ENVIRONMENTAL CONSULTANTS

ECOLOGICAL IMPACT ASSESSMENT REPORT

Dundrum Living Streets, Phase 1, Main Street and Sandyford Road, Dundrum, Co. Dublin

November 2026

Document Details

Client:	DBFL Consulting Engineers
Project Title:	Dundrum Living Streets Project Dundrum Living Streets, Phase 1, Main Street and Sandyford Road, Dundrum, Co. Dublin
Project Code:	01-DBFL-2025
Document Title:	Ecological Impact Assessment Report
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Reviewed By:	Ian Douglas

Rev	Status	Date
01	Draft	06/10/2025
02	Draft	28/09/2025
03	Final 1	15/10/2025
04	Final 2	26/11/2025
05	Final 3	16/10/2026
06	Final 4	12/11/2026

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Abbreviations

Abbreviation	Term
AA	Appropriate Assessment
BOCCI	Birds of Conservation Concern in Ireland
CJEU	Court of Justice of the European Union
EC	European Commission
IROPI	Imperative Reasons of Overriding Public Interest
LSE	Likely Significant Effects
NHA	Natural Heritage Areas
NIS	Natura Impact Statement
pNHA	proposed Natural Heritage Areas
OPR	Office of the Planning Regulator
SCI	Special Conservation Interest
TFEU	Treaty on the Functioning of the European Union
UNESCO	United Nations Educational, Scientific and Cultural Organisation

Definitions

Definition	Term
Appropriate Assessment (AA)	An assessment of the potential adverse effects of a plan or Project (in combination with other plans or projects) on Special Areas of Conservation and Special Protection Areas
Department of Environment, Heritage, and Local Government	The previous name for Department of Housing, Local Government and Heritage. The Irish government department responsible for housing, local government (including planning) and heritage.
Effect	Outcome to an ecological feature from an impact, e.g., the effects on an animal population from the loss of a hedgerow.
European Commission (EC)	The executive body of the European Union responsible for proposing legislation, enforcing European law, setting objectives and priorities for action, negotiating trade agreements, and managing and implementing European Union policies and the budget.
Habitats Directive	European Directive relevant to on the conservation of natural habitats and of wild fauna and flora

Definition	Term
(92/43/EEC)	
Impact	Actions resulting in changes to an ecological feature, e.g., the construction activities of a development removing a hedgerow.
Natura 2000 / European Site	A network of sites selected to ensure the long-term survival of Europe's most valuable and threatened species and habitats. European site" replaced the term "Natura 2000 site" under the EU (Environmental Impact Assessment and Habitats) Regulations 2011 S.I. No. 473 of 2011
Receptor	Environmental components that may be affected, adversely or beneficially, by the Project.
Special Protection Areas (SPAs).	Sites classified in accordance with Article 4 of the EC Birds Directive (79/409/EEC) which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex 1 of the Directive), and for regularly occurring migratory Species.
Special Areas of Conservation (SACs)	Areas of protected habitats and species as defined in the Habitats Directive (92/43/EEC).
Qualifying Interest (QI)	Relates to the habitats and/or (non-bird) species for which an SAC or SPA is selected
Zone of Influence (ZoI)	Spatial extent of potential impacts resulting from the Project.

1 Introduction

DBFL Consulting Engineers appointed ID Environmental Consultants Ltd to prepare an Ecological Impact Assessment Report for the proposed Dundrum Living Streets Phase 1 development, located along Main Street and Sandyford Road, Dundrum, Co. Dublin. The proposed development aims to deliver objectives outlined in the Dundrum Local Area Plan 2023, focusing on improving the public realm, enhancing facilities for sustainable transport modes and upgrading key junctions.

The Dundrum Living Streets project was initially considered as a wider study area during the options assessment and scheme development process. This wider consideration informed the overall approach to public realm and active travel improvements within Dundrum. The scheme now being brought forward through the Part 8 process represents Phase 1 of the wider Dundrum Living Streets project and comprises a clearly defined and independently deliverable package of works. The remaining elements of the wider Project are intended to be progressed separately as Phase 2, subject to further design development, Assessment and the appropriate statutory approval process.

