Dunboyne LRD

784-B071879

Interim Review Report

Technical EIAR Chapters and Appendices Review

Document prepared on behalf of Meath County Council

February 2026

Tetra Tech Limited. Registered in England number: 01959704

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1.0 INTRODUCTION

1.1 PURPOSE OF THIS REPORT

1.1.1 Tetra Tech has been commissioned by Meath County Council (MCC) to conduct a review of some technical chapters of the Environmental Impact Assessment Report (EIAR) prepared by McCutcheon Halley Planning Consultancy. The EIAR was submitted on behalf of Marina Quarter Ltd (hereafter referred to as the 'applicant') in support of a planning application (ref: 2660001), located at Bennetstown (townland) to the west of the R157 and North of Kennedy Road, and extending into Pace and Dunboyne (townlands), Dunboyne North, Co. Meath, Irland.

1.1.2 The EIAR chapters reviewed as part of this report are as follows:

- Chapter 5: Land, Soils and Geology;
- Chapter 6: Hydrology and Hydrogeology;
- Chapter 7: Air Quality;
- Chapter 8: Climate Change;
- Chapter 9: Noise and Vibration; and
- Chapter 10: Waste.

1.1.3 The following appendices supporting the EIAR chapters were also considered as part of this review:

- Appendix 5-1: NRA Criteria for rating the Magnitude and significance of Impacts at EIA Stage;
- Appendix 6-1: NRA Criteria for rating the Magnitude and significance of Impacts at EIA Stage;
- Appendix 6-2: Water Framework Directive (WFD) Screening Assessment;
- Appendix 10-1: Resource Waste Management Plan;
- Appendix 10-2: Operational Waste Management Plan.

1.1.4 The EIAR chapters review have been prepared subject to the Planning and Development Act 2000 (revised 2025)[1], the S.I. No. 600/2001 - Planning and Development Regulations 2001[2], and S.I. No. 296/2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018[3] (hereafter referred to as 'the EIA Regulations'), as well as topic specific guidance described in each technical chapter, where required. Therefore, they have been assessed against the requirements of the EIA Regulations to confirm its compliance and acceptability.

1.1.5 Each EIAR chapter on this report has been reviewed in the context of current and forthcoming relevant policies and legislation, including applicable planning policies, standards and strategic

[1] Irish Government. (2005). *Planning and Development Act 2000.* Available at: https://www.irishstatutebook.ie/eli/2000/act/30/section/172/enacted/en/html#partx
[2] Irish Government. (2005). *S.I. No. 600/2001 - Planning and Development Regulations, 200*1. Available at: https://www.irishstatutebook.ie/eli/2001/si/600/made/en/print#part10
[3] Irish Government. (2018). *S.I. No. 296/2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.* Available at: https://www.irishstatutebook.ie/eli/2018/si/296/made/en/print

plans. Furthermore, each technical chapter and respective supporting documents have been cross reviewed to ensure consistency, alignment, and adherence to best practices.

1.1.6 This review has also determined whether each chapter adopts an appropriate scope and a clear approach to identify the presence or absence of significant effects, as well as the proposed mitigation measures to address any identified effects.

1.1.7 This review highlights strengths or issues of each technical topic assessment and ensure consistency with their respective appendix and input.

1.1.8 When gaps of information, inconsistencies or inadequacy are identified, this review provides advise of what additional information is required to address concerns.

1.2 PLANNING APPLICATION

1.2.1 The EIAR has been submitted in support of a planning application (ref 2660001), with the following description:

'Permission for the following Large-Scale Residential Development consisting of: 1) the demolition of 2 no. existing agricultural farm sheds and associated structures, 2) the removal of the existing GAA pitch and associated structures; 3) the construction of 356 no. residential units comprising 252 no. dwelling houses and 104 no. maisonettes/apartments/duplexes providing a mix of 1, 2, 3 and 4-bed units. The dwelling houses range in height from 2-3 storeys. The maisonettes are 2 storey in height and the apartments/duplexes are in 4 no. blocks (i.e. Blocks A-D) ranging in height from 3 to 4 storeys; 4) a 2 storey creche; 5) modifications to the R157 regional road including changes to the existing carriageway/traffic lanes, the replacement of an existing roundabout with a new signalised junction and the provision of a northern arm off the new signalised junction; 6) a new signalised junction and link road (including new bridge over the River Tolka) connecting the R157 and the Old Navan Road; 7) the provision of footpaths, cycle lanes and 2 no. pedestrian crossings on the existing M3 Parkway access road, 8) foul pumping stations and connection to the existing public sewerage system via the Old Navan Road; 9) a watermain connection to the north of the site at Pace (townland); 10) 4 no. ESB substation/kiosks; 11) construction of conveyance swales and filter drains as part of pluvial flood mitigation measures and 12) all ancillary development works.'

1.2.2 The subject site is located within the townland of Bennetstown to the north of, and within the defined development boundary, of Dunboyne. The site area of 17.22ha is west of the R157 and the M3 Parkway Station. The centre of the site is located c.1.4km north of Dunboyne town centre, which is a c. 1.8km driving distance.

1.3 STATEMENT OF COMPETENCE

McCutcheon Halley Planning Consultants (MH Planning)

1.3.1 Section 1.7 of the EIAR presents a statement of competence from all the technical specialists involved in the EIAR.

1.3.2 The team involved in each of the EIA topics reviewed in this report is shown in the following table:

Topic	Team Member	Qualifications	Organisation
EIA Coordination	Saoirse Kavanagh	BA, MSc, 5 years' experience	McCutcheon Halley Planning Consultants (MH Planning)
Land, Soils and Geology	Rashaqat Ali Siddiqui	BSc, MSc, MIT, 6 years of experience	AWN Consulting Ltd.
	Marcelo Allende	BSc, BEng, 20 years of experience	
Hydrology and Hydrogeology	Rashaqat Ali Siddiqui	BSc, MSc, MIT, 6 years of experience	AWN Consulting Ltd.
	Marcelo Allende	BSc, BEng, 20 years of experience	
Air quality	Ciara Nolan	BSc, MSc, MIAQM, MIEnvSc, 9 years of experience	AWN Consulting Ltd.
Climate Change	Ciara Nolan	BSc, MSc, MIAQM, MIEnvSc, 9 years of experience	AWN Consulting Ltd.
Nosie and Vibration	Alistair Maclaurin	BSc, MIOA, 15 years of experience	AWN Consulting Ltd.
Waste	Elaine Neary	BA, MApplSc, CMWIM, 21 years of experience	AWN Consulting Ltd.
	Chonaill Bradley	BSc ENV,PG Dip Circ Econ, AssocCIWM, 10 years of experience	AWN Consulting Ltd.

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1.3.3 The EIA Regulations state that the reviewers '*shall ensure it has, or has access as necessary to, sufficient expertise to examine the remedial environmental impact assessment report to ensure its completeness and quality and'* after *'thereunder the Board.'*

1.3.4 This review has been conducted by Tetra Tech, registrants of the EIA Quality Mark scheme, which is administered by the Institute of Sustainability and Environmental Professionals (ISEP, formerly known as the Institute of Environmental Management and Assessment, IEMA). Therefore, Tetra Tech is recognised as 'competent experts' as defined by the EIA Regulations.

