

Further Information Response Report

Grinding Proposal at Portersize
& Timolin, Ballitore, Co. Kildare
– PI Ref. 20/1329

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1. INTRODUCTION

This Further Information Response is prepared and submitted on behalf of the applicant Noel Lawler Sand & Gravel Ltd in response to a request for Further Information from Kildare County Council (**PI Ref 20/1329**) relating to a proposed infill development at Portersize & Timolin townlands, Ballitore, Co. Kildare. The full development description is as follows:

‘Planning Reference: 20/1329 - Noel Lawler Sand and Gravel Limited - PERMISSION for a twenty-year planning permission for the infilling of an existing and future quarry void (Ref: 07n23 and 17/1107) with inert soil and stone in order to return the land to a beneficial use (agriculture) over an area of approximately 18.95 ha in the townlands of Portersize and Timolin, Ballitore, Co. Kildare. The void will be infilled with approximately 1,299,791 m³ of inert material. The proposed development also includes for the following: Infill, grading and restoration of two settlement ponds, totalling 1.065 ha (two settlement pond areas in NW of site approximately 0.788 and 0.277 ha). Restoration of three smaller ponds, totalling 0.44 ha, in order to provide an area of aquatic habitat (three ponds are approximately 0.321, 0.0835 and 0.0358 ha). Planting of a raised soil bund with native tree species, along northern site boundary (planting area approximately 0.48 ha). Grading of a pre-existing soil mound at the site entrance (approximately 1.11 ha). Development and management of an artificial sand martin nesting site, to replace the existing nesting location identified in the soil mound at site entrance. Construction of a soil quarantine shed (approximately 180m² in area, 15m height), inspection area and re-fuelling area (hardstanding) located north of the existing site office (approximately hardstanding area - 400m²). Associated minor works to include site access road improvements (resurfacing), upgrade of drainage infrastructure including new fuel/oil interceptor and surface drains on hardstanding, refurbishment/repair of existing site office and weighbridge. The proposed development also includes for all other site development works and services ancillary to the proposed development. A waste licence is required for the proposed development. The application is accompanied by an Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS). Development at Portersize and Timolin Townlands, Ballitore, Co.Kildare.

This report responds to the 12 no. points raised in the further information request issued by the Planning Authority dated 11th January 2021.

Enclosed with the report, and in support of the response to each item, are the following documents:

- > Further Information Response prepared by Alan Lipscombe Traffic and Transport Consultants
- > Site Layout Detail (Dwg Ref. 191115 – 10), prepared by MKO
- > Site Layout Plan (Dwg Ref 191115 – 02), prepared by MKO
- > Hydro Environmental Services Further Information Response
- > Drainage Layout Plan - Locations of Tanks, Wells, Streams & Ditches (Dwg Ref. Figure 2), prepared by HES
- > Existing & Proposed Drainage Layout Plan (Dwg Ref. Figure 1) prepared by HES

In accordance with the Request for Further Information received from Kildare County Council, 6 no. copies of all documentation are enclosed with this response.

2. FURTHER INFORMATION REQUEST ITEMS

2.1 Item No.1 – Strategic Infrastructure Development

The Applicant should note that the proposed development may constitute Strategic Infrastructure Development (SID) as it exceeds the annual tonnage capacity outlined within the Seventh Schedule of the Planning and Development Act 2000, as amended, i.e., Development comprising or for the purposes of the following:

- An installation for the disposal, treatment or recovery of waste with a capacity for an annual intake greater than 100,000 tonnes.

Having regard to this, it is considered that it may be premature for the Planning Authority to determine this application until the Applicant engages with An Bord Pleanala under Section 378(1) of the said Act. Furthermore, it is noted that Section 378(7) of the Act states that no application for permission in respect of Schedule 7 development shall be made to the Planning Authority unless or until a notice is served under subsection 4(b), i.e. stating that it is not strategic infrastructure development.

2.2 Item No.1 – Response

We note that Section 1.4 of the Environmental Impact Assessment which accompanied the planning application noted the following:

It is proposed to import up to 1,299,791 cubic metres (m³) (approximately 2,339,624 tonnes) of inert soil and stone material for the infilling of the quarry void. It is considered that the rate of infilling and restoration will be subject to market conditions and therefore planning permission is being sought for a 20-year operation.'

