13 Material Assets

13.1 Introduction

This Environmental Impact Assessment Report (EIAR) has been prepared to accompany a 37L Application for restoration of a disused quarry to agricultural use through import of clean soil and stone (referred to herein as the 'Proposed Project'). The lands on which the Proposed Project is located (referred to as the 'Application Site' or 'Site') are at the townlands of Coolsickin or Quinsborough[1], near the town of Monasterevin, Co. Kildare. The Application Site is located within the administrative boundary of Kildare County Council, (KCC).

This chapter of the EIAR has been prepared by WSP Ireland Consulting Ltd (WSP) and addresses the potential direct and indirect significant effects on material assets located in the vicinity of the Site, which may occur, or which are occurring or which can reasonably be expected to occur because of the Proposed Project.

Material assets are comprised of the physical resources in the environment, which may be of human or natural origin. The objective of the assessment contained in the following sections is to ensure that these assets will be used in a sustainable manner with respect to operations at the Site.

Material assets in the vicinity of the Site comprise of built services and infrastructure, such as surface water drainage, roads, traffic, telecommunications, electricity, gas and water supply infrastructure, waste infrastructure, and geological resources.

The following assessment was prepared by Rab Kassie-Sheeran (MSc, AssocMCIWM) and Rhian Llewellyn (MGeol, PhD, PIEMA). Rab is an environmental scientist and waste specialist with over 3 years' experience, and Rhian is a geologist and EIA specialist with over 9 years' experience.

13.1.1 Technical Scope

This assessment has been made with guidance from the 'Guidelines on the information to be contained in environmental impact assessment reports', published by the EPA in May 2022, (the '2022 EPA Guidelines'). The guidelines were drafted by the EPA with a view to facilitating compliance with EIA Directive (2014/52/EU).

The 2022 EPA Guidelines suggest that the material assets assessment covers the topics: built services, roads and traffic and waste management. The following subheadings are suggested under which to arrange issues concerning 'Built Services'; "Electricity, Telecommunications, Gas, Water Supply Infrastructure, Sewerage".

[1] Also known as 'Coolsickin–Quinsborough'

Having regard to the below guidance in Section 13.2, particularly the 2022 EPA guidelines, and the characteristics and context of the lands that are the subject of this application, this EIAR chapter aims to identify the likely significant effects that the Proposed Project may have on built services and waste management. These include:

- Electricity network utilities;
- Gas infrastructure;
- Telecommunications;
- Local water supplies and foul water network;
- Surface water drainage infrastructure; and,
- Waste management infrastructure;

Roads and traffic have been assessed in Chapter 12 (Traffic and Transport) of this EIAR.

Geological and land resource has been assessed in Chapter 5 (Land, Soils and Geology) of this EIAR.

13.1.2 Geographical and Temporal Scope

The geographical study area for the assessment covers the EIA boundary (identified in **Figure 13-1**). In the context of this EIAR, the EIA boundary contains the Application Site. The Application Site comprises lands which form the historical quarry area and associated working areas, and the access/private access road and proposed location of temporary facilities.

