DUBLIN PORT COMPANY

Application for Derogation under Regulation 54 European Communities (Birds and Habitats) Regulations 2011

3FM Project

IBE 2022

F01

28 September 2026

TETRA TECH

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1.0 INTRODUCTION

1.1 OBJECTIVE OF THE PROPOSED WORKS

The 3FM Project (http://www.dublinport3fm.ie) is Dublin Port Company's (DPC's) third and final Masterplan Project. It focuses on development in the south port area, known as the Poolbeg Peninsula, which contains nearly one-fifth of the Dublin Port estate. The estimated capital cost of the 3FM Project is €1.1 billion (2024 costs).

The 3FM Project at Dublin Port has been designed in accordance with the Dublin Port Masterplan 2040. The proposed project focuses on the DPC-owned lands of the south port area on the Poolbeg Peninsula. The Masterplan identifies the land uses and development projects on port lands which will allow the port to achieve its ultimate capacity of 73.8m tonnes of cargo throughput per annum by 2040. The 3FM Project has evolved from the concept drawings of the Masterplan, driven by DPC's understanding of the key environmental constraints formulated by a decade of environmental monitoring, collaborative working with NGOs and Universities, and early consultation with key stakeholders.

1.2 STATEMENT OF AUTHORITY

David Welsh

The lead otter surveyor and consultant ecologist for the licence applicant, David Welsh is an Associate Ecologist with Tetra Tech and holds a BSc (Hons) in Marine Science, a MSc in Ecological Management and Conservation Biology with over eleven years of experience in ecological consultancy. David has wide ranging experience in ecological surveys, including habitat, mammal, reptile, and amphibian survey and is a protected species licence holder. David has extensive experience of badger survey and derogation works including providing the role of Ecological Clerk of Works (ECoW), supervision of both temporary and permanent badger sett closures, badger territory bait-marking surveys and monitoring. David has also had extensive experience undertaking otter surveys throughout his ecological consultancy career and voluntary conservation work. David is an associate member of the CIEEM and a former member of the Northern Ireland Badger Group.

David has held the following licences for species derogation:

National Parks and Wildlife Services (NPWS):

- DER-BAT-2022-77
- C97 / 2022

- DER-BAT-2023-63
- DER-BAT-2024-174
- DER-BAT-2025-18
- DER-BAT-2026-130

Northern Ireland Environment Agency (NIEA):

David has been issued with numerous NIEA wildlife licences (badger sett closures, bat survey, bat roost exclusions etc.), an example of these are listed below.

- DDB/26/21 Bat roost exclusion
- DDB/11/22 Bat roost exclusion
- DDB/6/23 Bat roost exclusion
- DDB/28/23 (Daubenton's Bat)
- DDB/46/23 (Daubenton's Bat)

The information prepared and provided is true and accurate at the time of issue of this report and has been prepared and provided in accordance with the CIEEM Code of Professional Conduct (CIEEM 2025). We confirm that the professional judgement expressed herein is the true and bona fide opinion of our professional ecologists.

2.0 BACKGROUND

2.1 PROPOSED ACTVITY

Dublin Port is the largest Port in Ireland. The Northern Lands and Southern Lands of Dublin Port (Dublin Port Estate) comprise an area of 265 ha of land entirely within the ownership of Dublin Port Company. The entire Port Estate comprises 309 ha, including the lands at the Dublin Inland Port.

The 3FM Project has six key elements (Figure 1):

1. Construction of a new public road and bridge called the **Southern Port Access Route (SPAR)** to link the north and south port areas including a new opening bridge over the River Liffey. This will facilitate HGVs, pedestrians, cyclists, blue light services and public transport users moving to and from the South Port and Poolbeg Peninsula. The SPAR will also allow the 3FM Project to be rail enabled through rapid road shunting of freight from the South Port, across the Liffey, to rail intermodal facilities in the North Port vicinity. The SPAR will have a direct connection to the Dublin Tunnel (AKA Dublin Port Tunnel) via the North Port road system.

2. Construction of a new **Lift-on Lift-off (Lo-Lo) Terminal** with an annual throughput capacity of 550,000 Twenty-foot Equivalent Units (TEU) or 5.34m tonnes. The Lo-Lo terminal will be located north of the ESB's Generating Station, with 650m of deep-water berthage plus associated cargo handling areas (Dublin Port Masterplan Area N) to accommodate Lo-Lo vessels of up to 240m dredged to a depth of -13.0m CD (Chart Datum). It will operate in conjunction with a transit container storage yard located on waterside land currently used for bulk cargo handling (Dublin Port Masterplan Area L).

3. Replacement of the existing Lo-Lo container terminal, currently operated by Marine Terminals Limited (MTL), with a **new Roll-On Roll-Off (Ro-Ro) Terminal** with an annual throughput capacity of 360,000 Ro-Ro units or 8.69m tonnes. The Ro-Ro terminal will be located at existing Berths 42-45 including provision of two berths, each with a single tier Ro-Ro ramp, plus associated cargo handling facilities (Dublin Port Masterplan Area K). The terminal will operate in conjunction with a transit Ro-Ro trailer yard located on Port owned land on the southern side of the Poolbeg Peninsula (Dublin Port Masterplan Area O). This combined terminal will accommodate Ro-Ro vessels of up to 240m length, primarily from Continental Europe. There will be no stacking of containers or trailers, nor use of gantry cranes in Area O, where ground level, single height freight trailers will be completely hidden from Sandymount Strand.

4. Provision of a **325m diameter ship turning circle** in the river channel north of Pigeon House Harbour, dredged to a depth of -10.0m CD. The ship turning circle will enable safe navigation and efficient manoeuvring of vessels up to 240m in length.

5. Construction of a **Maritime Village** at Pigeon House Road and Berth 41. This village will accommodate local rowing, sailing, and boat clubs and will provide a significantly enhanced public realm and facilities on the waterside. The 3FM Project will require the demolition of the existing boating facilities to make way for the proposed SPAR. The existing facilities will be replaced by the construction of the Maritime Village which will have a significantly larger footprint including the hinterland to Berth 41 (currently part of the existing Lo-Lo Container Terminal operated by MTL).

6. Construction of **Community Gain** elements, which collectively represent a substantial and meaningful community proposal, including:

Enhanced **recreational amenity** through:

- **7.0km of Active Travel Paths** (cycle, pedestrian, wheelers etc.) **and 4.9km of new or upgraded footway** for the SPAR and Poolbeg Peninsula, which will link with the 1.4km Liffey Tolka Greenway in the North Port, and from there to the 4.0km Tolka Estuary Greenway currently under construction by Dublin Port. **DPC will also provide Dublin City Council with a €5 million contribution** for future upgrading of the existing coastal path along the southern perimeter of the Poolbeg Peninsula.

- Development of a **sailing, rowing and maritime campus** (Maritime Village) adjacent to the existing Poolbeg Yacht and Boat Club in consultation with local sailing and boating clubs, including a public slipway and facilities for maritime skills training.
- Provision of recreational space in the form of **Port Park and Wildflower Meadow** (2.5ha) and **Coastal Park** (1.6ha), and 1.1ha extension to Irishtown Nature Park.

Enhanced **public realm** through the development of a new public plaza as a key part of the Maritime Village, and extensive boundary softening works adjacent to the development sites forming part of the 3FM Project.

Community support through the establishment of a new €2 million Community Benefit Fund for Education, Heritage & Maritime Training Skills projects within the Poolbeg area. The initial capital for the Fund will be administered by DPC in consultation with local stakeholders.

Heritage & Biodiversity enhancements through:

- An innovative design approach that will use open-piled structures to protect marine biodiversity by preventing significant infilling of the River Liffey, while also being future-proofed against climate change impacts
- Sustainable construction practices, low-carbon materials, and energy-efficient infrastructure that will reduce the port's environmental impact.
- Commissioning a new Public Access Feasibility Study regarding the Great South Wall to identify improved public interpretation, accessibility, facilities and conservation possibilities, with up to €1 million funding to implement the study recommendations.
- Construction of an additional permanent marine structure (dolphin) to expand the available habitat and range of the Dublin Port Tern Colonies.
- Provision of Interpretative Markers to delineate the alignment of the Great South Wall.

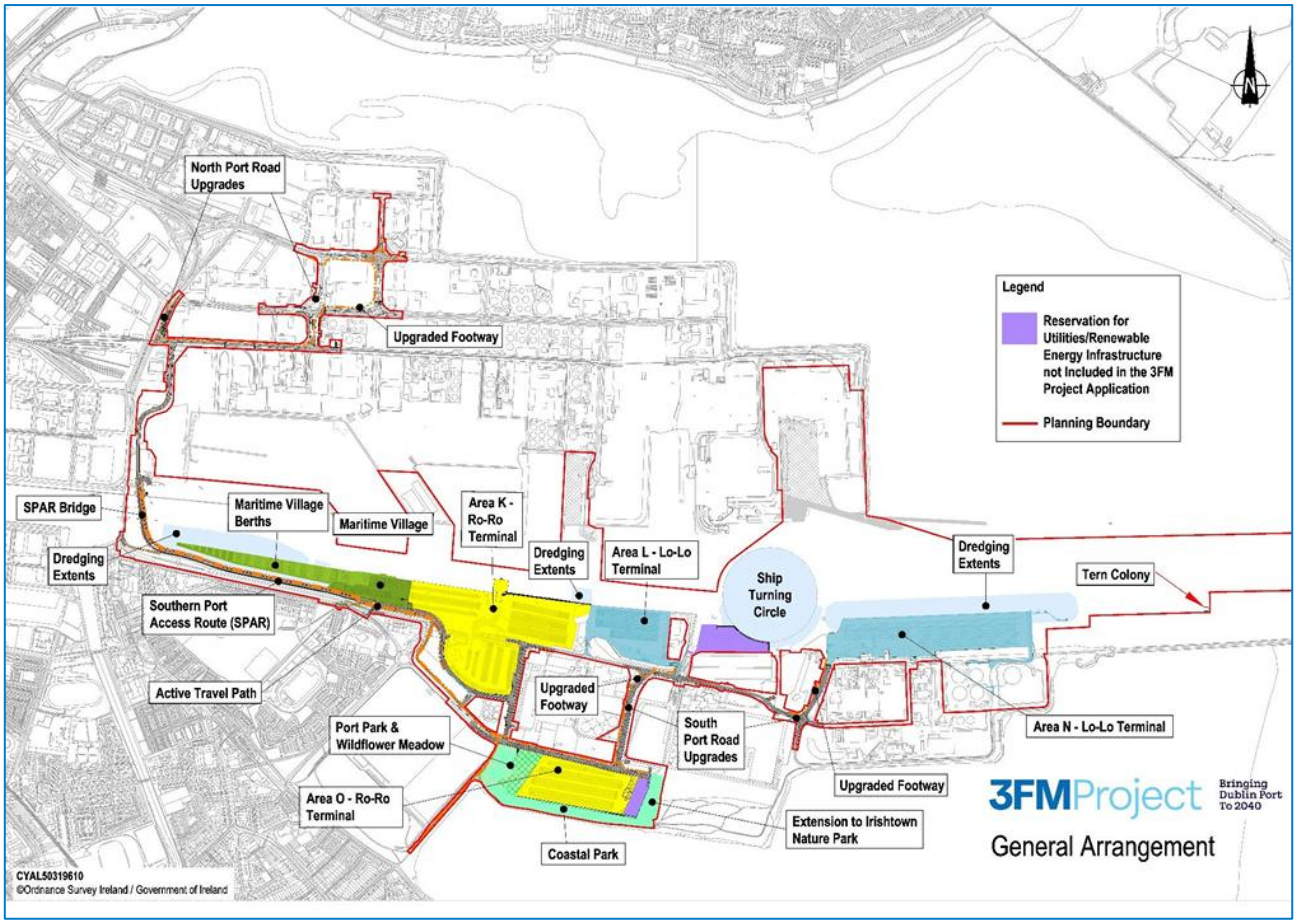


Figure 1: 3FM Project Site Location Map and key project elements

2.1.1.1 RELEVANT PROJECT WORKS AND PROGRAMME

The proposed development has a 15-year programme of construction works, with many elements of the project not commencing for a number of years. An outline proposed project phasing of the key work elements over a 15-year project period is presented in Figure 2. Calendar years have been amended to reflect a revised potential commencement date in 2027.

The principal 3FM Project activities relevant to this application include capital dredging of areas in the inner port to facilitate vessel movements and installation of scour protection, and construction of infrastructure and facilities which requires demolition of certain structures and piling operations.

