

Dublin City Council

Report to Support Derogation Licence Application

Dublin District Heating Project

MDR1597

F01

25 June 2026



TETRA TECH

Tetra Tech Dublin, West Pier Business Campus, Old Dunleary Road, Dún Laoghaire, Co. Dublin,
A96 N6T7, Ireland

Tetra Tech Ireland Limited. Registered in Ireland: No. 161581
Registered Office: West Pier Business Campus, Old Dunleary Road, Dún Laoghaire, Co. Dublin,
A96 N6T7, Ireland

Document status

Document status					
Version	Purpose of document	Authored by	Reviewed by	Approved by	Date
F01	Final	HF	MN	CR	25/06/26

Approval for issue		
CR		25/06/2026

This report was prepared by Tetra Tech within the terms of Tetra Tech engagement with its client and in direct response to a scope of services. This report is supplied for the sole and specific purpose for use by Tetra Tech’s client. The report does not account for any changes relating the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report. Tetra Tech does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report.

Prepared by	Prepared for
Tetra Tech	Dublin City Council

Table of contents

1	Introduction	1
2	Proposed Development.....	3
2.1	Initial Phase Dublin District Heating Project.....	3
2.1.1	Open Cut Roads and Paved Areas.....	7
2.1.2	Hours of Work.....	9
2.1.3	Programme	9
3	Overview of Otter Surveys	10
3.1	Consultation.....	10
3.2	Methodology	10
3.2.1	Desktop Study	10
3.2.2	Field Study.....	11
3.3	Results	11
3.4	Data Limitations and Difficulties Encountered	14
4	Evidence to Support Derogation Test.....	15
4.1	Test 1 – Reason for Derogation.....	15
4.2	Test 2 – Absence of Alternative Solution	16
4.2.1	Aim of the Proposed Works	16
4.2.2	Need for the Proposed Works.....	16
4.2.3	Alternatives Considered.....	17
4.3	Solutions Test 3 – Impact on Conservation Status	18
5	Proposed Mitigation	20
6	Monitoring	21
7	References.....	22

List of tables

Table 1-1: Qualifications and relevant experience of contributors.	1
---	---

List of figures

Figure 2-1: Overall Dublin District Heating Project	7
Figure 2-2: Typical Cross Section for Construction of District Heating Pipelines.....	8
Figure 3-1: Otter Survey Results (Source: 3FM Project, 2025a)	13
Figure 3-2: DCC Otter Survey Results (Source: Macklin, <i>et al.</i> , 2019)	13

1 Introduction

This derogation licence is being sought to permit works associated with the development of the Dublin District Heating Project (DDHP) (hereafter referred to as the ‘Proposed Development’) which aims to capture waste heat from industrial facilities on the Poolbeg Peninsula, and pipe it into homes, businesses and civic buildings in the Poolbeg, Ringsend and Docklands areas of Dublin city via a pipeline network. The primary heat source for the project will be the Dublin Waste to Energy (DWtE) facility at Poolbeg.

A single potential otter holt is located within the potential zone of disturbance of the Proposed Development where works are proposed at the North Docklands (see **Section 3**). The potential otter holt is located within the existing North Wall Quay at MV Cill Airne floating restaurant (53.347135, - 6.237892, see **Figure 3-1**). Publicly available data relating to this otter holt has indicated that it was inactive in 2024/2025, however in consultation with NPWS in February 2026, it was advised that that this holt be monitored to determine its status and usage.

NPWS also advised that on a precautionary basis, a derogation licence to disturb the single potential otter holt is sought given the holt location is within 150m of the Proposed Development.

A number of mitigation measures including pre-construction surveys and monitoring (see **Section 5**) are included for the Proposed Development to identify potential breeding evidence in advance of construction. However, based on the current baseline disturbance, as a result of the Proposed Development, cannot be avoided.

A list of the ecologists, their competence and experience including relevant qualifications is provided in **Table 1-1** below. Those listed in **Table 1-1** have either assisted in the preparation of the application and/or will be responsible for carrying out the proposed derogation activities.

Table 1-1: Qualifications and relevant experience of contributors.

Contributor	Qualifications	Relevant Experience
Dr Miles Newman	BSc, MSc, PGDip, PhD, CEnv, MCIEEM	Dr Miles Newman is a Senior Associate Ecologist with over 17 years of experience working in the private sector, research, academia and Non-Governmental Organisations (NGOs). He holds a PhD in Botany, Postgraduate Diploma in Statistics, MSc in Biodiversity and Conservation and a BSc (Hons) in Environmental Management. He is a Chartered Environmentalist and a full Member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). Miles provides key ecological inputs on projects including ecological surveying and coordination, Ecological Impact Assessments (EclA), mitigation strategy development, Ecological Clerk of Works, long-term site management plans, and operational stage surveying and reporting.
Hannah Fearon	BSc, MSc	Hannah Fearon is a Senior Project Ecologist. She is a professional ecologist with over 7 years' experience in a variety of environmental and ecological assessment procedures, planning reporting, Environmental Impact Assessment (EIA), EclA, AA, Natura Impact

Contributor	Qualifications	Relevant Experience
		Statements (NIS) and ecological surveys including invasive species survey, and protected species surveying. Hannah has a broad knowledge base and is a member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and Institute of Environmental Science (IES). She was awarded a Master's degree in Applied Environmental Science from the UCD School of Biology and Environmental Science. Hannah has extensive experience delivering ecological inputs on high profile projects including ecological surveying and coordination, mitigation, Ecological Clerk of Works, and long-term site management plans.
Conor Maloney	BSc, MSc	Conor is a Project Ecologist with over 4 years' experience. Conor graduated from UCD with a masters in Applied Environmental Science in 2022. Conor's field survey experience includes terrestrial mammal surveys, habitat surveys, wintering bird surveys, breeding bird surveys, and bat surveys. He is also a qualified tree climber. He has experience in the preparation of ecological assessments to inform AA Screening, Natura Impact Statements and Ecological Impact Assessments. He is experienced in completing desktop studies, data analysis and the assessment of impacts.
Michael Suttle	BSc, MSc	Michael Suttle is a Project Scientist. He is a professional ecologist with 3 years of experience in a variety of environmental and ecological assessment procedures. Michael has extensive experience delivering ecological inputs on high profile projects including EIA, EcIA, AA and Natura Impact Statements. Michael's experience includes ecological surveying and coordination, mitigation, and Ecological Clerk of Works. Ecological survey work includes habitat surveys, invasive species surveys, and protected species surveying. Michael was awarded a master's degree in Applied Environmental Science from UCD and a bachelor's degree in Plant Sciences from Trinity College Dublin.

