S. 37

File With _____

SECTION 131 FORM

Appeal NO: ABP 321022-24 **Defer Re O/H** ☐

Having considered the contents of the submission dated/ received 29/1/25 from Applicant I recommend that section 131 of the Planning and Development Act, 2000 be/not be invoked at this stage for the following reason(s):. New information

E.O.: Daniel O Connor **Date:** 31/1/25

For further consideration by SEO/SAO

Section 131 not to be invoked at this stage. ☐

Section 131 to be invoked – allow 2/4 weeks for reply. ☐

S.E.O.: _____ **Date:** _____

S.A.O: _____ **Date:** _____

M _____

Please prepare BP 70 **- Section 131 notice enclosing a copy of the attached submission**

to: all parties - 4 copies **Task No:** 420215-25

Allow 2/3/4weeks – BP _____

EO: Daniel O Connor **Date:** 31/1/25

AA: Fadimie Khatijaye **Date:** 31/01/25

S. 37

File With _____

CORRESPONDENCE FORM

Appeal No: ABP 321022-24

M _____

Please treat correspondence received on 29/1/25 **as follows:**

1. Update database with new agent for Applicant/Appellant _____	
2. Acknowledge with BP 23	**1. RETURN TO SENDER with BP** _____
3. Keep copy of Board's Letter ☐	2. Keep Envelope: ☐
	3. Keep Copy of Board's letter ☐

Amendments/Comments Applicant's response to S131 Notice

4. Attach to file	**RETURN TO EO** ☐
(a) R/S ☐ (d) Screening ☐	Re-submit drawer
(b) GIS Processing ☐ (e) Inspectorate ☐	
(c) Processing ☐	

	Plans Date Stamped ☐
	Date Stamped Filled in ☐
EO: Daniel O Connor	**AA:** Fadimie Khatipova
Date: 31/1/25	**Date:** 31/01/25

D. O'Connor

Dáire Littleton Caden

From: Evelina Sadauskaite <esadauskaite@mkoireland.ie>
Sent: Dé Céadaoin 29 Eanáir 2025 17:13
To: Appeals2
Subject: 211034-e - Lomaunaghbaun Submission Response ABP REF - 321022-24
Attachments: 211034-c - Submissions Response - F - 29.01.2025.pdf

Caution: This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

Afternoon,

On behalf on our client, Newtown Farming Ltd, please see attached a submission response in relation to the development of a quarry and associated site development works in Lomaunaghbaun, Tuam, Co. Galway (ABP Ref: 321022-24).

Can you kindly acknowledge receipt of this email.

Best regards,
Evelina

Evelina Sadauskaite
Planner

MKO
9C Beckett Way, Park West
Business Park, Dublin, D12 XN9W

Offices in Galway and Dublin
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MKO Water Limited t/a MKO. Registered in Ireland No: 338589. VAT No: IE8358589Q
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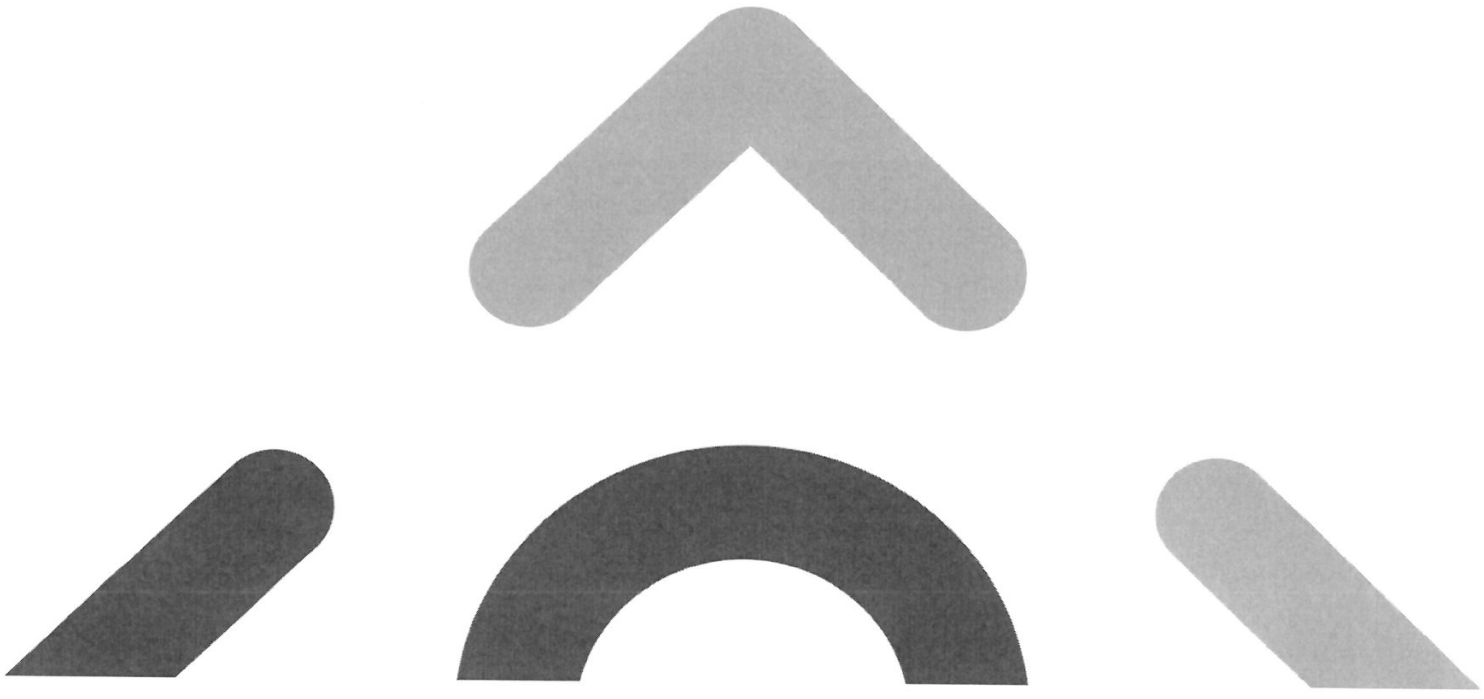