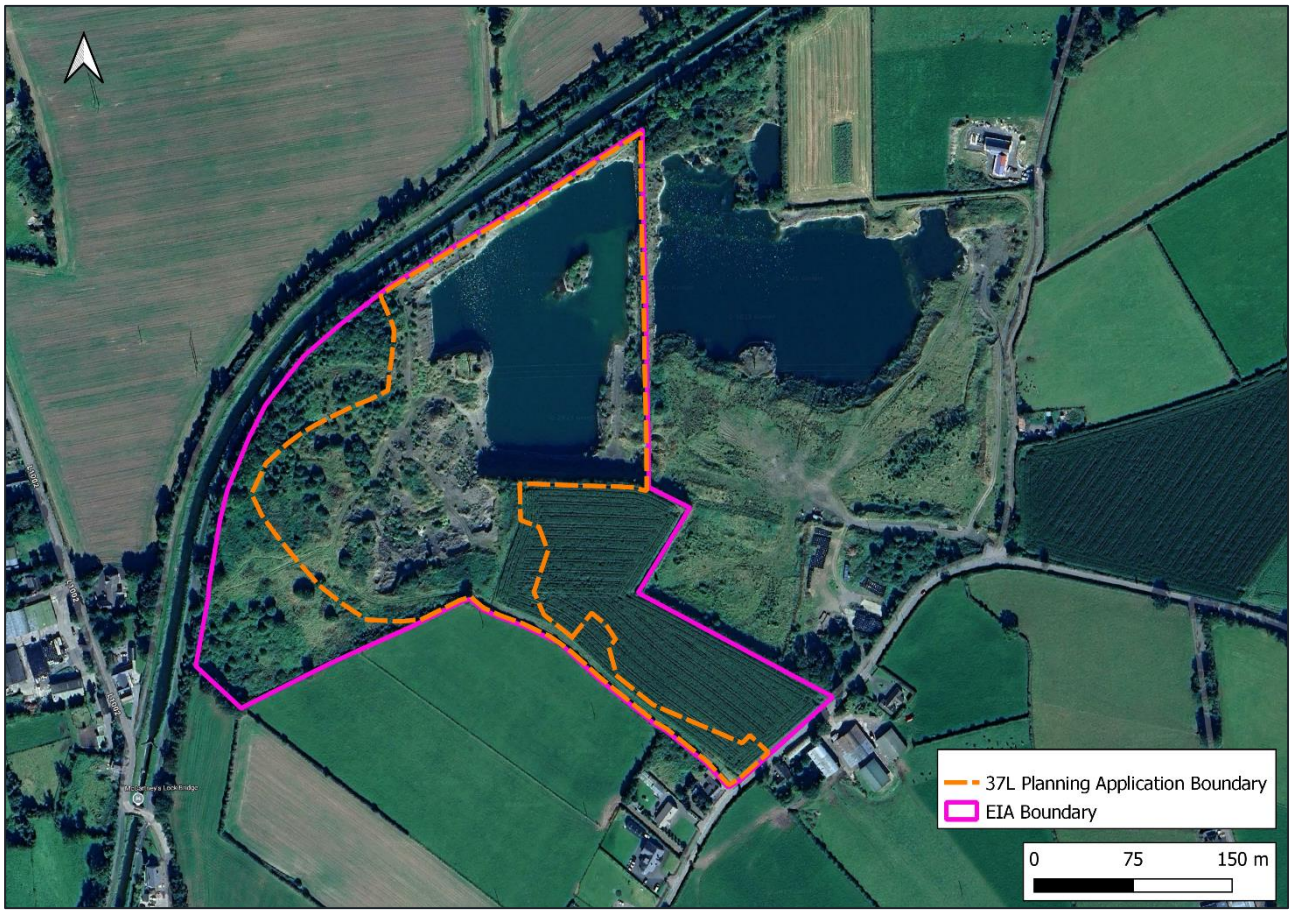

Figure 13-1 - EIA Boundary and Application Boundary overlain on 2024 Google Earth Satellite Imagery

The temporal scope of this assessment covers the construction phase (comprising enabling works and infilling works) and the restoration phase. The combined duration of these phases is predicted to 13 years.

Detailed description of the Proposed project phasing is presented in Section 2.7. of Chapter 2 (Project Description).

13.1.3 Project Description Summary

The Proposed Project consists of the restoration of lands through the import of approximately 720,000 tonnes clean soil and stone as by-product (non-waste) from development sites to infill a disused historical quarry and raise ground levels to tie in with ground levels of surrounding land.

Restoration of the lands will be to agricultural grassland, an artificial waterbody, and a hedgerow habitat with the lands returned to their pre-extraction agricultural use.

The proposed duration of infilling is 10 years depending on market conditions for the anticipated acceptance of clean soil and stone, and a further 3 years for the completion of final restoration activities.

The Application Site is located in the townland of Coolsickin or Quinsborough, Co Kildare. The Application Site is accessed by a privately-owned access road connecting to a local road (L7049).

The following temporary facilities will be installed and maintained during the life of the Proposed Project:

- office and fully serviced welfare facilities;
- weighbridge and associated portacabin;
- closed-system wheel wash;
- 6 no. parking bays;
- 2 no. waste inspection bays and 1 no. bunded waste quarantine area;
- hardstanding area (vehicle movement and storage); and,
- surface water drainage infrastructure from hard standing and discharge to ground, including 2 no. interceptors and 2 no. soakaways.
- security features, including security gates and fencing.
- Power supply. It is intended that approval will be sought for a connection to the ESB Network for the office and fully serviced welfare facilities. Diesel generators will be used to power mobile lighting, if required.

