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Ecological Impact Assessment (EcIA) for a Proposed Large-Scale Residential Development (LRD) at Parkmore Industrial Estate, Long Mile Road, Robinhood, Dublin 12.

7th March 2025

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.
On behalf of: Watfore Ltd. (Dairygold)

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Document Control Sheet			
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Contents

Introduction

Background

Ecological Impact Assessment (EcIA) has been defined as '*the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components*' (Treweek, 1999). "*The purpose of EcIA is to provide decision-makers with clear and concise information about the likely ecological effects associated with a project and their significance both directly and in a wider context. Protecting and enhancing biodiversity and landscapes and maintaining natural processes depends upon input from ecologists and other specialists at all stages in the decision-making and planning process; from the early design of a project through implementation to its decommissioning*" (IEEM, 2010).

The following EcIA has been prepared by Altemar Ltd. at the request of Watfore Ltd. (Dairygold) who intend to apply for planning permission for a proposed Large-Residential Development (LRD) on a site at Parkmore Industrial Estate, Long Mile Road, Robinhood, Dublin 12.

Study Objectives

The objectives of this EcIA are to:

1. Outline the project and any alternatives assessed;
2. Undertake a baseline ecological feature, resource and function assessment of the site and zone of influence;
3. Assess and define significance of the direct, indirect and cumulative ecological impacts of the project during its construction, lifetime and decommissioning stages;
4. Refine, where necessary, the project and propose mitigation measures to remove or reduce impacts through sustainable design and ecological planning; and
5. Suggest monitoring measures to follow up the implementation and success of mitigation measures and ecological outcomes.

The following guidelines have been used in preparation of this EcIA:

- Guidelines on the information to be contained in Environmental Impact Statements (EPA, 2002);
- Guidelines on the information to be contained in EIARs (EPA,2022);
- Guidelines for Ecological Impact Assessment (EcIA) (IEEM, 2019);
- Advice Notes on current practice in the preparation of EIS's (EPA, 2003);
- Institute of Ecology and Environmental Management Guidelines for EIA (IEEM, 2005).

Altemar Ltd.

Since its inception in 2001, Altemar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments. Bryan Deegan, the managing director of Altemar, is an Environmental Scientist and Marine Biologist with 30 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture). Bryan Deegan carried out all elements of this Ecological Impact Assessment (EcIA).

Project Description

Watfore Ltd, intend to apply for Planning Permission for development at Parkmore Industrial Estate, Long Mile Road, Robinhood, Dublin 12.

The development will comprise a Large-Scale Residential Development (LRD) on a site at Parkmore Industrial Estate, Long Mile Rd, Robinhood, Dublin, 12. The proposed development will comprise the demolition of existing industrial units, and construction of a mixed use, residential-led development within 4 no. blocks ranging in height from 06 to 10 storeys over semi-basement. The development will comprise the following: 436 no. apartments (studios; 1 beds; 2 beds and 3 beds) with commercial/employment units, creche, café and library. Provision of car, cycle and motorbike parking. Vehicular accesses from Parkmore estate road and additional pedestrian/cyclist accesses from the Long Mile Road and Robinhood Road. Upgrade works to the estate road and surrounding road network. All associated site development works and services provision, open spaces, ESB substations, plant areas, waste management areas, landscaping and boundary treatments.

The proposed site outline, site location, site location map, and site layout plan are demonstrated in Figures 1-4.

Landscape

The landscape strategy plan and report for the proposed development has been prepared by NMP Landscape Architects.

The landscape design summary is as follows:

''Landscape design proposals are driven by ecological influences in response to the sites context and relationship with surrounding character. Experienced sequentially as routes of discovery and exploration which weave themselves across the lands revealing a sensorium of spatial typologies.

The landscape design has been planned in such a way so as to maximise the site's orientation and anticipated microclimate to create habitable, quality spaces which respond to human comfort, encouraging residents and public into a safe and surveilled space. A number of potential routes through the site have been identified to benefit connections with its surroundings and provide a better amenity for the wider community. Pedestrian and cycle routes complement this strategy underpinning the sustainable credentials associated with the development.

In addition, it is anticipated that the development will offer a net gain to biodiversity through the development of additional habitat connecting existing surrounding ecological stands with continuous tree canopies for bat and bird roosting and provision of specific plants for wildlife to forage through.

An increased number of trees, areas for surface water treatment, coupled with best practice maintenance will ensure a sustainable landscape for the future. Edge conditions and relationships with neighboring developments are sensitively integrated and screened.

The primary objectives of the design are to encourage biodiversity through varied tree and shrub planting, create a series of interlinking spaces which 'blur' the boundaries and create 'moments' for interactions, crafting a sense and extension of the community for the wider neighborhood.''

The proposed landscape masterplans are demonstrated in Figure 5 & 6.

Figure 1. *Site outline*

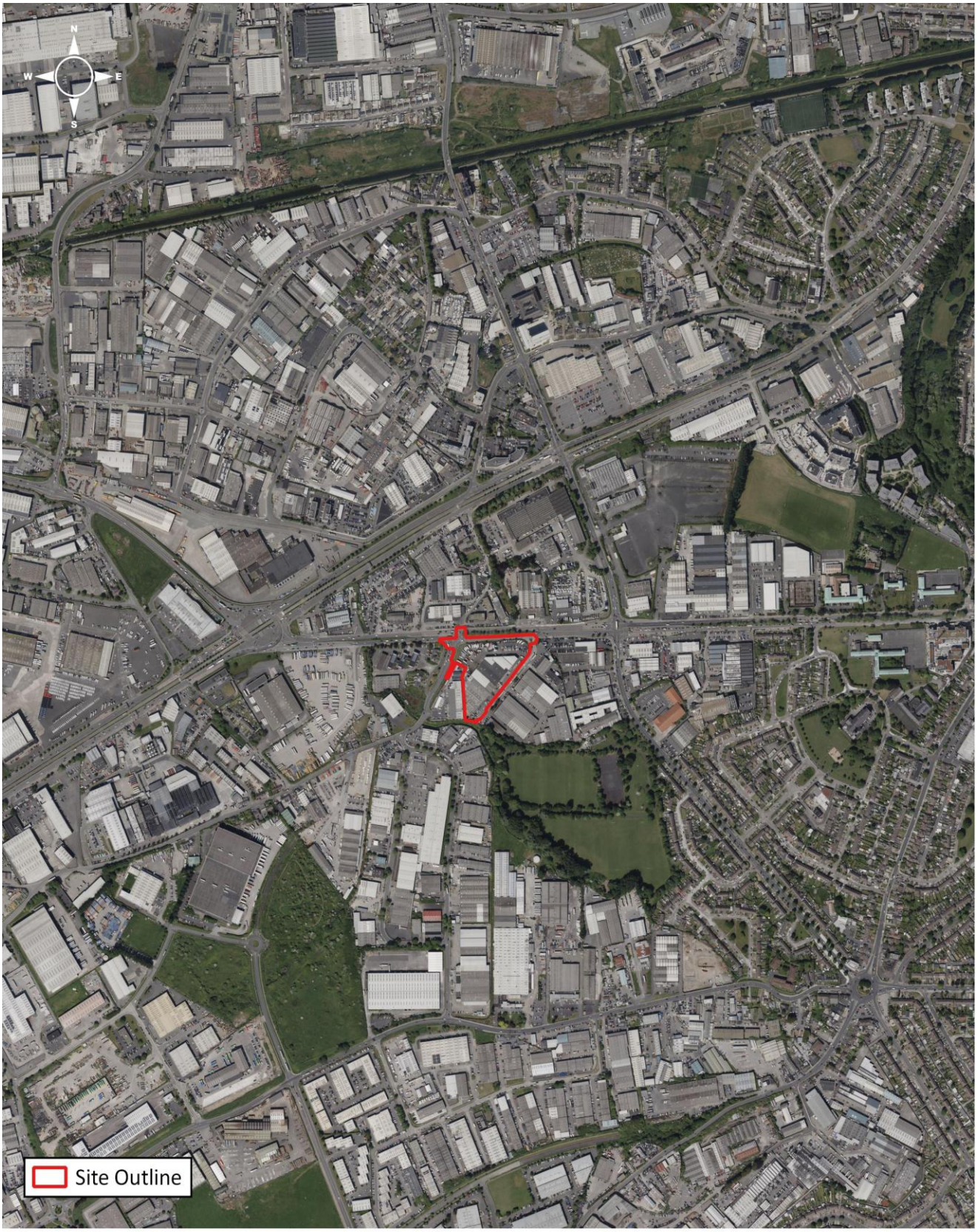


Figure 2. *Site location*

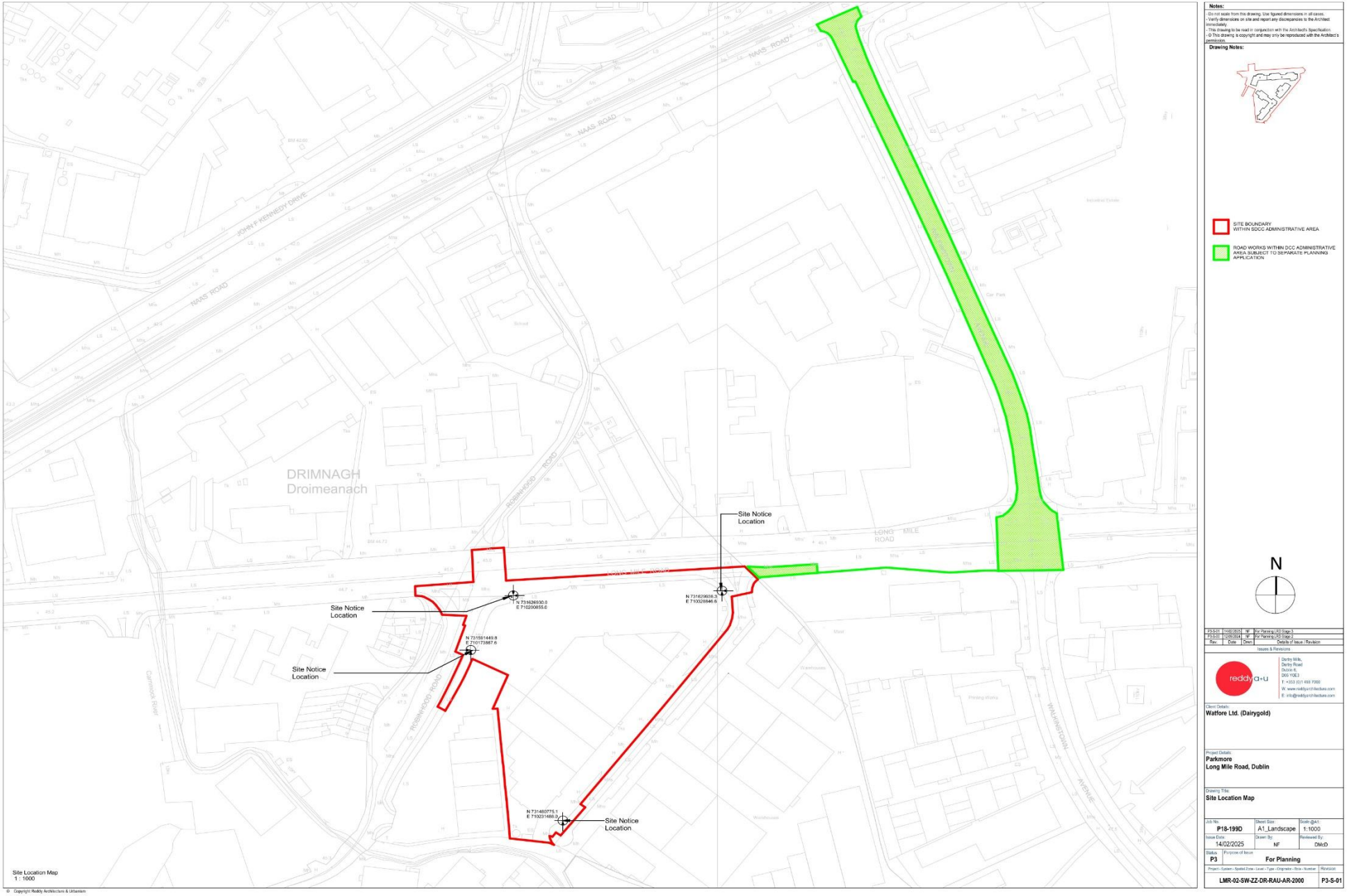


Figure 3. *Site location map*

Figure 4. *Site layout plan*

Figure 5. *Landscape masterplan- sheet 1*

Figure 6. *Landscape Masterplan- sheet 2*

Drainage

An Engineer's Planning Stage Report has been prepared by Roughan & O'Donovan Consulting Engineers to accompany this planning application. This report outlines the following foul and surface water drainage strategy for the proposed development:

Foul Water Drainage

'It is proposed to provide new separate surface and foul drainage systems to serve the proposed development. This section describes the existing foul drainage services on or near the site and summarises the additional foul drainage infrastructure required to serve the proposed development.

Existing Foul Drainage

Foul drainage records obtained indicate that there is existing foul and combined drainage infrastructure within the vicinity of the site. The records show an existing 225mm diameter foul sewer immediately east of the site within the industrial estate access road. This foul sewer discharges to a 225mm diameter combined sewer located immediately northeast of the site on Long Mile Road.

Proposed Foul Drainage

It is proposed to construct a new foul sewer network to serve the development. Foul discharge from the site will discharge to the existing 225mm dia. foul sewer located within the existing access road to the east of the site. Runoff from cleaning operations in the basement car park will also be conveyed to the foul network in accordance with the Greater Dublin Regional Code of Practice for Drainage Works. A Confirmation of Feasibility Letter was received from Uisce Eireann in October 2024 which outlined that a connection to the existing foul network can be facilitated if infrastructure upgrades are carried out on the wider foul network. To facilitate a foul connection from the proposed development, approximately 360m of network extension will be carried out along regional road R112 (between regional roads R110 and R810) to divert flow from an existing 225mm diameter sewer to the 9B trunk sewer.'

Surface Water Drainage

'Existing Surface Water Drainage

Surface water drainage records obtained indicate that there is existing surface water drainage infrastructure within the vicinity of the site. The records show existing 225mm diameter surface water gravity drainage pipes immediately north, east and west of the site.

Proposed Surface Water Drainage

As part of the development, a number of different SuDS measures are proposed to minimise the impact on water quality and water quantity of the runoff and maximise the amenity and biodiversity opportunities within the site. The site topography will allow for the site to drain by gravity to the existing surface water pipe network located in the existing industrial estate access road. It is proposed to construct a new surface water drainage system for the development to collect runoff and convey it to the outfall location. The site will be served by a new network consisting of surface water pipes, blue / green roofs and permeable paving areas. The lower subbase levels of the permeable paving and blue/green roofs will provide for the attenuation storage requirements on site as a result of the residential development.'

SuDS

As part of the development, a number of different SuDS measures are proposed to minimise the impact on water quality and water quantity of the runoff and maximise the amenity and biodiversity opportunities within the site. These measures have been chosen and designed in accordance with the South Dublin County Council Sustainable Drainage Explanatory, Design & Evaluation Guide 2022.

The proposed SuDS measures will include Source Control measures as part of a Management Train whereby the surface water is managed locally in small subcatchments rather than being conveyed to and managed in large

systems further down the catchment. The combination of the SuDS measures listed below will maximise the potential for surface water attenuation, reducing the impact on the existing surface water drainage network downstream. The proposed techniques will offer high level of treatment processes and nutrient removal of the runoff, particularly during the 'first flush'. Finally, the various measures will offer significant amenity and biodiversity opportunities compared to other drainage systems. It is proposed to provide the following SuDS measures:

- *Blue/green roof systems to all building blocks and areas above basements*
- *Rain Gardens to manage runoff at the surface from the central pathway through the site*
- *Vegetated swales*
- *Flow control devices to limit discharge'*

Flood Risk Assessment

A Flood Risk Assessment has been prepared by Roughan & O'Donovan Consulting Engineers. The report concludes the following:

Source	Pathway	Receptor	Likelihood	Consequence	Risk
Tidal	Overland flow, out of bank	Development Site	Low Possibility	Low (distance from tidal waterbody and site elevations limit possible flood extents)	Low (due to relative distance from, and elevation of site above nearest tidal waterbody)
Fluvial	Overland flow, out of bank	Development Site	Low Possibility	Low (site elevations limit possible flood extents – Development site is within Flood Zone C)	Low (due to relative elevation of site above nearest watercourse)
Surface Water	Overland flow	Development Site	Low Possibility	Low (The City Edge Project pluvial mapping indicates pluvial flooding within the vicinity of the site however these maps represent overland flow as a result of extreme rainfall events only and do not take into account the surface water drainage network for the area. No other sources consulted reported surface water flooding on site)	Low (if appropriate drainage system is incorporated in development and maintained appropriately)
Ground Water	Rising levels	Development Site	Low Possibility	Low (no indication of previous groundwater flooding at the site)	Low (due to low permeability of soil cover, no indication of previous groundwater flooding at the site)

'The consulted sources indicate that no area of the subject site is liable to flood from fluvial, coastal or groundwater sources. The susceptibility of Long Mile Road to pluvial flooding is noted but through the use of appropriate drainage measures the risk is considered low. All sources indicate that there is a low risk of flooding on site and that the site is within Flood Zone C, ensuring it is appropriate for residential and commercial developments.'

The proposed drainage layout is demonstrated in Figures 7-10.