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Planning and Environmental Consultants

Response to Submissions ABP-321022-24

Proposed Quarry on lands at Lomaunaghbaun, Co. Galway



DOCUMENT DETAILS

Client:	Newtown Farming Ltd.
Project Title:	Response to Submissions
Project Number:	211034-c
Document Title:	Response to Submissions ABP-321022-24
Document File Name:	211034-c – RGOASubmissions – D
Prepared By:	MKO Tuam Road Galway Ireland H91 VW84

Planning and Environmental Consultants

Rev	Status	Date	Author(s)	Approved By
01	Final	29.01.2025	ES	SM C

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INTRODUCTION

We are instructed by our client, Newtown Farming Ltd, Cortoon, Tuam, Co. Galway, to prepare this Response to Appeal Submissions in respect of two third-party submissions made to An Bord Pleanála in relation to a decision by Galway County Council to grant planning permission for the development of a quarry for sand extraction and processing on lands at Lomaunaghbaun, Co Galway (Pl. Ref. 24/60013) (ABP-321022-24).

The full development description for the proposed development as per the public notices is as follows:

> *The development of a quarry for the extraction of sand in a phased basis over an area of c. 6.2 ha by an average depth of 3m from existing ground levels in the townland of Lomaunaghbaun, Co. Galway. The proposed development also includes the following:*
>
> *i. Installation of a processing plant and associated components;*
> *ii. Stockpiling of topsoil removed during quarrying for future implementation of a restoration plan;*
> *iii. Construction of a refuelling area;*
> *iv. Installation of a site office (30 sq.m);*
> *v. Installation of a wastewater holding tank (63.6 sq.m)*
> *vi. Installation of a weighbridge and wheelwash;*
> *vii. Installation of a new site entrance along with road reprofiling works on the L2232;*
> *viii. Installation of a groundwater well;*
> *ix. Provision of drainage infrastructure including a new hydrocarbon interceptor and surface drains on hardstanding;*
> *x. All associated site development and operational works; and*
> *xi. Site restoration following the cessation of sand extraction works.*
>
> *Permission is sought for an operational lifetime of 10 years. The Planning Application is accompanied by an Environmental Impact Assessment Report and Natura Impact Statement.*

The planning application was lodged with Galway County Council on 9th January 2024. Subsequently, GCC granted permission on 12th September 2024 for the proposed development subject to 18 no. conditions.

Two third party submissions have been lodged to An Bord Pleanála on 4th and 5th November 2024 in respect of the Appeal ABP-321022-24. An Bord Pleanála wrote to MKO on the 7th January 2025 inviting to respond to the submissions made. The submissions were made by An Taisce and Sabrina Joyce-Kemper.

We have examined the submissions, and we are satisfied that the proposed development is in accordance with the Galway County Development Plan 2022-2028 and the proper planning and sustainable development of the area, as evidenced in the decision that was issued from the Planning Authority on this application. This submission should be read in conjunction with the Technical Note, prepared by Hydro Environmental Services (HES) in Appendix 1 and the revised drawings, prepared by MKO in Appendix 2.

2. THIRD PARTY SUBMISSIONS

The grant of permission from Galway County Council has been appealed to An Bord Pleanála by Mr Peter Sweetman and two submissions have been received by ABP from An Taisce and Sabrina Joyce-Kemper. The matters referred to in the submissions are addressed in the following sections below.

2.1 Response to Submissions

2.2 Introduction

In the first instance, and for the avoidance of doubt, we wish to provide clarification to the Board in respect of what comprises the 'proposed development' in respect of the subject planning application. The public notices for the planning application stated the following:

> *'The development of a quarry for the extraction of sand in a phased basis over an area of c. 6.2 ha by an average depth of 3m from existing ground levels'.*

In the course of preparing a response to the submissions, MKO have established that there were a number of drafting errors in the planning application submission, which has potentially led to confusion as to what comprises the 'proposed development'. Specifically, planning drawings submitted with the Planning Application, namely Drawing No's. 211034-06, 211034-07 and 211034-14 indicate that it is proposed to extract material to a depth of 6m below existing ground level in a localised sector of the application site where the proposed processing plant is to be located. It should be noted that notwithstanding the drafting error, the findings or the EIAR are unaltered.

