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ElAR Non-Technical Summary: Mounthall, Camross, Co. Laois

Continued Use & Extension to Existing Sand and Gravel Pit Development

Breedon Materials Ltd. (t/a Breedon Ireland)

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Basis of Report

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1.0 Introduction

An Environmental Impact Assessment Report (EIAR) has been prepared in support of a planning application for the continued use and extension of an existing sand and gravel pit at Mounthall and Cummer townlands in Camross, Co. Laois. This document provides a non-technical summary (NTS) of the EIAR.

An Appropriate Assessment Screening and Natura Impact Statement (NIS) has also been prepared in support of the planning application and is provided as a separate document.

1.1 The Applicant

The planning application and accompanying supporting documentation has been prepared by SLR Consulting Ireland (SLR) on behalf of Breedon Materials Ltd. (trading as Breedon Ireland).

The company is a leading supplier of natural aggregates and added-value construction materials products, principally concrete and asphalt, across the island of Ireland. The company is part of Breedon Group plc, a public company with ordinary shares traded on the London Stock Exchange.

Across Ireland, UK and America the company employs approximately 4,200 people and operates 2 cement plants, >110 quarries, >50 asphalt plants and >200 ready-mixed concrete plants.

Breedon trades in the Republic of Ireland as Breedon Ireland, a fully integrated aggregates and downstream products business headquartered in Dublin. It comprises all Breedon's construction materials and contracting services businesses (aggregates, asphalt, ready-mixed concrete, bitumen, contract surfacing highway maintenance, civil engineering and airfield construction) in the Republic of Ireland.

Breedon are fully committed to sustainability and social responsibility. This commitment is one of the six pillars of the company's growth strategy. In September 2020, Breedon committed to achieving net zero carbon emissions by 2050.

1.2 Site Location

The application site is located approximately 3.5 km from the Laois / Offaly County border on the southeastern flanks of the Slieve Bloom mountains and c. 3km north of Camross village, approximately 9km northwest of Mountrath and 18km west of Portlaoise. Please refer to **NTS Figure 1**.

1.3 Site Description

Within the application area (c. 12.2 hectares) the northern portion of the site (c. 1.2 hectares) contains the existing sand and gravel pit and entrance onto the L10317. At the site entrance, the existing gate is set back from the edge of the public road.

The existing pit consists of a single face typically 8m in height, and there are no built structures associated with it. Ground levels rise from the entrance at c. 194m AOD westwards to the toe of the existing face along the western boundary where ground levels are c. 200-203m AOD.

Existing agricultural grazing lands are situated to the south of the existing pit, over which the extension extraction operations (c. 8 hectares) are proposed. The extension lands are undulating, and ground levels are variable from c. 205m AOD adjacent to the existing pit to the north, falling south-eastwards to c. 195m AOD, before rising to 205m AOD and again falling away to c. 180m AOD in the southeast corner of the site.



The extension lands contain some native hedgerows, gorse and bramble scrub and some immature broadleaved woodland mixed with gorse scrub. There is a small pond (c. 20m in diameter) located along the eastern site boundary. **NTS Figure 4** shows the application site in its current layout.

1.4 Surrounding Land-Use

The lands surrounding the application site predominantly comprise agricultural fields with the exception of the existing sand and gravel pit. There are isolated private residential property and agriculture farms located throughout the surrounding rural landscape, predominantly along the local road network. There are c. 21 residences located within 500m of the application boundary, with a further c. 29 residences between 500m and 1km.

Two local roads bound the application site. The L1031 local road borders its southeastern boundary and the L10317 local road to the east and northeast which provides the site access. A drainage channel bounds the southern application site, flowing east for c. 150m alongside the L1031 local road before it enters the Killeen stream.

The application site is not subject to any statutory or non-statutory nature conservation designations. The Slieve Bloom SPA (site code 004160) bounds the northern boundary of the existing sand and gravel pit with the proposed extension area to develop away from this SPA. The Slieve Bloom SAC (site code 000412) is located c. 1.5km to the north at its closest point and the River Barrow & River Nore SAC is c. 2km to the east.

1.5 Site Access

The proposed development will use the existing permitted access to the existing sand and gravel pit, along the northeastern site boundary and off the L10317.

1.6 Consideration of Alternatives

The proposed pit extension is located in an area favourable to extraction activities, due to, inter alia the:

- previous history of sand and gravel extraction at this site and in the general geographic location;
- application site is a proven source of high-quality sand and gravels;
- ongoing and continued increases in the level of construction and development activity in the midlands and eastern regions is generating ever increasing demand for construction materials;
- within an appropriate topographic setting i.e. well screened from surrounding areas;
- remote location, but with access to the regional and national roads network and a low annual extraction rate will minimise HGV traffic movements on the local road network;
- best practice industry standard extraction methods can be used; and
- the proposed development will be carried out by a long established and experienced operator in the extractive and ancillary concrete / asphalt manufacturing industry with a proven track record in planning and environmental compliance within their overall pit/quarry portfolio.

1.6.1 Do Nothing Alternative

If the proposed development does not take place, the existing pit would remain as is and the extension lands would remain in use for agricultural purposes, and there would be a loss of a proven and valuable aggregate supply to the region going forward.



1.6.2 Alternative Sources of Aggregates

In the medium term there are no real alternatives to the current land-based sources of construction aggregates. Until such time as end of waste criteria in respect of construction & demolition (C&D) materials is formally implemented, these materials cannot be relied upon and for the foreseeable future there are no real alternatives to primary land-won aggregates. Notwithstanding the above, the volume of C&D waste suitable for recycling into secondary aggregates would be considered very low in comparison to the overall demand for aggregates. The demographic spread of the population results in only the large urban centres potentially being capable of generating sufficient volumes of construction and demolition (C&D) waste to justify a commercial operation producing secondary aggregates going forward. In the longer term (>25 years), there may be some scope for extraction of minerals from marine sources.

In the absence of significant volumes of aggregates from recycled / secondary and marine sources, it is clear that land-based deposits (such as the proven reserves at Mounthall) will continue to be the main source of construction aggregates in Ireland, including Laois and the wider midlands and eastern region.

1.6.3 Alternative Locations

The current planning application is for continued use and extension of an existing permitted sand and gravel pit. It is a resource-based development and therefore the aggregates can only be worked (extracted) where they are present in-situ, as acknowledged in Section 9.5 of the LCDP 2021-2027. Other factors influencing potential locations for this type of development include a willing vendor, distance from market, required quality and quantity to justify capital investments, etc. It is usually the case that a number of these prerequisites are not met, and the alternative is discounted.

The provision of aggregates is essential to meet the needs of society. At the current time, there is no suitable alternative replacement sand and gravel location available to the applicant.

The existing site at Mounthall is an established pit in a remote location and has a local road network providing access to and from it that has proven to be suitable for this type of development previously.

Notwithstanding the continual search for suitable development sites, the lands at Mounthall are proven to contain an economically viable volume of quality sand and gravel reserves. The site is deemed appropriate for the following reasons:

- suitability of the economic sand and gravel reserve;
- extent of the lands over which the applicant has an interest in, and which are available for development;
- access and road infrastructure with proximity to the national road network and key transport corridors, namely the M7 motorway and R440 regional road;
- low environmental impact: topography assists with screening of the development (no significant visual intrusion), no recorded monuments within the application or landholding area; and not within a designated ecological or landscape area (albeit, adjacent to the Slieve Bloom SPA); and
- detailed water and ecology studies indicate the development can proceed without impacts on the surrounding hydrogeological and ecological regimes.

On the basis of the above, it is considered that the proposed extension development of the existing pit, subject to implementation of best environmental management practice and compliance with appropriate planning controls (i.e. planning conditions and standard emission limit values for the sector) can be carried out without any significant environmental impacts on the surrounding area.



1.6.4 Alternative Designs / Layouts

Alternative designs, including alternative layouts within the site were considered with particular attention being paid to the location of the processing plant and ancillary facilities in general being located away from the public road and nearest residences where possible, along with the direction of working within the extension area.

The design layout that was chosen for the proposed extension area is considered to best minimise the potential impacts on the environment and third party residences from noise, dust, visual and landscape impacts, through the design proposed.

All of the site ancillary facilities, and product stockpiles will be located on the existing pit floor, screened by the existing pit faces and set back from the public roads and therefore will be mostly screened from view due to the topography of the area. Similarly, the processing plant will be located on the pit floor within the proposed extension area, located centrally within the site and where the pit faces and proposed screening mounds and vegetation will be used to mostly screen the plant.

1.6.5 Alternative Processes

Breedon Ireland are a company with expertise and experience in the field of quarrying, aggregates production and the manufacture of value-added products. As the proposed development comprises the extension of an existing pit with standard extraction and processing methods to be implemented, alternative processes are not considered relevant in this instance.

2.0 Description of the Proposed Development

2.1 Existing Sand and Gravel Pit

The existing sand and gravel pit located within the northern portion of the application area is long established. It is recognised that the pit was in use for sand and gravel extraction prior to October 1, 1964, and the introduction of the Planning and Development Act. It has been subsequently registered under Section 261 of the Planning and Development Act, and Laois County Council is satisfied that it is compliant with relevant legislation regarding pre 1964 land use rights and environmental requirements emanating from EU Directives.

2.2 Proposed Development

The proposed development being applied for under this current planning application will consist of:

- Continued use and extension to existing permitted sand and gravel pit registered under Section 261 of the Planning & Development Act 2000, as amended (site ref. QY05/10) within an overall application area of c. 12.2 hectares;
- Extraction of sand and gravel (dry working) over an area of c. 8 hectares with processing and washing of material on site (closed loop water recycling system with associated silt storage lagoons 1,952.25m²), and all ancillary works and structures;
- Site facilities consisting of mobile processing plant, portacabin site office (6.25m²), portacabin welfare facility (18.9m²), serviced portaloo toilet, bunded fuel storage and refuelling pad with hydrocarbon interceptor, weighbridge, wheelwash, water supply borehole, perimeter berms, vegetation planting and fencing;
- Access to the site will be via the existing sand & gravel pit entrance;
- Restoration of the site to agricultural lands; and



- The proposed extraction operational period is for 10 years plus 1 year to complete restoration (total duration sought 11 years).

The overall extraction development plan is shown in **NTS Figure 5**.

2.2.1 Construction Phase

It is anticipated that the construction stage works (including provision of ancillary facilities, acoustic fencing and topsoil stripping and construction of screening berms) would be carried out within a 6-month period.