1.3.5 The technical chapters reviews included within this report have been performed by competent and qualified experts, whose qualifications are described in the following table:

Topic	Reviewer	Qualifications	Verifier	Qualifications
EIA coordination	Ana Conde De Vega, Associate Environmental Planning Consultant	BSc (Hons), MSc, PISEP, MIEnvSC, 15 years' experience	Howard Waples, Head of Environmental Planning	BSc (hons), MSc, MIEMA, CEnv, +20 years' experience
Land, Soils and Geology	Eve McArdle, Senior Environmental Consultant	BSc (Hons), 4 years' experience	Peter McConvey, Associate	MSc, BSc, Cgeol, +30 years' experience
Hydrology and Hydrogeology				
Air quality	Joe Shaw, Senior Air Quality Consultant	BSc (Hons), 8 years' experience.	Sri Srimath, Head of Noise, Air Quality, Lighting	PhD, CEnv, CSci, MIEnvSc, MIAQM, PISEP, MIoL, 30 years' experience.
Climate	Ann-Marie Worobec, Environmental Planning Consultant	BSc, Msc, PISEP, 4 years' experience	Howard Waples, Head of Environmental Planning	BSc (hons), MSc, MIEMA, CEnv, +20 years' experience
Nosie and Vibration	Michaela Moffatt, Senior Environmental Consultant.	BSc, MSc, MIOA, 10 years of experience	Dawit Abraham, Head of Noise & Acoustics	MSc, MIOA, 16 years' experience
Waste	Chris Muir, Associate Planning Consultant- Minerals and Waste	BA, MSc, MRTPI, +10 years of experience	Howard Waples, Head of Environmental Planning	BSc (hons), MSc, MIEMA, CEnv, +20 years' experience

2.0 METHODOLOGY AND REVIEW APPROACH

2.1 OVERVIEW

2.1.1 The review approach for each technical chapter is in compliance with relevant legislation, planning requirements, and the most up-to-date guidance. The methodology applied focuses on evaluating the appropriateness of assumptions, baseline data, and assessment methods, as well as the suitability of predicted impacts, proposed mitigation measures, and implementation actions in the context of the characteristics of the Proposed Development.

2.1.2 For ease of reference, the review clarifications and requests presented in each section of this report have been highlighted in **bold** and are compiled in Table 1, located at the end of the report.

2.2 THE EIAR REVIEW PROCESS

2.2.1 The approach followed for the review of the EIAR chapters has been based on the criteria set out by ISEP within 'Appendix C' of the EIA Quality Mark Applicant Guide[4]. The criteria used covered the following:

- COM3: EIA regulatory compliance.
- COM5: EIA content.
- COM6: EIA Presentation.

2.2.2 Considering the above, this report presents the findings of the review, consolidating all identified clarifications and potential requests for further information under Article 108 'Adequacy of EIAR' of the EIA Regulations and Article 33 require the applicant to submit such further information (hereafter referred as to 'Potential Article 108/33').

2.2.3 Clarifications are explanations required when information in the assessment is unclear or inconsistent. While they do not automatically imply non-compliance with EIA regulations, they are essential for understanding the rationale behind decisions and preventing misunderstandings.

2.2.4 The Potential Article 108/33 requests highlight key issues and non-conformance with the EIA Regulations (e.g. not clearly identifying significant effects, or how they have been established) and provide the applicant with an opportunity to offer further explanations prior to the formal issuance of Article 108/33.

2.2.5 Upon receipt of the applicant's responses to the Clarifications and Potential Article 108/33 requests, Tetra Tech will conduct a subsequent review to assess their adequacy. The applicant will be informed if the responses are deemed sufficient or not and whether the responses are to be considered as 'additional information' and therefore trigger further consultation.

[4] ISEP. (formerly IEMA, 2021). *EIA Quality Mark: Applicant Guide*. https://www.iema.net/media/gelptv4b/eia-quality-mark-applicant-guide-april-2021-v12.pdf

2.2.6 Where a Potential Article 108/33 or a clarification requests leads to modifications of the EIAR, the Non-Technical Summary (NTS) should be amended accordingly.

3.0 REVIEW OF LAND, SOIL AND GEOLOGY EIAR CHAPTER

3.1 PRESENTATION

3.1.1 This EIAR Chapter is structured as follows:

- Introduction.
- Expertise & Qualifications.
- Proposed Development.
- Methodology.
- Difficulties Encountered.
- Baseline Environment.
- The 'Do Nothing Scenario'.
- Potential Significant Effects.
- Mitigation.
- Monitoring Requirements.
- Residual Effects.
- Risk of Major Accidents or Disasters.
- Worst Case Scenario.
- Significant Interactions.
- References & Sources.

3.1.2 This chapter is supported by Appendix 5-1: NRA Criteria for Rating the Magnitude and Significance of the Impacts at EIA stage

3.1.3 Overall, the chapter is well presented and formatted. A minor suggestion is that a list of the associated appendices for the chapter could be presented within the Table of Contents.

3.2 ASSESSMENT APPROACH

3.2.1 The EIAR methodology is correct and clearly defines the guidance, sources of information, relevant legislation and site-specific investigations used to inform the assessment. The methodology relies on the following:

- Transport Infrastructure Ireland (TII) 2009 Guidance for soils and geological attributes, presented in Appendix 5-1.
- Environmental Protection Agency (EPA) 2022 Guidelines on the Information to be contained in Environmental Impact Assessment Reports.

3.2.2 Section 5.4.5 outlines that consultation was undertaken with the council and other stakeholders. It is noted that and appendix (Appendix 1-1: Consultation Responses) have been provided.

However, no supporting documentation or details of this consultation, including when it was completed, are provided. **This is included as a clarification in Table 1 (LSG1).**

3.2.3 The site-specific data referenced in section 5.4.2 namely the Engineering Report and Site Investigation (SI) report are listed as sources of information but their inclusion in the EIAR is not referenced. Although a summary of the Site Investigation is provided in 5.4.4 and reference is made to the volume of material to be excavated these reports should be provided as appendices and their location referenced in the report. **This is included as a Potential Article 108/33 in Table 1 (LSG2).**

3.3 BASELINE

3.3.1 The environmental baseline of the site for soils and geology is sufficiently presented and supported through a series of figures from the sources of information. However, no site-specific investigation information is referenced in this section. Section 5.6 does note that the 'land use at the site has *generally* remained greenfield'. Further description relating to anything not considered greenfield would be helpful to determine significance with respect to potential for influence on land quality, if any. **This is included as a Potential Article 108/33 in Table 1 in Table 1 (LSG3).**

3.3.2 No specific reference is made to the existing agricultural buildings on site, although this is referenced later in Section 5.8. **This is included as a Potential Article 108/33 in Table 1 (LSG4).**

3.3.3 Although the SI findings are included in section 5.4, this information should also be included in the Baseline section. Furthermore, no details of confirmation of no contamination encountered on the site is included. **This is included as a clarification in Table 1 (LSG5).**

3.3.4 In section 5.6.5 the text refers to made ground underlain by clay with extreme vulnerability which does not tie in with the Figure 5.7 mapping or the text provided before the figure. **This is included as a clarification in Table 1 (LSG6)**.

3.3.5 Reference should also be made under section 5.6.8 that the area is largely mapped as moderate aggregate potential mapping as per the GSI online map[5] with minor area of high potential to the east. Reference should also be made that the GSI online Minerals Database indicates no recorded mineral localities within the Proposed Development area however gravel minerals are mapped to the east of the M3 c.0.5km to the site boundary. **This is included as a Potential Article 108/33 in Table 1 (LSG7).**

3.3.6 Section 5.8.1 confirms the presence of existing buildings on-site. No specific reference is made in the chapter to the nature of the buildings and whether they were assessed with respect to potential for any contaminating materials to have been in use or stored there, with respect to risk or otherwise of local contamination of soils/groundwater. **This is included as a Potential Article 108/33 in Table 1 (LSG8).**

[5] Geological Survey. (n.d.). Geological Survey Ireland Spatial Resources. Available at: https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228

3.4 MITIGATION MEASURES

3.4.1 Section 5.8.2.2 references temporary on-site groundwater monitoring wells as a pathway risk to groundwater from pollution events. No reference is made in the chapter regarding any specific mitigation proposed for this, such as formal decommissioning of the wells. **This is included as a Potential Article 108/33 in Table 1 (LSG9).**

3.4.2 In Section 5.10.1 monitoring is specified as not being required as no excavation works proposed. As demolition works will be where existing buildings are, a minimum of a watching brief would be recommended to record any signs of potentially contaminated soils. This should be part of the mitigation in the EIAR chapter. **This is included as a Potential Article 108/33 in Table 1 (LSG10).**

3.4.3 Bullet point 3 under section 5.10.2 states, *'Soil sampling to confirm disposal options for excavated soils in order to avoid contamination run-off.'* No further detail or reference to standard methodology provided. **This is included as a clarification in Table 1 (LSG11).**

3.4.4 Bullet point 5 under section 5.10.2 states *'… monitoring of surface water runoff will be required in case of accidental discharges to underlying geology'*. Reference to the nature of monitoring and/or where the monitoring will be specified in more detail would be beneficial. This comment is also raised for section 5.10.3. **This is included as a clarification in Table 1 (LSG12).**

3.5 ASSESSMENT

3.5.1 The EIAR chapter states that, in the absence of mitigation, the impact of the demolition phase on land, soils and geology is short term, imperceptible and negative, the magnitude of the impact is considered negligible.