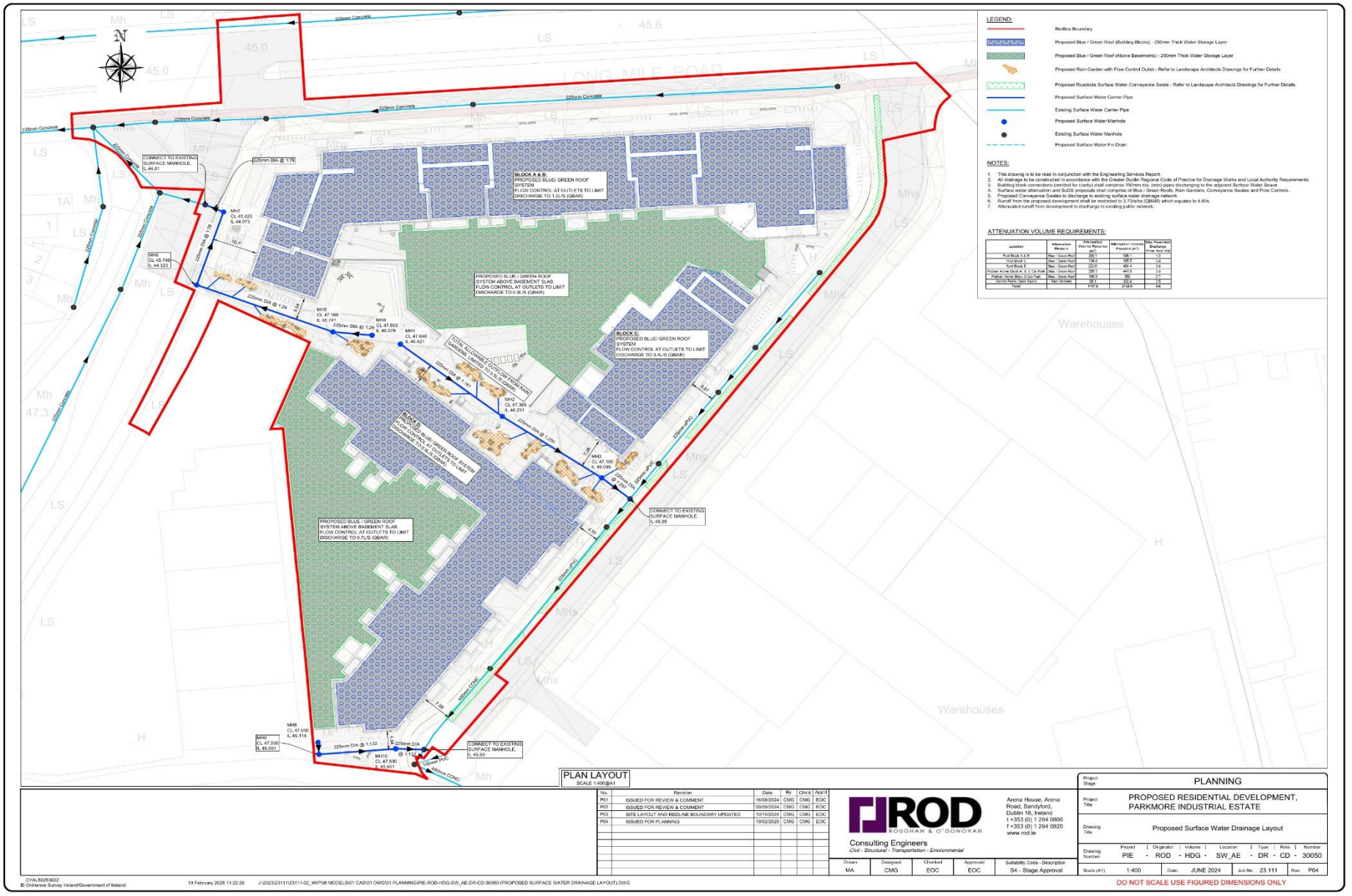


Figure 7. *Proposed surface water drainage layout*

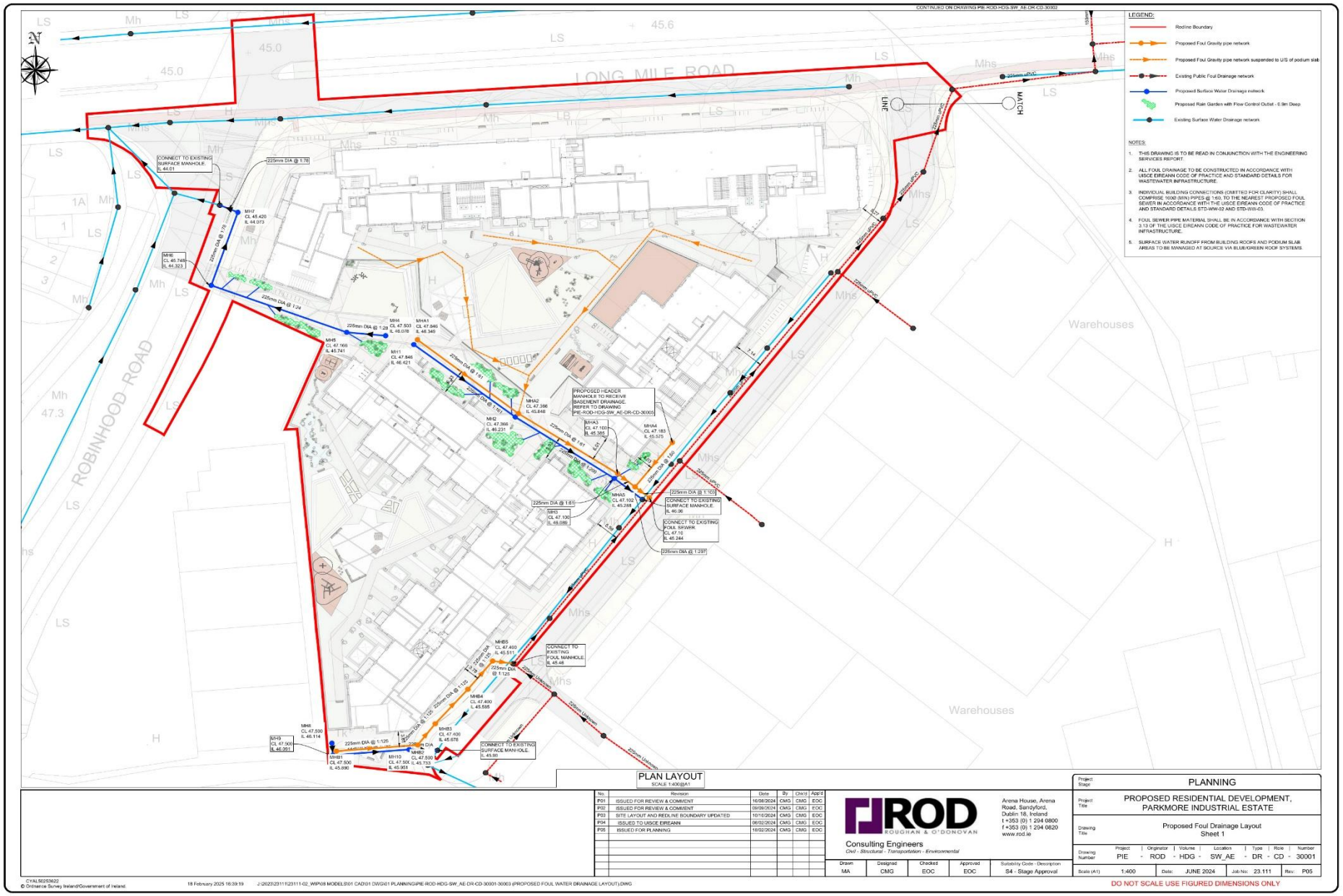


Figure 8. *Proposed foul water drainage layout -sheet 1*

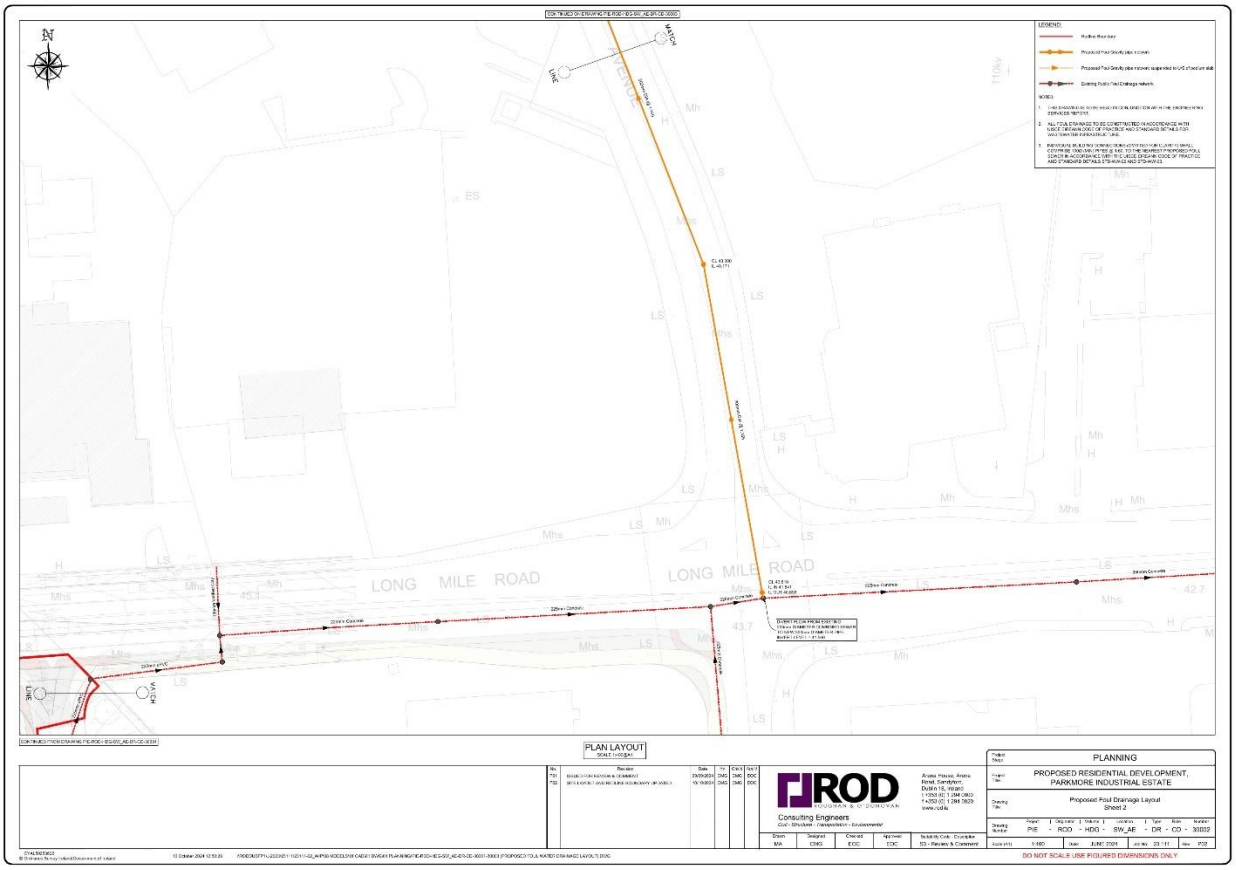


Figure 9. *Proposed foul water drainage layout -sheet 2*

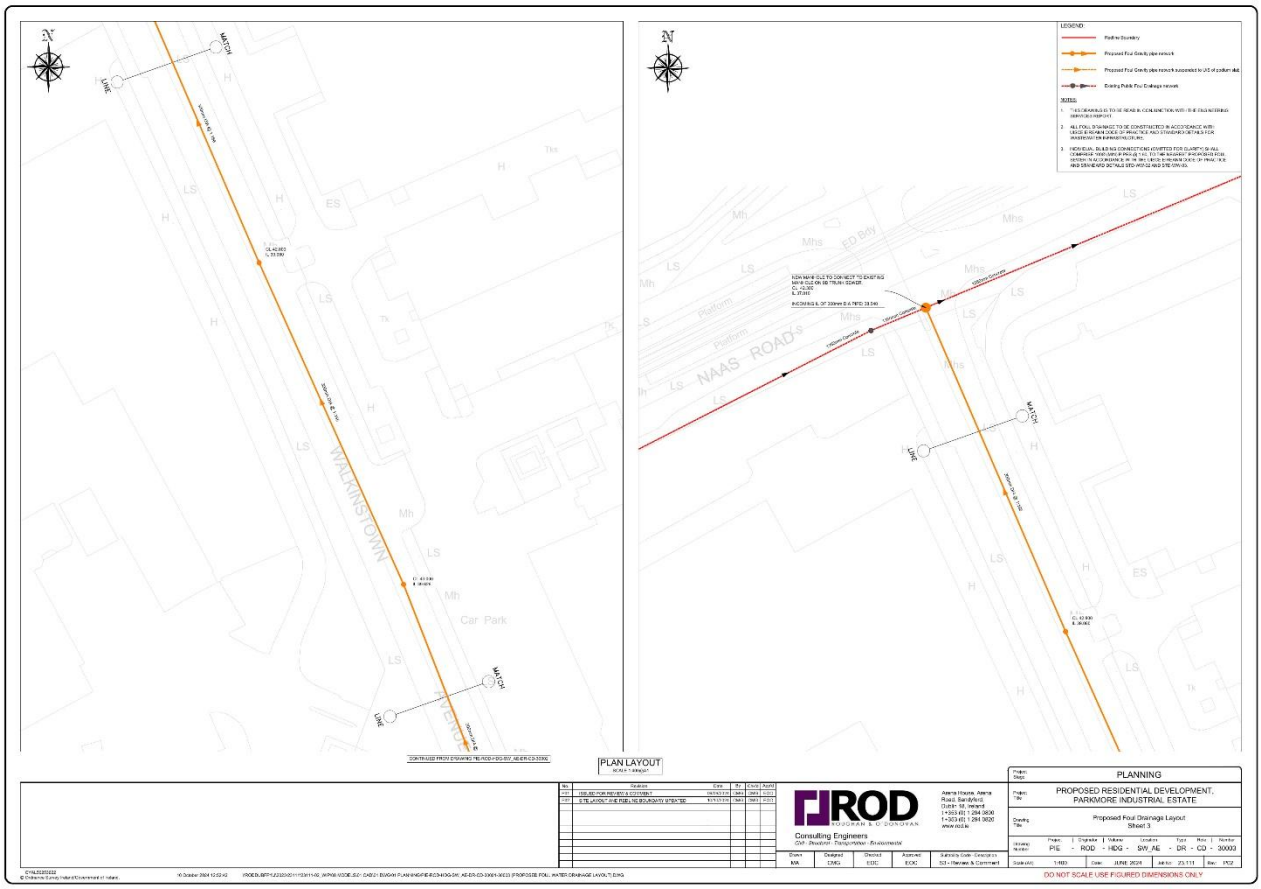


Figure 10. *Proposed foul water drainage layout -sheet 3*

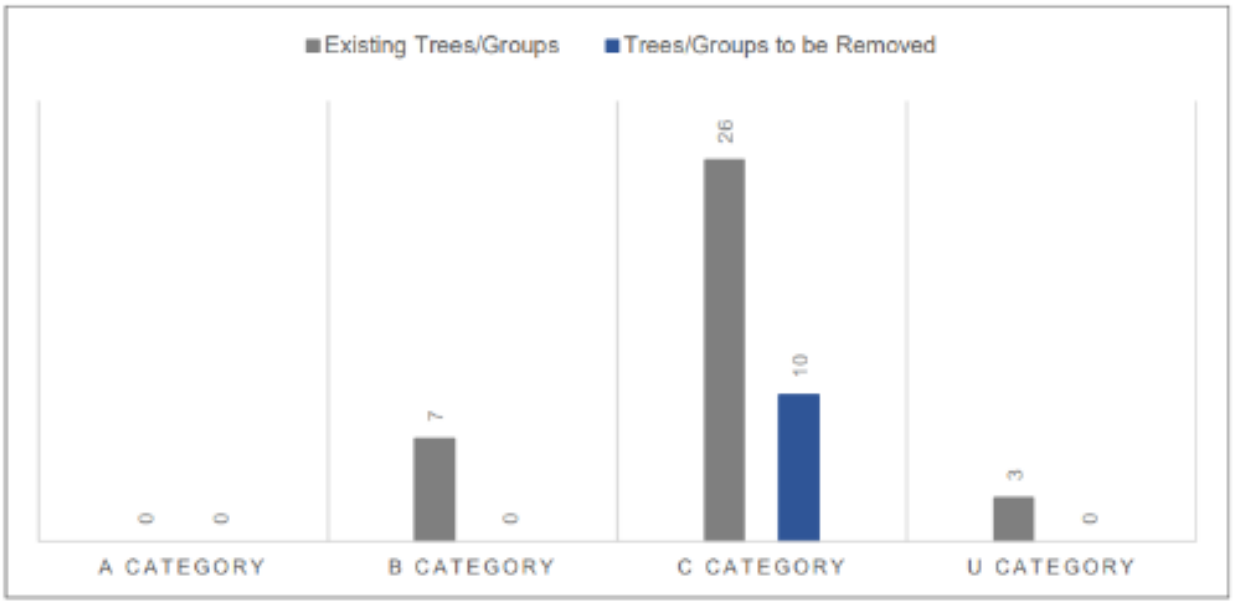
Arborist

An Arboricultural Impact Assessment has been prepared by CMK Hort + Arb Ltd. to accompany this planning application. The report concludes the following in relation to trees on site:

'The proposed development will require the removal of 8 trees and 2 shrub groups, all of low quality and value (C Category). The proposed removals have been assessed and their loss will not have a significant impact on the landscape character of the local surrounding area.

The proposal includes substantial new high-quality tree planting that will mitigate the proposed removals and have a positive impact on the amenities and visual appearance of the development and local surrounding landscape in the future.

In conclusion, the proposed development is achievable in both arboricultural terms and in relation to local planning policy as it relates to trees. Tree impacts have been assessed and tree protection measures have been specified in accordance with best practice and are sufficient to safeguard retained trees during the proposed works.'



The tree survey & constraints plan and the tree impact & protection plan are demonstrated in Figures 11 -13.

