Jacobs

Greater Dublin Drainage Project Addendum

Outline Construction Environmental Management Plan Addendum

Uisce Éireann

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Acronym	Description
ABP	An Bord Pleanála
CEMP	Construction Environmental Management Plan
CO ₂	Carbon dioxide
EcCOW	Ecological Clerk of Works
EIAR	Environmental Impact Assessment Report
EMS	Environmental Management System
EPA	Environmental Protection Agency
EU	European Union
ISMP	Invasive Species Management Plan
MCC	Motor Control Centre
NFS	North Fringe Sewer
NIS	Natura Impact Statement
OHL	Overhead line
RBSF	Regional Biosolids Storage Facility
SPA	Special Protection Area
UV	Ultraviolet
WwTP	Wastewater Treatment Plant

1. Introduction

1.1 Introduction

An Bord Pleanála (ABP) previously made a decision to grant the planning application by Order dated 11 November 2019 under reference number ABP-301908-18 for the Greater Dublin Drainage Project (hereafter referred to as the Proposed Project). That decision was quashed by Order of the High Court and the case was remitted by that Court to the Board for a fresh determination. Following the remittal Order, ABP decided that given the passage of time since the submission of the original planning application, and in accordance with Section 37F(1)(c) of the Planning and Development Act 2000 (as amended), Uisce Éireann should have the opportunity to update, where appropriate, the Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS), and any other information submitted. This Addendum has been prepared in response to that request from ABP to provide a full update in an Addendum Report. In the preparation of this Addendum Report, Uisce Éireann and its technical advisors have considered the extent to which each of the technical documents are required to be updated.

In so far as relevant to this Addendum Report, we have had regard to the information presented at the Oral Hearing for application ABP-301908-18 and the High Court proceedings in respect of that application, including the addition of ultraviolet (UV) treatment and the extension of the River Mayne culvert, such that the Proposed Project description has been updated.

We have reviewed the Outline Construction Environmental Management Plan (CEMP) in the 2018 planning application and prepared this Addendum Report, in light of:

- Updated elements to the proposed infrastructural requirements of the Proposed Project;
- Updates made to the EIAR as set out in Volume 1A to 6A of the EIAR Addendum and the Revised NIS (included as a standalone document in the Addendum pack); and
- Changes to relevant law, policy, and industry standards and guidance, in the intervening period.

The following updated documentation have been specifically considered in this Addendum to the Outline CEMP.

• Environmental Protection Agency (EPA) Best Practice Guidelines for the Preparation of Resource Management Plans for Construction and Demolition Projects (EPA 2021).

1.2 Description of Proposed Project

Table 1.1 below includes a summary of the project elements which were incorporated into the planning design for the Proposed Project following direction at the Oral Hearing in 2019 and the subsequent planning conditions applied to the 2018 planning application submission. A full description is included in Chapter 4A (Description of the Proposed Project) in Volume 2A Part A of the EIAR Addendum. The remaining elements of the Proposed Project included in the 2018 planning application remain unchanged.

Updated Element	Outline Description of Updated Element
Ultraviolet (UV) Treatment	 UV Treatment is to be included in the treatment process at the proposed wastewater treatment plant (WwTP) in the northern section of the WwTP site. The UV treatment system will be designed for the expected flows at the plant and will be installed on the final effluent line. UV treatment will be in operation 24 hours a day, 365 days a year. The UV system will consist of a minimum of three and a maximum of four treatment units located below or partially below ground level with an above-ground Motor Control Centre (MCC) (in a kiosk) along with minor maintenance and control equipment (e.g. shut-off button, frame for supporting, retracting and cleaning of UV lamps etc.).
River Mayne Culvert Extension	• Extension of the River Mayne Culvert on the proposed access road to the WwTP by 4m (from 21m to 25m) to cater for the full width of the future north south link road.

Table 1.1: Updated Proposed Project Elements

Please refer to Appendix 17A in Volume 4A Part B of the EIAR Addendum for the Addendum Outline CEMP for the proposed Regional Biosolids Storage Facility (RBSF) element of the Proposed Project.

