RFI Item 10 - Ornithology Plan

Sand and Gravel Extraction, Knockroe, Bandon, Co. Cork (Plan. Ref. 25/04666)

Keohane Readymix Ltd.

Prepared by:

SLR Environmental Consulting (Ireland) Ltd

Suite 212, Acorn Business Centre, Blackrock, Cork, T12 K7CV

SLR Project No.: **501.065557.00001**

Client Reference No: **0033**

28 November 2025

Revision: 2

Planning Department
04 DEC 2025
Cork County Council
County Hall
Cork

254666-04/12/2025-FI Ornithology Plan

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1	21 November 2025	Faolán Linnane	Michael Bailey	T. Paul
2	28 November 2025	Faolán Linnane	Michael Bailey	T. Paul

Basis of Report

This document has been prepared by SLR Environmental Consulting (Ireland) LtdSLR, with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Keohane Readymix Ltd. (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature, and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

Table of Contents

Planning Department
04 DEC 2025
Cork County Council
County Hall
Cork

1.0 Introduction and Purpose of Report

This Ornithology Plan has been prepared to address Item 10 of a request for further information (RFI) from Cork County Council (CCC) in relation to the planning application 25/04555. The Planning application is for the following;

"Permission for extraction of sand & gravel over an area c3.5 ha; extraction by dry working to a level 2 metres above ground water level at a maximum rate of 100,000 tonnes per year; transport of the extracted sand & gravel to the adjacent Dromkeen pit (plan ref. 23/04780) for use in concrete production; upgrading of the existing internal access road and use of the existing access onto the local road L3204; provision of wheelwash and welfare unit (c8.3sqm) and restoration of the lands to agricultural and natural habitat use, all within an application area of c4.0 hectares. Permission is sought for 15 years plus two years for final restoration (total duration of seventeen years). The planning application will be accompanied by an Environmental Impact Assessment Report (EIAR)".

Item 10 for which this report has been developed reads as follows;

***"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 any other nesting birds, to be carried out by an experienced ornithologist. The plan should also include details of mitigation measures to be implemented, including measures to provide for undisturbed buffers around breeding sites for these species."*

As such, the purpose of this report is to develop a detailed ornithology plan for the quarry to include monitoring methodologies and measures to mitigate against disturbance of potential populations of breeding birds and especially sand martin *Riparia riparia* in the event that a breeding colony(s) becomes established during the lifespan of the proposed sand and gravel pit.

2.0 Statement of Authority

This ornithology plan was prepared by SLR Senior Ecologist Faolán Linnane. A technical review was carried out by SLR Associate Ecologist Michael Bailey.

Faolán Linnane BSc, MSc - is a Senior Field Ecologist with SLR and has worked in consultancy since June 2021. Faolán holds a BSc in Environmental Science (Zoology) from University College Cork and an MSc in Marine Biology from University College Cork. Faolán gained valuable and transferable bird survey skills with the Curlew Conservation Programme on completion of his MSc. His experience in consultancy includes ECoW on a large infrastructure development, habitat surveys and a variety of bird surveys including vantage point watches, breeding wader surveys, breeding raptor surveys and goose roost surveys. He has also prepared AA screening reports/NIS, Invasive species management plans, amphibian monitoring plans and Ecological Impact Assessments (EcIA) for a range of projects.

Michael Bailey BSc, MSc – Michael is an Associate Ecologist with SLR and holds a BSc (Hons) in Biology and Ecology from the University of Ulster, and an MSc in Quantitative Conservation Biology from the University of the Witwatersrand, Johannesburg, South Africa. Michael is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Michael is an experienced consultant ecologist with field and research experience with mammal, bird, bat and invasive species surveys in Ireland, the UK and Africa. He has prepared Appropriate Assessments and Ecological Impact Assessments for a wide range of infrastructure, mining and extractive industry, and renewable energy projects.

3.0 Legal Protections:

Breeding birds and their nesting sites are protected under the Wildlife Acts and according to Section 40 (Amended 2000) of the Acts.

4.0 Sand Martin Life History

Sand Martin (*Riparia riparia*) conservation status in Ireland is listed as Amber by the Birds of Conservation Concern Ireland[1] list which reviews the status of birds in Ireland. Sand Martin are summer migrants to Ireland and are only present in the breeding season. This species arrives in Ireland in early March and leaves again for sub – Saharan Africa in late September with peak counts being recorded in June according to Birdtrack[2].

