynn is an EIA Co-ordinator (BSc, MSc) and has experience of Environmental Impact Assessment, project management and planning, with extensive experience of carrying out EIARs throughout Ireland and the UK.

### Limitations / Difficulties Encountered

11.13 No limitation or difficulties were encountered in the preparation of this chapter of the EIAR.

<sup>1</sup> Environmental Protection Agency (2022). *Guidelines on the Information to be contained in Environmental Impact Assessment Reports.*

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## REGULATORY BACKGROUND

### Guidelines and Technical Standards

- 11.14 This chapter of the EIAR has been prepared on the basis of the EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2022).
- 11.15 There are no technical standards relevant to this chapter of the EIAR.

### Legislation

- 11.16 There is no specific legislation relevant to this chapter of the EIAR. However, the information provided within this chapter is informed by:
- Section 37D and 171A of the Planning and Development Act, 2000 (as amended);
  - Section 94 and Schedule 6 of the Planning and Development Regulations, 2001 (as amended);
  - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.

### Planning Policy and Development Control

- 11.17 This chapter of the EIAR is informed by the National Planning Framework 2040 (NPF 2040) and the Kildare County Development Plan 2023-2029 (KCDP).
- 11.18 The Kildare County Development Plan (KCDP) 2023-2029<sup>2</sup> is the statutory plan detailing the development objectives/policies of the authority, covering the application area.

#### Rural Development

- 11.19 **Chapter 9** Our Rural Economy of the KCDP states the following regarding employment in rural areas:
- "It is important to recognise that there is a role for rural employment in contributing to the general economic development of the county. In rural areas of the county there is a need to balance social and economic activity with the protection of the environment and character of the rural landscape."*

#### Extractive Industry

- 11.20 The KCDP recognises the importance of the extractive industry in relation to employment and economic development, as well as the need to exploit such resources in an environmentally sound and sustainable manner.
- 11.21 Section 9.9 of the KCDP refers to the contribution of mineral resources to the county's rural economy and states:
- "Mineral resources are generally located within the rural area. Reserves of suitable material are finite, and the nature of the extractive industry is such that the industry must be developed where the resource occurs. The industry can have damaging environmental effects and permission will only be granted where the council is satisfied that residential and natural amenities will be protected, pollution will be prevented, and aquifers and ground water safeguarded."*

**Policy RD P8** sets out the Council's policy to:

<sup>2</sup> Kildare County Development Plan 2023-2029:  
<https://kildarecoco.ie/AllServices/Planning/DevelopmentPlans/KildareCountyDevelopmentPlan2023-2029/Volume1Chapters1-17/>

*"Support and manage the appropriate future development of Kildare's natural aggregate resources in appropriate locations to ensure adequate supplies are available to meet the future needs of the county and the region in line with the principles of sustainable development and environmental management and to require operators to appropriately manage extraction sites when extraction has ceased outlines in more detail considerations in relation to the sector together with appropriate policies and objectives."*

11.22 In relation to restoration, section 9.9.1 of the KCDP states that:

*"The conditions of quarry after-use and rehabilitation frequently involves the restoration of quarries, as far as possible, to their original appearance. This may result in the loss of key features that may ironically, have some ecological benefit or rich biodiversity interest. For example, sand and gravel banks are sometimes used as nesting sites by sand martins..."*

11.23 **Objectives RD O42 to RD O51** set out detailed requirements in relation to management of aggregate works in the county and these will have been addressed in the preparation of the planning application. The Objectives are as follows:

The council policies in relation to the extractive industry as set out in section 10.7.8 of the CDP include:

**Objective RD O42** *Ensure that development for aggregate extraction, processing and associated concrete production does not significantly impact the following:*

- *Special Areas of Conservation (SACs)*
- *Special Protection Areas (SPAs)*
- *Natural Heritage Areas (NHAs)*
- *Other areas of importance for the conservation of flora and fauna.*
- *Zones of Archaeological Potential.*
- *The vicinity of a recorded monument.*
- *Sensitive landscape areas as identified in Chapter 13 of this Plan.*
- *Scenic views and prospects.*
- *Protected Structures.*
- *Established rights of way and walking routes.*
- *Potential World Heritage Sites in Kildare on the UNESCO Tentative List, Ireland.*

**Objective RD O43** *Consult with the Geological Survey of Ireland (GSI), with regard to any developments likely to have an impact on sites of Geological Importance listed in Chapter 12 of this Plan.*

**Objective RD O44** *Require applications for mineral or other extraction to include (but not limited to):*

- *An Appropriate Assessment Screening where there is any potential for effects on a Natura 2000 site (see Chapter 12).*
- *An Environmental Impact Assessment Report (EIAR).*
- *An Ecological Impact Assessment may also be required for subthreshold developments to evaluate the existence of any protected species / habitats on site.*

- A detailed landscaping plan to be submitted indicating proposed screening for the operational life of the site. The predominant use of native plant species in the proposed landscaping plan will be expected.

- Detailed landscaping and quarry restoration plans. Habitats and species surveying shall be carried out and shall influence the restoration plan for the site.

- Comprehensive Site Restoration Plan and/or After-Use Strategy having regard to the principles of 'Rehabilitation Ecology'

- Transport Impact Assessment.

**Objective RD O45** Require, where permission is granted for quarrying / extraction of aggregates, the submission by the developer of a bond (cash deposit, bond from an insurance company or other security acceptable to the planning authority) to ensure the satisfactory completion and restoration of the site.

**Objective RD O46** Require road re-instatement work to be on-going during operations, in the interests of road and traffic safety. Works undertaken to re-instate/improve the public road should be undertaken by the quarry developer or paid by them and completed by the Council.

**Objective RD O47** Protect and safeguard the county's natural aggregate resources from inappropriate development.

**Objective RD O48** Manage the finite aggregate resources being mined by the extractive industries in the county to supply the future needs of our region while working to reach our climate change targets.

**Objective RD O49** Have regard to the following guidance documents (as may be amended, replaced, or supplemented) in the assessment of planning applications for quarries, ancillary services, restoration and after-use:

- Quarries and Ancillary Activities: Guidelines for Planning Authorities, DEHLG (2004).

- Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals), EPA (2006).

- Archaeological Code of Practice between the DEHLG and ICF (2009).