The document is structured as follows:

- **Section 2: Proposed Development** sets out the proposed works which have the potential to have an effect on otter.
- **Section 3: Overview of Otter Surveys** summarises the methodology and findings of the desktop and field studies which have been completed to inform this derogation licence.
- **Section 4: Evidence to Support Derogation Test** summarises the conditions for seeking derogation and applies the tests required to ensure that the pre-conditions for a derogation licence are met.
- **Section 5: Proposed Mitigation** outlines the mitigation measures proposed for the Proposed Works with respect to otter.
- **Section 6: Monitoring** outlines the reporting that will be undertaken as part of the Proposed Works.

2 Proposed Development

2.1 Initial Phase Dublin District Heating Project

Dublin City Council (DCC) is seeking to undertake the delivery of the DDHP. The Proposed Development will initially capture heat produced at the Dublin Waste to Energy (DWtE) facility in Poolbeg and re-use it to heat water and buildings in the Poolbeg, Ringsend and Docklands areas of Dublin City via a district heating network. In the future, the network will expand and may be supplied with heat from multiple sources.

The medium for circulating heat within the district heating network and transferring heat to customers is water. This water will be circulated within a closed network of insulated steel pipelines that will be buried. There will be two pipelines running in parallel to each other throughout the network, with branch connections to individual premises terminating in heat exchangers. One of these pipelines will be the supply pipeline bringing heat to premises. The other pipeline will be the return pipeline, returning the water in the system to the DWtE facility after it has passed through heat exchangers located at customer premises. The system will operate in a continuous manner, with heat being added to the network in response to customer demand.

The proposed Initial Phase of the DDHP will comprise the following elements:

- A. Modifications at the DWtE facility to enable harnessing of available heat energy from the plant. This will involve the installation of plant, piping and equipment within the existing permitted District Heating Plant Room as follows:
 1. Electrical boiler (approximate capacity up to 10MW_{th})
 2. Pumping systems comprising pumps, filters, valves and insulated piping for circulating district heating water as follows:
 - Through existing steam-water heat exchangers at the DWtE facility.
 - Through the electrical boiler (For modulating the thermal output to the district heating network.)
 - Through a future thermal storage tank¹.
 3. Water treatment installation (capacity 5m³/hr) including storage.
 4. Water treatment facilities for circulation water (capacity 30m³/hr) including storage.
 5. Pressure holding equipment
 6. District heating piping including connections to the district heating network and to the future planned thermal storage tank.
 7. Associated electrical installations for the above (distribution board, motor control centre etc.). Power for the district heating plant room will be provided via the existing grid connection to the DWtE facility.
 8. Control system with Control Room.

¹ The future thermal storage tank will be the subject of a future planning application. The thermal storage tank will provide back-up and peak load heating for the district heating network.

9. Modifications to the steam piping and equipment within the DWtE facility to ensure that the proposed district heating system can be run safely and at maximum efficiency.
- B. Installation of a District Heating Pipeline Network comprising the following:
1. Approximately 8.5km of parallel buried (minimum cover of 750mm) district heating insulated pipelines (1No. flow and 1No. return) ranging in size from approximately 600mm internal diameter and approximately 900mm external diameter (including insulation) to approximately 100mm internal diameter and approximately 225mm external diameter (including insulation).
 2. Approximately 240m of parallel district heating insulated pipelines with an internal diameter of approximately 500mm and an external diameter (including insulation) of approximately 710mm for circulating district heating water between the DWtE facility and a future planned thermal storage tank that will be the subject of a future planning application.
 3. An elevated steel pipe bridge, crossing an internal road within the site of the DWtE facility approximately 15m in length with a clearance above the road approximately 5.5m to support 4No. district heating pipelines as follows:
 - 2No. district heating pipelines, with an internal diameter of approximately 600mm and an external diameter of approximately 900mm connecting to the district heating network.
 - 2No. district heating pipelines, with an internal diameter of approximately 500mm and external diameter of approximately 710mm, connecting to a future planned thermal storage tank that will be the subject of a future planning application¹.
 4. Expansion loops to ensure that the district heating pipelines are not subjected to unacceptable levels of stress or fatigue over time, due to thermal expansion and contraction.
 5. A surveillance system for the purpose of detecting possible leaks from the district heating network or damage to the pipe insulation cause by external factors. The surveillance system will use pre-installed wires within the external insulation of the district heating pipelines. At intervals of approximately 500m, above ground cabinets (approximately 650mm high x 310mm wide x 160mm deep) will be installed to facilitate operation and maintenance of the surveillance system.
 6. Buried isolation valves, including customer isolation valves, to be located at strategic locations within the network to facilitate system operation, control and maintenance.
 7. Electrical mini pillars to supply power to isolation valves fitted with electric actuators. Approximate dimensions 600mm x 370mm wide x 210mm deep.
 8. 2No. 100mm uPVC ducts for carrying fibre optic cables that will be used for monitoring and controlling the overall district heating network.
 9. A tunnel, approximately 140m in length extending from a location adjacent to York Road on the east, to Sir John Rogerson's Quay on the west. The tunnel will have an internal diameter of approximately 2.5m. It will be approximately 15m

deep, with a minimum cover under the river bed of approximately 6m. The tunnel will include the following:

