SLR Environmental Consulting (Ireland) Ltd

4 December 2025

By Hand

Planning Department
Further Information

Planning Department
04 DEC 2025
Cork County Council
County Hall, Cork

Planning Department,
Cork County Council,
County Hall,
Carrigrohane Road,
Cork.

SLR Project No.: 501.065557.00001

RE: Keohane Readymix Ltd. – Planning Application for Extraction of Sand & Gravel at Knockroe, Bandon, Co. Cork.

Planning Ref. 25/04666 - Further Information Response

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Dear Sir / Madam,

Please find enclosed the response to the request for further information (dated 5th June 2025) submitted on behalf of Keohane Readymix Ltd. in relation to the above planning application.

The responses are provided under each further information item for ease of reference. Six copes of the Further Information Response together with supporting documentation are enclosed.

**RFI Item 1**

*It is submitted as per Chapter 10 of the Environmental Impact assessment report that baseline noise survey measurements were completed at 4 selected measurement locations on the 9th January 2024, with results summarised as per Table 10.5. However, Table 10.5 refers to 'Summery of Noise monitoring results (2020-2023) and a referenced date of 'Tue 25 Mar. . This should be clarified and corrected. Similarly, Table 10.6 (Summary of Measured Noise levels, Free Field dB (Average Values)) should be clarified and explained as the presented results for the monitoring locations N1 and N2 which are submitted as representative of both receptors Rl,R2, are distinctively different. Following and further to the above clarifications, the noise impact assessment should be accordingly further reviewed and updated as necessary. A clear trail should be presented and evident in establishing the final conclusions.*

**Response:**

The noise survey was carried out on Tuesday 25th March 2025. This has been corrected in EIAR chapter 10 – Noise text and in Table 10.5, refer to revised EIAR chapter 10 – Noise enclosed.

The noise levels monitored at locations N1 and N2 are representative of the receptors at R 1 and R2. N1 is located at R1 adjacent to the existing road – noise is dominated by road traffic. N2 is located at the rear of R1 and is partially screened from the road. An average value of noise level from N1 and N2 (i.e. 53.5 dB(A)) was used for the purposes of the noise assessment at R1 and R2.

From Table 10-10 the predicted operational noise level from site operations at R1 is 44dB(A) and at R2 is 42dB(A) are very low, even in a worst case scenario where the machinery is operating continuously during the working hours, which will not be the case for the scale of the proposed development, and furthermore without



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implementation of noise mitigation measures. These noise levels are well below the recommended daytime noise emission limit value of 55 dB(A)[1] measured at the nearest noise sensitive receptor.

If the higher monitored noise level of 62 dB(A) at N1 is considered in the assessment and added cumulatively to the predicated noise levels at R1 (44 dB(A)) and R2 (42 dB(A)) then the cumulative noise level would be 62 dB(A), no change due to the large difference in monitored and predicted noise levels; and the impact at these receptors is assessed as Negligible (refer to Table below)

If the lower monitored noise level of 45 dB(A) at N2 is used in the assessment and added cumulatively to the predicated noise levels at R1 (44 dB(A)) and R2 (42 dB(A)) then the cumulative noise levels would be 48 dB(A) and 47 dB(A) respectively, and the impact at these receptors is assessed Minor to Moderate (refer to Table below, refer also to EIAR chapter 10 Table 10-1 for noise effects descriptors)

| Receptor | Period | Existing noise level $L_{Aeq,T}$ dB.(a) | Operational $L_{ar,\ 1hr}$ dB.(a)* | Cumulative $L_{Aeq,\ T}$ dB.(a)* | Difference | Short term impact | Long term impact |
|---|---|---|---|---|---|---|---|
| R1 | Daytime | 53.5 | 44 | 54.5 | 1 | Minor | Negligible |
| R2 | Daytime | 53.5 | 42 | 53.5 | 0 | Negligible | Negligible |
| R1 | Daytime | 62.0 | 44 | 62.0 | 0 | Negligible | Negligible |
| R2 | Daytime | 62.0 | 42 | 62.0 | 0 | Negligible | Negligible |
| R1 | Daytime | 45.0 | 44 | 48.0 | 4 | Moderate | Minor |
| R2 | Daytime | 45.0 | 42 | 47.0 | 5 | Moderate | Moderate |

A programme of noise mitigation and management measures will be implemented at the site as detailed in the EIAR Chapter 10 – Noise, and as stated in EIAR such measures can reduce noise levels from site activities and operations by c. 5 dB(A).