3.5.2 The EIAR chapter states that the impact assessment during the construction phase will be slight negative, permanent effect on land take. The activities associated with the construction without mitigation are considered to have a negative but not significant impact on soils and bedrock which are short term and localised.

3.5.3 The predicted impacts during the operational phase on land, soils and geology is that the land take will have a negative slight permanent effect on the environmental of the area. The development itself during the operational phase will have a neutral imperceptible, permanent effect on recharge to localised portions of soils and bedrock due to the introduction of hardstanding. However, the typical activities at the development will not cause disturbance to the land, soils and geology.

3.5.4 Based upon the assessment presented with respect to soils and geology it is agreed that no significant impact should occur, where mitigation measures requested above are implemented.

3.6 CUMULATIVE IMPACTS

3.6.1 Cumulative impacts have been considered in the demolition, construction and operational phases of the Proposed Development. It is noted that, although described elsewhere in the chapter, reference to the influence on recharge to the underlying aquifer is not specifically

included in the relevant hydrology and hydrogeology section (5.14.2.3). **This is included as a Potential Article 108/33 in Table 1 (LSG13)**

3.7 RESIDUAL IMPACTS

3.7.1 The chapter states that, following the implementation of a carefully planned approach, particularly the waste management and adherence to the RWMP, all residual effects will be short term, imperceptible and neutral with a magnitude impact considered negligible.

3.7.2 The chapter outlines that the implementation of the mitigation measures will ensure that the residual impacts during the construction phase on land, soils and geology is neutral, imperceptible and short term and the magnitude of the impact is considered negligible.

3.7.3 The chapter outlines that the implementation of the mitigation measures will ensure that the residual impacts during the operational phase on land, soils and geology is considered neutral, imperceptible and short term and the magnitude of the impact is considered negligible.

3.7.4 Based upon the assessment presented with respect to soils and geology, it is agreed that no significant impact should occur, where mitigation measures requested above are implemented.

4.0 REVIEW OF HYDROLOGY AND HYDROGEOLOGY EIAR CHAPTER

4.1 PRESENTATION

4.1.1 This EIAR Chapter is structured as follows:

- Introduction.
- Expertise & Qualifications.
- Proposed Development.
- Methodology.
- Difficulties Encountered.
- Receiving Environment.
- The 'Do Nothing' Scenario.
- Potential Significant Effects.
- Mitigation.
- Residual Impact Assessment.
- Risk of Major Accidents or Disaster.
- Significant Interactions.
- Monitoring.
- Conclusion.

4.1.2 This chapter is supported by the following appendices

- Appendix 6-1: NRA Criteria for Rating the Magnitude and Significance of the Impacts at EIA stage.
- Appendix 6-2: Water Framework Directive (WFD) Screening Assessment.

4.1.3 Overall, the chapter is well presented and formatted. A minor suggestion is that a list of the associated appendices for the chapter could be presented at the start of the chapter.

4.2 ASSESSMENT APPROACH

4.2.1 The EIAR methodology is correct and clearly defines the criteria, sources of information, relevant legislation/guidance and site-specific investigations used to inform the assessment. This EIAR methodology relies on the following:

- Transport Infrastructure Ireland (TII) 2009 Guidance criteria for rating the magnitude and significance of Hydrological and Hydrogeological impacts , presented in Appendix 6-1
- Environmental Protection Agency (EPA) 2022 Guidelines on the Information to be contained in Environmental Impact Assessment Reports.

4.2.2 Section 6.3.2 references the Engineering Services Report, this report is not provided as a supporting appendix to the EIAR chapter, but it is noted that the report has been provided with

the application. This documentation was not provided to Tetra Tech and therefore has not been considered within the review.

4.2.3 Section 6.4.5 references a consultation undertaken with MCC for a Request for Information (RFI), which included the following requests:

- Private well information with the MCC.
- Dunboyne Public Water Supply Source Protection Zone.

4.2.4 However, no supporting evidence of the results of this consultation is provided within the report or Appendix 1-1: Consultatation Responses. It is noted that the Dunboyne Public Water Supply Source Protection Zone is referenced later in 6.6.5.3 as understood to not be in active use. Clear references to the above points, as well as evidence of the consultation undertaken should be presented within Appendix 1-1 and direct the reader to this. **This is included as a Potential Article 108/33 in Table 1 (HH1)**.

4.2.5 Section 6.6.5.3 states '*As a conservative measure a technical note has considered the risk of impact (construction and operation) to the PWS as if it were an active supply within the planning application (Appendix 6.3)'.* However, no Appendix 6-3 is included. **This is included as a Potential Article 108/33 in Table 1 (HH2)**.

4.2.6 No appendix is provided for the site investigation completed by Ground Investigations Ireland Ltd., in May 2024. Tetra Techn could not located the report on the MCC Planning Permission Applications website to confirm the report was submitted as part of the application. This should be presented as an appendix and referenced in this section. **This is included as a Potential Article 108/33 in Table 1 (HH3)**.

4.3 BASELINE

4.3.1 Section 6.6.3.5- States *'The proposed foul sewer network will connect to the proposed foul sewer pumping stations at the NE boundary, which will discharge to the existing Irish Water foul sewer network'.* No additional details or relevant references in the text or in appendices have been provided with respect to approval of connection/system design. **This is included as a Clarification in Table 1 (HH4)**.

4.3.2 Section 6.6.3.7 references a flood risk assessment, submitted as part of the application. This report is not included as an appendix as part of the EIAR. This report has not been made available to Tetra Tech and therefore not been included in this review.

4.3.3 In Section 6.6.5.2 regards the infiltration testing, no appendix is provided supporting the findings. This should be presented as an appendix and referenced in this section. **This is included as a Potential Article 108/33 in Table 1 (HH5)**.

4.3.4 The statement that *'Given the subsoils are Made ground underlain by clay along with extreme vulnerability'* is not correct. The majority of subsoils are till. In this section it also states based on vulnerability mapped that till cover is expected to be 10m+ in low vulnerability areas. Whilst this may be the case, reference to the GII Site Investigation report (July 2024), which is referenced in the report but not provided as an appendix to the EIAR does not specifically confirm that. G.I.

undertaken in the wider area for areas mapped as low vulnerability indicate possible bedrock at ~6m bgl. **This is included as a clarification in Table 1 (HH6)**.

4.3.5 Section 6.6.5.3 which states '*Our current understanding is that these wells are not actively in use for a public supply and when they were in use required chlorination treatment'.* The source of this understanding is not detailed. Whilst further detail may be in the technical note referenced as Appendix 6.3, no Appendix 6.3 has been made available. **This is included as a Potential Article 108/33 in Table 1 (HH2)**.

4.3.6 Section 6.6.7 references groundwater quality discharging to the estuary, in the context of a surface water hydrological link identified.

4.3.7 Section 6.6.5.3 also references other private wells in the local area with one just beyond the western margin, but no specific reference is made to risk of impact or otherwise to these other nearby receptors. **This is included as a clarification in Table 1 (HH7)**.