- Geological Heritage Guidelines for the Extractive Industry (2008).

- Wildlife, Habitats, and the Extractive Industry - Guidelines for the protection of biodiversity within the extractive industry, NPWS (2009).

**Objective RD O50** Ensure the satisfactory and sensitive re-instatement and/or re-use of disused quarries and extraction facilities, where active extraction use has ceased. Future uses should include amenity, recreation and biodiversity areas shall be informed by an assessment of the specific site/lands and shall be subject to an ecological impact assessment or other environmental assessments as appropriate. Where it is proposed to reclaim, regenerate, or rehabilitate old quarries by filling or re-grading with inert soil or similar material, or to use worked-out quarries as disposal locations for inert materials, the acceptability of the proposal shall be evaluated against the criteria set out in Section 15.9.6 of this Plan. The Council will resist development that would significantly or unnecessarily alter the natural landscape and topography, including land infilling/ reclamation projects or projects involving significant landscape remodelling, unless it can be demonstrated that the development would enhance the landscape and / or not give rise to adverse impacts.

**Objective RD O51** Require that quarry remediation plans provide for environmental benefit, biodiversity and re-wilding in all instances. The 80% requirement for environmental/biodiversity

*may be waived at sites closer to urban areas where a significant portion of the site is being provided for sports, recreation, and amenity.*

### Development Management Standards

- 11.24 **Chapter 15** Development Management Standards of the KCDP outlines development management policies for business, commercial and employment developments.
- 11.25 Section 15.9.6 sets out specific requirements in relation to planning applications for quarries and ancillary developments and there is a note that the Council favours the use of existing authorised and planning compliant quarries over proposals for extraction from green field sites.

### Guidelines

- 11.26 As previously referenced, this chapter of the EIAR has been prepared on the basis of the Guidelines on the Information to be contained in Environmental Impact Assessment Reports by the EPA (2022).

### Technical Standards

- 11.27 There are no technical standards relevant to this chapter of the EIAR. Technical standards, if any, which are relevant to each pathway (noise, air, soil, water, etc.), are addressed elsewhere in each specialist chapter of this EIAR.

## RECEIVING ENVIRONMENT

### Study Area

- 11.28 The study area for this chapter of the EIAR encompasses the vicinity of the application site and extends to those dwelling and buildings on the roads surrounding the application site, within c. 1km of the application site.

### Baseline Study Methodology

- 11.29 The baseline study comprises a desk-top review of online and published resources, information provided by the applicant and information contained in the other chapters of this EIAR. Ordnance Survey (OSi) maps and aerial photography (Google Maps) were also consulted.

### Sources of Information

- 11.30 All baseline information not contained within other chapters of this EIAR was obtained from the following resources:
- Myplan.ie (<http://myplan.ie/index.html>);
  - Historic Environment Viewer (<http://webgis.archaeology.ie/historicenvironment/>);
  - Kildare County Development Plan 2023 – 2029;
  - Meath County Development Plan 2021 - 2027;
  - OSi Maps;
  - Aerial photography;
  - Open Streetmaps ([www.openstreetmaps.org](http://www.openstreetmaps.org)).

## Site Context

- 11.31 The application area is located in Co. Kildare within the townland of Kilrathmurry and Kilrainy and the Electoral Division of Kilrainy. The small settlement of Claremount/ Clogharinka (Co. Kildare) is located 1.2km to the south. The larger settlements of Edenderry, Co. Offaly and Kinnegad, Co. Westmeath are located 7km to the south and 6.5km to the northwest respectively; refer to EIAR **Figure 1-1**.
- 11.32 The site is accessed from the L5002 local road by an existing established entrance, on the western boundary of the application site. The site is located approximately 3km south of the L5001 local road junction with the R148 close to Leinster Bridge. The L5002 road, which serves the site, runs from its junction with the L5001 to the north of the site to where it meets the R401 regional road c. 1.5km southwest of the site entrance.
- 11.33 The R401 linking the towns of Kinnegad and Edenderry crosses the landscape in a north-south direction, to the west of the site and is located c. 1 km from the site where it crosses the River Boyne at Ballyboggan bridge. The river is c. 380m from the site entrance at its closest point to the site. The M4 motorway is located c. 2.5 km to the north, in an east west alignment. A network of minor roads including the L5001, L5004 and L5008, which are lined with individual and groups of dwellings, connects these strategic roads. The existing housing pattern in the vicinity of the application site is shown on **Figure 11-1**.
- 11.34 The plan extent of the lands under the control of Kilsaran Concrete are outlined in blue on a 1:10,000 scale map of the area, refer to EIAR **Figure 1-2**. The extent of the site application area is also outlined in red on the same **Figure 1-2**. The planning application red line boundary includes for 3 no. locations off-site (along the haul route from the entrance to the R401 regional road) where road improvement works in the public road and verge are proposed that aim to achieve a consistent carriageway width of 6.0m along with provision of verge widening on the inside of the three bends to improve forward visibility and intervisibility for all opposed traffic including traffic generated by the proposed development. The locations are shown on EIAR **Figure 1-1** and SLR Planning **Drawing 17**.
- 11.35 The existing sand and gravel pit and the site entrance are located within the townland of Kilrathmurry, while the existing quarry site is located within the townland of Kilrainy.
- 11.36 The planning application site extends to c.51.7 hectares (c. 127.8 acres). The general site areas are shown on EIAR **Figure 1-3**, with a more detailed site layout provided in EIAR **Figure 2-1** of Chapter 2. The existing site (within the blue line area) consists of the existing sand and gravel pit development and the hard-rock quarry development.
- 11.37 The application site consists of the previously permitted hard rock quarry areas c. 12.2 hectares (**P. Ref. 99/2042 (and P. Ref. 16/1246)**); the existing permitted sand and gravel extraction / ancillary processing areas c. 33.4 hectares (**P. Ref. 03/2754**); previously restored and buffer areas along with the lands required for the improved site access arrangements and the three off-site areas of road improvements.
- 11.38 The application site is located within a wider area of generally flat to gently undulating farmed landscape with locally high hills dotted throughout and featuring a mixture of mostly pasture and some arable farmland, as well as a number of woodlands/mixed forests, equestrian activities and aggregate extraction developments. The field pattern is irregular, with small to medium sized fields and generally defined by mature dense hedgerow vegetation.
- 11.39 There are several former, existing and proposed sand and gravel extraction sites within the general vicinity of the site. There are two disused sand and gravel pits located within 1km to the application