Ancillary facilities will consist of a portacabin weighbridge office, portacabin welfare facility, serviced portaloo toilet, mobile aggregate processing plant, refuelling pad with hydrocarbon interceptor, weighbridge, wheelwash and water supply borehole.

ESB Networks will re-route 5 no. electricity poles located within the proposed extension extraction area to the edge of the site.

Silt storage lagoons will be constructed as part of the washing plant closed water recycling system.

Acoustic fencing of c. 2-3m in height will be erected adjacent to residences R1 to the north and R2/R3 to the east to reduce potential noise impacts to those properties.

Perimeter screening berms of c. 2m in height will be located along the northern boundary adjacent to residence R1 and along the eastern boundary adjacent to residences R2/R3. These will be constructed using soils stripped from the initial extraction works.

Vegetation planting with native species will be carried out around the edges of the proposed development. The planting will be carried out in Year 1 to allow the maximum time for the vegetation to become established. The vegetation will be retained indefinitely following the completion of sand and gravel extraction operations at the site.

2.2.2 Operational Phase

The proposed operational phase will see sand and gravel extraction carried out within an overall extraction area of c. 8 hectares. The final extraction scheme is shown in plan on **NTS Figure 5**. It is proposed that extraction would be carried out over a 10-year period at an average rate of 80,000 tonnes per annum.

Extraction within the existing pit was previously carried out as a dry extraction operation above the groundwater table. It is proposed that extraction within the extension area will also be carried out above the groundwater table, with the proposed pit floor sloping from northwest (c. 205m AOD) to southeast (c. 175m AOD). It is proposed to extract the sand and gravel in 3 phases, where extraction operations will progress in an anti-clockwise direction from Phase 1 to Phase 3. The selection of the proposed phasing design has been made taking advantage of the natural screening potential offered by extracting first within the central part of the site (therefore at further distance from residential receptors) while perimeter acoustic fencing, screening berms and vegetation are able to establish at the earliest opportunity along the northern and eastern boundaries closest to the residences R1 and R3. Further detail is provided in EIAR Chapter 2 – Project Description.

2.2.3 Restoration Phase

On completion of extraction operations it is proposed to return the worked lands to agricultural grazing lands with some dedicated peripheral areas to be left for natural habitat and ecological benefit refer to **NTS Figure 6**.

The only material requirements in respect of the planned restoration scheme are those topsoils and subsoils already present on site and which will be stored in screening berms (with any excess



on the pit floor) during extraction works. Redundant pit faces will be regraded with these materials and will be grass seeded. Provision is made for a 1 year final restoration period to carry out such works.

2.3 Hedgerows/Treelines (Phased Removal / Reinstatement)

Some hedgerows and associated trees, as well as treelines and scrub areas will need to be removed to facilitate the proposed extraction of sand and gravel from the extension area. Please see **NTS Figure 7** for identification of those requiring removal.

It is proposed to remove c.310m of internal low-cut hedgerows and tree lines, as well as some individual or small groups of trees/vegetation consist of c.0.4 ha. of immature woodland (dominated by hazel, with some ash, sycamore, blackthorn, hawthorn and holly), c.1.7 ha. of gorse and c.750m² willow within the site on a phased basis to facilitate the proposed development.

The proposed landscaping plan implements 315m of a more diverse native hedge that will be planted on commencement of the development, along part of the extraction outline and a further 370 m across the pit floor in the approximate location of the hedgerows to be removed on restoration of the site following extraction works.

It is further proposed to plant c.1,700m² of native trees in various blocks around the edges of the extraction area.

All hedges and trees planted as part of the proposed landscaping and restoration plans will be comprised of native and typically occurring species present in the local vegetation and/or hedgerows in Co. Laois.

2.4 Aggregate Reserve Assessment

The total recoverable reserve of sand and gravel from within the proposed development extension design scheme has been investigated and is estimated to be c. 800,000 tonnes.

2.5 Duration of Extraction

The duration of quarrying activities at the application site will largely be dictated by the rate at which the sand and gravel is extracted from the site. There are many factors which will influence this, including, but not limited to the prevailing economic climate and related construction industry demand and distance of construction projects from the facility (and scale of activity). The sand and gravel will be used to primarily supply value added plants, with the remainder being transported directly to the market.

In light of these and other variables, the definition of fixed output rates and duration is challenging. It is anticipated that the average annual extraction rate will be in the order of 80,000 tonnes per year.

A planning permission duration of 10 years is sought for the sand and gravel pit development and a further 1 year to complete final restoration of the site.

2.6 Removal of Topsoil & Overburden Soils

Topsoil and overburden stripped to obtain access to the underlying sand and gravel reserve will be either utilised directly for construction of the perimeter screening berms and settlement ponds, landscaping works or stored in stockpiles on the pit floor until it can be used in the final restoration.

There is no requirement to remove topsoil or overburden off site.



All berms will have slope angles not greater than 1:1.5 and will be re-vegetated at the earliest opportunity to avoid soil erosion by air and water.

2.7 Site Drainage

An existing surface water drainage channel flows along the southeastern landholding boundary parallel to the L1031 local road in an easterly direction before entering the Killen river further east of the application site. There is no surface water drainage infrastructure within the site. Rain falling across the existing site percolates down through the existing ground surface as recharge to groundwater and this will continue to be the case.

A hydrological / hydrogeological assessment has been carried out to determine what the requirements are for the proposed development, regarding a water regime. It addresses mitigation measures to eliminate and/or minimise the potential impacts, if any, on surface water and groundwater. These measures will be incorporated into the pit design and operation, (refer to EIAR Chapter 7 – Water).

A hardstanding area and hydrocarbon interceptor is to be provided around the proposed bounded fuel storage area.

2.8 Stability of the Pit

Industry standard slope angles, bench heights, and bench widths will be used for extraction operations at the site.

2.9 Method of Extraction

There will be no blasting associated with the proposed development and it is proposed to use a load, haul, dump method of extraction. A wheeled front-end loader will be used to excavate the previously stripped sand and gravel deposit. The material from the working face will then be directly fed into the mobile processing plant by the same loader.

2.10 Processing Methods

The sand and gravel processing methods will consist primarily of washing and screening, using a mobile processing plant, to produce a range of aggregates for sale and distribution by the company. The processing plant will operate in a closed loop water circuit with silt disposal lagoons to minimise the need for excessive take of groundwater and to eliminate the need to discharge process water from the site.

Once washed and screened, the aggregate will be stockpiled on the pit floor to await transportation off site for use in value added production, or for direct sale to the market. Aggregate from the screened stockpiles will be loaded by means of a mechanical loading shovel directly to incoming HGVs (trucks).

2.11 Pit Working Hours

The proposed hours for operations (extraction, processing and haulage) at the site will be 07.00 hours to 18.00 hours Monday to Friday inclusive and 07.00 hours to 14.00 hours on Saturdays. No operations will be carried out on Sundays or Public Holidays.

2.12 Employment

The proposed development will provide employment for 1 direct employee plus a number of sub-contractors, hauliers and service providers.



2.13 Site Access and Security

The proposed development will use the existing access on the L10317 local road, along the northeastern site boundary. At the site entrance, the existing gate is set back from the edge of the public road, with the area between the gate and road consisting of a concrete hard surface.

There will be no other vehicular access to the proposed development. The access gate will be locked outside operational hours.

The boundary of the proposed extension area will be secured by stock-proof post & wire fencing except where an acoustic fencing structure will be constructed in two locations, each c.150m in length along the application boundary with residences R1 to the north and R3 to the east. In addition, operational landscaping will be provided in the form of hedgerow / tree planting along the northern and eastern and southeastern boundaries.

2.14 Parking

All HGVs utilising the site will be confined within the application area. There will be adequate provision for HGV parking to ensure that there is no queueing of HGV's on the public road outside the pit.

Adequate car parking provision (6 no. spaces) for employees, contractors and visitors will be provided in a dedicated area on a hardcore surface adjacent to the weighbridge office.

2.15 Wheelwash

A wheel wash facility will be constructed in close proximity to the site entrance and adjacent to the proposed weighbridge and the new unit will be utilised throughout the life of the development, with due maintenance as required. This will eliminate the risk of mud and dust being carried from the development onto the public road. All aggregate haulage vehicles will be required to pass through the wheelwash prior to leaving the site. The section of internal road between the wheelwash and the site entrance will be hard-surfaced.

2.16 Weighbridge

All HGV traffic will be directed across a weighbridge in order to track and record the amount of material exiting the site.

2.17 Offices and Ancillary Facilities

Two prefabricated portacabin structures will be transported to the site and will act as site offices, and canteen/cloakroom for staff use. Surface water run-off from the roofs will directly percolate to ground.

2.18 Utilities and Services

The offices will be powered by mains electricity from the ESB's national grid via a new connection to the existing power lines in the area. A super-silent diesel generator will be used to provide power to the processing plant on site.

Site based staff at the application site will be contactable by mobile phone, landline and email and broadband connections to the site office will be provided via a mobile network.

A portable toilet system, placed on a concrete pad will be located adjacent to the welfare portacabins. The portaloo will be inspected on a regular basis and when necessary it will be emptied by a licensed contractor and the material disposed at an authorised facility.



A water supply borehole will provide process water for sinks, a top-up supply to the closed system silt lagoons, the wheelwash and other operations. Potable bottled water will be supplied by a contractor for consumption by persons onsite.

Given the lack of combustible waste materials at this site, it is considered highly unlikely that a fire will break out during quarry operations. A range of fire extinguishers (water, foam and CO₂) will be kept at the site office to deal with any localised small scale fires which might occur. Additional fire-fighting capacity can be provided by storing water in a mobile bowser.

2.19 Lighting

Lighting will be provided at the site as necessary. This will include fixed downlights outside the office / welfare facilities and processing plant; and mobile lighting on the machinery used within the pit void. All lighting would only be in use for wintertime operations, when darkness has fallen, within the proposed site operating hours of 07.00 hours until 18.00 hours Monday to Friday and until 14.00 hours on Saturdays. There will therefore be a period where such lighting will be required for up to 1 hour in the morning and up to 2.5 hours in the evening, during periods in winter. Any night-time light pollution caused by the proposed development will therefore be of brief duration during winter months and is not considered significant.

2.20 Fuel and Oil Storage

Fuel and oils will be stored in bunded fuel tanks, which will be covered and enclosed to prevent the build-up of potentially contaminated water within the bund arising from rainfall. A build-up of rainwater in the bund could also reduce the holding capacity of the bund. The bund capacity will be in excess of 110% of the combined volume of the tank(s).