4.3.8 Section 6.8.1 confirms the presence of existing buildings on-site. No specific reference is made in the chapter to the nature of the buildings and whether they were assessed with respect to potential for any contaminating materials to have been in use or stored there, with respect to risk or otherwise of local contamination of soils/groundwater. **This is included as a clarification Table 1 (HH8)**.

4.4 MITIGATION MEASURES

4.4.1 The mitigation measures indicated in the EIAR seem overall appropriate to the development activity.

4.4.2 No reference is made to any mitigation measures associated with formally decommissioning the private well identified on the site (section 6.6.5.3) to remove a possible contamination pathway to groundwater. **This is included as a clarification in Table 1 (HH7)**.

4.4.3 In section 6.9.2 no mitigation measures are proposed for the demolition phase as the reports states that given no excavation works are proposed the impacts are not considered significant. However, as demolition works will occur where existing buildings are, a minimum of a watching brief would be recommended to record any signs of potentially contaminated soils. **This is included as a clarification in Table 1 (HH8)**.

4.4.4 Section 6.9.4.2 states that '*A review of Ringsend 2022 annual report confirmed there is adequate capacity for foul water*'. More up-to-date evidence of capacity and indication that the discharge will be approved by Uisce Eireann, as flagged in point 3.4.4 above, would be expected. It is noted that later in section 6.10.5 acknowledgment to this requirement is made regarding approval from Uisce Éireann (UÉ) confirming available capacity in the water and wastewater infrastructure. This may have been advanced outside of the EIA reporting. **This is included as a clarification in Table 1 (HH4)**.

4.5 ASSESSMENT

4.5.1 The EIAR chapter states that in the absence of mitigation measures the demolition phase of the development are considered short term, imperceptible and negative. As it is noted that details of the existing buildings and their contents/historical use have not been provided in the chapter, it is considered that demolition could have impact other than 'imperceptible'. Furthermore, we note that section 6.9.2 states that *'No mitigation measures are required for hydrogeology and hydrology during the demolition phase'*. Based on the information provided, this cannot be properly assess. Depending on building use/activity in this area of the site as a minimum a watching brief may be required with respect to potential contamination in this area.

4.5.2 The EIAR chapter states that in the absence of mitigation measures the potential impacts during the construction phase on surface water quality and groundwater quality are negative, imperceptible and short term. Given that we have not seen confirmation from consultees or documented evidence that the nearby boreholes are not in active use for public water supply, nor have we been provided with the technical note which considers the risk of impact (construction and operation) as referenced in 6.6.5.3, it is not possible to assess whether the determination above is appropriate.

4.5.3 In section 6.6.8 hydrogeological features have been assigned a rating of 'Very high importance'. Whilst risk to groundwater may be limited due to geological setting (majority of site is low vulnerability but there are some limited areas of moderate and high vulnerability) and the nature of development, reference to and the rationale of risk assessment and mitigation for groundwater and identified receptors would be expected to be referenced in some more detail in places. In the assessments of Water Framework Directive Status, no specific reference is made to the associated WFD defined groundwater body.

4.5.4 As stated in 6.9.4.1 SUDS measures are proposed to ensure quantity and quality of discharge water meet relevant discharge licence requirements. No detail is provided in the EIAR, and this aspect has not been reviewed further. However, section 6.3.2 references an Engineering Services Report (Paul McGrail Consulting Engineers, 2024) relating to this component of the project. The description provided in 6.9.4.1 for the Operational Phase notes in case of exceedances water will be retreated on-site or disposed off to a licenced facility. For the operational phase it is not clear how this would be managed but is possibly described elsewhere.

4.5.5 The EIAR chapter states that in the absence of mitigation measures the potential impacts during the construction phase on water quality and flow are negative, imperceptible and short term. Whilst this may be an appropriate assessment, as noted above the missing information relating to SI information and the Appendix 6.3 restricts full review of this.

4.5.6 In the absence of mitigation measures, the potential impacts considered in the chapter during the construction phase on human health and populations due to changes to the hydrological and hydrogeological environment are negative, imperceptible and short term. As noted, we have not seen supporting appendices including the SI to confirm ground conditions nor have we seen evidence to outline the use of nearby boreholes are not used for PWS and/or are not at risk.

4.5.7 The chapter states that in the absence of mitigation measures, the potential impact of operation phase of the Proposed Development to the hydrological and hydrogeological environment are

considered negative, imperceptible and short term. Whilst this may be an appropriate assessment, as noted above the missing information relating to SI information and the Appendix 6.3 restricts full review of this.

4.5.8 The EIAR chapter references in section 6.8.3.1 that the Uisce Eireann's WWT capacity register has capacity for the development at Ringsend WwTP this was reviewed in June 2023, however an updated register may now be available.

4.6 CUMULATIVE IMPACTS

4.6.1 The EIAR states that the cumulative effects during the demolition phase, the implementation of mitigation measures will ensure that any cumulative effect on the hydrogeological and hydrological environment is likely to be short-term, imperceptible and neutral, with a magnitude of impact considered negligible. Whilst the above may be appropriate assessments, as noted above the missing information relating to SI information and the Appendix 6.3 and absence of specific reference to groundwater restricts full consideration of this.

4.7 RESIDUAL IMPACTS

4.7.1 This section of the EIAR does not give specifically reference to the residual impacts on groundwater quality but mostly references surface water quality. The rationale for concluding no risk to groundwater could be usefully included/repeated in this section.

4.7.2 The EIAR chapter states that during the demolition phase, construction and operational phases, the implementation of mitigation measures will ensure the residual effect on the hydrogeological and hydrological environment is likely to be neutral, imperceptible and short-term with a magnitude of impact considered negligible.

4.7.3 Whilst the above may be appropriate assessments, as noted above the missing information relating to SI information, Appendix 6-3 and the absence of specific reference to groundwater restricts full consideration of this.

5.0 REVIEW OF AIR QUALITY EIAR CHAPTER

5.1 PRESENTATION

5.1.1 The Air Quality EIAR Chapter is structured as follows:

- Introduction.
- Expertise & Qualifications.
- Proposed Development.
- Methodology.
- Difficulties Encountered.
- Baseline Environment.
- The 'Do Nothing' Scenario.
- Potential Significant Effects.
- Mitigation.
- Residual Impact Assessment.
- Risk of Major Accidents or Disasters.
- Significant Interactions.
- References & Sources.

5.1.2 Overall, the chapter is well presented and formatted.

5.2 ASSESSMENT APPROACH

5.2.1 The air quality assessment methodology utilises the appropriate Institute of Air Quality Management (IAQM) 'Guidance on the Assessment of Dust from Demolition and Construction' (2024) V2.2 to assess impacts from the construction phase.

5.2.2 The air quality assessment uses the TII guidance 'PE-ENV-01106' (TII 2022. Now 2025 as the 2022 version is withdrawn) to assess the impacts from the operational phase.

5.2.3 It should be noted that IAQM 'Land-Use Planning & Development Control' guidance should also be used alongside the Transport Infrastructure Ireland (TII) 'Air Quality Assessment of Specified Infrastructure Projects' guidance.

5.2.4 The air quality chapter refers to the TII 'Air Quality Assessment of Specified Infrastructure Projects' guidance. This guidance applies to specified infrastructure projects, namely road schemes, and follows a hybrid methodology using the Design Manual for Roads and Bridges (DMRB) 'LA105' traffic screening criteria and the IAQM 'Land-Use Planning & Development Control' guidance significance criteria.

5.2.5 As per the LA105 (Design Manual for Roads and Bridges (DMRB) 'LA105', June 2024) traffic screening criteria, that was used for both construction and operational phases within the EIAR, requires air quality assessment where there are a change of 1,000 Annual Average Daily Traffic

(AADT) flows and a change of 200 AADT flows for Heavy Duty Vehicles (HDV). The IAQM traffic screening criteria outlined in Figure 1 below is considered more appropriate for consideration of the requirement of detailed assessment of residential developments. **This is included as a clarification in Table 1 (AQ1)**.