This quantum of material would equate to 116,981.2 tonnes per annum over the lifetime of the development (20 years). However, it should be noted by the Planning Authority that this notional tonnage outlined was **indicative only**. For example, it is envisaged that non-contaminated soil will form a significant proportion of the material that is imported into the proposed development. This type of material, based on the volume specified, would equate to less than 100,000 tonnes per annum which would be below the threshold specified in the Seventh Schedule of the Planning and Development Act 2000 (as amended).

Table 1 - Material & Tonnage

Material	Weight per Cubic Metre	Total Tonnage in context of proposed development	Annual Tonnage in context of proposed development
Uncontaminated Soil	1.3	1,819,707	90,985

The applicant does not intend to import more than 100,000 tonnes of material into the facility on an annual basis and would accept a planning condition limiting any grant of planning permission in this way.

2.3 Item No.2 – Condition Survey

The Applicant is requested to carry out a condition survey of the R-747 from its junction with the R-448 to the County Boundary with Wicklow. For the above lengths of vehicular carriageway, the Applicant is requested to carry out:

- (a) A Falling Weight Deflectometer (FWD) Test;

(b) A condition survey of the existing pavement, linked to the Falling Weight Deflectometer (FWD) data analysis.

The Applicant is requested to furnish a report identifying remediation measures to ensure pavement construction is appropriate to serve the development.

2.4 Item No.2 – Response

A number of measures have been undertaken to address this issue. These are set out briefly below and are presented in greater detail in the enclosed Traffic and Transport Response Note prepared by Alan Lipscombe, Traffic and Transport Consultants.

PMS Pavement Management Services Ltd. (PMS) were appointed by Lawler Quarry to carry out a structural evaluation and pavement investigation of the identified section of the R747, County Kildare, in April 2021. A programme of pavement testing was carried out comprising a Falling Weight Deflectometer (FWD) survey and pavement coring.

The structural evaluation was carried out in accordance with CC-GSW-04008 ‘Guidelines for the use of the Falling Weight Deflectometer in Ireland (2000)’ and AM-PAV-06050 (HD31/15) ‘Pavement Design and Maintenance – Pavement Maintenance Assessment and Renewal’. The section was tested at 50m intervals for 2000m with chainage increasing in the southbound direction. A total of four pavement cores were extracted to establish the existing pavement construction. The bituminous depths ranged from 185mm to 240mm.

The average D1 and SCI results for each lane can be described as “Good” and the D7 results as “Stiff” based on The Department of Transport, Tourism and Sport (DTTAS) document ‘Guidelines on the Depth of Overlay to be used on Rural Regional and Local Roads’

The design traffic was supplied in terms of AADT and HGV. There were three different traffic scenarios analysed based on “Scenario 1 – No Quarry”, “Scenario 2 – Quarry activity with Extraction” and “Scenario 3 – Quarry activity with Restoration”. The analysis has shown that based on a 20-year design and 3.5% growth, there is no overlay or inlay requirement for each scenario.

The analysis has highlighted two locations where the D1 results are higher than the surrounding pavement and should be investigated to determine the cause of the poorer D1 results in this location. A brief visual survey of the pavement taken in conjunction with the FWD survey has highlighted light raveling and cracking in the Left-hand Wheel path in certain locations. The reports prepared by Pavement Management Services Ltd are included as Appendix A of the enclosed Traffic and Transport Response Note.

2.5 Item No.3 – Road Safety Assessment

The Applicant is requested to carry out an extended Road Safety Assessment (RSA) Stage 1 and 2, by the independent accredited Road Safety Auditor, to examine the haul route along the R-747 from the junction with the R-448 to the County Boundary with Wicklow; as well as for the access road and internal vehicle operations. The Road Safety Authority (RSA) should also consider inter-visibility for existing residents in the private house at the junction between the access road and the R-747. The Applicant is requested to include agreed recommendations from the extended Road Safety Authority (RSA) in the Applicant's amended works proposals.

2.6 Item No.3 – Response

An extended Road Safety Audit has been carried out as requested by the Local Authority. The Audit and subsequent findings are set out in detail in the enclosed Traffic and Transport Response Note and summarised below.

A total of 5 no. “problems” were identified in the audit, all of which are responded to in the Feedback Form appended to the enclosed audit to the satisfaction of the Auditors. The “problems” raised, and design team responses are summarised as follows.

Problem 1 – The Auditors identified that the access road is narrow and recommended that the junction be modified to have a holding/passing area for HGVs as they exit the site.