Where relevant, this Response submission will clarify this matter. We respectfully request that the Board accept the enclosed Drawing No's. 211034-06 (V2) , 211034-07 (V2) and 211034-14 (V2) which resolve the drafting error, and which illustrate that the proposed extraction extent is to an average of 3m below ground level in accordance with the development description set out in the planning application. Where relevant, in the context of addressing matters raised in the 2 no. submissions, this response clarifies matters where they relate to the proposed depth of extraction.

The Board will also note that the extent of the extraction was condition by Galway County Council in Condition No.2 of the grant of planning permission which stipulates the following:

> *This grant of planning permission for quarrying relates only to the area of 6.2 hectares, as outlined in red, undertaken down to a level of 3m from existing ground levels, in accordance with the details submitted with the application on the 9th January 2024. No extraction of rock or other quarrying operations shall be undertaken on any part of the overall lands, outside the site of this application, unless a separate planning permission has been granted for such development.*

This condition is consistent with the development description for this planning application and indeed, with Drawing No's. 211034-06 (V2) , 211034-07 (V2) and 211034-14 (V2), submitted to the Board as part of this Response Submission.

2.3 Item 1 : An Taisce Submission

The submission received from An Taisce highlights concerns in relation to the potential for impacts on Drumbulcaun Bog pNHA, a nationally important site for diverse intact raised bog and fen habitats. The submission highlights the proximity of the Proposed Development to this National Site, as well as the high vulnerability of the ground water catchment (Clare-Corrib) within which both sites are located.

As per the reasons above, Drumbulcaun Bog pNHA was identified to be within the Likely Zone of Influence of the Proposed Development (Table 6-3 of the Biodiversity chapter), as, in the absence of mitigation, the potential for significant impacts on the ground water dependant features of interest of the site was identified via the deterioration of groundwater quality. Therefore, this site was considered as a Key Ecological receptor (KER) in Table 6-10 for further assessment.

An impact assessment was undertaken in Section 6.7 of the Biodiversity chapter, and potential for impacts on groundwater quality was assessed in Table 6-11 (construction phase) and Table 6-15 (operational phase). For the reasons outlined in these tables, which included mitigation measures and best practice procedures, no significant impacts on ground water quality is anticipated, as a result of the construction and/or operational phases of the Proposed Development.

Furthermore, in light of this submission from An Taisce, and the concerns around ground water impacts, a Technical Note has been provided by Hydro Environmental Services (HES) in Appendix 1, who also prepared Chapter 8: Hydrology and Hydrogeology of the submitted EIAR. Section 4 of the Technical Note addresses concerns pertaining to Drumbulcaun Bog pNHA.

Considering the above, which is a summary of the information already provided within the EIAR, as well as the clarifications provided in the Technical Note in Appendix 1, no residual impacts on Drumbulcaun Bog pNHA are anticipated, as a result of the Proposed Development.

2.4 Item 2: Sabrina Joyce Kemper Submission

2.4.1 Loss of hedges and impacts on bats

Habitats within the EIAR Site Boundary were surveyed on the 9th of August 2022 and evaluated for their suitability to support roosting, foraging and commuting bats. Connectivity with the wider landscape was also considered. Suitability was evaluated following Collins (2016) which provides suitability categories for habitats. The categories are described fully in Collins (2016) and are broken down into High, Moderate, Low and Negligible, suitability.

Hedgerows within the site were assessed as providing *moderate* suitability for commuting and foraging bats while grasslands were assessed as providing *Low* suitability for commuting and foraging bats. Further details is provided in Section 6.6.2.4.1 of the Biodiversity chapter of the EIAR.

The submission pertaining to the bat surveys undertaken by MKO states that the surveys were deficient and did not fully follow guidance i.e. Collins (2016), Bat Surveys for Professional Ecologists: Good Practice Guidance. The submission states that a bat manual survey '*took place at dusk just before sunset on 9th of August for approx. 30 minutes*' and that this was contrary to Collins (2016), which '*recommend the surveys take place 15 minutes before sunset to 1.5-2 hours after sunset*'.

In response, as per Table 6-1 of the Biodiversity chapter of the EIAR, which has been repeated below for ease, the manual activity survey undertaken commenced 23 minutes before sunset, and concluded 2 hours and 5 minutes after sunset.

Date	Surveyors	Survey Type	Sunset/ Sunrise	Start-End	Weather
9th August 2022	Claire Stephens & Katie Grice	Dusk Transect	21:15	20:52 – 23:20	13 - 22°C; dry; calm

In addition to the above manual activity survey, two full spectrum static bat detectors, Song Meter SM4BAT (Wildlife Acoustics, Maynard, MA, USA) were deployed within the site for a total of 14 nights; from the 26th of July 2022 to the 9th of August inclusive, which is the optimal survey period for such surveys. Considering the nature of the site, which, while providing foraging habitat in the form of

hedgerows and open grassland, had limited connectivity to the wider landscape, the surveys undertaken to inform the impact assessment were sufficient, and followed the relevant guidance.

