ALTEMAR

Marine & Environmental Consultancy

# Ecological Impact Assessment (EcIA) for a Proposed Large-Scale Residential Development (LRD) at Summerhill Road, Dunboyne, Co. Meath.



**20th of August 2026**

**Prepared by:** Bryan Deegan (MCIEEM) of Altemar Ltd.
**On behalf of:** D/RES Properties for Solkerry Ventures Limited

Altemar Ltd., 50 Templecarrig Upper, Delgany, Co. Wicklow. 00-353-1-2010713. info@altemar.ie
Directors: Bryan Deegan and Sara Corcoran
Company No.427560 VAT No. 9649832U
www.altemar.ie

| Document Control Sheet | | | |
|---|---|---|---|
| Project | Ecological Impact Assessment (EcIA) for a Proposed Large-Scale Residential Development (LRD) at Summerhill Road, Dunboyne, Co. Meath. | | |
| Report | Ecological Impact Assessment | | |
| Date | 20th of August 2026 | | |
| Version | Author | Reviewed | Date |
| Planning | Bryan Deegan | Frank Spellman | 20th of August 2026 |

# Contents


1. Introduction ..... 1
   1.1. Background ..... 1
   1.2. Study Objectives ..... 1
   1.3. Altemar Ltd. ..... 1
   1.4. Project Description ..... 2
   1.5. Landscape ..... 8
   1.6. Arborist ..... 10
   1.7. Lighting ..... 16
   1.8. Drainage ..... 19
      1.8.1. Storm Water Drainage ..... 19
      1.8.2. Foul Water Drainage ..... 21
      1.8.3. Site-Specific Flood Risk Assessment ..... 22
   2. Ecological Assessment Methodology ..... 27
      2.1.1. Desk Study ..... 27
      2.1.2. Field Surveys ..... 27
      2.1.3. Consultation ..... 27
      2.1.4. Ecological Evaluation Criteria ..... 27
3. Results ..... 30
   3.1. Proximity to Designated Conservation Sites ..... 30
   3.2. Historic Records of Biodiversity ..... 41
   3.3. Habitats and Species ..... 42
   3.4. Potential Impacts ..... 48
      3.4.1. Construction Impacts ..... 48
      3.4.2. Potential Operational Impacts ..... 49
4. Mitigation Measures & Monitoring ..... 50
5. Adverse Effects likely to occur from the project (post mitigation) ..... 57
6. Cumulative Impacts ..... 58
7. Residual Impacts and Conclusion ..... 66
8. References ..... 67

Appendix I: 2025/2026 Wintering Bird Assessment ..... 68

Appendix II – Bat Fauna Impact Assessment ..... 84

# 1. Introduction

## 1.1. 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 D/RES Properties for Solkerry Ventures Limited. This project relates to a Proposed Large-Scale Residential Development at Summerhill Road, Dunboyne, Co. Meath.

## 1.2. 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 EIARs (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).

## 1.3. 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 over 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).

## 1.4. Project Description

The Proposed Development will consist of a Large-Scale Residential Development on lands at Summerhill Road, Dunboyne, Co. Meath. comprising 248 no. residential units and 1 no. childcare facility with associated car parking, bicycle parking, public open spaces, communal open spaces and all ancillary works.

The development shall comprise:

a) Construction of 248 no. residential units as follows:
   - 170 no. 2 storey houses in a mix of terraced, semi-detached and detached unit types consisting of 27 no. 2-bedroom units, 124 no. 3-bedroom units and 19 no. 4-bedroom units. Each house will have an associated rear private garden.
   - 26 no. apartment units in a single 4 storey block consisting of 13 no. 1-bedroom units and 13 no. 2-bedroom apartments. All apartment units will be provided with private open space areas in the form of balconies.
   - 52 no. duplex units in 4 no. 3 storey blocks (A-D) consisting of 26 no. 2-bedroom units and 26 no. 3-bedroom units. All duplex units will be provided with private open space areas in the form of balconies/terraces.
   - Communal open space associated with the proposed apartment / duplex units will be provided in the form of 5 no. landscaped areas located in the vicinity of the units (total approx. 1,340.4 sqm).

b) 1 no. childcare facility at ground floor of apartment Block A with dedicated external open space (GFA approx. 285.7 sqm).

c) Total provision of 388 no. car parking spaces including 6 no. accessible spaces and 24 no. EV charging spaces (357 no. resident car parking spaces, 18 no. residential visitor car parking spaces and 13 no. car parking spaces dedicated for the creche facility) and a total of 429 no. bicycle parking spaces (319 no. secure resident spaces and 88 no. visitor spaces for the apartment / duplex / mid-terrace units; and 14 no. childcare facility staff spaces and 8 no. childcare facility visitor spaces).

d) Landscaped public open space areas including children's play areas totalling approx. 10,775 sqm;

e) A new vehicular and pedestrian access point is proposed via a simple priority junction on Summerhill Road (L2228).

f) All associated site and infrastructural works including a foul pump station with 24hr storage and associated rising main (580m) discharging to an existing foul line at the Navan Road and Dunboyne Business Park Road junction; diversion of an existing 600 mm diameter storm pipe and proposed storm drain outfall to the R157 / Summerhill Road roundabout; internal roads, road markings, homezones, footpaths and cycle infrastructure; provision of 3 no. ESB substations; bin stores and associated bin staging areas; public lighting; all hard and soft landscaping works; natural and formal play equipment; boundary treatment works including retaining walls; green roof; PV panels and all associated site clearance, excavation, landscape and development works.

The proposed site location, layout, elevations and sections are demonstrated in Figures 1-5.




*Figure 1. Proposed site location*




*Figure 2. Proposed Site Outline*




*Figure 3 Proposed Site layout plan*




*Figure 4. Proposed contiguous elevations part 1*




*Figure 5. Proposed contiguous elevations part 2*

## 1.5. Landscape

The landscape plan for the proposed development has been prepared by Áit. The landscape plan is shown in Figure 6.




*Figure 6 Proposed Landscape Plan*

## 1.6. Arborist

An Arboricultural Report has been prepared by Charles McCorkell Arboricultural Consultancy for the proposed development. It outlines the following tree impacts and mitigation:

***Arboricultural Impacts***

*6.1* ***Loss of trees and hedgerows –*** *The proposed development requires the partial removal of small sections of hedgerows H1 and H68 and tree group G2. These works are required to widen and construct the proposed site entrance. The extent of these removals is considered insignificant and will not negatively impact the character and appearance of the surrounding local landscape.*

*6.2 Along the western boundary, a small section of the C Category hedgerow H3 and tree group G4 are required to be removed to connect the proposed watermain. The extent of removals are considered to be minimal and will not have a negative impact on the local landscape.*

*6.3 To the north of the site, the proposed installation of the foul rising main will result in the removal of the U Category tree T20 and the partial removal of the tree and shrub groups S39, G42 and G43. These trees, and those immediately surrounding them, are required to be removed to accommodate the Dunboyne Link Road proposed by Meath County Council. For context, the Part 8 Dunboyne Link Road proposal has been shown on the Tree Removals & Protection Plans at Appendix B.*

*6.4 In addition, it is also recommended that six U Category trees (T54, T56, T69, T64, T63 and T66) be removed for arboricultural reasons due to their poor condition and location adjacent to Summerhill Road.*

*6.5 Three U Category ash trees (T21, T22 and T24) are located outside the red line boundary in the northeastern corner of the site. As the trees overhang the site boundary and are within the ownership of the Applicant, their condition and management are required to be reviewed prior to construction works commencing. The initial approach will be to retain and manage the trees; however, if their condition is considered dangerous, removal may be required.*

*6.6 The proposed removals are specified within the Tree Work Schedule at Appendix A and are highlighted in the Tree Removals & Protection Plans at Appendix B.*

*6.7* ***Tree and hedgerow management works –*** *The lateral growth of the northwestern boundary hedgerows (H3 & H5) are required to be pruned back to the timber fence line. These works have been carried out in the past and will not have a negative impact on the health or visual appearance of the hedgerow.*

*6.8 Where additional tree management works are required, these must be specified on-site by the arboricultural consultant.*

*6.9 All tree surgery works must be carried out by a reputable arboricultural contractor in accordance with the recommendations given in BS 3998:2010 – Tree Work Recommendations.*

*6.10* ***Compound area*** *– The proposed site compound area has not yet been designed; however, there is sufficient space available on the site to avoid any unnecessary impacts to retained trees and hedgerows, provided the tree protection measures, as detailed within the Tree Removals & Protection Plans at Appendix B, are adhered.*

*6.11* ***Construction operations –*** *The construction of the main built element of the proposal will not require excavation or other works within the RPAs of retained trees. No special methods of construction are therefore required; however, it will be necessary to ensure that site operations do not impact trees or the soil environment upon which they rely. Details of the measures to be taken to protect trees are included in the Tree Removals & Protection Plan at Appendix B.*

*6.12* ***New hard standing within tree RPAs –*** *The proposal will require the construction of a footpath within the RPAs of the retained trees T52 to T59, as highlighted in purple on the Tree Removals & Protection Plans at Appendix B. To minimise damage or loss to the roots of trees, these areas of hard standing are required to be constructed using a no-dig design.*

*6.13 A no-dig design involves constructing the hard surface above the existing ground level using a cellular confinement system, or similar approved, please refer to Appendix C. The finishing surface material must be permeable to maintain water infiltration and gaseous exchange within tree rooting areas. This will ensure that damage does not occur to the roots of the trees or the structure and function of the soil in which they are growing.*

*6.14 The proposal includes a pedestrian link to the adjacent residential development 'The Park', in the southeastern most corner of the site. Existing site levels need to be explored between these two sites in order to establish whether this link can be achieved without negatively impacting the two prominent and good quality trees T51 (Oak) and T52 (Beech). If this link cannot be achieved without excavation works, an alternative location that does not impact these trees will be required.*

*6.15* ***Drainage and services*** *– The proposed drainage layout is shown on the Tree Removals & Protection Plans at Appendix B. It has been carefully designed to minimise the impact on the existing trees and hedgerows. It does include the installation of a foul rising main through the mature northeastern tree and hedge line; however, this is in the location of the proposed Dunboyne Link Road, so no additional tree or hedge removals are required.*

*6.16 Full details of all proposed underground services are currently unknown. Where additional underground services are required, these should avoid the RPAs of retained trees, or special installation techniques must be used under arboricultural supervision.*

*6.17 All drainage and service runs located within tree RPAs must be installed in accordance with industry best practice. The BS 5837:2012 recommends the National Joint Utilities Group Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees Volume 4, issue 2: NJUG, 2007 as a normative reference in these instances.*

*6.18* ***Tree protection measures –*** *All retained trees and hedgerows can be successfully protected during the proposed development works by using robust fencing measures which comply with the recommendations outlined within BS 5837:2012. The location of tree protection measures is highlighted in the Tree Removals & Protection Plans at Appendix B.*

*6.19* ***Landscape operations -*** *Landscaping operations will typically take place at the end of the construction period. These works will normally require the removal of protective fencing to facilitate access for works. There is a risk that machinery may damage soil structure where tree roots are growing. These risks can be managed by maintaining good professional standards of work and working to a method statement. The principle of avoiding soil disturbance or changes in levels within the RPAs of retained trees should be followed unless arboricultural advice has been sought.*

***Arboricultural mitigation***

*6.20 A detailed landscape plan has been designed and will form part of the planning application for the development proposal. This design includes the planting of a large number of new high-quality trees and hedgerows.*

*6.21 The proposed new planting will mitigate the loss of hedgerows and trees required to facilitate the development and will enhance the tree cover throughout the site and within the local area. This will have a positive impact on the local canopy cover and the character and appearance of development, and the surrounding landscape.*

The tree survey and constraints, removals and protection plans are shown in Figures 7-10.




*Figure 7 Tree survey and constraints plan (1/2)*




*Figure 8 Tree survey and constraints plan (2/2)*




*Figure 9 Tree removals and protection plan (1/2)*

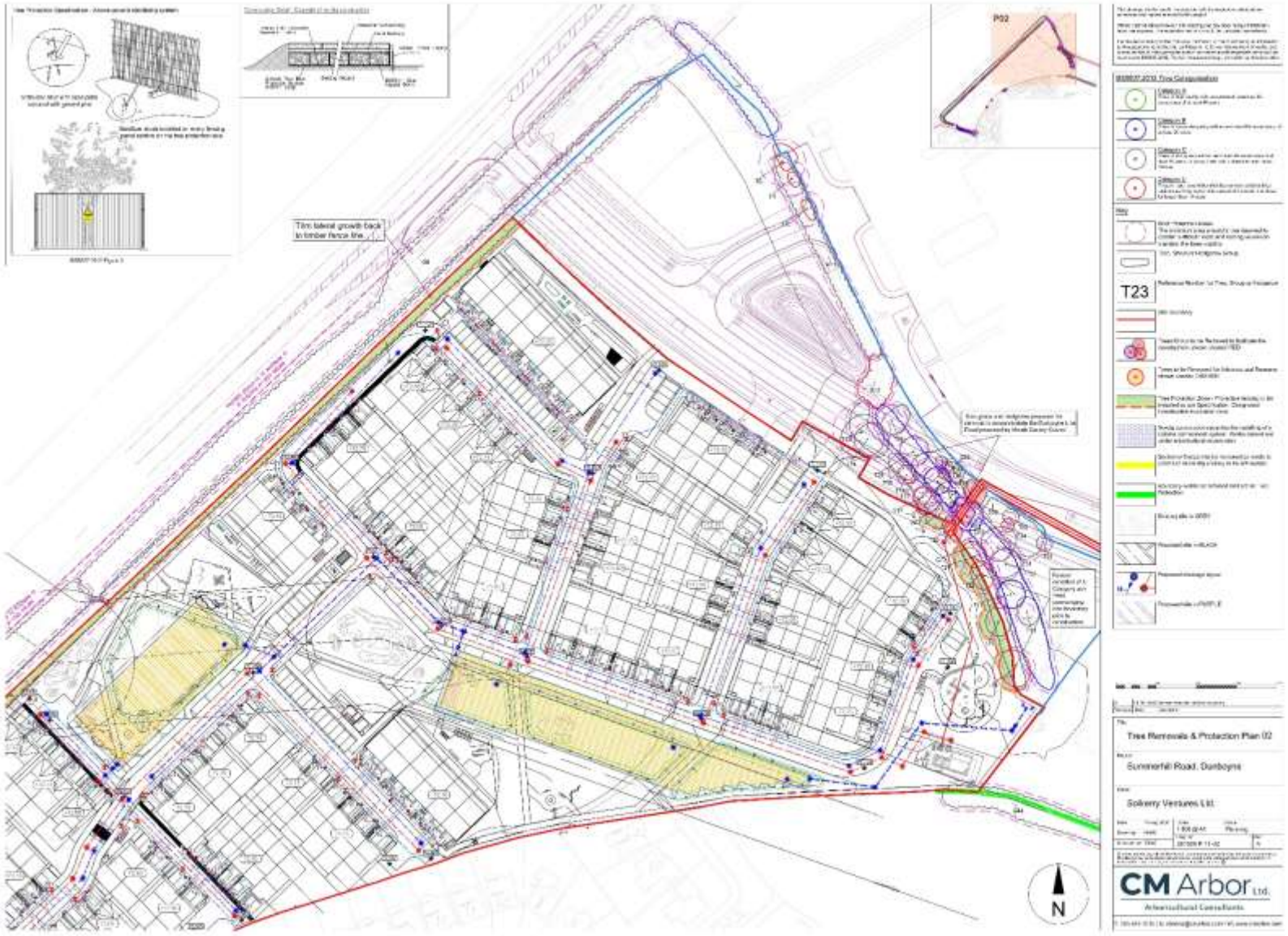



*Figure 10 . Tree removals and protection plan (2/2)*

## 1.7. Lighting

The lighting strategy for the proposed development has been prepared by Fallon Design M&E Engineering. The site lighting report outlines the following:

The design uses 86 x Metro Streetlight 19w LED 3000K:

- 56 x Single Street Optic R03 mounted on 6m columns with no tilt
- 22 x Single Street Optic R01 mounted on 6m columns with no tilt
- 8 x Forward Throw A Optic mounted on 6m columns with no tilt.

### *1.1 Proposed Lighting Fittings*

*The lighting design is based on the following light fittings:*



**Luminaire A Data**

| | |
|---|---|
| Supplier | |
| Type | Veelite Metro Streetlight 19w LED Forward Throw A Optic |
| Lamp(s) | 8LED 3000K G4 700mA |
| Lamp Flux (klm) | 2.26 |
| File Name | 5MTA08LGA-FTA-3K.ies |
| Maintenance Factor | 0.80 |
| Imax70,80,90(cd/klm) | 401.3, 47.0, 0.5 |
| No. in Project | 8 |



**Luminaire B Data**

| | |
|---|---|
| Supplier | |
| Type | Veelite Metro Streetlight 19w LED Street Optic R03 |
| Lamp(s) | 8LED 3000K G4 700mA |
| Lamp Flux (klm) | 2.27 |
| File Name | 5MTA08LGA-R03-3K.ies |
| Maintenance Factor | 0.80 |
| Imax70,80,90(cd/klm) | 537.8, 56.5, 0.3 |
| No. in Project | 56 |



**Luminaire C Data**

| | |
|---|---|
| Supplier | |
| Type | Veelite Metro Streetlight 19w LED Street Optic R01 |
| Lamp(s) | 8LED 3000K G4 |
| Lamp Flux (klm) | 2.15 |
| File Name | 5MTA08LGA-R01-3K.ies |
| Maintenance Factor | 0.80 |
| Imax70,80,90(cd/klm) | 680.3, 387.6, 0.6 |
| No. in Project | 22 |

The majority of light spill will be contained within the site boundary specifically along the southern, eastern and western boundaries, and open space areas will be kept unlit.

The proposed site lighting layout is shown in Figure 11 and 12. Lighting is compliant with bat lighting guidelines with a temperature of 3000K.




*Figure 11. Proposed Public Lighting Plan Part 1*




*Figure 12. Proposed Public Lighting Plan Part*

## 1.8. Drainage

An Engineering Assessment Report has been prepared by CS Consulting to accompany this planning application. The report outlines the following:

### 1.8.1. Storm Water Drainage

'*As part of this application, it is proposed to divert this existing storm sewer to exit the development via the proposed access, run westwards along Summerhill Road and discharge into the existing culvert just south of the R157.*

*2.4.1 Allowable run-off rate and Surface water design*

*The development is required to retain stormwater volumes predicted to be experienced during extreme rainfall events. This is defined as the volume of storm water generated during a 1-in-100-year storm event, increased by 20% for the predicted effects of climate change. In accordance with the Greater Dublin Strategic Drainage Study (GDSDS), the proposed development shall restrict the stormwater run-off to greenfield run-off rates or 2.0l/s/ha whichever is greater, unless other requirements are specified by Meath County Council. The greenfield runoff rate for the proposed development was determined through the HR Wallingford online tool. The calculated Q-Bar value for the overall development site is 14.7 l/sec, considering an overall drainable site area of 6.51ha.*

*To ensure an accurate calculation of the development's required attenuation storage volume, the following data were obtained from Met Éireann:*

*a) the SAAR (Standard Annual Average Rainfall) for the area (840mm/year);*

*b) the sliding duration table for the site, indicating the 1-in-100-year rainwater intensities to be used;*

*2.4.2 Proposed surface water drainage layout and connection points*

*The topography of the subject site indicates that the development site is generally flat, albeit falls from south to north. Due to the flat nature of the development site and the invert level of the existing open channel (Tokja_020) along the northern boundary, the development site has been divided into two principal catchments areas for the collection and disposal of stormwater runoff from impermeable areas:*

*• Catchment 1 of 1.72ha*

*All storm water from this Catchment shall be collected in a designed attenuation tank of total volume approx. 551m3. All storm water from this catchment shall discharge into the proposed diverted storm sewer via an appropriate flow control device. The discharge rate for Catchment 1 shall be limited to 3.81 l/s, calculated as a proportion of this Catchment's area relative to the overall site's drainable area and overall discharge rate of 6.51ha and 14.7 l/s, respectively:*

*14.7 l/s x (1.72ha / 6.51ha) = 3.89 l/s*

*• Catchment 2 of 4.79ha*

*All storm water from this Catchment shall be collected in 4 no. designed detention basins placed over 2 no. attenuation tanks and shall have a total combined volume of approx. 1698m3. All storm water from this catchment shall discharge into the existing open channel (Tolka_020) along the north-eastern boundary of the development site via an appropriate flow control device. The discharge rate for Catchment 2 shall be limited to 10.89 l/s, calculated as a proportion of this Catchment's area relative to the overall site's drainable area and overall discharge rate of 6.51ha and 14.7 l/s, respectively:*

*14.7 l/s x (4.79ha / 6.51ha) = 10.81 l/s*

*The total effective impermeable area for the overall development site is:*

*8422 m2 + 23707 m2 = 32129 m2*

*For each catchment, the surface water runoff shall be collected in separate storm water pipes of size 225mm to 450mm diameter and shall be discharged into attenuation tanks and detention basins placed over attenuation tanks. The attenuated water from each of the tanks and detention basins shall then pass through a petrol interceptor and a hydrobrake (proposed separately for each catchment), before discharging into the proposed diverted storm line for Catchment 1 and into the existing open channel for Catchment 2.*

*For Catchment 1, it is proposed to backdrop the last pipe immediately downstream of the attenuation tank at approximately 1.2m above the invert level of the diverted storm line. This shall reduce to a minimum the likelihood of surcharge of the proposed storm network for extreme storm events. Likewise, for Catchment 2 it is proposed to outfall the storm above the existing invert level of the open channel.*

*2.5 Proposed Sustainable Drainage System (SuDS) Design*

*Meath County Council's Drainage Division requires that all developments adhere to their policy of implementing Sustainable Drainage Systems (SuDS). SuDS not only entail restricting stormwater discharge during extreme storm events but also to integrate sustainable water management solutions to create safe places. The features proposed shall reduce run-off volumes and pollution concentrations and enhance groundwater recharge and biodiversity.*

*2.5.1 Proposed SuDS Elements*

*The proposed SuDS features within the subject development shall consist of:*

*a. Permeable paving for car-parking bays.*
*b. Detention Basins*
*c. Tree Pits*
*2.5.2 Surface Water Treatment*
*Land use is the primary influencing factor in the quality of urban surface water runoff and can therefore be used to represent the significance of the expected pollutant concentrations generated during rainfall events. The Simple Index Approach (SIA). -The SuDS Manual will be applied in the stormwater treatment analysis of the proposed development, which is residential in nature. To implement this method effectively, the steps described below will be followed.*

*• Step 1: Define SuDS Treatment Areas for the proposed development.*
*• Step 2: Produce a SuDS Treatment Train table with the total areas for each hardstanding and soft landscaping surface type present on the proposed development, outlining the proposed SuDS feature and end recipient for each of the surfaces.*
*• Step 3: Allocate pollution hazard indices to the development's proposed land use for the following types of pollutants: suspended solids, metals, and hydrocarbons.*
*• Step 4: Allocate pollution mitigation indices to each proposed SuDS component for the following types of pollutants: suspended solids, metals, and hydrocarbons.*
*• Step 5: Using the Simple Index Approach, compare the aggregated surface water pollution mitigation indices determined in Step 4 to the pollution hazard indices. determined in Step 3. The aggregated surface water pollution mitigation indices should be greater than the pollution hazard indices.*

*2.5.3 Attenuation Storage*

*The restriction of post development run-off to greenfield discharge rates is intended to be achieved primarily through the provision of onsite attenuation storage, which shall retain excess runoff during extreme rainfall events and allow this to be discharged at a controlled rate. Refer to chapter 2.4.1 contained in this report for a breakdown of the allowable discharge rates in each Catchment of the proposed development.*

*As mentioned previously the overall development shall be divided in 2 principal catchment areas. Both catchment areas shall be provided with attenuation systems and shall have a combined volume of 2,249m3 and shall be discharged via flow-controlled mechanism at a maximum combined rate of 14.7l/s.*

***Catchment 1***

*Catchment 1 has an area of circa 1.72ha and the greenfield runoff rate has been established as 3.89 l/s. Attenuation is provided in the form of an attenuation tank located to the south of the apartment block along the southern boundary.*

*The proposed attenuation tank shall have a total volume of **551m3** and has been designed to cater for 1-in-100 storm event increased by 20% climate change. Stormwater from this catchment shall discharge into the diverted storm line via a flow control device, at a maximum rate of 3.89 l/s.*

***Catchment 2***
*Catchment 2 has an area of 4.79ha and the greenfield runoff rate has been established as 10.81 l/s. Attenuation storage for Catchment 2 shall be divided onto 2 no. attenuation systems. The overall attenuation volume for Catchment 2 shall equate to a total of **1698m3**.*