- site; one immediately west of the site between the L5002 road and the River Boyne in the townland of Ballycowan; and the second c. 850m to the southwest in the townland of Brackagh.
- 11.40 Adjacent to the disused pit in Brackagh is a greenfield site, for which Kilsaran Concrete recently received a notification decision to grant permission for sand and gravel extraction (dry working) for a period of 9 years (P. Ref. **20/1409**). This decision was appealed to An Bord Pleanála and a final order to grant was made in August 2023.
- 11.41 There are a number of existing and disused sand and gravel sites located between c. 2-3km of the application site in the townlands of Balrinnet, Kilglass and Ballinderry. There have been various proposals for development of these sites, which are discussed in the 'Cumulative Impacts' section further in this chapter.
- 11.42 The topography of the surrounding landscape is flat to gently undulating with levels typically ranging from 70 to 90m AOD and including some occasional local highpoints up to 119m AOD. The lowest elevations of just below 70m AOD are along the River Boyne, which crosses the landscape in a south-west to north-east direction. Views into the wider landscape and in particular towards distant higher ground (e.g., Allen Hill), are blocked by the aforementioned local highpoints (e.g., 106m AOD at Clogharinka), as well as the otherwise flat/gently undulating topography and many intervening hedgerows and woodlands.
- 11.43 According to the Kildare County Development Plan 2023 – 2029, the site is located in a Class 1 landscape sensitivity area and can accommodate a *“range of uses without significant adverse effects on the appearance or character of the area”*. Scenic Route 26 is located approximately 3km to the southeast of the site (however no views of the application site can be gained from this route).
- 11.44 As per **Figure 11-1**, there are c. 15 no. dwellings within 250m of the application site and a further 10 no. dwellings, as well as an equestrian centre, between 250 to 500m of the site. Between 500m-1km there are a further 25 dwellings, with the majority of these located to the northeast and southwest.
- 11.45 The study area relates to those dwellings and buildings on the roads surrounding the application site.

## Built Services

- 11.46 The existing site has an electricity supply via an existing mains supply and sub-station on site. This connection will continue to provide the principal energy source for the overall site.
- 11.47 A 220kV overhead powerline traverses the landscape in an east-west direction and is located c. 350m beyond the southern site boundary on the opposite side of the L5004 / L5008 roads. The powerline runs from the West Offaly Power station at Shannonbridge to the Maynooth 220kV substation.
- 11.48 The existing site-based staff are contactable via fixed landline and mobile phones. Internet connection to the site office is currently provided by a mobile network, facilitating access to email.
- 11.49 An existing effluent treatment system is located within the existing site to service the current workforce. Permission was granted under P. Ref. No. **03/2754** / ABP Ref. **PL09.209480**.
- 11.50 An existing water supply from groundwater is provided at the site. This provides the water required to facilitate the ancillary operations, dust suppression and wheel wash operations on the application site. Drinking water is and will continue to be sourced from bottled water brought to site.
- 11.51 Review of the 'dial before you dig' website from Gas Networks Ireland was carried out as part of the baseline review. The results of the inspection are provided in **Appendix 11-A**. There are no gas

- supply mains within the vicinity of the site. The closest high pressure gas line to the site runs in a general east-west direction c. 6.5km north of the site. The closest medium pressure gas line is c. 8km northeast of the site near Longwood, Co. Meath.
- 11.52 Chapter 12 of this EIAR provides an assessment of the cultural heritage features in the vicinity of the application site and the potential for impacts to arise as a result of the proposals.
- 11.53 Chapter 14 of this EIAR contains details of the transportation network and an assessment of the capacity of it to cater for the proposed development. The provision within the development scheme for 3 no. sections of off-site road improvements (widening) along the haul route between the site entrance and the R148 regional road will enhance passing opportunities, improve visibility and enhance the overall quality of the local road environment.

## Waste Management

### General Waste Management

- 11.54 Kilsaran Concrete is a member of the Irish Concrete Federation and commits itself to the principles of the Federations Environmental Code. This code states:
- “ICF members will minimise production of waste and where appropriate, consider its beneficial use including recycling. They will deal with all waste in accordance with the relevant legislation and other controls in place, including using waste contractors with valid Waste Collection Permits.”*
- 11.55 Potential waste which can be produced at the overall site include:
- scrap metal produced from the maintenance of the processing plants;
  - used oils and oil filters may arise from the regular maintenance of fixed and mobile plant;
  - used batteries; and
  - domestic waste generated at the employee facilities or the office.

### Extractive Waste Management

- 11.56 Almost all products and by-products arising from the aggregate processing have commercial value. Any waste materials from the site are stored, collected, recycled and/or disposed of in accordance with any requirements of Kildare County Council.
- 11.57 In Ireland, the management of extractive waste is regulated by the Waste Management (Management of Waste from the Extractive Industries) Regulations 2009 (SI No. 566 of 2009). Under these Regulations, quarry operators are required to prepare an Extractive Waste Management Plan (EWMP) which outline the plans and procedures for minimisation, treatment, recovery and disposal of extractive wastes, having regard to the principle of sustainable development. The applicant has an Extractive Waste Management Plan for the Clonard site which is provided in **Appendix 2-B** of the EIAR.
- 11.58 There is no intention on behalf of Kilsaran to discard, where possible, any material extracted at Clonard. The principle aim of this extractive waste management plan is to prevent waste production which is in accordance with Section 5(2)(a) of the 2009 Regulations.
- 11.59 Extracted Material will fall into the following categories:

### Soil and Sub-soil (Overburden) Stripping

- 11.60 This material is excavated to expose the underlying bedrock in overall quarry extraction area.

- 11.61 **Topsoil & Sub-soil (Overburden)** – all material stripped will either be used to construct perimeter visual/noise screening mounds or be placed directly back into previously extracted areas as part of the progressive restoration scheme.

#### Rock Material

- 11.62 Rock is extracted from the quarry face using commercial explosives, the blasted rock pile is processed through size reduction (crushing) and size classification (screening) to produce a suit of saleable aggregate products or for use in the concrete batching plant. Aggregates awaiting haulage off-site are stored temporarily in individual stockpiles, which are maintained in order to ensure stability, minimal visual intrusion and minimal environmental impact.