Figure 1: IAQM Traffic Screening Criteria

The development will:	Indicative Criteria to Proceed to an Air Quality Assessment [a]
1. Cause a significant change in Light Duty Vehicle (LDV) traffic flows on local roads with relevant receptors. (LDV = cars and small vans <3.5t gross vehicle weight).	A change of LDV flows of: - more than 100 AADT within or adjacent to an AQMA - more than 500 AADT elsewhere.
2. Cause a significant change in Heavy Duty Vehicle (HDV) flows on local roads with relevant receptors. (HDV = goods vehicles + buses >3.5t gross vehicle weight).	A change of HDV flows of: - more than 25 AADT within or adjacent to an AQMA - more than 100 AADT elsewhere.

5.2.6 Notwithstanding this, the operational traffic increase is determined to be more than 1,000 AADT on a number of road links as a result of the Proposed Development, as such a detailed air quality assessment has been undertaken for the operational phase.

5.3 BASELINE

5.3.1 The baseline section uses the most recent annual report on air quality in Ireland which is 'Air Quality in Ireland 2024' (EPA 2025).

5.3.2 The baseline section correctly identifies the concentrations of NO_2, PM_{10} and $PM_{2.5}$ to be below the annual average limit of 40 µg/m^3 and 20 µg/m^3.

5.3.3 The utilisation of the data recorded at the Dublin Airport meteorological station is considered appropriate for the assessment.

5.3.4 The Site has correctly been identified as being within Air Quality Zone D, also taking into consideration the proximity to Zone A which has been accounted for when estimating current background pollutant concentration for the area of the Proposed Development site.

5.4 MITIGATION MEASURES

5.4.1 Construction phase mitigation measures have been selected in accordance with guidance from Ireland (DCC, 2018), the UK (IAQM (2024), BRE (2003), The Scottish Office (1996), UK ODPM (2002)) and the USA (USEPA, 1997).

5.4.2 The measures have been divided into different categories for different activities such as communications, site management, operation, etc.

5.4.3 The level of mitigation has been determined based on the assessment outcomes which determined a medium risk of dust soiling impacts and a low risk of dust related health impacts during the construction phase. The mitigation measures to be implemented are considered appropriate for a site with medium risk of dust impacts.

5.4.4 The site-specific mitigation measures relating to the construction phase of the Proposed Development are considered appropriate.

5.4.5 There are no proposed mitigation measures for the operational phase as the impacts are not significant. This is considered appropriated given the results of the operational phase assessment.

5.5 ASSESSMENT

5.5.1 A construction dust assessment has been undertaken to assess the level of dust mitigation that is required at the site. The construction dust assessment results show that there is at most a medium risk of dust soiling and low risk of dust related human health impacts against the IAQM criteria.

5.5.2 A construction phase traffic assessment has also been undertaken to consider the potential short-term impacts of the traffic emissions. The construction phase traffic has been reviewed and detailed assessment has been scoped out as none of the road links are affected by the construction traffic flows to the extent which would necessitate assessment, in accordance with TII Scoping Assessment criteria.

5.5.3 Detailed dispersion modelling of traffic pollutants has been undertaken for the Proposed Development in the operational phase. An assessment of 2025 emissions for an operational year of 2025 has been undertaken to assess the effects of the Proposed Development using the TII guidance.

5.5.4 The modelling study outcomes identify that air pollutant concentrations at all seven sensitive receptors are below the respective Air Quality Objectives.

5.5.5 The air quality chapter concludes that there are no significant air quality impacts associated with the construction or operational phases of the Proposed Development. The conclusions of the assessment are considered appropriate.

5.6 CUMULATIVE IMPACTS

5.6.1 It is noted that the operational phase traffic data included permitted developments and is inherently cumulative. Cumulative impacts associated with the operational phase are considered not significant.

5.6.2 The air quality chapter states that cumulative impacts during the construction phase are not significant. The outcome of the assessment is considered appropriate.

5.7 RESIDUAL IMPACTS

5.7.1 The air quality chapter states that there are no significant residual impacts associated with the construction or operational phases of the Proposed Development. This is considered appropriate.

6.0 REVIEW OF CLIMATE CHANGE EIAR CHAPTER

6.1 PRESENTATION

6.1.1 This EIAR Chapter is structured as follows:

- Introduction.
- Expertise and Qualifications.
- Description of the Proposed Development.
- Methodology.
- Difficulties Encountered.
- Baseline Environment.
- The 'Do Nothing' Scenario.
- Potential Significant Effects.
- Mitigation.
- Residual Impact Assessment.
- Risk of Major Accidents or Disasters.
- Significant Interactions.
- References and Sources.

6.1.2 Overall, the chapter is well presented and formatted.

6.2 ASSESSMENT APPROACH

6.2.1 The EIAR methodology is clearly set out and refers to relevant guidance such as the EPA Guidelines (2022) and ISEP guidance (2020 and 2022).

6.2.2 The assessment has identified the two elements within climate change as required by the EIA Regulations. These are as follows:

- The impact of the Proposed Development on climate through for example the nature and magnitude of greenhouse gases (GHG) emissions (defined in the chapter as Greenhouse Gas Emissions Assessment).
- The vulnerability of the Proposed Development to climate change (defined in the chapter as Climate Change Risk Assessment (CCRA)).

6.2.3 Relevant legislation, policy and guidance on which the assessment has been based is listed.

6.2.4 Relevant guidance is used for establishing the criteria followed (i.e. the scope of assessment, sensitivity of receptors, magnitude of impacts, and significance).

6.2.5 GHG emissions calculations (expressed as carbon equivalent) from the Proposed Development have been undertaken, including but not limited to, energy use, water consumption, and transportation during the construction and operational phases (following a whole life carbon

assessment approach). These emissions are contextualised and compared against the Irish Carbon Budgets in order to understand their contribution.

6.2.6 A CCRA was undertaken to identify and assess potential risks of extreme weather events in line with a suitably future climate projection timeframe. The initial CCRA screening *'did not identify any residual medium or high risks to the Proposed Development as a result of climate change. Therefore, a detailed CCRA for the construction and operational phase were scoped out'*.

6.3 BASELINE

6.3.1 A baseline against which to assess the impacts of the Proposed Development has been adequately described.

6.3.2 A current and future baseline for GHG emissions is identified, including information on national GHG emissions from different sectors.

6.3.3 The current and future baseline for climatic conditions is also identified e.g. average temperature conditions, relative humidity, sunshine, rainfall and wind. It is noted that the future assessment year has not been defined in section 8.6.4. **This is included as a clarification in Table 1 (CC1)**.

6.4 MITIGATION MEASURES

6.4.1 Mitigation measures for both the construction and operational phases have been set out to prevent, avoid or minimise the potential effects on the climate from GHG emissions as well as the vulnerability of the Proposed Development to climate change. It is understood that further measures are set out in the Climate Action Energy Statement prepared by ENX, although this has not been reviewed as part of EIAR chapter review.

6.5 ASSESSMENT

Greenhouse Gas Assessment

6.5.1 The GHG Assessment has determined the magnitude of GHG emissions during the construction and operational phases of the Proposed Development, and assessed their contribution to the future baseline (i.e., Irish legally binding five-year carbon budgets).

6.5.2 It provides a comprehensive set of emissions, capturing whole life carbon and transport, and compares these against appropriate benchmarks.

6.5.3 The assessment concludes that '*In accordance with the EPA guidelines (EPA, 2022), the above significance equates to a significance of effect of GHG emissions during the construction and operational phases which is direct, long-term, negative and slight, which is overall not significant.'*

6.5.4 This conclusion is considered reasonable.

Climate Change Risk Assessment

6.5.5 The assessment has considered the Proposed Development's vulnerability to climate change hazards including flooding (coastal, pluvial, fluvial), extreme heat, extreme cold, wildfire,

drought, extreme wind, lightning, hail, landslides and fog. This is considered appropriate, although further detail would help to understand how potential overheating of the buildings will be managed. **This is included as a clarification in Table 1 (CC2)**. The climate change vulnerability assessment is outlined as shown in Table 8.10 of the chapter.