1.3 Scheme Elements

There are no other changes to the main elements of the Proposed Project proposed in the 2018 planning application, other than the updated elements discussed in Table 1.1.

1.4 Scheme Layout

There are no changes to the site locations for the proposed Abbotstown Pumping Station and the proposed Wastewater Treatment Plant (WwTP). There are also no changes to the proposed location for the proposed RBSF (refer to Appendix 17A in Volume 4A Part B of the EIAR Addendum for the Addendum Outline CEMP for the proposed RBSF element).

1.5 Planning Drawings

This Addendum to the Outline CEMP should be read in conjunction with the updated Planning Drawings listed in Appendix 1. All other planning drawings remain unchanged from the 2018 planning application.

2. Health and Safety

Following a review of the Outline CEMP submitted as part of the 2018 planning application, the updated Proposed Project elements as outlined in Table 1.1, the updated EIAR Addendum Chapters, and all relevant legislation, policy and guidance, we are satisfied that the information previously submitted in this Section of the Outline CEMP in the 2018 planning application remains up-to-date and that no further changes to this section are required.

3. **Construction Programming and Sequencing**

Due to the passage of time since the preparation of the original 2018 planning application, an updated estimated timeline is provided in Diagram 3.1. The total Construction Phase will remain as approximately 48 months, including 12 months of commissioning. Individual activities will have shorter durations, as shown.

All other information provided in this Section of the Outline CEMP in the 2018 planning application remains valid.

Please refer to Appendix 17A in Volume 4A Part B of the EIAR Addendum for the updated construction programme for the proposed RBSF element.



Diagram 3.1: Updated Proposed Project Construction Programme

4. **Construction Environmental Management**

The following sections provide updated information in relation to issues that will be encountered during the Construction Phase of the Proposed Project. This Section identifies any additional controls that will be in place during the Construction Phase and any additional mitigation measures that have been specified in the addendum to the EIAR. The appointed contractor(s) will develop a CEMP in advance of commencement on-site and this will be adhered to during the course of the Construction Phase.

4.1 Site Operations

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application. All site operations will be in accordance with the information provided in this Section of the Outline CEMP in the 2018 planning application.

4.2 Environmental Management Plan

The mitigation measures, as set out in Chapter 24 (Summary of Mitigation Measures) in Volume 3 Part A of the EIAR submitted as part of the 2018 planning application remain valid and shall be included in the final CEMP completed by the appointed contractor(s). The following additional mitigation measures, as set out in the Chapter 24A (Summary of Mitigation Measures) in Volume 3A Part A of the EIAR Addendum must also be adhered to and included in the final CEMP for the Proposed Project by the appointed contractor(s):

Ecology (Marine)

- The Revised Vessel Management Plan included as Appendix A10.2 in Volume 3A Part B of the 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.; and
- 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.

Ecology (Terrestrial)

- 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 outfall pipeline route from the proposed 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;
- 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:

- 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.
- 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:
 - 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.
- 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);
- 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 doublerow 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);
- 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 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.;
- 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;

 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;

- 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.;
- 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.;
- 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.

Landscape and Visual

• The relevant Landscape Management Plans which will be prepared and implemented by the appointed contractor 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.

Air Quality, Odour and Climate

- 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);
- 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;
- Materials procured for major asset components will have verified Environmental Product Declarations;
- The appointed contractor will comply with the latest European Union regulations relating to carbon dioxide (CO₂) 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 with set emissions standards 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 CO₂ emission performance standards for new passenger cars and new light commercial vehicles in line with the Union's increased climate ambition; and

• 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).

Waste

• 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.

Material Assets

- 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; and
- 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.

Risk of Major Accidents and / or Disasters

- 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. 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. 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:
 - 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.

Cumulative Impacts

- 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 Eireann 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.
- 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.

• 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.

All of the mitigation measures set out in the original 2018 planning application and in this Addendum Outline CEMP are considered necessary to protect the environment prior to and during the Construction Phase of the Proposed Project and shall be included in the appointed contractor's final CEMP.