#### Sand and Gravel Material

- 11.63 Currently, the material is processed through size reduction (crushing), washing to remove silt and size classification (screening) to produce a suit of saleable aggregate products. With the exception of the fine silt material all the sand and gravel on-site is processed to produce various aggregate and sand products, which are stored temporarily in individual stockpiles, which are maintained in order to ensure stability, minimal visual intrusion and minimal environmental impact.
- 11.64 **Washing Fines** – The fixed aggregates processing plant operates a closed circuit washing cycle where silt fines are washed out of the aggregates being processed and are allowed to settle out of the wash water in a series of constructed lagoons. Once settled the clear water is recycled back to the washing plant.
- 11.65 The settlement ponds are cleaned out on a regular basis to ensure adequate capacity within the ponds to allow sufficient retention time to ensure adequate settlement of fines. All material removed from the settlement ponds is temporarily stored to allow natural outflow of retained moisture. Following this short storage period the material is put to a variety of operational or restoration uses within the site, namely:
- Construction of visual screening or noise attenuation berms, and/or construction safety berms alongside haul roads or under quarry faces.
  - Washing fines are also placed directly back into previously extracted areas as part of the progressive restoration scheme prior to the replacement of sub and topsoil.

#### Sensitive Receptors

- 11.66 The application site is surrounded by mostly agricultural land that is interspersed with wooded areas, former sand and gravel pits, one-off housing and agricultural buildings.
- 11.67 The closest residential dwellings to the application area include three dwellings in the vicinity south of the existing site entrance, and groups of houses along the roads approaching the application site. **Figure 11-1** identifies residential properties, farm buildings and sensitive receptors within the locality and shows 250m, 500m and 1km offsets from the application boundary.
- 11.68 The closest church and school are adjacent to each other and are located c. 1km and 1.1km south of the application area respectively in Clogharinka.
- 11.69 All local residences are served by individual supply wells, and there is no mains or Group Water Scheme supply to residences in the vicinity of the site. A well survey of local residences within c. 700m of the quarry void was undertaken as part of the EIA process in support of the previous planning application (P. Ref. 22/83), which proposed extraction beneath the groundwater table. The current proposals do not involve vertical extension of the hard rock quarry development any deeper than was previously permitted by P. Ref. 99/2042 and no dewatering will be required.

- 11.70 The Geological Survey Ireland (GSI) has an online database of wells and springs in Ireland; however, it should be noted this database is not extensive.
- 11.71 According to the GSI well database, there are a large number of wells within a 2km radius of the site, these are shown on EIAR Chapter 7, **Figure 7-9**. The wells are located in either the gravel aquifer (Kilrathmurry Gravels Groundwater Body (GWB)), the locally important Lm bedrock aquifer (Trim GWB), or the nearby locally important LI bedrock aquifer (Athboy GWB).
- 11.72 The closest well is an agricultural & domestic well c. 700m south-east (GSI name 2623NWW285) within the Trim GWB. The closest well within the gravel aquifer and the Kilrathmurry GWB is an agricultural and domestic well located ~1km to the east (GSI name 2623NWW240). There is an ESB well (GSI name 2623SWW247) located ~1.1km to the south-east and another (GSI name 2623NWW202) ~4.3km to the east. Both wells are hosted in the locally important bedrock aquifer and Trim GWB.
- 11.73 The Clogherinkoe Public Groundwater Supply well (GSI name 2623SWW262) for Kildare County Council is located c. 1.9km south of the site in the Lm bedrock aquifer and Trim GWB. A volume of 23m<sup>3</sup> is abstracted daily.

## IMPACT ASSESSMENT

### Evaluation Methodology

- 11.74 The evaluation of effects on built services and waste comprises a qualitative assessment based on the 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 and professional judgement in relation to potential impacts on built services and waste.

### Built Services

#### *Construction and Operational Stages Impacts*

- 11.75 Due to the site being a long established and operational site, there is limited requirement for any new site facilities, plant or infrastructure. All the existing infrastructure such as offices, workshop, weighbridge, processing plant and concrete plant are already in-situ and will be utilised for the duration of the proposed development. The only new infrastructure proposed relates to the new access road (with acoustic fencing on the northern side) and widening of 3 sections of the public road between the haul route and the R148).
- 11.76 The only construction phase works to be carried out at on the onset will consist of:
- the construction of the proposed new site entrance and internal access road with installation of the new acoustic fencing and wheelwash; and
  - new screening berm along the western site boundary area.
- 11.77 It is proposed that that the road improvement works along 3 sections of the public road would be carried out within a 6-month period of any final grant of planning permission.
- 11.78 It should be noted that extraction and production operations will be ongoing in tandem with the above-mentioned construction stage development works.
- 11.79 The operational stage will consist of:

- extraction of the limestone rock using the same format as previously practiced, by way of blasting, crushing and screen of the rock;
  - transportation of the extracted materials from the working faces to the existing processing area within the existing site;
  - importation of fine aggregates for use in the readymix concrete plant;
  - processing of the extracted rock through crushing, washing and screening for use in the onsite concrete batching plant or transport off-site; and
  - continued progressive restoration of the existing sand and gravel pit site.
- 11.80 The proposed development, for use of the land for rock extraction and processing and the continued concrete batching facility, is generally unlikely to give rise to any construction/operational impacts on material assets.
- 11.81 The proposed development is far enough removed from the high and medium pressure gas lines to the north and northeast.
- 11.82 The 220kV overhead powerline which crosses the landscape is an east-west direction and located c. 350m beyond the southern site boundary on the opposite side of the L5004 / L5008 roads is well removed from the site and will not be impacted by the proposed development.
- 11.83 There are no pylon towers located within the site. The application site does not extend beneath any overhead powerline and, as such, the proposed activity at the site will have no impact on the existing electricity transmission network.
- 11.84 A telegraph wire line mounted on single wooden poles runs along the public road (L5002) to the west of the site but will not be impacted upon by any proposed works associated with construction of the new site entrance as the wire and poles are located on the opposite side of the road to the site.
- 11.85 Similarly, there will be no impact on any telegraph or electricity wire lines mounted on single wooden poles along the public road by any proposed works associated with the off-site road carriageway width and visibility improvements, the locations indicated on Planning **Drawings 1 & 17**.
- 11.86 The existing site-based staff are contactable via fixed landline and mobile phones. Internet connections to the site office is currently provided by a mobile network, facilitating access to email.
- 11.87 The existing effluent treatment system is located within the existing site to service the current workforce.
- 11.88 An existing water supply from groundwater is provided at the site. This provides the water required to facilitate the ancillary operations, dust suppression and wheel wash operations on the application site. Bottled drinking water is imported to the site as required.
- 11.89 Based on the above, it is anticipated that the proposed development will not result in any significant adverse construction/operational stage impact on existing infrastructure or utilities.