6.5.6 The assessment concludes that *'With design mitigation in place, there are no significant risks to the Proposed Development as a result of climate change. In accordance with the EPA Guidelines (EPA, 2022), the significance of effect of the impacts to the Proposed Development as a result of climate change are direct, long-term, negative and imperceptible, which is overall not significant in EIA terms.'*

6.6 CUMULATIVE IMPACTS

6.6.1 There has been consideration of both cumulative and in-combination effects.

6.6.2 In-combination effects have been identified including land, soils geology and hydrology, air quality, traffic and transportation and waste. The assessment concluded that the effects of the interactions between climate and these individual topics would not be considered significant in EIA terms.

6.6.3 Regarding cumulative effects, no reference to other plans and proposals which may have been submitted locally as planning applications have been presented, although it is stated that *'The traffic data used for the operational phase assessment included cumulative traffic from existing and permitted developments in the surrounding area and the full masterplan development. Therefore, this impact assessment is cumulative. As per the above, the cumulative impact of the Proposed Development in relation to GHG emissions is considered direct, long-term, negative and slight, which is overall not significant in EIA terms.'* Although, not stated, it is reasonable to assume that the other cumulative developments will lead to GHG emissions from sources other than traffic. For future reference, some narrative relating to this (and assumptions that those schemes would be likely to adopt their own measures to reduce emissions) would be helpful, although in this case it wouldn't alter the conclusions of this section.

6.6.4 The above conclusions are considered reasonable.

6.7 RESIDUAL IMPACTS

6.7.1 The assessment concludes that there are no significant residual impacts to climate as a result of the Proposed Development, nor in relation to climate change vulnerability. Tetra Tech is in agreement with this outcome.

7.0 REVIEW OF NOISE AND VIBRATION EIAR CHAPTER

7.1 PRESENTATION

7.1.1 This EIAR Chapter is structured as follows:

- Introduction.
- Expertise & Qualifications
- Proposed Development
- Methodology
- Difficulties Encountered
- Baseline Environment
- Impact Assessment
- The 'Do nothing' Scenario
- Potential Significant Effects
- Mitigation
- Residual Impact Assessment
- Significant Interactions
- References & Sources

7.1.2 Overall, the chapter is well presented and formatted.

7.2 ASSESSMENT APPROACH

7.2.1 In the absence of specific noise guidance in Ireland, criteria have been established from appropriate standards and guidance.

7.2.2 The magnitude of impact from construction noise levels on receptors has been determined in accordance with the ABC method in British Standard (BS) 5228 – 1: 2009+A1:2014: Code of practice for noise and vibration control on construction and open sites – Noise. For construction vibration, the likely effects have been derived from human response to vibration levels presented in BS 5228 – 2: 2009+A1:2014: Code of practice for noise and vibration control on construction and open sites – Vibration.

7.2.3 To assess additional traffic noise from the development on public roads, the change in sound level has been classified in accordance with the Design Manual for Roads and Bridges (DMRB), and the magnitude of impact has been established. No details have been provided regarding input data and calculations for the assessment. **This is included as a clarification in Table 1 (NV1).**

7.2.4 For Building Services Plant, BS 4142:2014+A1:2019 Methods for rating and assessing industrial and commercial sound has been referenced, which is consider appropriate. However, no

reference has been made to the magnitude of impact or sensitivity of receptors. No methodology has been established for defining significance of the effect from Building Services Plant.

7.2.5 The chapter states a Magnitude of Impact classification as a range, associated with noise criteria from appropriate standards and guidance. However, the EIAR methodology falls short on defining the sensitivity of receptors to allow the effect level to be determined. While the EIAR states significance from the Magnitude of Impact of some of these topics, it does not present a clear methodology as to how significance of effects has been determined. **This is included as a Potential Article 108/33 in Table 1 (NV2).**

7.3 BASELINE

7.3.1 Nearby sensitive receptors (existing and future) in the vicinity of the site have been identified, and baseline noise monitoring has been undertaken to establish the existing noise climate at the nearest noise-sensitive locations and across the development site.

7.3.2 The surveys consisted of unattended noise monitoring between 23 May and 27 May 2024, supplemented be attended measurements on 23 May 2024. Subjective comments on the noise climate were described as:

- Aircraft activity associated with Dublin Airport;
- M3 Road traffic noise;
- Local traffic movements;
- Agricultural noise;
- Birdsong;
- Wind generated noise.

7.3.3 A summary of the ambient (L_{Aeq}), background (L_{A90}) and maximum (L_{Amax}) noise levels during daytime, evening and night-time periods have been presented for each location. Full details of the unattended survey data, and statistical analysis to determine representative background sound level for this period have not been presented.

7.3.4 Details of meteorological conditions during the measurement period have not been provided. **This is included as a clarification in Table 1 (NV3).**

7.4 ASSESSMENT

7.4.1 Construction phase has been considered, but falls short on clearly setting out the magnitude of impact for individual receptors. The magnitude of impact along with the sensitivity of receptors need to be considering together in establishing the resultant effect.

7.4.2 An assessment has been undertaken of Operational Phase Additional Traffic on Public Roads by considering the relative increase in noise level associated with traffic movements on existing roads and junctions with and without the development. The results are presented in Table 9.17,

but no details are provided on how these have been calculated (as per section 1.2 Assessment Approach). **This is included as a clarification in Table 1 (NV1).**

7.4.3 Design criteria have been provided for Building Services Plant based on the baseline noise data collected for this assessment it, which are considered to be 43 dB $L_{Aeq, 15min}$ during the day period, and 34 dB $L_{Aeq,15min}$ during the night period. However, it is not clear how these criteria have been established. The predicted Rating Level (including any sound characteristics) should be compared with the representative background sound level to provide an indication of impact where these criteria are met. The associated effect is stated as 'negative, not significant, long-term' though the magnitude of impact and sensitivity of receptors has not been defined.

7.4.4 Following from **NV2** (Assessment Approach), the process of establishing effects has not been clearly set out. The magnitude of impact should be identified for each potential effect and combined with the receptor sensitivity to determine the effect for each receptor in the assessment section. The significance of each effect should then be determined. Following inclusion of the above, the assessment of likely significant effects, mitigation measures, cumulative impacts and residual impacts will need to be revisited. **This is included as a Potential Article 108/33 in Table 1 (NV4).**

7.5 CUMULATIVE IMPACTS

7.5.1 Limited cumulative impact analysis has been conducted. However, specific cumulative sites have not been referenced. **This is included as a clarification in Table 1 (NV5)**

7.5.2 The cumulative impact of traffic is predicted to be negative, imperceptible to not significant and long-term.

7.5.3 The chapter states that cumulative impacts during the construction phase are not significant, the outcome of the assessment is considered appropriate..

7.6 RESIDUAL IMPACTS

7.6.1 While mitigation is described, residual effects are not clearly stated for each receptor. No significance criteria have been established to conclude the residual impacts

7.6.2 Given the findings of this review, there are currently a number of outstanding matters in relation to noise that may have residual impacts if not appropriately addressed.

7.6.3 **This is included as a Potential Article 108/33 in Table 1 (NV6)**.

8.0 REVIEW OF WASTE EIAR CHAPTER

8.1 PRESENTATION

8.1.1 This EIAR Chapter is structured as follows:

- Introduction.
- Expertise and Qualifications.
- Proposed Development.
- Methodology.
- Difficulties Encountered.
- Baseline Environment.
- The 'Do nothing' Scenario.
- Potential Significant Effects.
- Mitigation.
- Residual Impact Assessment.
- Monitoring.
- Reinstatement.
- Risk of Major Accidents or Disasters.
- Significant Interactions.
- References and Sources.

8.1.2 This chapter is supported by the following appendices:

- Appendix 10-1: Resource Waste Management Plan (RWMP).
- Appendix 10-2: Operational Waste Management Plan (OWMP).