Refuelling will take place adjacent to the bunded fuel storage area on a concrete pad with associated hydrocarbon interceptor attached.

Spill kits will be provided on site and periodic spill kit training will be provided to staff.

2.21 Waste Management

Almost all products and by-products arising from the aggregate processing have commercial value. There is no intention on behalf of Breedon Ireland to discard, where possible, any material extracted from the sand and gravel pit at Mounthall. The principal aim of the extractive waste management plan for the site is to prevent waste production which is in accordance with Section 5(2)(a) of the 2009 Regulations. All materials (including any fines removed from the settlement ponds) will be used for operational or restoration purposes.

Potential waste produced and the proposed measures used to control it are described as follows:

- **Scrap metal** – these materials are chiefly produced from the maintenance of the processing 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 contractors.
- **Used Oil and Oil Filters** – any waste oil/oil filters that may arise from servicing of fixed or mobile 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** (Canteen Waste) – domestic waste generated at the offices and employee's facility will be collected by a licensed waste collection contractor.



2.21.1 Environmental Control, Management & Monitoring

Extraction, processing and ultimately restoration activities at the application site require a number of environmental controls to eliminate or minimise the potential nuisance to the public arising from the extraction and processing operations. The environmental control measures to be put in place at the site for dust, noise and water management are outlined in the relevant EIA Chapters and these are summarised under the relevant topic headings in this summary document.

A site-specific Environmental Management System (EMS) will be implemented prior to commencement of the development should planning permission be granted.

2.22 Pit Restoration

A landscaping plan will be implemented to minimise visual intrusion of the sand and gravel pit on surrounding receptors during operation of the works, full details of which are provided in Chapter 2 – Project Description and Chapter 13 – Landscape and Visual.

The final restoration works will start when all the accessible sand and gravel deposits have been exhausted. All plant associated solely with extraction and processing activities will be removed from site. The pit slopes and material used in the construction of the silt lagoon and screening berms will be regraded and the general area returned to a beneficial agricultural use over the pit floor.

The stored subsoil and topsoil will be spread on the contoured area and seeded with a mix of suitable grasses to create pasture and when this operation is completed the site will have fully reverted back to agricultural land and will blend in with the surrounding topography.

A layer of overburden/silt material will be spread over the worked out pit floor as a sub-base. Topsoil will be spread over the entire treated area; stone picked and promptly grass seeded under expert supervision.

On completion of the extraction works the sand and gravel pit will be restored to an agricultural use, which is one of the beneficial after uses listed in the EPA Guidelines: 'Environmental Management in the Extractive Industry' (2006).

2.22.1 Site Management and Supervision

The Applicant will clearly define the management responsibility for the site restoration work and will ensure that this person has the necessary information (from the planning application) and authority to manage the whole restoration process. Relevant staff will be briefed on the scheme and will be adequately supervised / controlled. A system of record keeping for the key restoration activities will be put in place.

2.22.2 Long Term Safety and Security

The existing boundary fences, walls and hedgerows will be maintained in a stock proof state of repair as part of the future agricultural land use. The area will be landscaped and vegetated so as to blend into the surrounding existing landscape.

All components of the barrier system of the site protection outlined above will remain in place after extractive/processing operations have ceased. This, combined with the secure and locked entrance gates to the development will prevent unauthorised third party access.

The restoration scheme provides for the re-grading of the external worked out pit faces to a safe angle of repose of between 1:2.5 (22°) and 1:3.5 (16°). This will ensure the long-term stability of slopes and faces.



2.22.3 Long Term Surface Water and Groundwater

The surface water will percolate to ground. There is no requirement for any active long term surface water or groundwater management at the site.

2.22.4 Decommissioning of Plant and Machinery

Redundant structures, plant equipment and stockpiles will be removed from site on permanent cessation of extraction activity. Machinery and buildings will either be utilised on other sites, or be sold as working machinery or scrap. As part of the overall decommissioning process, all fuel and oil storage tanks within the existing site will be removed from the site by a licensed waste contractor. Therefore, there will be no potential for fuel, oil or sewage to cause long-term water pollution following completion of extraction activities.

2.22.5 Aftercare and Monitoring

No aftercare or monitoring is required for the restoration proposals for the application area. A final site inspection 6 months after formal site closure will be carried out to confirm the final site restoration as implemented is functioning.

3.0 Existing Environment, Effects and Mitigation

3.1 Population & Human Health

The review of population is based predominantly on a review of settlement and land use patterns to identify existing residential housing and sensitive receptors in the vicinity of the application site. Ordnance Survey maps and aerial photography were also examined. Demographic information from the Electoral Division (ED) of Arderin, in which the application site is located, from the census years of 2016 and 2022 were used in order to identify broad trends in the area.

The census results indicate that the population has increased in the Arderin ED, albeit at a lower rate than that observed at the county and national level. In terms of employment, the ED has a slightly higher proportion of residents staying home to care for home/family but a higher level of available workforce than in the wider area generally. Residents of the ED appear to be more reliant on non-office based employment such as agriculture, forestry and fishing, building and construction and manufacturing, than at the County and State level.

The proposed development will support the direct employment of two people on a full time equivalent (FTE) basis. Staff will be employed for the duration of the operations (i.e. 10 years). Employment will cease on completion of extraction activities.

The proposed development will also indirectly support and sustain indirect employment and contribute to the local and regional economy by supporting the construction industry and providing supply of aggregates that are proven to be lacking in the region.

The population and human health assessment did not reveal any particular sensitivities in the local population. Self-reported general health trends indicated higher quality of health than at the County or State level.

Mitigation measures to be adopted during the extraction and restoration activities will aim to minimise any impacts of the project on surrounding sensitive receptors (primarily those associated with noise, dust and traffic). These are described under the relevant topic headings in this summary document. The specialist environmental assessments that are reported in the EIAR and this NTS were undertaken using the Receptor Map set out in **Figure 4-2** of the EIAR, which was produced as part of the population and human health assessment.



3.2 Biodiversity

All designated sites for biodiversity within 15 km and with ecological and/or hydrological connectivity have also been considered as part of this assessment, which comprised of both desk and field studies. The desk study analysed published ecological data covering the site and the field work comprised of numerous site visits between January and July 2024, full details of which are provided in Chapter 5 – Biodiversity.

A preliminary ecological appraisal (PEA) of the application site was undertaken in January 2024 to identify initial ecological constraints and to determine the need for targeted surveys. All habitats within the site were mapped and repeat surveys were carried out in optimal seasonality across the spring and summer months to provide an accurate assessment of the habitats and the flora that they support.

Pre-planning consultation was undertaken, during which Inland Fisheries Ireland requested aquatic surveys to be undertaken on the adjacent stream located close to the site, and assessment of designated sites located downstream of this stream. This has been included in the accompanying AA Screening and Natura Impact Statement (NIS) report undertaken and submitted as a standalone report in accordance with European legislation on the protection of EU designated sites. The biodiversity assessment incorporates the findings of that report.

The application site is not subject to any statutory or non-statutory designation and no such sites will be directly or indirectly impacted upon by the proposed development.

The proposed extraction operations will result in the direct loss of all woodland, scrub, grassland, hedgerows and trees within the proposed extraction area. Existing habitats including woodland, scrub, hedgerows and treelines located outside the proposed extraction area will be retained.

In the long term, and with the implementation of the mitigation measures, there will be no significant loss of habitats as compensation habitat will be created (as detailed on the restoration plan **NTS Figure 6**). Following the completion of the operational phase, the site will be restored to its current agricultural land. In addition, areas of the site will be left to naturally regenerate including the previous extraction, which will provide a mosaic of bare ground and exposed areas suitable for lizard basking as well as more densely vegetated areas suitable for shelter and refugia that could be used by this species.

No significant effects are predicted to impact any rare and protected species in the long term and potential significant effects have been appropriately mitigated for in the short and medium-terms. A buffer zone of c. 50m of the habitat surrounding the breeding pond in the east of the site (which was found to have value for frogs, newts and lizards) will be retained, which will provide continued suitable terrestrial habitat to these species. An Ecological Clerk of Works (ECOW), to be a qualified ecologist, will be present on the site throughout the site preparation works to ensure that no rare or protected species are potentially using the site, and to ensure that appropriate surveys, licencing and mitigation is implemented. Appropriate timing of works (such as removal of hedgerows outside the bird breeding season) and construction management (such as sensitive placing of lighting) will be incorporated into operational works. Suitable habitat for species such as hen harrier will be included to create and enhance the value of the site for them in the long-term.

3.3 Land, Soils & Geology

This assessment was undertaken based on available desktop information, a number of detailed site investigations to establish the geological conditions and prove the sand and gravel resource, as well as professional experience. Site investigations included:

- Geophysical site survey (Apex Geophysics Ltd., 2022);



- A detailed geological investigation to establish the resource at the site (2023);
- Borehole survey for the hydrogeological assessment (2023 and 2024); and
- Inspection of the existing pit faces at the site.

The sand and gravel material reserve at the site has been proven through the operation of the existing pit and the inspection and ground investigation surveys within the extension lands. This has included sampling and testing of the in-situ sand and gravel material.

The proposed development will result in a temporary loss of c. 8 ha of agricultural land across the proposed extension area. In terms of land take, the proposed development will result in a temporary use of the land for sand and gravel material extraction and a temporary loss of agricultural lands over the extension area. The soils at the site will be stripped and stored on site during the extraction of the sand and gravel material and will be used for the restoration of the site to return it to a beneficial agricultural after-use.

The soil association at the application site is classified as the Clonegall Series (ISIS Code 0920CG); it is described as Coarse loamy drift with siliceous stones. The soil combination is considered to be well draining. The Clonegall association belongs to the Gleyic Brown Podzolic subgroup. It is shallow, well-draining and widespread within the study area considered.

The soils at the site are mapped and described under the Teagasc Irish Forestry Soils (IFS) study as being predominantly shallow well drained mineral soils, which are derived from non-calcareous parent material (IFS code AminSW). The soils at the site have formed on sand and gravel materials and are referred to as Lithosols.

There is a small area of till derived chiefly from Devonian soils along the south and western edge of the site and within the red line application area. The till soils are derived from mainly non-calcareous parent materials (IFS code AminDW). Till soils are classified as deep and well drained mineral (Mainly acidic).

Soil thickness varies across the proposed development site, from 0.1m - 0.6m of topsoil overlying a variable thickness of subsoil. Borehole drilling for groundwater monitoring has confirmed the presence of sand and gravel material to depths of up to c. 24m below ground level.