On this basis with the implementation of the proposed noise mitigation measures, the operational noise level will reduce by c. 5dB(A) and the residual noise impact at receptors R1 and R2 for the worst case would reduce from Minor / Moderate to Negligible / Minor.

**RFI Item 2**

*It is noted from the submission that "the machinery used at the proposed site will not generate impulsive or tonal noise". This should be further expanded and detailed with any supporting documentation to support same submitted.*

**Response:**

As stated in EIAR chapter 10 Table 10-8 the noise sources on site will comprise a loading shovel / excavator and a dump truck. There will be no noise sources on site that could give rise to impulsive noise (e.g. no use of rock breakers etc.). No impulsive noise will be generated on the site.

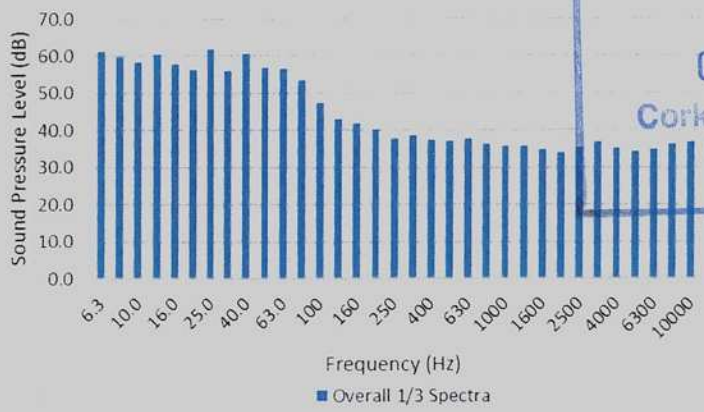
The Environmental Noise Standard ISO 1996-2:2007 details that a prominent, discrete tonal component may be detected in one-third octave spectra if the level of a one-third octave band exceeds the level of the adjacent bands by some constant level difference. The appropriate level differences vary with frequency. For a

[1] DoEHLG (2004) Planning Guidelines for Quarries & Ancillary Activities; EPA (2006) Environmental Management Guidelines for the Extractive Industry (Non-Scheduled Minerals)

tonal component to be present the level difference of adjacent bands should be greater than or equal to the following values in both adjacent one-third-octave bands:

- 15dB in low-frequency one-third-octave bands (25Hz to 125Hz);
- 8dB in middle-frequency bands (160Hz to 400Hz), and;
- 5dB in high-frequency bands (500Hz to 10,000Hz).

A typical 1/3 octave band analysis from a site with similar activity (noise sources including loading shovel / excavator and dump truck for soil stripping, extraction of sand & gravel) is provided below. Applying the criteria above, this confirms that the proposed activities on site with similar machinery will not give rise to tonal noise components.






The machinery used at the proposed site will not generate impulsive or tonal noise, no penalty was therefore applied to the predicted operational LAr, 1hr noise level for presence of tonal or impulsive elements or for prediction of resultant noise level at each receptor.

**RFI Item 3**

*Confirm whether the dwelling house at 30m east of the site (approx.. 55m from borehole BH3) is served by a private well and the location of that well. Assess the risk to water supply and any mitigation measures which should be put in place to protect the water supply.*

**Response:**

The location of the private well that serves the dwelling house referenced above is shown on Figure 7-1 Rev. A attached.

The proposed development will not extract sand & gravel below the groundwater table and there will be no groundwater lowering associated with the proposed development.

EIAR Chapter 7 – Water Table 7-7 provides an assessment of the impacts during the constriction and operational stages (without mitigation measures in place). This includes potential impact on groundwater quality in private water supplies which is assessed as Slight (without mitigation measures).