Figure 11. *Tree Survey Plan*

Figure 12. *Tree Impact Plan*

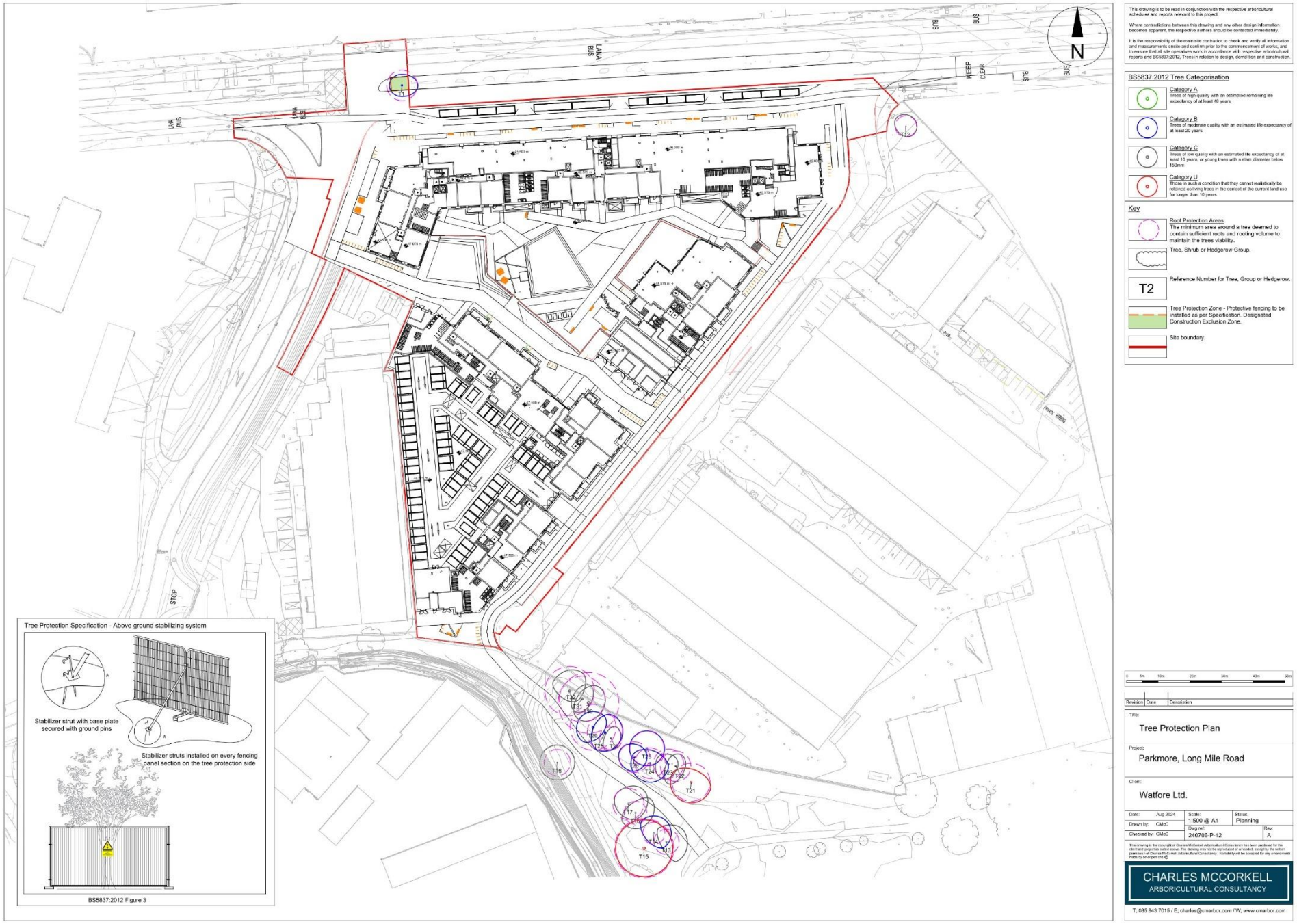


Figure 13. *Tree Protection Plan*

Lighting

A public lighting report has been prepared by EDC Engineering to accompany this planning application. The report outlines the following:

'As per the recommendations of the ecological report, the private external lighting for the courtyards and the proposed footpath/cycle track connecting Parkmore Industrial Estate Road with Walkinstown Avenue Park will be designed to limit overspill and prevent light pollution. The key design features include:

- *All luminaires shall be designed to minimize the spill of upward light and should not emit any up-light.*
- *All luminaires shall lack UV elements when manufactured and shall be LED*
- *A warm white spectrum (ideally <=2700 Kelvin) shall be adopted to reduce blue light component*
- *Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats*

The public lighting will be designed in accordance with SDCC/DCC lighting standards, adhering to the recommendation for neutral white light (4000K). This approach ensures that all installations meet the requisite specifications for safety, efficiency, and environmental considerations, while providing optimal illumination for public areas.'

The public lighting plan complies with bat lighting guidelines and is set to 2700^{o}K. The lighting layout is demonstrated in Figure 14.

Figure 14. *Proposed Public Lighting Layout*

Ecological Assessment Methodology

Desk Study

A desk study was undertaken to gather and assess ecological data prior to undertaking fieldwork elements. Sources of datasets and information included:

- The National Parks and Wildlife Service
- National Biological Data Centre
- Satellite, aerial and 6" map imagery
- Bing Maps (ArcGIS)

A desk-based assessment of the potential species and habitats of conservation importance was carried out in July 2024 and revised in October 2024. Altemar assessed the project, the proposed construction methodology and the operation of the proposed development.

Field Survey

A site visit was carried out by Bryan Deegan on the 12th of September 2023 and updated on the 17th July 2024. A bat survey was carried out on the 22nd August 2023 and two bat surveys were carried out in 2024 (4th July and 17th July 2024). The surveys were carried out in mild dry conditions and covered all the lands within the site outline and the land immediately outside the site. The purpose of the field survey was to identify habitat types according to the Fossitt (2000) habitat classification and map their extent. In addition, more detailed information on the species composition and structure of habitats, conservation value and other data were gathered.

Survey Limitations

The field surveys were carried out on the 12th September 2023 and the 17th July 2024. This is within the period for full species assessments of the floral cover. Additionally, the bat surveys (22nd August 2023, 04th July 2024, and 17th July 2024) were carried out within the appropriate bat survey season. Weather conditions were mild and dry and allowed a bat detector surveys to take place. Given that the site is primarily build land and all areas were accessible, no limitations are foreseen in relation to the surveys.

Consultation

A request for data in relation to species of conservation interest was submitted to the National Parks and Wildlife Service (NPWS). The National Biological Data Centre records were consulted for species of conservation significance.

Spatial Scope and Zone of Influence

As outlined in CIEEM (2018) '*The 'zone of influence' for a project is the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries.*' In line with best practice guidance an initial zone of influence be set at a radius of 2km for non-linear projects (IEA, 1995).

The Walkinstown Stream transverses along the southern boundary of the site, making an indirect hydrological link to Natura 2000 sites located within Dublin Bay. The ZoI of the proposed project would be seen to be restricted to the site outline, with potential for minor localised noise and lighting impacts during construction which do not extend significantly beyond the site outline nor are they likely to have any significant effects on any designated conservation sites. However, due to the presence of the Walkinstown Stream along the southern boundary and given that storm water discharge outfalls to this watercourse, in the absence of mitigation, there is potential for silt and contaminated surface water runoff to enter the watercourse and impact downstream of the proposed development including Natura 2000 sites. A Natura Impact Statement (NIS) has been prepared by Altemar and is being submitted with this application.

Ecological Evaluation Criteria

This section of the EcIA examines the potential causes of impact that could result in likely significant effects to the species and habitats that occur within the ZOI of the proposed development. These impacts could arise during either the construction or operational phases of the proposed development. The following terms are derived from EPA EIAR Guidance (2022) (Table 1) and are used in the assessment to describe the predicted and potential residual impacts on the ecology by the construction and operation of the proposed development.

Table 1. *Impact description terminology (EPA,2022)*

Magnitude of effect (change)		Typical description
High	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality.
Medium	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements
	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality.
Low	Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial effect on attribute or a reduced risk of negative effect occurring
Negligible	Adverse	Very minor loss or alteration to one or more characteristics, features or elements.
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements.

Table 2. *Criteria for establishing receptor sensitivity/importance*

Importance	Ecological Valuation
International	Sites, habitats or species protected under international legislation e.g. Habitats and Species Directive. These include, amongst others: SACs, SPAs, Ramsar sites, Biosphere Reserves, including sites proposed for designation, plus undesignated sites that support populations of internationally important species.
National	Sites, habitats or species protected under national legislation e.g. Wildlife Act 1976 and amendments. Sites include designated and proposed NHAs, Statutory Nature Reserves, National Parks, plus areas supporting resident or regularly occurring populations of species of national importance (e.g. 1% national population) protected under the Wildlife Acts, and rare (Red Data List) species.
Regional	Sites, habitats or species which may have regional importance, but which are not protected under legislation (although Local Plans may specifically identify them) e.g. viable areas or populations of Regional Biodiversity Action Plan habitats or species.
Local/County	Areas supporting resident or regularly occurring populations of protected and red data listed-species of county importance (e.g. 1% of county population), Areas containing Annex I habitats not of international/national importance, County important populations of species or habitats identified in county plans, Areas of special amenity or subject to tree protection constraints.
Local	Areas supporting resident or regularly occurring populations of protected and red data listed-species of local importance (e.g. 1% of local population), Undesignated sites or features which enhance or enrich the local area, sites containing viable area or populations of local Biodiversity Plan habitats or species, local Red Data List species etc.
Site	Very low importance and rarity. Ecological feature of no significant value beyond the site boundary

Table 3. *Quality of effects*

Quality of Effects	Effect Description
Negative /Adverse Effect	A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem; or damaging health or property or by causing nuisance).
Neutral Effect	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
Positive Effect	A change which improves the quality of the environment (for example, by increasing species diversity, or improving the reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).

Table 4. *Significance of effects*

Significance of Effect	Description of Potential Effect
Imperceptible	An effect capable of measurement but without significant consequences.
Not significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Slight Effects	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Moderate Effects	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant Effects	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Very Significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment.
Profound	An effect which obliterates sensitive characteristics.

Table 5. *Duration and frequency of effects*

Duration and Frequency of Effect	Description
Momentary	Effects lasting from seconds to minutes
Brief	Effects lasting less than a day
Temporary	Effects lasting less than a year
Short-term	Effects lasting one to seven years.
Medium-term	Effects lasting seven to fifteen years.
Long-term	Effects lasting fifteen to sixty years.
Permanent	Effects lasting over sixty years
Reversible	Effects that can be undone, for example through remediation or restoration

Table 6. *Describing the probability of effects*

Describing the Probability of Effects	Description
Likely Effects	The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.
Unlikely Effects	The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.

Results

Designated Sites

As can be seen from Figures 15 & 16 (SAC's & SPA's within 15km), 17 & 18 (pNHA and Ramsar within 15km), and 19 (Watercourses proximate to the site.), there are 10 Natura 2000 sites within 15km, 15 National conservation sites, and 2 Ramsar sites within 15 km of the proposed development site. The distance to the conservation sites within 15km of the proposed development and outside 15km with potential for a pathway are seen in Table 7 and Table 8.

Table 7. *Natura 2000 sites within 15km (and outside 15km with potential for a pathway) of the proposed development*

Site Code	NATURA 2000 Site	Distance
Special Areas of Conservation		
IE001209	Glenasmole Valley SAC	7.2 km
IE000210	South Dublin Bay SAC	8.7 km
IE002122	Wicklow Mountains SAC	10.0 km
IE001398	Rye Water Valley/Carton SAC	10.6 km
IE000206	North Dublin Bay SAC	11.5 km
IE000725	Knocksink Wood SAC	15.0 km
Special Protection Areas		
IE004024	South Dublin Bay and River Tolka Estuary SPA	8.7 km
IE004040	Wicklow Mountains SPA	9.9 km
IE004006	North Bull Island SPA	11.6 km
IE004236	North-West Irish Sea SPA	13.2 km

Table 8. *Designated conservation sites within 15km (and outside 15km with potential for a pathway) of the proposed development*

pNHA	
Grand Canal	900m
Liffey Valley	3.4 km
Dodder Valley	3.8 km
Royal Canal	5.8 km
Lugmore Glen	7.0 km
Glenasmole Valley	7.2 km
North Dublin Bay	8.4 km
South Dublin Bay	8.7 km
Slade of Slaggart and Crooksling Glen	9.3 km
Fitzsimon's Wood	9.4 km
Santry Demesne	10.5 km
Rye Water Valley/Carton	10.6 km
Dingle Glen	14.2 km
Ballybetagh Bog	14.3 km
Dalkey Coastal Zone and Killiney Hill	14.8 km

Ramsar	
Sandymount Strand/Tolka Estuary	8.7 km
North Bull-Island	11.6 km

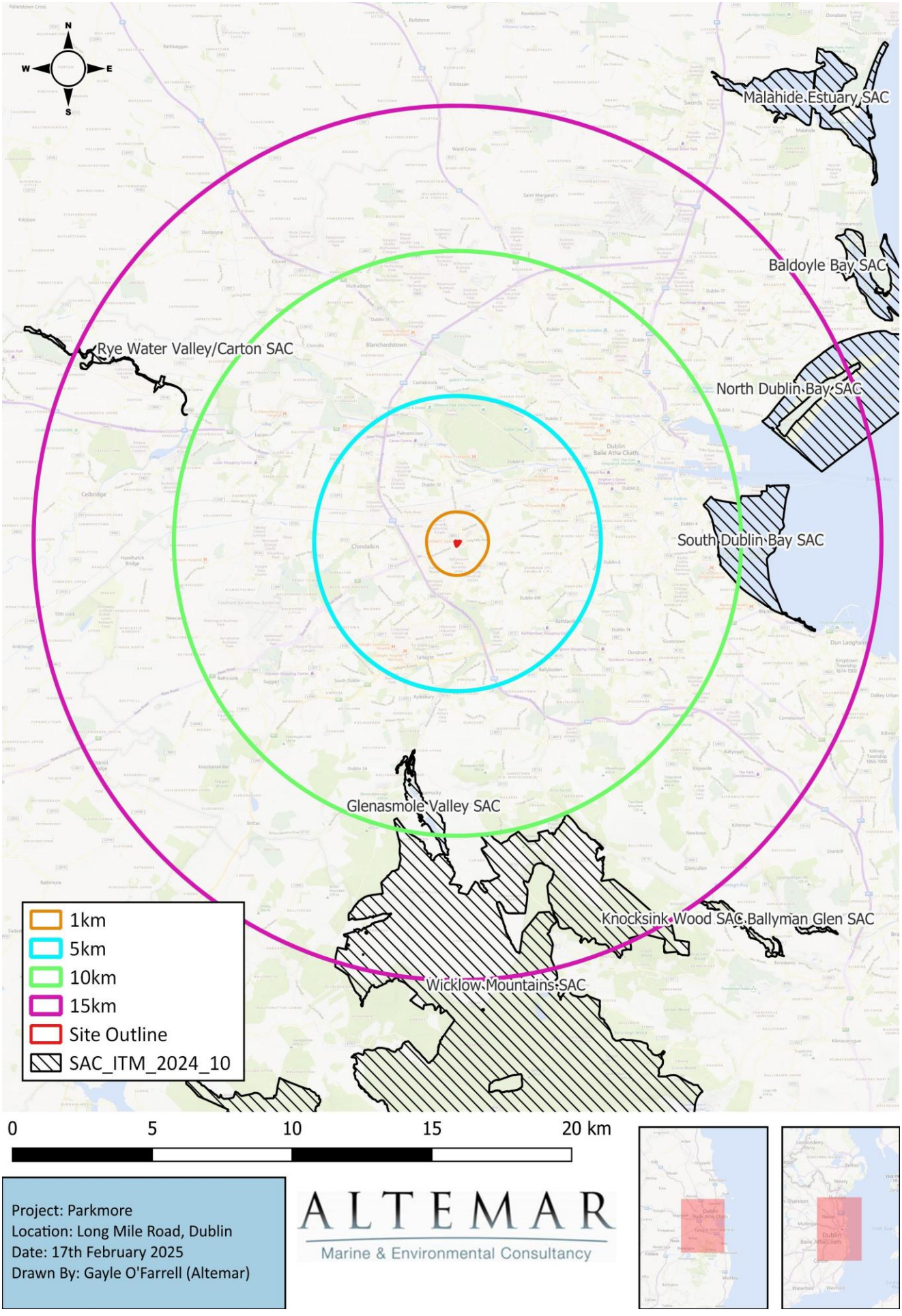


Figure 15. *Special Areas of Conservation (SAC) within 15km of the proposed development*

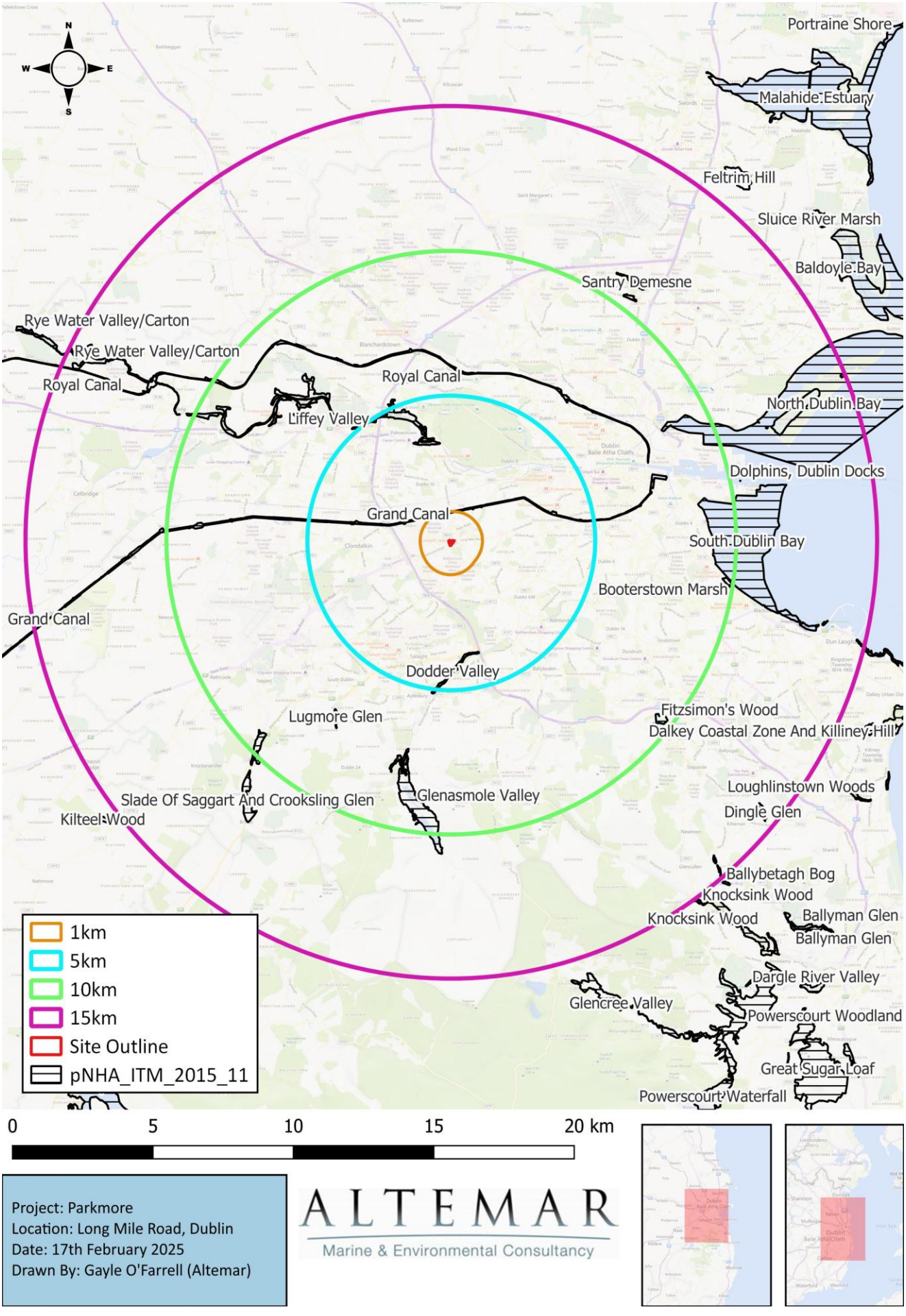


Figure 17. *Proposed Natural Heritage Areas (pNHA) within 15km of the proposed development*