- 2No. district heating pipelines, with an internal diameter of approximately 500mm and an external diameter of approximately 710mm.
- 2x 300mm ducts and 4x 100mm ducts for future possible services.
- Isolation valves on the district heating pipelines.
- Ancillary systems including water level monitoring, drain pumps, lighting, ventilation etc.
- Covered shafts on both sides of the River Dodder. These will incorporate ground level accesses (detailed below) to facilitate inspection and maintenance of the tunnel, installed district heating pipelines, valves, service conduits and ancillary systems.
 - Personnel access (3,150mm x 1,050mm)
 - Equipment access (1,200mm x 1,200mm)
 - Equipment access (750mm x 750mm)
- Above ground control kiosks on both sides of the River Dodder for operating tunnel access openings. Approximate dimensions 600mm high x 600mm wide x 400mm deep.
- Above ground power kiosks on both sides of the River Dodder. Approximate dimensions 1,500mm high x 750mm wide x 400mm deep.
- Above ground ventilation units on both sides of the River Dodder. Approximate dimensions 3,825mm high x 470mm wide x 1,000mm deep.

10. Open cut methods will be used generally for the construction of the district heating network. However, there will be trenchless crossings under various utilities and services including but not limited to as follows:

- High voltage electrical cables and high-pressure gas pipeline to the south of the DWtE facility.
- High voltage cables and storm water drain to the east of the Irish Glass Bottle Development.
- 2No. crossings of high voltage cables, water pipelines and foul pipelines within Ringsend Park, including a crossing of the combined historic quay wall / Ringsend & Pembroke Sewer.

11. Connections to existing sections of district heating pipelines within the Dublin City area at the following locations:

- Liffey Services Tunnel
- North Wall Avenue

- North Wall Quay
 - Mayor Street
- C. Modifications of the existing Back-up Boiler Station at Spencer Dock to increase its capacity from approximately 7.2MW_{th} to approximately 9MW_{th}. These modifications will include the following works within the existing permitted back-up boiler building:
1. Removal of 6No. existing 1.2MW_{th} gas fired boilers.
 2. Installation of 3No. 3MW_{th} gas fired boilers.
 3. Reconfiguration of the piping, plant and equipment within the boiler station as required to accommodate larger boilers.
 4. Upgrading of relevant plant and equipment including water treatment facility and expansion tanks in line with the planned larger capacity of the back-up boiler station.
 5. Installation of a new heat exchanger unit to facilitate heat transfer from the back-up boiler station to the district heating network.

Figure 2-1 illustrates the extent of the Initial Phase of the DDHP indicating the location of the district heating plant and infrastructure at the DWtE facility and the location of the back-up boiler facility at Spencer Dock. The preferred route of the underground pipeline network is also illustrated (in red) together with alternative route options (shown in green). Sections of the network that are already installed are shown in blue.



Figure 2-1: Overall Dublin District Heating Project

2.1.1 Open Cut Roads and Paved Areas

The construction method to be used for the section of the district heating network along North Wall Quay (i.e. the area adjacent to the location of the otter holt) is open cut construction trenching in existing roadway. Trenching is a construction technique that involves digging a trench in the ground for the installation, maintenance or inspection of

pipelines, conduits or cables. A typical layout and typical cross section for district heating pipeline construction in paved areas is shown on **Figure 2-2**.

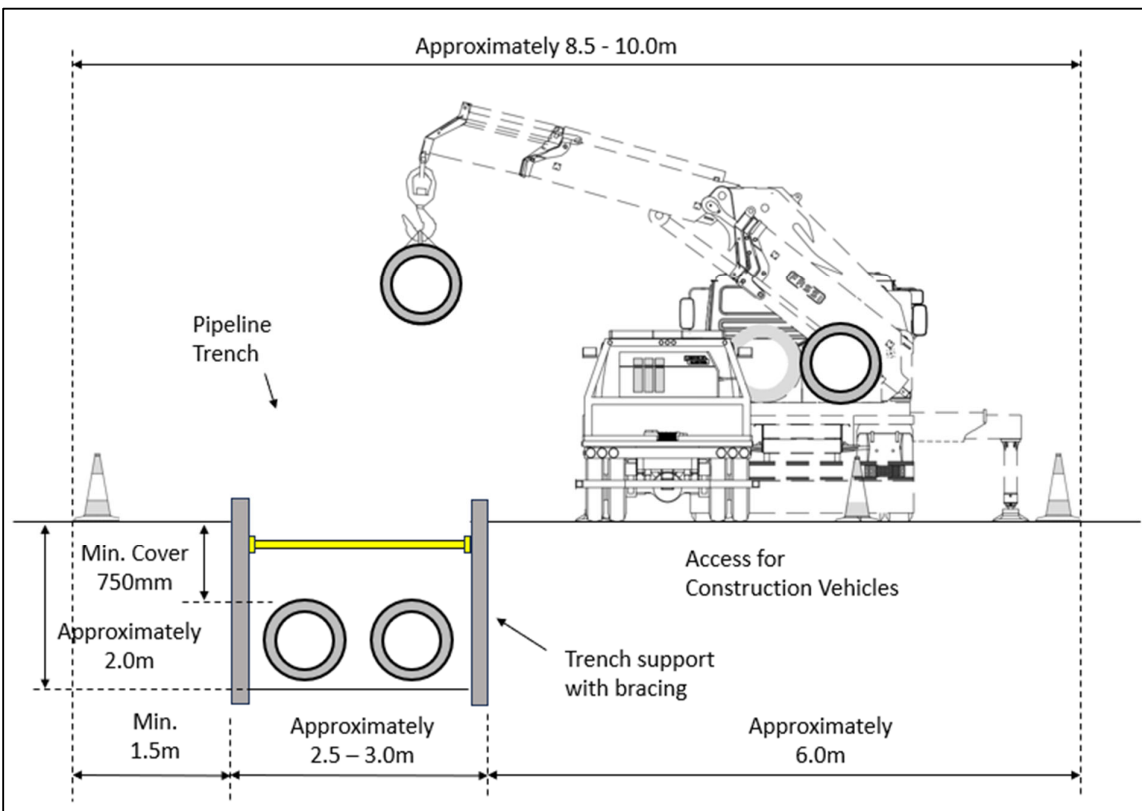


Figure 2-2: Typical Cross Section for Construction of District Heating Pipelines

For the largest district heating pipes (900mm external diameter), the typical trench will be approximately 1.75m deep and measure approximately 2.85m wide. The overall width of the temporary construction area, including access for machinery, is approximately 8.5 - 10m.