The use of the soils is limited due to their free draining nature as they quickly dry out and the grass or crop production is poor, particularly during summer months. The agricultural land use in the proposed extension area and in the vicinity of the site is primarily agriculturally improved grassland, used for grazing.

Subsoils in the proposed development site have been mapped under the IFS project as glacial till material and gravels derived from lower Devonian sandstones. Three cable percussive boreholes encountered silt/clay at depths ranging from 10.5 to 21.5 m below ground level (bgl). The lands at Mounthall are underlain by Upper Palaeozoic Devonian pale and red sandstone, grit and claystone from the Cadamstown Formation.

There are no bedrock exposures at the site, the closest bedrock outcrop of Cadamstown Formation in study area is encountered approximately 500m in a northeast direction from the northern application boundary. It is not proposed to extract or blast any bedrock at the site as part of this planning application. Geological Survey of Ireland (GSI) 1:100,000 mapping shows the proposed development site is primarily underlain by the Cadamstown Formation, comprising pale and red sandstone, grit and claystone. Bedrock lies beneath substantial layers of soil, sand and gravel, with minimal exposure in close proximity to the site.

Geophysical site investigations from 2022 have identified the bedrock by the seismic data, within the application site, at depths ranging from 3m to 25m bgl, depending on location and topography and generally corresponding to between 170m and 225m AOD.



The results of geological investigations have informed the design of the proposed extraction works to ensure the existence of reserve and to ensure that the potential hydrogeological linkages from the application site and the surrounds can be accurately understood.

Following consultation, Geological Survey Ireland requested that the operator assist with geological heritage goals by:

- Allowing scientists access to quarry faces during operations to study new stratigraphies and assess the site's post-extraction significance; and
- Leaving a representative section of the pit face or including information panels for public education and tourism if appropriate, to enhance geological knowledge.

These actions can be included in the restoration plan as planning conditions if deemed appropriate.

Soils will be managed on site in line with best practice. A specific Soil Management Plan (based on The Institute of Quarrying Guidelines, 2021) will be developed for the site for the stripping, storage and reuse of the soils in restoration at the site.

The stripped soils at the proposed development will be used in the restoration of the site to agricultural use. With this mitigation measure in place, it is considered that the residual impact on soils will be low to imperceptible.

The design of the extraction scheme (boundary set-back distance and final pit slopes) together with the operation of the pit will be in line with the Health and Safety Authority Safe Quarry Guidelines in relation to the Safety Health and Welfare at Work (Quarries) Regulations 2008 and will eliminate the potential for unplanned events such as instability of pit face or instability in adjacent lands. Therefore, it is considered that the residual impact of the proposed development on land stability will be negligible.

3.4 Water (Hydrology and Hydrogeology)

This assessment addresses the potential impacts on surface water (hydrology) and groundwater (hydrogeology) in the application area within the context of the regional setting, and assesses the potential impacts the proposed development will have on surface water and groundwater. The study area comprises the application site and the surrounding area up to 2km reflect the sensitivity of the surface water and groundwater, in accordance with the Institute of Geologists of Ireland's (IGI) guidelines (2013).

In addition to a desk study of publicly available data, extensive data gathering has been undertaken at the site as follows:

- Installation of 9 no. groundwater monitoring boreholes across the proposed development area, to monitor both the sand and gravel superficial deposits and underlying sandstone aquifer;
- Installation of groundwater level data loggers at 5 no. on-site groundwater monitoring boreholes to facilitate continuous groundwater level monitoring;
- Manual dipping of groundwater wells from 9 no. on-site groundwater monitoring boreholes on 13 no. occasions;
- 5 no. rising head tests;
- Installation of rain gauge;
- Measurement of surface water flow values at 3 no. locations over 3 no. rounds of monitoring;
- 3 no. rounds of surface water quality monitoring at 3 no. monitoring points in the vicinity of the proposed development area;



- 3 no. rounds of groundwater quality from 9 no. on-site groundwater monitoring boreholes; and analysis of the information gathered; and
- Well survey of private wells within 500m of the proposed development area.

Surface water features at the proposed development area include a small pond (c. 20m in diameter) located along the eastern site boundary, outside of the proposed extraction area which will be retained.

There is a small stream located along the southern boundary, which flows into the Killeen River from the southern boundary approx. 150m from the site. There are two further small streams located close to the proposed site, both of which flow into the Delour River.

The site is situated within the Camross Groundwater Body and the GSI online map viewer shows the site is underlain by a locally important aquifer (LI), Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones. The sand and gravel subsoils at the application site are not defined by the GSI as an aquifer and are underlain by low permeability silt and clay across the extension area, which provides protection to the underlying sandstone aquifer.

The Office of Public Works (OPW) is the government agency with statutory responsibility for flooding in Ireland. The existing CFRAM and NIFM flood maps show that the site is at low risk of fluvial flooding (Flood Zone C). The available GSI data does not indicate that the site is vulnerable to groundwater flooding. Due to the location of the proposed sand and gravel pit, the risk of coastal flooding is also low (Flood Zone C). There are no records of historic flooding in the OPW database within 2 km of the site.

The GSI well database shows a number of wells within a 2 km radius of the site which abstract from the locally important bedrock aquifer. There is no Group Scheme Source Protection Areas near the site.

Extraction within the existing pit was carried out as a dry extraction operation above the groundwater table. It is proposed that extraction within the extension area will also be carried out above the groundwater table, with the proposed pit floor sloping from northwest (c. 205m AOD) to southeast (c. 175m AOD).

The sand and gravel processing methods will consist primarily of washing and screening, using a mobile processing plant, to produce a range of aggregates for sale and distribution by the company. The mobile plant will operate within a closed loop water circuit with the silt storage lagoons to minimise the need for excessive take of groundwater and to eliminate the need to discharge process water from the site.

A water supply well will be required to provide water for processing as well as for washing and dust suppression. It will be located to the north of the site facilities area and will extend into the underlying bedrock which is classified by the GSI as a locally important aquifer.

Due to the closed loop water recycling system, the water requirement for top-up of the washing plant is considered to be minimal. A domestic well survey was undertaken to supplement the available data and enhance the understanding of the regional hydrogeological regime and identified the closest domestic supply well as being 420m from the proposed supply well.

There is no surface water drainage infrastructure within the site. Rain falling across the existing site percolates down through the existing ground surface as recharge to shallow groundwater in superficial deposits.

The provision of a serviced portaloo on site will negate the requirement for installing a septic tank / propriety effluent treatment system.

Drinking water will be supplied by means of bottled water.



A Water Framework Directive assessment has been undertaken and concluded that with the embedded mitigation measures in place, the proposed development will not result in a deterioration of the existing status of the identified WFD receptors and it will not be a factor in the receptors failing to achieve their status objectives.

A number of sensitive water receptors have been identified in the receiving environment around site and these include the Killeen River, the Delour River, the locally important sandstone bedrock aquifer within the Camross Ground Water Body, private groundwater supply wells and the River Barrow and River Nore SAC located 2.4 km east.

Potential to affect groundwater quality in bedrock underlying shallow groundwater through vertical migration is limited by low permeability deposits between the bedrock and sand and gravel deposits.

The required volumes from the proposed water supply borehole are low, and so there will be a localised impact on the groundwater flow and quantity in the bedrock aquifer only.

A positive impact has been identified through the removal of livestock from the application site as a result of the proposals. Livestock have been observed entering the stream along the southern boundary and introducing direct contact with livestock waste. This stream flows directly into Killeen River which has declining status and has recently been classified as “at risk” due to “significant pressures such as nearby agricultural activity”.

There is a potential risk to the identified sensitive receptors as a result of an accidental spillage of hydrocarbons or from suspended solids entering the groundwater and also in the discharge from the site. A series of standard management / mitigation measures are identified for implementation to minimise potential for these impacts so that there will be no significant effect.

A surface and groundwater monitoring programme is proposed to ensure that the impacts of the proposed development can be demonstrated.

3.5 Air Quality

The proposed development will involve extraction of sand and gravel materials, which has potential to generate dust and particulate air emissions, and the associated traffic associated with machinery and transportation of materials from the site has potential to generate particulates and nitrogen oxides that can cause impacts on local air quality.

The following activities are those with potential for dust arising:

- soil stripping, earthworks, and topsoil stockpiling (site preparation and restoration works);
- handling and processing of excavated sand and gravel;
- transfer, end-tipping and stockpiling of aggregates;
- trafficking by heavy goods vehicles (HGVs) over paved / unpaved surfaces; and
- landscaping and final restoration activities.

The air quality assessment predicts the scale of potential emissions that might arise, based on a review of the dispersal of local residences, the prevailing weather conditions and the most representative existing air quality data held by the EPA. The national Air Quality Standards set by Government were also reviewed to ensure that relevant emissions limits are not already being approached in the local area. Measures to reduce and monitor potential for air quality impacts are identified to ensure these are minimised as far as possible.

The proposed mitigation measures include recommendations from the Health Service Executive, who were consulted for their views on the project during the pre-planning



consultation stage. Measures include controls on vehicle operation (such as shortening haul routes and ensuring low speeds), careful handling of materials (such as minimising drop heights), use of technology (such as water bowsers, sprinklers, road sweepers and wheelwash), using excavated soils to create screening berms to contain dust within the site and seeding / vegetating berms and stockpiles to further capture potential air emissions.

It is concluded that the proposed development, with the range of mitigation measures to be implemented and design measures incorporated into the working scheme, will not have any adverse or unacceptable dust deposition impact on any nearby sensitive receptors.

Dust deposition monitoring will continue to be undertaken at Mounthall for the duration of extraction activities at the proposed development (in accordance with expected conditions attached to the future planning permission and in line with the EPA and DoEHLG guidelines).

3.6 Climate

Observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising sea level are unequivocal evidence of warming of the climate system globally. Global mean temperature has increased compared with pre-industrial times for land and oceans. Most of the observed increase in global average temperatures is very likely due to human activity.

Ireland has a typical maritime climate with relatively mild and moist winters and cool, cloudy summers. The prevailing winds are south westerly in direction. The climate is influenced by warm maritime air associated with the Gulf Stream, which has the effect of moderating the climate, and results in high average annual humidity across the country. The area of least precipitation is along the eastern seaboard of the country in the rain shadow of the Leinster uplands.

Despite the different methods and scenario combinations used to project climate change, there is agreement in projected changes in Ireland, including sea level rises, storm surge and temperature extremes.

The climate data referred to as indicative of the local area of Mounthall is based on Met Éireann data for stations at Mullingar (c. 55km north), Birr (c. 20km west) and Gurteen (c. 27km west). A rain gauge station has also been established at the application site since April 2024.