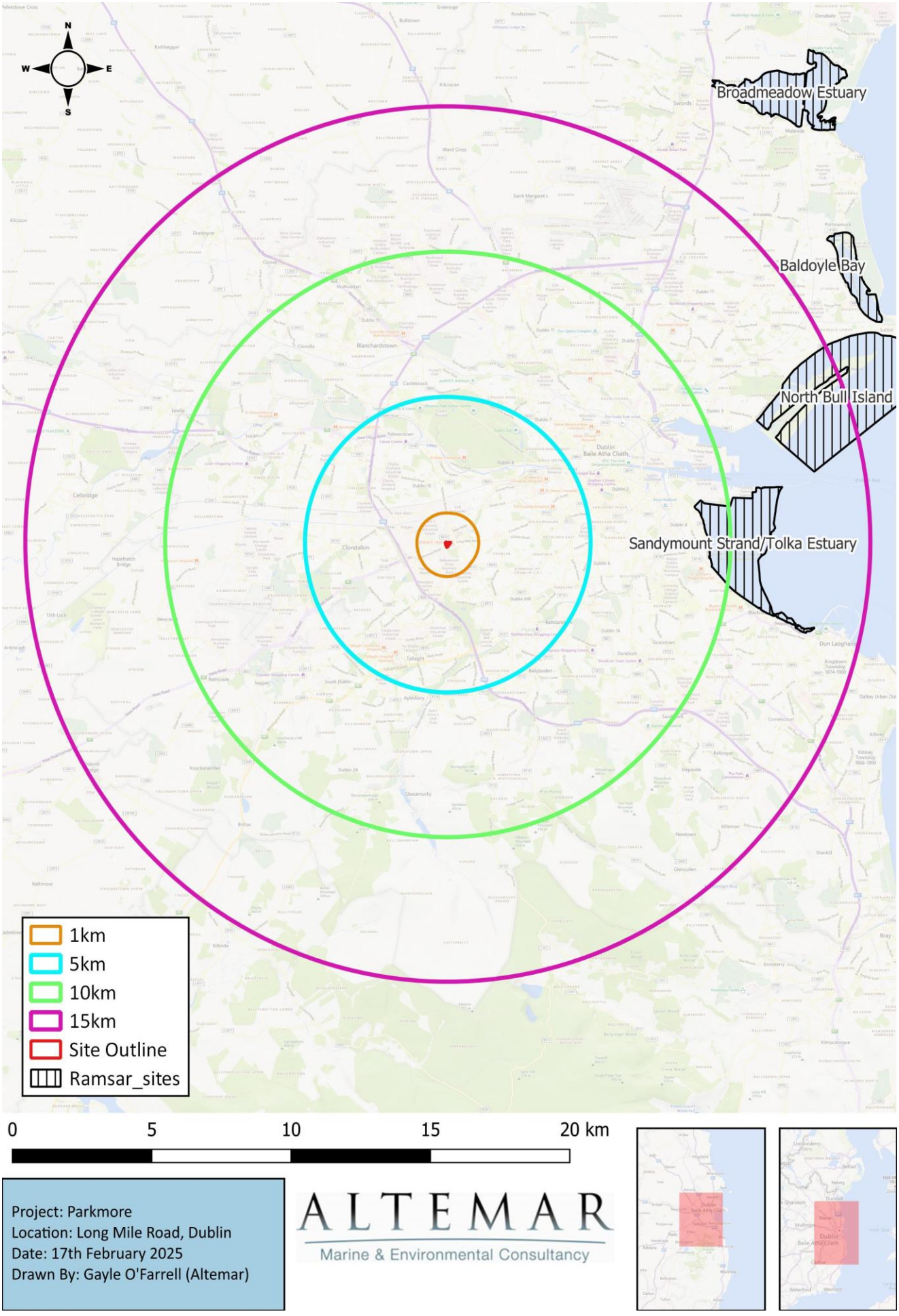


Figure 18. *Ramsar sites within 15km of the proposed development*

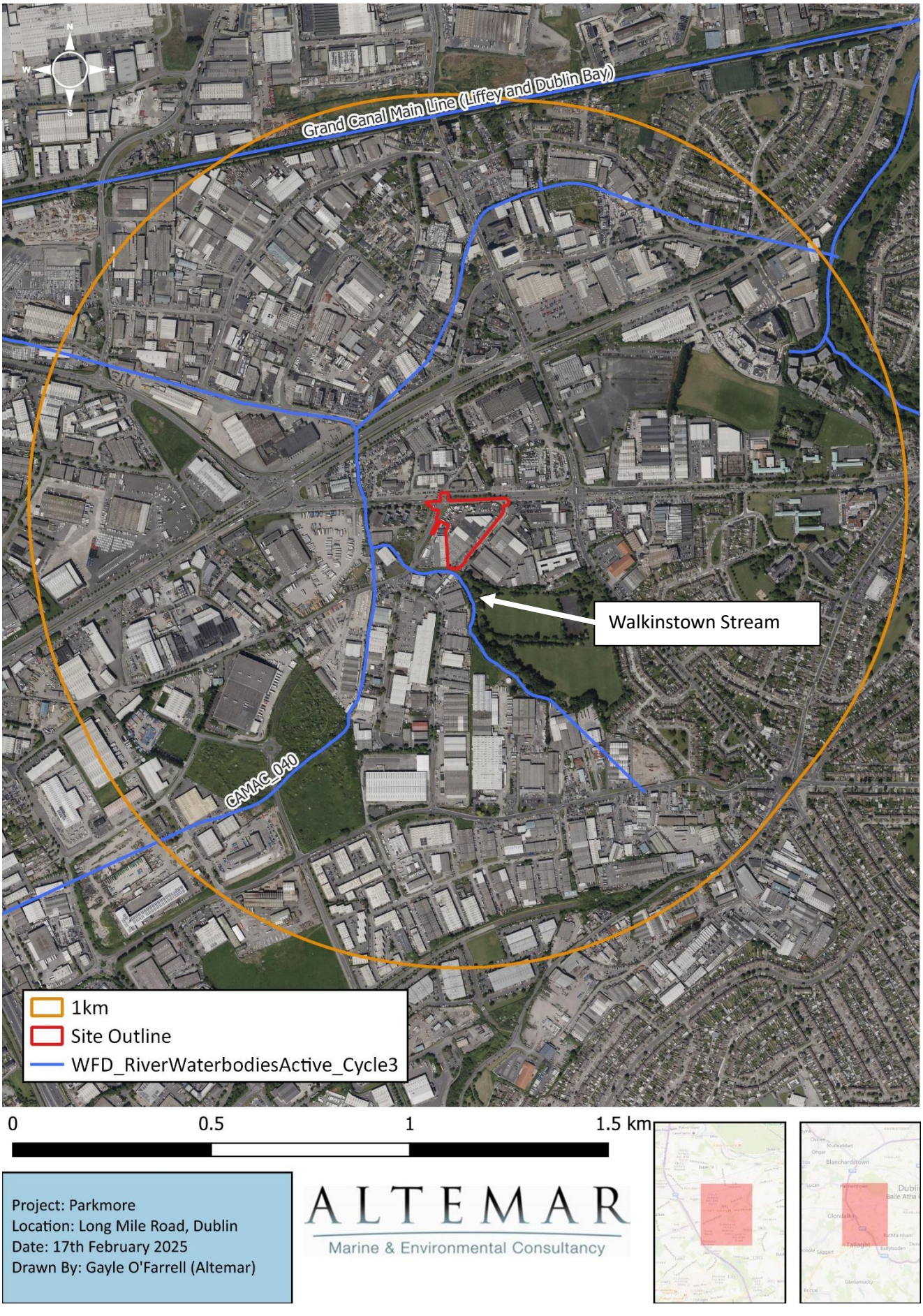


Figure 19. *Waterbodies in proximity to the proposed development*

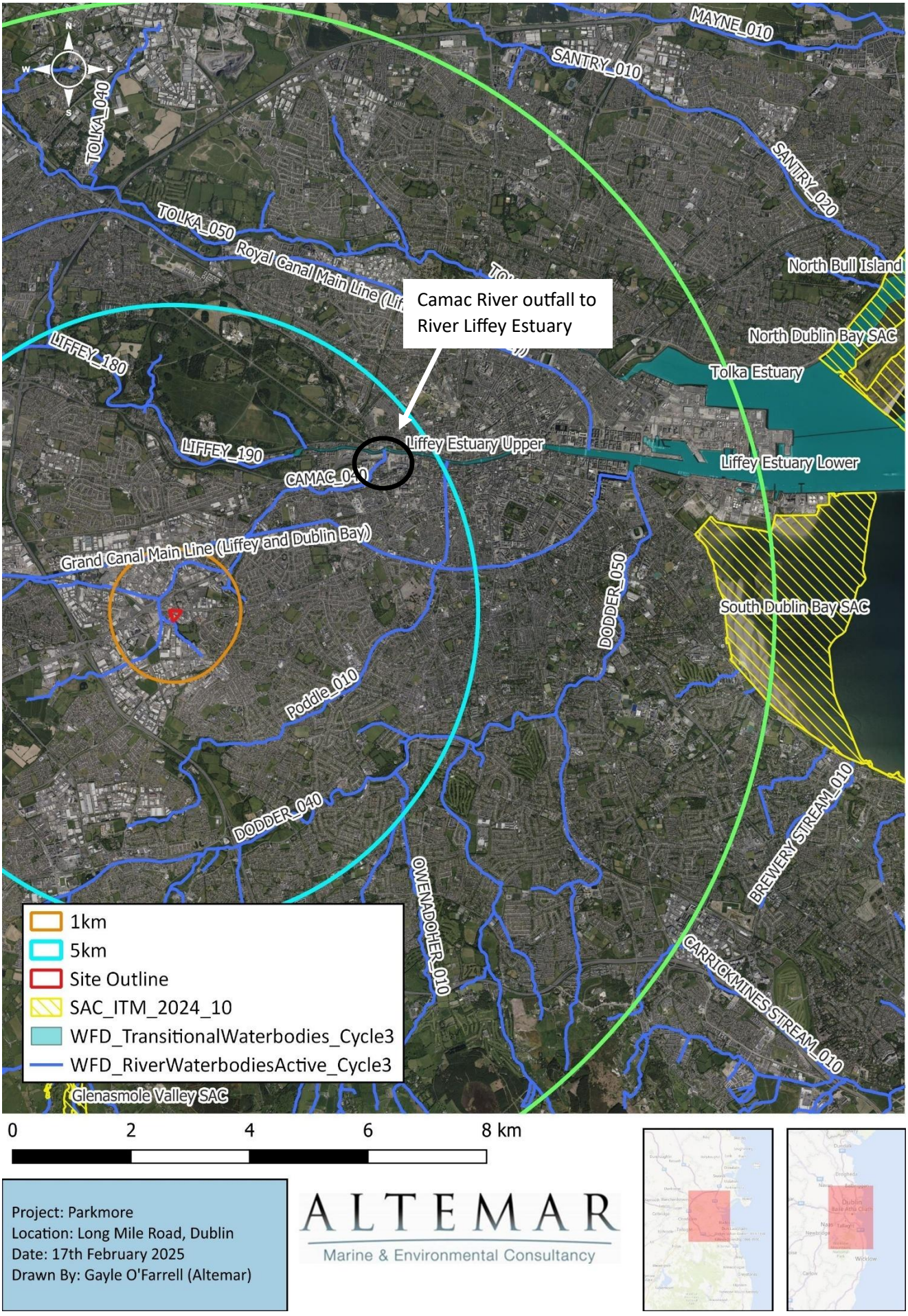


Figure 20. *Waterbodies and pathways to proximate SACs*

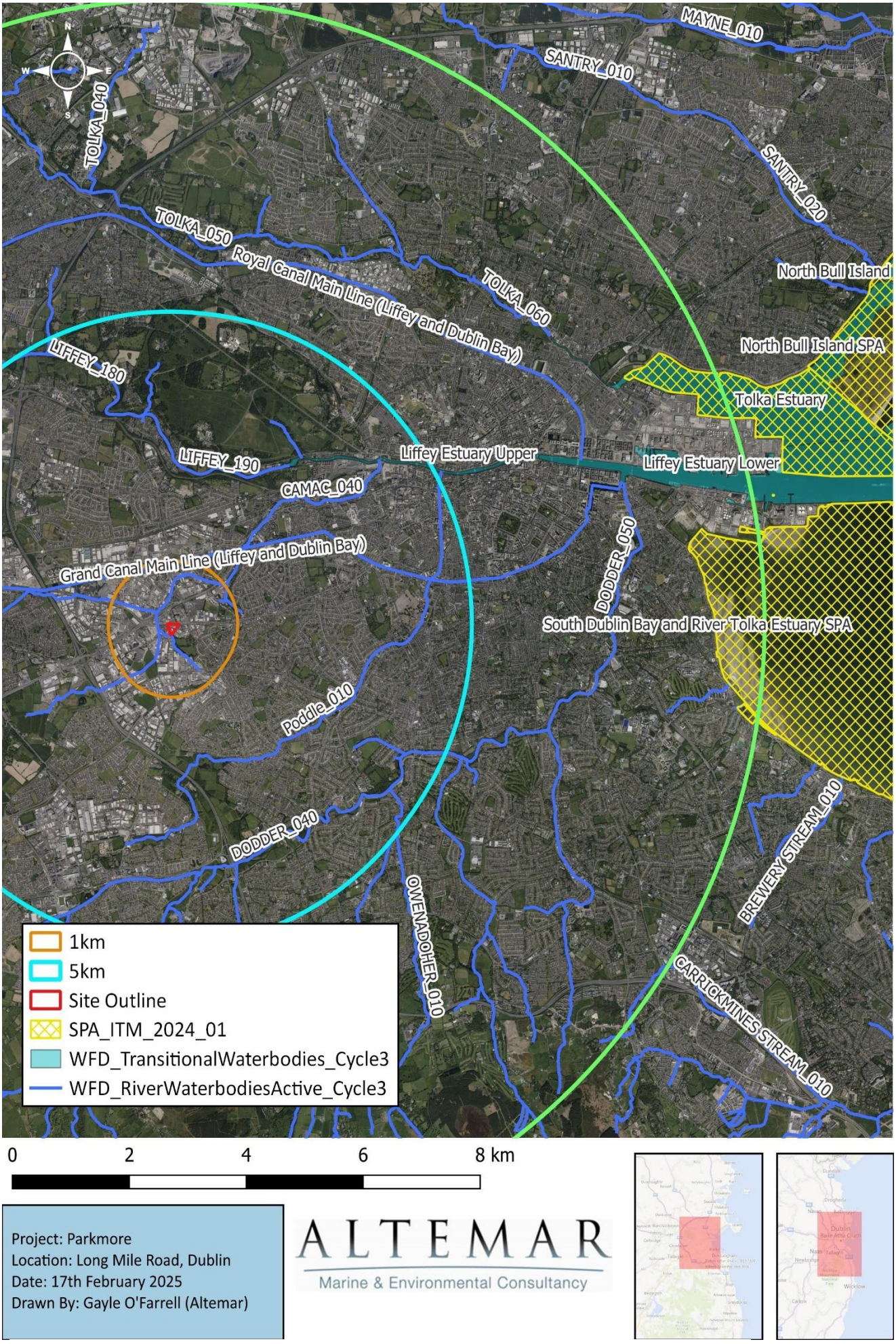


Figure 21. *Waterbodies and pathways to proximate SPAs*

Habitats and Species

A site assessment was carried out on the 12th of September 2023 and updated on the 17th July 2024. Habitats within proposed site were classified according to Fossitt (2000) Figure 22.

Figure 22. *Fossitt Habitat Map*

BL3- Artificial surfaces and buildings.

The industrial estate was primarily paved concreate and commercial buildings.

Plate 1. *Built land.*

GA2 - Amenity grassland

In the commercial area, there were small strips of amenity grassland with a singular tree. This habitat was also noted on sloped banks on the east of the site. The species included white clover (*Trifolium repens*), red clover (*Trifolium pratense*), ribwort plantain (*Plantago lanceolata*), greater plantain (*Plantago major*), groundsel (*Senecio vulgaris*), thistles (*Cirsium spp.*), broad-leafed doc (*Rumex obtusifolius*), dandelion (*Taraxacum* spp.), daisy (*Bellis perennis*), bush vetch (*Vicia sepium*), black medic (*Medicago lupulina*), common knapweed (*Centaurea nigra*), creeping cinquefoil (*Potentilla reptans*), yarrow (*Achillea millefolium*), canadian fleabane (*Erigeron canadensis*) and autumn hawksbit (*Scorzoneroides autumnalis*). Some tree species within this habitat included rowan (*Sorbus aucuparia*), cabbage palm (*Cordyline australis*), sycamore (*Acer pseudoplatanus*) and birch (*Betula pendula*).