The proposed construction methodology and requirements are outlined below:

- There will be additional requirements for traffic management within roadways (including adjacent footpaths, cycle tracks etc.). The specific traffic measures that will be used in each case will depend on the location. However, the relevant requirements of the Department of Transport Traffic Signs Manual, Chapter 8 (Temporary Traffic Measures and Signs for Roadworks) will be adhered to for all traffic management. For the duration of works in a particular area, members of the public and public traffic will be segregated from the construction works.
- Due to space limitations in public roads, the typical pipeline trench will be made by first cutting the pavement surface with a circular saw. Material excavated from the top layer of the trench (road planings, broken concrete or asphalt) will be removed from site and disposed of at appropriately licensed landfills / disposal or recycling locations by licensed hauliers. Material subsequently excavated from the pipeline trench will not be stored

within the extents of the construction site due to the limited space and as such, will need to be loaded directly from the trench into attendant dumpers, dump trailers or tipper trucks. The excavated material will be removed off-site to a temporary storage point prior to screening and reuse for backfilling or removal to a licensed landfill for disposal or recovery. The pipeline trench will only be backfilled with suitable material from the works or other suitable imported material in accordance with relevant best practice.

- The excavated trench will have vertical sides and trench protection added to ensure that construction personnel can work safely within the open trench. This approach will ensure that disruption to traffic will be minimised. It should be noted that the contractor may choose to use this approach for some green or open areas also.
- Given the space constraints for working in roads and paved areas, the size of equipment used for excavating and material disposal may be smaller than that used within open spaces. The actual equipment used for construction will depend on the specific contractor's consideration of requirements and construction efficiency. However, for this project it is envisaged that excavators used within roads and paved areas are likely to have a rating of approximately 15 tonnes. Wheeled or rubber tracked excavators are envisaged for these areas. Dumpers and tipper trucks will be wheeled and suitable for working in paved areas. Tipper trucks will be road legal and may also be fitted with grabs to facilitate removal of excavated spoil.

2.1.2 Hours of Work

It is generally envisaged that construction activities will be undertaken during daylight hours. It is proposed that the normal permitted working times will be 07.00 to 19.00 hours Monday to Friday and 08.00 to 16.30 hours on Saturdays, with no working on Sundays and Public Holidays, unless otherwise agreed between the Contractor and the local authority (DCC). For some locations, there may be a need to schedule works outside the above hours e.g. to avoid additional traffic impacts. In these circumstances, working hours will be agreed in advance with DCC Traffic Department in accordance with relevant procedures.

2.1.3 Programme

The development of the Initial Phase of the DDHP as described above will take place over a number of years.

The construction of the proposed development will be transient (continually moving) and will be completed in sections. Sections of excavations will be worked on at any one time.

The construction phase associated with the North Docklands will take place over 12-15 months, however, works adjacent to the potential otter holt location will likely be limited to a number of weeks.

3 Overview of Otter Surveys

3.1 Consultation

During consultation undertaken with the National Parks and Wildlife Service (NPWS) in February 2026, a known location of a potential otter holting site at MV Cill Airne floating restaurant (North Wall Quay) was raised. Publicly available data relating to this otter holt has indicated that it was inactive in 2024/2025, however it was advised by NPWS that this holt be monitored to determine its status and usage. Additional information was provided with regards to potential holts at Sea Safari offices, Pigeon House Road, and the Harbour Master Garden at Grand Canal; and otter evidence (i.e. spraints) at Hailing Point.

NPWS recommended an application for Derogation in relation to disturbance for the otter holt at MV Cill Airne floating restaurant.

3.2 Methodology

3.2.1 Desktop Study

A desktop study was completed in May 2026 to identify relevant information regarding otter across the Proposed Development. This desktop study established, from available publications and other publicly available resources, the known distributions and potential presence of otter across the Proposed Development. Otter records older than 10 years or more were excluded from the data search. This exercise collated information from the following sources:

- Information on ranges of mobile QI populations in Volume 1 of NPWS' Status of EU Protected Habitats and Species in Ireland (NPWS, 2025a), and associated digital shapefiles obtained from the NPWS Research Branch;
- Details of QIs of European sites within the National Biodiversity Action Plan 2023-2030 (DoHLGH, 2024);
- Any local surveys of fauna, and habitat available using the Heritage Councils mapping website (<https://heritagemaps.ie/WebApps/HeritageMaps/index.html>);
- Distribution records for QI and SCI species of European sites held online by the National Biodiversity Data Centre (NBDC)²;
- Information on the location, nature and design of the Proposed Development;
- Photographs and aerial imagery e.g. Google Maps (<https://www.google.ie/maps/>); Bing Maps (<https://www.bing.com/maps>) etc. Study area: 150m buffer around the redline of the Proposed Development;
- Information regarding records for sensitive habitats and species presented by the Dublin Port Company 3FM Project Ecological Impact Assessments (<https://www.dublinport.ie/masterplan/3fm/>); and
- Dublin City Biodiversity Action Plan 2021-2025 (DCC, 2021).

² Assessing records up to 10 years old (from date of search), for an area of 5 km from the Proposed Development site. Available online at: <https://maps.biodiversityireland.ie/Map> Accessed May 2026.