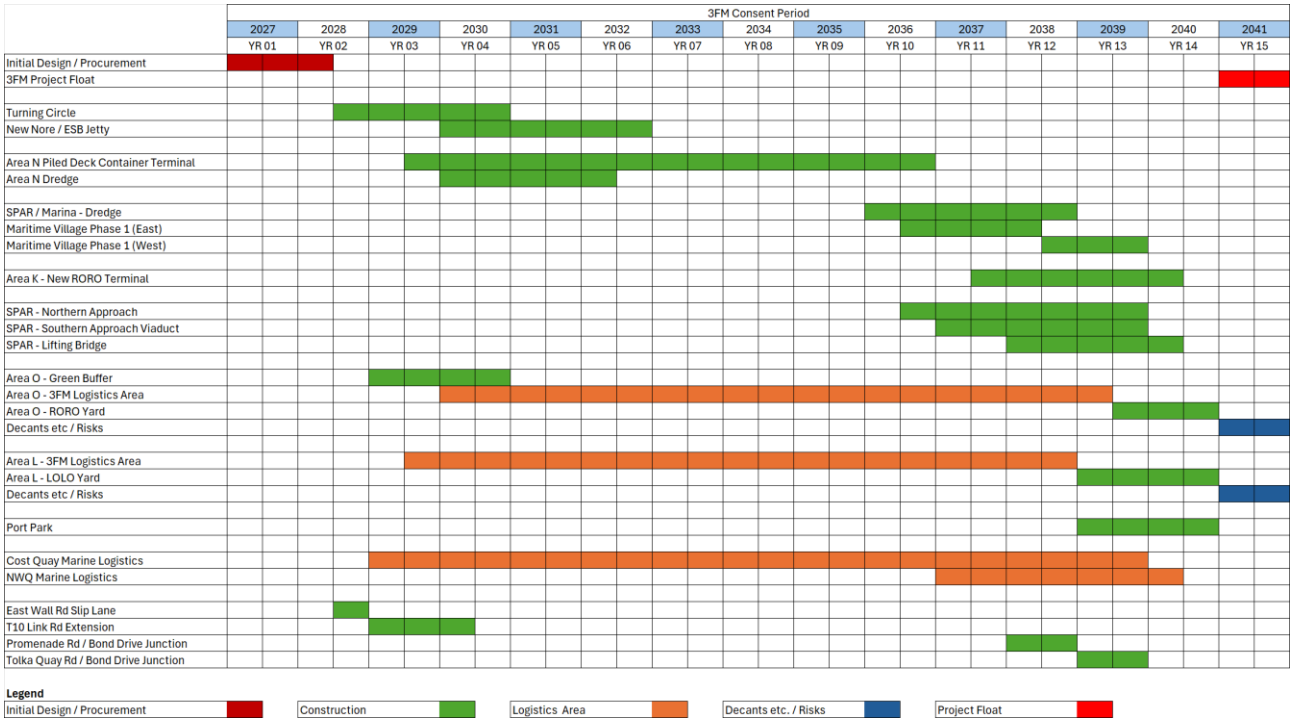


Figure 2: 3FM Programme of works over a 15-year implementation period

2.2 LOCATION

See **Figure 1** 3FM Project Site Location Map and key project elements.

2.3 OWNERSHIP

The area within the proposed development boundary is in ownership of the Dublin Port Company.

2.4 REASON FOR ACTIVITY (3FM PROJECT)

The 3FM Project is a strategically important element of the long-term development of Dublin Port and is required to provide additional port capacity in response to anticipated growth in national and regional trade. The project is expected to provide approximately 20% of the additional capacity required to accommodate projected port throughput of approximately 77.2 million gross tonnes by 2040.

Dublin Port is Ireland's principal port and a critical national gateway for the movement of imported and exported goods. Without the 3FM Project, the port would be unable to accommodate anticipated future demand, resulting in pressure on existing facilities, reduced operational flexibility and potential

constraints on the movement of goods. These effects could have wider consequences for supply-chain resilience, freight transport, employment, economic activity and associated public revenues.

The project will support the continued development of port capacity within an existing strategic port location and contribute to national transport and port-policy objectives. Its benefits extend beyond the commercial interests of Dublin Port Company and relate to the effective functioning of Ireland's transport network, economy and supply chains.

2.5 PLANNING

The Dublin Port Masterplan 2040 was first published in 2012 and was reviewed in 2018. The Dublin Port Masterplan 2040 presents a vision for future operations at the Port in order to plan for sustainable growth and changes in facilitating seaborne trade in goods and passenger movements to and from Ireland and the Dublin Region in particular. The Masterplan is being implemented through a series of capital development projects.

The Alexandra Basin Redevelopment (ABR) Project is the first major strategic infrastructure development project from Dublin Port's Masterplan 2040, involving the construction of approximately 3km of quay walls, deepening of the harbour basin and channel to accommodate larger sea going vessels as well as works associated with the conservation of the port's Victorian industrial heritage. An Coimisiún Pleanála (ACP – formerly An Bord Pleanála) granted a 10-year permission for the ABR Project on 8th July 2015 (Ref: 29N.PA0034), and works commenced in November 2016. Planning permission expired in July 2025, and some outstanding elements are being brought forward under a further planning application to ACP.

The MP2 Project is the second strategic infrastructure development project from the Masterplan. It focuses on the use of existing port lands at the eastern end of the North Port estate. When complete, it will provide additional capacity for almost one-third of the projected increases in Dublin Port's Ro-Ro and Lo-Lo traffic to 2040. ACP granted Planning Permission for the MP2 Project on the 1st of July 2020 (ABP-304888-19) and works commenced in 2022.

The third and final strategic infrastructure development project to complete the Dublin Port Masterplan 2040 is the 3FM Project, the subject of this application. The 3FM Project is focused on developing additional port capacity on port owned brown-field lands on the Poolbeg Peninsula. An application for planning permission is currently lodged with ACP (PA29N.320250). The 3FM Project has six key elements: the Southern Port Access Route; a new Lo-Lo Terminal; a new Ro-Ro Terminal; a Ship Turning Circle; a new Maritime Village; and several Community Gain elements. These are described in greater detail below.

3.0 DETAILS OF PROPOSED ACTVITY TO BE COVERED BY THE DEROGATION

The application seeks a Regulation 54 derogation in respect of the potential temporary disturbance of otter arising from construction activities associated with the 3FM Project, including piling and associated noise and vibration, and the potential removal of one inactive potential temporary covered otter resting place. The activities covered by the derogation are described below.

3.1.1.1 DREDGING

Dredging will take place at Area N, Area K, and the Turning Circle and at the Maritime Village. The capital dredging works will be carried out using a trailing suction hopper dredger and/or a backhoe dredger. Other ancillary equipment will include a survey vessel and a bed-leveller to remove peaks and troughs created by the dredger. All capital dredging works will take place within the period October to March and will be spread over a number of years (DPC is seeking permission for a 15-year project period). No overspill of the hopper will be permitted during the loading operations to minimise the volume of suspended solids within the River Liffey channel during the loading operations. When working within the navigation channel, the TSHD will also work in the direction of flow to avoid any potential of creating elevated levels of suspended solids across the River Liffey.

The volume of sediment to be dredged in various elements of the 3FM Project is detailed in Table 8.14 of the 3FM EIAR, and total volume is estimated at 1,259,000m^3. Of this, 1,189,000m^3 has been assessed as Class 1 and suitable for disposal at sea (3FM EIAR, Table 8.24). It is proposed to dispose of this dredged material at the licensed disposal site at the entrance to Dublin Bay, located to the west of the Burford Bank subject to separate licensing (**Error! Reference source not found.**). The remaining 72,000m^3, which has been classified as Class 2 material, will be recovered or disposed to an appropriate facility.

Dredging to construct the Turning Circle is programmed to commence in Year 2 of the project (currently 2028). Dredging of Area N will commence soon after. These elements of dredging should be completed in four winter dredging seasons. Further dredging for the SPAR and Maritime Village works is not scheduled to commence until year 10 of the project (currently 2036).