4.1.1 Nesting

Sand martins are social nesters with tens to several hundred pairs nesting close together in a single colony. The actual nest at the end of a tunnel which may be up to four feet in length, bored into suitable substrates in sand pits, gravel pits, and sea cliffs. Nests are lined with vegetation and feathers. Sand martins will keep coming back to the same locations if available for years but tend to build new tunnels each year and seldom used the previous year's tunnels. They lay four to five eggs in late May or early June, with eggs hatching after around two weeks. Approximately 20-24 days later chicks will fledge. Sand martins usually have two broods each year[3]

5.0 Baseline Conditions and Potential Future Use

Currently, the Site is not suitable for use by breeding sand martin. There are no suitable pit faces or stockpiled material currently on Site which can be used by breeding sand martin. However, during the operational phase of the development and as material is extracted there may be new exposed, sandy pit faces or tall sand/gravel stockpiles with potential for use by breeding sand martin.

6.0 Monitoring Programme

As the site develops and potential sand martin breeding habitat is created the following the steps to monitor and prevent the establishment of sand martin colonies at the Site over the lifespan of the development should be implemented.

This section also details the procedures that should be required in the event that any sand martin colony becomes established to ensure no disturbance is caused to breeding and martin colony.

Planning Department
04 DEC 2025
Cork County Council
County Hall
Cork

[1] https://birdwatchireland.ie/app/uploads/2021/04/BOCCI-2020-2026.pdf

[2] https://app.bto.org/birdtrack/explore/graph/graph_report_rate.jsp

[3] Sand Martin (Riparia riparia) - British Birds - Woodland Trust

6.1.1 Sand Martin Mitigation Measures (Incl. Buffer Zones)

6.1.1.1 Prevention

To discourage sand martin from becoming established on Site there are a number of key measures that should be implemented.

1) In February, prior to the commencement of each nesting season 1st March , a suitably qualified ecologist / ornithologist should carry out a detailed survey of the Site. All potentially suitable sand martin nesting pit faces and/or stockpiles should be recorded and mapped.
2) Re - profiling of sand and gravel stockpiles to angles of 45° or less should be carried out[4] to discourage sand martins from establishing a new nesting colony. Many of these stockpiles are temporary and are created prior to being exported from the Site, however, sand martins can start building overnight and once started and if within the bird breeding season (1st March to 31st August) these nesting site cannot be disturbed or moved.
3) A toolbox talk will be given to all machinery operators and Site staff as part of their induction process and ongoing talks on biodiversity management. During the induction, operators will be informed on how to identify sand martin and sand martin nesting sites and will be given instruction on procedures to follow in the event that they find or suspect a sand martin colony during the course of their work.

6.1.1.2 Exclusion / Buffer Zones

In the event that a sand martin colony becomes established the following steps will be taken:

1) All works in the immediate area will be halted and a qualified ecologist / ornithologist will be contacted in order to assess the location and determine sand martin breeding activity. An appropriate buffer zone (>20m from the nest site) will then be created to ensure the colony is not disturbed. As sand martin regularly nest in active quarries, they readily adapt to noise so it is most important ensure that works will not cause any physical disturbance to nesting sites, such as vibrations that could cause stockpiles to collapse or pit faces to become unstable.
2) Signage will be erected to indicate the presence of sand martin and concrete bollards should be used to demarcate the exclusion zone to ensure no accidental interference with the breeding site(s).
3) The exclusion zone will remain in place until the end of the breeding bird season (March 31st – August 31st inclusive). Following this period, a suitably qualified ecologist will return to assess the Site and ensure all nests have been vacated. Only then will works be allowed to resume in the area.

6.1.1.3 Creation of sand martin breeding sites

Depending on the proposed sand and gravel extraction programme there is the potential for identifying suitably exposed sand pit faces for breeding sand martin in relatively secluded and undisturbed areas of the sand and gravel pit which could be deliberately left exposed with the sole purpose of providing breeding locations for sand martin. The location and characteristics of suitable breeding location can be identified and confirmed in collaboration with an experienced ecologist/ornithologist and the site manager.

[4] Sand Martin - Nature After Minerals

Identification and isolation of suitable breeding sites should be done several months before the start of the breeding season so that all activities in the area can be concluded before the start of the breeding season.

6.1.2 General Breeding Bird Procedure / Buffer Zones

As mentioned previously, the breeding bird season in Ireland takes place between March 1st and August 31st inclusive. Vegetation removal required for the proposed development (refer to EIAR Figure 2-6) will be undertaken outside the nesting bird season (i.e., vegetation removal will be limited to September to February) in order to avoid risking harm or disturbance to nesting birds. Any vegetation removal that must be undertaken within the nesting bird season must undergo a nesting bird check by a qualified ecologist. Any nesting birds will be protected by an appropriate buffer to be determined following the nesting bird check. Works within this buffer will not recommence until such a time that it has been deemed that young have fledged or that the nest has been abandoned, as determined by an experienced ornithologist.