3.2.2 Field Study

The Proposed Development area was searched for evidence of otter in October 2024, and a follow-up survey was carried out in March 2026 to update the baseline.

Ecological surveys were conducted in October 2024 and March 2026 for observations of otter and otter signs (e.g. footprints, spraints, couches, holts, live sightings, etc.). These surveys were undertaken to confirm the presence or absence of otter activity, including breeding or resting locations (e.g. holts, couches etc.), for all land within 150m of the Proposed Development, and to detail otter activity and the locations of such activity.

The survey methodology for Otter (*Lutra lutra*) was cognisant of guidance of the NRA (2006) and included searches for breeding or resting sites within suitable habitats up to 150m from the footprint of the Proposed Development to account for the potential effect of disturbance from noise and vibration. Evidence of otter including spraints, footprints, or feeding remains was recorded, where present.

Following consultation with the NPWS (see **Section 3.1**), and evidence to suggest a potential holting site, trail cameras were deployed on a floating pontoon at two locations proximal to MV Cill Airne floating restaurant (53.347135, -6.237892) to assess the North Quay Wall for potential otter holting. The trail camera was deployed for a period of 38 days between 20 April 2026 and 28 May 2026).

3.3 Results

The data search (NBDC) identified the presence of otter (*Lutra lutra*) within the Ecological Study Area of the Proposed Development. Consultation with NPWS (see **Section 3.1**), also confirmed the presence of otter spraint at Hailing Point. However, the field survey conducted in October 2024 and March 2026 concluded that no evidence of otter (holts, spraints, slides, trails, prints, and couches) was observed within 150m of the Proposed Development footprint. Despite this, the River Liffey and Dublin Bay are known to support foraging and/or commuting otter populations.

Between April 2018 and April 2019 Dublin City Council (DCC) undertook baseline surveys to collect data on otter populations within the DCC bounds (Macklin, *et al.*, 2019). As part of this survey, the presence of otter was surveyed along the reaches of the River Liffey, between the M50 at Waterstown Park (Palmerstown), as far as the East Link Toll Bridge (Tom Clarke Bridge) at Ringsend. During the survey in Dublin City Centre, a holt was identified in a quay wall at the MV Cill Airne floating restaurant (see **Figure 3-2**), which is located within the ecological study area of the Proposed Development.

For surveys completed by Tetra Tech (Tt) access was limited in certain areas during the site walkover. Any areas where access was not granted, supplementary information was taken from a combination of the Dublin Port Company 3FM Project Ecological Impact Assessments (3FM, 2025a). For the 3FM Project otter surveys were carried out on the 13th, 18th and 23rd of December 2024; the 14th and 17th of January 2025, and the 19th of February 2025 to establish the presence of otter holts and/or foraging areas within the site of the 3FM Project. According to these surveys there was one otter holt recorded inside the Zone of Influence (ZoI). An inactive otter holt was identified c. 120m from the Proposed Development. Refer to **Figure 3-1**.

Anecdotal evidence from the management team at MV Cill Airne floating restaurant stated that visual evidence of otter (i.e., a single cub) was seen 5+ years ago. However, no evidence has since been noted.

Due to location of this potential holt within the footprint of the Proposed Development, two camera traps were deployed to monitor the status of the holt and the presence of otter associated with North Wall Quay and pontoon for a period of 38 days between 20 April 2026 and 28 May 2026. A review of camera trap footage confirmed no records of otter, and no evidence of otter (i.e. spraints, prints) were observed on or in proximity to the pontoon. However, due to the site-specific constraints associated with the deployment at this location (see **Section 3.4**), it is still considered possible that otter are potentially using the North Wall Quay and/or pontoon as a potential resting site.



Figure 3-1: Otter Survey Results (Source: 3FM Project, 2025a)