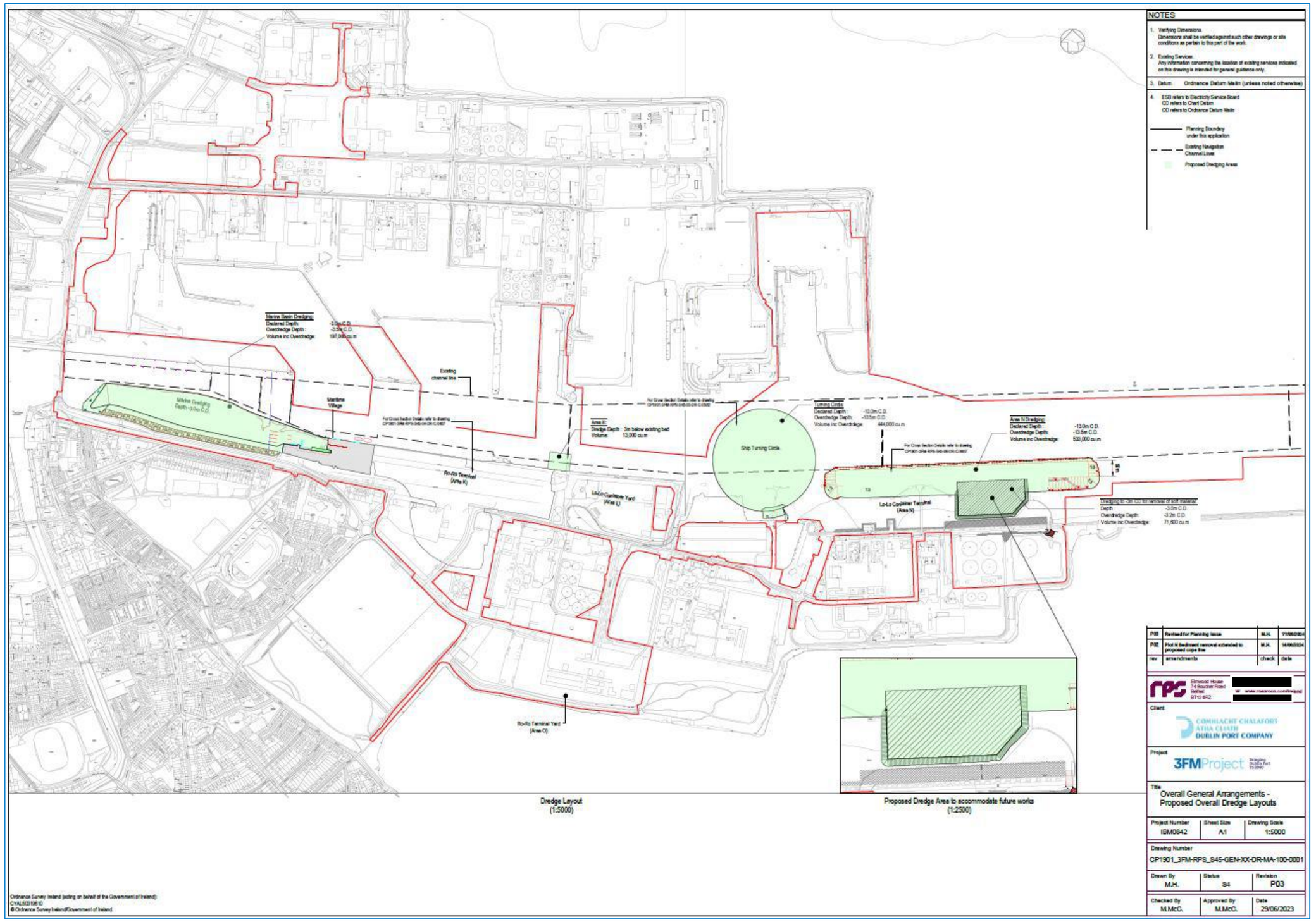


Figure 3: 3FM Dredge Extents

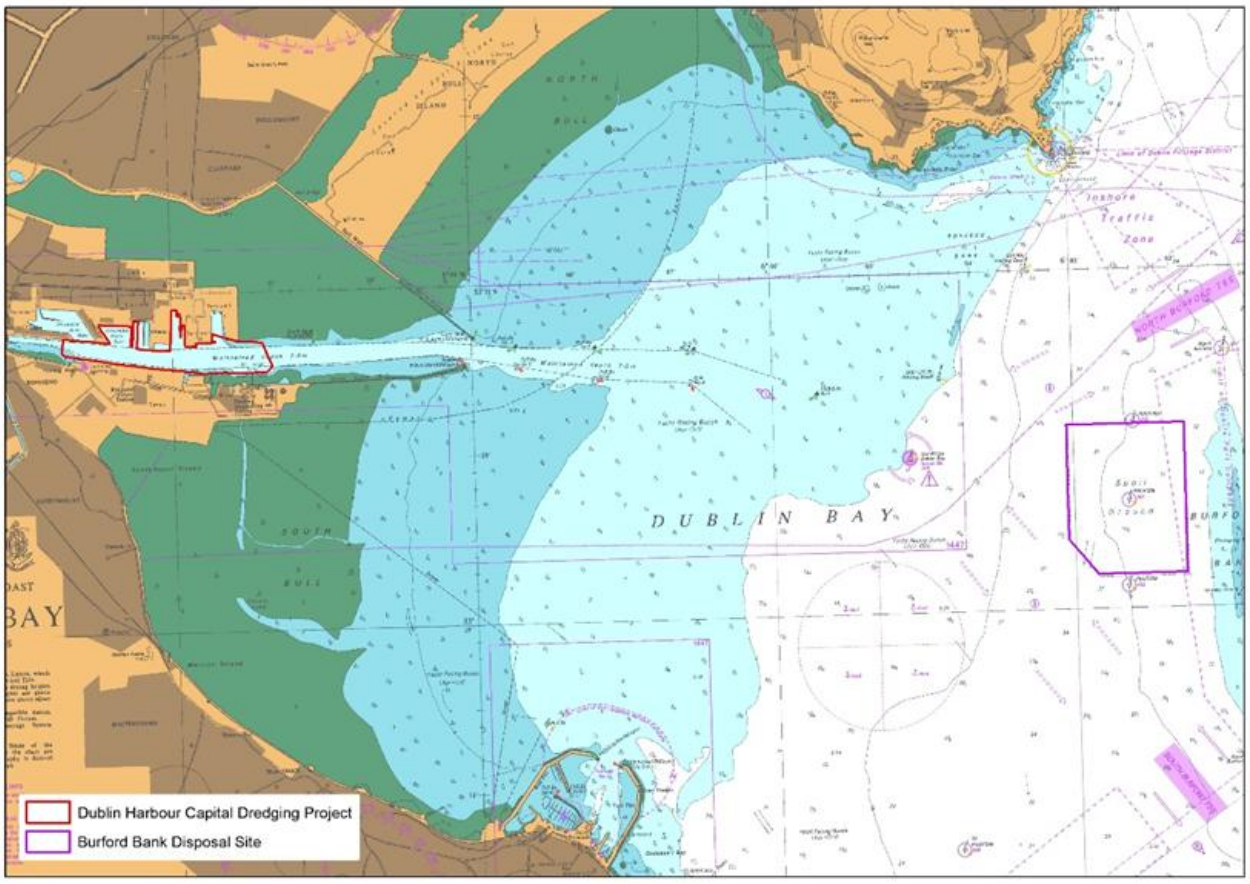


Figure 4: Location of Licenced Spoil Grounds at Burford Bank

3.1.1.2 PILING

Piling activities will be undertaken across various elements of the 3FM Project at different times throughout the construction programme to provide the marine infrastructure required for the 3FM Project. The key piling areas are SPAR Bridge and Viaduct, Maritime Village and Marina, Area K Ro-Ro Terminal, temporary ramp at Area L, the Turning Circle, and Area N Lo-Lo Terminal.

Area N is the most intensive of these areas, requiring installation of 2,600 piles between years 4 and 8 of the project. Piling activity is expected to commence at the Turning Circle and the temporary works at Area L between years 2-4. Further piling at the remaining areas is expected to take place between years 10 to 13.

Piling within the marine environment gives rise to underwater noise which has the potential to adversely impact on marine mammals and fish, and therefore a range of appropriate mitigation measures will be implemented with respect to piling.

3.1.1.3 CONSTRUCTION – DEMOLITION AND DISTURBANCE

The 3FM Project will require the demolition of sundry buildings and jetties, including demolition of the old sludge jetty in year 3 of the project, and the oil jetty in years 6 and 7. Construction of the Viaduct for the SPAR Bridge will entail demolition of the existing facilities at Poolbeg Marina, and is programmed for project year 12. In particular, this will include the removal of the Sea Safari Tours Ltd. Shipping containers currently being used as offices. These containers have previously been identified as a potential otter holt site on the basis of anecdotal evidence. This is discussed in more detail in Section 4.5. The issue of this potential holt is deal with in greater detail below.

4.0 ECOLOGICAL SURVEY AND SITE ASSESSMENT

4.1 PRE-EXISTING INFORMATION ON SPECIES AT LOCATION AND ENVIRONS

The NBDC Biodiversity Maps identified no new records of otter or badger within 1 km of the site since the submission of the original planning application. As of September 2026, there are still no new records of otter or badger within 1km of the site.

The otter (*Lutra lutra*) is widespread throughout Ireland and is currently assessed as being at Favourable conservation status under Article 17 of the EU Habitats Directive. As an Annex IV species under the Habitats Directive, the otter is subject to a system of strict protection. Otter has been identified above as potentially being present in the project area and evidence of presence and distribution considered below.

Otter Surveys carried out for Dublin City Council's Dublin City Otter Survey, 'An Action of the Dublin City Biodiversity Action Plan 2015-2020' covered habitats along 44.7km of the Dublin City coastline, including Dublin Port (Macklin et al., 2019). Spraints were identified on quay steps near Poolbeg Lighthouse, but surveys failed to identify any otter signs on North Bull Island and throughout much of Dublin Port and Merrion Strand. Three holts were recorded in secluded areas of the Tolka Estuary to the north of Dublin Port, one of which was inactive. The port area was typified by low levels of otter seclusion due to high levels of human activity. The low frequency of otter signs in the port and surrounding coastal habitats ranked near the bottom of areas surveyed for otter signs/activity.

Occurrence of spraints and reported anecdotal sightings suggest some otter activity throughout the port area. Significant predation by an otter at the nesting tern colony on the CDL Dolphin in the Liffey channel was recorded on trail-cam in 2021, resulting in no Common or Arctic Tern chicks fledging that season, and required predation preventative measures involving barriers to predator access to nesting platforms (Boland et al, 2022).

4.2 STATUS OF THE SPECIES IN THE LOCAL/REGIONAL AREA

Otter (*Lutra lutra*) is widespread in Ireland and is associated with rivers, lakes, estuaries and coastal areas where suitable prey, access to water and sheltered terrestrial cover are available. Otter is listed under Annexes II and IV of the EU Habitats Directive and is afforded strict protection under Regulation 51 of the European Communities (Birds and Natural Habitats) Regulations 2011.

The most recent national Article 17 assessment, published in 2025, concludes that otter remains widespread in Ireland and that the species is in favourable conservation status. The 2023–2024 national otter survey indicates that the population has stabilised overall following earlier declines. The national population is therefore considered to be broadly stable, although pressures remain from water-quality impacts, disturbance and loss of suitable riparian or coastal habitat.

At the local and regional level, otters are known to occur within the Dublin area, including along the River Liffey, River Tolka, Dublin Bay and associated coastal habitats. The Dublin City Otter Survey identified otter signs along sections of the Dublin coastline and river network, including spraints recorded near Poolbeg Lighthouse. Three holts were recorded in more secluded areas of the Tolka Estuary, although one of these was inactive. The survey also found that otter activity was generally lower within Dublin Port and other highly urbanised areas, reflecting the high levels of human activity and the limited availability of secluded resting habitat.

More recent surveys undertaken in and around Dublin Port have recorded evidence of otter presence, including holts, couches, spraints, slides, paths, feeding remains and occasional sightings. These records demonstrate that otters use the Dublin Port area and the wider Dublin Harbour environment for commuting, foraging and, potentially, resting. The available survey evidence indicates that otter activity is dispersed throughout the wider port and harbour area rather than being confined to the immediate 3FM works areas.

The local port environment is subject to substantial existing levels of human activity, vessel movements, operational noise, lighting and regular disturbance. Otters using the area are therefore likely to utilise suitable areas opportunistically and to move between aquatic and terrestrial habitats, including the River Liffey, the Tolka Estuary, the wider Dublin Bay coastline and associated shoreline and intertidal areas. In coastal environments, otters may also require access to freshwater for drinking and washing saltwater from their coats, as well as suitable cover for resting.

4.3 OBJECTIVE OF SURVEY

The objective of the otter surveys was to establish the presence of otter field signs, otter holts and otter foraging areas within the site of the 3FM Project and within a minimum of 150 m of red line boundary. The 150 m extension is in consideration of a potential occurrence of a natal holt, and to

assess potential piling impacts. The survey information has been used to inform survey reports, and ecological impact assessment of the proposed 3FM project.

4.4 DESCRIPTION OF SURVEY AREA

The 3FM Project site is located within Dublin Port and Dublin Harbour, extending along the lower River Liffey and associated port estate. The site comprises existing quay walls, berthing areas, navigation channels, port infrastructure, warehouses, roads, hardstanding, industrial facilities and areas of active development. The surrounding area is highly urbanised and industrialised, with adjoining estuarine, shoreline and intertidal environments

4.5 SURVEY METHODOLOGY

Ecological surveys have also been undertaken for Otter in the Dublin Port area between June 2022 and February 2023; in April 2023; between January and May 2024; December 2024, January 2025; and February 2025, and August and September 2026 (Dublin Port Company, 2022; RPS, 2025a, Tetra Tech 2026 – see Appendix A of this report). Boat based (small RIB) surveys were included within the 2024/25 and 2026 otter surveys. Thermal imaging devices were used in some locations to search for the potential heat signatures of otters (both in water and on land), in advance of approaching more secluded areas. These surveys covered the areas within the 3FM Project and within a minimum of 150 m of red line boundary. Overall, the area surveyed covers almost the entirety of the Dublin Port estate and additional coastal areas on the southern Poolbeg peninsula.

The location of otter field signs were recorded, mapped and photographed where present.

The site was surveyed for evidence of otter including:

- Holts
- Couches
- Spraint sites
- Feeding sites
- Paths
- Slides
- Footprints

Two infrared, motion-activated, low-glow trail cameras were deployed on the 19th of August within the Yacht club at Poolbeg Harbour to monitor a potential otter holt (previously referred to as Holt H3). This potential holt (anecdotal stakeholder observation) is located under a shipping container structure within a busy boat yard. A total of 38 nights of footage has been reviewed as of the 25th of September.

The trail cameras were secured to temporary scaffolding poles associated with boat-repair works within the yard. The cameras were positioned approximately 5m from the gaps beneath the shipping-container structure (this potential otter resting place has since been confirmed to be inactive). Their deployment was considered non-intrusive, particularly given the high levels of existing human and industrial activity within the yard.

4.6 SURVEY RESULTS

There were no additional otter holts or couches recorded by RPS during the 2026 survey campaign within the site of the 3FM Project or within 150m of the red line boundary. All areas which were previously surveyed were surveyed again in 2026. However, no evidence of otter was recorded, including spraints. It is acknowledged that these survey findings do not confirm absence of otter, however, latest survey findings are consistent with previous surveys and assessments suggesting that otter activity is relatively low within the lower Liffey/Dublin Port Area. Two otter spraints were recorded in May 2026 along the northern Dublin Port Boundary (Tolka Estuary side), outside of the 3FM survey area during an Artificial Otter Holt Suitability Assessment Survey.

4.6.1 POTENTIAL HOLTS

4.6.1.1 Holts 1 & 2

Of the potential holts identified previously (based on otter spraint located near a rock cavity), only one on the northern boundary of the Port estate in Tolka Estuary, was found to show any evidence of otter, and this was limited to a single otter passing by the rock cavity on trail camera footage in 2025, no otters were recorded using the cavity. No evidence of natal holts was found. Construction works associated with Port Internal Road Network (Planning Reg. Ref. 3084/16 as amended by Planning Reg. Ref. 3220/21) and the Liffey Tolka Greenway (PL29N.312692) resulted in the loss of two potential holt locations previously located on the northern shoreline of the Port Estate (approximately 60m from the 3FM site boundary), as part of preparatory ground works to accommodate sheet piling and revetment replacement activities permitted under the above mentioned planning permissions.

Dublin Port Company engaged with NPWS and provided two artificial holts at the location of the two former potential Holts 1 & 2 in June 2026 in consultation with NPWS. To date, there has been no evidence of otter occupancy, however this is not unusual given the relatively short time since they were constructed.



Plate 1: Showing one of two artificial otter holts constructed at the general location of former Holts 1 & 2

4.6.2 Potential Holt 3

In its August 2026 request for Further Information, ACP has observed (at Item 3) that in the Applicant's Technical Note 1 (February 2025), a potential otter holt (no.3) is located beneath the Sea Safari Tours Ltd. shipping containers within the area of Poolbeg marina along the south quays. To assist ACP in its planning determination of the significant environmental effects of proposed 3FM Project on otters as required under EIA requirements, two trail cameras were deployed on the 19th of August within the Yacht club at Poolbeg Harbour. These low-glow trail cameras were secured to temporary scaffolding poles associated with boat-repair works within the yard. The cameras were positioned approximately 5m from the gaps beneath the shipping-container structure. Their deployment was considered non-intrusive, particularly given the high levels of existing human and industrial activity within the yard. A total of 38 nights of footage has been reviewed as of the 25th of September.

No evidence of otter activity has been recorded to date.

Fox, cats, rats and dog was recorded occasionally passing by the cameras, however they never entered under the shipping container or seen to emerge from beneath it. High levels of human activity were recorded (captured from the waist down), as might be anticipated at a boat yard, on almost every day, typically from Sea Safari Boat Tour Staff and boat owners.



