

Greater Dublin Drainage Project Addendum

**Environmental Impact Assessment Report Addendum:
Volume 3A Part A of 6**

Chapter 24A Summary of Mitigation Measures

Uisce Éireann

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24. Summary of Mitigation Measures

24.1 Introduction

The purposes of this Addendum Chapter is to collate the additional mitigation measures identified in the Environmental Impact Assessment Report (EIAR) Addendum, that are considered necessary to protect the environment prior to the commencement of and during the Construction Phase and / or Operational Phase of the Greater Dublin Drainage Project (hereafter referred to as the Proposed Project).

The additional mitigation measures identified in this Addendum Chapter have resulted from the Addendum assessments and are intended to be applied in addition to the mitigation measures outlined in Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIAR in the 2018 planning application. This Addendum Chapter, therefore, should be read in conjunction with Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIAR in the 2018 planning application.

Please note that Section 17A in Volume 4A Part A of this EIAR Addendum discusses additional mitigation measure requirements in relation to the proposed Regional Biosolids Storage Facility (RBSF) element of the Proposed Project.

24.2 Mitigation Schedule

The additional mitigation and environmental commitments have been identified from the Addendum assessments as overarching general requirements which shall avoid, reduce or offset potential impacts and are relevant to a number of the environmental aspects addressed in this EIAR Addendum. These measures are provided in Section 24.3 to Section 24.21.

These additional measures are specified within the Addendum technical assessments which are provided in Chapter 6A to Chapter 23A in Volume 3A Part A of the EIAR Addendum.

The timing of the implementation of these additional mitigation measures is indicated within the tables as either the:

- Construction Phase: The undertaking of the physical works to construct all elements of the Proposed Project, as outlined in Chapter 4 (Description of the Proposed Project) in Volume 3 Part A of the EIAR in the 2018 planning application, as supplemented by Chapter 4A (Description of the Proposed Project) in Volume 3A Part A of the EIAR Addendum; and
- Operational Phase: When the Proposed Project commences operation, as well as any ongoing maintenance.

24.3 General Mitigation Requirements

Table 24.1: Additional General Mitigation Measures

Mitigation No.	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD - G1	The mitigation strategy outlined in this Addendum Chapter will be incorporated by the appointed contractor(s) into the future design proposals for the Proposed Project, in addition to the mitigation strategy outlined in Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIA in the 2018 planning application. The strategy will be incorporated into the overall Construction Environmental Management Plan (CEMP), by the appointed contractor(s) and approved by Uisce Éireann.	Construction Phase

24.4 Population and Human Health: Population

No additional mitigation measures have been proposed as part of the EIA Addendum assessment for population. The mitigation measures outlined in Section 24.4 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIA in the 2018 planning application remain valid and applicable and will be implemented in full.

24.5 Population and Human Health: Human Health

No additional mitigation measures have been proposed as part of the EIA Addendum assessment for human health. The mitigation measures outlined in Section 24.5 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIA in the 2018 planning application remain valid and applicable and will be implemented in full.

24.6 Marine Water Quality

No additional mitigation measures have been proposed as part of the EIA Addendum assessment for marine water quality. The mitigation measures outlined in Section 24.6 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIA in the 2018 planning application remain valid and applicable and will be implemented in full.

24.7 Biodiversity (Marine)

No additional mitigation measures have been proposed as part of the EIA Addendum assessment for biodiversity (marine). The mitigation measures outlined in Section 24.7 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIA in the 2018 planning application remain valid and applicable and will be implemented in full.

24.8 Biodiversity (Marine Ornithology)

Table 24.2: Additional Biodiversity (Marine Ornithology) Mitigation Measures

Mitigation No.	EIAR Addendum Section Reference	Location	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD - BMO1	Section 10.9.2	Proposed outfall pipeline route (marine section) and marine diffuser	The Revised Vessel Management Plan included as Appendix A10.2 in Volume 3A Part B of this EIAR Addendum is to be adhered to (please note that this Vessel Management Plan supersedes the previous Vessel Management Plan included in Volume 3 Part A of the EIAR in the 2018 planning application). Adherence to the Revised Vessel Management Plan will ensure that the Ireland's Eye SPA boundary is not unnecessarily approached or crossed by construction vessels working on the proposed marine diffuser and subsea section of the proposed outfall pipeline route (marine section) at any time during the Construction Phase. The second is to ensure the protection of rafting auks (guillemot and razorbill) which are both SCI species of both Ireland's Eye SPA and the North-West Irish Sea cSPA, when they are leaving the Ireland's Eye colony in July to mid-August at the end of the breeding season.	Construction Phase
ADD – BMO2	Section 10.9.2	Proposed outfall pipeline route (marine section) and marine diffuser	As a matter of good practice, the bird observer appointed by the contractor as part of adherence to the Revised Vessel Management Plan (Appendix A10.2 in Volume 3A Part B of this EIAR Addendum), will notify the Marine Coordinator if there are any additional agglomerations of SCI species during their watching brief in place over the period 8 July to 31 August during the construction period.	Construction Phase