*The western attenuation system is in the form of a detention basin placed on top of an attenuation tank. The attenuation tank has been designed for 1-in-30-year storm event and the detention basin has been designed for 1-in-100-year storm event increased by 20% climate change. The detention basin shall have a gradient of 1:4 and the maximum water depth within the basin at any time would not exceed 300mm. Land drains shall collect and direct water from west to east. The storm water from this attenuation system shall then be discharged into the main storm network within the site via a flow-controlled mechanism at a maximum rate of 2.5 l/s. The combined volume of the attenuation tank and the detention basin shall equate to a total of **711m3**.*

*The eastern attenuation system is in the form of three adjoining detention basins placed on top of an attenuation tank. The attenuation tank has been designed for 1-in-30-year storm event and the detention basin has been designed for 1-in-100-year storm event increased by 20% climate change. The detention basin shall have a gradient of 1:4 and the maximum water depth within the basin at any time would not exceed 300mm. Land drains shall collect and direct water from west to east. The storm water from this attenuation system shall discharge into the existing open channel (Tolka_020) via a flow-controlled mechanism at a maximum rate of 10.81 l/s. The combined volume of the attenuation tank and the detention pond shall equate to a total of **987m3**.'*

### 1.8.2. Foul Water Drainage

***'3.3 Proposed Foul Drainage Arrangements and Outfall***
*All foul effluent generated from the proposed development will be collected in separate foul pipes and discharge to a proposed on-site Type 3 foul pump station, designed to provide 24- hour storage capacity as per UÉ Code of Practice. Effluent would then be pumped via an 80mm rising main to the existing 450 mm foul sewer approx. 620m from the development site within the Dunboyne Industrial Estate.*

*A septicity test was carried out for the 80mm rising main, the test results shows that the 80mm rising main can cater for the proposed development.*

***3.4 Uisce Éireann Engagement***
*A Pre-Connection Enquiry (PCE) was submitted to Uisce Éireann for the proposed development. As a response to the PCE, a confirmation of Feasibility (CoF) was issued by Uisce Éireann on September 1st 2025 and it was noted that wastewater connection is feasible subject to upgrades;*

*'It is the responsibility of the applicant to verify that a gravity connection to the public foul sewer is possible.*

*Proposed Connection point should be to the existing 450mm Sewer to the Northeast of the site within neighbouring industrial estate.*

*The proposed wastewater connection for this development connects to the Uisce Eireann network via infrastructure that has not been taken in charge by Uisce Eireann (Third Party Infrastructure). Please be advised that at connection application stage and prior to the commencement of any Self-Lay Works, you have to:*

*• Identify and procure transfer to Uisce Eireann of the arterial wastewater Infrastructure within the Third Party Infrastructure.*

*• Demonstrate that the arterial infrastructure are in compliance with requirements of Uisce Eireann Code of Practice and Standard Details and in adequate condition and capacity to cater for the additional water demand.*

*Please note that there is a lot of interest in this area from Connection Applications and Pre-Connection Enquiries and limited capacity at the connection point/Network and this will be re-assessed if/when a Connection Application is received. This connection point/Network will be monitored from current on the ground connection applications and this may affect the analysis.*

*In the case capacity is exceeded due to high growth in the catchment, additional upgrades, such as ground infiltration and/or stormwater reduction works may be required to facilitate development.'*

*As per the CoF received, it is proposed to collect the foul effluent generated within the site in a foul sewer network that shall then outfall via gravity into a Type 3 foul pumping station at the northeast corner of the site. From here the foul effluent shall discharge via an 80mm rising main into the existing 450mm diameter foul sewer along Dunboyne Business Park. Any Letter of Consent required shall be obtained by the applicant and shall be submitted during the Connection Application stage.*

***3.5 Design Standards***

*• Uisce Éireann Code of Practice for Wastewater Infrastructure*
*• Part H of the Building Regulations.'*

### 1.8.3. Site-Specific Flood Risk Assessment

The Site-Specific Flood Risk Assessment, as part of the Hydrological Assessment, has been prepared by Tetra Tech. In relation to the flood risk of the development area, the report outlines the following:

*The assessment of flood risk within Stages I, II and III concluded that:*

- *The Proposed Development is located within Flood Zone C.*
- *Coastal flood risk is insignificant due the site's inland location.*
- *No Groundwater flood risk is identified*
- *Pluvial flood risk will be managed by an appropriately designed drainage system.*
- *There is no increase in flood risk elsewhere caused by the proposed development.*
- *The flood risk assessment has identified that the site is appropriate for the development as proposed.*

*Overall, the assessment concludes that the site is in Flood Zone C with a low risk of flooding. Potential for pluvial flooding, residual flood risks and consideration of climate change are effectively managed through setting of appropriate finished floor levels and a robust and sustainable site drainage design including SuDS. As such, the development complies with the relevant policies and guidelines and is therefore appropriate for development from a flood risk perspective.*

The proposed surface water and foul wastewater drainage plan, as well as the SuDS details are demonstrated in Figures 13-16.




*Figure 13. Proposed site drainage sheet 1*

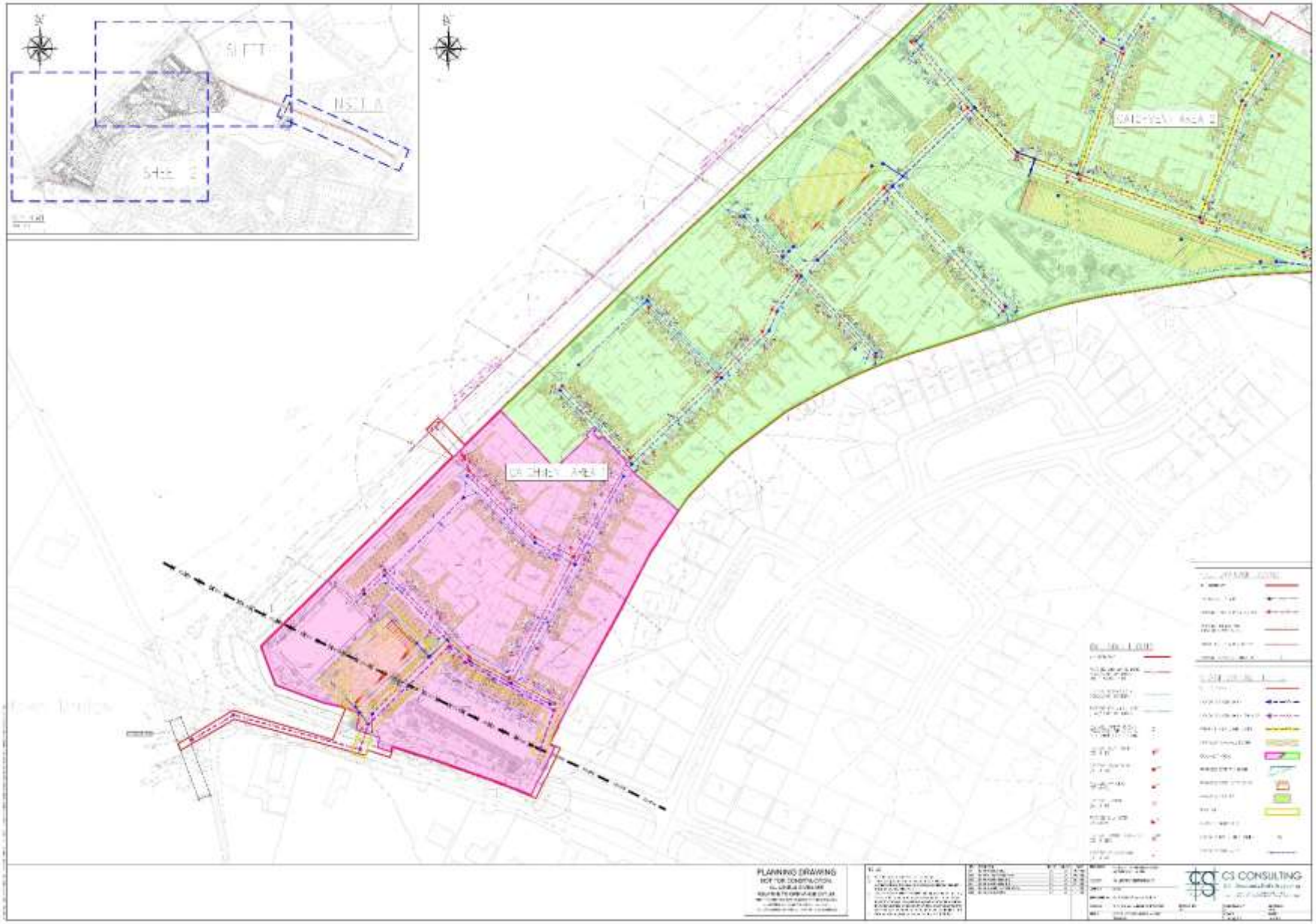



*Figure 14. Proposed site drainage sheet 2*



*Figure 15 Proposed SuDS Layout (1/2)*



*Figure 16  Proposed SuDS Layout (2/2)*

# 2. Ecological Assessment Methodology

### 2.1.1. 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 provisional desk-based assessment of the potential species and habitats of conservation importance was carried out in May 2026, with the updated site assessment on the 21st of May 2026 and the 12th of June 2026. Altemar assessed the project, the proposed construction methodology and the operation of the proposed development.

### 2.1.2. Field Surveys

A series of field surveys at the subject site were carried out between November 2025 and June 2026 in order to identify any sensitive ecological receptors. Five wintering bird surveys were carried out at the subject lands from November 2025 to March 2026, aimed at providing information to assist in assessing the potential impact of the proposed development on wintering birds within/over the development area, in particular species listed as Qualifying Interests of nearby SPAs. A mammal survey was carried out during the mammal survey period on 11th Dec 2025. Bat surveys were conducted by Frank Spellman (MSc.) and Dr. Tadhg Lonergan on the 21st of May and 12th June 2026. Bat surveys were carried out in mild dry conditions, and all surveys covered all lands within the site outline and the lands immediately outside the site where feasible. Flora surveys were carried out on the same dates as bat surveys 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**

All survey types were carried out within their respective seasons. Weather conditions were suitable on all occasions in respect of survey types. No limitations are foreseen in relation to any of the surveys carried out.

### 2.1.3. Consultation

The National Biological Data Centre records were consulted for species of conservation significance.

### 2.1.4. 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) (Tables 1A -F) 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 1A: 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 1B: 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 1C: 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 1D: Significance of Effects*

| Significance of Effect | Description of Potential Effect |
|---|---|
| **Imperceptible** | An effect capable of measurement but without significant consequences. |

| Significance of Effect | Description of Potential Effect |
|---|---|
| **Not significant** | An effect which causes noticeable2 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 1E: 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 1F: Describing 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. |

# 3. Results

## 3.1. Proximity to Designated Conservation Sites

Designated sites are presented in Figure 17 (SACs within 15km), Figure 18 (SPAs within 15km), Figure 19 (NHAs within 15km), Figure 20 (pNHAs within 15km), Figure 21 (Ramsar sites within 15km), Figure 22 (Watercourses near the subject site), Figure 23 (SACs and watercourse pathways), Figure 24 (SPAs and watercourse pathways), Figure 25 (pNHAs and watercourse pathways) and Figure 26 (Ramsar sites and watercourse pathways). A WFD mapped watercourse, the Tolka_020, is located in the east of the project site. The nearest pNHA is Royal Canal (4.99 km). There are no NHAs or Ramsar sites within 15km of the proposed site.

The nearest European site to the proposed development is 5.49 km away (Rye Water Valley/Carton SAC) with no hydrological connectivity to the Proposed Development site. However, the Proposed Development site is hydrologically connected via the Tolka_020, located in the east of the project site, to South Dublin Bay SAC (approx. 24.89 km downstream), South Dublin Bay and River Tolka Estuary SPA (approx. 21 km downstream), North Dublin Bay SAC and North Bull Island SPA (both 23.61 km downstream). The proposed development site is also hydrologically connected to North Dublin Bay pNHA (approx. 21 km downstream), South Dublin Bay pNHA (approx. 24.89 km downstream), Dolphins, Dublin Docks pNHA (approx. 25.34 km) as well as Sandymount Strand/Tolka Estuary (approx. 24.89 km downstream) and North Bull Island (approx. 23.61 km downstream) Ramsar sites. In addition, there is an indirect pathway via the foul water network. Foul water drainage from the site will discharge, via gravity, to an on-site Type 3 foul pump station (providing 24-hour storage), then to the existing foul sewer within Dunboyne Industrial Estate, at the Navan Road/Dunboyne Business Park Road junction. This connects to the wider Uisce Éireann foul network, ultimately conveying flows to Ringsend WwTP, where it will be treated under licence prior to discharge to Dublin Bay.

The distance and details of the conservation sites within 15km and beyond 15km with a hydrological connection to the proposed development site are presented in Tables 2 & 3. The watercourse, Tolka_020, is located within the eastern site boundary. In the interest of carrying out a thorough assessment in line with both the Habitats Directive, and the precautionary principle, the ZoI was expanded for this assessment to include designated sites within 15km of the proposed development site, and sites beyond 15km with the potential for a hydrological connection. This was done in the interest of ensuring that any pathways, however indirect or remote, were considered

***Table 2**. Natura 2000 sites within 15km and beyond 15 km of the proposed development*

| Site Code | NATURA 2000 Site | Distance |
|---|---|---|
| *Special Areas of Conservation* | | |
| IE001398 | Rye Water Valley/Carton SAC | 5.49 km |
| IE000210 | South Dublin Bay SAC | 19.90 km |
| IE000206 | North Dublin Bay SAC | 20.56 km |
| *Special Protection Areas* | | |
| IE004024 | South Dublin Bay and River Tolka Estuary SPA | 17.73 km |
| IE004006 | North Bull Island SPA | 20.56 km |

***Table 3**. pNHA and Ramsar sites within 15 km and beyond 15 km of the proposed development*

| Site Name | Distance |
|---|---|
| *Potential Natural Heritage Areas* | |
| Royal Canal | 4.99 km |
| Rye Water Valley/Carton | 5.49 km |
| Liffey Valley | 6.41 km |
| Grand Canal | 10.57 km |
| Santry Demesne | 14.45 km |
| North Dublin Bay | 17.73 km |
| South Dublin Bay | 19.90 km |
| Dolphins, Dublin Docks | 20.48 km |
| *Ramsar Sites* | |
| Sandymount Strand/Tolka Estuary | 19.90 km |
| North Bull Island | 20.56 km |

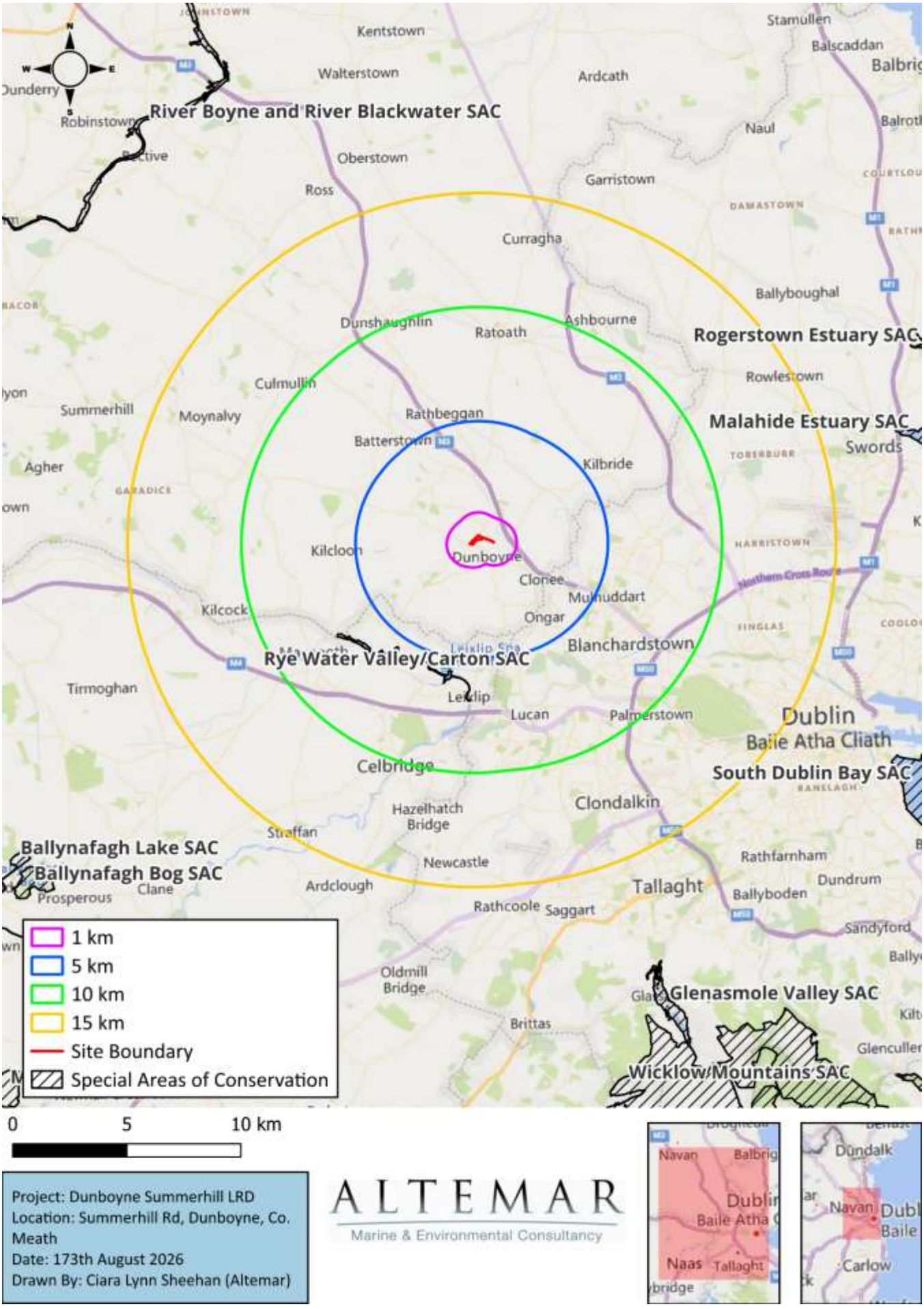



*Figure 17. SACs within 15 km of the proposed development*

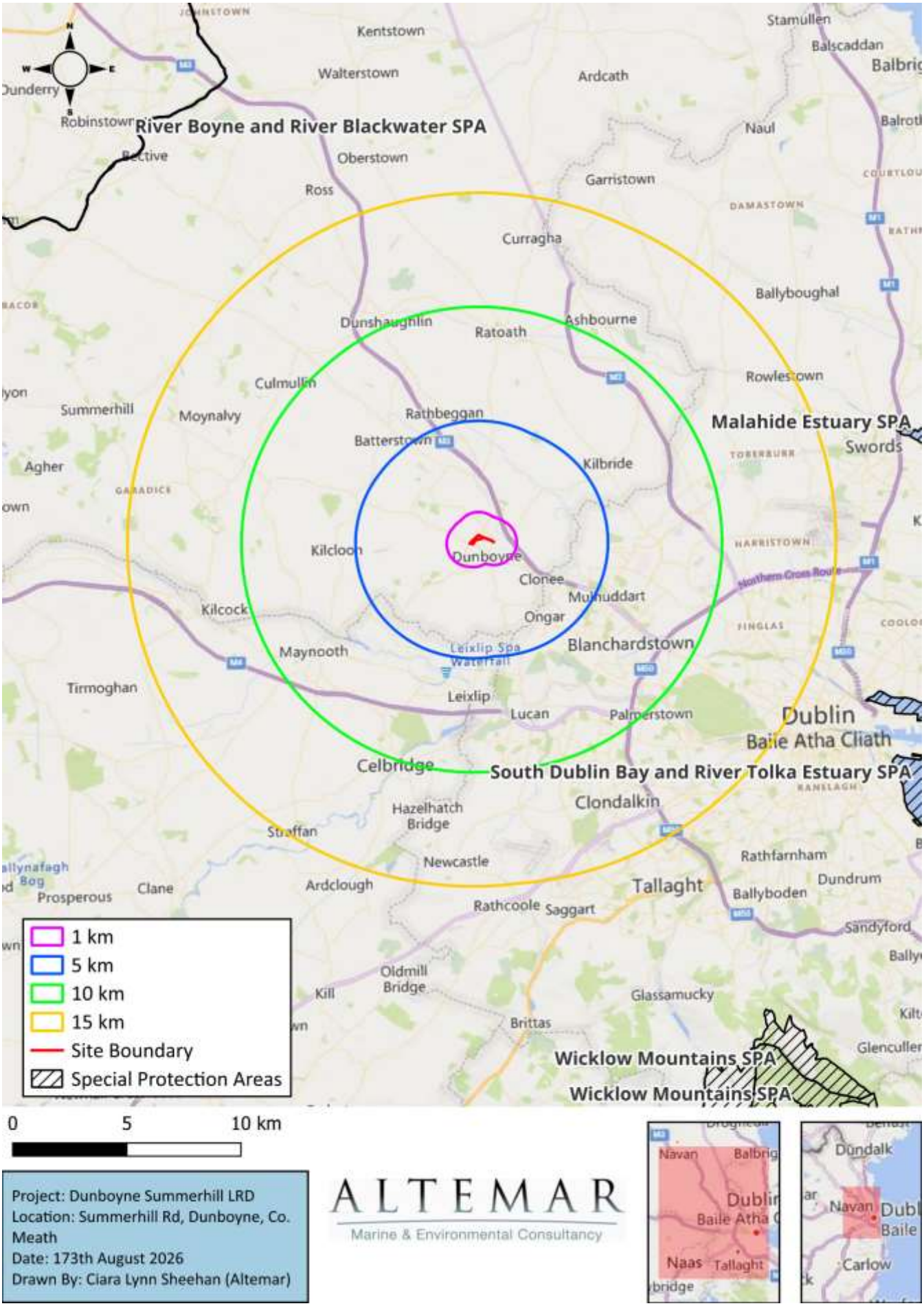



*Figure 18 . SPAs within 15 km of the proposed development*

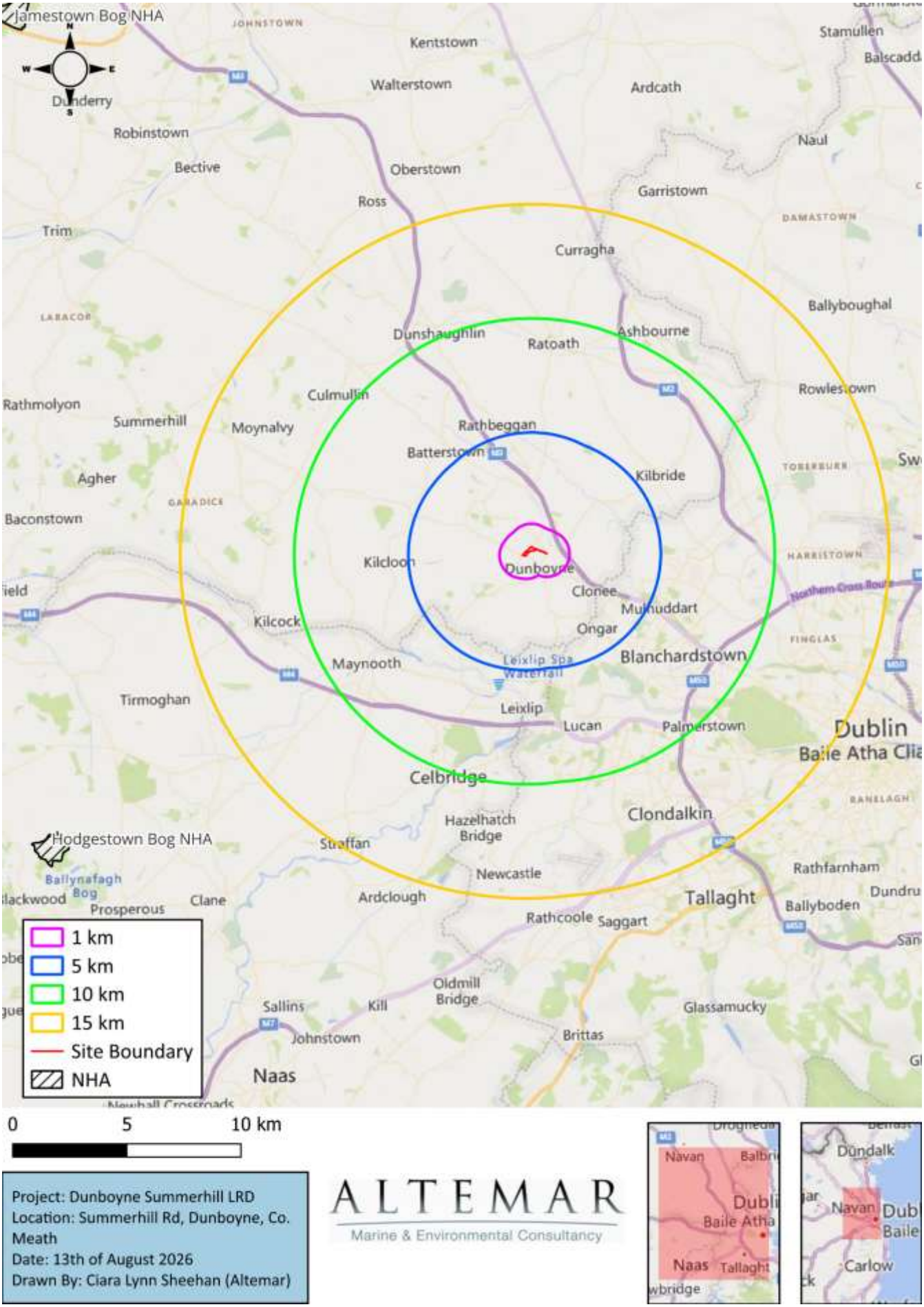



*Figure 19. Natural Heritage Sites (NHA) within 15 km of the proposed development*