Plate 2: Showing locations of gaps under shipping container structure (Anecdotal Holt 3)



Plate 3: Showing location immediately around shipping container structure (Anecdotal Holt 3)



Plate 4: Showing an example of under shipping container structure (Anecdotal Holt 3) – Image taken upon review of trail camera footage to ensure that no otters were present

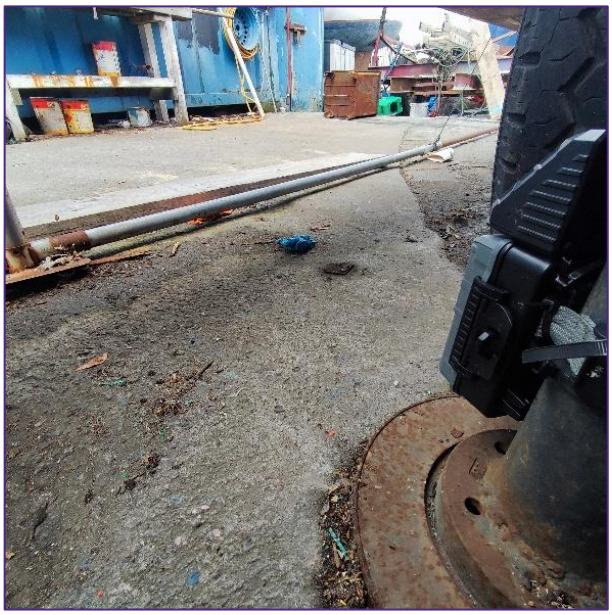


Plate 5: Showing one of the trail camera locations on temporary scaffolding, set back from shipping container.



Plate 6: Showing one of the trail camera locations on temporary scaffolding, set back from shipping container.



Plate 7: Showing examples of recorded images of animal activity at Anecdotal Holt 3.

4.6.2.1 Anecdotal Holts 4 & 5

No evidence of otter was recorded at either of these anecdotal holts. The location of Anecdotal Holts 4 and 5 are >150m from the proposed 3FM boundary.

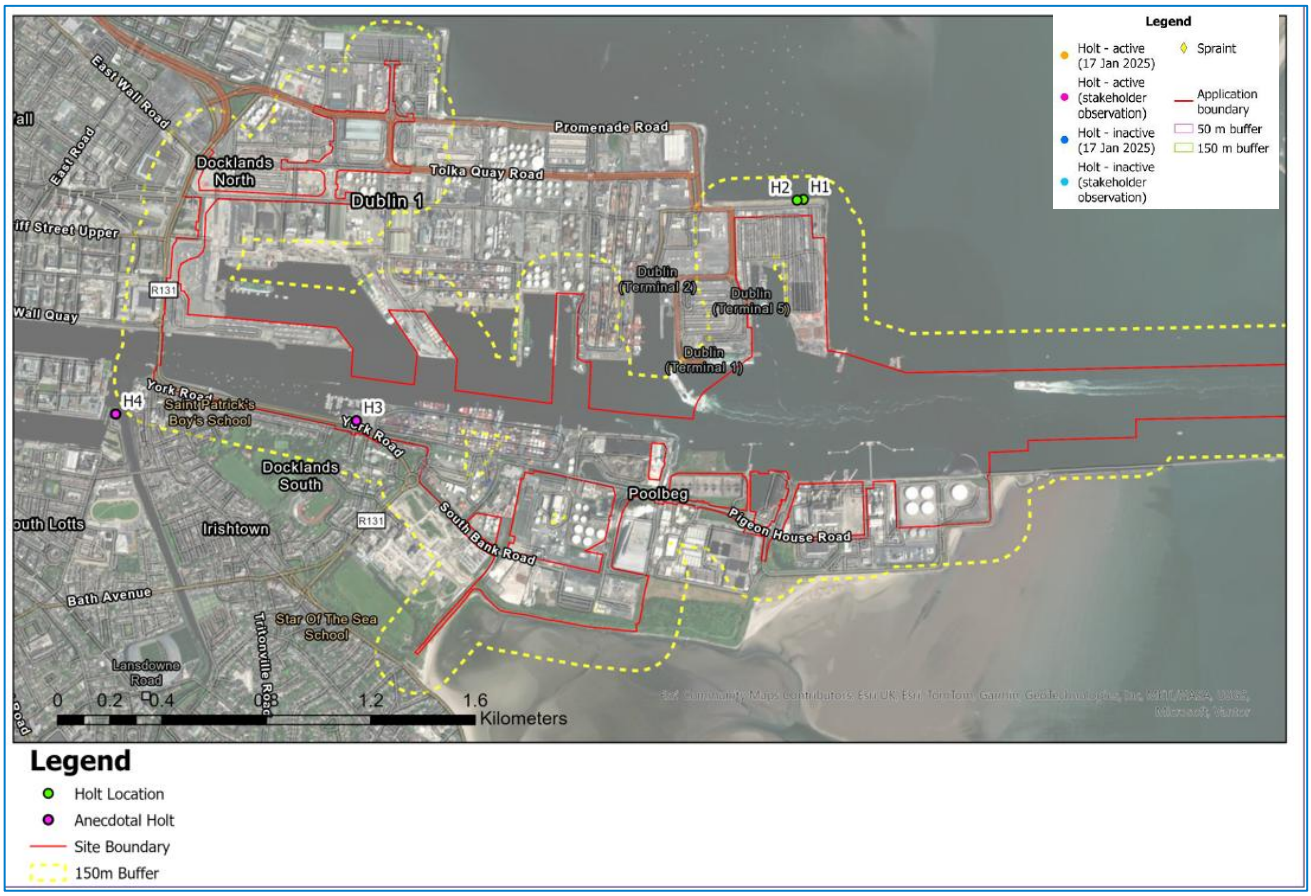


Figure 5: Locations of previously recorded potential otter holts, spraints and sightings in Dublin Port during recent surveys

4.6.3 ANECDOTAL STAKEHOLDER OBSERVATIONS

Otter had previously been seen to seek shelter under the offices of Sea Safari Tours Ltd at Poolbeg Marina, referred to in this report as (potential) Holt 3 (Figure 5). The stakeholder confirmed that this activity had ceased and speculated that otters left this location due increasing numbers of fox *Vulpes vulpes*. However, on the 6th of February 2025, the stakeholder contacted Tetra Tech to confirm a single otter was observed going under the offices of Sea Safari Tours Ltd.

In 2026, the same stakeholder confirmed that they had not observed otter at this location since the last sighting in February 2025. They stated that cats were regularly observed under the shipping container structure and that fox was observed on occasions.

The same stakeholder has observed otter entering the walled enclosure by the dwelling at Grand Canal Docks (Figure 5) in the past via a hole in the brickwork at the top of the steps, referred previously as Holt 4. The stakeholder confirmed that, based on their observations, this activity has now ceased. This enclosed garden is located immediately beside a source of freshwater, the Grand Canal. In 2026, there was no evidence that otters were using the enclosed garden as a resting place. However, a strong fox scent indicated that foxes regularly frequented the location.

Tetra Tech has also been informed of a stakeholder having observed an otter holt/couch (previously referred to as Holt 5) at the floating dock of the MV Cill Airne Boat Bar and Restaurant (Figure 2.1 of Appendix A Ecological Survey for Otter 2026). During the 2026 surveys, no evidence of otter was recorded at this location. Given the highly disturbed location and type of structure, it is considered highly unlikely that it is utilised by otter, either as a holt (underground/covered resting site) or as a couch (short term above ground resting site). Any previous sightings are likely an otter briefly resting or feeding while foraging along the lower Liffey/Dublin Port area.

4.7 POPULATION SIZE CLASS ASSESSMENT

Otters use the Dublin Port and wider Dublin Harbour area for commuting, foraging and potentially temporary resting. Available records indicate dispersed activity across the wider port, River Liffey, Tolka Estuary, Dublin Bay coastline and associated shoreline and intertidal habitats, rather than being confined to the 3FM Project works area.

The survey evidence confirms otter presence but does not allow the number of individual otters using the area to be calculated reliably, as otters are wide-ranging and may use multiple holts, resting places and sections of connected watercourse or coastline. Based on the available records (including anecdotal), the low-density nature of otter activity within the developed port environment and the connectivity of the wider harbour and river network, it is conservatively estimated that fewer than 10 individual otters may use habitats within the wider area potentially associated with the works. This is a precautionary maximum estimate and should not be interpreted as a census or confirmed total population size of otters which Dublin Harbour forms part of their wider territory.

The 3FM works area forms part of a wider connected otter-use area and does not represent a discrete population. The affected area is therefore assessed as supporting a small/localised component of the wider otter population, with the number of individuals directly affected by the works likely to be lower than the wider estimate and not quantifiable with confidence.

5.0 EVIDENCE TO SUPPORT THE DEROGATION

5.1 TEST 1 – REASON FOR DEROGATION

The application seeks a Regulation 54 derogation in respect of the potential temporary disturbance of otter arising from construction activities associated with the 3FM Project, including piling and associated noise and vibration, and the potential removal of one inactive potential temporary covered otter resting place.

The derogation is sought on the basis of Regulation 54(2)(c), namely other imperative reasons of overriding public interest, including reasons of a social or economic nature. Regulation 54 provides for a derogation on this basis where there is no other satisfactory solution and where the derogation would not be detrimental to the maintenance of the relevant species at favourable conservation status.

The 3FM Project is a strategically important element of the long-term development of Dublin Port and is being progressed in accordance with the Dublin Port Company's Masterplan. Dublin Port is a critical national gateway for the import and export of goods and forms an essential part of Ireland's transport, logistics and supply-chain infrastructure.

The project is expected to provide close to 20% of the additional port capacity required to accommodate an increase in port throughput to approximately 77.2 million gross tonnes by 2040. The project is therefore not an isolated or discretionary development; it forms part of the planned response to anticipated long-term growth in demand for port capacity and the need to maintain the efficient movement of goods through Dublin Port.

In the absence of the 3FM Project, Dublin Port would be unable to provide the capacity required to accommodate anticipated future growth. This would constrain the ability of the port to handle future trade and freight demand and could result in pressure on existing port facilities, reduced operational flexibility and increased difficulty in accommodating the movement of goods through Ireland's principal port. Such constraints would have consequences beyond Dublin Port Company, including potential impacts on national and regional trade, the resilience and efficiency of supply chains, employment, economic activity and associated Exchequer revenues.

The project would also support the continued development of port capacity within an existing strategic port location and contribute to the implementation of relevant national port and sustainable transport policy objectives. It would assist in maintaining the role of Dublin Port as a key component of the national transport network and support the movement of goods required by businesses, consumers and the wider economy.

The public interest relied upon is therefore not limited to the commercial or operational interests of Dublin Port Company. The project concerns the delivery of nationally significant transport infrastructure and the maintenance of essential port capacity. Its benefits extend to national and regional trade, freight movement, supply-chain resilience, employment, economic activity, public revenues and the effective functioning of the wider economy.

On that basis, the 3FM Project is supported by imperative reasons of overriding public interest, including reasons of a social and economic nature, for the purposes of Regulation 54(2)(c).

The potential effects on otter are described in Section 5.3 below. Construction noise and vibration, including piling noise, may result in temporary, localised disturbance and may temporarily deter otters from travelling through or using areas immediately adjacent to active works during working hours. The potential removal of the inactive potential temporary covered resting place is also addressed in the assessment. The nature, extent and duration of those effects, together with the proposed mitigation and monitoring measures and the assessment of conservation status, are considered under Test 3 and in the Monitoring section below.

5.2 TEST 2 – ABSENCE OF ALTERNATIVE SOLUTIONS

Assessment of reasonable alternatives is mandatory under the EIA Directive and is addressed in Chapter 4 of the 3FM Project EIAR. The process allows for adjustment to minimise environmental impact thus minimising project significant effects on the environment. Satisfactory alternatives are those which allow project implementation while protecting Annex IV species at the same time. Plan/strategic level alternatives have been considered in the preparation of Dublin Port's Masterplan, reviewed 2018. Only 3FM Project specific alternatives are relevant here. The assessment of detailed alternatives during the project-level design evolution process primarily considered the design and process alternatives (including alternative locations, layouts and materials), conducted on the basis of EIA topics.

The proposed 3FM Project is the third and final strategic infrastructure development project which will deliver the full capacity envisaged in the Dublin Port Masterplan 2040. Completion of the 3FM Project is needed to provide the capacity required for growth up to 2040.

5.2.1 SITE LAYOUT ALTERNATIVES

Alternative project layout scenarios were considered in the preparation of the 3FM Project yielding a full range of potential options as follows:

A. No Port Expansion – essentially the do-nothing scenario:

B. Optimise Main Port Lands:
    1. Optimise throughput of existing facilities.
    2. Optimise throughput of existing facilities and increase berthage in North Port lands.
    3. Optimise throughput of existing facilities and increase berthage in North Port and South Port lands.
C. Optimise Main Port Lands and Increase Port Lands:
    1. Rationalise existing facilities, increase berthage in the North Port and South Port lands, improve road infrastructure and infill adjacent to Port (part of the Tolka Estuary). (This particular option represents the implementation of the original Masterplan 2012 which addresses the scenario of "The Evolution of the Environment in the Absence of the Masterplan 2040").
    2. Rationalise facilities, increase berthage in North Port and South Port lands, improve road infrastructure and develop Inland Port.
    3. Rationalise facilities, increase berthage in North Port and South Port lands, improve road infrastructure and develop additional Coastal Port Facility external to Dublin Port.