It was demonstrated that the access junction as proposed in the EIAR provides sufficient area for HGVs to pass. In addition, it is proposed to provide a lay-by on the existing access road in order to provide a location where 2 HGVs may pass. This was accepted by the Auditors.

Problem 2 – The Auditors identified that the verge on the inside of the bend on the R747 was worn, which was likely caused by traffic avoiding right turning traffic into the site, and that the introduction of a kerb should be considered.

The design team responded that there were very few right turning movements generated by the existing/proposed quarry. The design team, however, agree that the introduction of a kerb at this location would discourage existing R747 traffic overrunning the corner. While this is not a measure that could be implemented by the Applicant, it would be supported were Kildare to implement such a measure.

Problem 3 - The Auditors requested an autotrack assessment to show that HGVs may turn left out of the access. This was demonstrated to be possible and was accepted by the Auditors.

Problem 4 – The Auditors identified that Intervisibility between the Lawler Quarry access road and the parallel access leading to an existing dwelling was restricted at the junction between the 2 internal roads. The Design Team agreed with this and it is confirmed that the embankment and vegetation between the two internal roads will be cleared in the proximity of the junction in order to improve visibility.

Problem 5 – The Auditors recommend that the existing “sharp bend” warning signs be replaced with “side road on outside of bend” signs and that the required visibility to the signs is provided. The Applicant agrees with this recommendation and would support the change to the existing signage in addition to the warning signs that were recommended in section 12.3.2 of the EIAR as follows;

“In order to provide advance warning to general traffic of the existing quarry access it is proposed. that “Agriculture (or Other) Machinery” warning signs (in lieu of HGV warning sign not being available) are provided on both R747 approaches to the existing junction. Discussions will be held with Kildare County Council in order to identify the appropriate locations for these signs.”

2.7 Item No.4 – Access

The Applicant is requested to consider providing a recessed entrance gateway with turning area along the access road to prevent lorries having to reverse if the gateway is shut. The Applicant is requested to consider the provision of a layby to allow lorries to pass each other without reversing along the access road.

2.8 Item No.4 – Response

As addressed under Point 3 above, it is demonstrated that the access junction as proposed in the EIAR provides for sufficient area for a HGV’s to pass as shown in Figures FI 1 and FI 2 below. In addition, it is proposed to provide a lay-by on the existing access road in order to provide a location where 2 HGVs may pass, as shown in Figure FI3 of the enclosed Traffic and Transport Response Note.



Figure 1 - FI 1 - HGV Junction Access



2.9

Figure 2 - FI 2 - HGV Junction Access

The Applicant is requested to supply details of the following:

- (a) Proposed signage to be used during the period of operation of the land filling;
- (b) Details of kerbing, road markings, drainage and finishes.

2.10 Item No.5 – Response

As addressed in Further Information item no. 3 above, it is proposed that the existing “sharp bend” warning signs be replaced with “side road on outside of bend” signs and that the required visibility to the signs is provided. In addition, as set out in section 12.3.2 of the EIAR, it is proposed to provide advance warning to general traffic of the existing quarry access by means of “Agriculture (or Other) Machinery” warning signs (in lieu of HGV warning sign not being available), on both R747 approaches to the existing junction. Discussions will be held with Kildare County Council in order to identify the appropriate locations for these signs.

While there are no additional kerbs or drainage proposed, the improved road markings proposed as part of the EIAR and illustrated in Figure 12.2, are included at Appendix C of the enclosed Traffic & Transport Response Note

2.11 Item No.6 – Local Neighbours

The Applicant is requested to examine conflict with residents who may have to cross the roads with the herd of dairy cows four times each day and consider the condition of fences and ways of avoiding a hazard between haulage trucks and the local farming community.

2.12 Item No.6 – Response

We wish to make the Authority aware that it is the Applicants dairy cows that cross the access road and these events are managed by the Applicant on a daily basis. Therefore, no conflict can arise from these overlapping activities.

2.13 Item No.7 – Sight Lines

The Applicant is requested to demonstrate that sight lines at the junction entrance to the development complies with the Transport Infrastructure Ireland (Til) Document (DN-GE0-03060) June 2017 standards.

2.14 Item No.7 – Response

While the speed limit in this section of the R747 is 80 km/h, actual speeds are significantly less than this due to the alignment of the road. A speed survey was undertaken by Traffinomics Ltd with the 85th percentile speeds observed to be less than 50 km/h in both directions (49.04 km/h northbound and 47.7 km/h southbound). The full survey results are included at Appendix D of the Traffic & Transport Response Note.