EIAR Chapter 7 Sections 7.138 & 7.139 provides details of mitigation measures that will be implemented at the site to prevent a reduction in surface water and groundwater quality:

- *There will be no fuel storage within the proposed development.*
- *No chemicals or petroleum-based products potential impacts on groundwater quality in private water supplies which is and chemicals will be stored at the site;*

- *No maintenance or mechanical repairs to vehicles shall take place within the site. Vehicle repairs will be undertaken in the existing covered maintenance shed at the adjacent Dromkeen Pit operated by KRL.*
- *Emergency Response Spill Kits will be kept on site to prevent any accidental leaks of petroleum-based products from reaching groundwater or adjoining surface watercourses to the site. In addition to the dedicated spill kits, the pit staff also maintain a quantity of sawdust on site which can be used to soak up any petroleum-based products if they accidently leak on site; and*
- *There is a wheel wash facility for all HGV vehicles exiting the site and the internal road between the wheel wash and the public road will be surfaced to prevent trucks carrying material from the site onto the public road with their tyres.*

*There will be no groundwater abstraction or discharge of water off-site to surface waters.*

With implementation of these mitigation measures the residual impact on the private water supply will be Imperceptible / Not Significant.

Notwithstanding this, in the unlikely event that the sand & gravel extraction operations impact on the water supply from the well a replacement well / water supply will be provided by the operator, and the Applicant will accept a condition to this effect, attached to the planning permission.

**RFI Item 4**

*The sight distance is not shown correctly on the Site Layout Plan. Please submit a dimensioned plan showing the setback measurements at 10m intervals of the existing roadside boundary required to achieve the Standard sight distance both (South) and (North) of the proposed entrance. Sight lines are measured to the nearside edge of the public road. Please submit a 1 :250 scale drawing showing the sight distance at the proposed entrance in accordance with the requirements of TII Publications DN-GEO-03060. No structures, utility poles, ditches or vegetation shall be allowed within the sight triangles. For the purpose of clarity, the drawing shall show the centre line of the public road. It is critical that the extent of any excavation required to achieve the required sight distance is clearly quantified and highlighted on the drawing.*

**Response:**

Drawing No. P25169-PMCE-XX-XX-DG-TR-3-001 Proposed Signage & Sightlines prepared by PMCE Consulting Engineers is enclosed. It shows 90m sightlines for a design speed of 60kph as per Table 5.5 TII Publication DN-GEO-03060 and the centreline of the public road.

The drawing shows the extent of vegetation to be removed within the sight triangle to the south and there is one utility pole to be relocated. This sight triangle area is within the land interest of the Applicant, and the Applicant will undertake these works prior to the transport any extracted sand & gravel from the site. The sight triangle of the north is clear from any vegetation, utility poles, structures etc.

A separate Programme of Sightline Inspection and Maintenance is provided in the response to Item 5 of the Request for Further Information. The Applicant, Keohane Readymix Ltd. confirms their agreement to maintain the sightlines for the lifetime of the development.

**RFI Item 5**

*Please submit a schedule to maintain the sightlines and maintenance agreement for the lifetime of this entrance.*

**Response:**

A Programme of Inspection and Maintenance prepared by PMCE Consulting Engineers is enclosed as a separate document. Keohane Readymix Ltd. confirms their agreement to maintain the sightlines for the lifetime of the development.



**RFI Item 6**

*Please submit a drainage impact assessment to support this planning application.*

**Response:**

A Drainage Assessment is enclosed. This includes a Site Drainage Plan and the assessment concludes:

> *With implementation of the above drainage measures the proposed development will not have any significant impact on the drainage in the vicinity of the site. Specifically, the drainage measures will ensure that surface water from the site cannot issue onto the public road network*

**RFI Item 7**

*The overall drainage design for the development shall demonstrate that surface water from the site cannot issue onto the public road/network. Details are also required of how the verge drainage (i.e. at the edge of the public road) will be permanently preserved across the site entrance. Any existing storm water drainage paths through the site serving the public road shall be preserved.*