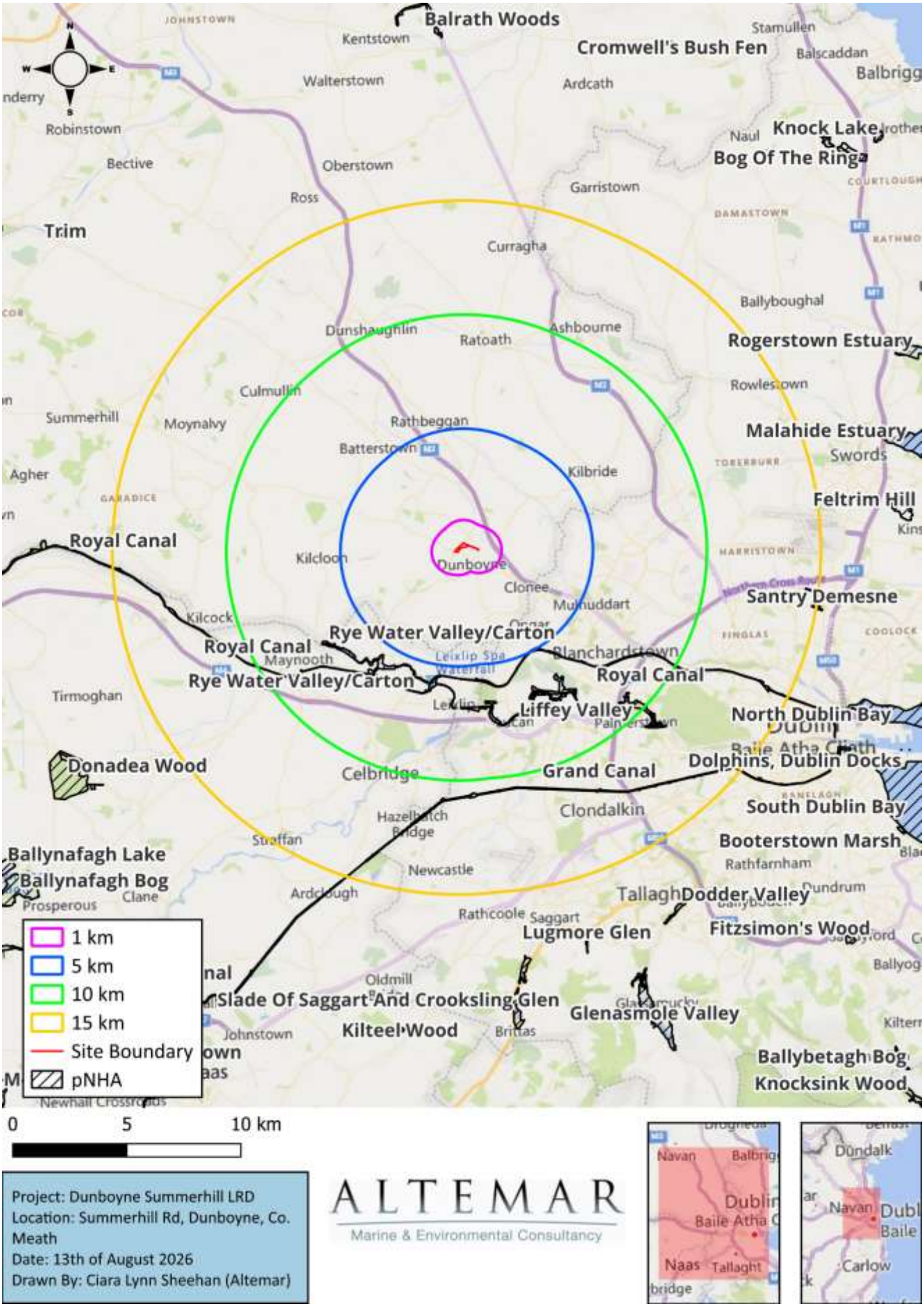



*Figure 20. Proposed natural Heritage Areas (pNHA) within 15 km of the proposed development site*

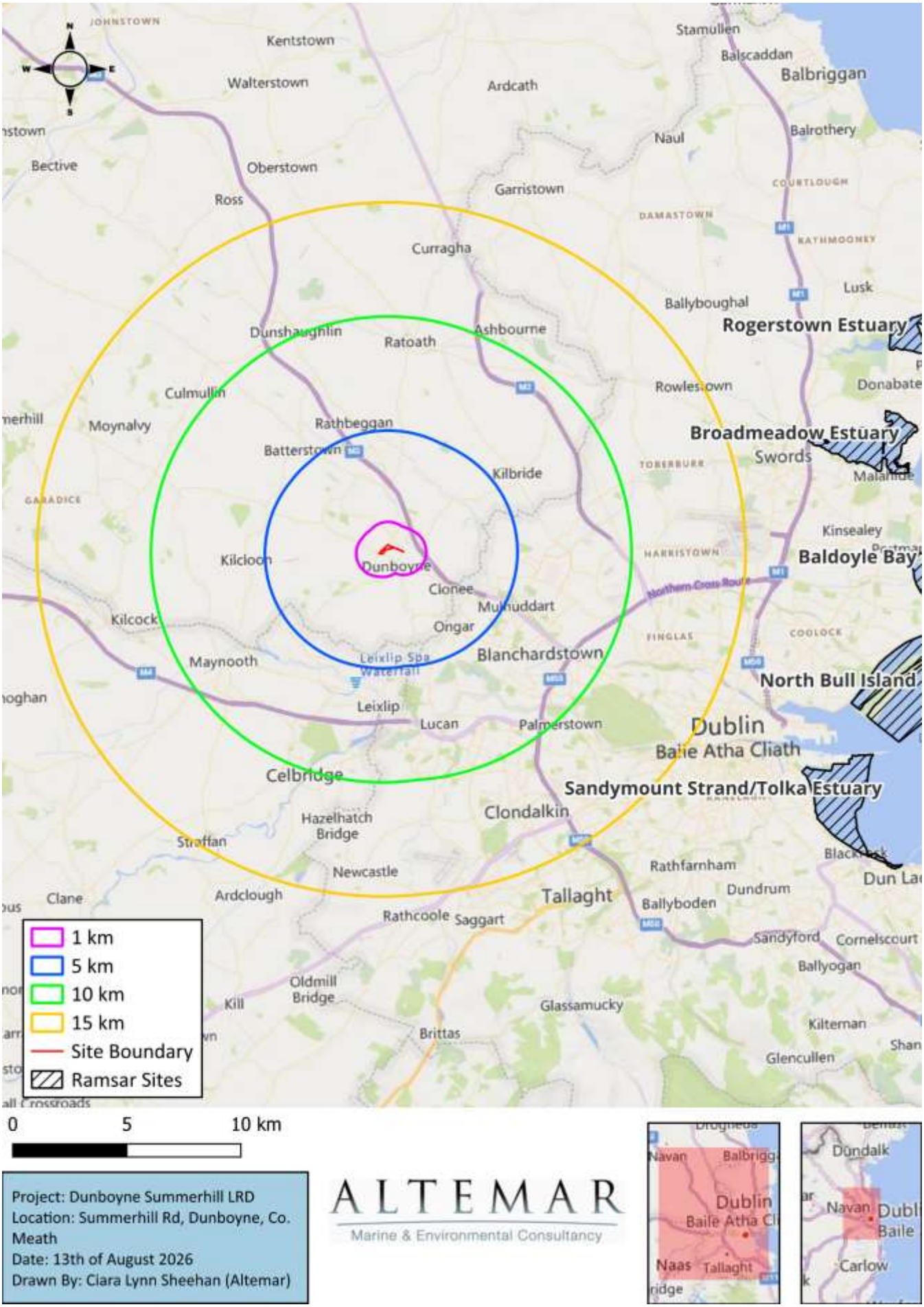



*Figure 21 Ramsar sites within 15 km of the proposed development site*

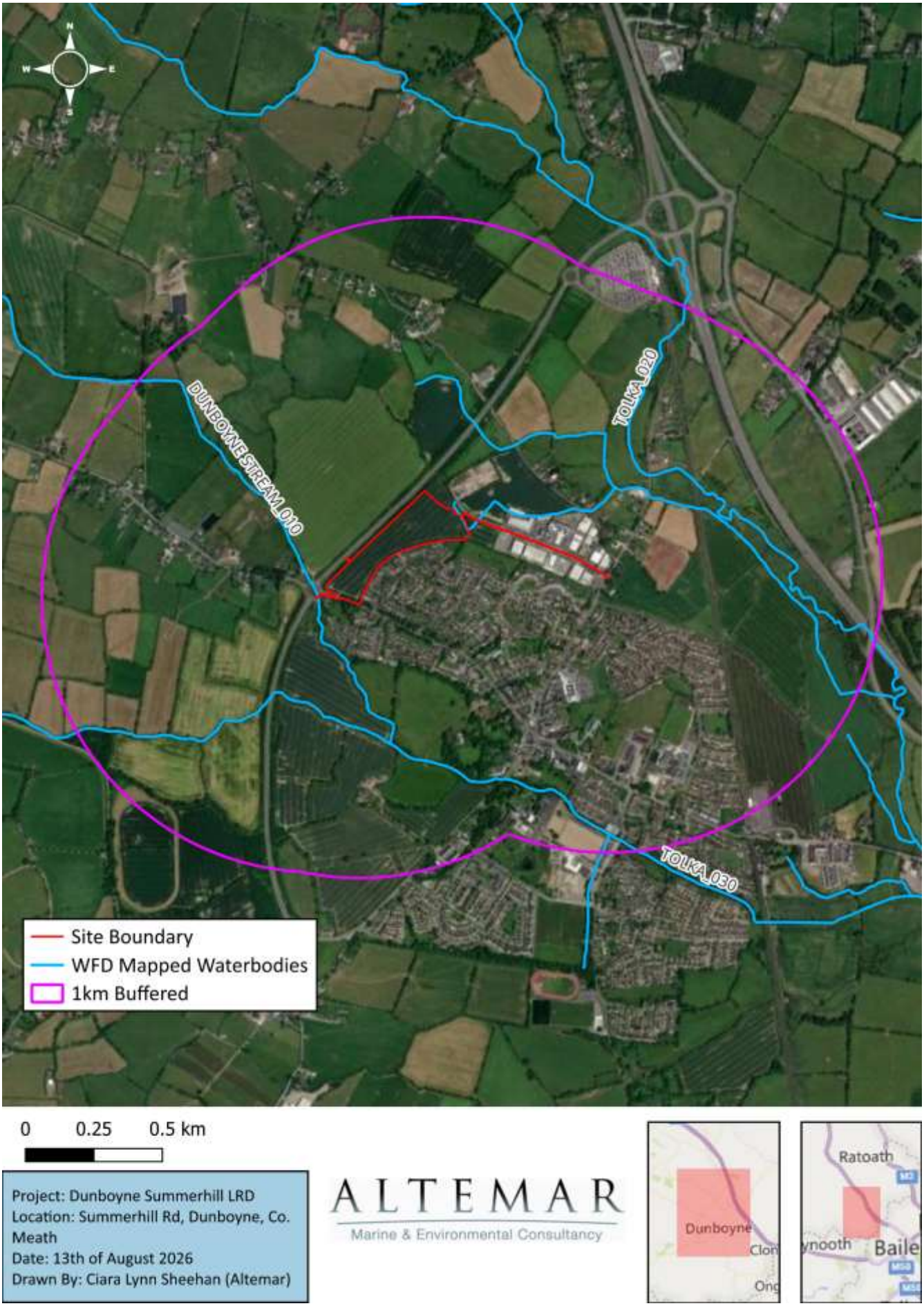



*Figure 22. WFD Mapped Waterbodies in proximity to the proposed development*

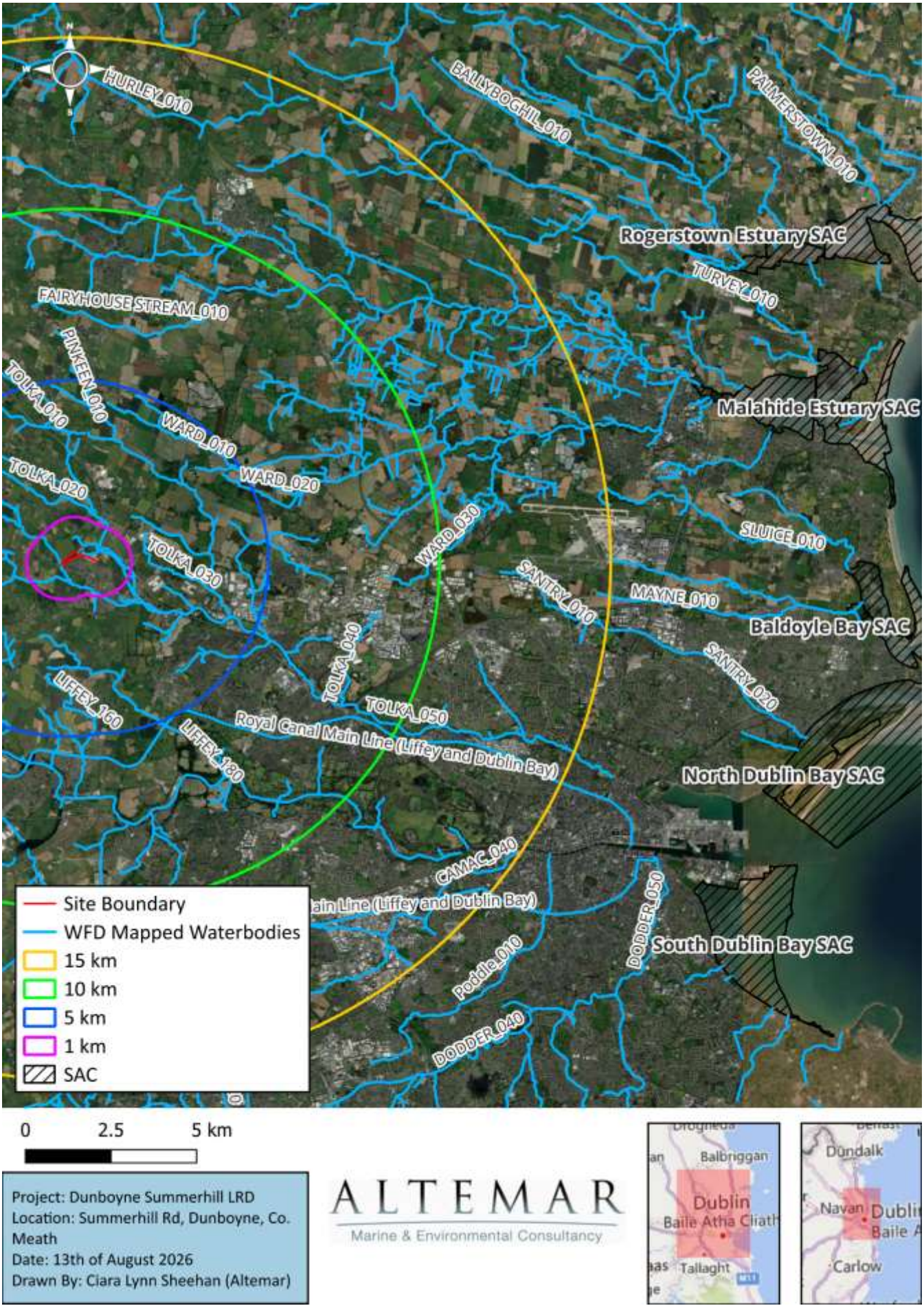



*Figure 23 WFD Mapped Watercourses and pathways to SACs*

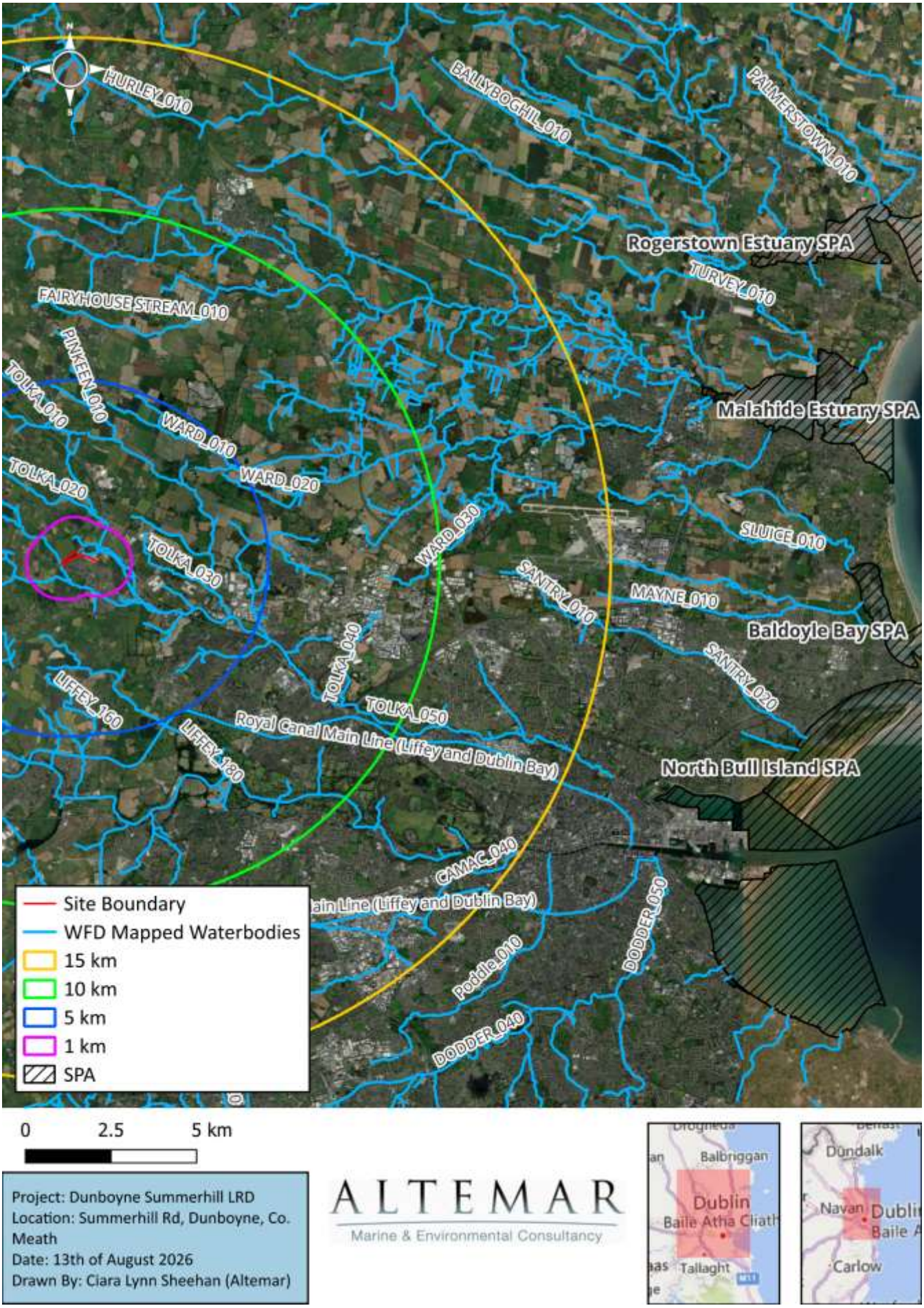



*Figure 24. WFD Watercourse and pathways to SPAs*

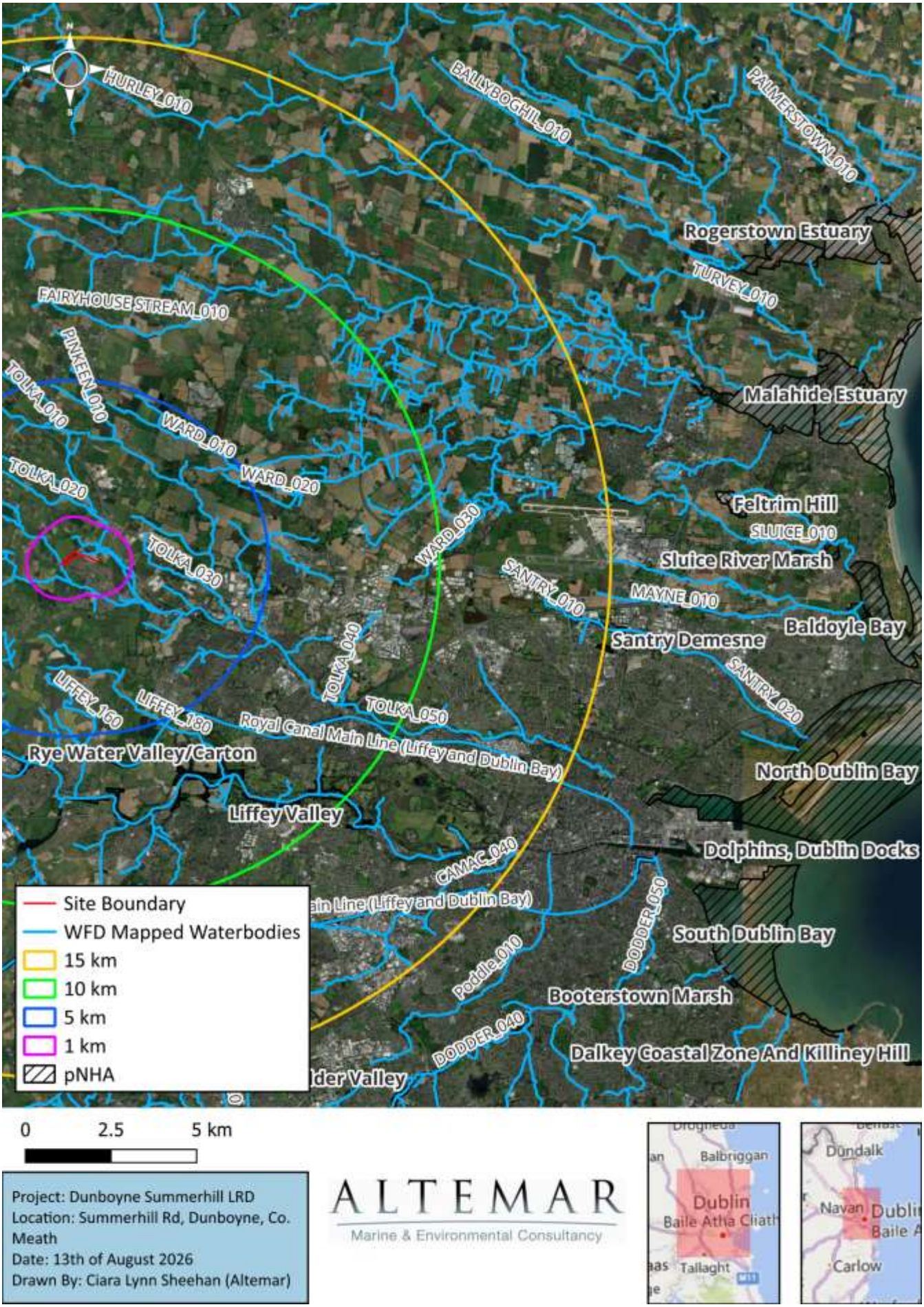



*Figure 25 WFD Watercourses and pathways to pNHAs*

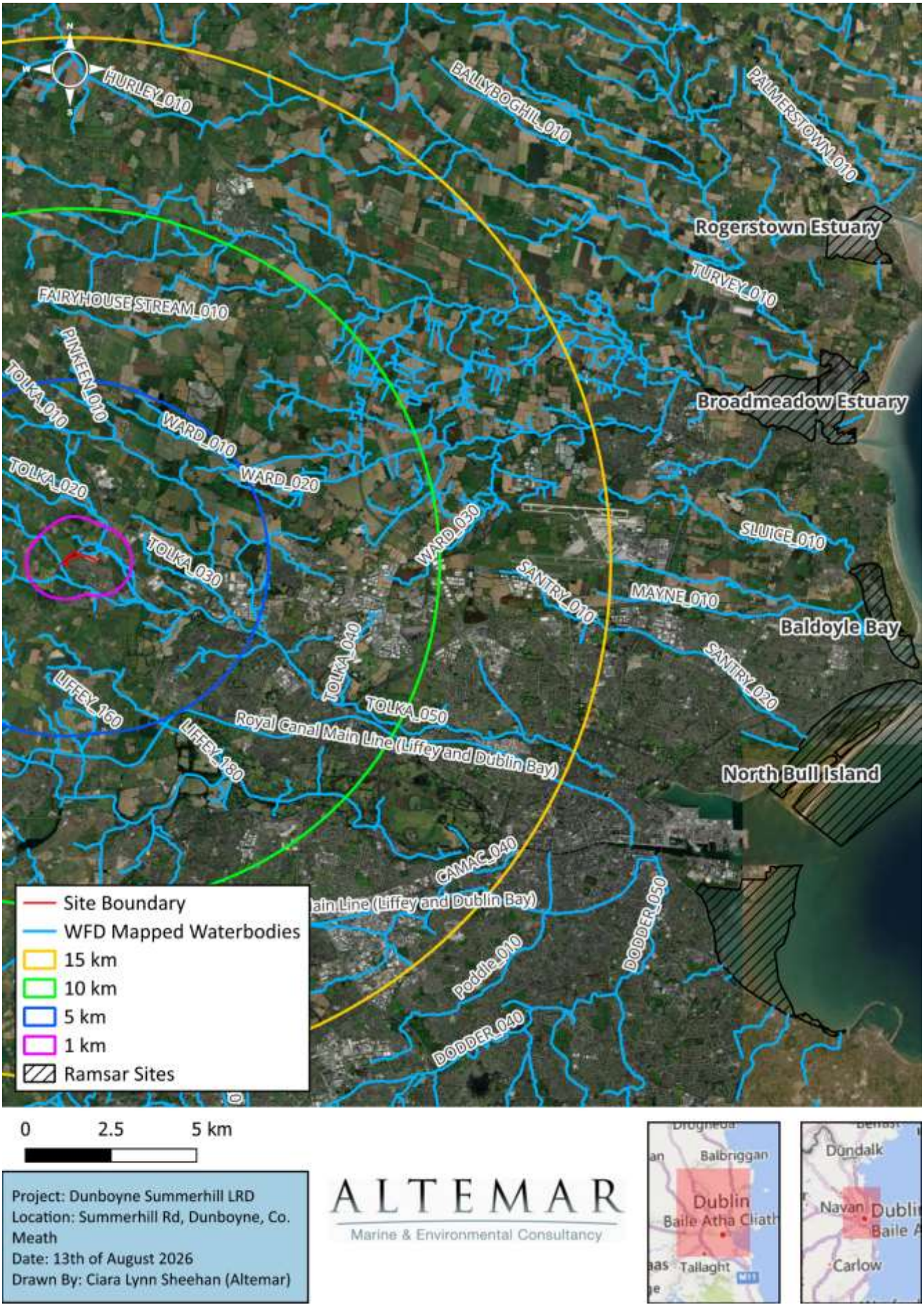



*Figure 26 WFD Watercourses and pathways to Ramsar Sites*

## 3.2. Historic Records of Biodiversity

The National Biodiversity Data Centre's online viewer was consulted in order to determine the extent of biodiversity and/or species of interest in the area. First, an assessment of the site-specific area was carried out and it recorded no species of interest in the site area. Following this, a 2km$^2$ grid (O04B) that encompasses the subject site was assessed. Table 1 provides a list of all species recorded in the grid area that possess a specific designation, such as Invasive Species or Protected Species.