Each potential option was assessed against a pass/fail requirement to achieve the port's ultimate capacity by 2040 (73.8m tonnes of cargo throughput annually). Only those options under scenario C above involving the optimisation of the main port lands and increasing port lands were deemed capable of delivering the required capacity to meet growth projection.

Of the three options in C, option C1 was screened out on environmental grounds due to its potential impact on the South Dublin Bay and River Tolka SPA.

Option C3 was not considered to be achievable within the timescale of the capacity demands and was therefore screened out.

Option C2 satisfied the further technical, environmental and social criteria. It presents the preferred layout option identified by the Masterplan review process in relation to the 3FM Project. This option is the most feasible and sustainable approach available to the Port.

The results of the analysis of options are set out in Table 4.1 of Chapter 4 of the 3FM EIAR.

5.2.2 STRATEGIC TRANSPORT CONNECTIVITY SCENARIOS

Since Masterplan conception, it has been recognised that this intensification necessitates additional transportation capacity connecting the Northern and Southern Estates. Strategic transport studies have considered high, mid and tunnel crossings (and alternatives such as ferries). They have identified a bridge crossing with an at-grade SPAR as the preferred form. They have also assessed various crossing points and concluded a corridor immediately eastwards of the Tom Clarke Bridge to

be the preferred crossing point. These findings are consistent with the layout produced in the Dublin Port Masterplan reviewed, 2018.

Dublin Port is rail connected and is at the hub of the national rail network. Options considered in relation to rail transport connectivity include:

- Do-nothing - keep the existing rail services with the existing limited services;
- Enhance rail connectivity for the North Port Estate;
- Enhance Rail connectivity to the South Port Estate.

In summary, having reviewed alternatives for rail connectivity for the 3FM Project, and the port more generally, DPC has identified the preferred option, which is most beneficial from a cost, sustainability and environmental perspective, is the servicing of rail freight for the port from a dedicated intermodal rail freight depot at North Wall, accessed by a dedicated bridge over East Wall Road, with new proposed 3FM terminals accessing the depot via transfer on the SPAR. DPC's preferred strategic transport layout, having considered connectivity of the port, therefore remains an at grade crossing, immediately east of Tom Clarke Bridge which provides for future light rail expansion, as identified in the Masterplan, reviewed 2018.

5.2.3 DETAILED PROJECT ALTERNATIVES

Detailed project level assessment of the construction and operational alternatives considered for the 3FM Project facilities are considered here. These project level alternatives evolved during more detailed project feasibility and outline design, informed by the collection of site investigation information and environmental data, environmental assessment, planning studies and associated ongoing stakeholder engagement. The approach was based on examining each of the key infrastructure elements, avoiding or minimising any adverse environmental and planning impacts, while meeting the requirements of the project brief. In addition, design and process assessment of alternatives for marine works was also undertaken for dredging, disposal, re-use of materials and for piling works. This enabled consideration of the cumulative environmental impacts of these activities at 3FM Project level. Options considered are set out below.

OPTION 0 (Do-nothing scenario)

The do-nothing scenario describes existing port activity or activity that incorporates previously consented development. It would fail to deliver on the port's strategic objectives without redevelopment of the south port lands (Poolbeg Peninsula) brownfield site's opportunities. The do-nothing scenario (Option 0) is therefore not considered to be a practicable alternative.

OPTION 1 (General Arrangement, March 2020)

The feasibility and outline design process used the reviewed Masterplan as a starting point to generate an initial draft general arrangement in March 2020.

There are potential negative construction phase impacts associated with some environmental topics in the early stages of the project, compared with the do-nothing option. These topics are biodiversity, flora & fauna, water quality & flood risk, air quality, climate, noise & vibration, material assets and cultural heritage.

In particular, the Lo-Lo container terminal and SPAR foreshore were based on solid structures requiring infilling of the foreshore embankment and had potential for construction and operation phase impacts on biodiversity, flora and fauna. Mitigation by design was achieved by refining the layout, project design and process design of these elements. Temporary and/or short-term negative impacts can be further mitigated by design and process constraints such as working hours, timing/phasing of operations, method of construction and rate of construction.

OPTION 2 (Refined draft general arrangement, November 2021)

Further key technical and environmental studies were undertaken to support the feasibility assessment and outline design, including in relation to Coastal Process, Flood Risk and Tern Colony Management. These studies were used to refine the 3FM Project through a series of project team workshops, consultations with statutory bodies and other stakeholders, and subsequent wider engagement with the public and stakeholders through the first 3FM Project virtual consultation room.

Key project design and process design progression for Option 2 related to the turning circle, foreshore infilling, access road and transportation and utilities. Minor negative operational phase impacts were identified in relation to Option 2 biodiversity, flora & fauna, climate, and noise & vibration associated with the increased operations.

OPTION 3 (Revised general arrangement, March 2023)

More detailed, environmental assessment was progressed throughout this period via screening, scoping and initiating a series of environmental impact assessments to inform the project design and process design. These studies were used to refine the 3FM Project through further internal project team workshops, follow up consultations with statutory bodies and other stakeholders, and subsequent wider engagement with the public and stakeholders through the second 3FM Project virtual consultation room.

Further environmental enhancements were achieved through refinement of the layout of Area N to accommodate services and environmental constraints of bird feeding areas, tern colonies and cultural heritage. Project design and process design uncertainty in relation to Option 3 remained due to the outstanding marine site investigation results.

OPTION 4 (Final 3FM Layout, June 2024)

Integrated engineering, planning and environmental studies were completed, and a full suite of detailed environmental impact assessments was finalised, as presented in the 3FM EIAR.

The key layout change undertaken between March 2023 – June 2024 was to redevelop Area L for container storage and Area O for as a Ro-Ro Freight Terminal (following a period of construction site compound use). The key project design and process design changes within this evolution period were the selection of open piled design, for both the new Lo-Lo container terminal (Area N) and the SPAR viaduct, which reduced potential negative biodiversity, flora and fauna construction phase impacts, coupled with the inclusion of further mitigation such as providing a noise barrier at Area K, restoration of sections of the Great South Wall and further enhancing the landscaping treatments to improve screening and enhance visual benefits. These key changes reflect the final detailed consideration of each element of the scheme to offer a refined alternative with additional environmental enhancements.

The environmental assessments developed a suite of avoidance, prevention, reduction, or offsetting mitigations, to be accommodated within the final outline design (Chapter 21 3FM EIAR). These have reduced potential negative impacts during construction and operational phases to minor potential impacts that are addressed by mitigation measures. The minor negative operation phase impacts on aquatic ecology and climate are mitigated by ongoing monitoring and substitution of materials respectively.

5.2.4 PROJECT CONSTRUCTION ALTERNATIVES

This section summarises the consideration of alternative construction methods for dredging and disposal activities and for piling activities which apply across several of the 3FM Project key infrastructure elements.

5.2.4.1 DREDGING, DISPOSAL AND RE-USE WORKS – DESIGN AND PROCESS ALTERNATIVES

5.2.4.2 LOADING ALTERNATIVES

A range of dredging alternatives were considered relating to loading of sediments from the seabed. Mechanical dredging options included use of a backhoe dredger; a bucket-ladder dredger; a clamshell dredger; and a plough dredger.

Hydraulic dredging options included use of a trailing suction hopper dredger; pipeline dredger; and injection dredger.

Of the alternative mechanical dredging options, a backhoe dredger is preferred over a bucket-ladder dredger or clamshell dredger because it is better suited to remove stiff material (gravels and stiff clays) at the 3FM Project site and accurate dredging of embankment slopes. The backhoe dredger is also more mobile to allow the dredger to move a safe distance from vessels operating at the port.

The backhoe dredger usually operates in conjunction with one or more hopper barges into which it loads the dredged sediment. The hopper barge transports the dredged material to its final destination.

A plough dredger would not be suitable at the 3FM Project site on environmental grounds because of the potential release of large volumes of sediment into the water column with possible impacts on the adjacent South Dublin Bay and Tolka Estuary SPA.

Of the alternative hydraulic dredging options, a trailing suction hopper dredger (TSHD) is the preferred option. A Pipeline dredge is not suitable due to the distance between the loading area and the final destination at this site. Injection dredging would also not be suitable at the 3FM Project site on environmental grounds because it too has the potential to release large volumes of sediment into the water column.

Further to the assessment of alternatives, the final loading design comprises use of a backhoe dredger and a TSHD in different areas of the project, but with no difference in environmental impact. No over-spill will be permitted whilst loading within the inner Liffey channel (Dublin Harbour). The quantity of dredged material entering the water column as a sediment plume is therefore expected to be very low and similar for both types of dredgers. Monitoring undertaken during the previous ABR Project and MP2 Project has shown that loading operations within Dublin Harbour have had no significant impact on water quality.

5.2.4.3 DISPOSAL AND RE-USE ALTERNATIVES

The total volume of Class 1 (Uncontaminated: no biological effects likely) marine sediment to be dredged is 1,189,000m^3. A number of disposal options were examined. The preferred option identified was a combination of disposal at sea and re-use with computational modelling undertaken to determine appropriate method, rate, timing and location of these activities.

The 3FM Project will require the disposal of 1,117,000m^3 of Class 1 marine sediments (Uncontaminated: no biological effects likely). The marine sediments comprise a mixture of clay, silt, sand, gravel and cobbles. No rock will be dredged.

The following disposal and re-use alternatives for the dredged marine sediments were considered:

- Do-Nothing Scenario;
- Beneficial Re-use;
- Disposal on Land;
- Incineration; and
- Disposal at Sea.

Do-Nothing Scenario - The localised deepening and widening of a section of the navigation channel to create the Turning Circle is required for the safe manoeuvring of vessels entering and leaving the

port, accommodating large vessels into the future. The berthing pockets are required to provide sufficient depth of water at all stages of the tide to allow for the safe and effective operation of the proposed port facilities. Should the pockets not be dredged to the required depths then this would result in the limited capacity of these berths to accommodate large vessels into the future.

Failure to carry out the proposed capital dredging works would inhibit the attainment of 3FM objectives, and limits future port investment.

Beneficial Re-use - Beneficial re-use for engineering, habitat enhancement/creation, or agricultural uses is not possible due largely to the unsuitability of the sediments to be dredged, technical issues, and/or the lack of suitable opportunities. Note that environmental enhancement through Dublin Bay sediment cell maintenance is identified as a feasible re-use option and is delivered through the disposal at sea option below.

Disposal on Land – This option would require bringing sediment ashore, dewatering/drying and road transport to a landfill site. Due to the large volume of dredged material, and the short supply of suitable landfill space, this option is considered unfeasible.

Incineration - There are no suitable incineration facilities in Ireland capable of accepting the proposed type or quantity of dredge spoil. The dredge spoil would therefore need to be transported to mainland Europe. This option is considered to be unreasonable and has been ruled out due to prohibitive cost and having regard to the proximity principle

Disposal at Sea – Sediments classified as Class 1 (uncontaminated, no biological effects likely) are suitable for disposal at sea. The closest licensed offshore disposal site is located just west of Burford Bank in Dublin Bay. It is currently being used to dispose of dredge spoil arising from the MP2 Project under Dumping at Sea Permit S0024-02. The site is also used by DPC for the disposal of dredge spoil arising from maintenance dredging under Dumping at Sea Permit S0004-03. The site is similarly used for the disposal of dredged spoil from Dun Laoghaire and Howth Harbours.

Extensive environmental monitoring has been undertaken with respect to the dumping of dredged spoil from the ABR Project and MP2 Project. This has demonstrated that both the maintenance dredging campaigns and the ABR Project and MP2 Project capital dredging campaigns did not cause any discernible increase in turbidity above recorded background levels (3FM EIAR Chapter 9), and no discernible impacts on the environment (3FM EIAR Chapter 7). In addition, disposal of dredge spoil at the Burford Bank site has the advantage of being dispersive for clays and silts, but sands and gravel are retained within the natural Dublin Bay sediment cell (see Beneficial Re-use above).

Therefore, the Disposal at Sea method, in combination with Environmental Enhancement - Sediment Cell Maintenance technology, has been selected as the disposal final design with no environmentally better alternative.

5.2.4.4 PILING WORKS – DESIGN AND PROCESS ALTERNATIVES

The 3FM Project includes piling works to provide structural support for a number of project elements, including jetties and wharfs, quay walls, SPAR bridge and viaduct, sundry foundations, and pontoons. The engineering design of each of these marine and landside elements has considered the feasibility of both the construction and operational phases of the 3FM Project, also taking into consideration potential environmental impacts to evolve the design process. The further design and process alternatives considered within this section are those associated with selecting the piling materials and piling technologies.