Visibility splays for speeds of 70 km/h and above are provided in the enclosed Traffic and Transport note (and at Figure 3 below) and demonstrate that 120m x 3m visibility splays appropriate for a 70 km/h speed, which are in excess of those required based on observed speeds of 50 km/d, are available at the existing Lawler Quarry access.

As noted in Chapter 12 of the EIAR, forward visibility on the R747 is partially obstructed by the existing hedge on the south west corner of the bend. While it is outside the control of the Applicant, it is noted that future maintenance of this boundary hedge to a maximum height of 1.05m would improve forward visibility for all vehicles, including general traffic on the R747.



Figure 3 - Visibility Splay (120m x 3m)

2.15 **Item No.8 – Staff Facilities**

The Applicant is requested to demonstrate that the overall development has enough staff facilities; shower, changing and locker facilities.

2.16 **Item No.8 – Response**

Within the submitted Environmental Impact Assessment Report (EIAR) Chapter 3 Description of the Proposed Development, Section 3.6.2 provides details of facility management and staffing. The applicant has confirmed there will be a maximum of 8 staff on-site at any one time, including management, administration, general operatives, drivers and maintenance staff.

Staff facilities will be located at the existing site office on the west of the site, adjacent to the site entrance road and car parking area. The existing site office provides approximately 35 square metres of floor space.

As part of the development of the site, the applicant has planned for the refurbishment of the existing portacabin-type site office to include an upgrade of the interior office spaces, common area/canteen, two toilets and changing/drying rooms. At least two additional portable toilets will be located on the site, at locations adjacent to active works areas. The quarry manager will have overall responsibility for the provision and maintenance of suitable staff welfare facilities.

For the location of the staff facilities please refer to the enclosed Site Layout Plan (Dwg Ref. 191115 – 01) and Sheet 6 (Dwg Ref. 191115 – 10) of the 1:1,000 scale Site Layout Plan drawings, submitted as part of the original application and enclosed here for convenience.

2.17 **Item No.9 – Water Drainage**

The Applicant is requested to provide details of the surface water drainage at the entrances.