24.9 Biodiversity (Terrestrial and Freshwater Aquatic)

Table 24.3: Additional Biodiversity (Terrestrial and Freshwater Aquatic) Mitigation Measures

Mitigation No.	EIAR Addendum Section Reference	Location	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD - TFA1	Section 11.7.3	All elements of the Proposed Project	All habitats that are within the redline boundary and are to be retained during the Construction Phase (including hedgerows, drainage ditches and other water features at the edge of the redline boundary) will be protected in advance of, and during construction, to avoid any incursion into them by personnel, construction plant or materials and to avoid and minimise any changes to the quality of those habitats (e.g., through changes in water quality such as with respect to silts, hydrocarbons or other pollutants). A specification for these measures will be prepared, implemented and maintained during the Construction Phase by the appointed contractor and the appointed Ecological Clerk of Works (EcCoW), and will include the specific areas for the proposed orbital sewer route, proposed North Fringe Sewer (NFS) diversion sewer and the proposed outfall pipeline route from the proposed wastewater treatment plant (WwTP) to proposed temporary construction compound no. 10 at Portmarnock (collectively referred to as the proposed pipeline route in the Biodiversity Assessment) that have been identified in the Biodiversity Assessment to be protected to limit clearance of existing habitats.	Construction Phase
ADD – TFA2	Section 11.7.3	All elements of the Proposed Project	A Biodiversity Implementation and Monitoring Plan will be prepared by the appointed contractor and the EcCoW, in consultation with Uisce Éireann, prior to the commencement of construction and implemented thereafter. The Biodiversity Implementation and Monitoring Plan will be required to include the following:	Construction / Operational Phases

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Mitigation No.	EIAR Addendum Section Reference	Location	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
			<ul style="list-style-type: none"> Measures to secure the delivery of the area and linear measurements of habitats identified to be delivered post-development; Measures, within areas retained in Uisce Éireann's control, to ensure the post-development habitat values attributed to each habitat are at least achieved within five to 10 years post habitat creation / restoration following completion of the Construction Phase. This will include the use of nutrient poor soil (subsoils) in the creation of dry meadow grasslands. Reference should be made to Uisce Éireann's Biodiversity Guidance for Irish Water Developments (IW-AMT-GL-021) (Uisce Éireann 2021a); Operational Phase habitat management measures within areas retained in Uisce Éireann's control following completion of the Construction Phase. This will include a schedule of requirements for the management of woodland, hedgerow and grasslands consistent with Uisce Éireann's Biodiversity Action Plan (Uisce Éireann 2021b); and Operational Phase habitat monitoring measures within areas retained in Uisce Éireann's control to ensure that the Operational Phase management is delivering, as a minimum, the post-development five to 10 year habitat values assigned in this assessment. This will involve habitat surveys of all created, reinstated and enhanced habitats within Uisce Éireann's control in Year 1, 3, 5, 8 and 10 of the Operational Phase. 	
ADD – TFA3	Section 11.7.3	Proposed Abbotstown pumping station and proposed WwTP	<p>All measures will include specifications for the creation and restoration of all habitats identified, cross-referencing, as appropriate, to the relevant Landscape Management Plans which will be prepared and implemented by the appointed contractor and will align with the Landscape Mitigation Plans included in the EIAR Addendum (refer to Figure 12.1 and Figure 12.2 in Volume 5A of the EIAR Addendum for the proposed WwTP and proposed Abbotstown pumping station plans, respectively). The landscaping will include:</p> <ul style="list-style-type: none"> Immature woodland and dry meadows, and the creation of hedgerows along the access road boundaries within the proposed Abbotstown pumping station site; and The creation of immature woodland, dry meadows and scrub within the site, the creation of a drainage ditch along the south boundary of the site, and the creation / protection of hedgerows along the access / egress roads at the proposed WwTP site. 	Construction Phase
ADD – TFA4	Section 11.7.3	All elements of the Proposed Project	Prior to construction / removal of hedgerows, the appointed EcCoW will be required to identify hedgerows of greater value that are suitable for transplanting or use in restoration, and / or any salvageable biodiversity materials which could improve the quality of any restored hedgerows (in accordance with relevant methodology to be identified and defined by the EcCoW)	Construction Phase
ADD – TFA5	Section 11.7.3	All elements of the Proposed Project	A specification for the restoration / re-planting of all hedgerows to be temporarily removed or affected will be prepared by the appointed EcCoW to ensure that any restoration or new planting of hedgerows seeks to increase species diversity of shrubby / woody species and also increase structural width and height. The new planting will, as a minimum, seek to use staggered double-row planting using at least five woody species of native origin and provenance. At least one standard tree (rather than whips) of native origin and provenance will be planted for every 250m of hedgerows restored / planted. Reference should be made to Uisce Éireann's Biodiversity Guidance for Irish Water Developments (IW-AMT-GL-021) (Uisce Éireann 2021a).	Construction Phase
ADD – TFA6	Section 11.7.3	Proposed temporary construction compound no. 10	Habitat management measures will be put in place at proposed temporary construction compound no. 10 during reinstatement of the site for the purpose of biodiversity gain. The amenity grassland at proposed temporary construction compound no. 10 will be removed during the Construction Phase, and rather than restoring amenity grassland, which is of little biodiversity value, measures will be put in place to reinstate the site so that it can be managed positively by FCC for dune habitat in the long term. The appointed contractor will implement and maintain the dune habitat during construction and testing phases in line with the Construction Phase Biodiversity and Implementation and Monitoring Plan that will be prepared by the appointed contractor and the	Construction Phase