The following piling works options were therefore considered for the relevant elements of the 3FM Project:

Do-Nothing Scenario – The 3FM project cannot be delivered in this scenario, and it represents the existing activities already taking place within this location.

Alternative Materials – The options depend on the structural element.

Open Piled Jetty Structures and Dolphins

Standard tubular steel piles were chosen for the open jetty, mooring dolphins, foundations for access bridges and the SPAR viaduct. The technical reasons are set out in 3FM EIAR Chapter 4.

Bored piles with reinforced concrete core were chosen for bridge foundations.

Timber piles were not selected as they are potentially susceptible to marine borers and therefore subject to decay, with associated maintenance difficulties, and are not suitable for deep penetrations into the ground, are both difficult to adapt (extend or trim) and to source.

Concrete piles were not selected as they were considered unfeasible, due to unsuitability for deep penetrations into the ground, and are difficult to maintain and apply corrosion resistance within this setting and are difficult to adapt during construction.

Bored concrete piles, with permanent steel casings would be a possibility for the lengths required – but as the casings still require driving, and then infilling with concrete, this does not represent a more sustainable option.

Tubular steel piles were therefore selected for the open piled jetty and the dolphins with no suitable, or environmentally better alternative material identified.

Infilled Jetty Structures and Quay Walls

Steel Sheet Pile Walls, Steel Combi-Walls, King Post Walls (steel posts with steel, concrete or timber infill elements) or Gravity Concrete Quay Walls were considered as alternatives.

Steel Combi-Walls are proposed for the Area K re-facing and the quayside at the Turning Circle. Twin Steel Sheet Piled Walls are proposed at the Maritime Village. Steel sheet piled cofferdams are proposed to facilitate the construction of the bridge pier foundations of the River Liffey crossing. Neither concrete, nor timber infill elements, were selected as they are generally not suitable for deep foundations. Gravity Concrete Quay Walls have not been selected as the retention height is too high and the seabed material would not have adequate bearing capacity. These also occupy a substantial footprint and would require a greater area of seabed reclamation.

Steel Combi-Walls were therefore selected, with no suitable, or environmentally better, alternative material identified.

Foundations for Crane Rails and Landside Structures

Driven tubular steel pile foundations have been selected as standard. However, bored reinforced concrete piles have been selected at the North SPAR Bridge abutment, to minimise disturbance at this location.

Foundations for Landside Buildings

Conventional techniques, using piled foundations, were chosen due to the unpredictable nature of the underlying reclaimed fill material across the sites. Both precast pile foundations and continuous-flight auger piles were selected with no environmentally better alternative construction form identified.

Restraints/Guides for Pontoons

The alternative materials considered were tubular steel, or a separate mooring arrangement of concrete mooring blocks and chains. Neither timber nor concrete piles were suitable alternatives for pontoon mooring restraints or guides. Concrete mooring blocks and chains were not considered suitable for providing pontoon restraint in this area which would not be compatible with the usage in the River Liffey. Therefore, tubular steel piles have been selected with no suitable, or environmentally better, alternative material identified.

Alternative Technologies - The following alternative piling methodologies were assessed for the installation of the tubular and sheet piles.

Vibrodriving

Vibrodriving was not feasible as a standalone piling technology due to the firm clays and dense granular materials found underlying Dublin Port.

Press-in Piling

Press-in piling was not feasible due to the firm clays and dense granular materials found underlying Dublin Port, and the pile lengths involved.

Impact Driving

Impact driving is commonly used for large diameter or long piling elements. It is also suitable for driving piles through the firm clays found underlying Dublin Port. Previous experience in the Port has found that impact driving is the most efficient form of pile driving. Impact driving was therefore identified as a feasible technology.

Combined Piling Methods

A combination of vibrodriving and impact driving has been successfully used for the ABR and MP2 Projects and is therefore tried and tested in similar ground conditions. This combined solution is feasible and preferred in terms of potential noise and vibration impacts. A combination of vibrodriving and impact driving methods was selected with no suitable, or environmentally better, alternative technology identified.

Environmental Effects

Based on the selection of alternatives above (materials and technology), environmental effects have been considered. The final design, largely dictated by the site ground conditions, has been selected in the absence of technically feasible alternatives, and with no better environmental alternative available. Potential temporary and/or short-term negative impacts on biodiversity during construction are possible in relation to noise & vibration.

The 3FM piling and foundation works are of a similar nature and magnitude to recent construction works within the ABR Project, and the MP2 Project. Appropriate environmental mitigation has been included based on the experience gained through monitoring of the ABR and MP2 Projects. Results of extensive continuous monitoring from 2017 to date show that residual environmental effects of the 3FM Project piling works can therefore be adequately mitigated.

5.3 TEST 3 – IMPACT OF DEROGATION ON CONSERVATION STATUS

5.3.1 SPECIES AND SCOPE OF THE ASSESSMENT

The target species for this application is the otter (*Lutra lutra*). The derogation is sought in respect of:

- potential temporary disturbance arising from construction noise and vibration, including piling and dredging activities; and
- the potential damage or destruction of H3, an inactive potential temporary covered otter resting place, through its proposed removal.

This assessment considers the status of otter within the Dublin Port and wider Dublin Harbour area, the potential effects of the proposed works before mitigation, and the residual effects following implementation of the proposed mitigation and conservation measures.

The assessment should be read in conjunction with **Appendix A: 3FM Project Ecological Survey for Otter Report (2026)** and **Appendix B: 3FM Project Outline Otter Conservation Management Plan (2026)**.

5.3.2 OTTER STATUS AND BASELINE CONDITIONS

Otter is widespread in Ireland and is associated with rivers, lakes, estuaries and coastal areas where suitable prey, access to water and sheltered terrestrial cover are available. The species is listed under Annexes II and IV of the EU Habitats Directive and is afforded strict protection under Regulation 51 of the European Communities (Birds and Natural Habitats) Regulations 2011.

The most recent national Article 17 assessment, published in 2025, concluded that otter remains widespread in Ireland and is in favourable conservation status. The 2023–2024 National Otter Survey indicates that the national population has stabilised overall following earlier declines. Nevertheless, pressures remain, including water-quality impacts, disturbance and the loss of suitable riparian or coastal habitat.

At local and regional level, otters are known to occur along the River Liffey, River Tolka, Dublin Bay and associated coastal habitats. The Dublin City Otter Survey recorded lower levels of otter activity within Dublin Port and other highly urbanised areas than in less disturbed riverine locations. The survey identified the River Dodder as having the highest frequency of otter signs per kilometre, with the nearest recorded holt approximately 3.4 km upstream of the proposed 3FM Project boundary.

The available evidence indicates that otters use the Dublin Port and wider Dublin Harbour area for commuting, foraging and potentially resting. Activity is dispersed throughout the wider port, connected river systems, estuarine habitats, the River Liffey, the Tolka Estuary, the wider Dublin Bay coastline and associated shoreline and intertidal areas. Otters are therefore likely to use suitable habitats opportunistically and to move between aquatic and terrestrial environments.

Project-specific walkover and boat-based surveys undertaken in 2024 and 2025 identified no confirmed otter holts or couches within the 3FM Project area. Updated surveys undertaken in August and September 2026 also identified no confirmed resting places, additional potential holts or couches within the site or within a minimum of 150 m of the red-line boundary. Two otter spraints were recorded in May 2026 along the northern Dublin Port boundary on the Tolka Estuary side, outside the 3FM survey area. No otter signs were recorded during the 2026 project-specific survey visits, although this does not demonstrate otter absence.

The available information does not provide a reliable basis for calculating the number of individual otters using Dublin Port. Accordingly, the local assessment is based on the distribution and frequency of field signs, the status of holts and resting places, habitat suitability, connectivity with the wider Dublin Harbour and river network, and the results of project-specific surveys.

Otter is considered to occur intermittently (likely when prey is more abundant) within suitable habitats in the wider Dublin Port and Dublin Harbour area, but at relatively low density within the most intensively developed and disturbed parts of the port. The 3FM works area forms part of a wider connected otter-use area and does not represent a discrete otter population.

5.3.3 POTENTIAL IMPACTS BEFORE MITIGATION

5.3.3.1 TEMPORARY DISTURBANCE FROM PILING, DREDGING, NOISE AND VIBRATION

Construction activities, including piling and dredging, have the potential to cause temporary and localised disturbance to otters using areas adjacent to the works. Potential effects include:

- temporary avoidance of areas immediately adjacent to active works;
- temporary disruption to commuting or foraging routes during working hours;
- temporary disturbance of otters using habitats within adjacent to active works;
- temporary changes in the use of suitable habitat while noise and vibration-generating activities are taking place.

The likely effects would be temporary, localised and associated primarily with the active construction period. The available evidence indicates that otters are highly mobile and use a wide area of connected riverine, estuarine, intertidal and coastal habitat. The potential for an individual otter to remain stationary close to a piling location for an extended period is therefore considered low.

With regard to the assessment of the effects of the proposed dredging and piling activities on otter, Temporary Threshold Shift (TTS) is a temporary reduction in hearing sensitivity caused by exposure to loud underwater noise. Hearing is expected to recover after the noise exposure ends. Permanent Threshold Shift (PTS) is a permanent reduction in hearing sensitivity caused by exposure to loud underwater noise. True marine mammals (Phocids, Pinnipeds & Cetaceans) have specially adapted auditory systems which enable sophisticated sound detection in water, and therefore, they are susceptible to underwater noise impacts. Otter underwater hearing sensitivity is significantly reduced compared to true marine mammals, and otter hearing is primarily adapted to receive airborne sounds.

The modelled risk ranges, that is, the distance from the noise source within which temporary (TTS) or permanent (PTS) injury may occur on marine mammal, including otter are detailed in Chapter 12

of the submitted EIAR for the proposed 3FM Project. Chapter 12 typically refers to otters as OCW (other marine carnivore in water).

Table 1 has been prepared using information from Chapter 12 and focuses specifically on the max risk ranges for TTS and PTS exceedance of otter. Examples of visual model outputs are provided here to illustrate max ranges of noise generating activities at the two locations. These locations are considered to be the most sensitive areas for potential noise impacts on otter. These areas include SPAR Bridge (nearest to the River Dodder) and Area N (the Max Risk Ranges extend further there than other locations and is nearest the two recently constructed artificial holts. Chapter 12, Figure 5.3 of the EIAR, shown below as Plate 8, illustrates that the Max Risk Ranges do not travel beyond the SPAR Bridge, and therefore, otters occurring at the mouth of the River Dodder, and further upstream (this area is considered the most active otter area within the 3FM Project Application Boundary) will unlikely be unimpacted by piling activities. Chapter 12, Figure 5.3.2 of the EIAR, shown below as Plate 9, illustrates that the Max Risk Ranges extend over a larger area. However, the TTS limit risk range falls approximately 250m short of the area directly below the two recently constructed artificial holts. Given this significant distance from the TTS limit risk range area, it is considered unlikely that any otters occupying these artificial holts in the future will be impacted (TTS/PTS) by noise generating activities such as piling.

Based on the available survey information and the underwater-noise modelling presented in Chapter 12 of the EIAR, piling and dredging are not predicted to result in injury or mortality to otters. The principal potential effect is temporary and localised behavioural disturbance, including short-term avoidance of areas immediately adjacent to active works and temporary disruption to commuting or foraging.

The modelled risk of hearing injury is considered low because otters are primarily adapted to airborne sound and are unlikely to remain stationary and close to an active piling location for the duration required for the modelled TTS or PTS thresholds to be exceeded. Nevertheless, the potential for disturbance will be managed through the proposed mitigation measures. Although some of these measures are also intended to protect other species, they will provide a secondary benefit to otter by reducing the likelihood and duration of exposure to active works and enabling an otter using the works area to be identified.