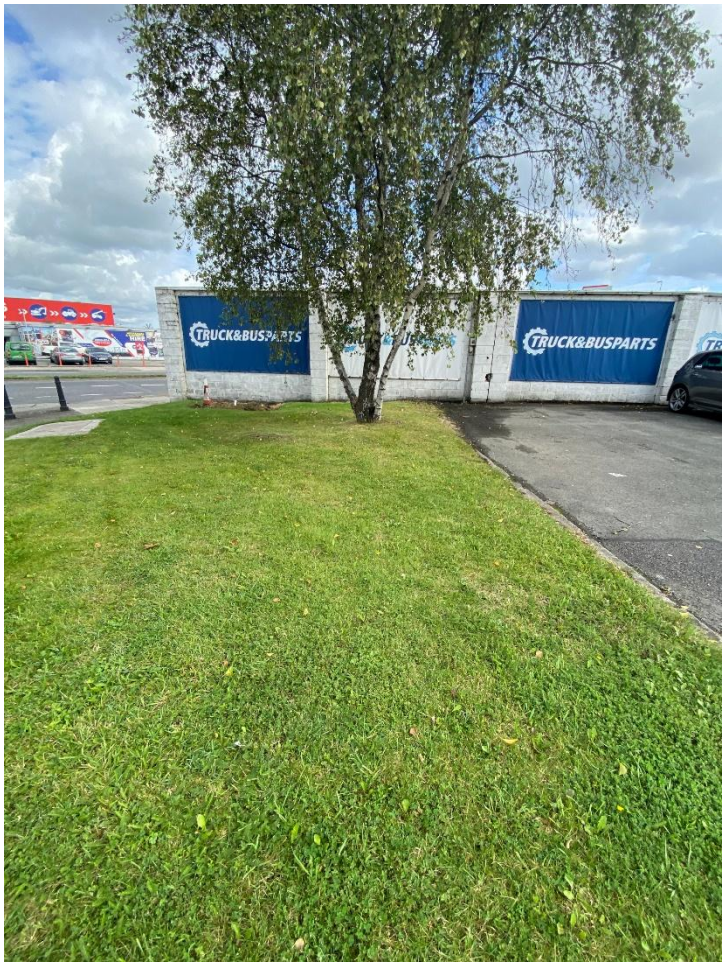


Plate 2. *Amenity grassland patch.*

Plate 3 & 4. *Amenity grassland.*

WS3 Ornamental/Non-native Shrub

The areas which form the site border to the amenity grassland in front of the road west and north of the site included common species and some ornamental species such as Blackthorn (*Prunus spinosa*), Cherry laurel (*Prunus laurocerasus*), Ivy (*Hedera hibernica),* Bramble (*Rubus fruticosus*), Rowan (*Sorbus aucuparia*), Frasers photinia (*Photinia x fraseri*), Black medick (*Medicago lupulina*), Petty spurge (*Euphorbia peplus*) and Hoary willowherb (*Epilobium parviflorum*).

WL1 - Hedgerow

A maintained cherry laurel (*Laurocerasus officinalis*) hedgerow was noted along the northern boundary of the subject site.

Birds

Table 9. *Birds recorded during field surveys*

Common Name	Scientific name	Conservation status
Blackbird	*Turdus merula*	Green
Wren	*Troglodytes troglodytes*	Green
Robin	*Erithacus rubecula*	Green
Blue tit	*Cyanistes caeruleus*	Green
Hooded crow	*Corvus cornix*	Green
Magpie	*Pica pica*	Green
Jackdaw	*Corvus monedula*	Green
Herring gull	*Larus argentatus*	Amber
Pied wagtail	*Motacilla alba yarrellii*	Green
Blackcap	*Sylvia atricapilla*	Green
Feral pigeon	*Columba livia f. domestica*	Green

Historic Records of Biodiversity

The NBDC's online viewer was consulted in order to determine the extent of biodiversity and species of interest in the area. An assessment of the Site-specific area was carried out and it recorded no species of interest. A 2 km^2 grid that encompasses the proposed development site was assessed (O14A). Table 10 provides a list of Species of Conservation Importance.

Table 10. *NBDC Records of Rare, Protected and Invasive Species within the 2 km^2 grid (O13A**).***

Species name	Date of last record	Designation
Common Frog (Rana temporaria)	*07/06/2014*	*Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts*
Barn Swallow (Hirundo rustica)	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Black-headed Gull (Larus ridibundus)	*08/12/2017*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Common Starling (Sturnus vulgaris)	*20/05/2022*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Common Wood Pigeon (Columba palumbus)	*20/05/2022*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species*
Herring Gull (Larus argentatus)	*16/07/2017*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
House Sparrow (Passer domesticus)	*17/05/2022*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Mallard (Anas platyrhynchos)	*26/05/2016*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species*
Rock Pigeon (Columba livia)	*13/01/2017*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species*
Black Horehound (Ballota nigra)	*31/12/1999*	*Threatened Species: Near threatened*
Butterfly-bush (Buddleja davidii)	*31/12/1999*	*Invasive Species: Invasive Species || Invasive Species: Invasive Species >> Medium Impact Invasive Species*
Fallopia japonica x sachalinensis = F. x bohemica	*17/06/2015*	*Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species || Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)*
Greater Knapweed (Centaurea scabiosa)	*31/12/1999*	*Threatened Species: Near threatened*
Japanese Knotweed (Fallopia japonica)	*19/08/2013*	*Invasive Species: Invasive Species || Invasive Species: Invasive Species >> High Impact Invasive Species || Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)*
Meadow Barley (Hordeum secalinum)	*31/12/1866*	*Threatened Species: Endangered*
Opposite-leaved Pondweed (Groenlandia densa)	*31/12/1999*	*Threatened Species: Endangered*
Sycamore (Acer pseudoplatanus)	*31/12/1999*	*Invasive Species: Invasive Species || Invasive Species: Invasive Species >> Medium Impact Invasive Species*
European Otter (Lutra lutra)	*23/09/2013*	*Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex II || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts*
European Rabbit (Oryctolagus cuniculus)	*30/07/2018*	*Invasive Species: Invasive Species || Invasive Species: Invasive Species >> Medium Impact Invasive Species*

Potential Impacts

This report has been prepared to outline the construction and operational phase measures in addition to detailing the potential impacts on sensitive receptors within the Zone of Influence (ZOI).

Potential Construction Impacts

The overall development of the site is likely to have direct negative impacts upon the existing habitats, fauna and flora. Direct negative effects will be manifested in terms of the removal of a portion of the site's internal habitats. The removal of these habitats will result in a loss of species of low biodiversity importance.

Designated Conservation sites within 15km

The proposed development is not within a designated conservation site. The nearest designated conservation site is the Grand Canal pNHA (0.9km). The nearest Natura 2000 site is the Glenasmole Valley SAC (7.2km). Construction will involve demolition, site clearance, enabling works and construction of a large-scale residential development (LRD). The Walkinstown Stream, a watercourse that transverses along the southern boundary of the site, connects the site to designated conservation sites at Dublin Bay, which are located downstream of the proposed development (South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay & River Tolka Estuary SPA, North Bull Island SPA and North-West Irish Sea SPA). In the absence of mitigation measures, there is the potential for silt and contaminated surface water runoff to enter this watercourse during the construction phase and significantly impact on downstream designated conservation sites.

Impacts: Low adverse / International / Neutral Effect / Not significant / Short-term. Mitigation in relation to water pollution is required for Nationally designated sites downstream of the proposed project.

Biodiversity

In the absence of mitigation, the impact of the development during construction phase will be a loss of existing habitats and species on site. However, roughly 90% of the site is built land and habitats on site are of low importance. It would be expected that the flora and fauna associated with these habitats would also be displaced. See below for mitigation measures to limit the impacts on biodiversity.

Terrestrial Mammalian Species

No protected terrestrial mammals were noted on site. Loss of habitat and habitat fragmentation may affect some common mammalian species.

Potential impacts in the absence of mitigation: Low Adverse/ Site/ Negative Impact/ Not Significant/ Short-term

Flora

No protected flora was noted on site. Site clearance will remove the flora species present.

Potential Impacts in the absence of mitigation: Low adverse / site / Negative Impact / Not Significant / Short term.

Bat Fauna

There are no trees of bat roosting potential located onsite. No bats were noted emerging from trees or buildings on the site. No bats were noted foraging on site or along the stream to the south of the site. No significant impacts are foreseen. Lighting during construction could impact on foraging activity.

Impacts: Low adverse / site / Negative Impact / Not significant / short term

Aquatic Biodiversity

The Walkinstown Stream transverses along the southern site boundary the absence of mitigation measures, there is potential for silt and contaminated surface water runoff to enter the watercourse and cause downstream impacts on biodiversity from silt or petrochemicals.

Potential Impacts in the absence of mitigation: Low adverse / International / Neutral Effect / Not Significant / short term. Mitigation is needed in the form of control of silt and petrochemical and dust entering the watercourse during construction.

Bird Fauna

Herring gull (amber-listed) was noted foraging on site. No other birds of conservation importance were noted on site.

Impacts: Low adverse / site / Negative Impact / Not significant / short term Mitigation is needed in the form of site clearance outside bird nesting season.

Potential Operational Impacts

Designated Conservation sites within 15km

The development must comply with County Council drainage requirements and the Water Pollution Acts. Measures will be in place to prevent downstream impacts. No significant impacts on designated sites are likely during operation in the absence of standard controls.

Impacts: Negligible / International / Neutral Impact / Not significant / Long-term. Standard mitigation will be required.

Biodiversity

Terrestrial mammalian species

No protected terrestrial mammals were noted in the vicinity of proposed works or along the Walkinstown Stream to the south of the site.

Potential Impacts in the absence of mitigation: Low adverse / local/ Negative Impact / Not significant / Long term.

Flora

No protected flora or invasive species were noted on site. Landscaping will increase flora diversity.

Potential Impacts in the absence of mitigation: Neutral / site / Not significant / Long-term

Bat Fauna

The proposed development will change the local environment as new structures are to be erected. The proposed development site is located within an industrial estate along Long Mile Road. No bats were noted foraging on site. No bat roosts or potential bat roosts will be lost due to this development and the species expected to occur in the vicinity of the site should persist. Public lighting onsite will comply with bat lighting guidelines.

Effects: Low adverse / International / Negative Impact / Not significant / Long term.

Aquatic Biodiversity

Standard measures will be in place in relation to surface water discharges. No additional mitigation is required.

Potential Impacts in the absence of mitigation: Low adverse / local / Negative Impact / Not significant / long term

Bird Fauna

The proposed development will change the local environment as new structures are to be erected. The buildings are comprised of solid materials on the exterior and will be lit up. These buildings would be clearly visible to bird species and would not pose a significant collision risk. As the landscaping elements improve with maturity it would be expected that the biodiversity value of the site to birds would increase.

Impacts: Low adverse / site / Negative Impact / Not significant / long term.

Mitigation Measures & Monitoring

Standard construction and operational controls will be incorporated into the proposed development project to minimise the potential negative impacts on the ecology within the Zone of Influence (ZoI). These are outlined in Table 11.

Table 11. *Mitigation measures*

Sensitive Receptors	Potential Impacts	Mitigation Measures to Prevent Impacts on Natura 2000 sites
Walkinstown Stream River Camac River Liffey South Dublin Bay (SAC & pNHA) North Dublin Bay (SAC & pNHA) South Dublin Bay and River Tolka Estuary SPA North Bull Island (SPA & Ramsar) North-West Irish Sea SPA Sandymount Strand / Tolka Estuary (Ramsar)	• Habitat degradation • Dust deposition • Pollution • Silt ingress from site runoff • Downstream impacts • Negative impacts on the aquatic environment, aquatic species and qualifying interests.	A CEMP has been prepared by Roughan & O'Donovan Consulting Engineers to accompany this planning application. The 'Environmental Management System' chapter outlines the following construction phase mitigation measures to prevent downstream impacts on Natura 2000 sites: *'Water Pollution* *Measures shall be taken to ensure that the groundwater related to the site does not come into contact with higher proportions of contaminants during the construction activity. Surface water in the vicinity ultimately discharges to Dublin Bay, which is an SPA, SAC and UNESCO Biosphere, and it is of paramount importance that these waterways are not affected during the construction works. The following avoidance measures are proposed to prevent the occurrence of any pollution incidents:* • *Throughout all stages of the construction phase of the project the contractor will ensure that good housekeeping is maintained at all times and that all site personnel are made aware of the requirement to avoid water pollution of all types.* • *Fuels, oils, greases and hydraulic fluids will be stored in bunded areas well away from any surface water gullies. Refuelling of machinery, etc., will be carried out in bunded areas.* • *Runoff from machine service and concrete mixing areas will not enter any watercourse or groundwater.* • *Areas for the stockpiling of materials will be kept to a minimum size, well away from any watercourse or permeable ground. It is noted that there is extremely limited scope for the stockpiling of materials on site.* • *Any small short-term storage of excavated material shall be kept away from drains and shall be covered with high grade plastic in order to prevent runoff from entering groundwater.* • *An emergency plan to deal with accidental spills within the confines of the site, and always at a safe distance from the surface water sewerage network, will be drafted with the inclusion of the relevant stakeholder contact details.* • *Any water collected in excavations will be treated as contaminated material and pumped into the foul runoff system or removed from site in tankers until the surface water infrastructure is complete, flow controls installed and inspected. Desilting and petrochemical interception of all surface runoff/pumped water will take place for the length of the construction project, using standard techniques including silt buster/silt socks, local silt traps throughout the site, etc.* • *A petrochemical interceptor will be placed on the surface water network prior to discharge.* • *Bunds will be kept clean and spills within the bund area will be cleaned immediately to prevent groundwater contamination. Any water-filled excavations, including the attenuation tank during construction, that require pumping will not directly discharge to the surface water network. Prior to discharge of water from excavations adequate filtration and petrochemical interception will be provided to ensure no deterioration of water quality and ensure compliance with the Water Pollution Acts.*

Table 11. *Mitigation measures*

Sensitive Receptors	Potential Impacts	Mitigation Measures to Prevent Impacts on Natura 2000 sites
		• *Wastewater from the temporary staff facilities will be discharged to sealed contaminant systems, and disposed via licensed contractors.* • *The pouring of concrete, sealing of joints, application of water-proofing paint or protective systems, curing agents, etc will be completed in the dry to avoid pollution of the freshwater environment. Method statements for these activities will be agreed prior to commencement.* *Air and Dust* *Dust is a nuisance and can be damaging to humans, machinery, plants and animals. All workers on site are to consider the nuisance caused by the impacts of dust. The effects of dust will be minimised using the following techniques;* • *Avoid creating unnecessary dust.* • *Cover materials which could create dust when windy.* • *Dampen down dust in operations which create dust.* • *Ensure that vehicles leaving site do not leave mud on the road.* *Waste Management* *The proper management and handling of waste on site is essential to ensure that pollution and increased levels of contamination are minimised. Effective management of waste on site will consist of the following measures;* • *Closed skip containers.* • *Non dumping/littering policy on site.* • *Waste segregation.* • *Regular clean up of the site.* • *Careful handling and transportation to avoid damage to raw materials.* • *Efficient ordering.* *Noise & Vibration* *Noise will be generated from excavation works, from delivery vehicles and from concreting operations. Noise hoarding will be erected around noisy equipment /activities where necessary.* *A noise and vibration control management plan shall be prepared by the contractor and shall be submitted in writing to South Dublin County Council's air quality monitoring and noise control department for approval in advance of the works commencing. The restrictions of the noise and vibration control management plan will include:* *1) Contractor to comply with all prevailing legislative requirements;* *2) All plant to comply with all prevailing legislative requirements, CE marked, and maintained and tested accordingly;* *3) All plant and machinery to be switched off when not in use;*

Table 11. *Mitigation measures*

Sensitive Receptors	Potential Impacts	Mitigation Measures to Prevent Impacts on Natura 2000 sites
		4) Noise and vibration limits to be prescribed in construction contract, and monitoring to be implemented at sensitive receptors. Management plans to be prepared for addressing any exceedances; *5) Ensure plant and equipment have properly operating silencers / mufflers;* *6) Consider the location of noisy plant in order to minimise nuisance to nearby houses, motorists, and wildlife;* *7) Specific measures to be included to monitor noise and vibration during granite excavation works, and the same noise and vibration limits will apply* *Light Pollution* *Lighting shall be focussed and controlled during the construction phase.'* In addition, the following mitigation will be in place: **Construction Phase Mitigation** • A project ecologist will be appointed to oversee works and will approve drainage during construction. • Local watercourses and drains will be protected from dust, silt and surface water throughout the works. • Local silt traps established throughout site. • Mitigation measures on site include dust control, stockpiling away from watercourse and drains • Stockpiling of loose materials will be kept to a minimum of 40m from watercourses and drains. • Stockpiles and runoff areas following clearance will have suitable barriers to prevent runoff of fines into the drainage system and watercourses. • Fuel, oil and chemical storage will be sited within a bunded area. The bund will be at least 50m away from drains, ditches or the watercourse, excavations and other locations where it may cause pollution. • Bunds will be kept clean and spills within the bund area will be cleaned immediately to prevent groundwater contamination. Any water-filled excavations, including the attenuation tank during construction, that require pumping will not directly discharge to the stream. Prior to discharge of water from excavations adequate filtration will be provided to ensure no deterioration of water quality. • Stockpiles and runoff areas following clearance will have suitable barriers to prevent runoff of fines into the drainage system and watercourses. • Fuel, oil and chemical storage will be sited within a bunded area. A risk-based approach will be taken. • Bunds will be kept clean and spills within the bund area will be cleaned immediately to prevent groundwater contamination. • During the construction works silt traps will be put in place in the vicinity of all runoff channels of the stream to prevent sediment entering the watercourse. • Petrochemical interception and bunds in refuelling area

Table 11. *Mitigation measures*

Sensitive Receptors	Potential Impacts	Mitigation Measures to Prevent Impacts on Natura 2000 sites
		• Maintenance of any drainage structures (e.g. de-silting operations) will not result in the release of contaminated water to the surface water network. • During the works, silt traps will be put in place • No discharges will be to the watercourse during and post works. Silt traps established throughout site including a double silt fence between the site and the watercourse. • Sufficient onsite cleaning of vehicles prior to leaving the site and on nearby roads, will be carried out, particularly during groundworks. • The Site Manager will be responsible for the pollution prevention programme and will ensure that at least daily checks are carried out to ensure compliance. A record of these checks will be maintained. • The site compound will include a dedicated bund for the storage of dangerous substances including fuels, oils etc. Refuelling of vehicles/machinery will only be carried out within the bunded area. • A project ecologist will be appointed and be consulted in relation to all onsite drainage during construction works. • Dewatering of excavations may be necessary. Appropriate monitoring of groundwater levels during site works will be undertaken. Standard construction phase filtering of surface water for suspended solids will be carried out. Unfiltered surface water discharges or runoff are not permitted from the site into the watercourse during the works. • Concrete trucks, cement mixers or drums/bins are only permitted to wash out in designated wash out area greater than 50m from sensitive receptors including drains and drainage ditches. • Abstraction of water from watercourses will not to be permitted. • Spill containment equipment shall be available for use in the event of an emergency. The spill containment equipment shall be replenished if used and shall be checked on a scheduled basis. • Materials, plant and equipment shall be stored in the proposed site compound location; • Plant and equipment will not be parked within 50m of the watercourse at the end of the working day; • Hazardous liquid materials or materials with potential to generate run-off shall not be stored within 50m of the watercourse. • All oils, fuels and other hazardous liquid materials shall be clearly labelled and stored in an upright position in an enclosed bunded area within the proposed development site compound. The capacity of the bunded area shall conform with EPA Guidelines – hold 110% of the contents or 110% of the largest container whichever is greater; • Drip trays will be turned upside down if not in use to prevent the collection of rainwater; • Waters collected in drip trays will be assessed prior to discharge. If classified as contaminated, they shall be disposed by a permitted waste contractor in accordance with current waste management legal and regulatory requirements; • Plant and equipment to be used during works, will be in good working order, fit for purpose, regularly serviced/maintained and have no evidence of leaks or drips; • No plant used shall cause a public nuisance due to fumes, noise, and leakage or by causing an obstruction;

Table 11. *Mitigation measures*

Sensitive Receptors	Potential Impacts	Mitigation Measures to Prevent Impacts on Natura 2000 sites
		• Re-fuelling of machinery, plant or equipment will be carried out in the site compound as per the appointed Construction Contractor re-fuelling controls; • All persons working will receive work specific induction in relation to material storage arrangements and actions to be taken in the event of an accidental spillage. Daily environmental toolbox talks / briefing sessions will be conducted for all persons working to outline the relevant environmental control measures and to identify any environment risk areas/works. **Operational Phase Mitigation** • A project ecologist will be appointed to oversee completion of all landscape and drainage works. • The foul and surface water drainage systems will be assessed by the project ecologist.
Birds (National Protection)	• Removal nesting habitat. • Destruction and/or disturbance	• Relevant guidelines and legislation (Section 40 of the Wildlife Acts, 1976 to 2012). Should this not be possible, a pre-works check by a qualified ecologist should be undertaken to ensure nesting birds are absent. If nesting birds are found NPWS will be consulted and appropriate mitigation measures put in place in discussion with NPWS.