***Table 4. Recorded species, associated designations and date of last record (O04B)***

| Date of Record | Species Name | Designation |
|---|---|---|
| *23/02/2023* | *Common Frog (Rana temporaria)* | *Protected Species: EU Habitats Directive \|\| Protected Species: EU Habitats Directive >> Annex V \|\| Protected Species: Wildlife Acts* |
| *30/03/2023* | *Greenfinch (Chloris chloris)* | *Protected Species: Wildlife Acts \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List* |
| *16/07/2020* | *House Martin (Delichon urbicum)* | *Protected Species: Wildlife Acts \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List* |
| *13/07/2019* | *House Sparrow (Passer domesticus)* | *Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List* |
| *31/03/2020* | *Little Egret (Egretta garzetta)* | *Protected Species: Wildlife Acts \|\| Protected Species: EU Birds Directive \|\| Protected Species: EU Birds Directive >> Annex I Bird Species* |
| *31/12/2011* | *Merlin (Falco columbarius)* | *Protected Species: Wildlife Acts \|\| Protected Species: EU Birds Directive \|\| Protected Species: EU Birds Directive >> Annex I Bird Species \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List* |
| *04/08/2025* | *Sparrowhawk (Accipiter nisus)* | *Protected Species: Wildlife Acts* |
| *15/05/2020* | *Starling (Sturnus vulgaris)* | *Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List* |
| *06/07/2019* | *Stonechat (Saxicola rubicola)* | *Protected Species: Wildlife Acts* |
| *24/06/2020* | *Swallow (Hirundo rustica)* | *Protected Species: Wildlife Acts \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List* |
| *24/06/2025* | *Swift (Apus apus)* | *Protected Species: Wildlife Acts \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List* |
| *21/09/2013* | *Butterfly-bush (Buddleja davidii)* | *Invasive Species: Medium Risk Invasive Species (2013 Report)* |
| *21/09/2013* | *Sycamore (Acer pseudoplatanus)* | *Invasive Species: Medium Risk Invasive Species (2013 Report)* |
| *01/07/2021* | *Red-tailed Bumblebee (Bombus lapidarius)* | *Threatened Species: Near threatened* |
| *20/09/2012* | *Grey Squirrel (Sciurus carolinensis)* | *Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 \|\| Invasive Species: Regulation S.I. 477/2011 (Ireland) \|\| Invasive Species: High Risk Invasive Species (2013 Report) \|\| Invasive Species: Regulation S.I. 374/2024 (Ireland)* |
| *12/07/2024* | *Hedgehog (Erinaceus europaeus)* | *Protected Species: Wildlife Acts* |
| *30/06/2011* | *Leisler's Bat (Nyctalus leisleri)* | *Protected Species: EU Habitats Directive \|\| Protected Species: EU Habitats Directive >> Annex IV \|\| Protected Species: Wildlife Acts* |
| *31/12/2007* | *Natterer's Bat (Myotis nattereri)* | *Protected Species: EU Habitats Directive \|\| Protected Species: EU Habitats Directive >> Annex IV \|\| Protected Species: Wildlife Acts* |

## 3.3. Habitats and Species

A site assessment was carried out on the 21st of May and 12th of June 2026. Habitats within the proposed site were classified according to Fossitt (2000) (Figure 27), and species assessments were carried out.

As can be seen from Figure 27, the site consists of the following habitats (Fossitt, 2000):

**BC1 – Arable crops**

The majority of the proposed development site comprised of arable crops (Plate 1). The dominating species found within this habitat include wheat (*Triticum aestivum*) as well as common poppy (*Papaver rhoeas*) and field speedwell (Veronica persica).

**WL2 – Treeline**

The treeline along the south-western border consisted of beech (*Fagus sylvatica*), hawthorn (*Crataegus monogyna*), sycamore (*Acer pseudoplatanus*), European ash (*Fraxinus excelsior*), hazel (*Corylus avellana*), wych elm (*Ulmus glabra*) and ivy (*Hedera helix*).

The treeline along the north-eastern boundary consisted of European ash (*Fraxinus excelsior*), elder (*Sambucus nigra*), crab apple (*Malus sylvestris*), alder (*Alnus glutinosa*), winter heliotrope (*Petasites fragrans*), pussy willow (*Salix caprea*), beech (*Fagus sylvatica*) and ivy (*Hedera helix*) (Plate 2).

**WS1 – Scrub**

The eastern site boundary crosses over an area of scrub (Plate 3). This habitat was dominated by bramble (*Rubus fruticosus* agg.) with other species including nettle (*Urtica dioica*), European ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), bush fetch (*Vicia sepium*), dandelion (*Taraxacum officinale* agg.) and tansy ragwort (*Jacobaea vulgaris*) present.

**WL1 – Hedgerow**

Hedgerows were located in the south-western and northern boundary (Plate 4). Species found within this habitat include European ash (*Fraxinus excelsior*), sycamore (*Acer pseudoplatanus*), ivy (*Hedera helix*), hawthorn (*Crataegus monogyna*), nettle (*Urtica dioica*), bindweed (*Calystegia sepium*), bramble (*Rubus fruticosus* agg.), cow parsley (*Anthriscus sylvestris*), hogweed (*Heracleum sphondylium*), elder (*Sambucus nigra*), sow thistle (*Sonchus* spp.), broad-leaved dock (*Rumex obtusifolius*), rosebay willow herb (*Chamaenerion angustifolium*) and dog rose (*Rosa canina*).

**GS2 – Dry meadows and grassy verges**

The habitat is found around the verges of the treeline and scrub in the east of the project site boundary (Plate 5). Species such as cleavers (*Galium aparine*), bindweed (*Calystegia sepium*), winter heliotrope (*Petasites fragrans*), cow parsley (*Anthriscus sylvestris*), hogweed (*Heracleum sphondylium*), meadowsweet (*Filipendula ulmaria*), common nettle (*Urtica dioica*), horsetail (*Equisetum* spp.), ivy (*Hedera helix*), herb-Robert (*Geranium robertianum*), bush vetch (*Vicia sepium*), curled dock (*Rumex crispus*), creeping buttercup (*Ranunculus repens*), meadow buttercup (*Ranunculus acris*), common poppy (*Papaver rhoeas*), small-flowered willowherb (*Epilobium parviflorum*), hart's-tongue fern (*Asplenium scolopendrium*), forget-me-not (*Myosotis* spp.) and fireweed (*Chamaenerion angustifolium*).

**BL3 – Buildings and artificial surfaces**

The project site boundary extends onto Summerhill Rd (L2228) to the south of the site and Dunboyne Business Park Rd to the north of the site. These roads are classified as buildings and artificial surfaces.

**FW2 - Depositing/lowland river**

A small watercourse (Plate 6) flows through the east of the site through an area of dry meadows and grassy verges and is mapped as a WFD watercourse (Tolka_020). The channel had a slow flow and connects to the River Tolka.




*Figure 27 Habitat Map of the habitats, according to Fossitt (2000), identified within the proposed development site boundary*



*Plate 1 Arable crop (BC1) within the proposed development site boundary*



*Plate 2 Treeline (WL2) within the proposed development boundary*



*Plate 3 Scrub (WS1) within the proposed development site boundary*



*Plate 4 Hedgerow (WL1) within the proposed development site boundary*



*Plate 5 Watercourse (FW2) within the proposed development site boundary.*



*Plate 6 Dry meadows and grassy verges (GS2) within the proposed development site boundary.*

**Evaluation of habitats**
The proposed development site is dominated by intensively managed agricultural land comprising arable crops (BC1), which forms the majority of the site. This habitat is of low ecological value due to its intensive agricultural management. Treelines (WL2), scrub (WS1) and hedgerows (WL1) occur along the eastern and southern site boundaries which contain an assemblage of native and non-native tree and shrub species and provide habitat connectivity between the wider landscape and adjacent habitats. The dense understory offers shelter and foraging opportunities for birds, mammals, and invertebrates. The presence of mature trees and structurally diverse vegetation increases the ecological value of these features relative to the surrounding agricultural habitats. The watercourse, located to the east of the site, is also ecologucally significant. This watercourse, Tolka_020, is a hydrological pathway to Dublin Bay and the associated designated sites. No habitats of conservation importance were noted on site. However, the treelines, scrub, hedgerows and watercourses are considered to be of local ecological importance.

**Flora**
The plant species encountered at the various locations on site are detailed above. No rare or plant species of conservation value were noted during the field assessment. Records of rare and threatened species from NBDC were examined. No rare or threatened plant species were recorded within the proposed development site. No invasive plant species were noted on site.

**Terrestrial Mammals**
No mammal activity was noted on site. No resting or breeding places of mammals of conservation importance have been noted on site.

**Bat Fauna**
Two bat species was noted foraging on site (Common Pipistrelle and Leisler's Bat). Bat foraging was concentrated on the treelines. Three trees of bat roosting potential ere identified within the proposed development site, two trees of low bat roosting suitability and one of moderate bat roosting suitability. Two Common Pipistrelles were recorded emerging from an Ash tree on the Southern treeline.

**Amphibians/Reptiles**
No amphibians or reptiles were noted on site. No ponds are located on site. Watercourses on site have the potential to act as breeding areas for frogs. However, no evidence of spawn within the watercourse to the north of the site was identified in Spring 2026.

**Wintering Birds**
Five wintering bird surveys were carried out during the 2025/2026 wintering bird survey season. As outlined in Appendix I, the wintering bird survey concluded the following:

*A total of 18 species were recorded within, above and adjacent to the survey area across five surveys. 14 green and four amber listed bird species of conservation concern in Ireland (BoCCI) were recorded either within, over and immediately adjacent to the survey area. One species, Black-headed Gull, listed as a Qualifying Interest of the nearest downstream SPA, South Dublin Bay and River Tolka Estuary SPA (17.73 km). No red-listed species of conservation concern in Ireland were recorded during the surveys. One species, Grey Heron, listed on Dublin Bay's I-WeBS Sit Summary (0U404), was noted flying over the survey area.*

*Future developments on lands at Summerhill Rd, Dunboyne are predicted to reduce available foraging area for wintering birds locally. However, it is considered that the subject site is not of significance to species listed as SCIs of nearby SPA(s), in particular the South Dublin Bay and River Tolka Estuary SPA. The reduction in foraging and potential roosting areas are not significant in the context of current use by wintering birds and the widespread and abundant habitats of comparable and superior suitability in the wider area. In addition, given that the site is located 17.73 km to the north-west of the nearest SPA, no significant noise and vibration during construction will impact the SCI species within this designated site. Impacts on wintering bird species foraging and transiting between foraging/roosting sites are not likely in the absence of mitigation measures. No significant impact on species listed as SCIs of nearby SPAs, in particular the South Dublin Bay and River Tolka Estuary SPA, or bird species of conservation interest, are predicted.*

## 3.4. Potential Impacts

Altemar has consulted with the design team to limit the potential impact of the proposed development on biodiversity. The proposal is a large-scale residential development on approximately 6.76 ha of currently undeveloped greenfield land, comprising 248 residential units and a childcare facility, together with roads, parking, open space, landscaping and associated infrastructure and will involve site clearance, excavations, services installation, construction of buildings and infrastructure and HDD beneath the onsite watercourse, Tolka_020. 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).

### 3.4.1. Construction Impacts

The construction of the proposed development would impact on the existing ecology of the site and the surrounding area. These potential construction impacts would include impacts that may arise during the site clearance, excavations, HDD works and the building phases of the proposed development.

**Designated Conservation sites within 15km, and outside 15km with a potential hydrological pathway**

The proposed development is not within a designated conservation site. The nearest designated conservation site is Royal Canal pNHA (4.99 km). The nearest Natura 2000 site with a direct pathway is South Dublin Bay and River Tolka Estuary SPA (17.73 km). Surface discharge will be directed to the Tolka_020 within the proposed development site which outfalls to the River Tolka, which in turn outfalls to the marine environment at Dublin Bay. Foul water drainage from the site will be discharged to Ringsend WwTP, via the existing foul sewer network where it will be treated under licence prior to being discharged to Dublin Bay, proximate to the associated designated sites. In the absence of any measures on site given the substantial hydrological distance, dilution, mixing and flocculation within the watercourse, any pollutants, dust or silt-laden run-off/pollution that enters the drainage network will be at negligible levels, prior to reaching Dublin Bay. Foul water will be treated at Ringsend WwTP via the foul sewer network, any pollutants, dust or silt laden run off will be dispersed, diluted, and ultimately treated within the public network prior to reaching the marine environment.

Potential Impacts in the absence of mitigation: Neutral / National & international / Not significant / short-term.

**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. It would be expected that the flora and fauna associated with these habitats would also be displaced. The removal of these habitats will result in the loss of species of low biodiversity importance. 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 trees of bat roosting potential located onsite. As outlined in Appendix II, two common pipistrelles were noted emerging from an ash tree in the southern boundary. Trees with bat roosting potential including the bat roost are proposed to be retained. Foraging activity was concentrated to treelines throughout the proposed site. Lighting during construction could impact on foraging activity. The removal of vegetation will result in the loss of foraging areas.

Impacts: Moderate adverse / site / Negative Impact / Not significant / short term. Mitigation is needed in the form of tree protection measures prior to commencement and overseen by a qualified arborist and the control of light spill during construction.

*Bird Fauna*

Black-headed gull (amber-listed), buzzard, grey heron and herring gull (amber-listed) were noted on site. One species, Black-headed Gull, listed as a Qualifying Interest of the nearest downstream SPA, South Dublin Bay and River Tolka Estuary SPA (17.73 km). No red-listed species of conservation concern in Ireland were recorded

during the surveys. The reduction in foraging and potential roosting areas are not significant in the context of current use by wintering birds and the widespread and abundant habitats of comparable and superior suitability in the wider area. In addition, given that the site is located 17.73 km to the north-west of the nearest SPA, no significant noise and vibration during construction will impact the SCI species within this designated site.

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

### 3.4.2. Potential Operational Impacts

**Designated Conservation sites within and beyond 15km**

The development will 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. No mitigation is required for the protection of designated sites.

Impacts: Negligible / International / Neutral Impact / Not significant / Long-term. No mitigation required.

**Biodiversity**

*Terrestrial mammalian species*

No protected terrestrial mammals or signs of protected mammals such as badger *(meles meles)* were noted onsite.

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

*Flora*

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

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

*Bat Fauna*

The proposed development will change the local environment as new structures are to be erected and existing vegetation and trees will be removed. Bats were noted foraging on site and foraging areas will be reduced as a result of the proposed development, but not significantly in the context of current bat foraging levels and as bat foraging areas and commuting features will persist. A bat roost is located in an ash tree along the southern boundary however, this tree is not proposed for removal. Public lighting onsite will comply with bat lighting guidelines.

Effects: Moderate adverse / International / Negative Impact / Not significant / Long term. Mitigation is required to minimise potential impacts on bat roosts and foraging/commuting areas.

*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. Foraging area would be lost overall, but insignificantly given the vast amount of similar habitat in the wider landscape. As the landscaping elements enhance biodiversity and increase botanical and habitat structure diversity of the site, bird nesting habitats would increase to similar or greater levels as is currently available.

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

# 4. 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 5. Mitigation Measures***

| Sensitive Receptors | Potential Impacts | Mitigation Measures to Prevent Impacts on Natura 2000 sites |
|---|---|---|
| River Tolka<br><br>Downstream Biodiversity<br><br>Local Biodiversity | • Habitat degradation<br>• Dust deposition<br>• Pollution<br>• Silt ingress from site runoff<br>• Downstream inputs<br>• Negative impacts on aquatic fauna | An Outline Construction Environmental Management Plan has been prepared by CS Consulting to accompany this planning application. This document details the following mitigation measures that will be implemented during the construction phase of development:<br><br>*GENERAL ENVIRONMENTAL PROTECTION MEASURES*<br><br>***4.1 Surface Water Treatment***<br>*All existing surface water drainage elements (including adjacent watercourses) will be maintained free from waste materials generated during the construction of the proposed development, including the initial site clearance and excavation. Routine visual inspections by the contractor shall reduce any risk of excess construction materials causing obstructions to surface water drainage and any potential flooding occurring. A maintenance schedule and operational schedule must be established by the contractor for silt and pollution control measures during the construction period. This should be undertaken in consultation with the relevant statutory authorities.*<br><br>*Run-off from the working site or any areas of exposed soil shall be channelled and intercepted at regular intervals for discharge to silt traps or lagoons. A temporary positive drainage system shall be installed prior to the commencement of the construction works, to collect surface water runoff from the site during construction. A series of geotextile-lined cascading, high level outfall settling basins will be installed upstream of an agreed discharge point, the location of which is to be determined by the contractor as part of their detailed Construction and Environmental Management Plan and approved by Meath County Council. This temporary surface water management facility will throttle runoff and allow suspended solids to be settled out and removed before being discharged in a controlled manner to the agreed outfall. All inlets to the cascading settling basins will be riprapped to prevent scour and erosion in the vicinity of the inlet.*<br><br>*Pouring of concrete shall be carried out in the dry and allowed to cure. Mixer washings and excess concrete shall not be discharged to surface water. Implementation of comprehensive and strict site housekeeping measures to isolate concrete from local surface waters is essential.*<br><br>*Oil storage tank(s) and the associated filling area and distribution pipe work shall be separated by at least 10m from surface watercourses. Storage tanks shall have secondary containment provided by means of an above ground bund to capture any* |

| Sensitive Receptors | Potential Impacts | Mitigation Measures to Prevent Impacts on Natura 2000 sites |
|---|---|---|
| | | *oil leakage, irrespective of whether it arises from leakage of the tank itself or from associated equipment (such as filling and off-take points, sighting gauges, etc.), all of which should be located within the bund. The bund specification should conform to the current best practice for oil storage (Enterprise Ireland BPGC5005).*<br><br>*Weather conditions and seasonal weather variations shall also be taken account of when planning stripping of topsoil and excavations, with an objective of minimising soil erosion.*<br><br>*Hazardous construction materials shall be stored appropriately to prevent contamination of watercourses or groundwater. Spill kits shall be kept in designated areas for re-fuelling of construction machinery.*<br><br>***4.2 Noise***<br>*The Contractor will implement measures to eliminate where possible and reduce noise levels where not.*<br><br>*All construction activities will be carried out in compliance with the recommendations of BS 5228, Noise Control on Construction and open sites part 1 and comply with BS 6187 Code of Practice for Demolition.*<br><br>*Potential sources of noise impact include construction activities on site which may involve the use of heavy machinery.*<br><br>*All works on site will comply with BS 5228 2009 which gives detailed guidance on the control of noise and vibration from construction activities. In general, the contractor will implement the following mitigation measures during the proposed infrastructure works:*<br>• *Avoid unnecessary revving of engines and switch off equipment when not required.*<br>• *Minimise drop height of materials.*<br>• *Start-up plant sequentially rather than all together.*<br><br>*More specifically the Contractor will ensure that:*<br>• *In accordance with Best Practicable Means, plant and activities to be employed on site are reviewed to ensure that they are the quietest available for the required purpose.*<br>• *Hoarding and sound barriers are provided and, where required, improved sound reduction methods are used (e.g., enclosures), particularly for works carried out near the site's eastern boundary closest to Broad Lough.*<br>• *Site equipment is located away from noise sensitive areas as much as physically possible.*<br>• *Loading and unloading will occur within designated loading areas as far from noise receptors as possible.*<br>• *Equipment will be fitted with appropriate silencers where possible.*<br>• *Regular and effective maintenance by trained personnel is carried out to reduce noise and / or vibration from plant and machinery.* |

| Sensitive Receptors | Potential Impacts | Mitigation Measures to Prevent Impacts on Natura 2000 sites |
|---|---|---|
| | | • *Hours are limited during which site activities likely to create high levels of noise and vibration are carried out – no noisy activities will be carried out outside of the permitted construction hours.*<br><br>*A site representative responsible for matters relating to noise and vibrations will be appointed prior to construction on site. This individual will be responsible for engagement with local residents, advance notice for noisy activities and the maintenance of a complaints register/ record.*<br><br>*A noise and vibration monitoring specialist will be appointed to carry out independent monitoring of noise and vibration during critical periods at sensitive locations.*<br><br>*4.2.1 Construction Noise Mitigation Recommendations*<br><br>*Best practice control measures for noise from construction sites are found within BS 5228 (2009 +A1 2014) part 1. Construction noise impacts are expected to vary during the construction phase of the project, this impact will depend on the distance between the construction activities and noise sensitive receptor. The contractor will ensure that all best practice noise and control methods will be used, to ensure any negative noise impacts at offsite noise sensitive locations are minimized.*<br><br>*The best practice measures set out in BS 5228 (2009) Part 1 includes guidance on several aspects of construction site mitigation measures, this includes the;*<br>• *Selection of quite plant and equipment*<br>• *Noise control and source of the noise*<br>• *Screening, and*<br>• *Public liaison.*<br><br>*Please refer to Acoustic Design Statement prepared by Wave Dynamics Acoustics Monitoring Environmental submitted under a separate cover for further details.*<br><br>***4.3 Air Quality and Dust Monitoring***<br><br>*Dust prevention measures will be included for control of any site airborne particulate pollution. The Contractor will monitor dust levels in the vicinity of the site in accordance with planning conditions. Records will be kept of such monitoring for review by the Planning Authority. There are currently no national or European Union standards of air quality with which levels of dust deposition can be compared. The minimum criteria to be maintained will be in accordance with the German* |