Prior to mitigation, piling and dredging have the potential to cause temporary and localised disturbance to otters, with a low likelihood of injury or mortality. While the consequence of direct injury or mortality would be severe for an individual otter, the overall pre-mitigation effect is assessed as a minor adverse impact of low significance due to the temporary nature of the works, the mobility of otters and the low likelihood of prolonged exposure to active piling or dredging

Table 1: Maximum Ranges (TTS/PTS Limit) for Otter at Each Location

Location Name	Activity	Duration/Blow Count	Species Group	TTS Risk Range (metres)	PTS Risk Range (metres)
Turning circle	Dredging	1 second	OCW (Otter)	<10	<10
Turning circle	Dredging	1 hour	OCW (Otter)	<10	<10
Turning circle	Impact piling	1 blow	OCW (Otter)	<10	<10
Turning circle	Impact piling	1200 blows	OCW (Otter)	1400	260
Turning circle	Vibration piling	1 second	OCW (Otter)	<10	<10
Turning circle	Vibration piling	1 hour	OCW (Otter)	1000	20
SPAR	Impact piling	1 blow	OCW (Otter)	5	<10
SPAR viaduct, west	Vibration piling	1 second	OCW (Otter)	<10	<10
SPAR viaduct, west	Vibration piling	1 hour	OCW (Otter)	30	10
SPAR viaduct, east	Vibration piling	1 second	OCW (Otter)	<10	<10
SPAR viaduct, east	Vibration piling	1 hour	OCW (Otter)	30	10
Marina	Impact piling	1 blow	OCW (Otter)	5	<10
Marina	Impact piling	1200 blows	OCW (Otter)	700	80
Ro-Ro	Impact piling	1 blow	OCW (Otter)	20	<10
Ro-Ro	Impact piling	1200 blows	OCW (Otter)	1200	300
Area K, refronting	Impact piling	1 blow	OCW (Otter)	20	<10
Area K, refronting	Impact piling	1200 blows	OCW (Otter)	1300	200
Area K, refronting	Vibration piling	1 second	OCW (Otter)	<10	<10
Area K, refronting	Vibration piling	1 hour	OCW (Otter)	500	25
Area N West	Impact piling	1 blow	OCW (Otter)	5	<10
Area N West	Impact piling	1200 blows	OCW (Otter)	1000	100
Area N Mid	Impact piling	1 blow	OCW (Otter)	<10	<10
Area N Mid	Impact piling	1200 blows	OCW (Otter)	700	60
Area N East	Impact piling	1 blow	OCW (Otter)	10	<10

Area N East	Impact piling	1200 blows	OCW (Otter)	700	70
Area N Cumulative	Impact piling	1 blow	OCW (Otter)	<10	<10
Area N Cumulative	Impact piling	1200 blows	OCW (Otter)	1000	100
Area N x4	Impact piling	1 blow	OCW (Otter)	20	<10
Area N x4	Impact piling	1200 blows	OCW (Otter)	1500	250
NORA	Impact piling	1 blow	OCW (Otter)	<10	<10
NORA	Impact piling	1200 blows	OCW (Otter)	600	80
Near NORA dolphin	Shipping 1	1 second	OCW (Otter)	<10	<10
Near NORA dolphin	Shipping 1	1 hour	OCW (Otter)	<10	<10
Near Ro-Ro ramp	Shipping 2	1 second	OCW (Otter)	<10	<10
Near Ro-Ro ramp	Shipping 2	1 hour	OCW (Otter)	<10	<10
Berth 45	Dredging	1 second	OCW (Otter)	<10	<10
Berth 45	Dredging	1 hour	OCW (Otter)	<10	<10
Berth 45	Impact piling	1 blow	OCW (Otter)	<10	<10
Berth 45	Impact piling	1200 blows	OCW (Otter)	1000	80



Plate 8: Impact piling, SPAR Bridge, Fish (unweighted) and OCW hearing group



Plate 9: Impact piling, Area N, five piling rigs, Fish (unweighted) and OCW hearing group.

5.3.4 LOSS OF POTENTIAL TEMPORARY OTTER RESTING PLACE (PRIOR TO MITIGATION)

H3 comprises a gap beneath a shipping-container structure that could provide a temporary covered resting location for an otter. Two infrared, motion-activated trail cameras were deployed approximately 5m from the structure, and no evidence of otter activity was recorded during 38 nights of monitoring. However, this does not conclusively demonstrate that the feature has never been used, as otters may use temporary resting places intermittently and may not be present during the monitoring period.

There was no evidence of prolonged, repeated or established use. H3 is therefore not considered to be a confirmed holt, enclosed or underground resting or breeding site, or confirmed couch. If used by otter, the feature is more likely to represent a temporary or sporadic resting opportunity, ‘an inactive temporary covered resting place`.

In the absence of mitigation, removal of the shipping container would result in the loss of this potential resting resource and could present a risk of direct injury or mortality if an otter were present beneath the structure during removal activities. The potential impact would therefore comprise both the loss of an unconfirmed temporary resting resource and the possibility of disturbance, injury or killing of an otter during demolition or removal.

Given the absence of recorded activity, the lack of evidence for established use and the mobile nature of otters, the likelihood of direct harm is considered low, but it cannot be excluded without appropriate pre-removal controls.

Prior to mitigation, the removal of H3 could result in the loss of an unconfirmed and apparently inactive potential temporary resting resource. Although no otter activity was recorded during 38 nights of camera monitoring, intermittent use cannot be excluded. There is therefore a low but credible risk that an otter could be present beneath or within the structure during removal, resulting in direct injury or mortality. The likelihood of such an event is considered low; however, the consequence would be a potentially severe adverse effect on an individual otter. Accordingly, prior to mitigation, the impact is assessed as a minor localised loss of potential resting habitat, together with a low likelihood but potentially significant risk of direct harm to an individual otter.

5.3.5 MITIGATION

The following mitigation measures have been taken from the 3FM Project Outline Otter Conservation Plan (Appendix B)

5.3.5.1 PRE-CONSTRUCTION SURVEYS

Pre-construction surveys will be undertaken to ascertain any changes to the baseline findings. If new holts (including potential holts) are found, these will be referenced as H6, H7, H8 and so on.

The following sections set out details on the methodology and programme for the protection of otter during the pre-Construction Phase, Construction Phase and post-Construction Phases of the Proposed Project.

The ECoW appointed by DPC will review the details below following completion of pre-construction surveys and send an updated version of this outline conservation plan to the planning authority for approval. Once approved, the finalised conservation plan will be issued to the appointed contractor(s) to inform the method statements for the implementation of the methodologies outlined in this plan.

The ECoW will request a detailed programme of works from the appointed contractor(s) to plan for the implementation of the mitigation measures set out in the finalised conservation plan.

5.3.5.2 ECOLOGICAL CLERK OF WORKS

An ECoW will be appointed by DPC to advise on the effective implementation of the biodiversity mitigation measures specified in the 2024 planning application (ABP Ref: PA29N.320250), Outline Otter Conservation Management Plan and any planning consent conditions including those relating to the protection of otters.

DPC will appoint a suitably qualified and experienced ecologist to act and discharge the role and responsibilities of ECoW during the Construction Phase of the Proposed Project. The appointed ECoW will be appointed prior to the commencement of construction. Their key role and responsibilities will be to:

- Update and finalise the otter conservation plan for issue to the planning authority prior to any works commencing;
- Implement and oversee the measures outlined in the otter conservation plan;
- Implement the pre-commencement toolbox talks with all personnel on-site to ensure that they understand the requirements of the otter conservation plan and the strict legal protection for otter;
- Provide the watching brief necessary for monitoring of setts at pre-Construction and Construction Phases;
- Liaise with DPC or their appointed contractor(s) during the Construction Phase and to resolve any issues arising which could harm otters or their holts; and
- Provide final reports to the planning authority and the NPWS relating to the implementation of this conservation plan. In this regard, the appointed ECoW will provide a report to the planning authority on the implementation of the methodology within four weeks of implementation of the otter protection measures during the pre-Construction Phase and within four weeks after the completion of the Construction Phase.

5.3.5.3 PRE-CONSTRUCTION SURVEY

To confirm that there have been no significant changes to the otter activity and baseline conditions identified in the 2024 planning application and recent surveys, including the continued applicability of the specified mitigation measures, a pre-construction otter survey will be undertaken by a suitably qualified ecologist prior to the commencement of any works on site. The survey will be undertaken in accordance with relevant National Parks and Wildlife Service (NPWS) guidance and the Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes (NRA, 2008/2009), as applicable.

The survey will assess the site and adjoining suitable habitat for evidence of otter activity, including holts, couches, temporary resting places, tracks, spraints and other signs of use. The survey will be undertaken sufficiently close to the commencement of works to ensure that the findings remain representative of conditions at the start of construction, and in any event no more than 10–12 months prior to construction. Where required, additional monitoring, including camera-trap monitoring, will be undertaken.

If an active holt, natal holt, couch or other evidence of otter use is identified, works in the relevant area will not commence until the findings have been reviewed by the project ecologist and the appropriate measures have been agreed with NPWS. Where required, an NPWS derogation licence will be obtained before undertaking works that could disturb otters or damage or destroy a breeding or resting place. These provisions reflect the strict protection afforded to otters and their breeding and resting places under Irish wildlife legislation.

5.3.5.4 REMOVAL OF H3 (POTENTIAL TEMPORARY COVERED OTTER RESTING PLACE)

All works associated with the removal of H3 will be undertaken in accordance with the requirements of the relevant National Parks and Wildlife Service (NPWS) licence, obtained prior to commencement of the works. The following mitigation measures will be put in place.

The following measures will be implemented:

- Trail cameras will be deployed to monitor the gaps beneath the shipping container, additionally:
- A suitably qualified ecologist will inspect under the shipping container immediately prior to removal.
- The inspection will confirm whether an otter is present and whether the feature shows evidence of active or recent use.
- The shipping-container structure will be removed in a controlled and gradual manner.

- Ecological supervision will be provided during removal if considered necessary.
- If an otter, evidence of recent otter use, or another protected species is identified, works will stop immediately.
- The ecologist will determine the appropriate course of action, including any requirement for consultation with the relevant authorities.
- The removal will be scheduled, where practicable, to minimise the potential for disturbance to otters using the wider area.
- An artificial otter holt will be constructed adjacent to the Tom Clarke Bridge.
- The artificial holt will be installed and made available before, or at an appropriate stage in advance of, the removal of H3.
- The artificial holt will be implemented in accordance with Appendix B: *Outline Otter Conservation Management Plan*.

5.3.5.5 PROVISION OF COMPENSATORY ARTIFICIAL HOLT

To compensate for the loss of the potential, albeit unconfirmed and apparently inactive, temporary covered otter resting resource, an artificial otter holt will be provided adjacent to the Tom Clarke Bridge. The holt will be incorporated into the boulder rock defence during construction and will be installed and made available before, or at an appropriate stage in advance of, the removal of H3.

The final design and dimensions of the artificial otter holt will be confirmed at the construction stage. However, it is envisaged that the holt chambers and access tunnels will comprise precast concrete structures. The chambers are expected to be approximately 800 mm wide × 600 mm long × 600 mm high, with access tunnels formed using pipes approximately 300 mm in diameter. The holt chambers will be positioned approximately 1.6 m above Mean High Water Springs (MHWS), with the access-tunnel entrances located approximately 1.5m above MHWS. All works associated with the construction and installation of the artificial otter holt will be undertaken in accordance with the requirements of the relevant National Parks and Wildlife Service (NPWS) licence. The indicative proposed location is shown in Appendix B of this report – **Figure 2.1a & b**: Indicative Location of Proposed Artificial Holt (H3 Compensation) and Plates 10 & 11 below.

5.3.6 NOISE GENERATING ACTIVITIES

5.3.6.1 TIMING AND SEASON RESTRICTIONS

Piling

Piling is restricted to 0700h and 1900h (Monday to Friday), 0800h to 1300h (Saturday) and no piling will take place on Sundays or Bank Holidays. Therefore, during piling periods, active piling operations

will only occur for a maximum of about 38% of that period, allowing extensive unimpeded use of the harbour area, particularly during nighttime by marine mammals throughout project construction. In addition, impact piling in ports is seldom a continuous activity, but is done in small bouts of 5-10 minutes with pile corrections and testing happening between these bouts of piling. The total daily duration of impact piling is a fraction of the time spent during pile installation.

Capital dredging is proposed to be undertaken on a 24-hour, 7-day-per-week basis, subject to seasonal restrictions. Capital dredging will be prohibited during the period October to March**, inclusive**, to avoid disturbance to nesting terns.

Riverside impact piling will also be subject to seasonal restrictions to minimise the potential for disturbance to migrating salmon. The proposed closed periods are as follows:

- **March to May, inclusive:** impact piling will be prohibited in relevant riverside areas during the peak smolt migration period, when juvenile salmon migrate from the river to the sea.
- **July and August:** impact piling will be prohibited in the vicinity of the turning circle and outer area during the peak period for the return migration of adult salmon from the sea to the river.

Vibratory piling may be undertaken during these periods, subject to compliance with the relevant environmental controls and monitoring requirements.

Impact piling within 75 m of Dublin Port's tern colonies will also be subject to seasonal restrictions to minimise disturbance to breeding terns. Impact piling will be prohibited during **May and June, inclusive**, in accordance with the proposed closed periods described further in EIAR Chapter 21 Mitigation. These restrictions coincide with the salmon-related impact piling restrictions applicable to Areas K and N.

Further mitigation will include implementation of a Marine Mammal Management Plan which requires qualified Marine Mammal Observers to carry out pre-watches to confirm the absence of otters in a mitigation zone of 1000m before piling will be allowed to commence. Piling will also include a soft-start procedure with a gradual ramp up of piling activity to allow any mammals (including otter) to flee the location before maximum noise outputs.