**Response:**

The Drainage Assessment enclosed in response to Item 6 above confirms:

i) *The site is located within an area of significant sand & gravel subsoil deposits with a High permeability, suitable for natural infiltration of rainfall. Extraction of sand and gravel will take place by Dry Working (i.e. above the groundwater table), thereby facilitating ongoing surface water drainage by natural infiltration.*

ii) *Any surface water run-off arising from rainfall within the proposed extraction area, the internal access road and the site entrance can be managed within the site and there is no requirement for any discharge off-site to surrounding surface water bodies.*

iii) *With the proposed drainage design for the internal access road (lateral over the edge drainage and natural infiltration) there will be no surface run-off from the internal access road onto the public road.*

iv) *Any existing verge drainage at the edge of the public road will be preserved across the site entrance and any existing stormwater drainage paths at the entrance area through the site serving the public road will be preserved.*

v) *Notwithstanding the above, as a precautionary measure, a drainage channel will be installed across the site entrance.*

vi) *It is proposed to install an ACO S200 drainage channel or a length of c. 25 metres across the site entrance area. The ACO S Range is specifically designed for heavy-duty and industrial applications fully certified to BS EN 1433:2002 for applications up to and including F 900*.Any surface water run-off collected in the drain will be directed to flow into the site and infiltrate naturally within the historical sand & gravel pit area. The drainage channel will be designed for a rainfall intensity of 75 mm per hour and assuming a length of 20 metres to the outlet (conservative) this will enable a maximum area of 50/75 x 2115 m2 = c. 1410 m2 to be drained. This maximum drainage area exceeds the internal access road area and site entrance area combined.*

**RFI Item 8**

*In addition to the above you are requested to submit a revised EIAR Biodiversity Chapter which includes the following:*

a. *Assessment of potential impacts to scrub habitat, including the extent of removal, as a result of the proposed development.*

**Response:**

A revised version of the EIAR Chapter 5 - Biodiversity (November 2025 Update) has been completed with all amendments regarding scrub habitat being addressed. The revised Biodiversity chapter has been submitted separately as part of the overall FI response. This revised chapter outlines the potential impact to scrub habitat as a result of the proposed project including the extent and significance of the removal.

A Tree Survey was carried out and a report prepared out in response to Item 9 of the Request for Further Information. This Report has been submitted as a separate document, and it details the extent of the removal of scrub required as well as detailing additional mitigation measures for the protection and monitoring of large trees adjacent to the Site.

b. *Clarification on the potential loss of woodland habitat as a result of the installation of the welfare unit (per drawing no. PL05).*

**Response:**

There will be no loss of woodland habitat to facilitate the installation of the welfare unit. The original planning application Drawing PL05 (refer to Appendix A of the separate RFI Item 8 Biodiversity report enclosed) did distinguish between woodland habitat and scrub / open scrub mosaic habitat. However, the more accurate habitat map, EIAR Figure 5-1, submitted as part of the Biodiversity Chapter of the original EIAR (refer to Appendix A of the separate RFI Item 8 Biodiversity report enclosed). It is clear from Drawing PL05 and Figure 5-1 that the welfare unit will be installed within an area that is currently a mix of scrub and open scrub mosaic habitat. These scrub and woodland habitats have been further assessed within the revised EIAR, and with the suitable mitigation implemented there will be no significant residual effects on the woodland habitat or any other habitats of the Site following the removal of a small amount of vegetation to allow for installation of the welfare unit.

c. *Results of a breeding bird survey and information on the use of the site as a roosting or foraging site for overwintering birds, informed by surveys (given the proximity, to Bandon Estuary)*

**Response:**

Information on breeding birds and the use of the site as a roosting or foraging site for overwintering birds is detailed in the separate RFI Item 8 Biodiversity report enclosed.