Adverse Effects Likely to Occur from the Project (Post-Mitigation)

Standard construction and operational mitigation measures are proposed. These would ensure that water entering the surface water drainage network and the Walkinstown Stream is clean and uncontaminated. However, early implementation of ecological supervision, prior to initial mobilisation and enabling works, is seen as an important element to the project, particularly in relation to the implementation of surface water runoff mitigation and the protection of aquatic habitats.

With the successful implementation of standard mitigation measures to limit surface water impacts on the watercourses, biodiversity mitigation/supervision, no significant impacts are foreseen from the construction or operation of the proposed project on terrestrial or aquatic ecology or on designated sites. Residual impacts of the proposed project will be localised to the immediate vicinity of the proposed works. It would be expected that bird foraging may be reduced within the site during construction, but this would deemed not to be significant as landscaping will be implemented and the biodiversity value will improve.

The construction and operational mitigation proposed for the development satisfactorily addresses the mitigation of potential impacts on terrestrial biodiversity, aquatic biodiversity and birds through the application of the standard construction and operational phase mitigation as outlined above. In particular, mitigation measures to ensure compliance with Water Pollution Acts and prevent silt and pollution entering Walkinstown Stream will satisfactorily address the potential impacts on downstream biodiversity and designated sites. No significant adverse impacts on the conservation objectives of European sites are likely following the implementation of mitigation.

It is essential that these measures outlined are complied with, to ensure that the proposed development does not have “downstream” environmental impacts and significant impacts on biodiversity on site.

Cumulative Impacts

The following is a list of planning applications as identified on the Department of Housing, Local Government and Heritage’s ‘National Planning Application Database’ portal[1]:

Table 12. *Cumulative Impacts considered*

Ref. No.	Address	Proposal
2778/21	Rear of Eir Training Centre, Walkinstown Avenue, Dublin 12, D12 WK84	To erect a 24m high lattice telecommunications structure, together with antennas, dishes and associated equipment and to remove the existing 18m high telecommunications monopole at the rear.
3228/20	Site to the east of Walkinstown Avenue at the junction of Walkinstown Avenue and Naas Road	O'Flynn Construction Co. Unlimited Company intend to apply for a 10-year permission for a mixed use including part Build to Rent development in 13 no. blocks (Blocks A-L) ranging in height from 4-15 storeys over 3 no. basements with a cumulative gross floor area of 168,184.13 sq.m at this 6.921 hectare site to the east of Walkinstown Avenue at the junction of Walkinstown Avenue and Naas Road. The application area includes part of the 'Nissan Site' (6.429 hectares) and 0.492 hectares to accommodate works to facilitate connections to municipal services and works proposed to public roads. The development will consist of; i. the demolition of all existing vehicle trade buildings (8,015.66 sq.m) and removal of 4 no. existing 38kV ESB timber poles and 2 no. existing 38kV lattice masts on the site; ii. construction of 3 no. basements with cumulative gross floor area (GFA) of 37,240.54 sq.m incorporating car parking, motorcycle parking, plant rooms and waste management facilities, comprising; a. 'West Basement' located under Blocks A, B, C, D and E (18,815.93 sq.m GFA), with 2 no. entrance/exit ramps including 1 no. situated between Blocks C and E and 1 no. on south side of Block B and containing 411 no. car parking spaces including 17 no. disabled parking spaces and 15 no. car-club spaces, together with 15 no. motorcycle spaces; b. 'North Basement' located under Blocks F, G K, and H1 (5,998.24 sq.m GFA), with entrance/exit ramp

[1] https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=9cf2a09799d74d8e9316a3d3a4d3a8de

Ref. No.	Address	Proposal
		on western side of Block K and containing 97 no. car parking spaces including 8 no. disabled parking spaces and 3 no. car-club spaces, together with 4 no. motorcycle spaces; and c. 'South Basement' located under Blocks H2, J, I and L (12,426.37 sq.m GFA), with entrance/exit ramp situated between Blocks L and J and containing 296 no. car parking spaces including 19 no. disabled parking spaces and 7 no. car-club spaces, together with 15 no. motorcycle spaces; iii. Block A - a hotel (148 no. rooms) with an upper height of 15-storeys (53.475m maximum above ground level) and a GFA of 7,415.0 sq.m in at the junction of Naas Road and Walkinstown Avenue; iv. a total of 1,137 no. residential units and associated tenant amenities (combined 2,948.90 sq.m GFA) across 12 no. blocks (B-L) that range in height from 4-10 storeys, with a cumulative GFA of 113,147.79 sq.m, of which Blocks C and L are dedicated Build to Rent (BtR). The residential units will be distributed as follows; • Block B with an upper height of 10 no. storeys (36.439m maximum above ground level) comprising 20 no. studio apartments, 48 no. 1-bedroom (2 person) units, 135 no. 2-bedroom (4 person) units and 16 no. 3-bedroom (5 person) units; • Block C with an upper height of 8 no. storeys (30.139m maximum above ground level) comprising 42 no. studio apartments, 67 no. 1-bedroom (2 person) units and 54 no. 2-bedroom (4 person) units and tenant facilities and amenities (combined 1,457.80 sq.m) incorporating refuse store, bicycle store, delivery room, manager's office, concierge office, gym and flex spaces, business centre, conference/meeting rooms, café, resident lounges, library, games room, cinema room, community room and chef's kitchen; all ancillary site development works, drainage, plant, waste storage, boundary treatment and lighting.
SD20A/0247	St. Cillian's National School, Robinhood Road, Dublin 12	Construction of a single storey side extension to existing single storey detached national school; minor internal and façade amendments to existing school including new accessible access door arrangement and all associated site works
SD19A/0281	Merrywell Industrial Estate, Ballymount, Dublin 12	Installation of new paving; removal of existing timber post and rail fence; installation of textured block walls incorporating new signage; erection of two textured block columns topped with new signage; all associated site development works
SD21A/0350	Long Mile Road, Drimnagh, Dublin 12	Retention of constructed fence and boundaries and the relocation of existing access gate to revised location and proposed use of space as an allotment
4535/23	Long Mile Retail Centre, 111/113 Long Mile Road, Dublin 12, D12 HY4A	Permission is sought for: (a) Change of use of rear portion of the premises from warehouse distribution to retail use, (b) Sub-division of existing unit to facilitate transfer of part of the unit to adjoining premises 109/110 (not within the ownership of the applicants) but without any change of use, (c) Provision of new escape doorways to the side and rear of the premises, (d) for changes to front elevation to include new signage panel over front elevation and for alterations to existing totem signage panel adjacent to public roadside, all to terraced single storey retail warehouse (Currently Wigoders Homestyle) at Long Mile Retail Centre, 111/113 Long Mile Road, Dublin 12 D12 HY4A.

The projects outlined were reviewed. It is considered that cumulative effects on biodiversity, with other existing and proposed developments in proximity to the application area, would be unlikely, neutral, not significant and localised. It is concluded that no significant effects on biodiversity will be seen as a result of the proposed development alone or in combination with other projects.

No significant cumulative impacts are likely in relation to the proposed development.

Residual Impacts and Conclusion

The construction and operational mitigation proposed for the development satisfactorily addresses the mitigation of potential effects on the terrestrial, mammalian, avian and aquatic sensitive receptors through the application of the standard construction and operational phase controls outlined in this report. No significant effects on biodiversity are likely. Residual effects on biodiversity are considered to be: Low adverse / site / Negative Impact / Not significant / short term. The impact of the proposed development in the long term would be neutral.

References

1. **Bat Conservation Ireland 2004** on-going, *National Bat Record Database.* Virginia, Co. Cavan
2. **Boyd, I. and Stebbings, R.E. 1989** Population changes in brown long-eared bats (*Plecotus auritus*) in Bat Boxes at Thetford Forest. *Journal of Applied Ecology* **26**: 101 - 112
3. **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1982**
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Appendix I – Bat Fauna Impact Assessment for a Proposed Large-Scale Residential Development (LRD) at Parkmore Industrial Estate, Longmile Road, Robinhood, Dublin 12

28th February 2025

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.
On behalf of: Watfore Ltd. (Dairygold)

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Document Control Sheet			
Client	Watfore Ltd. (Dairygold)		
Project	Proposed Development at Parkmore Industrial Estate, Walkinstown, Dublin 12.		
Report	Bat Fauna Impact Assessment		
Date	28th February 2025		
Version	Author	Reviewed	Date
Final	Bryan Deegan	Jeff Boyle	25th February 2025

SUMMARY

Structure:	The site is located in an existing industrial estate and consists of buildings and hardstanding areas.
Location:	Parkmore, Long Mile Road, Co. Dublin.
Bat species present:	No bats were noted roosting on site. No bats were noted foraging onsite. Minor foraging of a Common Pipistrelle (*Pipistrellus pipistrellus sensu lato*) bat and a Lesser Noctule (*Nyctalus leisleri*) bat was recorded within the public parkland to the south of the site (outside site outline).
Proposed work:	Large-Scale Residential Development (LRD)
Impact on bats:	The surveys found no evidence of roosting bats on site. The proposed development will not result in the loss of any bat roost as there are no confirmed bat roosts onsite. The proposed development will change the local environment as demolition works are proposed and new structures are to be erected. In the medium-long term, no significant effect would be foreseen. The proposed development will not impact on flightlines. Potential Impacts in the absence of mitigation: Neutral / Not significant / long-term.
Surveys by:	Jeff Boyle, Jack Doyle, Frank Spellman (Altemar)
Survey dates:	22nd August 2023, 4th & 17th of July 2024

Competency of Assessor

This report has been prepared by Bryan Deegan MSc, BSc (MCIEEM). Bryan has over 30 years of experience providing ecological consultancy services in Ireland. He has extensive experience in carrying out a wide range of bat surveys including dusk emergence, dawn re-entry and static detector surveys. He also has extensive experience reducing the potential impact of projects that involve external lighting on Bats. Bryan trained with Conor Kelleher author of the Bat Mitigation Guidelines for Ireland (Kelleher and Marnell (2022)) and Bryan is currently providing bat ecology (impact assessment and enhancement) services to Dun Laoghaire Rathdown County Council primarily on the Shanganagh Park Masterplan. The desk and field surveys were carried out having regard to the guidance: Bat Surveys for Professional Ecologists – Good Practice Guidelines 3rd Edition (Collins, J. (Ed.) 2016) and Marnell, Kelleher and Mullen (2022), Bat Mitigation Guidelines for Ireland V2 (which update and replace the Bat Mitigation Guidelines for Ireland published in 2006).

The surveys for this site were undertaken by Jeff Boyle, Jack Doyle and Frank Spellman of Altemar.

Jeff Boyle (BSc Environmental Management) is skilled in bat detection through static detector surveys, dusk emergence, and down re-entry surveys. He is also skilled in habitat assessment and has undertaken flora/ invasive plant species surveys to produce numerous ecological assessments on a range of residential and commercial projects.

Jack Doyle (MSc Sustainable Environments) has carried out a wide range of flora and fauna surveys and produced ecological assessments on numerous residential, commercial, and infrastructure projects in Ireland. These include breeding ornithological surveys, roving and static acoustic bat surveys, terrestrial non-avian mammal surveys, and habitat identification.

Frank Spellman (MSc Zoology, BSc Zoology) has extensive experience in carrying out a wide range of fauna surveys as both a sub-contractor and employee for environmental consultancies and organisations in Ireland and the US. These include both roving and static acoustic bat surveys, terrestrial non-avian mammal surveys, breeding/wintering bird surveys, freshwater ecology surveys as well as flora/invasive plant surveys. Frank has been lead surveyor on numerous development projects within Ireland carrying out full avian/non-avian mammal, wintering bird and breeding bird assessments.

Legislative Context

Wildlife Act 1976 (as amended by, inter alia, the Wildlife (Amendment) Act 2000).

Bats in Ireland are protected by the Wildlife (Amendment) Act 2000. Based on this legislation it is an offence to wilfully interfere with or destroy the breeding or resting place of any species of bat. Under this legislation it is an offence to "*Intentionally kill, injure or take a bat, possess or control any live or dead specimen or anything derived from a bat, wilfully interfere with any structure or place used for breeding or resting by a bat, wilfully interfere with a bat while it is occupying a structure or place which it uses for that purpose. "*

Habitats Directive- Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora has been transposed into Irish Law, including, via, *inter alia*, the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). See Art.73 of the 2011 Regulations which revokes the 1997 Regulations.

Annex II of the Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) lists animal and plant species of Community interest, the conservation of which requires the designation of Special Areas of Conservation (SACs); Annex IV lists animal and plant species of Community interest in need of strict protection. All bat species in Ireland are listed on Annex IV of the Directive, while the Lesser Horseshoe Bat (*Rhinolophus hipposideros*) is protected under Annex II which related to the designation of Special Areas of Conservation for a species.

Under the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), all bat species are listed under the First Schedule and, pursuant to, *inter alia*, Part 6 and Regulation 51, it is an offence to:

- Deliberately capture or kill a bat;
- Deliberately disturb a bat particularly during the period of breeding, hibernating or migrating;
- Damage or destroy a breeding site or resting place of a bat;
- Keep, sell, transport, exchange, offer for sale or offer for exchange any bat taken in the wild.

Project Description

The development will comprise a Large-Scale Residential Development (LRD) on a site at Parkmore Industrial Estate, Long Mile Rd, Robinhood, Dublin, 12. The proposed development will comprise the demolition of existing industrial units, and construction of a mixed use, residential-led development within 4 no. blocks ranging in height from 06 to 10 storeys over semi-basement. The development will comprise the following: 436 no. apartments (studios; 1 beds; 2 beds and 3 beds) with commercial/employment units, creche, café and library. Provision of car, cycle and motorbike parking. Vehicular accesses from Parkmore estate road and additional pedestrian/cyclist accesses from the Long Mile Road and Robinhood Road. Upgrade works to the estate road and surrounding road network. All associated site development works and services provision, open spaces, ESB substations, plant areas, waste management areas, landscaping and boundary treatments.

The survey area, site outline, location, and layout plan are shown in Figures 1-3.

Landscape

A Landscape Design Statement Report has been prepared by NMP Landscape Architects to accompany this planning application. As outlined in the Landscape Design Statement:

''Landscape design proposals are driven by ecological influences in response to the sites context and relationship with surrounding character. Experienced sequentially as routes of discovery and exploration which weave themselves across the lands revealing a sensorium of spatial typologies.

The landscape design has been planned in such a way so as to maximise the site's orientation and anticipated microclimate to create habitable, quality spaces which respond to human comfort, encouraging residents and public into a safe and surveilled space. A number of potential routes through the site have been identified to benefit connections with its surroundings and provide a better amenity for the wider community. Pedestrian and cycle routes complement this strategy underpinning the sustainable credentials associated with the development.

In addition, it is anticipated that the development will offer a net gain to biodiversity through the development of additional habitat connecting existing surrounding ecological stands with continuous tree canopies for bat and bird roosting and provision of specific plants for wildlife to forage through.

An increased number of trees, areas for surface water treatment, coupled with best practice maintenance will ensure a sustainable landscape for the future. Edge conditions and relationships with neighboring developments are sensitively integrated and screened.

The primary objectives of the design are to encourage biodiversity through varied tree and shrub planting, create a series of interlinking spaces which 'blur' the boundaries and create 'moments' for interactions, crafting a sense and extension of the community for the wider neighborhood.''

The proposed landscape masterplan is demonstrated in Figures 4 & 5.