2.4.2 Activity and Mitigation

Ms. Joyce Kemper's submission states that bat activity is high within the site and given the absence of sufficient surveys and, considering the extent of hedgerow to be lost as a result of the proposed development, significant impacts cannot be mitigated.

In response, MKO would contend that Section 2.4.1 above addresses these concerns. The sections below detail the consideration given to bats in the impact assessment, as provided in the Biodiversity chapter.

As per Section 6.6.2.4.2 and Section 6.6.2.4.3 of the Biodiversity chapter, the activity surveys identified five bat species, as well as *Myotis* species, to be active within the site. Activity was dominated by *pipistrelle* species, with recordings of Leisler's bat, Myotis and brown long eared bat, as well as one occurrence of lesser horseshoe. Given the identified activity, bats were included as a KER for assessment and bat populations utilising the site were considered of *Local Importance (Higher Value)* only, as the site is outside the foraging range of any populations designated under a Nationally or Internationally protected site.

As no roosting potential for bats was identified within the site, the potential for significant impacts on bats was assessed in Section 6.7 of the Biodiversity chapter, as a result of loss of commuting and foraging habitat and disturbance only. As proposed works within the site would be undertaken during day light only, no significant impacts as a result of disturbance were anticipated.

The unmitigated phased loss of hedgerow within the site, which provides potential suitable commuting and foraging habitat for bats, was assessed as a potential significant effect on bat species of *local importance (higher value)*. However, as per Table 6-18 of the Biodiversity chapter, the hedgerow proposed to be removed for each phase of the development will be reinstated prior to progression to the next phase.

Given the phased approach and reinstatement, as well as the extent of commuting and foraging habitat in the wider environment, Table 6-18 concludes '*Following the implementation of the mitigation measures as described above, there will be no significant residual effect on bats. The Proposed Development will not result in significant long-term habitat loss for any bat species*'.

2.4.3 Badger and marsh fritillary

Ms. Joyce Kemper's submission highlights an alleged deficiency in the assessments undertaken for badger and marsh fritillary within the Biodiversity chapter.

Survey methodologies for both badger and marsh fritillary are detailed in Section 6.4.3.1.2 of the Biodiversity chapter, which were intended to identify suitable breeding habitat for each.

Given that the Proposed Development site provides potential suitable habitat for badger, badger surveys were undertaken during the multidisciplinary survey, as per Section 6.4.3.1.2 of the Biodiversity chapter. As per Section 6.6.2.1, no indication of significant badger activity was recorded within the site, and no breeding sites (setts) were identified.

Regards marsh fritillary, whilst this species is known within the same hectad (M55) as the Proposed Development site, no significant supporting habitat for this species was identified within the site. Whilst a small number of devil's-bit scabious plants was recorded, no significant supporting habitat for this species was identified. In addition, the surveys undertaken were carried out in August, during the larval web season of Marsh Fritillary. No larval webs were recorded within the site.

Considering the above, and the abundance of similar habitats in the wider environment, neither badger nor marsh fritillary were considered as KERs and further assessment was not deemed necessary.

Proximity to Protected Sites

The submission highlights concerns pertaining to Drumbulcaun Bog pNHA, and the potential for impacts on its features of interest (diverse examples of intact raised bog and fens) as a result of deterioration of groundwater quality.

As per the response to the submission received from An Taisce above, this National Site was identified to be within the Likely Zone of Influence of the Proposed Development (Table 6-3 of the Biodiversity chapter), as, in the absence of mitigations, the potential for significant impacts on the ground water dependant features of interests of the site was identified via the deterioration of groundwater quality. Therefore, this site was considered as a Key Ecological receptor (KER) in Table 6-10 for further assessment.

An impact assessment was undertaken in Section 6.7 of the Biodiversity chapter, and potential for impacts on groundwater quality was assessed in Table 6-11 (construction phase) and Table 6-15 (operational phase). For the reasons outlined in these tables, which included mitigation measures and best practices procedures, no significant impacts on ground water quality was anticipated, as a result of the construction and operational phase of the Proposed Development.

Furthermore, in light of this submission from An Taisce, and the concerns around ground water impacts, a Technical Note has been provided by Hydro Environmental Services (HES) in Appendix 1, who also prepared Chapter 8: Hydrology and Hydrogeology of the submitted EIAR. Section 4 of the Technical Note addresses concerns pertaining to Drumbulcaun Bog pNHA.

Considering the above, which is a summary of the information already provided within the EIAR, as well as the clarifications provided in the Technical Note in Appendix 1, no residual impacts on Drumbulcaun Bog pNHA are anticipated, as a result of the Proposed Development.

2.4.11 Hydrogeology

The submission refers to groundwater vulnerability and abstraction. It must be noted that all extraction will take place above the groundwater table, and therefore no effects are likely as assessed in the EIAR. It must be noted that all extraction will take place above the groundwater table, and therefore no effects are likely as assessed in the EIAR. Nevertheless, emphasis is placed on mitigation with regard surface water and groundwater protection. The main mitigation with respect groundwater quality protection during the extraction phase will be employment of best practice measures with respect to oil usage and refuelling of plant and machinery (Section 8.5.2.3 of the EIAR). For further detail on hydrological matters, please refer to the Technical Note, prepared by Hydro Environmental Services (HES) in Appendix 1.