8.2 ASSESSMENT APPROACH

8.2.1 The EIAR methodology follows guidelines such as the EPA Guidelines on the Information to be contained in EIAR (2022). It is also considered the chapter has been produced in accordance with the Planning and Development Regulation 2001, which governs the EIA process in Ireland. The 2020 IEMA (now ISEP) guide to: Materials and Waste in Environmental Impact Assessment has not been referenced in the chapter.

8.2.2 The chapter includes a review of applicable policy, a description of anticipated waste materials with an estimate of quantities, the assessment of environmental impacts, and the identification of mitigation measures.

8.2.3 The areas of assessment are focused on the environmental impacts, say by way of pollution, that for example, could arise from poor waste management techniques, substandard design measures, and the use of non-permitted contractors and unauthorised facilities.

8.2.4 There is no assessment made of whether local waste management infrastructure could likely absorb the predicated waste arisings. The 2020 ISEP guidance, for example, includes landfill capacity as a receptor to consider in material and waste ES chapters. The EIAR chapter includes the below statements:

- *'There is a number of licensed, permitted and registered waste facilities in the Meath County Region'* (section 10.5).
- *'As discussed, there is a large number of available waste facilities for this project to utilise. The materials used during the construction of this project will be standard construction materials and it is envisaged that there will be capacity to receive any waste materials generated by the development during the construction phase.'* (section 10.5).
- *'There are a number of waste permitted and licensed facilities located in the EMR Waste Region for management of waste from the construction industry as well as municipal sources. These include soil recovery facilities, inert C&D waste facilities, municipal waste landfills, material recovery facilities and waste transfer stations'* (section 10.6).
- *'There are numerous licensed waste facilities in the EMR which can accept hazardous and non-hazardous waste materials, and acceptance of waste from the Proposed Development site would be in line with daily activities at these facilities. At present, there is sufficient capacity for the acceptance of the likely C&D waste arisings at facilities in the region'* (section 10.8.1).

8.2.5 The above statements would suggest the applicant has explored potential waste receiving sites in the County and wider region and have also stated there is currently sufficient construction and demolition waste management capacity. Given the applicant has made the above comments, it is not considered unreasonable that these should be substantiated. The statement above from 10.8.1, referring to there being sufficient capacity for C&D arisings, is used in the section assessing potential significant effects, and it is not possible to evaluate this without supporting evidence. **This is included as Potential Art 108/33 (W1)**

8.2.6 The applicant should provide further information relating to local waste sites and capacity, so that these comments can be accounted for, and it is considered that an appropriate assessment should be made on the potential impact on landfill capacity. **This is included as a clarification (W2) in Table 1.**

8.3 BASELINE

8.3.1 The baseline environment is set out in section 10.6. It includes statements that MCC no longer operates any municipal waste landfill in the county, and there are a number of permitted waste facilities in the EMR Waste Region.

8.3.2 The baseline section, which should provide the current state of environmental characteristics (including, for example, existing waste management infrastructure and landfill capacity), also provides a review of anticipated waste quantities that the Proposed Development would generate. This includes demolition and construction waste quantities and associated reuse, recycling/ recovery, and disposal rates, which are based on information from EPA. Cut and fill

information is also provided, as are estimates of operational waste arisings. This would be more appropriately set out in the assessment section, as this is not the baseline.

8.3.3 There appears to be an error in Table 10.1 on the 'Total' line. Overall, it is difficult to understand the existing waste management facilities and capacity based on this information. **This is added as a clarification in Table 1 (W3)**.

8.4 MITIGATION MEASURES

8.4.1 A Resource Waste Management Plan (RWMP) and an Operational Waste Management Plan (OWMP) have been completed and are included as appendices to the EIAR.

8.4.2 Mitigation measures are provided in section 10.9. The chapter refers to the RWMP when discussing construction waste and includes numerous mitigation measures. These include material choice and designing out waste, on site segregation of materials, staff training, adherence to the waste hierarchy, and the use of permitted contractors and permitted waste facilities.

8.4.3 For operational waste, reference is made to the OWMP. The mitigation includes segregation of materials, and management of waste in accordance with the waste hierarchy.

8.5 ASSESSMENT

8.5.1 The assessment is provided in section 10.8 'Potential Significant Effects'.

8.5.2 In terms of construction waste, the areas of assessment can be summarised as:

- The environmental effects from improper storage (say from litter and pollution);
- The use of non-permitted waste contractors and unauthorised facilities; and
- The classification of any waste soils.

8.5.3 The EIAR chapter states that, without the implementation of the mitigation measures, there would likely be significant impacts in relation to these assessment areas.

8.5.4 The assessment also states: *'At present, there is sufficient capacity for the acceptance of the likely C&D waste arisings at facilities in the region.'* This is unaccounted and the 2020 ISEP guidance[6] refers to significant effects being a function of sensitivity (of landfill void capacity) and magnitude (being either the depletion of landfill void capacity or landfill diversion (the % that will be diverted). **The above point is included as a Potential Article 108/33 in Table 1 (W1)**.

8.5.5 In terms of operational waste, the assessment considers there would likely be significant impacts if there improper or a lack of waste management, improper storage, and the use of non-permitted waste contractors or unauthorised waste facilities. No assessment of waste infrastructure / landfill capacity is also provided in this regard. **The above point is included as a Potential Article 108/33 in Table 1 (W1)**.

[6] ISEP. (formerly IEMA, 2020). Materials and Waste in Environmental Impact Assessment. Available at: https://www.isepglobal.org/media/0t5fwyhj/iema-materials-and-waste-in-eia-march-2020.pdf

8.6 CUMULATIVE IMPACTS

8.6.1 Cumulative development sites are summarised in Table 10.4 in section 10.8.3. It is stated that the other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans, which will mitigate against potentially significant cumulative impacts.

8.6.2 The cumulative development sites will also generate waste, and the cumulative impact that this could have on waste infrastructure capacity, notably landfill void space capacity, has not been assessed. **The above point is included as a Potential Article 108/33 in Table 1 (W1).**

8.7 RESIDUAL IMPACTS

8.7.1 The residual impacts are assessed insection 10.10. The chapter sets out *'the implementation of mitigation measures… will ensure that targeted rates of reuse, recovery and recycling are achieved… during the construction and operational phases.'*

8.7.2 The chapter states that with the mitigation measures implemented, the predicted impacts, in relation to both the construction and operational phases of the Proposed Development will be neutral, with no significant impacts predicted. This is regarding environmental impacts, say by way of pollution, that for example, could arise from poor waste management techniques, substandard design measures, and the use of non-permitted contractors and unauthorised facilities.

8.7.3 It is considered that landfill void space should be considered as an additional receptor, as per 2020 ISEP guidance, and an impact assessment, including any residual impact, should be set out as appropriate. **The above point is included as a Potential Article 108/33 in Table 1 (W1).**

9.0 SUMMARY OF CLARIFICATIONS AND POTENTIAL ARTICLE 108/33

9.1.1 The below table provide a summary of the findings for each technical chapter review.

Table 1: Summary of Clarifications and Potential Article 108/33

Topic	Reference	Type	Summary of Requirement from applicant
Chapter 5: Land, Soils and Geology	LSG1	Clarification	The consultation with MCC has not been documented as an appendix or within the report. This should be provided within the consultation appendices.
	LSG2	Further Information Required – Potential Art 108/33	Section 5.4.2 references an Engineering Report and Site Investigation, but they have not presented as an appendix within in the EIAR. These reports should be provided as appendices and their location referenced in the report.
	LSG3	Further Information Required – Potential Art 108/33	Further description relating to anything not considered 'greenfield' would be helpful to determine significance with respect to potential for influence on land quality, if any.
	LSG4	Further Information Required – Potential Art 108/33	No details regarding the existing agricultural buildings on site is included within the baseline of the site (although this is referenced later in section 5.8.) Consideration should be given to updating this section.
	LSG5	Clarification	SI details should be included in the Baseline section and confirm that no contamination was encountered on the site (if this was the case).