2.18 **Item No.9 – Response**

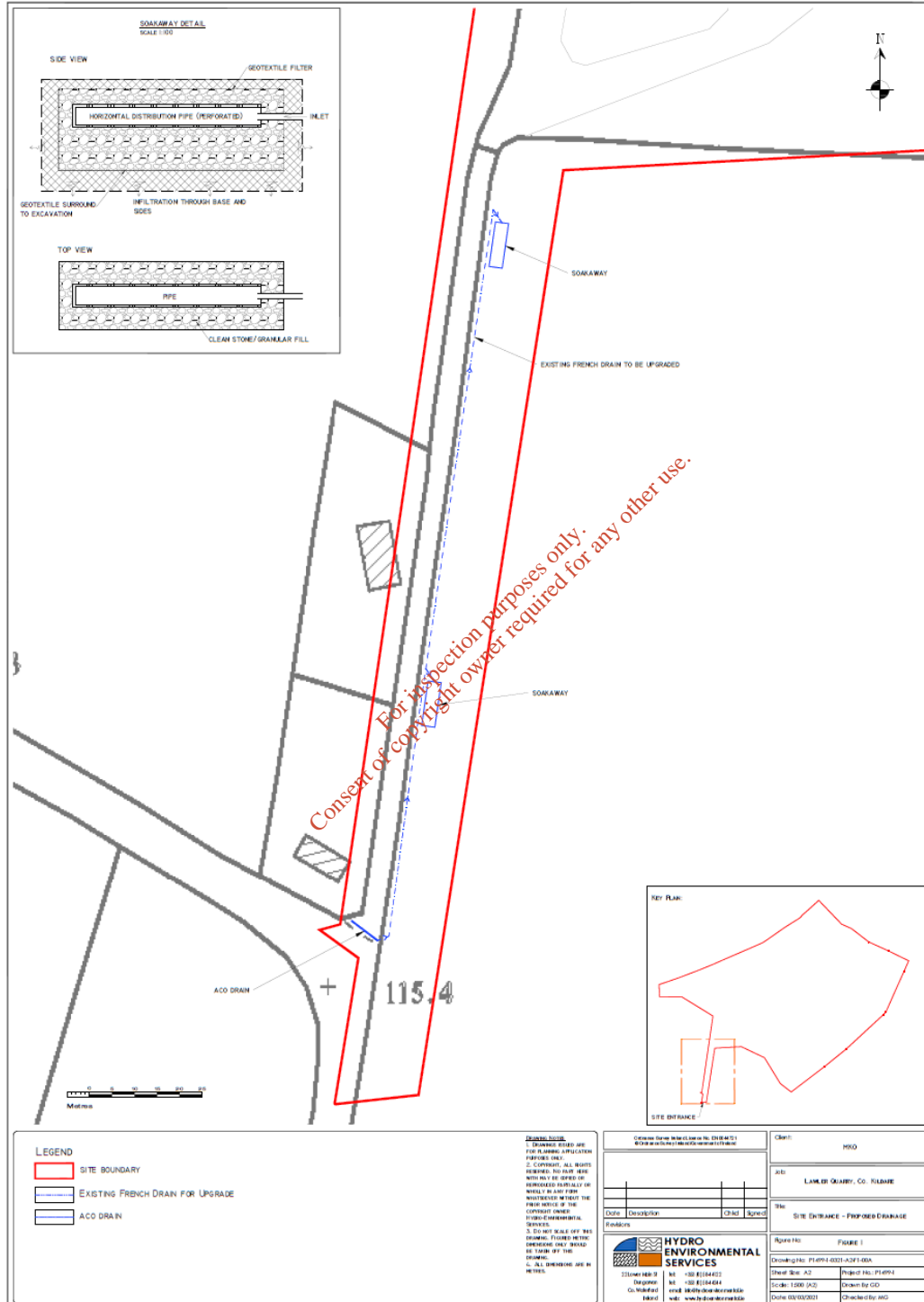


Figure 4 - Existing and Proposed Site Drainage

We refer the Authority to the enclosed Further Information Note prepared by Hydro-Environmental Services. Please also see Figure 4 above which shows details of the existing and proposed drainage for the site entrance road leading out to the R747. The full drawing is also enclosed with this submission, prepared at an appropriate scale.

There is an existing French drain which runs along the eastern side (upslope side) of the site entrance road (refer to Figure 4). The drain runs from the site entrance on the R747 as far as the internal entrance leading into the sand and gravel pit itself.

Proposed drainage upgrade works for the site entrance and site entrance road are as follows:

- Excavate/removal of the existing 40mm drainage stone within the French drain and replace with clean 40mm stone;
- Install 2 no. soakaways along the drain to facilitate percolation of drainage water; and,
- Installation of an ACO drain at the site entrance on the R747 which will feed into the entrance road French drain.

2.19

Item No.10 – Wastewater Treatment Systems

The Applicant is requested to submit certification from a competent person with a recognised technical qualification and accredited with the FAS National Certificate Training Programme in Site Suitability Assessments for On-Site Wastewater Treatment Systems, and that a copy of their professional indemnity insurance is required to also be submitted, that the hydraulic and biological loading generated by the proposed development can be catered for in the existing septic tank system and percolation area. Design details and calculations are required to be included as part of the report.

The Applicant should note that if the existing system requires upgrading to achieve compliance with NSAI SR6 or the requirements of the EPA Wastewater Treatment Manuals then a fully completed 'Site Characterisation Form for an On-Site Wastewater Treatment System' is required to be submitted. A "Site Characterisation Form for an On-Site Wastewater Treatment System" is required to be completed in full and signed by a competent person with a recognised technical qualification accredited with the FAS National Certificate Training Programme in Site Suitability for On-Site Wastewater Treatment Systems and that a copy of their professional indemnity insurance is required to also be submitted. The Site Characterisation Form should be completed in accordance with the requirements of the EPA Wastewater Treatment Manual, entitled "Treatment Systems for Single Houses".

If a proprietary wastewater treatment system is proposed, then a Site Suitability Report, prepared by the manufacturers/suppliers of the Irish Agreement Board approved wastewater treatment system, is required to be submitted. The Site Suitability Report should be based on a site visit by the manufacturers/suppliers of the wastewater treatment system, and on a fully completed Site Characterisation Form for an on-site wastewater treatment system. The design and location of the wastewater treatment system and polishing filter should be indicated clearly on a Site Layout Plan all in accordance with the requirements of the EPA Wastewater Treatment Manual, entitled "Treatment Systems for Single Houses".