It is noted that the Hydrogeology Section of Ms. Joyce Kemper's, submission identifies alleged discrepancies in the proposed extraction volumes referred to in the planning application submission. Based on the drafting error discussed in Section 2.2. There was a minor drafting error in the calculated extraction volumes. For clarity, the correct extraction volumes are as follows –

- Phase 1: The first phase of extraction will extend to an average depth of 2.8 metres and will allow for the extraction of circa 29,178 m3 of material.
- Phase 2: The second phase will extend to an average excavation depth of 3 metres and will allow for the extraction of circa 64,772 m3 of material.
- Phase 3: The third phase will extend to an average excavation depth of 1.7 metres and will allow for the extraction of circa 48,088 m3 of material.

3. CONCLUSION

This Response to Submissions demonstrates that the proposed development complies with all the relevant provisions, objectives and guidelines of Galway County Development Plan 2022-2028, national, regional and local guidelines and the principles of proper planning and sustainable development.

On addition, the Response to Submissions addresses all of the issues raised in the third-party submissions. We would concur with the conclusions of the Planning Authority in their assessment of the development proposal which concludes the following:

> *'The proposed development has been assessed within the restrictions imposed by the principles of proper planning and sustainable development and having regard to the policies and objectives of Galway County Council as set out in the County Development Plan 2022-2028. Based on this assessment it is considered that the proposed development is in accordance with the proper planning and sustainable development of the area and with the provisions of the County Development Plan 2022-2028.'*

In view of all the matters set out in this response document, as well as the reports and assessment submitted to the Planning Authority and to An Bord Pleanála as part of the Planning Application submission, we respectfully request that An Bord Pleanála upholds the decision of the Planning Authority to grant planning permission for the proposed development.

APPENDIX 1

HYDRO ENVIRONMENTAL SERVICES

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Co.Waterford
Ireland

tel: +353 (0)58 44122
fax: +353 (0)58 44244
email: info@hydroenvironmental.ie
web: www.hydroenvironmental.ie

Date: 28th January 2025
Our Ref: P1601-1-0001

MKO
Tuam Road,
Galway, Ireland,
H91 VW84

F.A.O. Mr Tom Madden

Dear Mr Madden

Re: An Bord Pleanála Third Party Appeal Response regarding Proposed Sand and Gravel Extraction at Lomaunaghbaun, Tuam, Co. Galway (ABP Ref: ABP-321022-24)

1 INTRODUCTION

Hydro-Environmental Services (HES) were requested by MKO to respond to third party appeal submissions made to An Bord Pleanála regarding a proposed sand and gravel extraction pit at Lomaunaghbaun, Tuam, Co. Galway (ABP Planning ABP-321022-24).

2 STATEMENT OF EXPERIENCE

Hydro-Environmental Services ("HES") are a specialist geological, hydrological, hydrogeological and environmental practice that delivers a range of water and environmental management consultancy services to the private and public sectors across Ireland and Northern Ireland. HES was established in 2005, and our office is located in Dungarvan, County Waterford.

Our core area of expertise and experience is hydrology and hydrogeology relating to quarry developments including sand and gravel pits. We work on an ongoing basis with some of the main quarry operators in Ireland on quarry expansion projects, water management and compliance work.

David Broderick P.Geo (BSc, H. Dip Env Eng, MSc) is a Hydrogeologist with over 17 years' experience in both the public and private sectors. Having spent two years working in the Geological Survey of Ireland working mainly on groundwater and source protection studies David moved into the private sector. David has a strong background in groundwater resource assessment and hydrogeological/hydrological investigations in relation to quarry and sand and gravel pit developments. David has completed numerous geology and water sections for input into EIARs for a range of commercial developments.

Michael Gill P. Geo (B.A.I., MSc, Dip. Geol., MIEI) is an Environmental Engineer/Hydrogeologist with over 22 years' environmental consultancy experience in Ireland. Michael has completed numerous geological, hydrological and hydrogeological impact assessments for the extractive industry in Ireland. He has also managed EIAR assessments for infrastructure projects and private residential and commercial developments. In addition, he has substantial experience in wastewater engineering and site suitability assessments, contaminated land investigation and assessment, wetland hydrology/hydrogeology, water resource assessments, surface water drainage design and SUDs design, and surface water/groundwater interactions.

HES completed the Land/Soils and Water Chapters of the Lomaunaghbaun Environmental Impact Assessment Report (EIAR).

3 RESPONSE APPROACH

Submissions on the Proposed Development appeal were received from An Taisce and Sabrina Joyce Kemper and are summarised in **Table A** below on a topic basis. This submission responds to individual topics as outlined in the table below.