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Mitigation No.	EIAR Addendum Section Reference	Location	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
			EcCoW, in consultation with Uisce Éireann, prior to the commencement of construction. The site will then be handed back to FCC to maintain following the completion of the Construction Phase.	
ADD – TFA7	Section 11.7.3	Proposed construction corridor at the Northpoint NCT Centre	Invasive Species For the presence of a Third Schedule IAPS within the construction corridor of the Proposed Project at the Northpoint NCT Centre, an Invasive Species Management Plan (ISMP) will be required to prevent their spread during the Construction Phase. The ISMP can be secured by way of an amendment to wording of Condition 10 of the (now quashed) 2019 planning permission.	Construction Phase
ADD – TFA8	Section 11.7.4	Proposed Abbotstown pumping station and proposed WwTP	Bats Artificial bat roosting structures will be erected at the end of the Construction Phase and in suitable locations to be determined by the appointed EcCoW. Suitable locations will be determined based on locations available to erect the structures safely, and in the long-term, proximity to artificial lighting (no or little artificial light spillage areas to be favoured) and connectivity to optimal bat foraging and commuting habitats. Suitable locations could include existing mature trees or built-in to the fabric of new built structures. In the absence of suitable locations, the bat roosting structures will be pole-mounted. A minimum of eight bat boxes will be erected at each of the proposed WwTP and Abbotstown pumping station sites, respectively. The bat boxes will be Schwegler-type (woodcrete) boxes (or similar) and a range of different type boxes (e.g. 2F, 1FF, 3FF, 1FW, 1FE and 1FTH) will be provided. The use of a range of boxes will provide additional roosting opportunities for a range of bat species.	Construction Phase
ADD – TFA9	Section 11.7.5	Throughout the Proposed Project boundary	Mammals (Other than Bats) A wildlife disturbance licence will be obtained from the National Parks and Wildlife Service (NPWS) for the exclusion and closure of six badger setts (four temporarily [BS6, BS10, S16 and S18] and two permanently [S5 and S17]). The four setts to be closed temporarily during the Construction Phase will require an Ecological Exclusion Zone to ensure their protection during the Construction Phase. All setts to be closed or fenced for their protection will be monitored by the ecological clerk of works appointed during the Construction Phase.	Construction Phase
ADD – TFA10	Section 11.7.5	Throughout the Proposed Project boundary	Mammals (Other than Bats) A further eight setts in close proximity to the proposed construction corridor (S2, S3, S4, S8, S9, S11, S12 and BS5) will also require an Ecological Exclusion Zone to ensure their protection during the Construction Phase. All setts to be closed or fenced for their protection will be monitored by the ecological clerk of works appointed during the Construction Phase.	Construction Phase
ADD – TFA11	Section 11.7.6	Proposed Abbotstown pumping station and proposed WwTP	Farmland Birds Artificial bird nesting structures will be erected at the end of the Construction Phase in suitable locations, as determined by the appointed EcCoW. Suitable locations will be determined based on locations available to erect the structures safely, and in the long-term, proximity to artificial lighting (no or little artificial light spillage areas to be favoured) and connectivity to optimal nesting and foraging habitats. Suitable locations could include existing mature trees or built-in to the fabric of new built structures. In the absence of suitable locations, the bird nesting structures will be pole-mounted. A minimum of eight bird boxes will be erected at each of the proposed WwTP and Abbotstown pumping station sites, respectively. The bird boxes will be Schwegler-type (woodcrete) boxes (or similar) and a range of different type boxes (e.g. 1B, 2H, 17C) will be provided. The use of a range of boxes will provide additional nesting opportunities for a range of bird species.	Construction Phase