2.20

Item No.10 – Response

It is proposed to manage wastewater from the staff welfare facilities in the site office building by means of a sealed storage tank, with all wastewater being tankered off-site by a permitted waste collector to a licensed wastewater treatment plant. It is not proposed to treat wastewater on-site, and therefore the EPA's 2009 'Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (p.e. 10)' does not apply. Similarly, the EPA's 1999 manual on 'Treatment Systems for Small Communities, Business, Leisure Centres and Hotels' also does not apply, as it too deals with scenarios where it is proposed to treat wastewater on-site.

The proposed wastewater storage tank will be fitted with an automated alarm system that will provide sufficient notice that the tank requires emptying. The quarry manager will have overall responsibility for monitoring and servicing of the storage tank. Only waste collectors holding valid waste collection permits under the Waste Management (Collection Permit) Regulations, 2007 (as amended), will be employed to transport wastewater away from the site to a licensed facility. Such a proposal for managing the

wastewater arising on site is a standard practice on quarry sites, which are often proposed in areas where finding the necessary percolation requirements for on-site treatment would be challenging and has been accepted by numerous Planning Authorities and An Bord Pleanála as an acceptable proposal.

2.21 Item No.11 – Tanks/Treatment Systems Location Plan

The Applicant is requested to indicate on a Site Layout Plan (1:500 scale) the exact location of any septic tanks/wastewater treatment systems and wells on or adjoining the site and the extent of all streams/ditches that are on, bordering, or adjacent to the site.

2.22 Item No.11 – Response

Please see Figure 5 below for Site Layout drawing (also refer to Figure 2 in enclosed Hydro Environmental Services Response Note) at scale 1:2,500 showing the location of the septic tank, on-site wells, private wells adjoining the site and the extent of all streams/ditches that are on, bordering, or adjacent to the site.

It was agreed with Kildare County Council that a 1:2,500 scale drawing would be more appropriate than a series of 1:500 scale drawings for the entire site as originally requested in the RFI. The critical areas of the site entrance (Figure 1) and septic tank area (View A on Figure 2) are provided at 1:500 scale.