Table A: Summary of Submissions Topics & Author

Topic	Submission Name	Response Section
Drumbulcaun Bog pNHA	An Taisce & Sabrina Joyce Kemper	Section 4
Lough Corrib SAC	Sabrina Joyce Kemper	Section 5
Gallagh Group Water Scheme		Section 6
Groundwater Vulnerability		Section 7
Groundwater Abstraction		Section 8

4 DRUMBULCAUN BOG PNHA

An Taisce state the Proposed Development "*would set a negative precedent for further development if permitted without scientific certainty of the absence of negative effects upon the pNHA*".

Sabrina Joyce Kemper highlighted [in bold text] in her submission on Drumbulcaun Bog pNHA that "***local hydrogeology is therefore an important element in fen peat formation as the wetland conditions are maintained by groundwater levels in the low-lying area being close to, or above, ground surface***", which draws her to make the point "*the planners screened out Drumbulcaun for further assessment stating it had no surface water or groundwater connection to the site, this was irrational based on the comments in bold above*".

The impact assessment carried out for Drumbulcaun Bog pNHA in Section 8.2.15 and Section 8.5.2.4 of the EIAR Water Chapter was informed by site specific groundwater level monitoring data (Section 8.3.9) for the Proposed Development site (1 whole year of continuous groundwater level data was collected from June 2022 to June 2023) as well as groundwater level monitoring data published in a hydrogeological report[1] for an existing quarry development expansion located in the area of Drumbulcaun Bog pNHA (Section 8.3.9).

What this data scientifically proves is that in addition to Drumbulcaun Bog pNHA and the Proposed Development being in separate surface water catchments (as per WFD/EPA mapping), the pNHA and Proposed Development are also located in separate groundwater catchments.

This assessment is summarised in Section 8.3.9 of the Water Chapter:

> "*The easterly groundwater flow direction at the Proposed Development site, the westerly direction in the area of at Dunblaney townland* [East of pNHA] *and southerly direction at Shanvally* [south of pNHA], *indicates the presence of a groundwater divide immediately to the west of the Proposed Development site location. The groundwater divide therefore appears to align with topography and a surface water sub-catchment divide which runs immediately to the west of the Proposed Development site*".

Based on the above hydrogeological data and the fact that the Proposed Development will extract above the groundwater table, there is no potential to effect Drumbulcaun Bog pNHA. (refer to Section 8.3.15 of the EIAR).

[1] *Investigations carried out by Envirologic (2022) with regard a proposed sand and gravel pit (Planning Ref 20/1447) at Dunblaney, located approximately 0.8km to the northwest of the Proposed Development site. The Envirologic report is attached as Appendix 8-2 of the EIAR.*

5 LOUGH CORRIB SAC

Sabrina Joyce Kemper stated the following in Section 2.5 of the submission:

> *"Levally Stream lies approximately 600 metres east of the site. Levally Stream forms Lough Corrib SAC and a number of species protected under the Lough Corrib SAC conservation objectives. According to the application, the site equipment will be located to the southeast of the site* [SAC]".
>
> *It is proposed to excavate to a depth of 6m to install it* [site equipment]. *This would go below the groundwater level according to the previous quarry, now reinstated, located across the road which is to be the borrow pit for the proposed wind farm. So, there may be a possibility of contamination of groundwater. This needs to be fully addressed by the applicant".*

The average excavation depth of the Proposed Development is 3m which is ~1m above the maximum groundwater level recorded in the lowest part of the site (Phase 1).

Nevertheless, mitigation for groundwater quality is paramount and measures for preventing ingress of potential contaminants such as hydrocarbons and sediment into groundwater are provided in the EIAR.

The only pathway for potential contaminants from the Proposed Development site to reach Lough Corrib SAC is via groundwater baseflow followed by surface water flows in the Levally Stream. There are no drains or streams connecting the Proposed Development site to the Levally Stream.

With regard sediments/fines, the lack of conduit flow /rapid groundwater flow [site investigations encountered competent bedrock across the site], means that sediments/fines will be filtered out naturally before groundwater reaches the Levally Stream. In addition, there is mitigation proposed in Section 8.5.2.2 of the EIAR to prevent sediments/fines entering the groundwater system.

Oils/fuels and cement-based products are potential contaminants on all quarry and construction site, but the risk can be managed and negative affects avoided if best practice measures are applied.

Refer to the EIAR for a full description of these measures with respect to hydrocarbons (Section 8.5.1.1 & 8.5.2.3) and cement-based products (Section 8.5.1.2).

Residual effects with regard sediments/fines, hydrocarbons and cement-based products are assessed to be imperceptible.

6 GALLAGH GWS

In section 2.7 of the Sabrina Joyce Kemper submission, the author refers to Figure 1 of the Envirologic report (2022) which shows the GSI mapped Gallagh GWS groundwater Source Protection Area.

The submission states the findings of the EIAR for the Proposed Development contradict the Envirologic report which shows the area of the Proposed Development inside the GSI Gallagh GWS SPA.