24.10 Landscape and Visual

Table 24.4: Additional Landscape and Visual Mitigation Measures

Mitigation No.	EIAR Addendum Section Reference	Location	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD – LV1	Section 12.7	Proposed Abbotstown pumping station and proposed WwTP	The relevant Landscape Management Plans will be prepared and implemented by the appointed contractor and will align with the updated Landscape Mitigation Plans included as Figure 12.1 and Figure 12.2 in Volume 5A of the EIAR Addendum for the proposed WwTP and proposed Abbotstown pumping station, respectively.	Construction Phase

24.11 Traffic and Transport

No additional mitigation measures have been proposed as part of the EIAR Addendum assessment for traffic and transport. The mitigation measures outlined in Section 24.11 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIAR in the 2018 planning application remain valid and applicable and will be implemented in full.

24.12 Air Quality, Odour and Climate

Table 24.5: Additional Climate (Carbon) Mitigation Measures

Mitigation No.	EIAR Addendum Section Reference	Location	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD – AQ1	Section 5.2.1.2 of Appendix A14.1 in Volume 3A Part B	All elements of the Proposed Project	A whole-life Carbon Management Plan will be implemented and will be aligned to the revised PAS 2080:2023 Carbon Management in Buildings and Infrastructure (British Standard Institute 2023). Through carbon management planning, emissions reduction actions can be identified early to inform design solutions with low embodied carbon and that are aligned with targets set in Table 3.5 (Key Metrics to Deliver Abatement in Industry) of Chapter 13 (Industry) in the Climate Action Plan 2023 (Government of Ireland 2022).	Construction Phase
ADD – AQ2	Section 5.2.1.2 of Appendix A14.1 in Volume 3A Part B	All elements of the Proposed Project	Lifecycle assessments for major asset components will be undertaken and recommendations will be implemented to influence the procurement of low carbon / sustainable / locally sourced materials and equipment, where possible.	Construction Phase
ADD – AQ3	Section 5.2.1.2 of	All elements of the Proposed Project	Materials procured for major asset components will have verified Environmental Product Declarations.	Construction Phase