The design of the proposed development has been developed alongside the review of vulnerability to the effects of climate change, and the adaptation measures incorporated include avoiding mapped flood hazard areas, resilient water management system and procedures to facilitate operational shutdown during extreme weather events.

GHG emissions have been estimated for the proposed development based on likely annual energy, fuel use and traffic movements at the proposed development site in future years. Based on the calculated total of 674,022 CO_{2e} kg (674 CO_{2e} tonnes) and a comparison to Ireland's 2022 emissions value of c. 59M Tonnes of CO_{2e}, it is assessed that proposed operations would be c. 0.00114% of Ireland's annual CO_{2e} emissions for the duration. Similarly, when compared to the 2023 emissions value of c. 55M Tonnes of CO_{2e}, it is assessed that proposed operations would be c. 0.00122% of Ireland's annual CO_{2e} emissions for the duration.

The Breedon Group has implemented a company-wide Energy and Carbon Policy as well as a Carbon Reduction Plan which commits to achieving Net Zero emissions by 2050. Breedon Ireland intends to implement a GHG monitoring programme at Mounthall.



3.7 Noise & Vibration

The existing noise levels at noise sensitive locations in the vicinity of the site and haulage routes was determined through initial monitoring at representative locations. Industry standard predictions of noise levels associated with proposed activities during the construction and operational phases was then used to calculate potential noise impacts arising at sensitive locations.

The design of the proposed development has incorporated measures from the outset to minimise the potential for noise disturbance to its nearest neighbours. Extraction will be commenced initially in the southeast of the site (Phase 1 of 3) to permit construction of acoustic fencing, screening berms and vegetation. Perimeter screening berms along the northern and eastern boundaries of the extension extraction area will be constructed using the stripped topsoil and overburden soils in the vicinity of the closest residences to the site. Acoustic fencing structure will also be constructed in two locations, each c.150 m in length along the application boundary with a residence to the north and another to the east. (The full EIAR Chapter 10 – Noise & Vibration specifically identifies and labels these residences).

Additional proposed mitigation measures include recommendations from the Health Service Executive, who were consulted for their views on the project during the pre-planning consultation stage. Mitigation measures include provision of a Noise and Vibration Management Plan to Laois County Council prior to undertaking works, which will commit to a programme of management measures including vehicle / plant management, hours of operation, community engagement and monitoring of noise levels.

The implementation of these practices should ensure that construction noise should give rise to slight negative temporary impacts for the most part and moderate brief impacts on limited occasions.

During the operational works (extraction), the implementation of noise management measures is expected to ensure that noise impacts at the landowner residence (R1, the closest receptor to the proposed pit extension) are limited to slight for the most part and moderate temporarily towards the latter end of the extraction period.

The nature of onsite operations (i.e. no blasting, piling or drilling) and the distance to the nearest noise sensitive locations is such that the risk of vibration impacts occurring during either the construction or operational phases is negligible.

3.8 Material Assets

The material assets assessment comprises the consideration of existing resources pertinent to the proposed development and the application site that are not addressed elsewhere in the EIAR and the likely development impacts on those resources. On this basis, it includes a review of utilities such as electricity, telecommunications, gas, water supply infrastructure and sewerage, as well as waste management arrangements.

Pre-planning consultation feedback of most relevance to the assessment of material assets was received from Uisce Éireann (formerly Irish Water), which stipulated required measures to ensure the protection of supply and protection of public water supplies. This was addressed in EIAR Chapter 7 – Water.

The proposed development is not predicted to have any negative impacts on any other services / utilities.

Re-routing of the 5 no. poles within the extension area to around the edge of the site will be carried out by ESB Networks.

The site infrastructure will be powered by mains electricity from the ESB's national grid via a new connection to the existing power lines in the area. This will be done in consultation with



ESB Networks through standard connection arrangements. A super-silent diesel generator will be used to provide power to the processing plant.

Standard construction safety practices for working close to the existing overhead power lines at the site will be implemented for all site-based operations in order to safeguard the uninterrupted supply to local service users and to ensure the health and safety of employees, hauliers and visitors. This will be done in line with statutory obligations under health and safety legislation. ESB Networks will be consulted in relation to works close to their infrastructure and the requisite protection buffers will be observed.

There is no gas infrastructure in or around the application site. Telecommunications cables run along the L10317 Local Road and these will be avoided as per standard construction best practice described above in relation to electricity infrastructure. It is intended that employees at the site will use mobile telephones and there will be no requirement for connecting to the telecommunication infrastructure.

Waste arising at the site will be disposed of by appropriately authorised waste collection services for each stream, in line with the Environmental Management System for the site.

3.9 Cultural Heritage

The study involved detailed investigation of the known / potential value of the site based on the archaeological and historical background of the development site, the landholding and the surrounding area extending 1km from the development boundary. This area was examined using information from the Record of Monuments and Places of County Laois, the Sites and Monuments Record, the Laois County Development Plan, the National Inventory of Architectural Heritage, lists of excavations and cartographic and documentary sources. A field investigation was carried out in March 2024 and an archaeological geophysical survey was undertaken in April 2024.

The site is situated in the townlands of Mounthall and Cummer in the Barony of Upperwoods, and the civil parish of Offerlane. There were no Protected Structures, sites in the Sites and Monuments Records or National Inventory of Architectural Heritage buildings identified in the application site or in the wider study area.

The application site extends partly within the zone of notification of a Barrow – unclassified (flat topped circular mound LA011-008 in the Record of Monuments and Places for Co. Laois) in Cummer townland. There is another Recorded Monument (Monelly Castle LA011-007) 0.7km west of the application site that will not be impacted by the proposals.

An Archaeological Impact Assessment (AIA) was completed by Dr. Charles Mount, Consultant Archaeologist and is provided in chapter 12 of the EIAR. The investigations were also commissioned by Dr. Charles Mount and carried out by AMS who completed the geophysical survey (a high resolution magnetometry survey in April 2024 under NMS Licence No. 24R0247) and the results of the geophysical testing are provided in the AIA in EIAR Chapter 12 (Appendix 12-B).

The potential of the proposal to negatively affect the setting of the Barrow (LA011-008) will be mitigated by the construction of a grassed 2m high screening berm.

3.10 Landscape & Visual

A landscape and visual impact assessment (LVIA) of the proposed development associated with the proposed continued use and extension of the sand and gravel pit at Mounthall was completed in accordance with accepted best practice guidance and involved both desk and field study. The application site is located along the L10317, the Glendine New Road, c. 3 km north of Camross village and c. 9 km northwest of Mountrath.



The existing permitted sand and gravel pit (site ref. QY05/10) is located at the northern end of the application area. The extension area expands to the south, comprising a number of pasture fields, as well as some areas of scrub and immature woodland. It is proposed to extract the sand and gravel from the extension area, starting in the southwest, working east and from there northwest towards the existing pit. This extraction design aims at utilising the existing sloping topography of the site as a screen of the works in views from neighbouring properties to the east of the site, for as long as possible.

In order to further minimise the visibility of the site and impact on local landscape, a detailed landscape and restoration scheme has been prepared. This scheme aims at protecting all existing vegetation along the site boundaries, including a number of mature trees, as these provide substantial screening, in addition to their biodiversity benefits. To augment the existing screening vegetation the scheme proposes temporary grassed screening berms and native tree planting in a number of locations. It further comprises the restoration of the pit to agricultural grazing land, including native hedge planting to establish a field system similar to what is currently present.

A study area of approximately 3km surrounding the application area and extending up to 5km to the southeast was identified during the desktop study, based on the Zone of Theoretical Visibility Map. While the ZTV indicates large areas of low or no visibility within this area, owing to the undulating topography, this extent of the study area is maintained for the purposes of providing landscape context. Photography and visual representations have been prepared in accordance with industry standards to enable an understanding of the landscape and visual impacts of the proposals. Six viewpoint locations were selected to represent the range of available views.

None of the protected views and prospects identified in the Laois County Development Plan 2021-2027 are within close proximity of the site. The application area is fully located within the Mountain, Hills and Upland Areas Landscape Character Area (LCA). The Mountain Areas are judged to be of High sensitivity, while the Hills and Upland Areas are judged to be of Medium Sensitivity. As the site is located on the southern lower slopes of the Slieve Bloom Mountains, it is considered to be part of the Hills and Uplands / Medium Sensitivity Areas, rather than the Mountains Area.

The proposed development will be largely screened in views from the surrounding area, by existing vegetation and topography. Seven beech trees close to the site boundaries will be retained by routing the extraction area around the root protection areas of these. The proposed gradual extraction and ultimate restoration of the site to an agricultural use, including diverse native tree and hedge planting, will contribute to the screening of the site and its integration into the local landscape. These elements comprise the main mitigating features integrated into the development design, ensuring that the landscape and visual effects are kept to a minimum.

In summary, the assessment has found that the proposed development would have moderate/minor or minor landscape effects on the landscape receptors identified (i.e. levels of impact not considered to be significant), during the extraction stage. The effects on views would range from none for the majority of the study area, to moderate/minor or minor for a small number of residential and recreational receptors, as well as road users within 1km to the north and 500 m to the southwest and east of the site (i.e. all impacts not regarded as significant).

Following the completion of all extraction and restoration works the predicted landscape and visual effects would reduce to minor/negligible for all receptors identified. The final landform, which will have a more regular appearance, compared with the irregular undulations in the surrounding landscape. It will take some time for the agricultural land and proposed hedgerows to become established, and some years for the hedgerows to mature along with some areas of scrub to naturally develop on the steepest sections of the site. Ultimately, this



will help soften the appearance and enhance the integration of the extraction area into the surrounding landscape.

No further mitigation measures are deemed required, further to those embedded in the design and set out in the detailed landscape and restoration plan. The c. 310 m of species poor tightly cut hedgerows to be removed will be replaced by 315m of a more diverse native hedge, which will be planted on commencement of the development, along part of the extraction outline, and on restoration a further 370 m will be planted across the restored pit floor in the approximate location of the hedgerows to be removed. 22,000 m² of scrub and immature woodland, as well as three mature beech trees, will require removal. This will be mitigated to some extent by early planting of a total of c. 1,700 m² of a diverse native tree mix in several blocks. The proposed mix is more species rich than the existing areas of scrub and immature woodland and will augment the existing boundary vegetation, compensate the loss of vegetation within the site and help the site to integrate into the surrounding landscape and available views.