*Post-Operational Stage Impacts*

- 11.90 During the post operational period, all works on the site will have ceased and the site will have been restored to a natural state. Any activity following the cessation of operations on the site would be limited to post-restoration uses and any aftercare required for a short period of time following the restoration of the application site.

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- 11.91 It is not considered that the proposed development would have any significant impacts on any infrastructure or utilities at the post-operational stage.

## Waste & Aggregate Supply

### *Construction and Operational Stages Impacts*

- 11.92 The existing arrangements for waste management in relation to general waste, ancillary operational waste and extractive waste will remain in place for the duration of the proposed development. The waste produced by the construction/operational stages will be limited to the domestic style waste generated by employees operating the facility, ancillary operational waste generated from the operation of the site (including waste oil, tyres, batteries, etc).
- 11.93 Potential waste which can be produced at the site, and the measures proposed to control it are described as follows.:
- **Scrap metal** – these materials are chiefly produced from the maintenance of the possessing plants and can cause a nuisance if allowed to build up in an uncontrolled manner. A designated scrap metal area will be demarcated on site and the build-up of scrap will be controlled by the regular removal by licensed scrap metal dealers.
  - **Used oils and oil filters** – any waste oil/oil filters that may arise from servicing of plant will be removed from the site by a licensed waste contractor.
  - **Used batteries** – similarly, all used batteries will be removed from site for collection and recycling by a licensed waste contractor in accordance with the Waste Management Regulations.
  - **Domestic Waste** – domestic waste generated at the offices and employee’s facility will be collected by a licensed waste collection contractor
- 11.94 Fine aggregates will be imported to the site from external planning approved extractive development sites to replace the reserves from the existing pit within the application site that are almost exhausted. The sources of the aggregates will be determined by the availability of resources and a range of factors in accordance with the business plan of the applicant. Preference will be given to aggregates sourced in proximity to the application site.
- 11.95 The importation of this material is crucial to the continuation of concrete supply from the existing batching plant given the demand for such product within the national building sector and to ensure that the in-situ infrastructure at the site is used to maximum potential. In the interest of operational logistical efficiency, where possible, those vehicles used to import the fine aggregate feedstock will also be used to export processed aggregate from the site.
- 11.96 The proposals for the site have been developed with maximising efficiencies of available resources and infrastructure and reducing waste, which is also in the economic interest of the applicant.
- 11.97 Overburden stripped from above the proposed rock quarry extraction area and silt produced during the washing process are not considered waste. Although the amount of soil and sub-soil stripping to be undertaken is minimal given the slight increased footprint proposed in the quarry (0.7ha), they are an essential component of the long term restoration programme. These materials are required for the reshaping and landscaping of the worked-out area to make it more suitable for an agricultural after-use.
- 11.98 It is not considered that the proposed development would have any significant impacts from waste generation at the construction/operational stages.

### Post-Operational Stage Impacts

- 11.99 During the post-operational stage, extraction will have been completed and restoration works will have ceased. Intermittent aftercare will be limited to a period of two years. Any waste generated on the site will be limited to the general waste produced by any employees engaged in the intermittent aftercare on the site, and any ancillary operational waste related to aftercare. Any such waste will be disposed of in accordance with the established practise on the site and will be removed from the site by a licenced contractor.
- 11.100 It is not considered that the proposed development would have any significant impacts from waste generation at the post-operational stage.

### Unplanned Events (i.e., Accidents)

- 11.101 According to the EPA guidelines, unplanned events, such as accidents, can include *“spill from traffic accidents, floods or land-slides 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)”*. In addition, the EPA guidelines note that *“Some types of factors are particularly vulnerable to unplanned events that have the potential to cause significant sudden environmental effects”*.
- 11.102 In this instance, the vulnerability of the proposed development to accidents, unplanned events or natural disasters is relatively limited owing to the relatively simple nature of the proposed development works, the established nature of the techniques and procedures to be followed, and the relatively rural location of the proposed works.
- 11.103 Unplanned events in relation to this type of development generally relate to:
- instability following the extraction of materials;
  - spill from traffic accidents; and
  - flooding.
- 11.104 Adhering to the HSA Safe Quarry Guidelines to the Safety Health and Welfare at Work (Quarries) Regulations 2008 should limit the potential for unplanned events in the form of instability in the pit and quarry faces during the course of the proposed extraction and restoration activities. It is considered that the proposed extraction and restoration activities are unlikely to have significant impacts on material assets, particularly beyond the site. The final restoration will provide for the restoration of the site to a combination of agricultural grassland and natural habitat.
- 11.105 Chapter 7 (Water) of the EIAR notes that the spillage of fuels and/or chemicals can happen during site activities. Appropriate mitigation measures and monitoring have been proposed to ensure that there are no potential impacts on the water environment as a result of unplanned spillages and events at the site.
- 11.106 The traffic and transport assessment contained within chapter 14 of this EIAR indicates that the existing road network can accommodate the proposed development. The enhanced visibility and increased provision for passing opportunities provided by the proposed improvements on the public road between the site entrance and the R148 will enhance safety of the road network.
- 11.107 It is considered that the risk of an accident resulting in a spillage would be no greater in relation to this development than it is for any other form of development that relies on HGVs for the transportation of goods and materials.

- 11.108 It is considered that the material assets as outlined in this chapter are not particularly vulnerable to such unplanned events and would be unlikely to cause significant, sudden environmental effects in respect of built services, waste or sensitive receptors.