In response to Item 10 of the Request for Further Information a detailed Ornithological Plan is enclosed, as a separate report. It includes annual monitoring for sand martin and other nesting birds. Sections 6.1.1 and 6.1.2 include measures for provision of undisturbed buffers / exclusion zones around any identified breeding sites for sand martins and other nesting birds.

d. *Biodiversity net gain measures at the end of the development, per the restoration plan, are not sufficient as they are planned for over 15 years after the removal of scrub habitat. More immediate measures to address the net loss of biodiversity are required. The revised Chapter should include these measures and have reference to the Tree Survey Report.*

**Response:**

As detailed in EIAR Chapter 2 there will be a "landscape phase" which will comprise a planting scheme and habitat creation that will take place upon commencement of the development. The landscape phase will include the following elements:

- Retention of all existing trees/scrub/woodland vegetation within the land interest boundary with the exception of the small number of trees/scrub vegetation along the proposed access track, refer also to the separate Tree Survey report submitted in response to Item 9 of the Request for Further Information.
- The planting of 660 m of diverse native hedgerow along the northern and part of the south-western and eastern boundaries of the proposed extraction area to mark/secure the edge of the pit slopes, provide habitat linkage and compensate for the loss of existing tree/scrub, refer to Figure RFI 9-1 Compensatory Planting Details (including planting schedule) and Compensatory Planting Map submitted in response to Item 9 of the Request for Further Information.

Details of the landscape and restoration phases are set out in EIAR Figure 2-5 in Appendix A, refer to separate RFI Item 8 Biodiversity report enclosed separately.

This initial landscape phase planting is significantly larger and more valuable than the habitat than the poor condition scrub that will be removed and that will mitigate against the loss of scrub at the Site and ensure a net gain for biodiversity at an early stage of the development.



**RFI Item 9**

*Please submit a tree survey, conducted by an arboriculture expert, for the site which shall include the following details:*

a. *Identify the age, species, and condition of all trees within the site.*

b. *A site layout plan, identifying all the trees on the site.*

c. *Identify which trees are required to be removed to facilitate the development.*

d. *The tree protection measures which will be implemented on the site to protect the trees for retention.*

e. *Details of compensatory planting on the site to ensure that there is no net loss of biodiversity on the site.*

**Response:**

A Tree Survey report is enclosed as a separate document with this response. It includes:

- Identify the age, species, and condition of all trees within the site.
- A site layout plan, identifying all the trees on the site, refer to Figure RFI 9-1.
- Identify which trees are required to be removed to facilitate the development, refer to Section 2.2 of the enclosed report and Figure RFI 9-1
- The tree protection measures which will be implemented on the site to protect the trees for retention, refer to Section 2.3 of the enclosed report and Figure RFI 9-1.
- Details of compensatory planting on the site to ensure that there is no net loss of biodiversity on the site, refer to Section 2.4 of the enclosed report and Figure RFI 9-1. This information includes Compensatory Planting Details (including planting schedule) / Compensatory Planting Map to be implemented during the initial landscape phase, and it will ensure no net loss of biodiversity on the site.

**RFI Item 10**

*The proposed quarry may, in time, provide suitable nesting opportunities for breeding sand martins. You are requested to submit a detailed Ornithology Plan for the quarry. The plan should include a programme of annual monitoring for sand martin, and other nesting birds, to be carried out by an experienced ornithologist. The plan should also include measures to provide for undisturbed buffers around breeding sites for these species.*

**Response:**

A detailed Ornithological Plan is enclosed, as a separate report. It includes annual monitoring for sand martin and other nesting birds. Sections 6.1.1 and 6.1.2 include measures for provision of undisturbed buffers / exclusion zones around any identified breeding sites for sand martins and other nesting birds.

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Yours Faithfully,

SLR Environmental Consulting (Ireland) Ltd

Tim Paul

Enc.

RFI Item 1 EIAR Chapter 10 revised

RFI Item 3 EIAR Figure 7-1 RevA.

RFI Item 4 PMCE Drawing No. P25169-PMCE-XX-XX-DG-TR-3-001

RFI Item 5 PMCE Programme of Inspection 7 Monitoring

RFI Item 6 & 7 Drainage Assessment (Incl Figure RFI 6-7)

RFI Item 8 EIAR Chapter 5 revised

RFI Item 8 Biodiversity & RFI Item 10 Report

RFI Item 9 Tree Survey Report (Incl Figure RFI 9-1).

RFI Item 10 Ornithology Plan

Cc. + Enc. Mr. P. Keohane (Keohane Readymix Ltd.)