3.11 Traffic

PMCE Ltd provided an assessment of the like traffic impacts associated with the proposed development, which comprised a review of the local road network, including the L10317, L1031, L1030 and R440. The site will be accessed from the L10317 Local Road via the existing pit entrance. 'Quarry Entrance Ahead' signs are provided along the route towards the site entrance.

Predicted traffic volumes were based on assumptions on likely trips generated by the proposals and from data obtained from traffic counts undertaken in the vicinity in January 2024. Based on the projected 80,000 tonnes of sand and gravel to be extracted per year, a total of 24 daily Heavy Goods Vehicle trips and 12 daily Light Vehicle trips are expected to arise from the proposals.

Link capacity analysis was carried out on the L1031 within the vicinity of the site. It was determined that the link road assessed will continue to operate within capacity for each of the assessment years 2025 (Opening year), 2030 and 2040.

Junction Capacity Analysis was undertaken at the junctions between L10317 & L1031, L1030 & L1031, and Existing Entrance & L10317. The results of the Junction Capacity Analysis indicate that all of the junctions assessed will operate within capacity for each of the assessment years 2025 (Opening year), 2030, and 2040.

The assessment therefore indicates that the development will have a negligible impact on traffic flows on the existing road network due to the low volumes of traffic being generated by the development.

Visibility splays looking north exiting the site can be achieved. Visibility splays looking south are currently restricted due to the adjacent embankment and overgrown trees and vegetation. Hedges and trees near the existing site entrance will be trimmed/removed, and maintained regularly, in order to ensure that the sightlines at the access are kept clear at all times.

Informal passing opportunities exist on the L10317 and support current traffic movement (and presumably past HGV movements at the existing pit), which also benefits from low vehicle speeds and low traffic volumes. Further investigation may be required to determine if formal passing bays are required, and where they would be located. This would be undertaken in consultation with Laois County Council.

The parking provisions have been assessed as satisfactory.



3.12 Interactions

A matrix and associated commentary is provided in Chapter 15 of the EIAR, which acts as a checking mechanism to ensure that there are no potential additional impacts from the interactions of impacts that are dealt with within the individual assessment chapters of the EIAR.

3.13 Mitigation and Monitoring

Chapter 16 of the EIAR provides a summary of mitigation and monitoring commitments set out within the technical chapters. This is intended to assist Laois County Council in determining the planning application and identifying any planning conditions that it may wish to impose on any future planning permission.

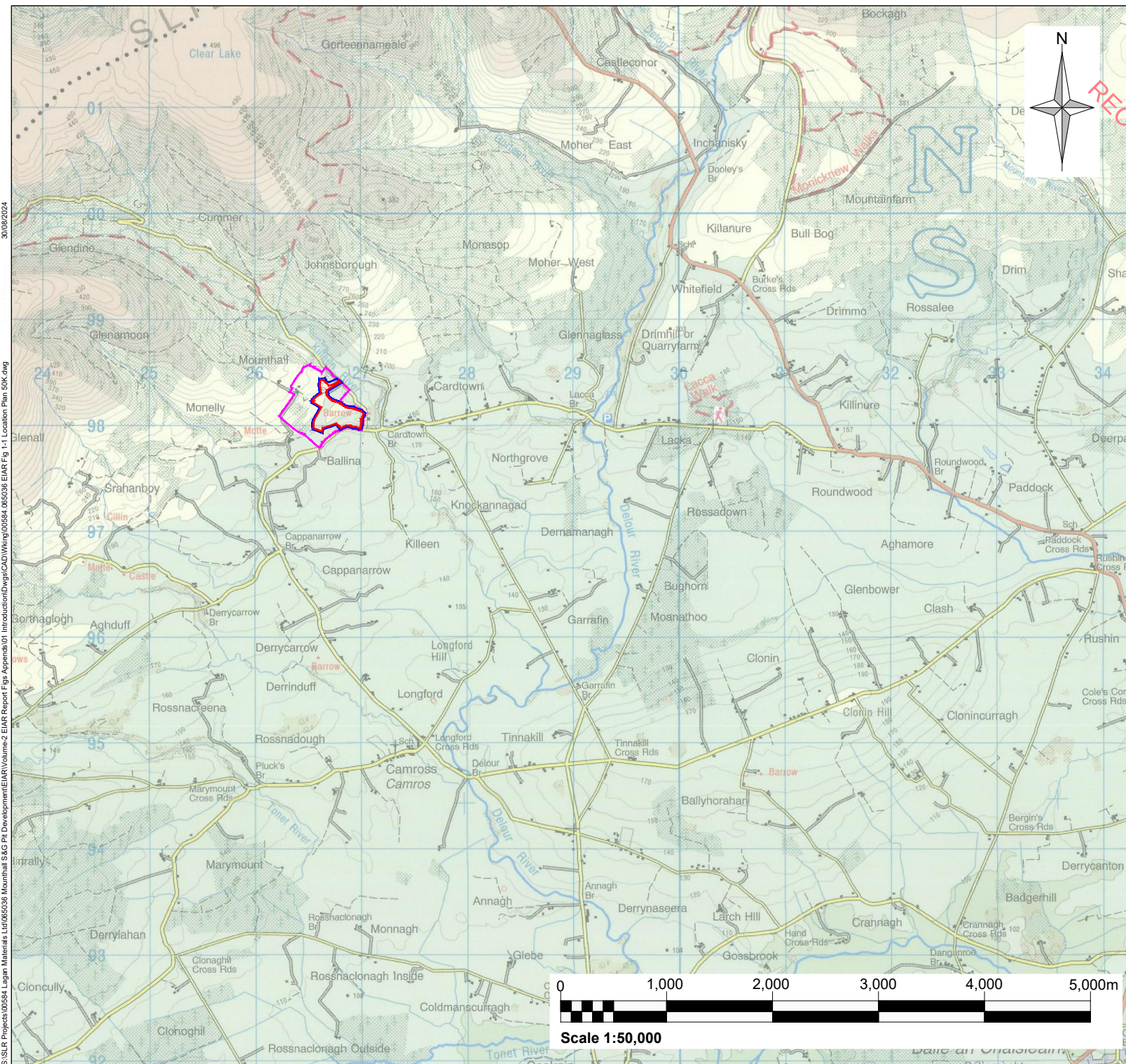


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Figures

NTS Figure 1	Site Location Map
NTS Figure 2	Site Location & Site Notice Map
NTS Figure 3	Site Location & Site Notice Map
NTS Figure 4	Existing Site Layout
NTS Figure 5	Proposed Site Layout
NTS Figure 6	Proposed Restoration Layout





Notes:

1. Extract from Ordnance Survey Discovery Series mapping - sheet numbers 54

Legend:

Landowner Boundary (c.32.1 Hectares)
Third party landowner's land interest

Planning Application Area (c.12.2 Hectares)

Applicants Land Interest Area (c.12.4 Hectares)
under lease agreement from landowner

Rev	Amendments	Date	By	Chk	Auth
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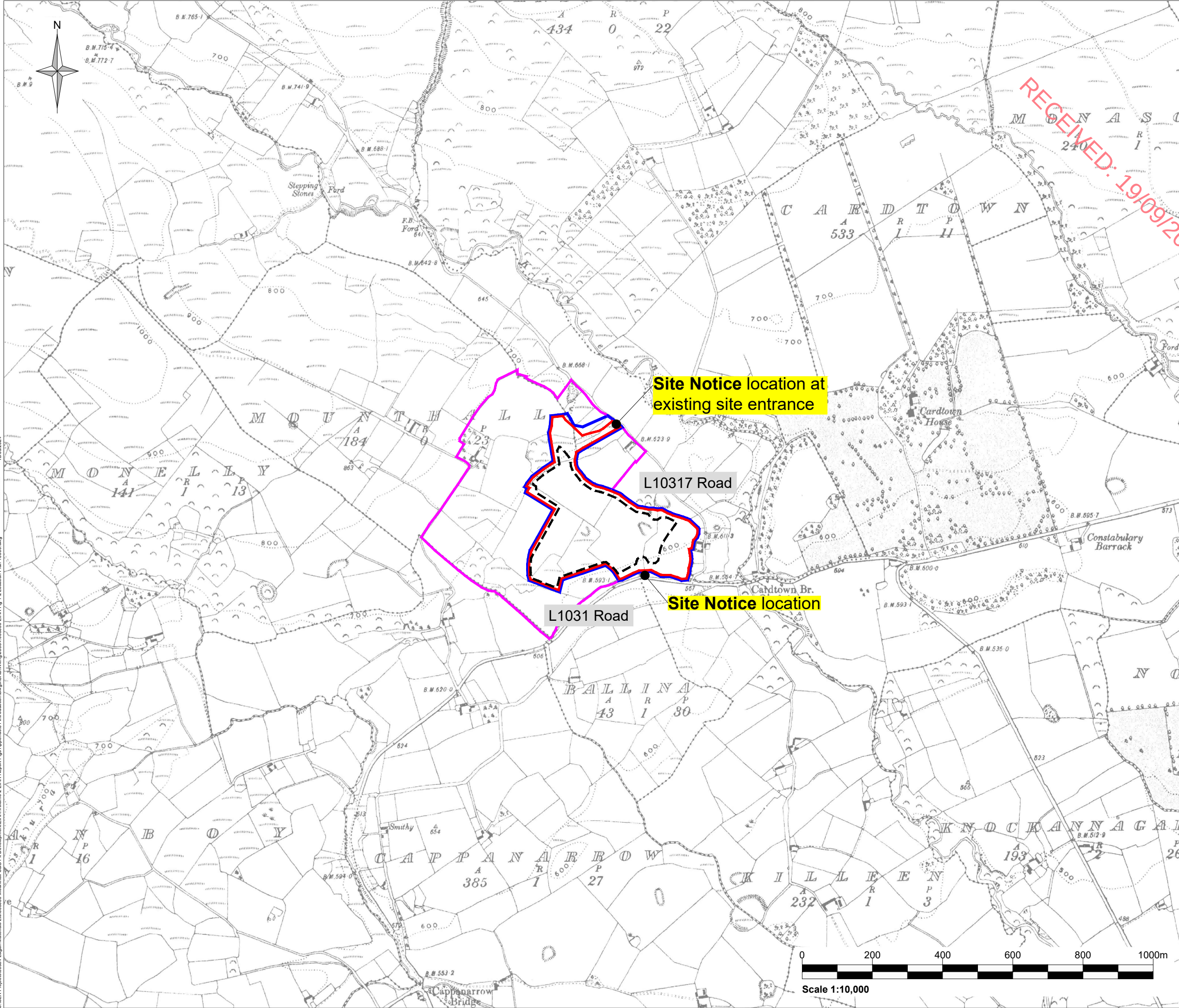
Client
Breedon Ireland