Notwithstanding this phased approach to delivery, the current scheme has not been considered in isolation. The relationship between Phase 1 and the wider Living Streets project has been recognised throughout the assessment process, with potential cumulative and in-combination effects considered, where relevant, as part of the environmental assessments accompanying the current Part 8 application.

Surveys were carried out to investigate whether any Annex I habitats (EU Habitats Directive), Annex II species (EU Habitats Directive), Annex I Bird Species (EU Birds Directive), 'stepping stones/Ecological Corridors' (as covered under Annex 10 of the EU Habitats Directive) or locally important habitats or species are likely to be impacted upon by the proposed development.

This report updates the previous Ecological Impact Assessment for the Dundrum Living Streets Project. The update incorporates a confirmatory ecological walkover undertaken on September 19th 2026, and the revised site layout drawings supplied by DBFL Consulting Engineers. The original survey findings are retained, with the September 2026 observations supplementing the ecological baseline for the areas inspected.

This Assessment aimed to;

- Establish baseline ecological data for the proposed development site;
- Determine the ecological value of the identified ecological features;
- Assess the impact of the proposed development on ecological features of value (biodiversity);
- Apply mitigation measures to avoid, reduce, remedy or compensate impacts; and
- Identify any residual impacts after mitigation and compensation.

1.1 Statement of Authority

This report was completed by Tomasz Szlaga. Tommy Szlaga, B.Sc. (Hons) QCIEEM, is a Project Ecologist with ID

Environmental Consultants (IDEC), having joined the company following a six-month internship in 2024. He graduated from Munster Technological University, where he completed a BSc (Hons) in Wildlife Biology (Level 8) and was awarded the MTU Faculty of Science and Informatics Award in 2025 for achieving the highest overall GPA in his class.

Tommy has direct professional experience in ecological Assessment, Appropriate Assessment (AA) Screening and Natura Impact Statement (NIS) preparation across a broad range of development types, including renewable energy, residential, infrastructure, wastewater, urban and coastal developments. His experience includes AA and ecological Assessment of renewable energy developments in Counties Cork, Westmeath and Kilkenny, as well as contributing to the NIS for the Shelbourne Solar project in County Wexford. He has also contributed to AA and NIS work on large-scale urban development in County Clare; wastewater infrastructure at Lismore, Longwood and Ratoath; one-off residential developments; urban infrastructure in Dublin; and coastal infrastructure at Dún Laoghaire Harbour and Howth. This experience has provided a broad understanding of the potential ecological and European site considerations associated with different development types and settings.

This Project was completed by Mirthe Kuperus (MSc, MA, BA) of ID Environmental Consultants. Mirthe is an Environmental researcher with a background in Environmental Studies & Sustainability Science and International Relations, specialising in biodiversity metrics, rewilding, and biodiversity net gain (BNG). Her work includes applying Defra's Biodiversity Metric at Knepp Rewilding and supporting Make it Wild's BNG journey. Mirthe has also contributed to international conservation initiatives through research with the Global Rewilding Alliance and hands-on fieldwork with the Environment Agency of Iceland. She joined ID Environmental Consultants in February 2026.

This report was reviewed by Ian Douglas (MSc, BSc, H Cert.Ag) of ID Environmental Consultants. Ian is an ecologist and environmental consultant with over 12 years of professional experience in Appropriate Assessment (AA), Ecological Impact Assessment (EcIA), habitat assessment, soil science, GIS mapping and biodiversity management. Since 2021, he has been involved in the delivery of ecological services for Uisce Éireann projects, including water network upgrades, water and wastewater treatment plant developments and emergency water storage infrastructure. His work has included pre-construction ecological surveys of habitats, mammals, birds, and bats; assessments of potential impacts on European Sites and other designated conservation sites; and the development and implementation of ecological mitigation measures. His experience also extends to major infrastructure developments, including road schemes, wind farms, solar energy developments and battery energy storage systems. This includes ecological field surveys, impact assessments, preparing environmental reports, and providing Ecological Clerk of Works (ECoW) services during construction. In addition, he has considerable experience in biodiversity enhancement and Biodiversity Net Gain (BNG), including baseline ecological assessments, preparing biodiversity management plans, and implementing and monitoring habitat creation, restoration, and enhancement measures. Having previously worked in environmental consultancy in England and Australia, Ian joined Flynn Furney Environmental Consultants in 2018, where he continues to serve as Associate Director. He established ID Environmental Consultants in 2021.