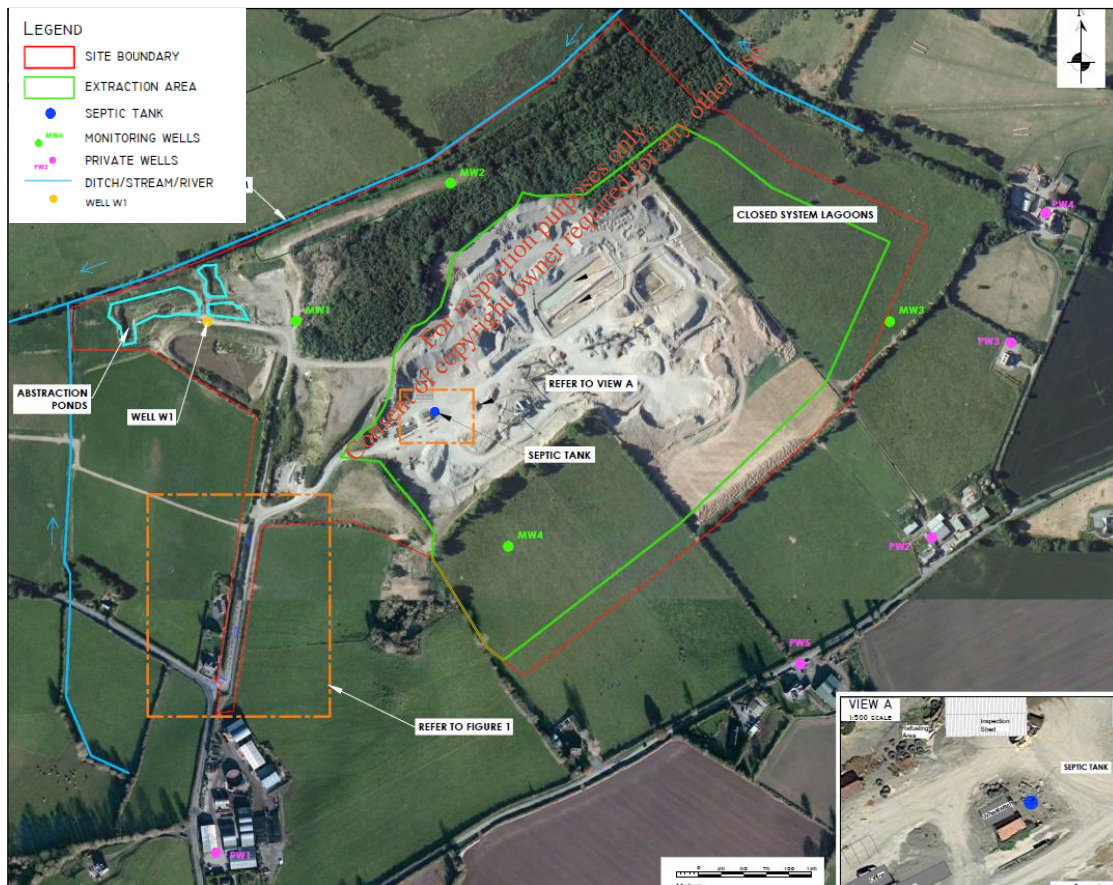


Figure 5 - Locations of Tanks, Wells, Streams & Ditches

2.23 Item No.12 – Third Party Submission

The Applicant should note that a third-party submission has been received on the application. The Applicant is requested to comment on this third-party submission.

2.24 **Item No.12 – Response****MKO Response to Point No. 1:**

As described in the Environmental Impact Assessment Report (EIAR), Section 5.6.1 Habitats Present on the Site and Surrounding Area, ‘The majority of the quarry excavation area consists of **Active quarries and mines (ED4)** (Figure 6) and **Building and artificial surfaces (BL3)** (Plate 5.2)’ of the EIAR, as provided below for ease of reference. As can be seen from Figure 6, due to the nature of the existing active quarry, there is little re-vegetation within the quarry void, which could be considered of local importance (lower value) (NRA, 2006¹) from a biodiversity perspective.



Figure 6 - Active quarries and mines (ED4)

As described in the Section 5.7.3 of the EIAR, Decommissioning/Reinstatement Phase and Biodiversity Net Gains; ‘Following completion of the proposed infilling, the lands will be reinstated to grasslands, in keeping with character of the surrounding landscape. A Site Restoration Plan (SRP) has been prepared as part of the proposed development and is provided in Drawing No. 191115-SRP of the EIAR. This plan provides for reseeded of the reinstated lands as well as the incorporation of new linear landscape features i.e. hedgerows and treelines. These are fully described in the Site Restoration Plan, Drawing No. 191115-SRP, along with associated species mixes. This measure has been designed with input from the project ecologist along with the landscape specialist.

Reseeding will be required for revegetation of new species rich grassland habitats within the site. The following seed mix has been recommended: ‘*Native Origin Irish Wildflower Seed Mixture: Range:*

¹ NRA/TII, 2006, *Guidelines for assessment of Ecological Impacts of National Road Schemes*, Dublin: National Roads Authority, Online, <https://www.tii.ie/technical-services/environment/planning/Guidelines-for-Assessment-of-Ecological-Impacts-of-National-Road-Schemes.pdf> Available at: Accessed 03.03.2021

Meadow Mixtures (Code MM)² (Wildflowers, 2020²) or equivalent. This will ensure a higher biodiversity value of the newly reinstated grasslands within the site.

Additional hedgerow and treeline planting proposed as part of the restoration plan (see Drawing no. 191115-SRP of the EIAR) will result in increased connectivity to the linear features in the surrounding landscape and will therefore result in a positive effect for a variety of faunal species locally. The linear landscape features have also been informed by a review of the historic 6-inch Ordnance Survey Ireland (OSI) maps, which show the original linear features that occurred on site prior to the commencement of quarrying activities. The new features have tried to replicate this original field boundary pattern where possible.

As described in Chapter 3 of the EIAR, ‘the proposed development also includes for the retention of a raised bund between the riverbank and northern boundary of the site, as shown in Plate 5-11 of the EIAR (Figure 7 below)’. It is proposed to plant this bund with native species. This is also described and shown in Drawing No. 191115-SRP of the SRP. This will provide additional biodiversity benefits locally as well as providing additional protection to the nearby watercourse.

The proposed development also incorporates the restoration of three smaller ponds, totalling 0.44 hectares (ha), in order to provide an area of aquatic habitat (the three ponds are approx. 0.32, 0.08 and 0.04 ha respectively). These ponds will be maintained on site with tree species planted partly around each to provide additional cover and biodiversity benefits locally. These measures have been incorporated into the project in consultation with the project ecologist and landscape specialist. Further detail is provided in Drawing No. 191115-SRP of the SRP that accompanies the EIAR.