4.3 Construction Waste Management Plan

As outlined in this Section of the Outline CEMP in the 2018 planning application, prior to construction, the appointed contractor will develop a Construction Waste Management Plan and procedures that will address:

- The mitigation measures set out in Chapter 20 (Waste) in the EIAR in the 2018 planning application;
- The Outline CEMP; and
- All current local and national and EU waste management legislative obligations.

The Construction Waste Management Plan will also address:

- Any updated mitigation measures outlined in Chapter 20A (Waste) in Volume 3A Part A of the EIAR Addendum; and
- This Addendum to the Outline CEMP.

All other information provided in this Section of the Outline CEMP in the 2018 planning application, with the exception of that described below, remains valid.

The quantity of excavated material / surplus material has been updated to account for the updates to the Proposed Project, as outlined in Table 1.1. There will now be a total of approximately 290m³ (cubic metres) of excavated materials generated due to the inclusion of the UV treatment unit at the proposed WwTP and the 4m extension to the proposed River Mayne Culvert, resulting in a total quantity of surplus material in the order of 220,700m³.

4.4 Communications Plan

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

5. Wastewater Treatment Plant

5.1 **Proposed Site at Clonshagh**

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

5.2 Access

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

5.3 Indicative Layout of WwTP

The indicative layout of the proposed WwTP has been updated to include the proposed UV treatment module, which will be installed on the final effluent line between Zone 2 and Zone 3 of the proposed WwTP site, as shown in Planning Drawing Number 32102902-2120.

5.4 Odour Control

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

5.5 External Lighting

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

5.6 Construction Methodology

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

5.7 Landscaping and Visual

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

5.8 Surface Water Management

During the Construction Phase, there will be no changes to the management of surface water runoff during construction activities, in accordance with the original Outline Surface Water Management Plan included in Appendix 3 to the Outline CEMP in the 2018 planning application and the Addendum to the original Outline Surface Water Management Plan, which is included in Appendix 2A to the Outline CEMP Addendum.

The design for surface water management has remained unchanged since the 2018 planning application. However, some additional surface water connection pipes may be required to service the UV treatment process building within the proposed WwTP site. However, there will be no change to the volume of surface water runoff to be collected as this area was previously hardstanding in the 2018 planning application.

There are no other changes to the information presented in this Section of the Outline CEMP in the 2018 planning application, which still remains valid.

6. Pumping Station

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7. Terrestrial Pipelines

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.1 Proposed Pipeline Routes

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.2 Pipeline Corridors

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.3 Pipeline Construction Methodology

7.3.1 Construction Overview

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.3.2 Access to Pipeline Corridor and Construction Compounds

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.3.3 Programme

Due to the passage of time since the preparation of the original 2018 planning application, an updated estimated timeline for the terrestrial pipeline elements of the Proposed Project has been developed and is provided in Diagram 7.1. The estimated construction period for the proposed orbital sewer and outfall pipeline route (land based section) remains at 18 months. All other information provided within this Section of the of the Outline CEMP in the 2018 planning application remains valid.

Description	Estimated Construction Programme	2025	2025 2026			2027					20	028		2029				
		Q 4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q 4
Mobilisation	3 months																	
Construction Corridor Fencing, Topsoil Stripping and Archaeological Monitoring	3 months	I																
Orbital Sewer Route (Blanchardstown to Clonshagh) incl. NFS Diversion	18 months																	
Outfall Pipeline Route (Land Based Section)	18 months																	
Commissioning	12 months																	
Ke	y: Critic	cal Path																
	Activity - Estimated D	Ouration																
Activity - Programme Float																		

Diagram 7.1: Updated Outline Construction Programme – Terrestrial Pipelines (Part of Overall Updated Programme)

7.3.4 Agricultural Lands and the Orbital Sewer

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.3.5 Terrestrial Pipelines – "Winter" Working

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.3.6 Pre Planning

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.3.7 Commencement of Work

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.3.8 Condition Survey

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.3.9 Corridor Preparation

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.4 Pipeline Crossings of Infrastructure

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

7.5 Pipeline Crossings of Watercourses

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

8. Outfall Pipeline (Marine Section)

8.1 Outfall Pipeline (Marine Section) Construction

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

8.1.1 Micro-tunnelled Section

Due to the passage of time since the preparation of the original 2018 planning application, an updated estimated timeline for the marine-based pipeline elements of the Proposed Project has been developed and is provided in Diagram 8.1. The estimated construction period of the micro-tunnelled section remains at 12 months, including for site mobilisation. All other information provided within this Section of the of the Outline CEMP in the 2018 planning application remains valid.