The Proposed Project site entrance and private access road will be upgraded and realigned. These will be retained following to completion of the Proposed Project.

A full project description in provided in Chapter 2 of this EIAR.

13.2 Policy and Legislation Context

13.2.1 Legislation

Annex IV of the amended EIA Directive (2014/52/EU) requires that the developer provides a description of the factors (specified in Article 3(1)) which are likely to be significantly affected by the project, including a study of the potential impacts to material assets.

The 2014/52/EU Directive was transposed into Irish law through European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI No. 296 of 2018) which amended the Planning and Development Act, 2000, and the Planning and Development Regulations, 2001. This EIAR has been produced in accordance with these relevant legislative requirements and Statutory Instruments.

13.2.2 Relevant Policies and Plans

The Kildare County Development Plan 2023–2029 (KCC CDP) is the strategy document for County Kildare which covers the temporal scope of this assessment period. The key policies and objectives of this plan are listed in Section 2.9.4. of the Chapter 2 (Project Description).

13.2.3 Relevant Guidance

This assessment has been made with guidance from 2022 EPA Guidelines.

13.3 Assessment Methodology and Significance Criteria

As identified in Chapter 1 (Introduction) of this EIAR, a common framework of assessment criteria and terminology has been used based on the 2022 EPA Guidelines. This common framework follows a 'matrix approach' to environmental assessment which is based on the characteristics of the impact (magnitude and nature) and the value (sensitivity) of the receptor.

The assessment reported below is based on the common framework described in Chapter 1 of this EIAR. It has been predicted that the value (sensitivity) of the material assets is no greater than Medium, which equates to 'Medium or high importance and rarity, regional scale, limited potential for substitution' (see Table 1-4 of Chapter 1). This sensitivity has been assumed given the importance of the assets to users surrounding the Project, and their sensitivity to potential disruption from the impaired use.

A description of the significance categories used is provided in **Table 13-1.** Effects that are either **Large or Profound are considered to be Significant**, and effects that are **Moderate, Slight or Imperceptible are considered to be Not Significant**. How the level of effect is determined, based on the environmental value and magnitude of impact, is explained in Chapter 1.

Table 13-1 - Significance Categories and Typical Descriptions

Significance Category	Typical Description
Profound	An effect which obliterates sensitive characteristics. Only adverse effects are usually assigned this level of significance. These factors are key issues in the decision-making and consent process. These effects are generally, but not exclusively, associated with sites or features of international, national or regional importance which are likely to suffer a most damaging impact and loss of resource integrity. However, a major change in a site or feature of local importance may also be included in this significance category.
Large	An effect which, by its character, magnitude, duration or intensity alters a significant proportion of a sensitive aspect of the environment. These can be beneficial or adverse effects and are considered to be very important issues which are likely to be substantial in the decision-making process.
Moderate	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends. These are beneficial or adverse effects which may be important but are not likely to be central to decision-making or consent. The cumulative effects of these factors may influence consent or decision-making if they should lead to an increase in the overall adverse effect on a particular resource or receptor.

Significance Category	Typical Description
Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities. These beneficial or adverse effects may be raised as local factors. They are unlikely to be critical in the decision-making process but are important in enhancing the subsequent design of the project.
Imperceptible	An effect capable of measurement but without significant consequences. No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

The Significance Matrix on which magnitude of impact in Section 13.6 is based, is located on Table 1-6 in Chapter 1 (Introduction).

13.4 Baseline Conditions

The subject lands are mainly bound by agricultural lands. The Grand Canal and its associated tow path are located broadly adjacent to the northern boundary of the Site. A disused quarry is located to the east of the Site. The L7049 road is located south of the Site, along with low density one off and ribbon residential development along that road. Previous extraction of aggregates from the Site is estimated to have ceased by December 2006 as indicated on aerial mapping and KCC held planning files for the Site.