The restoration of the quarry void, along with the above biodiversity enhancement measures will result in a long-term positive impact on the biodiversity value of the site at a local geographic scale and an overall biodiversity net gain.

MKO Response to Point No. 2:

As described in Section 5.7.2.3.1 of the EIAR, Assessment of Potential Impacts on Sand Martin, dedicated mitigation measures have been implemented for the protection of Sand Martin during the future operation and restoration of the proposed development.

Table 5-14, Section 5.7.2.3.1 of the EIAR specifically states that ‘Site preparation works, in advance of infilling, will be undertaken outside of the nesting bird season (1st March – 31st August) to ensure compliance with the Wildlife Act and that no nesting sand martin burrows are destroyed while active. If any site clearance or infilling works are required in the area surrounding the identified sand martin colony is required during the nesting bird season, this will be preceded by a nesting bird survey and all clearance works supervised by an appropriately qualified ecologist to ensure that no active nests are destroyed. In order to offset the loss of suitable nesting habitat created as a result of the operation of the quarry, it is proposed to retain a large mound of sand material that already occurs within the northwest of the site, see the *Site Restoration Plan* Drawing No. 191115-SRP. The mound will be altered on one side to create a steep ‘cliff’ face suitable for nesting sand martin. This will form part of the overall restoration plan. This area will be protected from disturbance/damage by placing large boulders beneath. This will be installed

² <http://www.wildflowers.ie/mixes/mmm/mmm06.htm>

prior to the commencement of the proposed infilling works, see example in Figure 7'. The above measures will be fully in place in advance of any infilling works.



Figure 7 - Example of protective boulders to be placed beneath the existing sand pile (example provided here for context) to be retained within the northwest of the site. This will maintain suitable nesting sand martin habitat on site.

MKO Response to Point No. 3:

Section 5.2 of the Natura Impact Statement (NIS), Potential for Indirect Effects on the European Sites, provides robust mitigation for the protection of downstream water quality, including the freshwater pearl mussel, identified as a potential sensitive downstream ecological receptor in Table 3.1 of the Screening for Appropriate Assessment (AA).

As described in Section 5.2 of the NIS, ‘hydrological connectivity has been identified between the proposed development and downstream European Sites via watercourses within the site boundary, namely; the Crookstown Upper River, a tributary of the River Greese, that joins the River Barrow (part of the River Barrow and River Nore SAC) over 16 kilometres (km) downstream of the proposed development site’.

‘As identified in the hydrological assessment prepared for the site (Chapter 7 Water of the accompanying EIAR, see Appendix 2 of the NIS) groundwater flow towards the Crookstown Upper Stream is the main pathway for impact on any downstream designated sites. The primary risk to groundwater quality at the site would be from the infill material and hydrocarbon spillage and leakages.’

During the operational phase of the proposed development, there will be no direct hydraulic connection between the site and the Crookstown Stream, and due to the bowl-shaped nature of the existing pit site, overland flow will be in the direction of the lowest ground within the pit, not in the direction of the Crookstown Stream.

During the backfilling phase/final reinstatement, as the ground level is raised and the permeability of the soil/subsoil altered by the imported fill material, surface water pathways may be created towards the Crookstown Stream in the absence of appropriate mitigation.

Sections 5.2.1.1 Construction/ Site Preparation Phase Mitigation Measures, and 5.2.1.2 Operational Phase Mitigation Measures, of the NIS prescribe robust and detailed mitigation measures for the protection of both surface water and groundwater. These include measures for the avoidance of potential impacts from heavy silted surface water runoff and the release of hydrocarbons.

The site-specific mitigation measures incorporated into the NIS and EIAR have been informed by a dedicated hydrological evaluation and assessment of the site, as fully detailed in Chapter 7 of the EIAR, and also provided in Appendix 2 of the NIS.

Chapter 7 of the EIAR states that ‘for the reasons outlined above, no significant effects on the surface water quality or groundwater will occur’. There is therefore no potential for adverse effect on any downstream EU Designated Site, including sensitive ecological receptors such as the freshwater pearl mussel (*Margaritifera margaritifera*).

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3.

CONCLUSION

The contents of this Response to Further Information clearly address each of the points raised in the Further Information Request received by the Planning Authority. Each Further Information Point is addressed by the relevant consultant, and a full suite of documents which comprehensively address each Further Information item is submitted with this report.

We trust the above along with the enclosed items adequately address the Planning Authority's Request for Further Information.

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