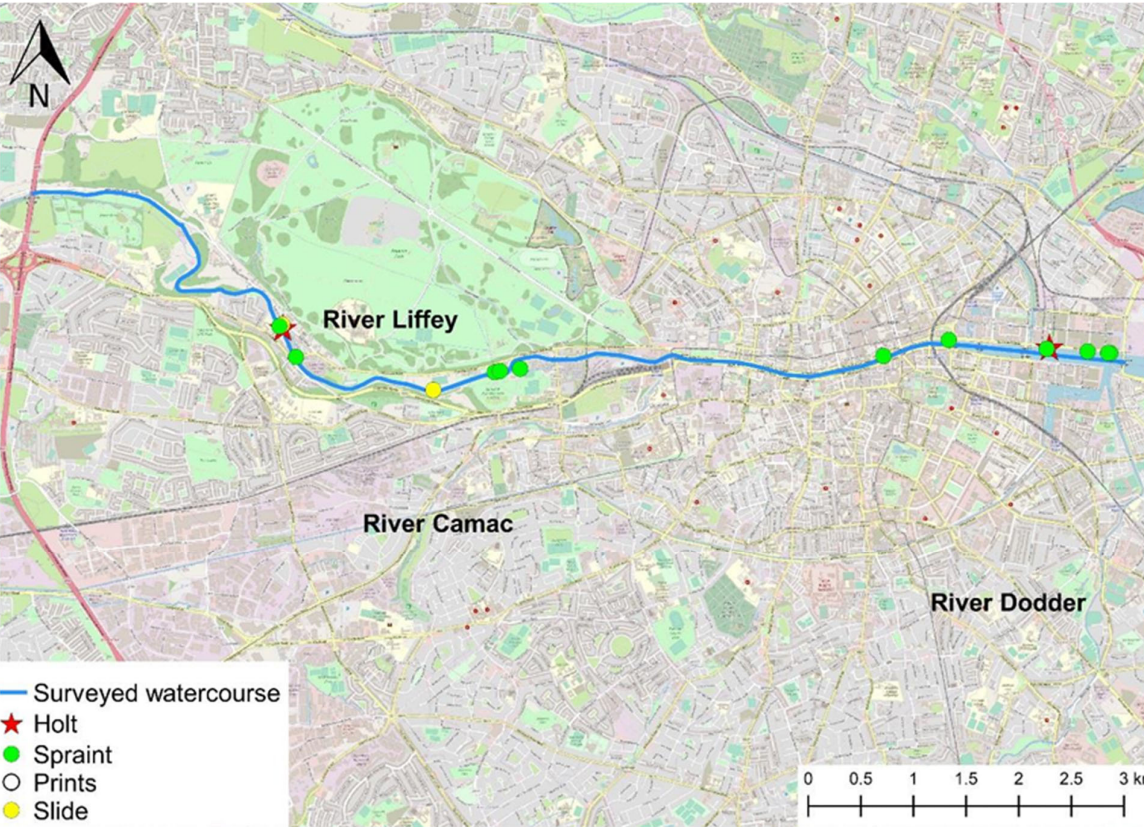


Figure 3-2: DCC Otter Survey Results (Source: Macklin, et al., 2019)

3.4 Data Limitations and Difficulties Encountered

During the deployment of trail cameras at two locations proximal to MV Cill Airne floating restaurant, monitoring was subject to site-specific constraints. Cameras were deployed on a floating pontoon rather than on fixed bankside features, resulting in high levels of disturbance due to tidal movement. The available mounting locations restricted the extent of achievable survey coverage and resulted in less than full coverage of potential otter resting locations. Additionally, intermittent technical issues occurred resulting in incomplete temporal coverage. Accordingly, the results of the trail camera monitoring have been interpreted with an appropriate degree of caution.

Consequently, while evidence of otter use has been indicated through consultation, it was not possible to robustly determine the number of individuals using the holt. In accordance with the precautionary principle, a conservative approach has been adopted, and a derogation license is sought for one or more otters at this location.

4 Evidence to Support Derogation Test

4.1 Test 1 – Reason for Derogation

Regulation 54(2)(a) to (e) states that a derogation licence may be granted for any of the following reasons:

- (a) In the interests of protecting wild flora and fauna and conserving natural habitats
- (b) To prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property
- (c) In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment
- (d) For the purpose of research and education, of re-populating and re-introducing these species and for the breeding operations necessary for these purposes, including artificial propagation of plants
- (e) To allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species to the extent specified therein, which are referred to in the First Schedule.

As per Article 16 of the Habitats Directive which is transposed into Irish law by Regulation 54(2) (b) of the EC (Birds and Natural Habitats) Regulations 2011, as amended, this derogation licence is being sought *'In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment'* and are associated with the contribution of the Proposed Development to Ireland's Climate and Energy targets by delivering on Government policy at a European, National and Local level.

It is estimated that once the pipe network is installed, connected to the plant and fully operational, it will be able to provide heat to homes and commercial businesses thereby potentially reducing carbon (CO₂) emissions by c.16,000 tonnes every year, by reducing the use of fossil fuels.

The National Climate Action Plan 2025 (CAP25) is the third statutory annual update to Ireland's Climate Action Plan under the Climate Action and Low Carbon Development (Amendment) Act 2021. CAP25 builds upon last year's Plan by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings and it should be read in conjunction with Climate Action Plan 2024 and sets out a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. It is highly supportive of the decarbonisation of public and commercial heating and includes a specific target to support the delivery of savings of 0.375 Metric tons of carbon dioxide equivalent (MtCO₂eq) in public and commercial buildings and enable the switch to alternative sources of heating such as district heating. The DDHP aligns closely with the objectives set out in CAP25, which has ambitious plans to phase out Ireland's fossil fuels and replace heating systems with low carbon alternatives such as heat pumps and district heating systems. Specific actions mandated by CAP25 include continuing to design National Planning Policy to appropriately

support district heating and the deployment of district heating at scale, particularly in densely populated areas with readymade heat sources located nearby.

CAP25 continues to promote the development of district heating systems which alone has a target of up to 2.7Twh of installed capacity by 2030. The Government has also approved a Heat Bill which aims to develop a district heating industry that will, among other things, support the development and expansion of district heating networks by public, private and utility 'actors', ensure price protection and provide a pathway for State ownership of privately developed heat networks.

This coordinated approach, backed by the findings of the National Heat Study and the recommendations of the District Heating Steering Group (2023), clearly shows that projects like the DDHP are crucial for achieving the government's target of a 51% reduction in greenhouse gas emissions by 2030. By supporting the deployment of district heating networks, this project will not only contribute directly to national climate goals but also foster the creation of a sustainable and efficient energy infrastructure for Dublin.

The applicant considers that the benefit delivered by the Proposed Development to decarbonisation, reduced reliance on fossil fuels, increased security of supply and security for customers and contribution for achieving national climate targets and obligations demonstrates imperative reasons of overriding public interest.

4.2 Test 2 – Absence of Alternative Solution

4.2.1 Aim of the Proposed Works

The objective of Initial Phase of the project is to facilitate the development of a highly efficient district heating system, which minimises carbon emissions, improves air quality, reduces dependence on imported fossil fuels, provides heat that is safe, good value, reliable and accessible to as many customers as possible on a commercial basis, supplied by waste heat from DWtE Facility and delivered via a district heating distribution network to the Poolbeg West SDZ and North and South Docklands areas.

4.2.2 Need for the Proposed Works

The National Climate Action Plan 2025 (CAP25) builds upon CAP24 and is highly supportive of the decarbonisation of public and commercial heating and includes a specific target to support the delivery of savings of 0.375 Metric tons of carbon dioxide equivalent (MtCO₂eq) in public and commercial buildings and enable the switch to alternative sources of heating such as district heating. The DDHP aligns closely with the objectives set out in CAP25, which has ambitious plans to phase out Ireland's fossil fuels and replace heating systems with low carbon alternatives such as heat pumps and district heating systems. Specific actions mandated by CAP25 include continuing to design National Planning Policy to appropriately support district heating and the deployment of district heating at scale, particularly in densely populated areas with readymade heat sources located nearby.