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Mitigation No.	EIAR Addendum Section Reference	Location	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
	Appendix A14.1 in Volume 3A Part B			
ADD – AQ4	Section 5.2.2.2 of Appendix A14.1 in Volume 3A Part B	All elements of the Proposed Project	The appointed contractor will comply with the latest European Union regulations relating to carbon dioxide (CO ₂) emission performance standards for new passenger cars and new light commercial vehicles for Construction Phase activities. The most recent standards in force at the time of writing for emissions from on-road vehicles, including passenger vehicles and shuttle buses for staff transportation, is Regulation (EU) 2023/851 of the European Parliament and of the Council of 19 April 2023 amending Regulation (EU) 2019/631 as regards strengthening the CO ₂ emission performance standards for new passenger cars and new light commercial vehicles in line with the Union's increased climate ambition.	Construction Phase
ADD – AQ5	Section 5.3.1.2 of Appendix A14.1 in Volume 3A Part B	All elements of the Proposed Project	A whole-life Carbon Management Plan will be implemented and will be aligned to the Revised PAS 2080:2023 Carbon Management in Buildings and Infrastructure (British Standard Institute 2023) to inform the operation of the Proposed Project using a purpose built carbon assessment tool and aligned to an industry adopted and verified assessment tool such as Transport Infrastructure Infrastructure's online Carbon Assessment Tool (TII 2023).	Operational Phase
ADD – AQ6	Section 5.3.1.2 of Appendix A14.1 in Volume 3A Part B	Proposed WwTP	Net zero for operational emissions in relation to both process and energy related emissions will be supported through energy demand reduction, increased energy efficiency, maximisation of energy recovery, implementation of a carbonaceous-only biomass control mode and implementation of process control optimisation to reduce the volume of biosolids production	Operational Phase
ADD – AQ7	Section 5.3.1.2 of Appendix A14.1 in Volume 3A Part B	Proposed WwTP	Provision of operational and process flexibility to support a carbonaceous only WwTP in accordance with regulatory requirements will be catered for. This will focus on the optimisation of both design and operational processes which will facilitate a low sludge retention time, minimising the risk of nitrification. This measure represents a significant opportunity to reduce process emissions from the wastewater treatment process. By operating the treatment process in a carbonaceous mode, the risk of inadvertent production of N ₂ O gas will be reduced	Operational Phase
ADD – AQ8	Section 5.3.1.2 of Appendix A14.1 in Volume 3A Part B	Proposed WwTP	A comprehensive Operational Commissioning Plan will be developed and implemented by the appointed contractor, as is normal practice, to demonstrate that the proposed WwTP is brought online in a carbonaceous mode (Biochemical Oxygen Demand removal only to intentionally avoid nitrification).	Construction / Operational Phase
ADD – AQ9	Section 5.3.1.2 of Appendix A14.1 in Volume 3A Part B	All elements of the Proposed Project	The fugitive emissions will be minimised via design technologies and will be managed by Uisce Éireann and its site operator during the Operational Phase.	Operational Phase

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Mitigation No.	EIAR Addendum Section Reference	Location	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD – AQ10	Section 5.3.1.2 of Appendix A14.1 in Volume 3A Part B	All elements of the Proposed Project	Scheduled capital replacement and regular planned maintenance will minimise the potential for unintentional releases and leaks from process units, pipework and fittings	Operational Phase

24.13 Noise and Vibration

No additional mitigation measures have been proposed as part of the EIAR Addendum assessment for noise and vibration. The mitigation measures outlined in Section 24.13 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIAR in the 2018 planning application remain valid and applicable and will be implemented in full.

24.14 Archaeological, Architectural and Cultural Heritage

No additional mitigation measures have been proposed as part of the EIAR Addendum assessment for archaeological, architectural and cultural heritage. The mitigation measures outlined in Section 24.14 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIAR in the 2018 planning application remain valid and applicable and will be implemented in full with the exception that AH 44 will no longer be subject to a direct impact as it has been preserved in-situ by another development, and as such, no archaeological mitigation is now required for this site.

24.15 Hydrology and Hydrogeology

No additional mitigation measures have been proposed as part of the EIAR Addendum assessment for hydrology and hydrogeology. The mitigation measures outlined in Section 24.15 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIAR in the 2018 planning application remain valid and applicable and will be implemented in full.

24.16 Soils and Geology

No additional mitigation measures have been proposed as part of the EIAR Addendum assessment for soils and geology. The mitigation measures outlined in Section 24.16 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIAR in the 2018 planning application remain valid and applicable and will be implemented in full.

24.17 Agronomy

No additional mitigation measures have been proposed as part of the EIAR Addendum assessment for agronomy. The mitigation measures outlined in Section 24.17 of Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIAR in the 2018 planning application remain valid and applicable and will be implemented in full.

24.18 Waste

Table 24.6: Additional Waste Mitigation Measures

Mitigation No.	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD - W1	General construction waste and by-products will be managed in accordance with requirements in the new Waste Action Plan 2020 and the Draft National Waste Management Plan 2023 for a strong focus on Article 27 and the end-of-waste decision-making process	Construction Phase

24.19 Material Assets

Table 24.7: Additional Material Assets Mitigation Measures

Mitigation No.	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD – MA1	All overhead electricity lines (OHLs) will be protected in accordance with the updated Code of Practice for Avoiding Danger from Overhead Electricity Lines (Electricity Supply Board Network 2019) during construction.	Construction Phase
ADD – MA2	There will be emphasis placed on maximising the reuse / recovery of excavated material (soil / rock) on-site, and thereby, reducing the need for imported material and reducing the impact of traffic on surrounding roads. Where surplus excavated materials cannot be reused on-site, contact will be made with nearby sites requiring fill / capping material to investigate reuse opportunities for the surplus materials in accordance with Article 27 of S.I. No. 323/2020 - European Union (Waste Directive) Regulations 2020, subject to EPA approval.	Construction Phase