| Sensitive Receptors | Potential Impacts | Mitigation Measures to Prevent Impacts on Natura 2000 sites |
|---|---|---|
| | | *Standard Method for determination of dust deposition rate (VDI 2119), which is a maximum deposition of 350mg/m2/day as measured using Bergerhoff type dust deposit gauges.*<br><br>*Contractor will continuously monitor dust over the variation of weather and material disposal to ensure the limits are not breached throughout the project. Potential sources of dust impact are present due to construction activities on site.*<br><br>***4.4 Migrating Dust and Dirt Pollution***<br><br>*The Contractor will ensure that all construction vehicles that exit the site onto the public roads will not transport dust and dirt to pollute the external roadways. This will be achieved through a combination of the following measures:*<br>• *Ensuring construction vehicles have a clean surface to travel on within the site (i.e., haul road).*<br>• *Providing a "Full-Body Self Contained" wheel wash, constructed and located within the site confines.*<br>• *Ensuring an appropriate wheel or road washing facility is provided as and when required throughout the various stages of construction on site. If conditions require it then a manned power washer will be put in place to assist the wheel wash system.*<br><br>*The use of appropriate water-based dust suppression systems will greatly reduce the amount of dust and windborne particulates as a result of the construction process. This system will be closely monitored by site management personnel particularly during extended dry periods and in accordance with site management methods.*<br><br>***4.5 Harmful Materials***<br><br>*Harmful material will be stored on site for use in connection with the construction works only. These materials will be stored in a controlled manner. Where on-site facilities are used there will be a bunded filling area using double bunded steel tank at a minimum.*<br><br>*4.5.1 Potentially Hazardous Wastes to be Produced*<br><br>*Contaminated Soil*<br><br>*If any contaminated material is encountered, it will need to be segregated from clean/inert material, tested and classified as either non-hazardousor hazardous in accordance with the EPA publication entitled 'Waste Classification: List of Waste & Determining if Waste is Hazardous or Non-Hazardous' using the HazWasteOnline application (or similar approved classification method). The material will then need to be classified as clean, inert, nonhazardous or hazardous in accordance with the EC Council Decision 2003/33/EC, which establishes the criteria for the acceptance of waste at landfills.* |

| Sensitive Receptors | Potential Impacts | Mitigation Measures to Prevent Impacts on Natura 2000 sites |
|---|---|---|
| | | *Fuel/Oils*<br><br>*As fuels and oils are classed as hazardous materials, any on-site storage of fuel/oil, all storage tanks and all draw-off points will be bunded and located in a dedicated, secure area of the site, away from watercourses.*<br><br>*Provided that these requirements are adhered to and site crew are trained in the appropriate refuelling techniques, it is not expected that there will be any fuel/oil wastage at the site.*<br><br>*Other known Hazardous Substances*<br><br>*Paints, glues, adhesives and other known hazardous substances will be stored in designated areas away from watercourses. They will generally be present in small volumes only and associated waste volumes generated will be kept to a minimum. Wastes will be stored in appropriate receptacles pending collection by an authorised waste contractor. In addition, WEEE (containing Construction and Demolition Waste Management Plan 11 hazardous components), printer toner/cartridges, batteries (Lead, Ni-Cd or Mercury) and/or fluorescent tubes and other mercury containing waste may be generated during construction activities. These wastes (if encountered) will be stored in appropriate receptacles in designated areas of the site pending collection by an authorised waste contractor.*<br><br>***4.6 River Tolka_020***<br><br>• *Discharge Licences – It will not be permitted to discharge into any newly constructed storm water systems or watercourse without adhering to the conditions of the discharge licence and agreeing the same with the Design Team, Site Manager and Local Authority Area Engineer.*<br><br>• *Over Ground Oil / Diesel Storage – Only approved storage system for oil / diesel within the site will be permitted, (i.e., all oil / diesel storage to be located within a designated area placed furthest away from adjacent watercourses and contained within constructed bunded areas e.g., placed on 150mm concrete slab with the perimeter constructed with 225mm solid blockwork rendered internally). The bunded area will accommodate the relevant oil / diesel storage capacity in case of accidental spillage. Any accidental spillages will be dealt with immediately on site however minor by containment/removal from site.*<br>• *Re-fuelling will be contained within a designated area adjacent to the storage area.*<br>• *Concrete Washout – The washing out of concrete trucks on site will not be permitted as they are a potential source of high alkalinity in watercourses. Consequently, it is a requirement that all concrete truck washout takes place back in the ready-mix depot.* |

| Sensitive Receptors | Potential Impacts | Mitigation Measures to Prevent Impacts on Natura 2000 sites |
|---|---|---|
| | | • *Disposal of Wastewater off Site – The Site Management Team will maintain a record of all receipts for the removal of toilet or interceptor waste off site to insure its disposal in a traceable manner.*<br>• *Road Sweepers/Cleaning – The cleaning of public roads in and around the subject site will be undertaken to reduce environmental impacts and care will be taken to prevent any pollution of watercourses from this activity.*<br><br>***4.7 Vibration***<br><br>*The Contractor will be required to carry out their works such that the effect of vibration on the adjacent buildings and surroundings is minimised, and that no damage to these results from construction activity on site. Potential sources of significant vibration include:*<br>• *Reduced level excavation and/or rock breaking.*<br>• *Construction of piled basement walls.*<br>• *Other construction activities on site involving the use of heavy machinery.*<br><br>*The Contractor will be required to comply with any planning conditions relating to vibration limits and vibration monitoring.*<br><br>*The Contractor will establish guidelines and controls for all activities that may impact on the surrounding environment for the duration of the works, including; air, water, land, natural resources, flora, fauna, humans, and their interrelation.*<br><br>*The project is to be developed to enable to all personnel with the means to understand their responsibilities and to meet the Contractor's statutory, contractual and procedural obligations relating to environmental management.*<br><br>*For each activity, the environmental aspects and associated actual and potential impacts are to be identified as they relate to the following environmental elements:*<br>• *emissions to air*<br>• *releases to water*<br>• *releases to land*<br>• *use of raw materials & natural resources*<br>• *use of energy*<br>• *waste and by-products*<br>• *community & neighbours*<br>• *flora & fauna*<br>• *heritage & cultural.*<br><br>*Horizontal Directional Drilling (HDD)* |

| Sensitive Receptors | Potential Impacts | Mitigation Measures to Prevent Impacts on Natura 2000 sites |
|---|---|---|
| | | *It is proposed to use HDD method to make a new watermain connection and a new foul drainage connection to the proposed office development. HDD is a construction technique whereby a tunnel is drilled under a waterway (in this case, under River Tolka_020), and a pipeline or other utility is pulled through the drilled underground tunnel.*<br><br>**Operational Phase Mitigation**<br>• A project ecologist will be appointed to oversee completion of all landscape and drainage works.<br>• The foul and surface water drainage systems will be assessed by the project ecologist. |
| **Birds**<br><br>**(National Protection)** | • Removal nesting habitat.<br><br>• Destruction and/or disturbance | • An Ecological Clerk of Works (ECoW) will be appointed to oversee the construction phase and to oversee the implementation of all mitigation including compliance with Wildlife Acts and Water Pollution Acts and ensure that biodiversity in neighbouring areas including birds will not be impacted.<br>• Relevant guidelines and legislation (Section 40 of the Wildlife Acts, 1976 to 2012) in relation to the removal of trees and timing of nesting birds will need be followed e.g. do not remove trees or shrubs during the nesting season (1st March to 31st August). Should this not be possible a pre-clearance inspection will be carried out by an ecologist and clearance will not take place if nests are present.<br>• 20 bird boxes to be placed on site. |
| **Bats**<br><br>**(International Protection)** | • Removal roosting/foraging habitat.<br><br>• Lighting Impacts | • None of the trees of bat roosting potential including the bat roost are to be removed.<br>• Tree protection measures will be in place prior to commencement and overseen by a qualified arborist.<br>• Lighting is to be carried out so that no lighting greater than 1 lux or 1 lux greater than the baseline, is to be observed/measured on the bat roost.<br>• If levels of greater than 1 lux are see on the tree that is a bat roost the lighting is to be revised including back spill protection and other mitigation until no lighting greater than 1 lux is observed.<br>• During operation, lighting will comply with Bat Lighting Guidelines. |

# 5. Adverse Effects likely to occur from the project (post mitigation)

Standard construction and operational mitigation measures are proposed. These would ensure that contaminated water does not enter the River Tolka or its tributaries and that water entering the River Tolka during operation is clean and uncontaminated. Early implementation of ecological supervision, prior 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 bat mitigation

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. Residual impacts of the proposed project will be localised to the immediate vicinity of the proposed works and would be deemed to be minor-adverse/long term.

The construction and operational mitigation proposed for the development satisfactorily addresses the mitigation of potential impacts on terrestrial biodiversity, aquatic biodiversity and bats through design and the application of the standard construction and operational phase controls as outlined above. In particular, mitigation measures to ensure compliance with Water Pollution Acts and prevent silt and pollution entering the Tolka_020 and then the River Tolka will satisfactorily address the potential impacts on downstream biodiversity. No significant adverse impacts on designated conservation sites are likely in the absence of mitigation measures outlined above.

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.

# 6. Cumulative Impacts

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

***Table 6. Cumulative impacts considered***

| Ref. No. | Address | Proposal |
|---|---|---|
| 2660066 | The townlands of Hilltown Jarretstown Walterstown Moor of Meath Rathleek , Cappaghcreen Milestown Oranstown Castlefarm Dunboyne and Bennetstown. | Permission for a 10-year approval for development at this site consisting of up to approximately 23.99 kilometres (km) of 38 kilovolts (kV) underground cable (UGC) and all associated site and development works at various locations in County Meath with a total site area of c. 25.71 ha. The proposed development consists of the following elements: •Installation of 3no. new 38 kV underground cable routes or cable route sections and all associated site and development works within the administrative area of Meath County Council (MCC) as outlined below and illustrated on the maps herein: •The proposed Coolmine cable route section in MCC is approximately 3.42 km in length crossing the townlands of Hilltown, Jarretstown and Walterstown from east to west. • The proposed Leixlip cable route section in MCC is approximately 4.08 km in length crossing the townlands of Moor of Meath, Walterstown, Rathleek, Cappaghcreen and Milestown from south to north. • The proposed Macetown cable route is wholly within MCC and is approximately 16.49 km in length crossing the townlands of Cappaghcreen, Walterstown, Milestown, Rathleek, Oranstown, Castlefarm, Dunboyne and Bennetstown from south to north. The primary purpose of the proposed underground cables is to provide electrical power to the Dart+ West Railway project as granted under the DART+ West Railway Order (ACP Ref. 314232). The proposed underground cable routes will incorporate the following elements: • Communication links and fibre optic cables between all substations in the same trench as the UGC; • Joint bays and communication chambers along the UGC alignment; • Temporary construction laydown and work areas with ancillary staff facilities and parking, temporary access tracks, passing bays and water and utility crossings; • All associated and ancillary above and below ground site development works, including works comprising or relating to permanent and temporary construction and roadworks and excavation (including HDD) and vegetation clearance. An Environmental Impact Assessment Report (EIAR) and a Natura Impact Assessment (NIS) will be submitted to the Planning Authority with the application. |
| 2360256 | Dunboyne AFC , Summerhill Road , Dunboyne Co. Meath A86 KT68 | Permission for the erection of 6no. 15m high floodlight poles and associated lighting for the existing main pitch and training pitch along with all other ancillary site development works |
| 2660589 | Summerhill Road , Dunboyne , Co. Meath | Permission for the development will consist of the construction of a new proposed two storey dwelling and detached single storey garage, opening of a new vehicular entrance to the site and wastewater treatment system and coco filter together with all associated site development works |
| 2360065 | South-west of the M3 Parkway , and south-east of the Dunboyne Bypass (R157) , located in the Townland of Bennetstown and the balance (1.92ha) located in the Townlands of Pace Bennetstown and Dunboyne including the Dunboyne Bypass | We, McGarrell Reilly Homes intend to apply for a 10-year permission for development in the Townlands of Bennetstown, Pace, and Dunboyne. The subject site (2.79ha) encompasses an area of 0.87ha situated to the south-west of the M3 Parkway and south-east of the Dunboyne Bypass (R157) located in the Townland of Bennetstown, and the balance (1.92ha) located in the Townlands of Pace, Bennetstown and Dunboyne including the Dunboyne Bypass (R157) and M3 Parkway access, Kennedy Road and Navan Road for infrastructure works. The development will consist of: i. Construction of a single-storey commercial building with a cumulative gross floor space (GFS) of 2,160 sq.m comprising: a. A supermarket with delivery, store and service area (1,880 sq.m), including net retail floorspace of 1,510 sq.m, and b. 2 commercial units (combined 280 sq.m) to facilitate Class 1 |

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

| Ref. No. | Address | Proposal |
|---|---|---|
| | (R157) and M3 Parkway | (Shop), Class 2 (Financial, Professional and Other Services) or Café (food and beverage) uses. ii. Provision of a 4-arm signalised junction replacing the existing Pace roundabout to include a new northern arm with segregated cycleway and footpath; iii. Upgrade works to the existing R157 and M3 Parkway access road to facilitate junction improvements; iv. Access to the development is proposed via a new 3-arm priority-controlled junction from the upgraded southern arm of the proposed 4-arm signalised junction, with 6m wide internal access roads to serve the development; v. A total of 118 surface level car parking spaces including 6 disabled access bays and 4 electric car charging points; vi. 20 short-stay bicycle parking spaces; vii. 1 Electricity substation / switch room; viii. Foul sewer connection to existing public system including pumping station on site with rising mains along Kennedy Road and Navan Road; ix. Permission is also sought for hard and soft landscaping, lighting, attenuation and drainage and all ancillary site development works. Significant further information/revised plans submitted on this application |
| 2660001 | Principally located in Bennetstown (townland) to the west of the R157 and North of Kennedy Road and also extending into Pace and Dunboyne (townlands) , Dunboyne North , Co. Meath | Permission for the following Large-Scale Residential Development consisting of: 1) the demolition of 2 no. existing agricultural farm sheds and associated structures, 2) the removal of the existing GAA pitch and associated structures; 3) the construction of 356 no. residential units comprising 252 no. dwelling houses and 104 no. maisonettes/apartments/duplexes providing a mix of 1, 2, 3 and 4-bed units. The dwelling houses range in height from 2-3 storeys. The maisonettes are 2 storey in height and the apartments/duplexes are in 4 no. blocks (i.e. Blocks A-D) ranging in height from 3 to 4 storeys; 4) a 2 storey creche; 5) modifications to the R157 regional road including changes to the existing carriageway/traffic lanes, the replacement of an existing roundabout with a new signalised junction and the provision of a northern arm off the new signalised junction; 6) a new signalised junction and link road (including new bridge over the River Tolka) connecting the R157 and the Old Navan Road; 7) the provision of footpaths, cycle lanes and 2 no. pedestrian crossings on the existing M3 Parkway access road, 8) foul pumping stations and connection to the existing public sewerage system via the Old Navan Road; 9) a watermain connection to the north of the site at Pace (townland); 10) 4 no. ESB substation/kiosks; 11) construction of conveyance swales and filter drains as part of pluvial flood mitigation measures and 12) all ancillary development works including footpaths, cycle lanes, car and bicycle parking, drainage, public lighting, bin/bike storage, boundary treatments and landscaping/amenity areas at this site principally located in Bennetstown (townland) to the west of the R157 and north of Kennedy Road, and also extending into Pace & Dunboyne (townlands), Dunboyne North, Co. Meath. Access will be via 2 no. new signalised junctions on to the R157 comprising 1 no. new vehicular access point to the southeast along the R157 and via 1 no. new vehicular access point to the north along a new northern arm off a new signalised junction which will replace the existing roundabout on the R157. The planning application red line boundary overlaps with planning ref. 23/60290 (ABP Ref: 320049-24), 23/60065, 23/424, 24/60805 and 25/61001. An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) has been submitted to the planning authority with the application. Significant further information/revised plans submitted on this application |
| 2360290 | Bennetstown (townland) to the south of the M3 Parkway park and ride and rail station and also extending into Pace & Dunboyne (townlands), Dunboyne North , Co. Meath | Permission for the following Large-Scale Residential Development consisting of: i) 267 no. residential units comprising 145 no. dwelling houses and 122 no. apartments/duplexes providing a mix of 1, 2, 3 and 4-bed units. The dwelling houses range in height from 2-3 storeys. The apartments/duplexes are in 8 no. blocks (i.e. Blocks A-H, with Blocks B and C joined) ranging in height from 3 to 5 storeys; ii) a single storey creche; iii) modifications to the R157 regional road including changes to the existing carriageway/traffic lanes and the replacement of an existing roundabout with a new signalised junction; iv) a new signalised junction and link road (including new bridge over the River Tolka) connecting the R157 and the Old Navan Road; v) the |

| Ref. No. | Address | Proposal |
|---|---|---|
| | | provision of footpaths, cycle lanes and 2 no. pedestrian crossings on the existing M3 Parkway access road, vi) a foul pumping station and connection to the existing public sewerage system via the Old Navan Road; vii) a watermain connection to the north of the site at Pace (townland); viii) 3 no. ESB substation/kiosks and the undergrounding/re-routing of existing electricity lines; ix) reprofiling of land and relocation of existing berm adjoining the River Tolka as part of flood mitigation measures; and x) all associated ancillary development works including footpaths, cycle lanes, car and bicycle parking, drainage, public lighting, bin storage, boundary treatments and landscaping/amenity areas at this site measuring 14.17 hectares principally located in Bennetstown (townland) to the south of the M3 Parkway park and ride and rail station, and also extending into Pace & Dunboyne (townlands), Dunboyne North, Co. Meath. Access will be via 2 no. new vehicular access points along the new link road between the R157 and the Old Navan Road. Pedestrian access will also be provided on to the existing M3 Parkway access road. An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) has been submitted to the planning authority with the application. Significant further information/revised plans submitted with this application |
| 2460805 | principally located in Bennetstown (townland) to the west of the R157 and also extending into Pace & Dunboyne (townlands) , Dunboyne North , Co. Meath | Permission for a Large-Scale Residential Development: permission for the following Large-Scale Residential Development consisting of: i) 309 no. residential units comprising 169 no. dwelling houses and 140 no. apartments/duplexes providing a mix of 1, 2, 3 and 4-bed units. The dwelling houses range in height from 2-3 storeys. The apartments/duplexes are in 8 no. blocks (i.e. Blocks A-H) ranging in height from 3 to 4 storeys; ii) a 2 storey creche; iii) modifications to the R157 regional road including changes to the existing carriageway/traffic lanes, the replacement of an existing roundabout with a new signalised junction and the provision of a northern arm off the new signalised junction ; iii) a new signalised junction and link road (including new bridge over the River Tolka) connecting the R157 and the Old Navan Road; iv) the provision of footpaths, cycle lanes and 2 no. pedestrian crossings on the existing M3 Parkway access road, v) a foul pumping station and connection to the existing public sewerage system via the Old Navan Road; vi) a watermain connection to the north of the site at Pace (townland); vii) 3 no. ESB substation/kiosks; viii) temporary raised levels and soil storage to the south west of the site; ix) reprofiling of lands, construction of conveyance swales and a surface water runoff retention area as part of pluvial flood mitigation measures and x) all associated ancillary development works including footpaths, cycle lanes, car and bicycle parking, drainage, public lighting, bin storage, boundary treatments and landscaping/amenity areas at this site principally located in Bennetstown (townland) to the west of the R157, and also extending into Pace & Dunboyne (townlands), Dunboyne North, Co. Meath. Access will be via 2 no. new signalised junctions on to the R157 comprising 1 no. new vehicular access point to the southeast along the R157 and via 1 no. new vehicular access point to the north along a new northern arm off a new signalised junction which will replace the existing roundabout on the R157. The planning application red line boundary overlaps with planning ref. 23/60290, 23/60065 and 23/424. An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) has been submitted to the planning authority with the application |
| 23424 | Bennetstown , Pace , Dunboyne Co. Meath | Permission for the development will consist of: i. Construction of 3 no. office buildings with a cumulative gross floor area (GFA) of 13,729 sq.m ranging in height from 3 to 4- storeys and shall comprise the following: a. Building 1 (3,597 sq.m GFA) 3-storeys in height (12.35 metres to top of parapet), with a set back louvred screen 2m above parapet level. b. Building 2 (5,336 sq.m GFA) 4-storeys in height (16.125 metres to top of parapet), with a set back louvred screen 2m above parapet level. c. Building 3 (4,796 sq.m GFA) 4-storeys in height (16.125 metres to top of parapet), with a set back louvred screen 2m above parapet level. ii. Roof mounted solar PV panels (c. 180 sq.m |

| Ref. No. | Address | Proposal |
|---|---|---|
| | | combined area); iii. Provision of a 4-arm signalised junction replacing the existing Pace roundabout to include a new northern arm with segregated cycleway and footpath; iv. Access to the development is proposed from the new northern arm, with 6m wide internal access roads to serve the development; v. Upgrade works to the R157 and M3 Parkway access road to facilitate junction improvements; vi. A total of 275 surface car parking spaces including 14 disabled access bays and 55 electric car charging points; vii. 280 bicycle parking spaces in 3 secure cycle storage areas adjacent to the buildings; viii. Site signage is to be erected, all spot-lit and back-lit illuminated, including 2 no. type 1 entrance signs (6.15m x 2.4m) and 3 no. type 2 building signs (1.35m x 2.4m); ix. 3 standalone electricity substations; x. Foul sewer connection to existing public system including pumping station on site with rising mains along Kennedy Road and Navan Road; xi. Watermain connection to the north east of site at Pace for connection to Irish Water Infrastructure; xii. Permission is also sought for associated landscaping, boundary treatments, public lighting, plant, waste storage and all ancillary site and development works. A Natura Impact Statement (NIS) has been prepared in respect of the proposed development. Signficant further information/revised plans submitted on this application |
| 2660607 | Bennetstown (townland) to the south of the M3 Parkway park and ride and rail station , Dunboyne North , Co. Meath | Permission for a Large-Scale Residential Development - Permission for the following Large-Scale Residential Development (LRD) comprising of i) the construction of 124 no. apartments in blocks A, B and C ranging in height from 4-5 storeys ; ii) a foul pumping station iii) and all ancillary development works including footpaths, cycle lanes, car and bicycle parking, drainage, public lighting, an ESB substation; and landscaping/amenity areas at this site located in Bennetstown (townland) to the south of the M3 Parkway park and ride and rail station, Dunboyne North, Co. Meath. The proposed development will replace 76 no. apartments previously permitted under Meath County Council Ref. 23/60290 (An Coimisiún Pleanála ref. 320049-24). An Environmental Impact Assessment Report (EIAR) addendum report has been submitted to the planning authority with the application. The EIAR addendum report will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy during public opening hours at the offices of the Local Authority. The application may be inspected online at the following website set up by the applicant: www.bennetstown5lrd.ie |
| 2460625 | Lands at Old Navan Road , Dunboyne , Co. Meath | Permission for the proposed development will consist of the following: a) Development of 171 no. residential units as follows: i. 114 no. houses comprising 101 3-bedroom houses, and 13 no. 4-bedroom houses, ranging in size from c. 107.6 sqm to c. 153 sqm, all 2-storeys in height. Each house will have an associated rear/side private garden. ii. 57 no. apartment/duplex units comprising the following: 5 no. 1-bedroom units of c. 56 sqm to 66.9 sqm, 26 no. 2-bedroom units of c. 78.8 sqm to 120.2 sqm., and 26 no. 3-bedroom units of c. 119 sqm to 128.6 sqm. in 7 no. blocks ranging in height from 2 to 3 storeys. All apartment and duplex units will be provided with private open space areas in the form of balconies/terraces. iii. Communal open space associated with the proposed apartment units will be provided in the form of landscaped areas located in the vicinity of the apartment units (of c. 595 sqm). iv. Provision of 301 no. car parking spaces across the development site (inclusive of accessible (4 no.) and EV (60 no.) parking spaces) and 195 no. bicycle parking spaces for residents and visitors of the scheme provided throughout the development site. b) 1 no. childcare facility of c. 161 sqm with associated outdoor amenity space of c. 40sqm. c) The provision of landscaped public open space amenity areas (totalling c. 6971 sqm). d) Surface water drainage infrastructure on a site of c. 0.36 ha on the eastern side of the railway line (all lands in the control of the applicant). e) Section of the Dunboyne Eastern Distributor Road from the western site boundary with Navan Road to the eastern site boundary. This includes all associated vehicular and pedestrian accesses, carriageways, paths and junctions. The following planning application - Meath Co. Co. Reg Ref 24/60063 – encroaches the application lands in this regard. f) The |