Indeed, the Proposed Development is inside the GSI mapped SPA as stated in Section 8.3.16.2 of the EIAR:

> *"The Proposed Development site is mapped by the GSI to be inside Gallagh GWS SPA. However, hydrogeological investigations completed at the Proposed Development site have revealed that local groundwater flow is to the east towards the Levally Stream. Groundwater from the area of the Proposed Development site*

will not flow towards the source of the GWS which is to the southwest. Therefore, the Proposed Development site is not located inside the Gallagh GWS SPA and can be ruled out for further assessment".

However, as explained above, HES have collected site specific groundwater level data that demonstrates that local groundwater flow is to the east towards the Levally Stream and away from the direction of the SPA. Therefore, the Proposed Development cannot impact on the Gallagh GWS. This is explained in Section 8.3.16.2 of the EIAR.

7 GROUNDWATER VULNERABILITY

Groundwater vulnerability is dealt with in Section 8.3.10 and Section 8.5.2.1 of the Water Chapter.

The groundwater vulnerability is rated predominately "Extreme" across most of the site with the exception of the eastern portion which is "High" based on the actual site hydrogeological condition.

Albeit there will be a slight increase in groundwater vulnerability due to the removal of overburden, there will be no actual change in the current greenfield/baseline vulnerability rating which is "High" to "Extreme". Post extraction the vulnerability rating will still remain as "High" to "Extreme".

It should be noted that most operational quarry sites (particularly bedrock quarries) can be mapped as Extreme Vulnerability as overburden is generally stripped away. Likewise sand and gravel deposit typically have a High Vulnerability rating.

Therefore, emphasise must be placed on mitigation with regard surface water and groundwater protection.

The main mitigation with respect groundwater quality protection during the extraction phase will be employment of best practice measures with respect to oil usage and refuelling of plant and machinery (Section 8.5.2.3 of the EIAR).

It is proposed in Section 8.5.2.2 that the aggregate will not be extracted down to bare bedrock, thus leaving a protective layer of existing subsoil over bedrock for the filtration of any surface water runoff that might be generated at the site during the extraction and following restoration phase.

The spoil/fines from the aggregate processing will be stored in bunded cells constructed within in-situ sand and gravel deposits. All runoff from spoil/fine storages areas will be contained and directed to ground within the cell, thereby the underlying sand and gravels filtering out any fines.

Post extraction phase a landscape and restoration plan will be implemented. This will involve previously stripped overburden being placed on the pit floor to establish grassland which will provide a level of protection to groundwater similar to the greenfield/baseline scenario.

As stated in Section 8.5.2.1 of the EIAR, application of best practice methods with regard oils and fuels and the proposed restoration plan means effect on groundwater vulnerability will be imperceptible.

8 GROUNDWATER ABSTRACTION

In Section 2.9 of her submission Sabrina Joyce Kemper poses the question:

"If water is abstracted could this have an effect on the water levels in Drumbulcaun Bog pNHA? This should be clarified and assessed. A Water Framework Directive assessment of groundwater impact would be welcome".

Based on the hydrological/hydrogeological setting (*i.e.* different surface water and groundwater catchments to that of Drumbulcaun Bog pNHA), extraction above the groundwater table and the proposed low groundwater volumes that will be abstracted from an on-site well for processing, no effects are likely as assessed in the EIAR.

The total daily demand for aggregate washing, wheel wash and dust suppression is expected to be under 25m³/day as a water recycling system is proposed for the site.

The water balance presented in Section 8.3.2 of the Water Section calculates the estimated groundwater recharge for the site area (6.2ha) is 35,340m³/year (average ~97m³/day). Due to the available recharge occurring within the site (~97m³/day), no significant off-site affects are likely as a result of abstracting 25m³/day.

A WFD Assessment Report for the Proposed Development was attached as Appendix 8-4 of the EIAR. The nature of the Proposed Development (*i.e.* lack of dewatering or discharges) along implementation of the pollution prevention mitigation measures will ensure there will be no effect on WFD status. The submitted WFD compliance assessment report confirms this assessment.

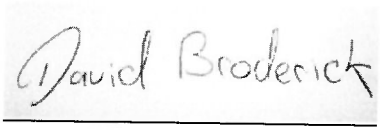
9 SUBMISSION SUMMARY

- A robust and detailed EIAR for the Proposed Development at Lomaunaghabaun Quarry, Co. Galway was submitted with the planning application;
- The EIAR included a detailed assessment of potential impacts of the Proposed Development on the local hydrological and hydrogeological environment including designated sites (i.e. Drumbulcaun Bog pNHA & Lough Corrib SAC) and local water supplies (Gallagh GWS);
- There is no proposed extraction or development below the groundwater table;
- Long term groundwater level monitoring data as well as relevant site-specific hydrogeological data from other local developments was used to scientifically inform the assessments;
- The nature of the Proposed Development (*i.e.* lack of dewatering and discharges as well application of water recycling) along with implementation of the pollution prevention mitigation measures will ensure there will be no significant effects on the water environment; and,
- All matters raised in the submissions were previously comprehensively addressed in the EIAR and are clarified robustly in the above response.

10 CLOSURE

We trust the above response meets your requirements. Please contact the undersigned if you have any questions regarding the above.