13.4.1 ESB Network Utilities

One service map was received from ESB in May 2024 detailing the layout of underground and overhead ESB lines on-site and in the locality covering an area of 500 m from the EIA boundary. The received service maps have been provided in Appendix 13A of this chapter.

The service map provided by ESB indicates that the Site is traversed by the grid via an overground high voltage lines (Newbridge to Portlaoise 110kV transmission line) that are supported by poleset no. 74 within the EIA boundary (**Figure 13-2** and Appendix 13A).

Figure 13-2 - Poleset no. 74

Overground medium voltage lines supported by poles are located in a southeast to northwest orientation in the western area of the Application Site. Pole no. 10 is mapped within the Application Site (see Appendix 13A). Pole No. 11 is located within EIA boundary.

A low voltage overhead cable is mapped along the L7049 Local road along the most southern section of the EIA Boundary (see Appendix 13A).

13.4.2 Gas Supply

A service map was received from Gas Networks Ireland (GNI) in May 2024 detailing the gas networks within the EIA boundary. GNI infrastructure (e.g. pipelines) are not mapped as present within the study area. This GNI service map has been included in Appendix 13B.

13.4.3 Telecommunications Network

Service maps have been sourced from the Open Eir Civil Engineering Infrastructure Service online mapping request portal and show the telecommunications network on-site and in the locality covering an area of 500 m from the EIA boundary. These maps indicate that transmission poles carry over ground services:

- along the Grand Canal – Barrow Line, which runs to the north and northwest of the Site,
- along the local roads to the east and south of the Site, these lines service the residential developments situated adjacent to them, and
- within lands to the east of the Site.

The map indicates a transmission line is present within the EIA boundary in the northern section of the Site. However, this infrastructure was not observed to be present along sections of its mapped route during a walkover carried out by WSP on 8 March 2024.

13.4.4 Local Water Supplies and Sewerage Infrastructure

Service infrastructure details were received from Uisce Éireann on May 2024 covering the EIA boundary area. This information indicated that the Site is not connected to public water infrastructure.

The closest water supply infrastructure can be found along the regional road R414 approximately 600m east of the EIA boundary.

The closest sewerage system infrastructure can be found in Monasterevin town approximately 1,200m south of the EIA boundary. Uisce Éireann data (2025) indicates that no public sewerage infrastructure is present within the EIA boundary.

13.4.5 Surface Water Drainage Infrastructure

There are no existing public surface water networks within the Site.

It is likely that any surface water flows within the vicinity of the Site will flow towards the northwest, towards the River Figile, with the understanding that culverts exist beneath the Grand Canal.

Internal haulage routes within the EIA boundary are comprised of compacted aggregates which are unlike to significantly impede infiltration of rainwater to ground. It is proposed that there will be a drainage system from hardstanding areas as highlighted on Drawing 04 - Proposed Site Layout provided as part of this planning application.

13.4.6 Waste Management

Land use on the Site is limited to agriculture (tillage) in the field in the southern section of the EIA Boundary. No waste is generated on the Site as limited activities currently take place on the lands.

13.4.7 Do Nothing Scenario

The do-nothing scenario will result in no changes to the Site. The limited material assets on the Site (i.e. ESB poles and polesets) will remain in place. The surface water drainage regime will remain the same.

13.5 Characteristics of the Proposed Project

During the construction phase, the facility will require electricity, water (potable/non-potable water), telecommunications (mobile), waste management for facilities, and surface water drainage infrastructure.

The proposed quarantine area and material acceptance procedures processed (see Chapter 2 Project Description) provide capacity for the Proposed Project to manage the risk of unsuitable fill being imported to Site, in the event that this should occur.

All facilities and access roads will be removed from the site during the decommissioning of the facility following the completion of the Proposed Project, with the exception of the upgraded site entrance, and associated surface water drainage infrastructure which will remain.

Given the above, the restoration phase impacts are considered to be no greater than those identified for the construction phase.

The Applicant will consult with ESB prior to construction to determine the preferred approaches to works around poleset 74 (high voltage) and pole 10 (medium voltage). All works near ESB infrastructure will be carried out in accordance with ESB guidelines (e.g. ESB Networks Code of Practice for Avoiding Danger from Overhead Electricity Lines, 2019), including works near poles at the proposed site entrance.