Figure 1. *Site outline*

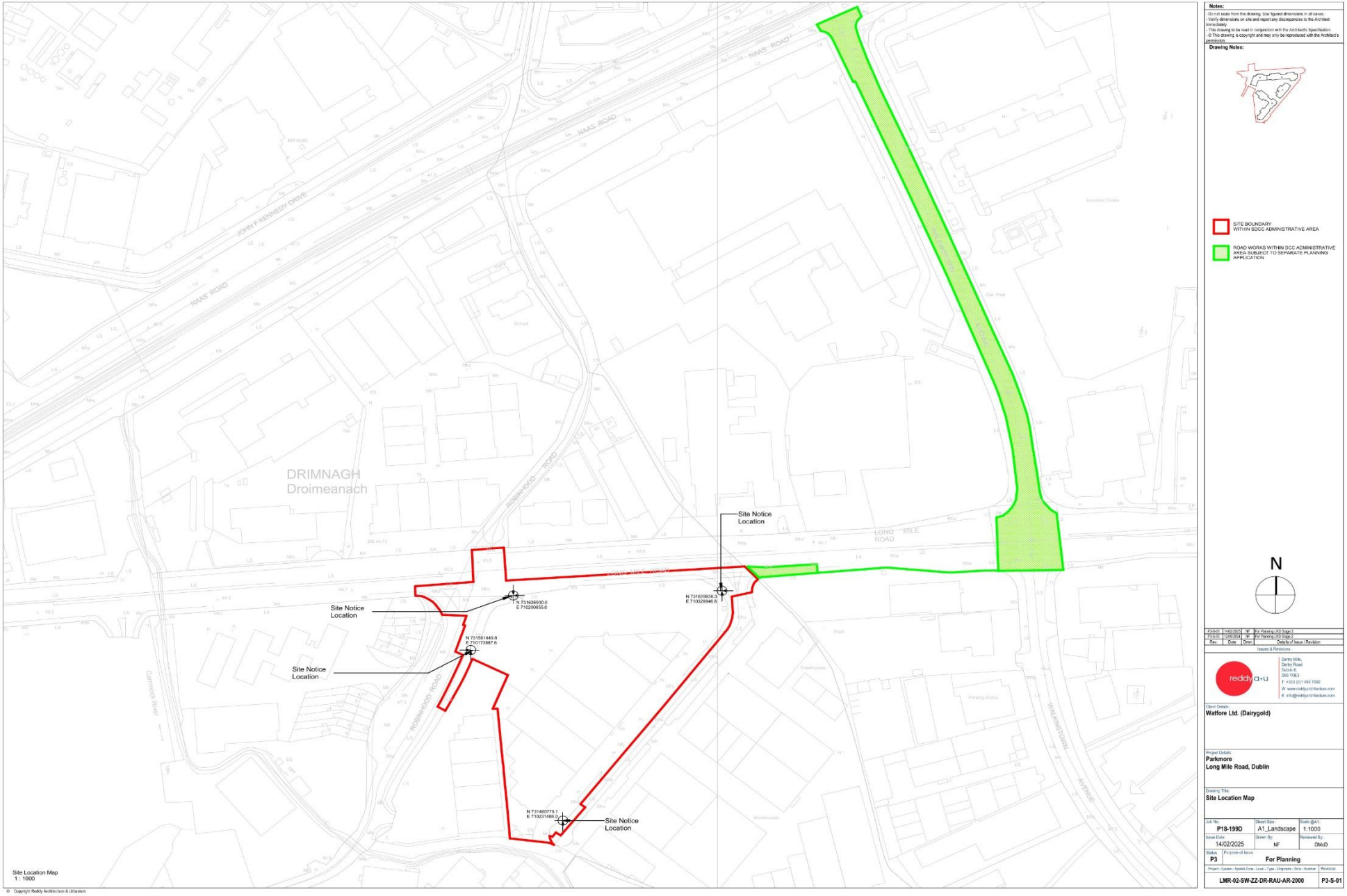


Figure 2. *Site location map*

Figure 3. *Proposed Site Plan Layout*

Figure 4. *Proposed Landscape Masterplan-sheet 1*

Figure 5. *Proposed Landscape Masterplan-sheet 2*

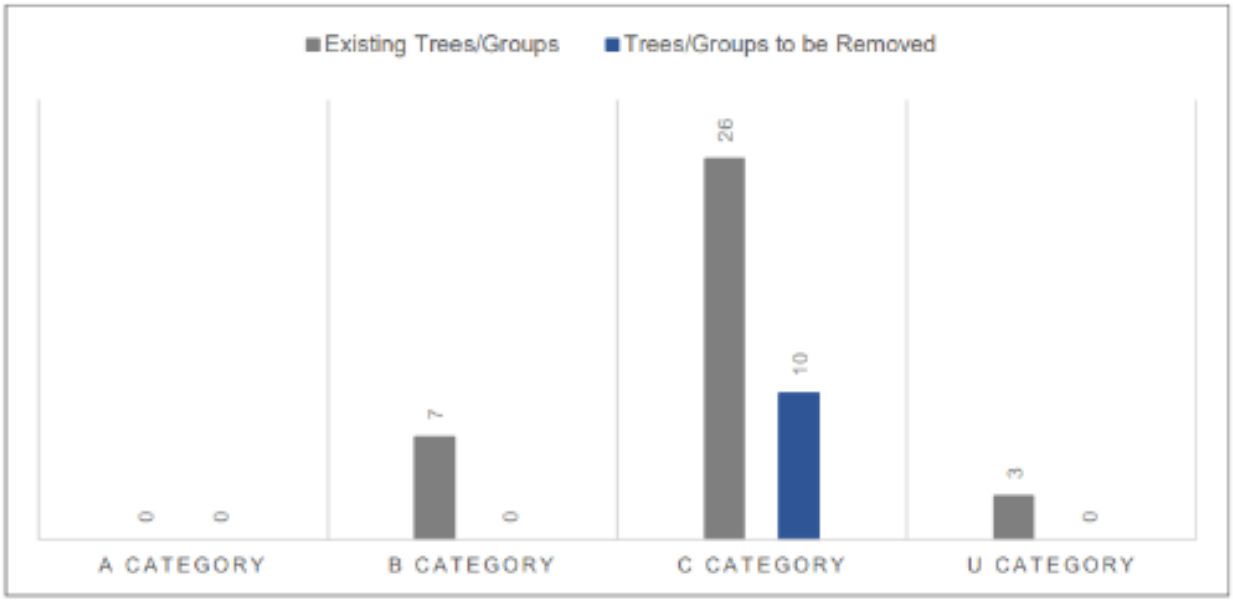
Arborist

An Arboricultural Impact Assessment has been prepared by CMK Hort + Arb Ltd. to accompany this planning application. The report concludes the following in relation to trees on site:

'The proposed development will require the removal of 8 trees and 2 shrub groups, all of low quality and value (C Category). The proposed removals have been assessed and their loss will not have a significant impact on the landscape character of the local surrounding area.

The proposal includes substantial new high-quality tree planting that will mitigate the proposed removals and have a positive impact on the amenities and visual appearance of the development and local surrounding landscape in the future.

In conclusion, the proposed development is achievable in both arboricultural terms and in relation to local planning policy as it relates to trees. Tree impacts have been assessed and tree protection measures have been specified in accordance with best practice and are sufficient to safeguard retained trees during the proposed works.'



The Tree Survey Plan, Constraints Plan & Protection Plan are demonstrated in Figures 6-8.

Figure 6. *Tree Survey Plan*

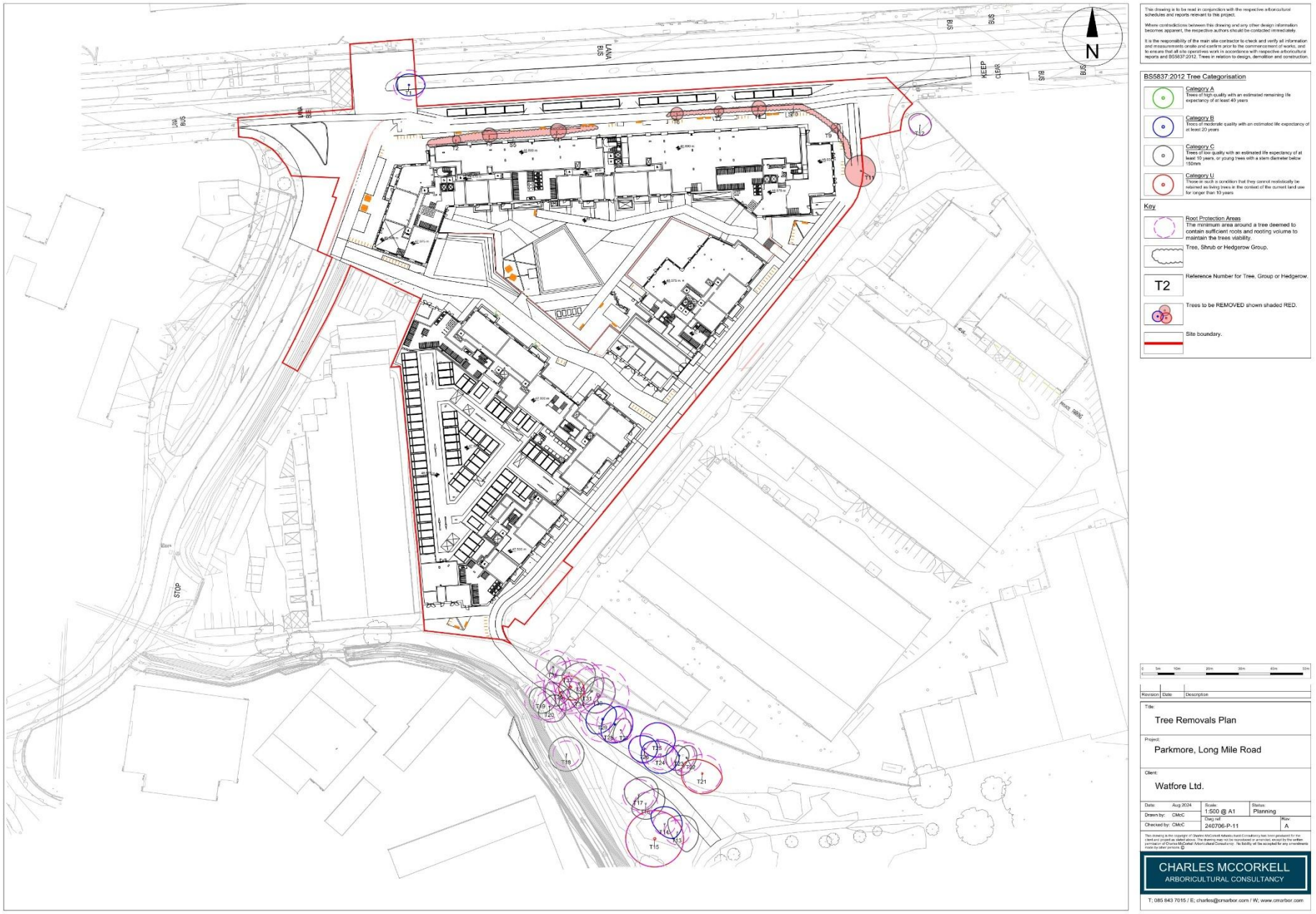


Figure 7. *Tree Constraints Plan*

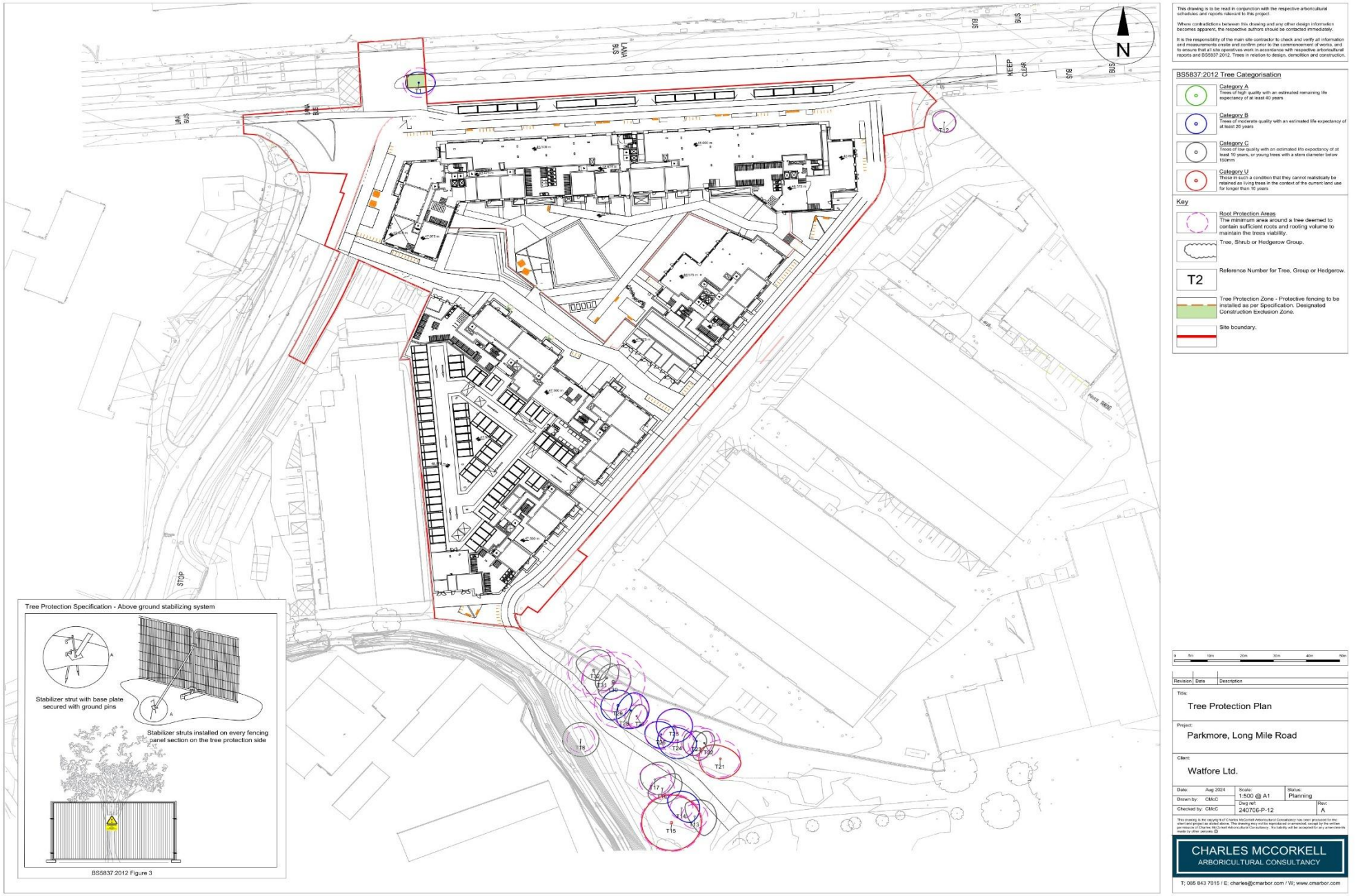


Figure 8. *Tree Protection Plan*

Lighting

A public lighting report has been prepared by EDC Engineering to accompany this planning application. The report outlines the following:

'As per the recommendations of the ecological report, the private external lighting for the courtyards and the proposed footpath/cycle track connecting Parkmore Industrial Estate Road with Walkinstown Avenue Park will be designed to limit overspill and prevent light pollution. The key design features include:

- *All luminaires shall be designed to minimize the spill of upward light and should not emit any up-light.*
- *All luminaires shall lack UV elements when manufactured and shall be LED*
- *A warm white spectrum (ideally <=2700 Kelvin) shall be adopted to reduce blue light component*
- *Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats*

The public lighting will be designed in accordance with SDCC/DCC lighting standards, adhering to the recommendation for neutral white light (4000K). This approach ensures that all installations meet the requisite specifications for safety, efficiency, and environmental considerations, while providing optimal illumination for public areas.'

The public lighting plan complies with bat lighting guidelines and is set to 2700°K. The lighting layout is demonstrated in Figure 9.

Figure 9. *Proposed Public Lighting Layout*

Bat Survey

This report presents the results of site visits by Frank Spellman, Jack Doyle, and Jeff Boyle on the 22nd August 2023, 04th of July 2024, and the 17th of July 2024. A bat emergent and detector survey was carried out on all occasions. Trees on site were examined for bat roosting potential. On the 17th July 2024, an internal building inspection was carried out on the buildings proposed for demolition.

Survey Methodology

As outlined in Marnell et al. 2022 '*The presence of a large maternity roost can normally be determined on a single visit at any time of year, provided that the entire structure is accessible and that any signs of bats have not been removed by others. However, most roosts are less obvious. A visit during the summer or autumn has the advantage that bats may be seen or heard. Buildings (which for this definition exclude cellars and other underground structures) are rarely used for hibernation alone, so droppings deposited by active bats provide the best clues. Roosts of species which habitually enter roof voids are probably the easiest to detect as the droppings will normally be readily visible. Roosts of crevice-dwelling species may require careful searching and, in some situations, the opening up of otherwise inaccessible areas. If this is not possible, best judgement might have to be used and a precautionary approach adopted. Roosts used by a small number of bats, as opposed to large maternity sites, can be particularly difficult to detect and may require extensive searching backed up by bat detector surveys (including static detectors) or emergence counts.'* In relation to the factors influencing survey results the guidelines outlines the following *'During the winter, bats will move around to find sites that present the optimum environmental conditions for their age, sex and bodyweight and some species will only be found in underground sites when the weather is particularly cold. During the summer, bats may be reluctant to leave their roost during heavy rain or when the temperature is unseasonably low, so exit counts should record the conditions under which they were made. Similarly, there may be times when females with young do not emerge at all or emerge only briefly and return while other bats are still emerging thus confusing the count. Within roosts, bats will move around according to the temperature and may or may not be visible on any particular visit. Bats also react to disturbance, so a survey the day after a disturbance event, may give a misleading picture of roost usage.'*

The survey involved the methodologies outlined in Collins (2016) which included the roost inspection methodologies i.e. external methodology outlined in section 5.2.4.1 and the internal survey outlines in section 5.2.4.2 of the guidelines. In addition, the methodologies for Presence absence surveys (Section 7) was carried out for dust emergent surveys.'

As outlined in Collins (2016) 'The bat active period is generally considered to be between April and October inclusive (although the season is likely to be shorter in northern latitudes). However, because bats wake up during mild conditions, bat activity can also be recorded during winter months.'

Survey constraints

Emergent/detector surveys were carried out on the 22nd August 2023 (Frank Spellman & Jack Doyle), 04th July 2024 (Jack Doyle & Jeff Boyle), and the 17th July 2024 (Frank Spellman & Jeff Boyle).

The detector surveys weres undertaken within the active bat season and the transects covered the entire site multiple times during the night. Weather conditions were good with mild temperatures greater than 12°C after sunset. Winds were light and there was no rainfall during the site. Insects were observed in flight during the survey.

As outlined in Collins (2016) in relation to weather conditions '*The aim should be to carry out surveys in conditions that are close to optimal (sunset temperature 10°C or above, no rain or strong wind.), particularly when only one survey is planned…. Where surveys are carried out when the temperature at sunset is below 10°C should be justified by the ecologist and the effect on bat behaviour considered.*' There were no constraints in relation to the surveys carried out. All areas of the site were accessible, and weather conditions were optimal for bat assessments.

Survey Results

Trees as potential bat roosts.

A ground level roost assessment was carried out and used to examine the trees on site for features that could form bat roosts. Potential roosting features include heavy ivy growth, broken limbs, areas of decay, vertical or horizontal cracks, cracks in bark etc. All trees on site were assessed for bat roosting potential. No trees of bat roosting potential are noted within the site outline. There are trees of bat roosting potential located in the parkland area to the south of the site (outside site outline).

Buildings as potential bat roosts.