Topic	Reference	Type	Summary of Requirement from applicant
	LSG6	Clarification	A review of the text provided in section 5.6.5 is required, where reference is made to made ground underlain by clay with extreme vulnerability. This does not align in with the mapping provided in Figure 5.7 or the text provided before the figure.
	LSG7	Further Information Required – Potential Art 108/33	Reference could made under section 5.6.8 to the following GSI www.gsi.ie) database : 1. The area is largely mapped as moderate aggregate potential, with a minor area of 'high potential' to the east. 2. No recorded mineral localities are within the Proposed Development area, however gravel minerals are mapped to the east of the M3.
	LSG8	Further Information Required – Potential Art 108/33	No specific reference is made in the chapter to the nature of the buildings and whether they were assessed with respect to potential for any contaminating materials to have been in use or stored there, with respect to risk or otherwise of local contamination of soils/groundwater.
	LSG9	Further Information Required – Potential Art 108/33	Section 5.8.2.2 references temporary on-site groundwater monitoring wells as a pathway risk to groundwater from pollution events. Is there specific mitigation proposed relating to the onsite groundwater monitoring wells i.e. decommissioning of the wells.
	LSG10	Further Information Required – Potential Art 108/33	In section 5.10.1 monitoring is specified as not being required as no excavation works proposed. This section should be updated to include as a minimum of a watching brief as part of the monitoring, to record any signs of potentially contaminated soils, unless otherwise confirmed to not be required.

Topic	Reference	Type	Summary of Requirement from applicant
	LSG11	Clarification	Update section 5.10.2 regarding the methodology/details of the proposed soil sampling and/or where these are detailed.
	LSG12	Clarification	Update section 5.10.2 regarding the details of the proposed monitoring of surface water runoff and/or where these are detailed.
Chapter 6: Hydrology and Hydrogeology	HH1	Further Information Required – Potential Art 108/33	In section 6.4.5 the reader is not directed to any supporting evidence of the consultation undertaken with MCC. No reference is made for the request of private well information with the MCC. Furthermore, no reference is made with respect to consultation regarding the Dunboyne Public Water Supply Source Protection Zone, which is referenced later in 6.6.5.3 as understood to not be in active use. Supporting evidence should be provided.
	HH2	Further Information Required – Potential Art 108/33	Appendix 6.3 Technical note on risk of impact to Dunboyne Public Water Supply has not been provided. Nor are any consultations regarding its status. Tt did not see it referenced in the full list of documents available at iDocs Web.
	HH3	Further Information Required – Potential Art 108/33	Although Tt have not been commissioned to review the Site Investigation (July 2024) report for site, it has not been presented as a supporting appendix to the EIAR chapter. TT did not see it referenced in the full list of documents available at iDocs Web.
	HH4	Clarification	Reference to latest consultation on capacity of local foul sewage network to accept discharge (this may be being addressed elsewhere).

Topic	Reference	Type	Summary of Requirement from applicant
	HH5	Further Information Required – Potential Art 108/33	No appendix is provided supporting the findings for infiltration testing discussed in section 6.6.5.2. This should be presented as an appendix and referenced in this section.
	HH6	Clarification	The statement that *'Given the subsoils are Made ground underlain by clay along with extreme vulnerability'* is not correct. The majority of subsoils are till. In this section it also states based on vulnerability mapped that till cover is expected to be 10m+ in low vulnerability areas. Whilst this may be the case, reference to the GII Site Investigation report (July 2024), which is referenced in the report but not provided as an appendix to the EIAR does not specifically confirm that. G.I. undertaken in the wider area for areas mapped as low vulnerability indicate possible bedrock at ~6m bgl.
	HH7	Clarification	Clarification needed regarding the risk assessment opinion for the onsite well and required decommissioning and for other private wells identified in proximity to development site.
	HH8	Clarification	Clarification for existing buildings on-site- Has an assessment of potential for contamination associated with previous/existing use and associated mitigation measures that may or not be required during demolition (watching brief for ground contamination).
Chapter 7: Air Quality	AQ1	Further Information Required – Potential Art 108/33	As per the LA105 (Design Manual for Roads and Bridges (DMRB) 'LA105', June 2024,) traffic screening criteria, that was used for both construction and operational phases within the EIAR, requires air quality assessment where there are a change of 1,000

Topic	Reference	Type	Summary of Requirement from applicant
			Annual Average Daily Traffic (AADT) flows and a change of 200 AADT flows for Heavy Duty Vehicles (HDV). The IAQM traffic screening criteria outlined in the AQ chapter is considered more appropriate for consideration of the requirement of detailed assessment of residential developments.
Chapter 8: Climate Change	CC1	Clarification	Future assessment year for CCRA to be defined.
	CC2	Clarification	Further detail would help to understand how potential overheating of the buildings will be managed.
Chapter 9: Noise and Vibration	NV1	Clarification	Further detail would help to understand how the suitability of the development-generated traffic assessment inputs, and the subsequent assessment of additional Traffic on Public Roads.
	NV2	Further Information Required – Potential Art 108/33	No methodology has been established for defining significance of potential effects. The sensitivity of receptors should be defined along with the magnitude of impact associated with all potential effects. The process for establishing the significance of effects has not been clearly defined.
	NV3	Clarification	No statistical analysis was provided to show the spread of results in accordance with BS4142. Further detail on meteorological conditions observed during the noise survey would also help to establish the suitability of measured backgrounds.

Topic	Reference	Type	Summary of Requirement from applicant
	NV4	Further Information Required – Potential Art 108/33	Following from NV2 (Assessment Approach), the process of establishing effects has not been clearly set out. The magnitude of impact should be identified for each potential effect and combined with the receptor sensitivity to determine the effect for each receptor in the assessment section. The significance of each effect should then be determined. Following inclusion of the above, the assessment of likely significant effects, mitigation measures, cumulative impacts and residual impacts will need to be revisited.
	NV5	Clarification	Limited cumulative impact analysis has been conducted. However, specific cumulative sites have not been referenced.
	NV6	Clarification	Given the findings of this review, there are currently a number of outstanding matters in relation to noise that may have residual impacts if not appropriately addressed.
Chapter 10: Waste	W1	Further Information Required – Potential Art 108/33	The chapter should provide an assessment of potential impacts of landfill capacity as per the 2020 IEMA (now ISEP) guide to: Materials and Waste in Environmental Impact Assessment. Also, the following statement is included in the section (10.8) assessing potential significant effects: '*There are numerous licensed waste facilities in the EMR which can accept hazardous and non-hazardous waste materials, and acceptance of waste from the Proposed Development site would be in line with daily activities at these facilities. At present, there is sufficient capacity for the acceptance of the likely C&D waste arisings at facilities in the region'* (10.8.1). It is not possible to evaluate this without supporting evidence of waste infrastructure capacity, including relevant information of

Topic	Reference	Type	Summary of Requirement from applicant
			landfill capacity. It is considered the applicant should provide further information, relating to local waste sites and landfill capacity, so that these comments can be accounted for, and to follow the ISEP guidance.
	W2	Clarification	There are also numerous other statements in the chapter that there a number of potentially suitable waste receiving sites, and there is currently sufficient construction and demolition waste management capacity. Given the applicant has made the above comments, it is not considered unreasonable that these should be substantiated as well.
	W3	Clarification	The baseline section (which should provide the current state of environmental characteristics) also provides a review of anticipated waste quantities that the development would generate. This includes demolition and construction waste quantities and associated reuse, recycling/ recovery, and disposal rates, which are based on information from EPA. Cut and fill information is also provided, as are estimates of operational waste arisings. This information would be better presented in the assessment section. Overall, it is difficult to understand the existing waste management facilities and capacity based on this information. There appears to be an error in Table 10.1 on the 'Total' line. It is considered this information should be corrected and clarified.