| Ref. No. | Address | Proposal |
|---|---|---|
| | | development will also consist of all associated site development works, demolition of an existing disused entrance way, services provision, infrastructural and drainage works, vehicular connections, internal access roads, homezones, cycle and pedestrian infrastructure, bin stores, bicycle stores, apartment storage, carparking, public lighting, communal and public open space, private open space in the form of the terraces/balconies, and rear/side gardens, as well as all landscape treatment works. Significant further information/revised plans submitted on this application |
| 2460063 | Lands at Station Road Pace Line Bracetown , Townlands: Dunboyne Castlefarm , Co. Meath | Permission for the proposed road development comprises of: • Construction of a new carriageway (c.1.46km) between Navan Road and Station Road (L2228); • Construction of a carriageway featuring 1 no. 3-3.5m wide lane of traffic in each direction; • A proposed design speed of 50 km/h; Provision of 2m wide cycle lanes on both sides of the corridor; • Provision of 2m wide footpaths on both sides of the corridor; • 3m landscaped verges to provide a buffer between the proposed cycle facilities and vehicular traffic. These verges could be converted into a potential bus lane in the future; • Construction of a new bridge over the existing railway line including embankments, bridge length c 22.5 m without embankments, height of a bridge underpass c 5.5 m; • Provision of 11 no. new priority junctions off the Eastern Distributor Road to provide a new access to Dunboyne Rail Station, to serve future residential development lands and lands zoned as 'G1-Community Infrastructure' to the east of the subject site. These junctions will be provided as raised tables to ensure priority for pedestrians and cyclists; • Provision of a new signal-controlled junction including a right turn lane off Navan Road in continuation of Dunboyne Business Park Road at the northern end of the proposed distributor road; • Provision of a new signal-controlled junction including turning lanes off Station Road aligned opposite to an already constructed segment of a distributor road (entrance to Castle Farm Residential Development); • Removal of the existing train station car park entrance road from Station Road and its replacement with a new access road off the proposed distributor road. It will also include ancillary works: • Drainage works; • Public lighting; • Traffic signals; • Road marking and signage; • Associated landscaping works; • Miscellaneous ancillary works above and below ground level including soil stabilisation works. Temporary areas necessary for construction phase include: • Provision of 2no. temporary construction compounds necessary for construction phase; • Provision of 2no. temporary storage areas for excavated spoil material with maximum capacities of c.25,000m3 and c.8,000m3; • 5m buffer area at identified locations along the proposed development. This planning application is accompanied by an Environmental Impact Assessment Report. Significant further information/revised plans submitted on this application |
| 2460709 | Station Road (L2228) and Old Navan Road (R147) , Dunboyne Co. Meath , townlands of Dunboyne Clonee Castle Farm and Loughsallagh | Permission for a 10 year Planning Permission of a Large-Scale Residential Development on a site of approx 21.9 ha in total and 15.74 ha net developable area respectively, at Lands at Station Road (L2228) and Old Navan Road (R147), Dunboyne, Co. Meath in the townlands of Dunboyne, Clonee, Castle Farm and Loughsallagh. The principle application site is generally bounded by Station Road (L2228) to the south, Dunboyne Train Station and the Iarnród Éireann rail line to the West, a cluster of detached houses to the south east, greenfield lands to north and east. The application includes also modifications to 2 no. roundabouts on the Old Navan Road, (R147). Development comprises: - a) Construction of 853 no. residential units as follows: 1) 398 no. Apartment Units in 3 no. 1-6 storey blocks (A-C) consisting of 121 no. 1-bedroom apartments; 258 no. 2-bedroom apartments; and 19 no. 3-bedroom apartments. All apartment units will be provided with private open space areas in the form of balconies/terraces. 2) 112 no. Duplex Units in 6 no. 2-4 storey blocks (D-H) consisting of 60 no. 2-bedroom units, 52 no. 3-bedroom units. All duplex units will be provided with private open space areas in the form of balconies/terraces. 3) 343 no. 1-3 storey houses consisting of 4 no. 2-bedroom units, 308 no. 3-bedroom units, 31 no. 4-bedroom units. ....TBC |

| Ref. No. | Address | Proposal |
|---|---|---|
| 23849 | Castlefarm Rusk Clonee , Dunboyne , Co. Meath | Permission for a 10-year permission for a Large-Scale Residential Development at this site in the Townlands of Castle Farm, Ruskin and Clonee, Dunboyne, County Meath on lands generally bound to the east and south by agriculturally zoned lands, to the west by the larnr6d Eireann rail line, and to the north by the residential development permitted under Meath County Council (MCC) Reg. Ref. RA180561, agricultural lands and the L2228 (Station Road/Clonee Road). Alterations to two no. roundabouts on the R147 (Old Navan Road) is also proposed and these are located on lands in the townlands of Loughsallagh and Clonee, Dunboyne, County Meath. The proposed development is on a site of approximately 16.92Ha overall and consists of 716no. dwellings in a mixture of terraced, semi-detached and detached houses, duplexes and apartments as follows: • 517no. apartment units are accommodated in 8no.buildings of 4-7 storeys in height comprising: l0no. 1-bed apartments, 202no. 2-bed apartments and 24no. 3-bed apartments accommodated in 4no. 4-6 storey apartment blocks (Blocks Al, A2, A3 and A4); 55no. 1-bed apartments, 80no. 2-bed apartments and 12no. 3-bed apartments accommodated in 2no. 6-7 storey apartment blocks (Blocks Bl and B2); 36no. 1-bed apartments, 78no. 2-bed apartments and 20no. 3-bed apartments accommodated in 2no. 4-5 storey apartment blocks (Blocks Cl and C2)…….. An Environmental Impact Assessment Report and Natura Impact Statement have been prepared in respect of the proposed development and accompany this application. |
| 2660481 | Lands within the townland of Dunboyne , Dunboyne , Co. Meath | Permission for a Large-Scale Residential Development - Apply for Permission for a period of 8 Years for a Large-Scale Residential Development at a site (c. 7.93 Ha) bounded generally by Station Road (L2228) to the south, Dunboyne Train Station and the Iarnród Éireann rail line to the west, greenfield lands to the north and east on lands in the townland of Dunboyne, Dunboyne, County Meath. The development comprises 314 no. residential units consisting of 234 no. houses, 2 to 3 storeys in height, comprising of 3 no. 2-bed houses, 167 no. 3-bed houses, 64no. 4-bed houses and 4no. apartment blocks, 1 to 5 storeys in height, accommodating 80 no. apartments comprising, 17no. 1-bed apartments, 63no. 2-bed apartments with balconies/terraces; a childcare facility (c. 396.3 sqm) at ground floor of apartment Block D. Vehicular access from Station Road (L2228) is to be provided by the Dunboyne Eastern Distributor Road as previously permitted under MCC Reg. Ref. 24/60709. All ancillary site development and landscape works, including new internal access roads, footpaths, lighting, public open space (1.74 Ha), 486no. car parking spaces, 489 no. bicycle parking spaces, communal open space, ESB sub-stations, bin storage and boundary treatments. The proposed development seeks amendments to approximately 7.93Ha of an already permitted residential development under MCC Ref. 24/60709 on an overall site of 21.9Ha, so as now to provide 865 units overall and includes adjustments to phasing and represents an increase of 55 additional units, overall. |
| 2460468 | Station Road , Dunboyne , Co Meath | Permission for the development, on a site area of c.2.14Ha, located at Station Road, Dunboyne, Co. Meath, in the townland of Castle Farm, south and east of the existing Castle Farm residential development. The proposed development consists of 76 no. dwellings, comprised of 42 no. 1, 2 & 3 bedroom apartments and duplex units, accommodated in 4 no. 2-3 storey buildings, and 34 no. 2, 3 and 4 bedroom, 2 & 3 storey, terraced, semi-detached and detached houses. Permission is also sought for a creche (c. 324sq.m) located on the ground floor of Block L, which will replace the creche permitted (under Ref. RA/180561) in the adjoining phase of the Castle Farm development. Access to the development will be via the constructed access road to Castle Farm, directly off Station Road. The proposed development also provides for all associated site development works, above & below ground, public and communal open spaces, including hard & soft landscaping and boundary treatments, car & bicycle parking, bin stores, public lighting etc. The effect of the proposed development will result in a |

| Ref. No. | Address | Proposal |
|---|---|---|
| | | modification to an extant permission under Ref. RA/180561. Significant further information/revised plans submitted on this application |
| 2560854 | Site in the Townlands of Castlefarm Rusk and Clonee Dunboyne County Meath on lands generally bound to the east and south by agriculturally zoned lands to the west by the Iarnród Éireann rail line , and to the north by the residential development perm | Permission for a Large-Scale Residential Development - the development will comprise amendments to the permitted development as per Large-scale Residential Development permission reference 23/849 which comprises 517no. apartment units, 44no. duplex units,155no. 2storey houses, a creche and associated site works. The proposed development incorporates the following amendments: (I) Reconfiguration of apartment block B1 with reduction of associated basement parking and provision of ground level parking in lieu of same. Apartment block B1 is amended with omission of 3no. 2 bed apartments to comprise a total of 67 apartments in lieu of 70 apartments as granted. (II) The omission of the Creche from apartment block B1 with a new two storey creche to be provided. (III) Revised phasing and associated site works. (IV) Reconfiguration of apartment block B2 with reduction of basement parking and provision of ground level parking in lieu of same. Apartment block B2 unit mix is amended with omission of 5no. 1 bed apartments and 3no. 2bed apartments to comprise 69 apartments in lieu of 77 apartments as granted. (V) The reduction in basement parking provision and overall parking provision will be amended by the provision of additional spaces at ground level. Revisions to bicycle storage provision are also proposed. (VI) Amendments to the design of duplex units (unit type D) comprising revised facades and roof designs to incorporate provision of a mono-pitch roof in lieu of previously approved pitch roofs. (VII) The amendment of 44no. duplex units from 1bed and 2bed units to now incorporate 2bed and 3bed units; (no change in overall duplex unit numbers proposed). (VIII) The overall residential unit numbers will decrease to 506no. apartment units, 44no. duplex units and 155no. dwelling houses (705 residential units in lieu of 716 units as granted). (IX) A revised phasing proposal with the creche provided in phase 1B. (X) Reconfiguration of public open space and communal space and associated site works.A Natura Impact Statement (NIS) has been prepared in respect of the proposed development and accompanies this application |
| 22675 | Station Road , Dunboyne , Co. Meath | Permission for the proposed development will consist of (a) the construction of 8 no. two storey semi-detached houses with habitable attic accommodation, 2 no. two storey end-terrace houses with habitable attic accommodation, 2 no. two storey mid terrace houses, a three storey apartment building accommodating 9 no. apartments with communal access, a bicycle storage building and a bin storage area (b) provision of public open space, landscaping and public lighting; (c) provision of vehicular and pedestrian access via Elton Grove; (d) provision of pedestrian/cyclist access to Station Road including improvement works to existing public paths; (e) provision of a shared pedestrian/cyclist route to the boundary of the Western platform of Dunboyne Railway Station and (f) associated site works on site. Significant further information/revised plans submitted on this application |

| Ref. No. | Address | Proposal |
|---|---|---|
| 21852 | Dunboyne Castle Hotel & Spa , Dunboyne , Co Meath | EXTENSION OF DURATION OF PLANNING APPLICATION RA151320 - the development will consist of - (i) 28 no. two storey and two and a half storey houses arranged in 5 no. terrace blocks to form courtyard type development. (ii) Apart-hotel consisting of 13 no. 2 bedroom hotel suites and 2 no. 3 bedroom hotel suites and cookery school/meeting space (284.2sq.m) - with adjoining kitchen garden - in 1 no. 3 storey (part 3.5 storey) block and all associated site development works including connections to existing services, parking etc. within the existing hotel grounds. The proposed development is located within the curtilage of a Protected Structure. Significant Further information / Revised plans submitted on this application |
| 211293 | 100m South of Gaelscoil Thulach Na Nog , Rooske Road , Dunboyne Co Meath | Permission for the construction of a new single storey primary school building which is to include 5 no. mainstream classrooms, a new dedicated special needs unit consisting of two safe base classrooms, general purpose hall, central activities space, multi-sensory room, new school office, ancillary accommodation and all associated site development works, with new boundary treatments to the east, south and west perimeters |
| 21629 | Dunboyne Junior + Senior NS , Station Road , Dunboyne Co. Meath | Permission for the development to which the permission relates: (i) Demolition of an existing c.1088 m2 temporary structure. (ii) Demolition of an existing c.2125 m2 Senior School building. (iii) Construction of new 4447 m2 two storey - Senior School building, located on parish owned lands to the north of the Junior School building. (iv) Refurbishment and construction of new 2120 m2 two storey extension (replacing existing temporary accommodations). (v) Newly configured approach - avenue to the east of the site - off Station Road with new road layout for both schools, bus and cars set-downs, staff car parks, improvement of the existing footpaths/cycle-lanes and all associated external works, hard play areas, soft landscaping, boundary treatment and new vehicular and pedestrian gates along Station Road |

As a result of the assessment carried out in relation to the above projects and supporting documentation, it is concluded that no significant effects on European sites will be seen as a result of the proposed development alone or in combination with other projects.

**No significant effects are likely from in-combination effects**.

# 7. 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 overall are considered to be: Low adverse / site / Negative Impact / Not significant / short term.

# 8. References


9. **Bat Conservation Ireland 2004** on-going, *National Bat Record Database.* Virginia, Co. Cavan
10. **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
11. **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1982**
12. **Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979**
13. **EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive) 1992**
14. **Jefferies, D.J. 1972** Organochlorine insecticide residues in British bats and their significance. *Journal of Zoology*, London **166**: 245 - 263
15. **Kelleher, C. 2004**, Thirty years, six counties, one species – an update on the lesser horseshoe bat *Rhinolophus hipposideros* (Bechstein) in Ireland – *Irish Naturalists' Journal* **27**, No. 10, 387 – 392
16. **Kelleher, C. 2015** *Proposed Residential Development, Church Road, Killiney, Dublin: Bat Fauna Study*. Report prepared for Altemar Marine and Environmental Consultants
17. **Marnell, F., Kingston, N. and Looney, D. 2009** *Ireland Red List No. 3: Terrestrial Mammals.* National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin
18. **Racey, P.A. and Swift, S.M. 1986** The residual effects of remedial timber treatments on bats. *Biological Conservation* **35**: 205 – 214
19. **Smal, C.M.** 1995 *The Badger & Habitat Survey of Ireland.* The Stationery Office, Dublin
20. **Wildlife Act 1976 and Wildlife [Amendment] Act 2000**. Government of Ireland.
21. The Status of EU Protected Habitats and Species in Ireland. http://www.npws.ie/publications/euconservationstatus/NPWS_2007_Conservation_Status_Report.pdf
22. NPWS (2021) Conservation Objectives: Rye Water Valley/ Carton SAC 001398. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
23. NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
24. NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
25. NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
26. NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
27. NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

ALTEMAR
Marine & Environmental Consultancy

# 2025/2026 Wintering Bird Assessment for a Proposed Large-Scale Residential Development (LRD) at Summerhill Road, Dunboyne, Co. Meath.



**20th of August 2026**

**Prepared by:** Ciara Lynn Sheehan of Altemar Ltd.
**On behalf of:** D/RES Properties for Solkerry Ventures Limited

Altemar Ltd., 50 Templecarrig Upper, Delgany, Co. Wicklow. 00-353-1-2010713. info@altemar.ie
Directors: Bryan Deegan and Sara Corcoran
Company No.427560 VAT No. 9649832U
www.altemar.ie

| Document Control Sheet | | | |
|---|---|---|---|
| Client | D/RES Properties for Solkerry Ventures Limited | | |
| Project | 2025/2026 Wintering Bird Assessment for a Proposed Large-Scale Residential Development (LRD) at Summerhill Road, Dunboyne, Co. Meath. | | |
| Report | Wintering Bird Assessment | | |
| Date | 20th of August 2026 | | |
| Version | Author | Reviewed | Date |
| Planning | Ciara Lynn Sheehan | Frank Spellman | 20th of August 2026 |

# Summary

| | |
|---|---|
| **Structure/features:** | The proposed development area consists mainly of a arable crop with areas of dry meadows and grassy verges, scrub, roads classified as buildings and artificial surfaces, some hedgerows and treelines, and a small watercourse that connects to the River Tolka. |
| **Location:** | Summerhill Rd, Dunboyne, Co. Meath. |
| **Bird species present:** | Blackbird, black-headed gull, bullfinch, buzzard, chaffinch, dunnock, goldcrest, great tit, grey heron, herring gull, hooded crow, jackdaw, long-tailed tit, robin, song thrush, starling, woodpigeon, wren. |
| **Proposed work:** | Large-scale Residential Development |
| **Surveys by:** | Frank Spellman (Altemar) |
| **Survey dates:** | 21st November 2025, 11th December 2025, 8th January 2026, 4th February 2026, 5th March 2026. |




***Figure 1.*** *Wintering bird survey areas.*




***Figure 2.*** *Wintering bird survey location.*

## Competency of assessor

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.

This report has been prepared by Ciara Lynn Sheehan and reviewed by Frank Spellman, both of Alemar Ltd.

**Ciara Lynn Sheehan (BSc Ecology and Environmental Biology)**

Bryan Deegan, the managing director of Altemar, is an Environmental Scientist and Marine Biologist with 32 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently lead project ecologist for Project Pembroke and was 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).

**Frank Spellman (BSc Zoology, MSc (Ind) Zoology).**

Frank 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, and freshwater ecology surveys. Frank has been lead ornithologist on numerous development projects within Ireland carrying out full wintering bird and breeding bird assessments.

## Legislative context

The Wildlife Act 1976 protects wild birds in Ireland. Based on this legislation it is an offence to wilfully interfere with or destroy wild birds and their nests and eggs (other than the wild species mentioned in the Third Schedule of this Act). Under this legislation it is an offence for any person who "*wilfully takes or removes the eggs or nest of a protected wild bird otherwise than under and in accordance with such a licence, wilfully destroys, injures or mutilates the eggs or nest of a protected wild bird, wilfully disturbs a protected wild bird on or near a nest containing eggs or unflown young.*"

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).

Council Directive 2009/147/EC 2010 on the conservation of wild birds provides for the conservation of wild birds by, among other things, classifying important ornithological sites as Special Protection Areas. The Directive relates to the conservation of all species of naturally occurring birds in the wild state, their eggs, nests and habitats in the European territory of the Member States. The Directive prohibits in particular:

- deliberate killing or capture by any method;
- deliberate destruction of, or damage to, their nests and eggs or removal of their nests;
- taking their eggs in the wild and keeping these eggs even if empty;
- deliberate disturbance of these birds particularly during the period of breeding and rearing, in so far as disturbance would be significant having regard to the objectives of this Directive;
- keeping birds of species the hunting and capture of which is prohibited.

Under the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), notwithstanding any consent, statutory or otherwise, given to a person by a public authority or held by a person, except in accordance with a licence granted by the Minister under Regulation 54, a person who in respect of the species referred to in Part 1 of the First Schedule:

- deliberately captures or kills any specimen of these species in the wild,
- deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration,
- deliberately takes or destroys eggs of those species from the wild,

- damages or destroys a breeding site or resting place of such an animal, or
- keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive, shall be guilty of an offence.

# Wintering bird surveys

This report presents the methodology and results of 5 visits to the Project Development site in Dunboyne by Frank Spellman from November 2025 to March 2026.

## Survey methodology

Wintering bird surveys were carried out during the wintering bird season in Dunboyne in order to gather baseline data to assist in assessing the potential impacts on wintering birds from future proposed developments on the site, in particular those listed as Qualifying Interests of SPAs within 15 km and other amber/red-listed birds of conservation concern in Ireland (BoCCI). Potential impacts on wintering bird species include disturbance, destruction of foraging areas, destruction of roosting areas and collision risk during construction and operation (cranes, buildings etc.). These wintering bird surveys were carried out based on the BTO Common Bird Census (Bibby *et al.*, 2000 and Gilbert *et al.*, 1998) and I-WeBS Counter Manual: Guidelines for Irish Wetland Bird Survey counters (BWI & NPWS), following CIEEM guidelines.

A 15-minute settlement period was given following arrival to allow resumption of bird activity after any possible disturbance caused by arrival to the site. Various features such as arable crop, grassland, scrub, watercourses, hedgerows, and treeline were present within and adjacent to the survey area. A roving transect survey around the perimeter was carried out on each occasion, providing clear views of all areas within and over that survey area. Flight lines, large flights, foraging, perching, bathing and any other observed behaviour by wintering bird species and other species observed within, over and immediately adjacent to the survey area were recorded. Each survey was carried out by a single surveyor. A pair of binoculars were used by the surveyor to identify and count birds at distance.

Care was taken not to double count any observations. Surveys were initiated at varying times (morning/midday/afternoon) to account for fluxes in bird activity and birds transiting to/from foraging and roosting areas. Local temperatures varied from 4 – 12°C. Winds varied from 1 – 2 on the Beaufort scale. Weather conditions were favourable on all occasions.

Peak counts for the survey area were compared to 1% national and international population sizes of relevant species for which data was available. Foraging areas, flight paths, large flights and other observations were mapped according to field sheet records.

# Survey results/discussion

## Habitats of wintering bird potential

A desk and ground level wintering bird habitat assessment were carried and used to examine the structures, features and vegetation on site that could provide wintering bird habitat. Potential features associated with foraging/roosting include agricultural fields, improved/amenity grassland, scrub, watercourses and drainage ditches, estuaries and intertidal zones. All open areas, vegetated areas, built areas and water-holding features within and immediately adjacent to the site were assessed for wintering bird potential.

Habitat of foraging value for wintering birds was limited throughout the site. The site consisted mainly of arable crop, grassland, areas of scrub, hedgerows and treelines. A small watercourse was present in the east of the site with some rushes, but with no significant vegetation/reed cover. There were no structures present within the site. The nearest SPA to the Proposed Development site is the South Dublin Bay and River Tolka Estuary SPA, located 17.73 km for the project site.

## Wintering bird activity survey

A total of 18 species were recorded within, above and immediately adjacent to the survey area across 5 surveys (see Appendix 1a for individual observations of target species). 14 green and four amber listed bird species of conservation concern in Ireland (BoCCI) were recorded either within, over and immediately adjacent to the survey area (Table 1). Details regarding the status, behaviour and abundances of species recorded on/over/adjacent to the site relevant to the conservation interests of Special Protected Areas (SPAs), any red listed BoCCIs and birds of prey are discussed below.

**Herring gull (amber BoCCI)** was observed in flight over the survey area during all five surveys. A total of 21 observations of herring gull were made. This species was observed in flight over and adjacent to the survey area. No particular patterns in flights were noted. Flights likely demonstrate movements between foraging/roosting areas. Multiple foraging opportunities exist for gull species in the form of arable fields, agricultural fields and urban/suburban environments in surrounding area. Peak count was 14 individuals. This species is not listed as a Qualifying Interest of any SPAs within or beyond 15 km of the project site. The peak number is below 1% of the international population (Table 2). Observations are demonstrated in Figure 3.

**Black-headed gull (amber BoCCI)** was observed in flight over the survey area on three occasions. A total of 4 observations of black-headed gull were made. This species was primarily observed flying over, or adjacent to, the site. No particular pattern was noticed in flight movements. Multiple foraging opportunities exist for gull species in the form of arable fields, agricultural fields and urban/suburban environments in surrounding area. No foraging was observed within the survey area. Peak count was 2 individuals. This species is an SCI of the nearest SPA, South Dublin Bay and River Tolka Estuary SPA. The peak number is below 1% of the international population (Table 2). Observations are demonstrated in Figure 3.

**Buzzard (green BoCCI)** was observed on one occasion. Peak count was 1 individual (Table 2). This species was recorded flying east to west over the survey area. Suitable foraging habitat exists throughout the project site and the surrounding area. This species is not an SCI for the nearby SPAs. Observations are demonstrated in Figure 3.

**Grey heron (green BoCCI)** was observed on one occasion. Peak count was 2 individuals (Table 2). This species was recorded flying west to east over the survey area. Suitable foraging habitat exists throughout the project site and the surrounding area. This species is not an SCI for the nearby SPAs. Observations are demonstrated in Figure 3.

***Table 1.*** *Total species recorded within, above and/or immediately adjacent to the*

| Common name | BTO | Latin name | BoCCI |
|---|---|---|---|
| **Blackbird** | B. | *Turdus merula* | Green |
| **Black-headed Gull** | BH | *Larus ridibundus* | Amber |
| **Bullfinch** | BF | *Pyrrhula pyrrhula* | Green |
| **Buzzard** | BZ | *Buteo buteo* | Green |
| **Chaffinch** | CH | *Fringilla coelebs* | Green |
| **Dunnock** | D. | *Prunella modularis* | Green |
| **Goldcrest** | GC | *Regulus regulus* | Amber |
| **Great Tit** | GT | *Parus major* | Green |
| **Grey Heron** | H. | *Ardea cinerea* | Green |
| **Herring Gull** | HG | *Larus argentatus* | Amber |
| **Hooded Crow** | HC | *Corvus cornix* | Green |
| **Jackdaw** | JD | *Corvus monedula* | Green |
| **Long-tailed Tit** | LT | *Aegithalus caudatus* | Green |
| **Robin** | R. | *Erithacus rubecula* | Green |
| **Song Thrush** | ST | *Turdus philomelos* | Green |
| **Starling** | SG | *Sturnus vulgaris* | Amber |
| **Woodpigeon** | WP | *Columba palumbus* | Green |
| **Wren** | WR | *Troglodytes troglodytes* | Green |

***Table 2.*** *Peak counts of target bird species recorded within, above and/or immediately adjacent to the survey*

| Species | Peak count (2025/26) | 1% national | 1% international |
|---|---|---|---|
| Black-headed Gull | 5 | n/a | >10,000 [1] |
| Buzzard | 1 | n/a | n/a |
| Grey Heron | 2 | n/a | n/a |
| Herring Gull | 14 | n/a | >1,000 [1] |

[1] AEWA. (2022). *AEWA Conservation Status Review 8 (CSR8) Report on the conservation status of migratory waterbirds in the agreement area*. Eight Edition. Agreement on the Conservation of African-Eurasian Migratory Waterbirds, September 2022. *

*Out of caution, where discrepancies in international flyway estimates occurred between sources, the lowest estimate was utilised.