### Cumulative Impacts

- 11.109 A GIS search was undertaken in May 2023 of available online planning search facilities provided by the prevailing local planning authorities, An Bord Pleanála and the EIA Portal. The purpose of the search was to identify other projects in the planning pipeline in the surrounding area that have the potential to have any significant adverse cumulative impacts with the proposed development. The GIS search covered a radius of 5km from the application site, within which planning applications from the previous 5 years were identified. A review was carried out in September 2023 to ensure no major applications had been made in the intervening period.
- 11.110 As set out earlier in this chapter, there is a number of existing and disused sand and gravel sites located between c. 2-3km of the application site in the townlands of Balrinnet, Kilglass and Ballinderry. Within this area, there appears to be only intermittent and small-scale extraction taking place in one part. One of the sites in this broad location (QRA-03-001) has recently had its planning permission expire and two others (QRA-03-003 and QRA-03-004) are in the planning process while their appropriate permissions are being regularised. A planning application (P. Ref. 23302) for restoration of a small portion of the former sand and gravel pit (QRA-03-020) has recently been refused by Kildare County Council.
- 11.111 A planning application to Kildare County Council (ref. 191138) was refused in November 2021 and is currently under appeal to An Bord Pleanála (ABP-312162-21). The proposals related to a concrete / ready mix batching plant and associated facilities on 1.05ha site approximately 2.7km north of the application site, on the opposite side of the M4 motorway and sufficiently separated from the application site so as not to have cumulative impacts.
- 11.112 Approximately 950m southwest of the application site in the townland of Brackagh is a greenfield site, for which the applicant previously received a notification decision to grant permission for sand and gravel extraction (dry working) for a period of 9 years (ref. 201409). This decision is the subject of a third-party appeal to An Bord Pleanála and a final order to grant planning permission was made in August 2023. At a separation of c. 950m, the proposed independent sand and gravel pit at Brackagh is not considered to have a potential cumulative impact on material assets.
- 11.113 To the east of the Kilsaran site at Brackagh and c. 850 m to the southwest of the Clonard site is a former sand and gravel site for which permission was sought and refused in 2015 (ref. 15/696) for "remediation works to worked out gravel pit consisting of levelling of existing material already on site and the importation of approximately 45,000 cubic metres of inert subsoil and top soil over a period of 2 years to return the site to agricultural use".
- 11.114 A planning application has recently been submitted to Kildare County Council (ref. 23613) for the continuation and extension of a sand and gravel pit, as well as restoration of most of the worked out site to former ground level using inert soil and stone. The site is located within the townland of Kilglass, c. 2km southeast of the application site at Clonard. It is proposed this site will use different haul routes to the proposed development. It will use an established access / haul road which links the Kilglass sand and gravel pit with the R148 Regional Road via the adjoining L5004 Local Road located immediately north of the site and via L1002 located to the east.
- 11.115 None of these proposals will have substantial demands on other built infrastructure such as electricity or water, and best practice construction procedures will ensure that overhead and underground connections to services are protected.

- 11.116 One other planned development with the potential for cumulative effects was identified, i.e., a proposed solar farm, known as the Harristown Solar Farm, in the townlands of Castlejordan, Harristown & Clongall (Co. Meath), c. 3km to the west of the application area. This development was granted planning permission in January 2020 by Meath County Council under planning file reference number TA/181225 for:

*"a ten-year planning permission for a solar farm and the construction, operation and decommissioning of a photovoltaic solar farm comprising photovoltaic panels on ground mounted frames, inverter stations, customer substation, switchgear substations, field transformers, monitoring house, communications building, single storey storage shed, battery containers, WC, fencing, temporary construction compounds, internal access tracks, CCTV cameras, improvements to existing entrance, cabling, landscaping and all associated ancillary development works. Environmental Impact Assessment submitted as part of the Further Information. Significant further information/revised plans submitted on this application at Castlejordan, Harristown & Clongall, Co. Meath."*

- 11.117 The potential for significant cumulative impact on material assets arises from traffic caused by the haulage of the solar kits and materials to construct the solar farm, should the solar farm not already be operational by the time the proposed development at Clonard commences.
- 11.118 A review of the Construction Traffic Management Plan for the solar farm states that the construction period of the solar farm is anticipated to be approximately 6 months, during which there would be a total of 1,207 HGV deliveries made to the site. This is expected to result in a daily average of 10 HGV deliveries, i.e., 20 HGV movements. The proposed haul route will be operated as a one-way system from the M6-motorway and will use the R401 for return trips only, i.e., 10 HGV movements/day.
- 11.119 HGV traffic will utilise separate haulage routes to and from both the Clonard quarry site and the Harristown Solar Farm and there will therefore be no cumulative impact from traffic from the combined developments. It should be further noted that the proposed solar farm will only generate HGV traffic during the construction and decommissioning periods (i.e., only short-term periods) and not throughout the life of the development.
- 11.120 It is considered that the proposed solar farm, in combination with the proposed quarry traffic is not expected to result in any significant impacts on the existing road network.

### Transboundary Impacts

- 11.121 It is not anticipated that the impacts of the proposed development would have any significant transboundary effects on material assets.

### Interaction with Other Impacts

- 11.122 It is not anticipated that the effects of the proposed development on material assets would interact significantly with other impacts.

### 'Do-nothing Scenario'

- 11.123 In a 'do-nothing scenario', development at the existing sand and gravel pit and ancillary manufacturing facilities, currently permitted would continue to operate within the extant planning permission until January 2024 and thereafter be restored in a similar fashion to what is proposed in this planning application, i.e., a mix of agricultural use and beneficial habitat area. The hard rock quarry would remain inactive with rock previously permitted for extraction under P. Ref. 99/2042 remaining in-situ and the quarry void being restored in line with what was proposed previously.

- 11.124 There would be a loss of the valuable infrastructure and limestone reserves effectively sterilising these valuable aggregates and processing capacity. There would be a loss of the valuable concrete supply to the region, and a loss of all employment currently associated with the site, with current staff numbers at c. 32.

## MITIGATION MEASURES

### Construction and Operational Stage Impacts

- 11.125 The mitigation of the impacts of the proposed development in respect of noise, air quality, ecology, cultural heritage and traffic are detailed in the relevant chapters of this EIAR. It is not considered that any additional mitigation measures are required in respect of utilities or sensitive receptors other than those set out in the other chapters of this EIAR.
- 11.126 All waste generated at the site will continue to be appropriately stored and removed by licenced contractors.