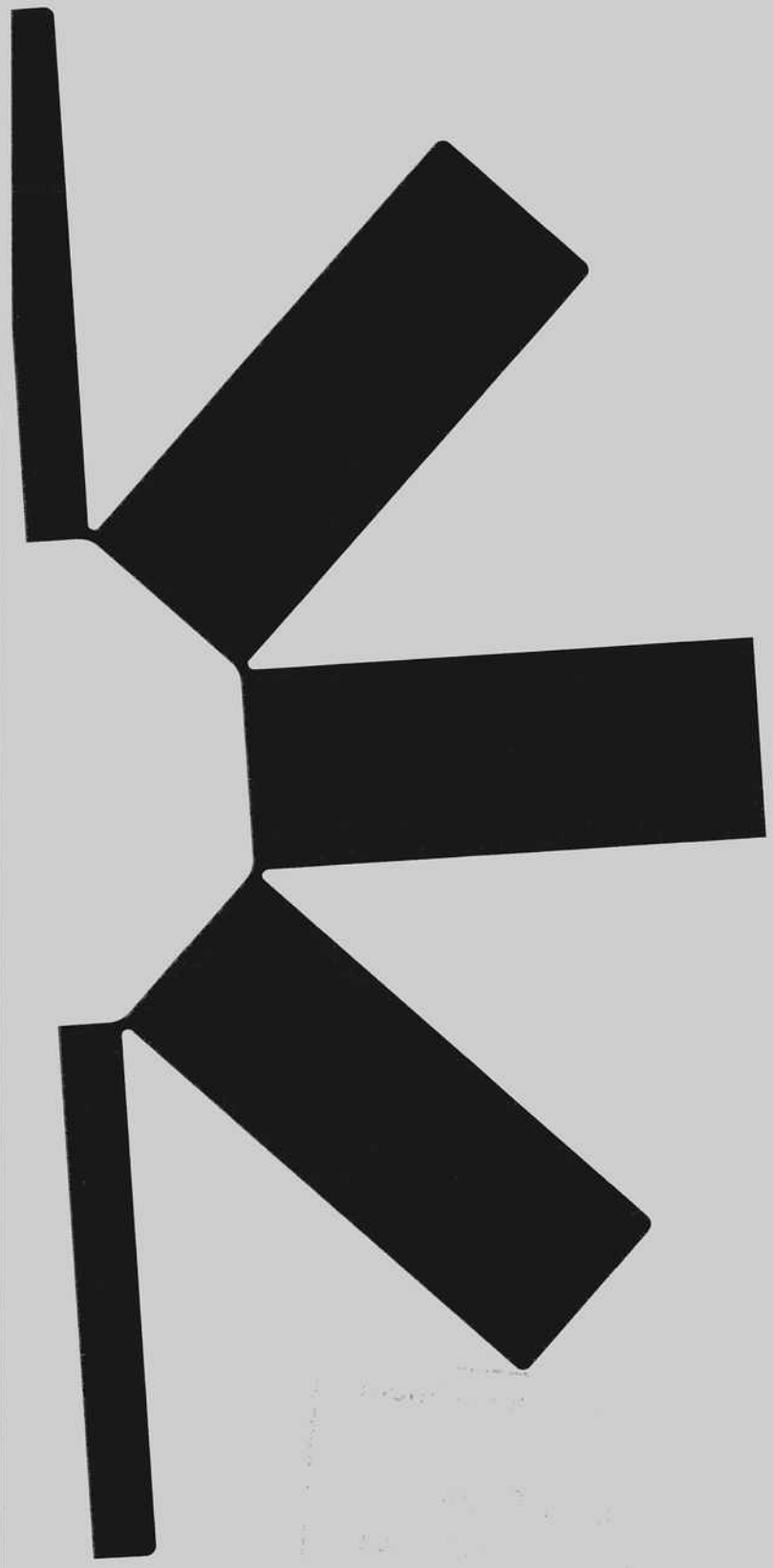
7.0 Conclusion

This document details the life history of sand martin and outlines steps to first discourage the establishment of any sand martin breeding colony on the Site but also to protect any sand martin breeding colony should they become established.

There should be annual surveying of the sand and gravel site prior to the start of the breeding season (1st March to 31st August) to identify potential sand martin breeding areas and any works in these areas should be programmed to be completed prior to the bird breeding season. In addition, there should be an ongoing monitoring programme of breeding sand martin colonies, if established, over the lifespan of the project.

Furthermore, this ornithology plan references breeding birds in general at the Site and offers mitigation to ensure that breeding bird habitat is not removed during the breeding bird season or without appropriate measures being undertaken to ensure that no harm will come to any breeding birds as a result of the proposed development.

Planning Department
04 DEC 2025
Cork County Council
County Hall
Cork



Making Sustainability Happen