CAP24 highlighted that approximately 50% of Ireland's heat demand can be met through district heating, necessitating the installation of an extensive pipe trench network of about 1,000 km to facilitate the distribution of heat from central sources to end-users. This coordinated approach, backed by the findings of the National Heat Study and the recommendations of the District Heating Steering Group (2023), clearly shows that projects like the DDHP are crucial for achieving the

government's target of a 51% reduction in greenhouse gas emissions by 2030. By supporting the deployment of district heating networks, this project will not only contribute directly to national climate goals but also foster the creation of a sustainable and efficient energy infrastructure for Dublin.

4.2.3 Alternatives Considered

4.2.3.1 Do Nothing

The Proposed Development is required to achieve the government's target of a 51% reduction in greenhouse gas emissions by 2030. By supporting the deployment of district heating networks, this project will not only contribute directly to national climate goals but also foster the creation of a sustainable and efficient energy infrastructure for Dublin.

The aim of the DDHP project is to contribute to Ireland's Climate and Energy targets by delivering on Government policy at a European, National and Local level including:

- **Climate Change:** The DDHP will contribute to Ireland and Dublin's Climate Targets by reducing the consumption of fossil fuels (coal, oil and gas) and consequently reducing carbon emissions. District Heating is a sustainable alternative to fossil fuels.

The DDHP will contribute towards Ireland achieving our greenhouse gas emissions targets, i.e., a 51% reduction in emissions by 2030 and carbon neutrality by 2050 (<https://www.seai.ie/about/irelands-energy-targets/>).

- **Energy Security:** The DDHP will help Dublin become less dependent on imported energy sources, such as oil and gas, by introducing a new local and renewable energy supply. This in turn will support us becoming more flexible with our energy choices.

In the absence of the Proposed Development (i.e. the option in which there is no delivery of the district heating project), this approach fails to accord with national and local planning policy. This would undermine national and EU commitments to climate targets and emission reductions.

4.2.3.2 Routing Alternatives

The Dublin district heating network is to provide heating to the Docklands area of Dublin from the DWtE Facility located to the East on the Poolbeg Peninsula. Once operational, the Proposed Development will convey thermal energy in the form of hot water through a closed network of buried insulated pipelines (flow and return) laid initially throughout the catchment area of the Poolbeg Strategic Development Zone (SDZ) and the North Lotts and Grand Canal Dock SDZ.

The preferred district heating route will cross the River Liffey, via the Liffey Services Tunnel and connects Poolbeg Peninsula to the North Lotts SDZ. The Liffey Services Tunnel is a pre-existing tunnel (circa 300m in length and 2.5m in diameter and has associated launch and reception shafts) that has been installed in advance of the DDHP and will be utilised as part of the development.

Existing planning policy within both the 'North Lotts and Grand Canal Dock Strategic Development Zone' and 'Poolbeg West Strategic Development Zone' requires that all proposed developments be 'District Heating Enabled'. Several existing developments particularly in the North Docklands/Spencer Dock area are "*district heat enabled*". As such, buildings within these zones that are district heating enabled will be able to connect to the system.

As part of the design development, a route option assessment report was completed to identify a preferred district heating route from the DWtE Facility to the Poolbeg, Ringsend and Docklands areas of Dublin City. All potential feasible route options were identified, and the route was broken down into unique sections. These sections ran between two nodes along the route, and each was subject to multi-criteria assessment under five categories (technical, deliverability, economic, socio-economic, and environmental). The advantage of breaking the route options into smaller sections was that these sections were then combined to build an optimised route.

As such, with respect to an alternative route to the North Wall Quay, a route along Mayor Street/Luas was assessed. However, the node was discounted as the Luas Red Line runs along this section and constrains future expansion of the network and there is high utility congestion in this area.

As such there is no alternative route with respect to the routing along the North Wall Quay.

4.3 Solutions Test 3 – Impact on Conservation Status

The potential effects of the Proposed Development on the conservation status of otter have been assessed. The closest European site for which otter is a Qualifying Interest (QI) is Wicklow Mountains SAC (002122) located approximately 12km southwest (as the crow flies) of the Proposed Development, and approximately 104km upstream via hydrological pathway to the Proposed Development. While otter populations are known to use the River Liffey, it is not considered likely that the individuals using the area of the Proposed Development form part of or are functionally connected to the population associated with the Wicklow Mountains SAC (noting the potential home range of 7.5km for females and 21km for males (O'Neill *et al.*, 2009)). Therefore, the Wicklow Mountains SAC has no hydrological or hydrogeological pathway to the Proposed Development; thus, its QI habitats and species are not assessed here.

As outlined in **Section 3.3**, the Proposed Development is expected to temporarily disturb the use of one holt along the North Wall Quay of the River Liffey due to the works proposed at the North Docklands. Otter can be very flexible in where they rest and sleep, generally relying on a network of holts and couches across their territory (Lundy, 2023). They are, however, more likely to show faithful year-to-year use of below-ground natal holts (Liles, 2003).

The works adjacent to the otter holt along North Wall Quay are not expected to permanently remove any otter holts, however, the works are in close proximity to the potential holt, therefore there is potential for disturbance of the holt. As described in **Section 2**, the holt may be temporarily unavailable for use for otter while works are being completed at the North Docklands (i.e. likely be limited to a number of weeks). However, once works cease, these features will be available for use by otter once again.

Otters are primarily crepuscular (i.e. mostly active at dusk and dawn), and with works proposed during daylight hours, the likelihood of disturbance will be reduced. However, should disturbance occur, the adjacent suitable habitat (i.e. River Liffey), both upstream and downstream of the Proposed Development, is considered to be sufficient for use by otter. The River Liffey contains suitable alternative resting areas for when the use of the identified holt will be temporarily interrupted by the Proposed Development construction phase.