### Post-Operational Impacts

- 11.127 It is not considered that there are any post-operational impacts associated with the proposed development that require mitigation in respect of material assets other than those identified elsewhere in other relevant chapters of this EIAR. Therefore, no specific mitigation measures are proposed.

## RESIDUAL IMPACT ASSESSMENT

### Construction and Operational Stage

- 11.128 As no significant effects are anticipated in relation to built services or waste management and no mitigation measures are required during the construction/operational stage, no residual impact is anticipated.

### Post – Operational Stage

- 11.129 As no significant effects are anticipated in relation to built services or waste management and no mitigation measures are required during the post-operational stage, no residual impact is anticipated.

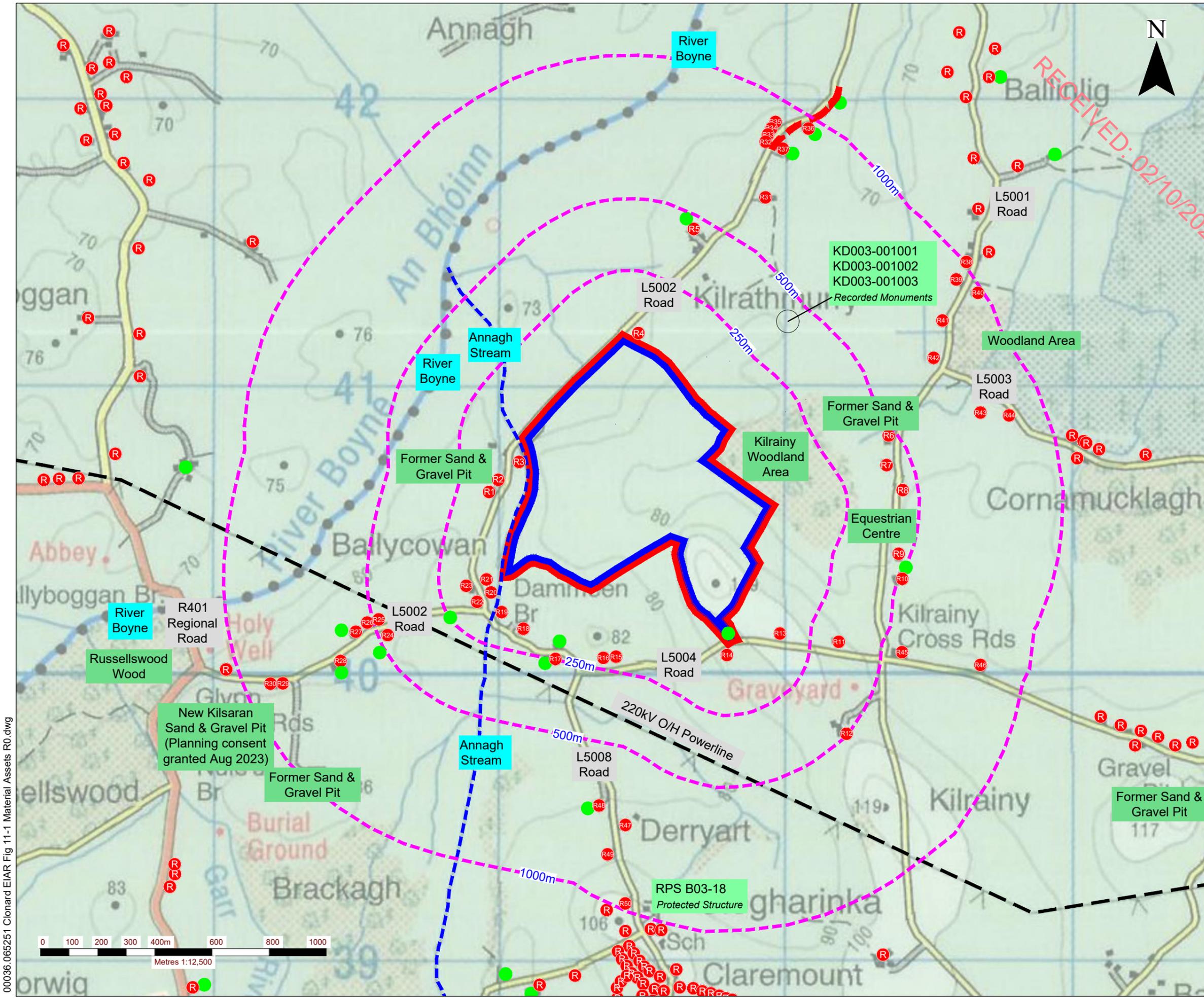
## MONITORING

- 11.130 Monitoring is not proposed in relation to material assets

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**FIGURES**

**Figure 11-1**  
Material Assets



**NOTES**

- EXTRACT FROM 1:50,000 O.S DISCOVERY MAPS NO. 49
- ORDNANCE SURVEY IRELAND LICENCE NO. CYAL50316488
- (C) ORDNANCE SURVEY & GOVERNMENT OF IRELAND

**LEGEND**

- APPLICANTS LAND INTEREST BOUNDARY (c. 51.6 ha)
- SITE APPLICATION AREA c.51.6 ha
- TOTAL APPLICATION AREA c.51.7 ha (Site & Road Works)
- DISTANCE OFF-SET FROM PLANNING APPLICATION BOUNDARY
- RESIDENCE LOCATIONS
- AGRICULTURAL BUILDINGS
- O/H POWERLINES
- STREAM

**Scale**  
1:12,500 @ A3

**Date**  
SEPTEMBER 2023

**Kilsaran**  
ideas taking shape

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ENVIROMENTAL IMPACT ASSESSMENT REPORT