24.20 Risk of Major Accidents and / or Disasters

Table 24.8: Additional Risk of Major Accidents and / or Disasters Mitigation Measures

Mitigation No.	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD - RMAND1	<p>The appointed contractor will pay due consideration to the impacts of extreme weather events during the Construction Phase as part of their Environmental Incident Response Plan.</p> <p>The appointed contractor will utilise available meteorological forecast data from Met Éireann or other approved provider of meteorological data to inform short to medium-term program management, environmental control and impact mitigation measures. A Construction Phase Severe Weather Management Plan (this will be prepared by the appointed contractor having regard to the CEMP included in the 2018 planning application, as supplemented by the Addendum to the CEMP in this Addendum application) will be considered in order to ensure mechanisms are in place should this impact arise. The documents will contain plans and mitigation to prevent future impacts due to increasingly severe weather events.</p> <p>The appointed contractor's Environmental Management System (EMS) will consider all measures deemed necessary to manage extreme weather events and will, as a minimum, cover training of personnel and prevention and monitoring arrangements. Mitigation will be as follows:</p> <ul style="list-style-type: none"> • Construction method statements will consider extreme weather events where risks have been identified; • Emergency preparedness and contingency procedures will be put in place for an extreme weather event on the construction site or within the supply chain; • The appointed contractor will schedule concrete curing to avoid peak temperatures; • The appointed contractor will consider increased dust suppression measures in hot and dry conditions; • The appointed contractor will have health and safety plan in place that takes into consideration dust-related air quality concerns; and • The appointed contractor will use short to medium range weather forecasting to inform short to medium term programme management, environmental control, and impact adaptation measures. The appointed contractor will register with the flood warning service in areas of flood risk. 	Construction Phase
ADD – RMAND2	<p>Uisce Éireann and the site operator will maintain the Severe Weather Management Plan during the Operational Phase to ensure that critical infrastructure is protected during operation from the impacts of severe weather.</p>	Operational Phase

24.21 Cumulative Impacts and Environmental Interactions

Table 24.9: Additional Cumulative Impacts Mitigation Measures

Mitigation No.	Description of Mitigation Measure / Environmental Commitment	Stage of Impact (i.e. Construction Phase / Operational Phase)
ADD – CIE11	<p>Dredging activities for other development application number F21A/0368 and the Proposed Project will be required to be scheduled to occur at different times to avoid any adverse cumulative impacts which may occur on marine water quality as a result of increased suspended sediment from both projects. The appointed contractor and Uisce Éireann will actively engage with the Department for Agriculture, Food and the Marine to ensure that dredging activities do not overlap and that a sufficient period will be maintained between these dredging activities</p>	Construction Phase
ADD – CIE12	<p>A coordinated approach between the Proposed Project Team and the CP1021 East Meath-North Dublin Project Team will be required to minimise potential soils and geology impacts in the vicinity of the proposed WwTP site if construction phases overlap.</p>	Construction Phase
ADD – CIE13	<p>The Proposed Project and other development application number 311315 will need to be coordinated to ensure that they do not take place at the same time in this location. A coordinated approach between the two project teams when each project's Construction Phase is taking place will also be required to minimise potential impacts on soils and geology in this vicinity.</p>	Construction Phase

24.22 Difficulties Encountered in Compiling Required Information

There were no difficulties encountered in compiling required information for this Addendum Chapter.

24.23 References

British Standard Institute (2023). PAS 2080:2023 Carbon Management in Buildings and Infrastructure

Electricity Supply Board Network (2019). Code of Practice for Avoiding Danger from Overhead Electricity Lines

Government of Ireland (2022). Climate Action Plan 2023

TII (2023). Carbon Assessment Tool

Uisce Éireann (2021a). Biodiversity Guidance for Irish Water Developments (IW-AMT-GL-021)

Uisce Éireann (2021b). Biodiversity Action Plan

Directives and Legislation

Regulation (EU) 2023/851 of the European Parliament and of the Council of 19 April 2023 amending Regulation (EU) 2019/631 as regards strengthening the CO₂ emission performance standards for new passenger cars and new light commercial vehicles in line with the Union's increased climate ambition.

S.I. No. 323/2020 - European Union (Waste Directive) Regulations 2020