Project
Sand and Gravel Pit Extension Development,
Mounthall, Camross, Co. Laois

Figure Title
Site Location Map

Scale 1:50,000 @ A4		SLR Project No. 00584.065036	
Designed SMcD	Drawn SMcD	Checked LH	Authorised LH
Date 01/24	Date 01/24	Date 09/24	Date 09/24
Figure Number NTS Figure 1			Rev. 0

S:\SLR Projects\00584 Lagan Materials Ltd\065036 Mounthall S&G Pit Development\065036 EIA\Report Figs\Appendix 01 Introduction\Drawings\CAD\Wing\00584.065036 EIA\Fig 1-1 Location Plan 50K.dwg
30/08/2024



Notes:
1. Extract from Ordnance Survey 6 inch scale raster mapping - sheet numbers LS010, LS011, OY040

Legend:

Landowner Boundary (c.32.1 Hectares)
Third party landowner's land interest

Planning Application Area (c.12.2 Hectares)

Applicants Land Interest Area (c.12.4 Hectares)
under lease agreement from landowner

Proposed S&G Extraction Area (c.8 Hectares)

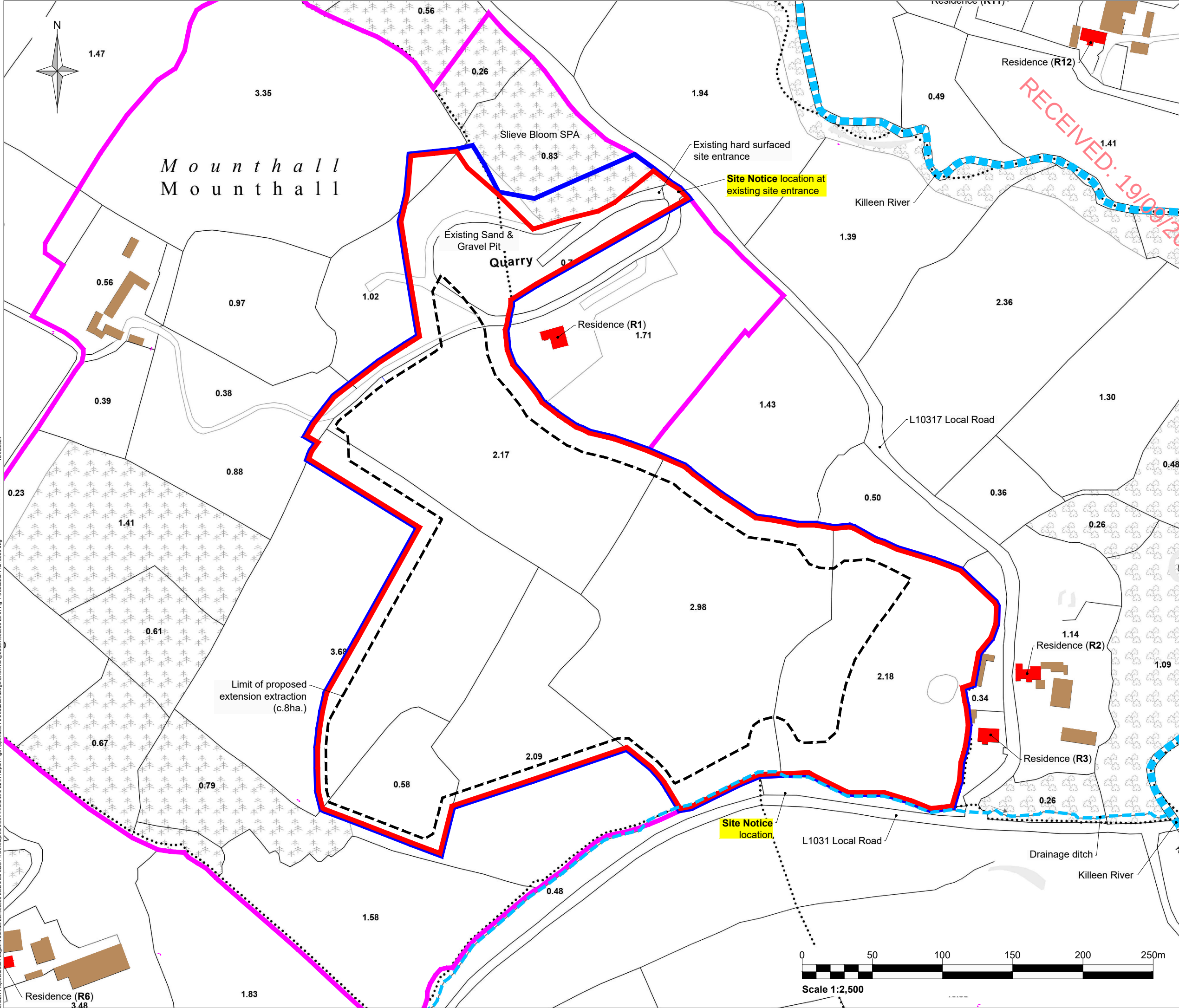
Rev	Amendments	Date	By	Chk	Auth
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Client Breedon Ireland					
Project Sand and Gravel Pit Extension Development, Mounthall, Camross, Co. Laois					
Figure Title Site Location Map / Site Notice Location					
Scale 1:10,000 @ A3		SLR Project No. 00584.065036			
Designed SMcD	Drawn SMcD	Checked LH	Authorised LH		
Date 01/24	Date 01/24	Date 09/24	Date 09/24		
Figure Number NTS Figure 2					Rev. 0

18/09/2024

S:\SLR Projects\00584 Lagan Materials Ltd\065036 Mounthall S&G Pit Development\00584.065036 EIA\Report Figs Appendix\01 Introduction\Drawings\00584.065036 EIA\Fig 1-2 Location Plan 10000.dwg

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Notes:
1. Extract from Ordnance Survey 5,000 scale mapping - sheet numbers 3880, 3881, 3937, 3938

Legend:

Landowner Boundary (c.32.1 Hectares)
Third party landowner's land interest

Planning Application Area (c.12.2 Hectares)

Applicants Land Interest Area (c.12.4 Hectares)
under lease agreement from landowner

Proposed S&G Extraction Area (c.8 Hectares)

Residential Property

Agricultural Shed / Other Building (non-residential)

Water course / drainage channel

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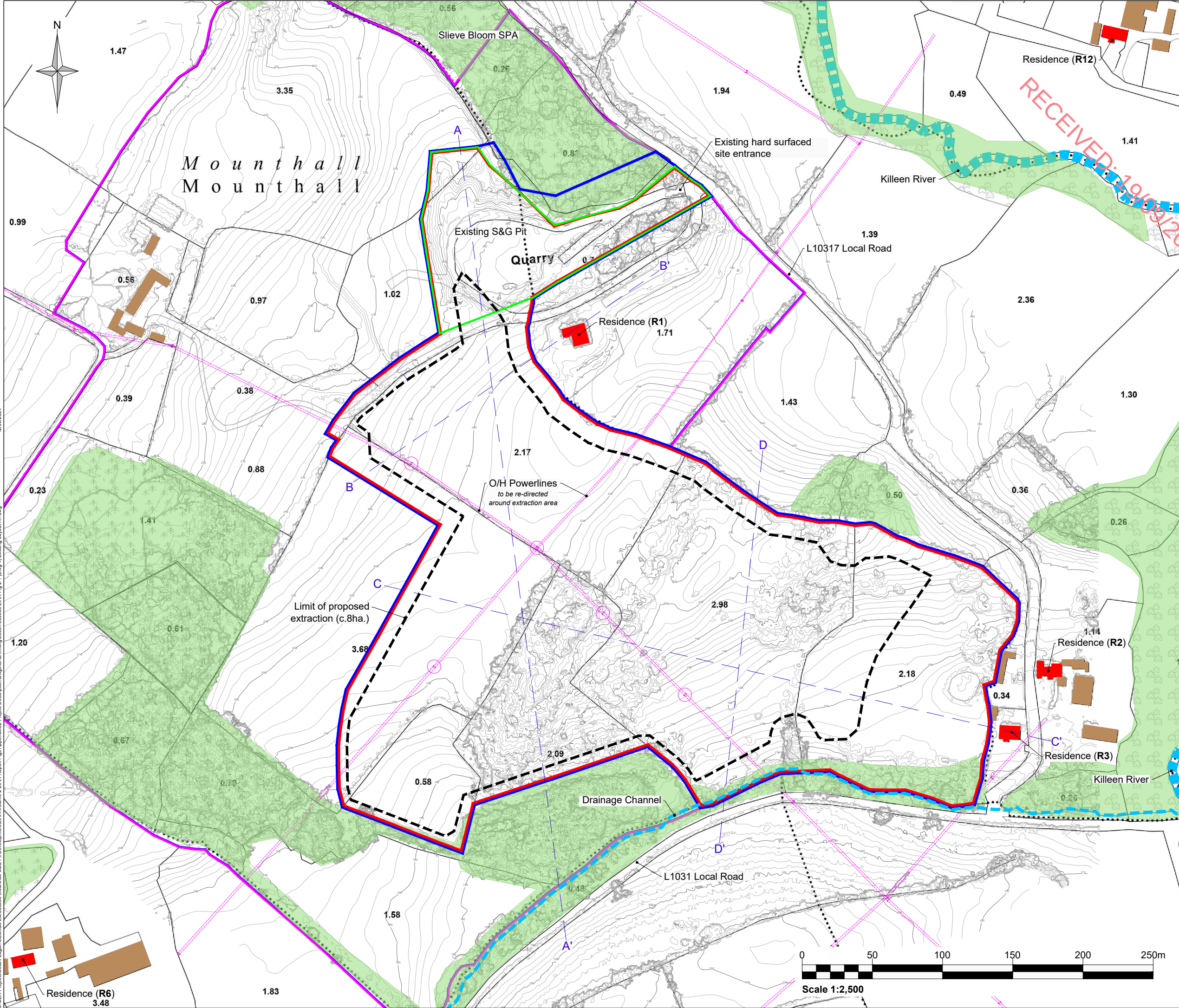
Project
Sand and Gravel Pit Extension Development,
Mounthall, Camross, Co. Laois

Figure Title
Site Location / Site Notice Location Map

Scale 1:2,500 @ A3		SLR Project No. 00584.065036	
Designed SMcD	Drawn SMcD	Checked LH	Authorised LH
Date 01/24	Date 01/24	Date 09/24	Date 09/24