2 Legislation and Policy Context

2.1 European Council Directives

2.1.1 Council Directive on the Conservation of Natural Habitats of Wild Fauna and Flora – *92/43/EC- The Habitats Directive*

The Directive aims to promote biodiversity by conserving the natural habitats and wild species listed in its Annexes. Member States are required to take measures to maintain or restore, at favourable conservation status, biodiversity whilst taking into account economic, social, and cultural requirements and regional and local characteristics.

It gives effect to site and species protection measures through the establishment of the Natura 2000 network and designation of European Sites, including Special Areas of Conservation (SAC) and Special Protection Areas (SPA). It also establishes a list of species (other than birds) whose habitats must be protected to secure their survival. These priority species and habitats are subject to a higher level of protection.

The Directive also requires appropriate Assessment of any plan or Project not directly connected with or necessary to the management of a European Site, but likely to have significant effects upon a European Site, either individually or in combination with other plans or projects.

2.1.2 Council Directive on the Conservation of Wild Birds - *2009/147/EC- The Birds Directive*

The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. It provides for maintaining wild bird populations across their natural range; conserves habitats for rare or vulnerable species listed in Annex I and for migratory species through the classification of SPAs; and protects all wild birds.

2.2 Irish Legislation

The following National legislation is relevant to the proposed development:

Wildlife Act, 1976 and Wildlife (Amendment) Act (2000) (as amended). Hereafter collectively referred to as the "Wildlife Acts". The Wildlife Acts are the principal national legislation for protecting wildlife and controlling activities that may harm it. All bird species, 22 other animal species or groups of species and 86 species of flora are protected under these pieces of legislation.

Flora (Protection) Order, 2022. This lists species of plant protected under Section 21 of the Wildlife Act, 1976.

The Planning and Development (Amendment) Act 2010 (as amended). This piece of legislation is the basis for Irish land use planning. Under the legislation, development plans (usually implemented at the local authority level)

must include mandatory objectives for the conservation of natural heritage for the conservation of European Sites.

European Communities (EC) (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011 (as amended); hereafter the "Birds and Habitats Regulations". This legislation transposes the Habitats and Birds Directives into Irish law. It also contains regulations (49 and 50) dealing with invasive species (those included in the Third Schedule).

3 Project Description

The proposed development comprises Phase 1 of the Dundrum Living Streets project, involving public realm and streetscape improvements along Main Street and Sandyford Road, Dundrum, Co. Dublin. The works include improvements to pedestrian facilities and accessibility, upgraded paving and public realm treatments, landscaping, street tree planting, rain gardens, street furniture and improvements to the public space around Holy Cross Church. Existing traffic and cycling arrangements will generally be retained, with localised adjustments to parking, loading and pedestrian crossing facilities. The proposed works are described in detail in the accompanying Part 8 and Preliminary Design Report and associated drawings provided in Appendix 1.

Figure 1: Site Location Map



3.1 Site of Works

The proposed Phase 1 development is located within Dundrum Village, Co. Dublin, and extends along approximately 417 m of Main Street, between Dundrum Crossroads and the Dundrum Bypass/Main Street junction, and approximately 385 m of Sandyford Road, between the Ballinteer Road junction and the entrance to Riversdale Apartments. The works are primarily confined to existing road corridors and adjoining hardstanding areas within an established urban environment comprising residential, commercial and retail development.