The interior of the buildings to be demolished was inspected for evidence of bat activity. No evidence of bat activity was noted within the buildings on site. The exterior of the onsite buildings was also inspected for bats. No features of bat roosting potential were recorded on any of these structures.

Emergent/detector surveys.

At dusk, a bat detector survey was carried out onsite using a*n Echo meter touch 2 Pro and a Bat box duet* detector to determine bat activity. Bats were identified by their ultrasonic calls coupled with behavioural and flight observations.

During the 2023 survey, no bats were emerging from any trees or structures on site. No bat foraging activity was recorded or observed onsite. A Common pipistrelle (*Pipistrellus pipistrellus*) bat and Leisler's Bat (*Nyctalus leisleri)* bat were noted foraging in the parkland area to the south of the site (outside site outline).

No bats were observed emerging from any trees or structures (on site or within the survey area) during the July 2024 surveys. No bat foraging activity was recorded or observed onsite during both July 2024 surveys. Minor foraging activity of a Common pipistrelle (*Pipistrellus pipistrellus*) bat and Leisler's Bat (*Nyctalus leisleri)* bat were recorded within the parkland to the south of the site (outside site outline) during the 17th July 2024 survey. These results are consistent with the results of the 2023 bat survey.

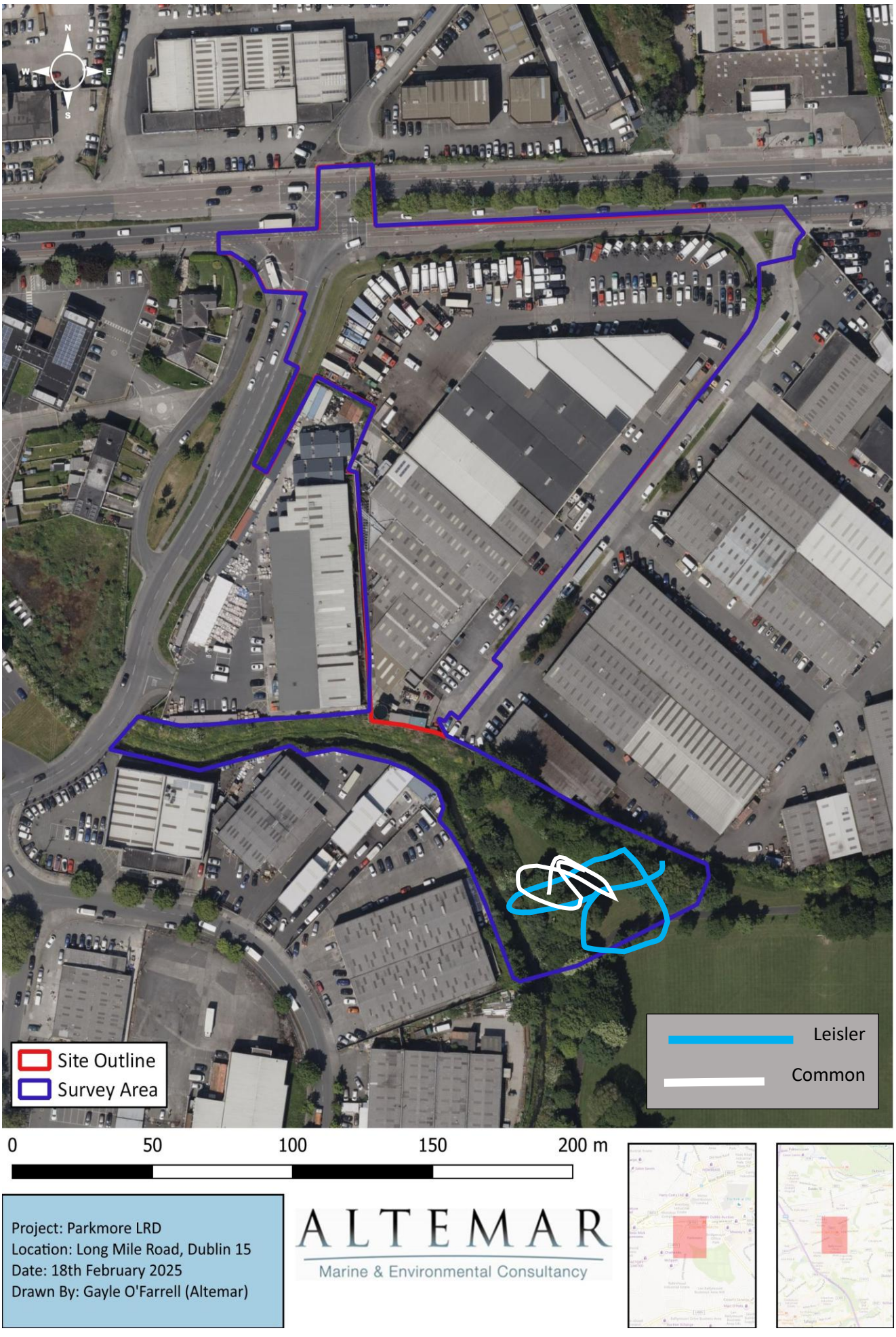


Figure 10. *Bat foraging activity recorded in 2023*

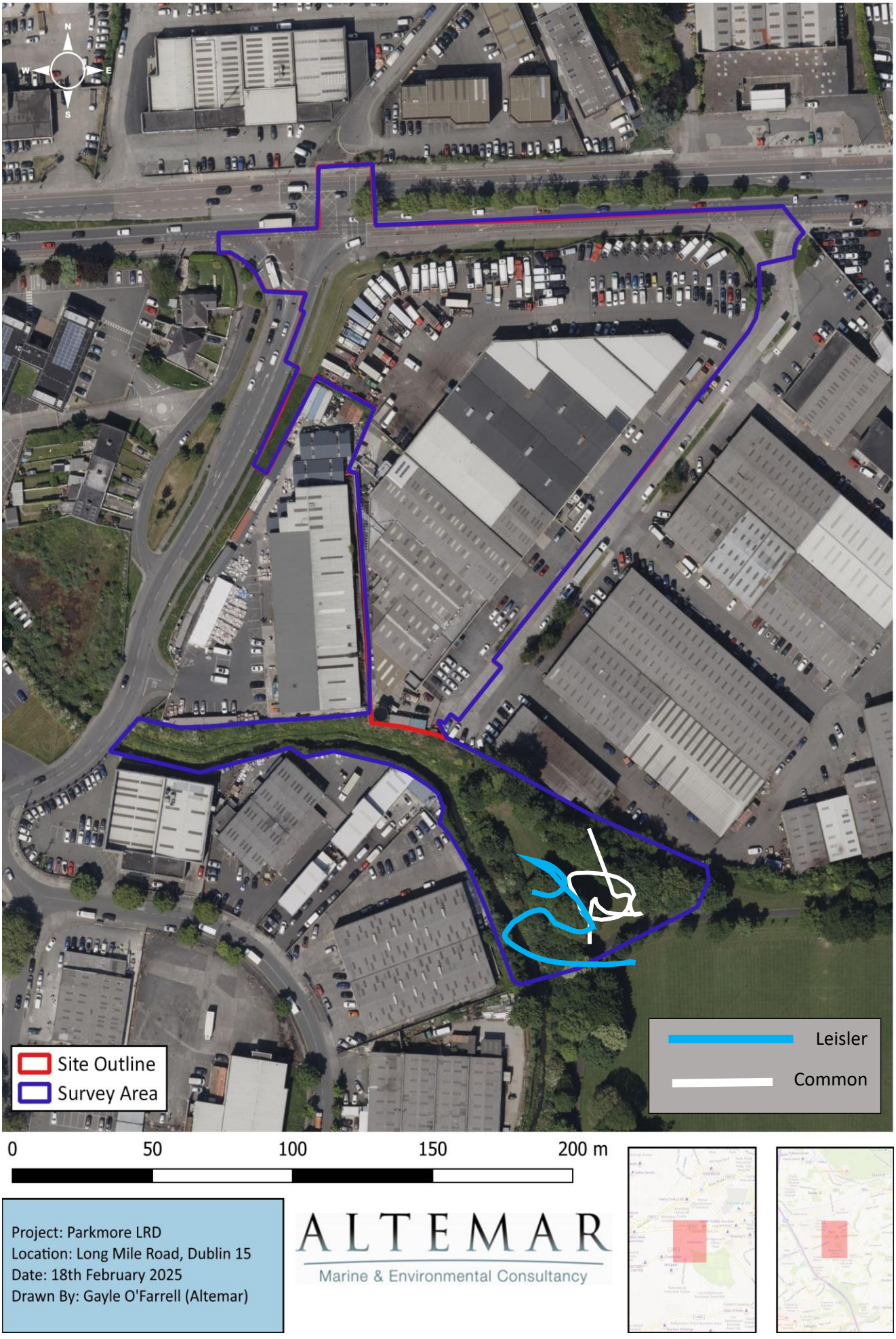


Figure 10. *Bat foraging activity recorded in 2024*

Bat Assessment Findings

Review of local bat records

The review of existing bat records (sourced from Bat Conservation Ireland's National Bat Records Database) within a 2km^2 grid (Reference grid O13A) encompassing the study area reveals that none of the nine known Irish species have been observed locally. The National Biodiversity Data Centre's online viewer was consulted in order to determine whether there have been recorded bat sightings in the wider area. This is visually represented in Figures 11 & 12. The following species were noted in the wider area: Common Pipistrelle (*Pipistrellus pipistrellus),* Soprano pipistrelle (*Pipistrellus pygmaeus),* Daubenton's bat (*Myotis daubentonii), and* Lesser noctule/Leisler's bat *(Nyctalus leisleri).*

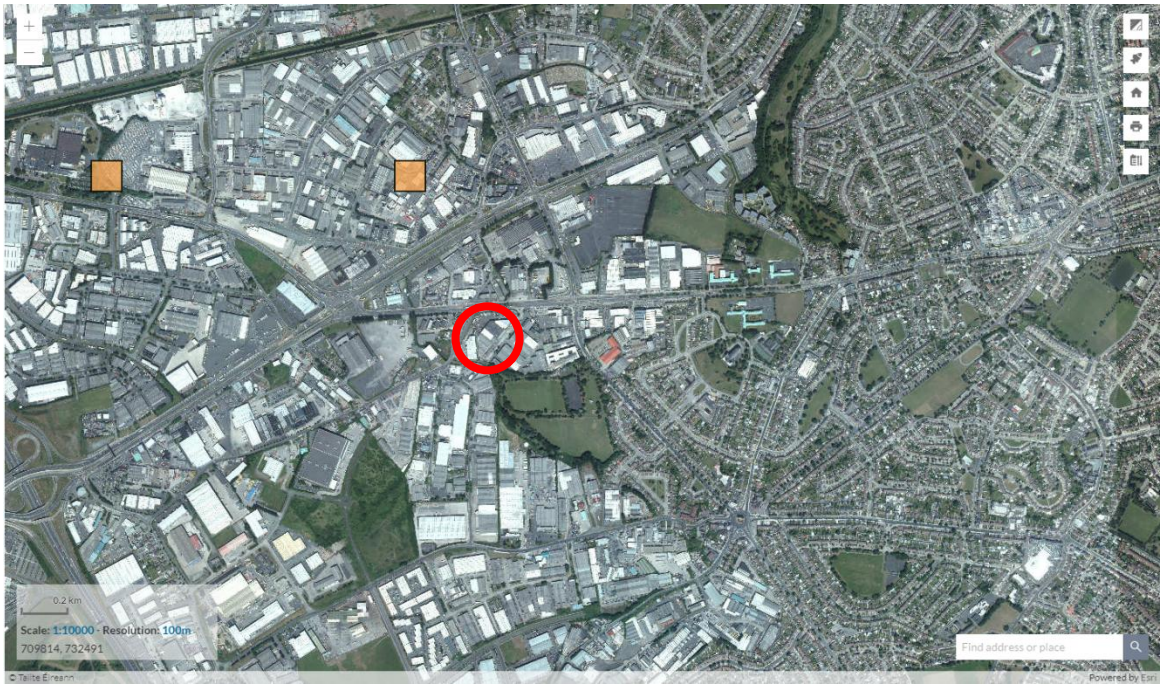


Figure 11. Common Pipistrelle (*Pipistrellus pipistrellus*) and Daubenton's bat (*Myotis daubentonii*) (both orange), Source: NBDC, site: red circle

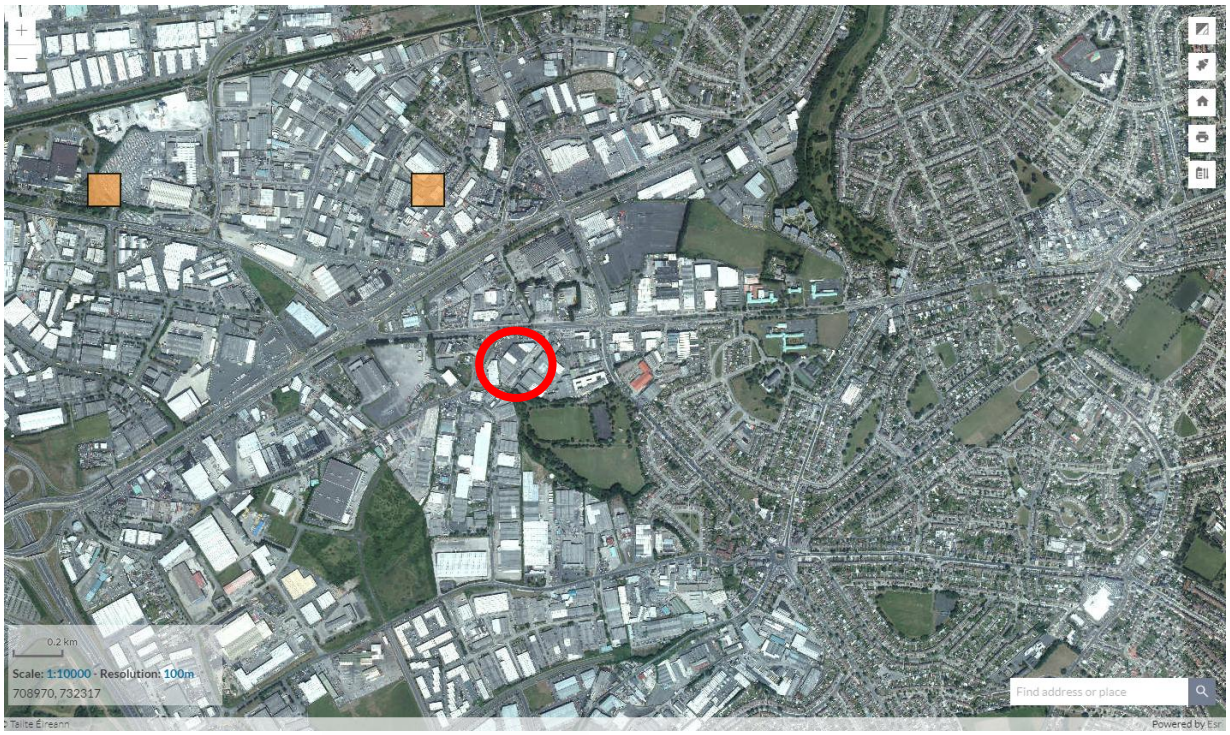


Figure 12. Soprano pipistrelle (*Pipistrellus pygmaeus)* and Lesser noctule/Leisler's bat *(Nyctalus leisleri)* (both orange), Source: NBDC, site: red circle

Evaluation of Results

The bat survey complies with bat survey guidance documentation including Marnell et al (2022) and Collins (2016). No bat activity was confirmed within the proposed site outline or in the corner of parkland to the south of the site boundary in 2024. In 2023, common bat species were noted foraging in the parkland area south of the site. The site is considered of relatively low importance to the local bat population.

Potential Impact of the development on Bats

No confirmed bat roosts will be lost. No trees of bat roosting potential are noted on site. No bats were observed emerging from onsite trees or buildings. No features of bat roosting potential were identified on any of the onsite structures to be demolished. As such, no confirmed bat roosts will be lost as a result of the proposed development. No bat foraging was recorded onsite. Minor foraging activity of common bat species (Common Pipistrelle and Lesser Noctule) were recorded within the public parkland space to the south of the site (outside site outline) during the 2023 and 17th July 2024 surveys. No bat activity was recorded within the site area of the proposed development.

The proposed development will change the local environment as new structures are to be erected. The potential for collision risk and impact on flight paths in relation to bats is considered low due to the low level of bat activity recorded and the buildings would be deemed to be clearly visible to bats. Mitigation measures are required in relation to a pre-construction survey of buildings should be carried out and a derogation licence acquired if a bat roost is present. The proposed public lighting plan has been designed in accordance with bat lighting guidelines and will therefore produce a negligible impact on bat activity within the public parkland to the south of the site. Impacts in the absence of mitigation: minor adverse, site, long term, not significant.

Mitigation Measures

As outlined in Marnell et al. (2022) "*Mitigation should be proportionate. The level of mitigation required depends on the size and type of impact, and the importance of the population affected*." In addition as outlined in Marnell et. al (2022) '*Mitigation for bats normally comprises the following elements:*

- *Avoidance of deliberate, killing, injury or disturbance – taking all reasonable steps to ensure works do not harm individuals by altering working methods or timing to avoid bats. The seasonal occupation of most roosts provides good opportunities for this*
- *Roost creation, restoration or enhancement – to provide appropriate replacements for roosts to be lost or damaged*
- *Long-term habitat management and maintenance – to ensure the population will persist*
- *Post-development population monitoring – to assess the success of the scheme and to inform management or remedial operations.*'

No confirmed bat roosts were recorded onsite. No trees or structures of bat roosting potential are noted on site. No bat activity was recorded onsite, with minor foraging of common species observed within the public parkland to the south (outside site outline). The proposed development will involve the demolition of existing warehouse structures onsite. Lighting will be in accordance with bat lighting guidelines. As a result, the following mitigation will be implemented:

- Prior to demolition, a pre demolition inspection will be carried out to assess if bats have inhabited the onsite structures since this survey was carried out and prior to the demolition.
- Lighting at all stages would be done sensitively on site with no direct lighting of the public parkland or watercourse to the south of the site.
- Post Construction assessment/compliance with proposed lighting strategy.

Predicted Residual Impact of Planned Development on Bats

The surveys found no evidence of roosting bats on site. The proposed development will not result in the loss of any bat roost as there are no confirmed bat roosts onsite. The proposed development will change the local environment as demolition works are proposed and new structures are to be erected. In the medium-long term, no significant effect would be foreseen. The proposed development will not impact on flightlines.

Potential Impacts in the absence of mitigation: Neutral / Not significant / long-term

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