Description	Estimated Construction Programme	2025	20	2026			2027				20	28		2029				
Mobilisation Establishing Temporary Construction Compounds for Tunnelling	3 months 3 months (Apr-Jun)	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Tunnelling Works	9 months (Jun- Apr)																	
Demobilisation of Temporary Construction Compounds	2 months (Aug-Sept)																	
Subsea Pipeline Manufacture	6 months (Jun -Dec)																	
Subsea Pipeline Delivery	3 months (mid Jan-mid Apr)																	
Subsea Pipeline Assembly	3 months (mid Jul-mid Sept)																	
Subsea Pipeline Installation	2 months (mid Jul-mid Sept)																	
Dredging	3 months (May-Jul)																	
Backfilling	2 months (mid Sept-mid Oct)																
Tunnel Subsea Pipeline Connection	1 month (mid Aug-mid Sept)																	
Install Diffusers	1 month (mid Aug-mid Sept)																	
Commissioning	12 months																	
Key	r Criti	cal Path		_														
Ney	Activity - Estimated E																	
	Activity - Program																	

Diagram 8.1: Updated Outline Construction Programme – Marine Based Pipelines (Part of Overall Updated Programme)

8.2 Subsea Pipeline

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

8.3 Tunnel/ Subsea Pipeline Interface

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

8.4 Marine Diffuser

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

8.5 Subsea Fibre Optic Cable

There are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

9. Regional Biosolids Storage Facility (RBSF)

9.1 Locations

There are no changes to the location of the proposed RSBF site. Therefore, there are no changes to the information presented in this Section of the Outline CEMP in the 2018 planning application.

9.2 **Proposed Works**

There are no changes to the design or the proposed works for the proposed RBSF, as outlined in this Section of the Outlined CEMP in the 2018 planning application remains unchanged.

9.3 Construction Phase

9.3.1 Programme

There have been changes to the programme presented for the proposed RBSF in this Section of the Outline CEMP in the 2018 planning application. The initial phase of construction for the proposed RBSF will involve the construction of one storage building. This has been updated to commence in 2024 (originally 2020). The estimated construction works period has been considered further since the 2018 planning application, and based on this, the construction period has been amended to 18 months (from 12 months). This will bring completion of the initial phase to 2025. The second building is likely to be constructed in 2028. An updated indicative programme for the construction works for the initial phase is shown in Diagram 9.1.

Task No.	Task and Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18
1	Mobilisation and Site Set Up																		
2	Demolition																		
3	Earthworks and Excavation																		
4	Roads																		
5	Drainage																		
6	Storage Building Concrete Foundation																		
7	Storage Building Concrete Ground Slab																		
8	Storage Building Retaining Walls																		
9	Strucutral Steel and Roof Trusses																		
10	Roofing																		
11	Cladding																		
12	Mechanical and Electrical																		
13	Adminsitration and Welfare Building																		
14	Landscaping and Planting																		
15	Comissioning																		

Diagram 9.1: Proposed RBSF Construction Works Programme – Initial Phase (Updated)

9.3.2 Construction Activities

There are no changes to the information relating to construction activities for the proposed RSBF, as presented in this Section of the Outline CEMP in the 2018 planning application.

9.3.3 Operational Phase

There are no changes to the information relating to the Operational Phase of the proposed RSBF, as presented in this Section of the Outline CEMP in the 2018 planning application.

10. Sources of Information

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

EPA (2021). Best Practice Guidelines for the Preparation of Resource Management Plans for Construction and Demolition Projects

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

Planning and Development Act 2000

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.

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