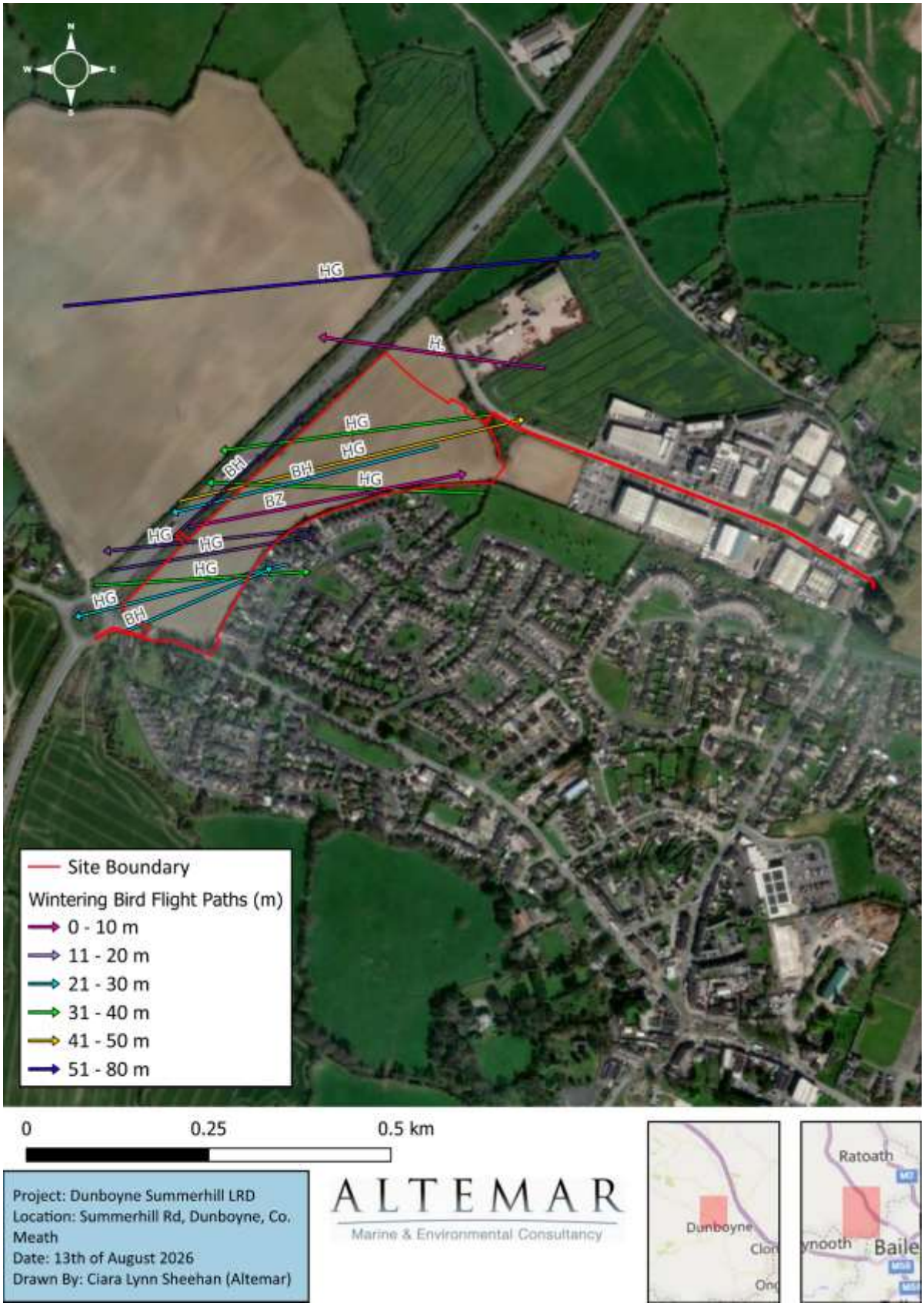



***Figure 3.*** *Flight observations of BoCCI species within, over and immediately adjacent to the survey area.*

# Wintering bird assessment findings

## Review of local bird records

The review of existing bird records (sourced from NBDC Database) within a 2 km$^2$ grid (Reference grids O04B) encompassing the study area reveals that 25 known bird species have previously been observed and recorded locally (*Table 3*).

***Table 3:*** *NBDC bird records within 2 km$^2$ (grids O04B)*

| Species Name | Record Count | Date of Last Record | Dataset | BoCCI Status |
|---|---|---|---|---|
| Blackcap (*Sylvia atricapilla*) | 1 | 14/03/2023 | Birds of Ireland | |
| Blue Tit (*Cyanistes caeruleus*) | 1 | 03/08/2019 | Birds of Ireland | |
| Buzzard (*Buteo buteo*) | 1 | 31/12/2011 | Bird Atlas 2007 - 2011 | |
| Chiffchaff (*Phylloscopus collybita*) | 1 | 31/07/2019 | Birds of Ireland | |
| Coal Tit (*Periparus ater*) | 2 | 30/03/2023 | Birds of Ireland | |
| Collared Dove (*Streptopelia decaocto*) | 1 | 03/09/2018 | eBIRD Bird Records for Ireland | |
| Great Tit *(Parus major*) | 1 | 03/08/2019 | Birds of Ireland | |
| Greenfinch (*Chloris chloris*) | 1 | 30/03/2023 | Birds of Ireland | Protected Species: Wildlife Acts \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List |
| House Martin (*Delichon urbicum*) | 4 | 16/07/2020 | Birds of Ireland | Protected Species: Wildlife Acts \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List |
| House Sparrow (*Passer domesticus*) | 1 | 13/07/2019 | Birds of Ireland | Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List |
| Jackdaw (*Coloeus monedula*) | 2 | 13/07/2019 | Birds of Ireland | |
| Lesser Redpoll (*Acanthis cabaret*) | 1 | 30/03/2023 | Birds of Ireland | |
| Little Egret (*Egretta garzetta*) | 2 | 31/03/2020 | Birds of Ireland | Protected Species: Wildlife Acts \|\| Protected Species: EU Birds Directive \|\| Protected Species: EU Birds Directive >> Annex I Bird Species |
| Long-tailed Tit (*Aegithalos caudatus*) | 1 | 01/09/2019 | Birds of Ireland | |
| Merlin (*Falco columbarius*) | 1 | 31/12/2011 | Bird Atlas 2007 - 2011 | Protected Species: Wildlife Acts \|\| Protected Species: EU Birds Directive \|\| Protected Species: EU Birds Directive >> Annex I Bird Species \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List |
| Moorhen (*Gallinula chloropus*) | 1 | 14/05/2012 | Birds of Ireland | |
| Raven (*Corvus corax*) | 1 | 26/07/2025 | Birds of Ireland | |
| Rook (*Corvus frugilegus*) | 2 | 25/07/2019 | Birds of Ireland | |
| Sparrowhawk (*Accipiter nisus*) | 1 | 04/08/2025 | Birds of Ireland | Protected Species: Wildlife Acts |
| Starling (*Sturnus vulgaris*) | 2 | 15/05/2020 | Birds of Ireland | Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List |
| Stonechat (*Saxicola rubicola*) | 1 | 06/07/2019 | Birds of Ireland | Protected Species: Wildlife Acts |
| Swallow (*Hirundo rustica*) | 2 | 24/06/2020 | Birds of Ireland | Protected Species: Wildlife Acts \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List |
| Swift (*Apus apus*) | 12 | 24/06/2025 | Swifts of Ireland | Protected Species: Wildlife Acts \|\| Threatened Species: Birds of Conservation Concern \|\| Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List |
| Woodpigeon (*Columba palumbus*) | 1 | 06/07/2020 | Birds of Ireland | |
| Wren (*Troglodytes troglodytes*) | 1 | 03/08/2019 | Birds of Ireland | |

# National Summary

| Species | Trend (%) National - 5 Year | National - 12 Year | National - 23 Year | Long Term Trend |
|---|---|---|---|---|
| Scaup | -33.6 | -82.9 | -89.2 | Large Decline |
| Pochard | -19.8 | -60.4 | -79.1 | |
| Goldeneye | -32.5 | -39.0 | -66.9 | |
| Lapwing | -6.5 | -45.1 | -63.9 | |
| Grey Plover | -21.9 | -42.8 | -58.8 | |
| Golden Plover | -17.5 | -58.0 | -54.1 | |
| Dunlin | 5.9 | -21.2 | -45.2 | Moderate Decline |
| Curlew | -9.4 | -23.7 | -43.1 | |
| Turnstone | -33.6 | -46.0 | -23.7 | Intermediate Decline |
| Coot | -10.1 | 1.1 | -23.2 | |
| Mallard | -11.3 | -19.7 | -19.1 | |
| Wigeon | 0.9 | -17.0 | -18.2 | |
| Tufted Duck | -20.7 | -28.9 | -17.9 | |
| Red-breasted Merganser | -12.9 | 5.2 | -14.7 | |
| Pintail | -0.8 | -6.0 | -13.7 | |
| Great Crested Grebe | -39.5 | -6.1 | -10.8 | |
| Shoveler | 23.0 | -21.3 | -10.8 | |
| Knot | 0.0 | -12.2 | -9.8 | |
| Bar-tailed Godwit | -32.6 | -13.9 | -5.1 | |
| Ringed Plover | -4.3 | -26.8 | -1.1 | |
| Grey Heron | 1.0 | -4.9 | 6.6 | Stable or Increasing |
| Redshank | -14.0 | -28.4 | 6.7 | |
| Shelduck | 6.3 | -0.8 | 9.3 | |
| Oystercatcher | -17.5 | -31.1 | 10.8 | |
| Mute Swan | 4.6 | 9.6 | 13.8 | |
| Teal | 1.8 | 5.7 | 19.4 | |
| Purple Sandpiper | -36.4 | -37.6 | 23.5 | |
| Gadwall | -26.5 | 4.3 | 24.4 | |
| Little Grebe | 6.1 | 16.7 | 38.2 | |
| Greenshank | 0.9 | 7.3 | 41.0 | |
| Cormorant | 38.5 | 8.4 | 42.9 | |
| Sanderling | -23.8 | -11.1 | 84.6 | |
| Black-tailed Godwit | 22.5 | 25.0 | 92.3 | |
| Light-bellied Brent Goose | -11.2 | 1.2 | 93.3 | |
| Little Egret | 34.6 | 61.5 | 483.3 | |

***Figure 4.*** *I-WeBS National Trends Report.*

## Historical Surveys

### I-WeBS

I-WeBS National and Site Trends Report 1994/95 – 2019/20 report presents national and site-specific trends of wetland birds in Ireland. This report was used to assess the trends of species recorded during wintering bird surveys at Dunboyne in winter of 2025/26. The survey area is hydrologically connected to Dublin Bay (0U404) I-WeBS site.

Two grey herons were observed during surveys that are listed on Dublin Bay's Site Summary as 'Stable or Increasing'.

The national wetland bird trend summary (Figure 4) provides long-term population trends for wintering species in Ireland.

# Conclusion

This report aims to build on the baseline data and provide information to assist in assessing the potential impact of Proposed Large-Scale Residential Development (LRD) at Summerhill Road, Dunboyne, Co. Meath, on wintering birds within/over/adjacent to the development area. This report presents the methodology and results of 5 visits to this location by Altemar Ltd. from November 2025 to March 2026.

A total of 18 species were recorded within, above and adjacent to the survey area across five surveys. 13 green and four amber listed bird species of conservation concern in Ireland (BoCCI) were recorded either within, over and immediately adjacent to the survey area. One species, Black-headed Gull, listed as a Qualifying Interest of the nearest downstream SPA, South Dublin Bay and River Tolka Estuary SPA (17.73 km). No red-listed species of conservation concern in Ireland were recorded during the surveys. One species, Grey Heron, listed on Dublin Bay's I-WeBS Sit Summary (0U404), was noted flying over the survey area.

Future developments on lands at Summerhill Rd, Dunboyne are predicted to reduce available foraging area for wintering birds locally. However, it is considered that the subject site is not of significance to species listed as SCIs of nearby SPA(s), in particular the South Dublin Bay and River Tolka Estuary SPA. The reduction in foraging and potential roosting areas are not significant in the context of current use by wintering birds and the widespread and abundant habitats of comparable and superior suitability in the wider area. In addition, given that the site is located 17.73 km to the north-west of the nearest SPA, no significant noise and vibration during construction will impact the SCI species within this designated site. Impacts on wintering bird species foraging and transiting between foraging/roosting sites are not likely in the absence of mitigation measures. No significant impact on species listed as SCIs of nearby SPAs, in particular the South Dublin Bay and River Tolka Estuary SPA, or bird species of conservation interest, are predicted.

# Reference

**AEWA. (2022).** *AEWA Conservation Status Review 8 (CSR8) Report on the conservation status of migratory waterbirds in the agreement area*. Eight Edition. Agreement on the Conservation of African-Eurasian Migratory Waterbirds, September 2022.

**Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000)** *Bird Census Techniques*. Academic Press, London

**Bird Survey & Assessment Steering Group. (2022)**. *Bird Survey Guidelines for assessing ecological impacts*, v.1.0.0. https://birdsurveyguidelines.org [15/05/2023]

**Burke, B. et al (2018)** *Estimates of waterbird numbers wintering in Ireland, 2011/12 – 2015/16*

**BWI & NPWS**, I-WeBS Counter Manual: Guidelines for Irish Wetland Bird Survey counters.

**Chartered Institute of Ecology and Environmental Management (2018).** *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal, and Marine.* Chartered Institute of Ecology and Environmental Management, Winchester.

**Collated by the National Biodiversity Data Centre from different sources, General Biodiversity Records from Ireland**, National Biodiversity Data Centre, Ireland, accessed 17 October 2023, <https://maps.biodiversityireland.ie/Dataset/7>

**Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1982**

**Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979**

**Department of Housing, Planning and Local Government (December, 2018).** *Urban Development and Building Heights Guidelines for Planning Authorities***.**

**EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive) 1992**

**EU Directive on the Conservation of Wild Birds 2009**

**Gilbert, G., Gibbons, D.W., & Evans, J. (1998)** *Bird Monitoring Methods: A Manual of Techniques for UK Key Species.* The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.

**Gilbert G, Stanbury A and Lewis L (2021)**, *Birds of Conservation Concern in Ireland 2020 –2026*. Irish Birds 9: 523—544

**Handby T (2022)**, *Social associations, patterns of urban habitat use and their implications for fitness in an avian long-distance migrant,* University of Exeter.

**Kennedy, J., Burke, B., Fitzgerald, N., Kelly, S.B.A., Walsh, A.J. & Lewis, L.J. 2022**. Irish Wetland Bird Survey: I-WeBS National and Site Trends Report 1994/95 – 2019/20. BirdWatch Ireland Waterbird Report to the National Parks and Wildlife Service. BirdWatch Ireland, Wicklow. (https://birdwatchireland.ie/app/uploads/2022/04/iwebs_trends_report.html)

**NPWS (2015)** Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

**NPWS (2015)** Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

**Szabolcs Nagy & Tom Langendoen (Wetlands International) (2021)**, *Report on the Conservation Status of Migratory Waterbirds in the Agreement Area*, AEWA, https://www.unep-aewa.org/sites/default/files/document/aewa_mop8_19_csr8.pdf

**Wildlife Act 1976 and Wildlife [Amendment] Act 2000**. Government of Ireland.

Appendix 1a – Individual survey observations of target species.

| Date | Species | No. | Behaviour | Height (m) | Details |
|---|---|---|---|---|---|
| 11/12/2025 | Herring Gull | 14 | Flight path | 80 | East flight to north of survey area |
| 11/12/2025 | Heron | 2 | Flight path | 10 | West flight from field to west of survey area of northern corner of survey area |
| 08/01/2026 | HG | 1 | Flight path | 40 | Flying southwest across site |
| 08/01/2026 | HG | 1 | Flight path | 50 | Flying northeast over site |
| 08/01/2026 | HG | 2 | Flight path | 30 | Flying southwest corner of site |
| 08/01/2026 | HG | 1 | Flight path | 20 | Flying northeast |
| 08/01/2026 | HG | 1 | Flight path | 40 | Flying east to west |
| 08/01/2026 | BH | 2 | Flight path | 30 | Flying east to west |
| 08/01/2026 | HG | 1 | Flight path | 20 | Flying east to west over centre of site |
| 04/02/2026 | BZ | 1 | Flight path | 10 | Flying low over site |
| 04/02/2026 | HG | 1 | Flight path | 40 | Flying west to east |
| 04/02/2026 | BH | 1 | Flight path | 20 | Flying along western boundary |
| 04/02/2026 | BH | 1 | Flight path | 30 | Flying south to east |

Appendix 1b – I-WeBS Trends for Dublin Bay (site code 0U404).

# Site Summary

| | Trend (%) | | | |
|---|---|---|---|---|
| Species | Dublin Bay - 5 Year | Dublin Bay - 12 Year | Dublin Bay - 23 Year | Long Term Trend |
| Grey Plover | 7.7 | -5.0 | -51.3 | Large Decline |
| Lapwing | -36.0 | -33.6 | -40.3 | Moderate Decline |
| Shoveler | -5.9 | 14.4 | -32.2 | |
| Ringed Plover | 6.5 | -52.1 | -14.5 | Intermediate Decline |
| Curlew | -14.1 | -22.7 | -4.5 | |
| Pintail | 24.4 | 78.3 | 8.1 | Stable or Increasing |
| Bar-tailed Godwit | -20.8 | 20.6 | 31.0 | |
| Dunlin | 69.6 | 18.6 | 32.7 | |
| Redshank | -5.3 | -8.2 | 45.9 | |
| Shelduck | 29.8 | 49.3 | 58.0 | |
| Wigeon | 61.9 | 126.7 | 78.9 | |
| Teal | 9.2 | 43.4 | 80.3 | |
| Sanderling | 15.0 | -13.2 | 84.0 | |
| Mallard | 32.2 | 134.7 | 91.7 | |
| Turnstone | -26.4 | -30.3 | 91.7 | |
| Oystercatcher | 1.9 | 12.8 | 103.8 | |
| Golden Plover | 948.0 | 147.2 | 114.8 | |
| Red-breasted Merganser | 2.9 | 37.3 | 118.8 | |
| Knot | 68.5 | 33.8 | 127.5 | |
| Grey Heron | 11.6 | 2.7 | 148.4 | |
| Great Crested Grebe | -54.1 | 69.9 | 188.4 | |
| Cormorant | 3.8 | -22.9 | 189.3 | |
| Light-bellied Brent Goose | -7.0 | 22.2 | 230.0 | |
| Greenshank | 15.6 | 48.6 | 235.5 | |
| Black-tailed Godwit | 120.0 | 193.3 | 780.0 | |
| Little Egret | 78.3 | 121.6 | 1540.0 | |

ALTEMAR
Marine & Environmental Consultancy

# Bat fauna impact assessment for a proposed development at Summerhill Road, Dunboyne, Co. Meath.



**18th August 2026**

**Prepared by:** Tadhg Lonergan of Altemar Ltd.
**On behalf of:** Solkerry Ventures Limited

| **Document Control Sheet** | | | |
|---|---|---|---|
| Client | Solkerry Ventures Limited. | | |
| Project | Bat fauna impact assessment for the proposed development at Summerhill Road, Dunboyne, Co. Meath. | | |
| Report | Bat Fauna Impact Assessment | | |
| Date | 18th August 2026 | | |
| | Author | Reviewed | Date |
| Draft | Tadhg Lonergan | Bryan Deegan | 18th August 2026 |
| Final | Tadhg Lonergan | Frank Spellman | 20th August 2026 |

**SUMMARY**

| | |
|---|---|
| **Structure:** | Site is predominantly agricultural in character and is located in the northeast of Dunboyne village along Summerhill Road. The proposed development area is bordered by hedgerows and treelines. |
| **Location:** | Summerhill Road, Dunboyne, Co. Meath. |
| **Bat species present:** | Common pipistrelle (*Pipistrellus pipistrellus*) and Leisler's bat (*Nyctalus leisleri*). |
| **Proposed work:** | Large-Scale Residential Development comprising 248 no. residential units and 1 no. childcare facility with associated car parking, bicycle parking, public open spaces, communal open spaces and all ancillary works. |
| **Surveys by:** | Tadhg Lonergan & Frank Spellman |
| **Survey dates:** | 21st of May and the 12th of June 2026 |

# Table of Contents

Bat fauna impact assessment for a proposed development at Summerhill Road, Dunboyne, Co. Meath.....84
Competency of Assessor.....88
Legislative Context.....88
Description of the Proposed Project.....89
Landscape.....89
Lighting.....96
Bat survey.....99
Survey methodology.....99
Trees/structures as Potential Bat Roosts.....100
Emergent/Detector survey.....101
Bat Assessment Findings.....103
Review of local bat records.....103
Potential impacts of proposed redevelopment on bats.....105
Mitigation measures.....105
Legal status and conservation issues – bats.....106
References.....107

# Table of Figures

**Figure 1** Site outline.....90
**Figure 2** Site Location.....91
**Figure 3** Landscape Masterplan.....92
**Figure 4** Proposed site layout plan.....93
**Figure 5** Proposed Site Section Contiguous Elevations AA.....94
**Figure 6** Proposed Site Section Contiguous Elevations BB & CC.....95
**Figure 7** Proposed public lighting plan (1 of 2).....97
**Figure 8** Proposed public lighting plan (2 of 2).....98
**Figure 9** Bat Activity recorded on site.....102
**Figure 10** Common Pipistrelle (*Pipistrellus pipistrellus sensu stricto*) (purple), Soprano Pipistrelle (*Pipistrellus pygmaeus*) (yellow), and both species (orange). Source: NBDC). Site location circled in red.....103
**Figure 11** Leisler's Bat (*Nyctalus leisleri*) (purple), Natterer's Bat *(Myotis natterei)* (yellow), and both species (orange). Source: NBDC. Site location circled in red.....104
**Figure 12** Brown Long-eared Bat (*Plecotus auritus*) (yellow). Source: NBDC. Site location circled in red.....104

## Competency of Assessor

This report has been reviewed by Bryan Deegan MSc, BSc (MCIEEM), who 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 4th Edition (Collins, J. (Ed.) 2023) 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).

This report and the associated surveys were carried out by Tadhg Lonergan (PhD Biology & Environmental Sciences, BSc (Hons) Zoology). Tadhg has extensive experience in carrying out a wide range of fauna surveys as both a researcher and consultant ecologist in Ireland, the UK, France, Denmark and the Central America. These include roving and static acoustic bat surveys, bat roost inspections and emergence/re-entry surveys. Tadhg specialises in bat ecology, with fieldwork experience spanning long-term mark-recapture studies and roost monitoring of multiple species. Tadhg holds an NPWS Section 23/34 licence for bat handling and a Regulation 54 personal derogation licence for bat survey work. The desk and field surveys were carried out having regard to the guidance: Bat Surveys for Professional Ecologists – Good Practice Guidelines 4th Edition (Collins, J. (Ed.) 2023) and Marnell, Kelleher and Mullen (2022), Bat Mitigation Guidelines for Ireland V2 (Irish Wildlife Manuals No. 134).

Associated surveys were carried out by Frank Spellman (MSc (Ind) Zoology, BSc Zoology). Frank has extensive experience in carrying out a wide range of ecological 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, breeding bird, Fossitt and invasive species 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.

## Description of the Proposed Project

Solkerry Ventures Limited intend to apply for permission for development of a Large-Scale Residential Development on a site of approx. 6.86 ha on lands bounded by Summerhill Road (L2228) to the south-west, R157 to the north, Plunkett Hall Estate to the south and Dunboyne Business Park to the east, Dunboyne, Co. Meath.

The proposed development will consist of a Large-Scale Residential Development comprising 248 no. residential units and 1 no. childcare facility with associated car parking, bicycle parking, public open spaces, communal open spaces and all ancillary works.