13.6 Potential Effects

The main potential impacts and associated effects that have been considered in the assessment relate to the following:

- Activities or events that might impact electrical services and utilities for surrounding users;
- Activities or events that might impact surface water drainage networks surrounding the Application Site;
- Activities or events that might impact water supplies and services for surrounding users;
- Activities or events that might impact waste water networks for surrounding users; and,
- Activities or events that might impact waste facilities for surrounding users.

These potential impacts are considered and assessed in the following sections.

Impacts to gas supply infrastructure have been scoped out of this assessment as no GNI infrastructure is mapped at or near the Application Site. The Proposed Project does not require a gas connection.

Data supplied by Eir and walkover observations conclude that no telecommunication infrastructure is present within the Application Site. The Proposed Project does not require a telecommunication network connection as mobile phones will be used on site. Therefore, potential effects on telecommunication infrastructure have been scoped out of this assessment.

Potential effects on geological resources are assessed in Chapter 5 (Land Soil and Geology).

Potential effects associated with the change of land-use caused by the Proposed Project are addressed in Chapter 5 (Land Soil and Geology) and Chapter 3 (Population & Health Human).

Potential effects on water quality and quantity of supply for groundwater users are addressed in Chater 6 (Water).

Potential effects on roads and traffic are addressed in Chater 12 (Traffic and Transport).

13.6.1 Potential Effects on Electrical Services and Utilities

Approval will be sought for a power supply connection to the ESB Network to service the site office and welfare facilities.

ESB infrastructure is located within the fill area. It is noted that proposed final ground levels broadly tie in with the existing ground level at the base of poleset 74 and works are not expected to occur within 4.5 m of the posts. The Applicant will consult with ESB prior to construction to determine the preferred approaches to works around poleset 74 (high voltage) and pole 10 (medium voltage). All works near ESB infrastructure will be carried out in accordance with ESB guidelines (e.g. ESB Networks Code of Practice for Avoiding Danger from Overhead Electricity Lines, 2019), including works near poles at the proposed site entrance.

With regards to the ESB Network Utilities located within the Site, the High Voltage poleset (Poleset no. 74). It is noted that access to this poleset will be improved by the Proposed Project as access to the poleset has been adversely affected by the historical extraction activities[2] adjacent to the poleset which has resulted in the poleset being located on a raised mound of alluvial material with exposed banks.

All construction and associated work will follow the above mentioned ESB guidance in relation to electrical services and utilities.

On the basis of the above, the potential magnitude of effect is considered to be Low (adverse). Therefore, the level effect is considered to be Slight. As per the choice presented in Chapter 1, Table 1-6 – Significance Matrix; the lower rating of ‘Slight’ is selected based on the information provided above. The potential effects on electrical services and utilities are considered to be Not Significant.

13.6.2 Surface Water Drainage Networks

There are no existing public surface water networks near the Site. The Proposed Project provides for an internal surface water drainage network (i.e. collection of run-off from hardstanding to ground via drains, interceptor and soakaway). This surface water management infrastructure will be maintained throughout the construction phase of the Proposed Project.

[2] Carried out by a third-party prior to the Applicant’s purchase of the lands in 2022.

Surface water drainage will be removed at the late stages of the project except for at the proposed Site entrance which will be retained.

On the basis of the above information, the potential magnitude of effect is considered to be no greater than Negligible (adverse) for surface water drainage networks. Therefore, the level effect is considered to be Imperceptible. The potential effects on Surface water drainage networks are considered to be Not Significant.

13.6.3 Water Supplies and Services

Water requirements of the Proposed Project are low (see Project Description Chapter 2, Section 2.4.2.6). During construction phase water will periodically be required for damping down dust, cleaning hard surfaces, etc. Water will be sourced from the collected waters in the quarry void . Water for the Proposed Project will not be abstracted from the adjacent canal. Bottled water will be provided for facility staff.

The potential magnitude of effect is considered to be no greater than Negligible (adverse) for water supplies and service for the Proposed Project. Therefore, the level effect is considered to be Imperceptible.. The potential effects are considered to be Not Significant.

13.6.4 Waste Water Networks

During the construction phase, welfare facilities will include water closet facilities with high quality sanitary fittings. The facilities will not have access to mains waste. They will be fully serviced by a suitable third-party provider with waste removed from site for disposal at appropriate third-party facilities.