**QUARRY DEVELOPMENT AT KILRATHMURRY & KILRAINY TOWNLANDS, CO. KILDARE**

**MATERIAL ASSETS**

**FIGURE 11-1**

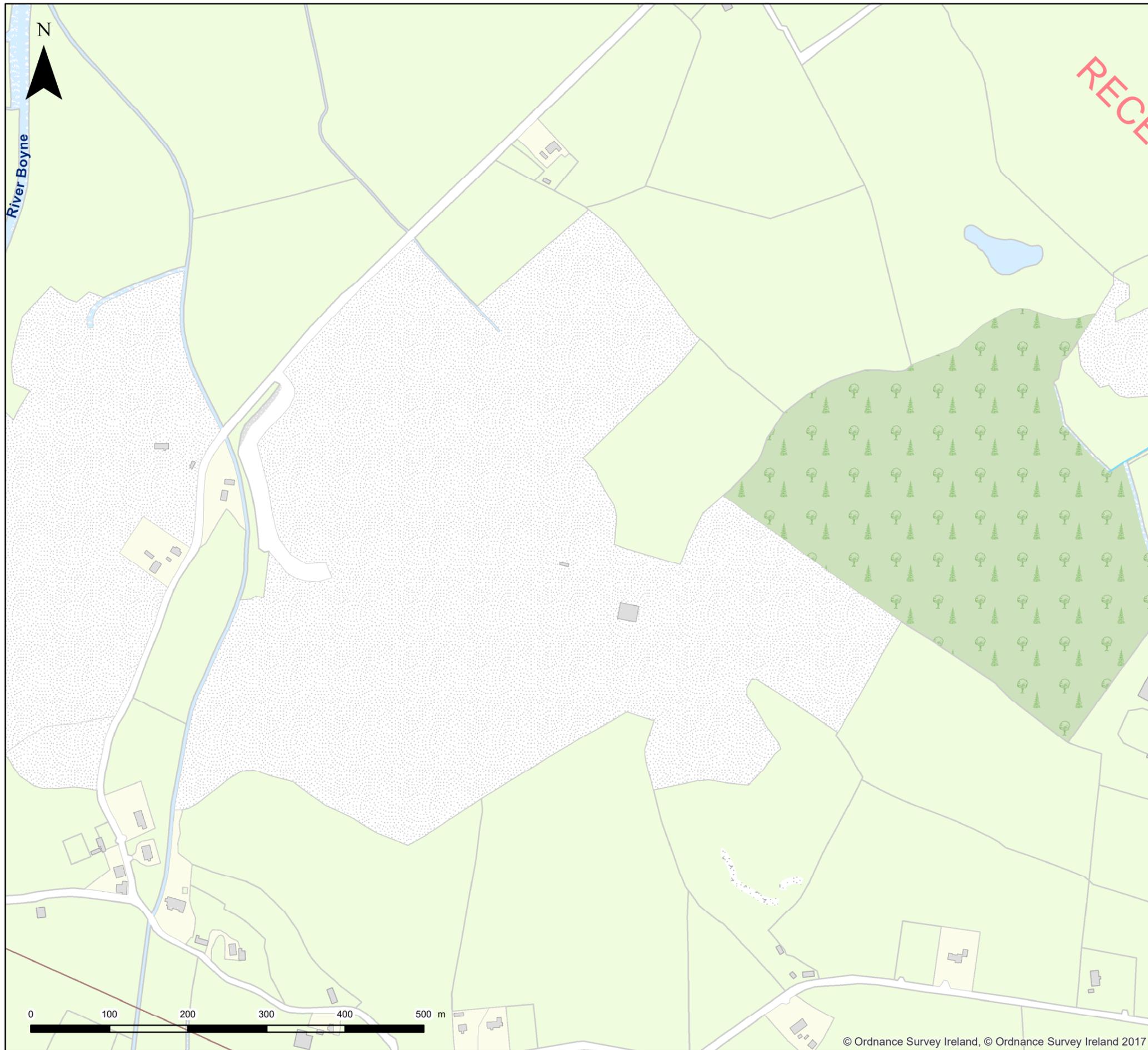
00036.065251 Clonard EIA Fig 11-1 Material Assets R0.dwg

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## APPENDICES

### Appendix 11-A

Gas Networks Ireland 'dial before you dig' review



**Important Safety Notice:** Damage to gas pipelines can result in serious injury or death. Gas network information is provided as a general guide. The exact location and depth of medium or low pressure distribution gas pipes must be verified on site by carrying out necessary investigations, including, for example, hand digging trial holes along the route of the pipe. Service pipes are not generally shown but their presence should always be anticipated.

High pressure transmission pipelines are shown in red. If a transmission pipeline is identified within 10m of any intended excavations then work must not proceed before GNI has been consulted. The true location and depth of a transmission pipeline must be verified on site by a representative of GNI. Contact can be made through 1800 427 747.

All work in the vicinity of the gas network must be completed in accordance with the current edition of the Health and Safety Authority publication, 'Code of Practice For Avoiding Danger From Underground Services' which is available from the Health and Safety Authority (1890 289 389) or can be downloaded at [www.hsa.ie](http://www.hsa.ie).

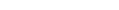
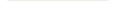
**Legal Notice:** Gas Networks Ireland (GNI) and its affiliates, accept no responsibility for the accuracy of any information contained in this document including data concerning location and technical designation of the gas distribution and transmission network (the "Information"). The Information should not be relied on for accurate distance or depth of cover measurements.

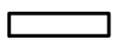
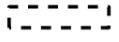
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 Aurora Telecom Duct (Pink dashed line)
   
 Aurora Telecom Sub Duct (Purple dashed line)
   
 Aurora Telecom Inserted Gas Pipe (Blue dashed line)

Aurora Telecom Queries - 01-8926166 (Office Hours)
   
 Aurora\_Network\_Queries@gasnetworks.ie
   
 Aurora Telecom Emergency Only 1800 427300 / 01 2030120

 Transmission Pipe (High Pressure)
   
 Transmission Pipe (Construction Issue)
   
 Distribution Pipe (Medium Pressure)
   
 Distribution Pipe (Low Pressure)
   
 Service Pipe (Medium Pressure)
   
 Service Pipe (Low Pressure)
   
 Strategic Pipe (Medium Pressure)
   
 Strategic Pipe (Low Pressure)
   
 Inserted
   
 Abandoned Pipe

C=?	Cover (depth in metres)		Pressure Monitor
	CP Test Point		Protection (Slabbing)
	End Cap		Protection (Sleeve)
	Hot Tap		Reducer
	Installation		Service Terminator
	Valve		Tee
	Mains Verification**		Transition

\*\* Please contact GNI on 1800-427747 for specific information




### GAS NETWORK INFORMATION

Description:	
Location: 665456,740716	
Plot Date: 07/01/2022 16:33	Scale: 5000 @ A3
Plotted By: 1088	Ref ID: 1088_07012022163351