Dredging

Dredging will take place at Area N, Area K, and the Turning Circle and at the Maritime Village. The capital dredging works will be carried out using a trailing suction hopper dredger and/or a backhoe dredger. Other ancillary equipment will include a survey vessel and a bed-leveller to remove peaks and troughs created by the dredger. All capital dredging works will take place within the period October to March and will be spread over a number of years (DPC is seeking permission for a 15-year project period). No overspill of the hopper will be permitted during the loading operations to minimise the volume of suspended solids within the River Liffey channel during the loading operations. When

working within the navigation channel, the TSHD will also work in the direction of flow to avoid any potential of creating elevated levels of suspended solids across the River Liffey.

The volume of sediment to be dredged in various elements of the 3FM Project is detailed in Table 8.14 of the 3FM EIAR, and total volume is estimated at 1,259,000m3. Of this, 1,189,000m3 has been assessed as Class 1 and suitable for disposal at sea (3FM EIAR, Table 8.24). It is proposed to dispose of this dredged material at the licensed disposal site at the entrance to Dublin Bay, located to the west of the Burford Bank subject to separate licensing. The remaining 72,000m3, which has been classified as Class 2 material, will be recovered or disposed to an appropriate facility.

Dredging to construct the Turning Circle is programmed to commence in Year 2 of the project (currently 2028). Dredging of Area N will commence soon after. These elements of dredging should be completed in four winter dredging seasons. Further dredging for the SPAR and Maritime Village works is not scheduled to commence until year 10 of the project (currently 2036).

Mitigation in the form of a Marine Mammal Monitoring Plan (MMMP) will be implemented by trained and experienced Marine Mammal Observers (MMOs) throughout the project and for all dredging activities in accordance with the requirements of NPWS Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (2014). This includes the implementation of a 500m monitoring zone for marine mammals (including otter). Dredging operations may only commence when the MM Observer has confirmed that no marine mammals are present in the monitoring zone for a period of at least 30 minutes.

A detailed assessment of underwater noise impacts is presented in 3FM EIAR Chapter 12, and includes noise generated by dredging and its impacts on otter. The analysis indicates that temporary threshold shift (TTS) ranges for the Other Carnivores in Water group (OCW), in which otter is placed, are less than 5m for one hours' exposure to dredging. Underwater noise transmission loss in Dublin Port is significant due to the shallow water and the prevalence of silts and sands on the seabed of the port. Noise generated by operation of the TSHD is unlikely to have any significant impact on otters.

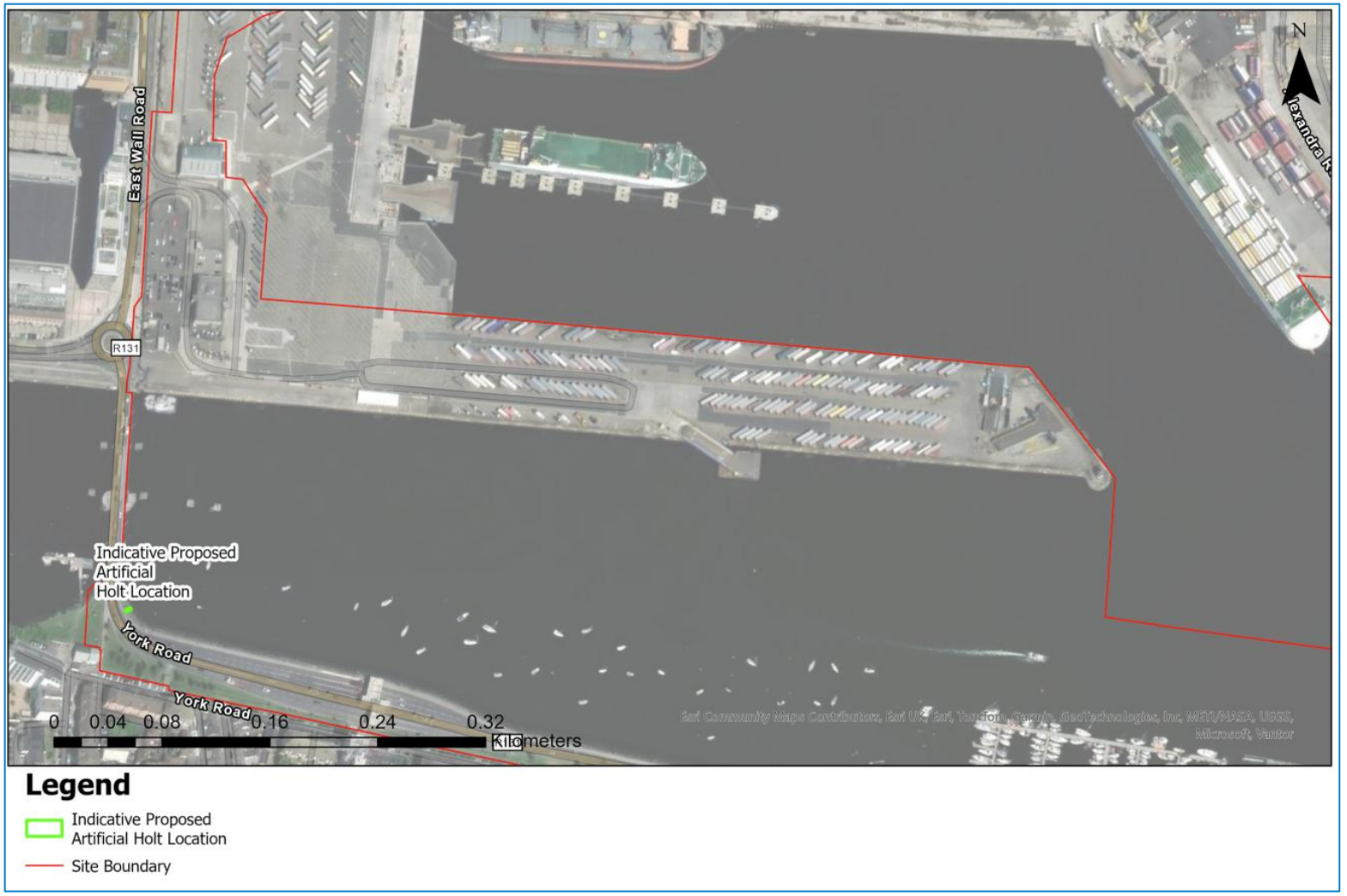


Plate 10: Indicative Location of Proposed Artificial Holt (H3 Compensation)



Plate 11: Indicative Location of Proposed Artificial Holt (H3 Compensation)

5.3.6.2 TEMPORARY DISTURBANCE FROM PILING, DREDGING, NOISE AND VIBRATION (AFTER MITIGATION)

Following implementation of the proposed mitigation measures, including pre-construction surveys, seasonal and timing restrictions, MMMP procedures, MMO pre-watches, soft-start piling, controlled dredging practices, ecological oversight and the requirement to stop or modify works if otters are observed within the relevant monitoring zone, the risk of injury or mortality to otters is expected to be negligible.

Any disturbance arising from piling and dredging is expected to be temporary, localised and intermittent. The MMO pre-watches and dredging monitoring requirements will reduce the likelihood of otters being present within the relevant area when noise-generating activities commence, while the soft-start procedure will provide an opportunity for any otter present to move away before maximum noise levels are reached. The seasonal restrictions and limits on piling hours, together with the intermittent nature of impact piling, will further reduce the duration and intensity of potential exposure. Although several of these measures are primarily intended to protect other sensitive receptors, they will also provide a benefit to otter by reducing potential disturbance and the likelihood of prolonged exposure to piling and dredging activities.

The residual impact of piling and dredging on otter is therefore assessed as a temporary, localised adverse effect of negligible to minor significance, with no predicted injury or mortality and no significant effect on otter habitat connectivity, local population status or the maintenance of the species at favourable conservation status.

5.3.7 LOSS OF POTENTIAL TEMPORARY OTTER RESTING PLACE (AFTER MITIGATION)

Following implementation of the proposed mitigation measures, including pre-removal camera monitoring, inspection by a suitably qualified ecologist immediately before removal, controlled and gradual dismantling, ecological supervision where required, and an immediate stop-work procedure if an otter or evidence of recent use is identified, the risk of direct injury or mortality to otter is expected to be negligible.

The removal of H3 will result in the loss of an unconfirmed and apparently inactive potential temporary resting resource. However, no otter activity was recorded during 38 nights of monitoring, H3 was not confirmed as a holt or couch, and an artificial otter holt will be provided and made available before, or at an appropriate stage in advance of, the removal of H3. **The residual impact is therefore assessed as a minor, localised adverse effect associated with the loss of potential resting habitat, with**

no significant effect on the local otter population and no adverse effect on the maintenance of otter at favourable conservation status.

5.3.8 EVIDENCE OF SUCCESSFUL MITIGATION

The mitigation measures proposed for the 3FM Project are consistent with measures implemented for otter protection during other Irish infrastructure and flood-relief projects. These include pre-construction and pre-removal surveys, trail-camera monitoring, ecological supervision, controlled working methods, stop-work procedures, monitoring by suitably qualified personnel and the provision of artificial resting habitat.

A relevant example is the Glashaboy River (Glanmire/Sallybrook) Drainage Scheme, Scheme Reference DPE63-9-2018, which was confirmed under the Arterial Drainage Acts on 18 January 2021. As part of that scheme, two artificial otter holts were constructed in 2022 in advance of the main construction phase, with their location selected to maximise the likelihood of use by placing them near an area known to be used by otters (2025-02-10 Report.pdf). Subsequent monitoring recorded otter activity at one of the artificial holts, including otter prints at the entrance. This provides relevant evidence that appropriately located and constructed artificial holts can provide suitable alternative resting resources when supported by monitoring and ecological management.

The use of trail cameras, pre-activity monitoring, ecological supervision and controlled working methods at comparable projects also demonstrates the value of monitoring-led mitigation in reducing the risk of direct harm and disturbance to otters. However, use of an artificial holt cannot be guaranteed and will therefore be verified for the 3FM Project through inspections, searches for otter signs and, where appropriate, trail-camera monitoring.

The proposed Marine Mammal Observer measures provide an additional precaution during piling and dredging. Qualified MMOs will undertake pre-activity watches, monitor the relevant observation zones and record any otter sightings, with observations communicated to the ECoW. Soft-start piling, seasonal and daily working restrictions, and monitoring before dredging will further reduce the likelihood and duration of exposure to peak noise levels.

Subject to implementation of the final Otter Conservation Plan and all relevant licence conditions, the proposed mitigation is considered capable of preventing injury or mortality, reducing temporary disturbance and providing an alternative resting resource before H3 is removed. The residual effects are therefore not expected to be detrimental to the maintenance of the otter population at favourable conservation status in its natural range. Monitoring results will be reviewed during the one-year derogation licence period and will inform the Derogation Report and EU Returns Form submitted to NPWS following expiry of the licence.

6.0 MONITORING THE IMPACTS OF THE DEROGATIONS

The impacts of the derogation on otter will be monitored through pre-construction surveys, routine construction-phase surveys, monitoring of the artificial holt, construction supervision and post-construction surveys.

A suitably qualified ECoW will oversee implementation of the Otter Conservation Management Plan and review any changes in otter activity, including holts, couches, temporary resting places, spraints, tracks and other signs.

Prior to removal of H3, trail-camera monitoring and an inspection by a suitably qualified ecologist will confirm whether the structure is in use. Removal will be supervised where required, and works will stop if an otter or evidence of recent use is identified. The artificial holt will be installed and made available before, or at an appropriate stage in advance of, H3 removal.

The artificial holt will be inspected after installation and monitored during the construction and post-construction phases. Monitoring will include visual inspections for structural integrity, blocked entrances, flooding, damage and other maintenance requirements, together with searches for spraints, tracks, bedding material, hair or other evidence of otter use. Trail cameras may also be used, where appropriate, to confirm use. The results will inform any required maintenance, remedial works or additional conservation measures.

Routine otter surveys will be undertaken during construction and following completion of the relevant works, at a frequency and for a duration agreed through the final Otter Conservation Management Plan. Surveys will cover the works area, the artificial holt, adjacent shoreline and suitable connected habitats. The surveys will record changes in otter activity, including the presence or use of holts, couches, resting places, commuting routes and foraging areas.

During piling and dredging, Marine Mammal Observers will undertake the monitoring specified in the Marine Mammal Management Plan, including pre-activity watches and monitoring of the relevant observation zones. Any otter sightings or behaviour indicating disturbance will be recorded and reported to the ECoW.

Any new holt, couch or resting place, injury, mortality, unexpected disturbance or evidence that the artificial holt is not functioning as intended will be reported to the ECoW and NPWS, where required. Monitoring results, including records of otter activity, use of the artificial holt, any disturbance, injury or mortality, and the implementation of mitigation measures, will be documented throughout the one-year derogation licence period.

Following expiry of the one-year derogation licence period, the monitoring data will be used to inform the Derogation Report and the EU Returns Form submitted to NPWS, in accordance with the licence conditions and applicable Article 16 reporting obligations. This will ensure that the effects of the derogation and the effectiveness of the mitigation measures are fully reported to NPWS.

7.0 REFERENCES

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