The potential magnitude of effect is considered to be no greater than Negligible (adverse) for waste water networks for the Proposed Project. Therefore, the level effect is considered to be Imperceptible based contents of this section. The potential effects are considered to be Not Significant.

13.6.5 Waste Management

During the construction phase, small amounts of general refuse wastes will be generated by the site office and staff facilities and will be collected by an authorised waste collection permit holder.

Given the small volume of plant proposed it is considered that limited volumes of waste may be generated by servicing equipment and plant. Waste oil and other waste and parts associated with this maintenance will be disposed by the service contractor at a suitably facility.

Refuelling of equipment will take place on hardstanding area or over drip trays. Refuelling will be undertaken by a suitably responsible person. Any waste generated will be disposed of at appropriate, authorised third-party facilities.

The Proposed Project seeks to restore historically quarries lands and immediately surrounding lands to their previous agricultural use through importation of clean soils and

stones to site. Clean soil and stone will be imported to site and subject to the handling procedures as set out in Chapter 2 (Project Description). Only clean soil and stone we be accepted. A quarantine area is provided for the unlikely event that unsuitable materials are bought into the Site (see Chapter 2 Project Description).

The potential magnitude of effect is considered to be Negligible (neutral) for Waste Management for the Proposed Project. Therefore, the level effect is considered to be Imperceptible. The potential effects are considered to be Not Significant.

13.6.6 Summary Evaluation of Initial Impacts and Their Effect Significance

Table 13-2 - Summary Table of Evaluation of Initial Impacts and Their Effect Significance

Receptor	Sensitivity	Source of Impact/Description of Change	Impact Magnitude	Level of Effect
Electrical Infrastructure / Utilities	Medium	Disruption to electrical supplies as a result of Site activities.	No greater than Low (adverse)	Slight
Water Supplies	Medium	Impacts to quality of surrounding water supplies (groundwater well users) from quarry restoration activities on Site.	No greater than Negligible (adverse)	Imperceptible
Wastewater Networks	Medium	Impacts or impairment of local wastewater networks as a result Site activities or contributions.	No greater than Negligible (adverse)	Imperceptible
Waste Management Infrastructure	Medium	Impacts or impairment of local waste management infrastructure as a result Site activities generating wastes. However, Site will add to region's soil recovery capacity.	Negligible (neutral)	Imperceptible

13.7 Mitigation

In addition to the measures set out in **Section 13.5**, the below measures are be implemented.

In order to mitigate the effects associated with the potential impacts on material assets surrounding the Proposed Project, the following additional mitigation will take place:

- Any works required to material assets on or around the Site will be carried out in conjunction with the relevant utility provider to ensure minimal disruption to the existing users.
- If it is determined in conjunction with the utility provider that utility disruption is required, then prior notification of disruptions shall be given to all impacted properties. This shall include information on when disruptions are scheduled to occur and the duration of the disruption.
- All underground services will be identified, and protection will be put in place.

13.8 Monitoring

No specific monitoring measures are required in relation to material assets.

13.9 Residual Effects

Once the identified mitigation measures, appropriate design standards and environmental management system is adhered to it is considered that there will be no residual impact on the material assets surrounding the Proposed Project. In all cases the residual effect is **Not Significant** and not greater than '*Slight'*.

13.9.1 Interaction with Other Effects

No interaction with other effects has been identified.

13.9.2 Do Nothing Effects

If the Proposed Project were not to proceed there would be no negative effect relating to material assets.

13.10 Cumulative Impacts

Given the mitigation herein, there are no predicted cumulative impacts.

13.11 Difficulties Encountered

No particular difficulties were encountered in the preparation of this chapter of the EIAR.

13.12 References

- EPA. (2022). Guidelines on the information to be contained in Environmental Impact Assessment Reports.
- ESB (2019). ESB Networks Code of Practice for Avoiding Danger from Overhead Electricity Lines.
- Gas Networks Ireland (2021) Code of Practice for Working in the Vicinity of the Transmission Network.
- Kildare County Council (2023) Kildare County Development Plan 2023-2029.
- Kildare County Council (2012) Section 261A Assessment
- Uisce Éireann (2025) Mapping Portal Data