The development shall comprise:

g) Construction of 248 no. residential units as follows:

- 170 no. 2 storey houses in a mix of terraced, semi-detached and detached unit types consisting of 27 no. 2-bedroom units, 124 no. 3-bedroom units and 19 no. 4-bedroom units. Each house will have an associated rear private garden.
- 26 no. apartment units in a single 4 storey block consisting of 13 no. 1-bedroom units and 13 no. 2-bedroom apartments. All apartment units will be provided with private open space areas in the form of balconies.
- 52 no. duplex units in 4 no. 3 storey blocks (A-D) consisting of 26 no. 2-bedroom units and 26 no. 3-bedroom units. All duplex units will be provided with private open space areas in the form of balconies/terraces.
- Communal open space associated with the proposed apartment / duplex units will be provided in the form of 5 no. landscaped areas located in the vicinity of the units (total approx. 1,340.4 sqm).

h) 1 no. childcare facility at ground floor of apartment Block A with dedicated external open space (GFA approx. 285.7 sqm).

i) Total provision of 388 no. car parking spaces including 6 no. accessible spaces and 24 no. EV charging spaces (357 no. resident car parking spaces, 18 no. residential visitor car parking spaces and 13 no. car parking spaces dedicated for the creche facility) and a total of 429 no. bicycle parking spaces (319 no. secure resident spaces and 88 no. visitor spaces for the apartment / duplex / mid-terrace units; and 14 no. childcare facility staff spaces and 8 no. childcare facility visitor spaces).

j) Landscaped public open space areas including children's play areas totalling approx. 10,775 sqm;

k) A new vehicular and pedestrian access point is proposed via a simple priority junction on Summerhill Road (L2228).

l) All associated site and infrastructural works including a foul pump station with 24hr storage and associated rising main (580m) discharging to an existing foul line at the Navan Road and Dunboyne Business Park Road junction; diversion of an existing 600 mm diameter storm pipe and proposed storm drain outfall to the R157 / Summerhill Road roundabout; internal roads, road markings, homezones, footpaths and cycle infrastructure; provision of 3 no. ESB substations; bin stores and associated bin staging areas; public lighting; all hard and soft landscaping works; natural and formal play equipment; boundary treatment works including retaining walls; green roof; PV panels and all associated site clearance, excavation, landscape and development works.

The proposed site outline and site location are demonstrated in Figures 1 & 2.

### Landscape

The landscape strategy for the proposed development has been prepared by Áit Urbanism & Landscape Ltd to accompany this planning application. The proposed landscape masterplan is demonstrated in Figure 3.




**FIGURE 28 SITE OUTLINE**

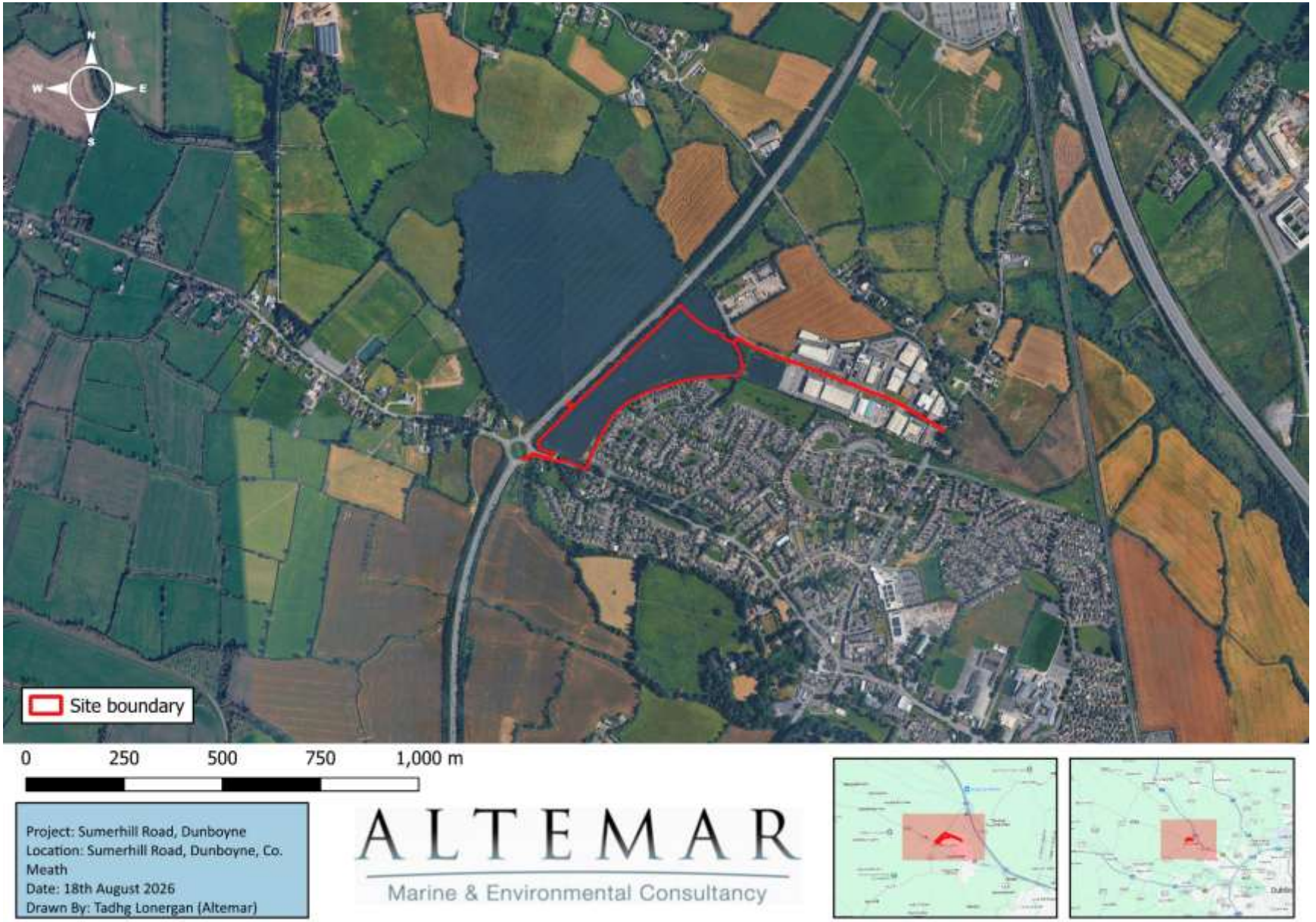



**FIGURE 29 SITE LOCATION**




**FIGURE 30 LANDSCAPE MASTERPLAN**




**FIGURE 31 PROPOSED SITE LAYOUT PLAN**




**FIGURE 32 PROPOSED SITE SECTION CONTIGUOUS ELEVATIONS AA**




**FIGURE 33 PROPOSED SITE SECTION CONTIGUOUS ELEVATIONS BB & CC**

## Lighting

An Outdoor Lighting Report has been prepared by Fallon Design M&E Engineering to accompany this planning application. Consultation within the project team has taken place regarding the potential impact of artificial lighting on bat foraging activity. In response, the proposed lighting strategy has been revised to ensure that foraging opportunities are maintained across the site. This includes the use of full cut off lamps with forward throw optics. All lighting proposed is compliant with Bat Lighting Guidelines and is set to 3000K.

The proposed public lighting layout is outlined in Figures 7 & 8.



**Luminaire A Data**

| | |
|---|---|
| Supplier | |
| Type | Veelite Metro Streetlight 19w LED Forward Throw A Optic |
| Lamp(s) | 8LED 3000K G4 700mA |
| Lamp Flux (klm) | 2.26 |
| File Name | 5MTA08LGA-FTA-3K.ies |
| Maintenance Factor | 0.80 |
| Imax70,80,90(cd/klm) | 401.3, 47.0, 0.5 |
| No. in Project | 8 |



**Luminaire B Data**

| | |
|---|---|
| Supplier | |
| Type | Veelite Metro Streetlight 19w LED Street Optic R03 |
| Lamp(s) | 8LED 3000K G4 700mA |
| Lamp Flux (klm) | 2.27 |
| File Name | 5MTA08LGA-R03-3K.ies |
| Maintenance Factor | 0.80 |
| Imax70,80,90(cd/klm) | 537.8, 56.5, 0.3 |
| No. in Project | 56 |



**Luminaire C Data**

| | |
|---|---|
| Supplier | |
| Type | Veelite Metro Streetlight 19w LED Street Optic R01 |
| Lamp(s) | 8LED 3000K G4 |
| Lamp Flux (klm) | 2.15 |
| File Name | 5MTA08LGA-R01-3K.ies |
| Maintenance Factor | 0.80 |
| Imax70,80,90(cd/klm) | 660.3, 387.6, 0.6 |
| No. in Project | 22 |




**FIGURE 34 PROPOSED PUBLIC LIGHTING PLAN (1 OF 2)**




**FIGURE 35 PROPOSED PUBLIC LIGHTING PLAN (2 OF 2)**

## Bat survey

This report presents the results of a bat roost suitability assessment and dusk emergence surveys carried out by Tadhg Lonergan & Frank Spellman on the 21st of May and the 12th of June 2026. All mature trees on site were examined for bat roosting potential, and dusk emergence surveys were undertaken at trees identified as being of bat roosting potential. Bat activity surveys (transect) were conducted across the entire site after the emergence surveys on both nights.

## 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 (2023) which included the roost inspection methodologies i.e. external methodology outlined in section 5.2.10 and the internal survey outlines in section 5.2.14 of the guidelines. In addition, the methodologies for Presence/likely absence surveys (Section 7) were carried out for dusk emergence surveys.*

*As outlined in Collins (2023) '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.'*

At dusk, bat detector surveys were carried out onsite using an Echo Meter Touch 2 Pro bat detector, to determine bat activity. Bats were identified by their ultrasonic calls coupled with behavioural and flight observations. Surveys were carried out having regard to the following guidelines:

- Collins. J (ed.) (2023) Bat surveys for Professional Ecologists: Good Practice Guidelines (4th Edition);
- Bat Mitigation Guidelines for Ireland (NPWS, 2006); and,
- Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes (NRA, 2006).

## Survey Results

### Trees/structures as Potential Bat Roosts

No existing structures are present within the site; the assessment therefore focused on the mature trees on site. A ground level roost assessment was carried upon arrival to the site 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 and cracks in bark. All trees on site were assessed for bat roosting potential.

Three ash trees (*Fraxinus excelsior*) on site were identified as offering features suitable for roosting bats and were categorised according to Collins (2023). Two trees were assessed as being of low bat roosting suitability and one of moderate bat roosting suitability. Roosting features recorded included ivy growth, broken limbs, vertical cracks, and lifting bark.

Two Common Pipistrelles were recorded emerging from an Ash tree on the Southern treeline. Photographs of the three trees are presented in Plate 1.



**Plate 1.** Main trees on site assessed for bat roosting potential. A Common Pipistrelle roost was recorded in the Ash tree in the left image.

## Emergent/Detector survey

Bat emergent/detector surveys were undertaken during the active bat season on the 21st of May and the 12th of June 2026 by Tadhg Lonergan and Frank Spellman. Weather conditions were good, with warm temperatures greater than 10°C after sunset, winds not exceeding Beaufort 1, and no precipitation during or preceding the surveys. Insects were observed in flight throughout the survey.

As outlined in Collins (2023) in relation to weather conditions: '*The aim should be to carry out surveys in conditions that are close to optimal (with sunset temperature 10°C or above without heavy rain or strong wind), particularly where low numbers of surveys are planned. Where the temperature drops significantly below this during the survey surveys, the impact on bat activity should be considered and, in many cases, it may be appropriate to stop the survey.*' There were minimal constraints in relation to the survey carried out. All areas of the site were accessible, and weather conditions were optimal for bat assessments in the area surrounding the site. Winds were considered optimal for assessing foraging behaviour.

Emergent surveys began 30 minutes prior to sunset and were completed 1 hour after sunset. Following the emergence surveys, an acoustic transect survey was carried out throughout the survey area using a*n Echo meter touch 2 Pro* detector to determine bat activity on site.

A large amount of foraging activity was recorded on site. Foraging activity was heavily concentrated along the southern and western boundaries of the site, where the treeline and hedgerow run along the site perimeter. Large numbers of common pipistrelles were observed foraging along the southern treeline in particular. Two Common pipistrelles were observed emerging from an Ash tree along the southern boundary.

Two species were noted foraging on site:

- Common pipistrelle (*Pipistrellus pipistrellus*)
- Leisler's bat (*Nyctalus leisleri*)

Bat activity on site is displayed in Figure 9.

It should be noted that an unknown number of Common pipistrelles and Leisler's bats were observed foraging outside of the site along the R157 side of the hedge line on the western boundary.

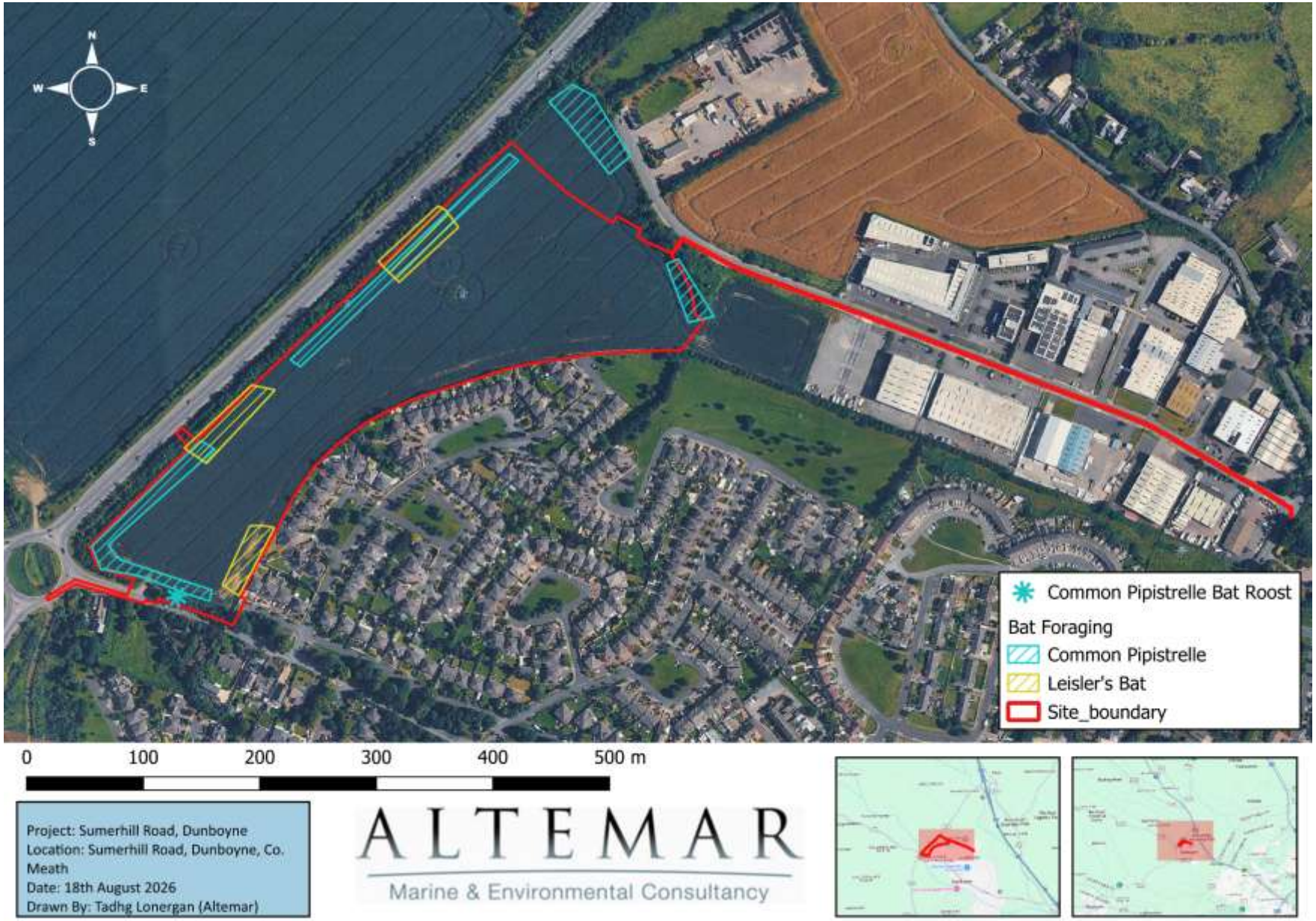



**FIGURE 36 BAT ACTIVITY RECORDED ON SITE**

## 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 the 2km$^2$ grid square encompassing the study area (Reference grid O04B) reveals that two of the nine known Irish bat species have been recorded locally (Table 1). The National Biodiversity Data Centre's online viewer was used to determine whether there have been recorded bat sightings in the wider area. The location of these records are included in figures 10 - 12.

**Table 1:** Status of bat species within a 2km$^2$ grid encompassing the subject site (Reference no. O04B)

| Species Name | Record Count | Last date of Record | Title of Dataset | Designation |
|---|---|---|---|---|
| Natterer's Bat (*Myotis nattereri*) | 4 | 31/12/2007 | National Bat Database of Ireland | Protected Species: EU Habitats Directive \|\| Protected Species: EU Habitats Directive >> Annex IV \|\| Protected Species: Wildlife Acts |
| Leisler's Bat *(Nyctalus leisleri)* | 2 | 30/06/2011 | National Bat Database of Ireland | Protected Species: EU Habitats Directive \|\| Protected Species: EU Habitats Directive >> Annex IV \|\| Protected Species: Wildlife Acts |



**Figure 37** Common Pipistrelle (*Pipistrellus pipistrellus sensu stricto*) (purple), Soprano Pipistrelle (*Pipistrellus pygmaeus*) (yellow), and both species (orange). Source: NBDC). Site location circled in red.



**FIGURE 38 LEISLER'S BAT (*NYCTALUS LEISLERI*) (PURPLE), NATTERER'S BAT *(MYOTIS NATTEREI)* (YELLOW), AND BOTH SPECIES (ORANGE). SOURCE: NBDC. SITE LOCATION CIRCLED IN RED.**



**FIGURE 39 BROWN LONG-EARED BAT (*PLECOTUS AURITUS*) (YELLOW). SOURCE: NBDC. SITE LOCATION CIRCLED IN RED.**

## Potential impacts of proposed redevelopment on bats

The proposed development will change the local environment as the site, currently an open field, will be developed for new residential units. A bat roost of at least two Common Pipistrelles was noted on site and is within the potential zone of influence of the proposed project. This tree is being retained. Foraging activity of two relatively common bat species (Common Pipistrelle and Leisler's Bat) were noted on site. Foraging activity was concentrated to treelines throughout the proposed site where large numbers of insects were swarming in the sheltered conditions. The removal of trees and scrub on site will result in reducing the sites foraging potential across the site. While existing light spill is on site in the vicinity of the proposed development, lighting during construction and operation could potentially lead to impacts on foraging. However, the lighting has been designed to minimise light spill onto the treeline boundaries. It would be expected that bats would continue to forage on site with the implementation of the sensitive lighting strategy.

## Mitigation measures

Lighting on site during construction will not be directed towards existing trees on site. A post Construction light spill assessment/compliance with proposed lighting strategy will be carried out.

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.*'

As a result, the following mitigation measures will be implemented:

- None of the trees of bat roosting potential including the bat roost are to be removed.
- Tree protection measures will be in place prior to commencement and overseen by a qualified arborist.
- Lighting is to be carried out so that no lighting greater than 1 lux or 1 lux greater than the baseline, is to be observed/measured on the bat roost.
- If levels of greater than 1 lux are see on the tree that is a bat roost the lighting is to be revised including back spill protection and other mitigation until no lighting greater than 1 lux is observed.
- During operation, lighting will comply with Bat Lighting Guidelines.

## Predicted and residual impact of the proposal

The proposed development will change the local environment as new lights and structures are to be erected in what was previously, open agricultural land. A Common Pipistrelle (*Pipistrellus pipistrellus*) bat roost is located within a tree along the southern boundary of the site. However, this treeline is proposed for retention. Foraging activity on site may be reduced due to the presence new buildings and lighting however, it would be expected that, with a sensitive public lighting strategy, foraging activity will continue on site.

## Legal status and conservation issues – bats

All Irish bat species are protected under the Wildlife Act (1976) and Wildlife Amendment Acts (1976-2023). Also, the EC Directive 92/43/EEC on the conservation of Natural habitats and of Wild Fauna and Flora ("Habitats Directive"), seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. All Irish bats are listed in Annex IV of the Habitats Directive and the lesser horseshoe bat *Rhinolophus hipposideros* is further listed under Annex II. Across Europe, they are further protected under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982), which, in relation to bats, exists to conserve all species and their habitats. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries. The Irish government has ratified both these conventions.

All Irish bats are listed in Annex IV of the Habitats Directive, and the lesser horseshoe bat is further listed under Annex II.

The current status and legal protection of the known bat species occurring in Ireland is given in the following table.

| **Common and scientific name** | **Wildlife Act 1976 & Wildlife (Amendment) Acts 2000/2010** | **Irish Red List status** | **Habitats Directive** | **Bern & Bonn Conventions** |
|---|---|---|---|---|
| Common pipistrelle *Pipistrellus pipistrellus* | Yes | Least Concern | Annex IV | Appendix II |
| Soprano pipistrelle *P. pygmaeus* | Yes | Least Concern | Annex IV | Appendix II |
| Nathusius pipistrelle *P. nathusii* | Yes | Not referenced | Annex IV | Appendix II |
| Leisler's bat *Nyctalus leisleri* | Yes | Least Concern | Annex IV | Appendix II |
| Brown long-eared bat *Plecotus auritus* | Yes | Least Concern | Annex IV | Appendix II |
| Lesser horseshoe bat *Rhinolophus hipposideros* | Yes | Least Concern | Annex II<br>Annex IV | Appendix II |
| Daubenton's bat *Myotis daubentonii* | Yes | Least Concern | Annex IV | Appendix II |
| Natterer's bat *M. nattereri* | Yes | Least Concern | Annex IV | Appendix II |
| Whiskered bat *M. mystacinus* | Yes | Least Concern | Annex IV | Appendix II |
| Brandt's bat *M. brandtii* | Yes | Data Deficient | Annex IV | Appendix II |

Also, under existing legislation, the destruction, alteration or evacuation of a known bat roost is a notifiable action, and a derogation licence has to be obtained from the National Parks and Wildlife Service before works can commence.

It should also be noted that any works interfering with bats and especially their roosts, including for instance, the installation of lighting in the vicinity of the latter, may only be carried out under a licence to derogate from SI 477/2011 EC( Birds and Natural Habitats ) 2011 (Reg 51 /52 provide Strict Protection and Regs 53/54 address Derogation Licences)[2].

[2] https://www.irishstatutebook.ie/eli/2011/si/477/made/en/print

# References

**Collins, J. (ed.) (2023)** Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th edition. Bat Conservation Trust, London.

**Chartered Institute of Ecology and Environmental Management (2021).** *Bat Mitigation Guidelines: A guide to impact assessment, mitigation and compensation for developments affecting bats. Beta version.* Chartered Institute of Ecology and Environmental Management, Winchester.

**Chartered Institute of Ecology and Environmental Management (2018).** *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal, and Marine.* Chartered Institute of Ecology and Environmental Management, Winchester.

Institution of Lighting Professionals (2018). *Bats and Artificial Lighting in the UK – Bats and the Built Environment Series: Guidance Note 08/18.* Institution of Lighting Professionals and the Bat Conservation Trust.

**Department of Housing, Planning and Local Government (December, 2018).** *Urban Development and Building Heights Guidelines for Planning Authorities***.**

**Bat Conservation Trust (May 2022).** *Interim Guidance Note: Use of night vision aids for bat emergence surveys and further comment on dawn surveys.* The Bat Conservation Trust, London.

**Bat Conservation Ireland 2004** on-going, *National Bat Record Database.* Virginia, Co. Cavan

**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

**Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1982**

**Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979**

**EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive) 1992**

**Jefferies, D.J. 1972** Organochlorine insecticide residues in British bats and their significance. *Journal of Zoology*, London **166**: 245 - 263

**Kelleher, C. 2004**, Thirty years, six counties, one species – an update on the lesser horseshoe bat *Rhinolophus hipposideros* (Bechstein) in Ireland – *Irish Naturalists' Journal* **27**, No. 10, 387 – 392

**Kelleher, C. 2015** *Proposed Residential Development, Church Road, Killiney, Dublin: Bat Fauna Study*. Report prepared for Altemar Marine and Environmental Consultants

**Marnell, F., Kingston, N. and Looney, D. 2009** *Ireland Red List No. 3: Terrestrial Mammals.* National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin

**Marnell, F., Kelleher, C., & Mullen, E. (2022),** BAT MITIGATION GUIDELINES FOR IRELAND – V2 https://www.npws.ie/sites/default/files/publications/pdf/IWM134.pdf

**Racey, P.A. and Swift, S.M. 1986** The residual effects of remedial timber treatments on bats. *Biological Conservation* **35**: 205 – 214

**Smal, C.M.** 1995 *The Badger & Habitat Survey of Ireland.* The Stationery Office, Dublin

**Wildlife Act 1976 and Wildlife [Amendment] Act 2000**. Government of Ireland.