Figure Number
NTS Figure 3

Rev.
0

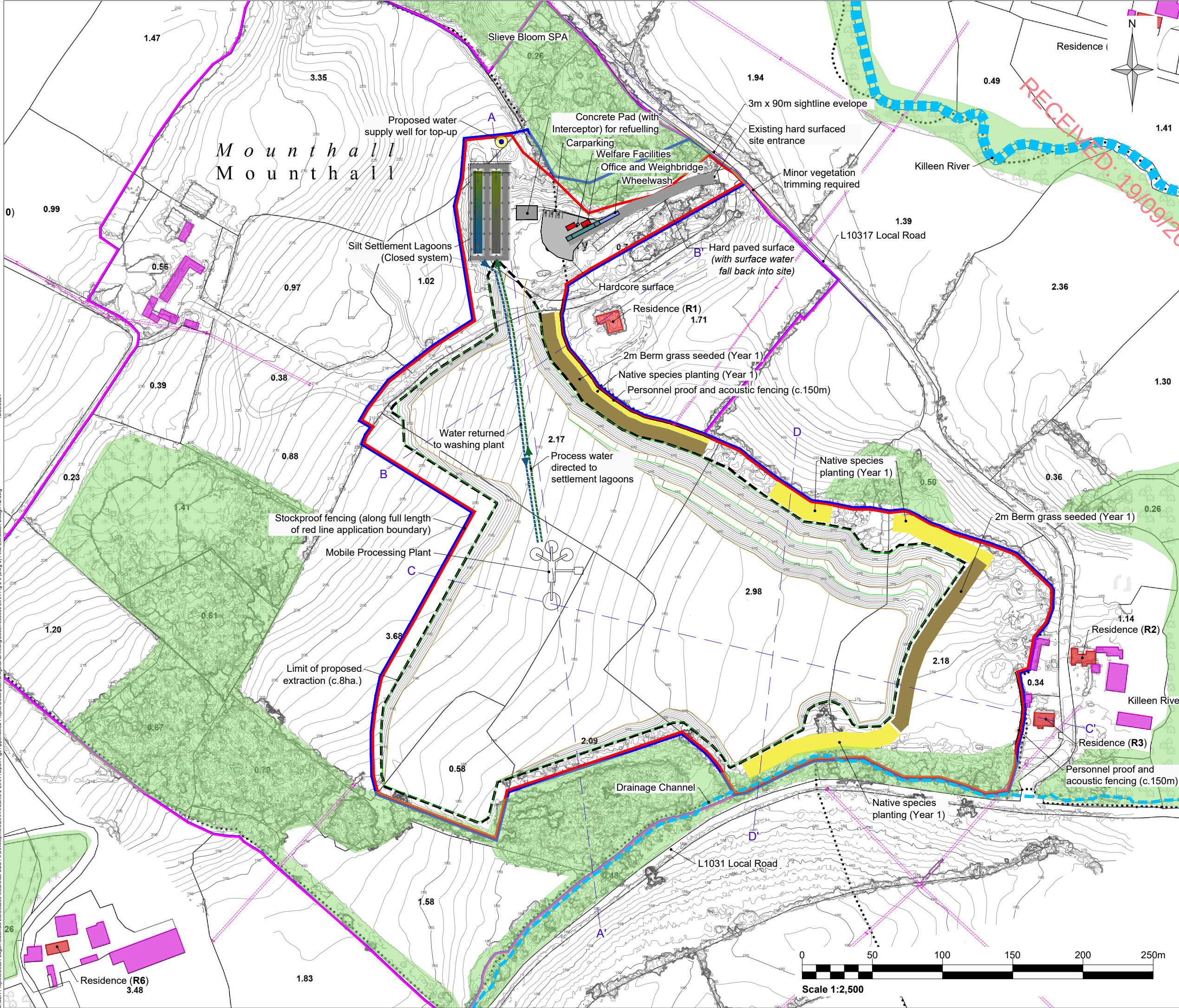


Notes:
1. Extract from Ordnance Survey 5,000 scale mapping - sheet numbers 3880, 3881, 3937, 3938

Legend:

- Landowner Boundary (c.32.1 Hectares)
Third party landowner's land interest
- Planning Application Area (c.12.2 Hectares)
- Applicants Land Interest Area (c.12.4 Hectares)
under lease agreement from landowner
- Existing Sand & Gravel Pit Area (c.1.2 Hectares)
- Proposed S&G Extraction Area (c.8 Hectares)
- Residential Property
- Agricultural Shed / Other Building (non-residential)
- O/H Powerlines (with 5 no single poles located within the proposed extraction area)
To be redirected around the extraction void by and in consultation with ESB Networks
- Water course
- Woodland areas
- Slieve Bloom SPA

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Project Sand and Gravel Pit Extension Development, Mounthall, Camross, Co. Laois					
Figure Title Existing Site Layout					
Scale 1:2,500 @ A3		SLR Project No. 00584.065036			
Designed SMcD	Drawn SMcD	Checked LH	Authorised LH		
Date 01/24	Date 01/24	Date 09/24	Date 09/24		
Figure Number NTS Figure 4					Rev. 0



Notes:

- Extract from Ordnance Survey 5,000 scale mapping - sheet numbers 3880, 3881, 3937, 3938

Legend:

- Landowner Boundary (c.32.1 Hectares)
Third party landowner's land interest
- Planning Application Area (c.12.2 Hectares)
- Applicants Land Interest Area (c.12.4 Hectares)
under lease agreement from landowner
- Proposed S&G Extraction Area (c.8 Hectares)
- Special Protection Area (SPA)
Slieve Bloom SPA
- Woodland and vegetation Areas
- Proposed personnel proof and acoustic fencing (c. 200m total)
*To provide additional screening to nearest residences
Remainder of red line site boundary to have stockproof fencing*
- Proposed screening berm (2m high)
*Grass seeded for duration of extraction operations
Soils used in final site restoration operations*
- Proposed native species planting
Vegetation to be permanently retained post extraction operations
- Residential Property
- Agricultural Shed / Other Building (non-residential)
- Woodland areas
- Slieve Bloom SPA

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Figure Title
Proposed Final Extraction Layout

Scale 1:2,500	@ A3	SLR Project No. 00584.065036	
Designed SMcD	Drawn SMcD	Checked LH	Authorised LH
Date 01/24	Date 01/24	Date 09/24	Date 09/24

Figure Number
NTS Figure 5

Rev.
0



RESTORATION PROPOSALS:

The proposed afteruse of the exhausted sand & gravel pit is as agricultural land (e.g. grazing land), one of the afteruses recommended in the EPA Guidelines: 'Environmental Management in the Extractive Industry' (2006).

Restoration Phasing

As the majority of the extraction area (in particular the area of Extraction Phase 1) will be used for the processing and storage of material, it is not feasible to restore any sections of the site early. Therefore, all restoration works, i.e. re-profiling of the pit slopes, grass seeding and native hedge planting, will be carried out on completion of all extraction works.

Restoration Activities

Re-profiling of the pit slopes: As part of each of the Restoration Phases, the available overburden material will be used to re-profile the pit slopes to an angle of 2.5:1 (H:V) or shallower. Once done the slopes and pit floor will be covered with the available topsoil (min. 10cm) and will be seeded with a suitable agricultural grazing grass seed mix.

Removal of processing / ancillary facilities: Prior to the restoration of the Restoration Phase 3 area, all plant and equipment will be removed from the pit floor. On completion of all restoration works, the ancillary facilities near the site entrance will be removed. This area will be left for natural regeneration.

Native Hedge Planting: As mentioned above native hedge planting will be carried out in a number of locations on the restored pit floor (refer to plan on the left and planting details below).

Site Security

All existing boundary vegetation and fencing will be retained, as well as the gate at the site entrance, which will be kept locked. Considering that all pit slopes will be re-profiled and the site brought back into agricultural use, security or safety issues are not expected to occur on completion of all restoration works.

GENERAL NOTES:

- All plant handling, planting and establishment works to be carried out in accordance with current best practice and to take place in the appropriate season (e.g. bareroot planting: November to March only) and in favourable weather conditions.
- All works to be carried out by a suitably qualified landscape contractor.
- Establishment maintenance to be carried out for 2 years following the completion of planting (minimum 3 maintenance visits per year; i.e. spring, summer and autumn). Works to include weed control, replacement planting (where required) and the adjustment/removal of tree ties and spiral guards.
- In periods of drought the newly planted trees are to be watered to ensure their survival and establishment.

NATIVE HEDGE MIX

Approximately 370 lin.m. in total. Hedges to be planted in two staggered rows, with plants 40cm apart (i.e. 2.5 plants per m) and rows 40cm apart. 925 plants in total, rounded to 930. To be planted randomly with no more than 3-6 plants of the same species in one group and to be supplied with spiral guards.

No.	Plant Name	Common Name	Height (cm)	Age	%
Transplants/Container Grown Shrubs					
140	<i>Corylus avellana</i>	Common hazel	60-90	1+0	15
190	<i>Crataegus monogyna</i>	Hawthorn	60-90	1+1	20
190	<i>Ilex aquifolium</i>	Common holly	60-80	2L	20
140	<i>Prunus spinosa</i>	Blackthorn	60-90	1+0	15
90	<i>Quercus robur</i>	Pedunculate oak	60-90	1+1	10
90	<i>Salix cinerea</i>	Sally	60-120	0+1	10
90	<i>Sambucus nigra</i>	Elder	60-90	1+1	10

Notes:

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Legend:

- Landowner Boundary (c.32.1 Hectares)
Third party landowner's land interest
- Planning Application Area (c.12.2 Hectares)
- Applicants Land Interest Area (c.12.4 Hectares)
under lease agreement from landowner

Restoration Proposals:

- All existing vegetation to be retained (including Native Tree Planting carried out on commencement of the development; refer to EIAR Figure 2-5)
- Extraction Area to be re-profiled, using material stored on pit floor and in screening berms, and restored to agricultural grassland
- Screening berms to be removed (material used in restoration works) and ground to be grass seeded
- Proposed native hedge planting (370m in total) and associated stockproof fencing

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Project Sand and Gravel Pit Extension Development, Mounthall, Camross, Co. Laois					
Figure Title Proposed Restoration Layout					
Scale 1:2,500 @ A3		SLR Project No. 501.00584.065036			
Designed SMcD	Drawn SMcD	Checked AM	Authorised AM		
Date 01/24	Date 01/24	Date 09/24	Date 09/24		
Figure Number NTS Figure 6					Rev. 2

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