Yours sincerely,



David Broderick
Hydrogeologist
B.Sc., H. Dip Env Eng. MSc, P. Geo

APPENDIX 2



Drawing Legend

Planning Application Boundary

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N

DRAWING TITLE

Proposed Site Layout Extraction Levels

PROJECT TITLE

Lomaunaghbaun Quarry

DRAWING BY	CHECKED BY
Joseph O Brien	Tom Madden
PROJECT No.	DRAWING No.
211034	211034 - 06 v2
SCALE	DATE
1:2,500 @ A3	28.01.2025
OS SHEET No.	
2678, 2679, 2747, 2748	

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Drawing Legend

- Planning Application Boundary
- Proposed Phase 1 Track
- Proposed Phase 2 Track
- Stockpile Area
- Site Office
- Weighbridge
- Wheelwash
- Fueling Area
- Drainage Pipe from Wheelwash
- Drainage Pipe to Recycled Water Tank

N

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DRAWING TITLE

Proposed Site Layout Infrastructure Area

PROJECT TITLE

Lomaunaghbaun Quarry

DRAWING BY: Joseph O Brien	CHECKED BY: Tom Madden
PROJECT No: 211034	DRAWING No: 211034 - 07v2
SCALE: 1:2,500 @ A3	DATE: 28.01.2025
OS SHEET No: 2678, 2679	

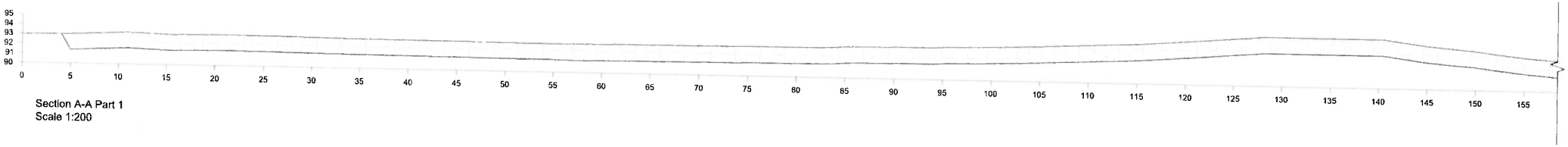
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Drawing Legend

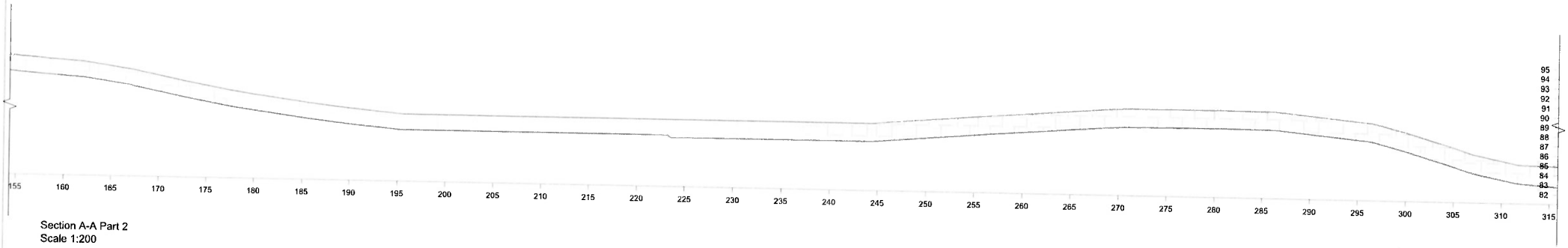
- Phase 1
- Phase 2
- Phase 3
- Ground Level
- Proposed Ground Level

Overall Section A-A
Scale 1:1,000

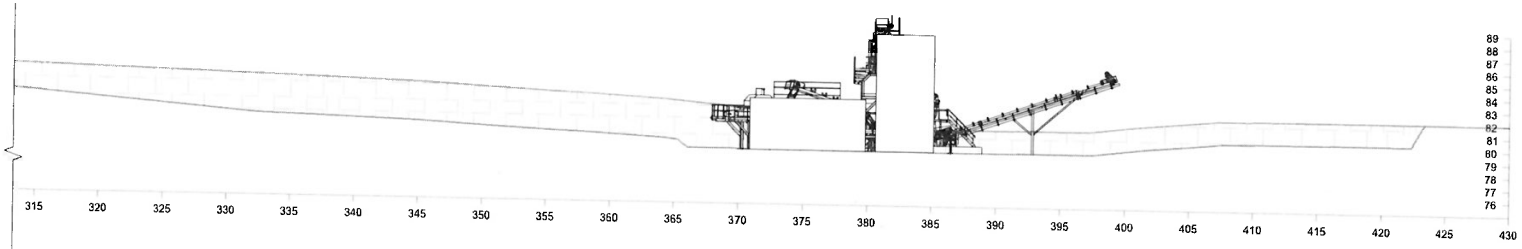




Section A-A Part 1
Scale 1:200



Section A-A Part 2
Scale 1:200



Section A-A Part 3
Scale 1:200

Site Sections A-A

Lomaunaghbaun Quarry

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PROJECT No: 211034	DRAWING No: 211034 - 14 v2
SCALE: 1:200 @ A1	DATE: 28.01.2025

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