The Proposed Development works adjacent to the otter holt will use open cut excavations within the existing road/pavement. Otter occurring in Dublin City are expected to be somewhat habituated to

the baseline levels noise and vibration, and as construction activity will predominantly occur during daylight hours otter in the vicinity of the North Docklands are expected to already be habituated to noise and vibration.

With the implementation of the mitigation measures stipulated in **Section 5**, and the considerable habitat available both upstream and downstream of the Proposed Development, it is considered that there will be no significant decline of holts and correspondingly, no significant decline in the distribution of otter within the wider population occurring in Dublin City as a result of granting this derogation licence.

Otter is of favourable conservation status in Ireland (NPWS, 2019), remaining widespread and ubiquitous throughout the Republic of Ireland (ROI) and Northern Ireland (NI) (Reid *et al.*, 2025). The population for 2023-2024 is estimated at 13,270, with a minimum estimate of 6,050 breeding females. Over the long-term (since the 1980s), otter populations have shown no change since the last survey in 2010-2011. In the short-term (2010s to 2020s), the population declined -3% overall (+2% in ROI, -27% in NI), with regional variation; notably increasing in the South Western district (+13%) but declining sharply by -40% in the Neagh Bann district (Reid *et al.*, 2025). Given their high mobility, otters can redistribute rapidly in response to environmental change, making it possible that the observed decline in the Neagh-Bann district in NI reflects a temporary localised response to algal blooms which occurred during the survey period.

The current range (84,000 km²) and distribution of otter across Ireland shows no change since the 1980s with otter recorded in 95% of hectads (10 km squares) during the 2023-2024 surveys (NPWS, 2019; Reid *et al.*, 2025). This is commensurate with the favourable conservation status for the species, however the apparent significant decline in the Neagh-Bann River Basin District will require future surveys to determine if this decline is temporary (Reid *et al.*, 2025).

Overall, Reid *et al.* (2025) states that throughout Ireland otters remain widespread, their habitat largely intact and are showing resilience in modified landscape with no existential threat at the national scale. Ireland continues to remain a stronghold for otter (NPWS, 2019).

Given the good future prospects for otter, the overall Favourable conservation status of the species and population trend, it is considered that the granting of this derogation licence will not affect the favourable conservation status of otter at the local, regional or national level.

5 Proposed Mitigation

Based on the current baseline, the Proposed Development has the potential to disturb an otter resting site and therefore, a derogation with respect to this species is sought. The following mitigation is proposed:

- A suitably experienced and competent Ecologist with experience of otter surveys (see **Table 1-1**) will be appointed by or on behalf of the applicant, before the commencement of the Proposed Development.
- Mindful of the mobile nature of otters; at least one month in advance, but no greater than six months in advance, a confirmatory pre-construction ecology survey will be completed. This survey will include reassessment of otter (commuting, foraging and breeding).
- Confirmatory pre-construction surveys will be completed in line with NRA (2006) Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes, National Roads Authority. This survey will include camera trapping (under appropriate NPWS licence) to monitor the potential holt at MV Cill Airne floating restaurant for a minimum of 38 days.
- Should evidence of breeding be identified, no works will be permitted to take place within 150m of the holting site until such a time as otters have successfully completed the breeding (i.e. pups have left the holt). Should evidence of otter holting be identified, and the absence of breeding is confirmed, a temporary exclusion of the holt may be applied, following NRA (2006) guidance.
- The Ecologist will be the liaison for the purposes of consulting with environmental bodies including the NPWS for the Proposed Development, as necessary. In advance of any works commencing on site, all personnel will receive on-site induction by the Ecologist.

6 Monitoring

The Ecologist appointed for the Proposed Development will produce a report outlining all works undertaken in relation to otter for each day they were on site. This report will include details of otter commuting, foraging and breeding evidence identified prior to works commencing and during works. This report will include the exact location of the holt and the number of otters present, if possible.

All necessary return forms and reporting will be submitted to the NPWS, as required.

7 References

- 3FM (2025a) Technical Note 1. Confidential Ecological survey for Otter and Badger (2025). 3FM Project, Dublin Port.
- 3FM (2025b) Environmental Impact Assessment Report. Chapter 7 Biodiversity, Volume 2 Part 2. 3FM Project, Dublin Port.
- DCC (2021) Dublin City Biodiversity Action Plan 2021-2025. Dublin City Council.
- DoHLGH (2024) Ireland's 4th National Biodiversity Action Plan - Overview. Department of Housing, Local Government and Heritage.
- Liles G. (2003) Otter Breeding Sites. Conservation and Management. Conserving Natura 2000 Rivers Conservation Techniques Series No. 5. English Nature, Peterborough.
- Lundy, M. (2023) 'Species Profile: Otter', Vincent Wildlife Trust Ireland.
- Macklin, R., Brazier, B. & Sleeman, P. (2019) Dublin City otter survey. Report prepared by Triturus Environmental Ltd. for Dublin City Council as an action of the Dublin City Biodiversity Action Plan 2015 2020.
- Neill, L. O., Veldhuizen, T., de Jongh, A., & Rochford, J. (2009) Ranging behaviour and socio-biology of Eurasian otters (*Lutra lutra*) on lowland mesotrophic river systems. *European Journal of Wildlife Research*, 55(4), 363-370.
- NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
- NPWS (2019) The Status of EU Protected Habitats and Species in Ireland: Species Assessments. Volume 3 2019. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Dublin.
- NPWS (2025a) The Status of Protected EU Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished Report, National Parks & Wildlife Services. Department of Culture, Heritage and the Gaeltacht, Dublin.
- NRA (2006) Guidelines for the Treatment of Bats during the Construction of National Road Schemes. National Roads Authority.
- Reid, N., Dingerkus, K., Stone, R., Colhoun, K., Maddox, L. & Marnell, F. (2025) Otter Survey of Ireland 2023-24. Irish Wildlife Manuals, No. 161. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.