The wider Dundrum Living Streets study area considered during earlier scheme development included additional roads and surrounding areas. Ecological Information collected within this wider area has been retained where relevant to the Assessment. Still, these areas do not form part of the current Phase 1 works unless included within the Part 8 application boundary.

3.2 Section 1 – Main Street

Section 1 – Main Street The proposed works on Main Street retain the street layout as it has operated since the temporary measures were introduced in 2020 and transition it to a permanent public realm scheme. The one-way northbound arrangement for general traffic is retained from Dundrum Cross to the Old Dundrum Shopping Centre access, as is the existing two-way operation over the northern c. 90m of the street to the Dundrum Bypass junction, with existing bus routes and stops, on-street parking, loading bays and servicing access maintained. The segregated southbound contra-flow cycle track is retained and upgraded along the full length of the street, with northbound cyclists continuing to share the traffic lane with general traffic, and the existing footpaths and pedestrian crossings are retained and enhanced. The temporary materials will be replaced with high-quality paving, landscaping, seating, cycle parking, and streetscape improvements, with tree planting and SuDS planting provided where feasible to connect to the mature tree line on Sandyford Road.

The traffic lane is approximately 3.2m wide and the contra-flow cycle track approximately 2m wide. Most on-street parking is retained; the existing accessible parking space is relocated; additional EV charging and age-friendly parking spaces are provided; and cycle parking increases from 9 to 12 stands. A new plaza is created in front of Holy Cross Church, with a distinctive paving treatment extending across the carriageway, circular paving reflecting the church forecourt, seating, landscaping, and tree planting, with delineation of pedestrian, cycle, and vehicular areas. The three existing ash trees at the northern end of the street will be removed and replaced with alternative street tree species. The undergrounding of the overhead ESB lines is being investigated with ESB Networks, with public lighting moved from the ESB poles to independent columns.

3.3 Section 2 – Sandyford Road

The proposed works on Sandyford Road follow the existing street arrangement from Dundrum Cross toward the south. At the northern end of the route, the single northbound traffic lane and the segregated southbound contra-flow cycle track are retained and made permanent, with the footpaths and paving on both sides upgraded as part of the wider public realm scheme. From the pedestrian entrance to Dundrum Shopping Centre toward the Sandyford Road car park and the apartment complexes beyond, the street continues to operate as a two-way carriageway shared by cyclists and general traffic, with the carriageway narrowed, footpaths widened and on-

street parking retained where practicable.

The scheme terminates at the entrance to the Riversdale Apartments and Overend House, where it ties into the existing two-way arrangement of the street to the south. The two-way segregated cycle track between this point and the Sandyford Road / Wyckham Way / Overend Avenue junction, does not form part of this scheme and is to be progressed separately. The existing pedestrian crossings within the section are upgraded and existing bus services and stops are retained, while the footpaths and public realm are finished in high quality materials with additional landscaping and tree planting where space allows, strengthening the existing line of mature trees along Sandyford Road. At the Sandyford Road car park entrance, school zone measures are incorporated and the existing pedestrian crossing is relocated to align with the new footpath through the centre of the car park, providing a more direct route to Holy Cross National School. Parking bays for motorcycles and mopeds are provided outside the Dundrum Town Centre entrance, and the four existing cycle stands on Sandyford Road are retained.

4 Survey Methodologies

4.1 Desktop Study

Prior to the main fieldwork contributing to this Assessment, a desktop survey of available information sources was carried out. These included:

- The NPWS Protected Species Database and Online Mapping
- Data on waterbodies, available for download and interrogation from the Environmental Protection Agency (EPA) web map service (Environmental Protection Agency, 2018);
- Information on the location, nature and design of the Proposed Development supplied by the applicant's design team;
- Review of previous and current planning applications for the subject site and local area via the Dún Laoghaire–Rathdown Council's[1] and the An Coimisiún Pleanála[2].
- Desk research included a review of records available through the National Biodiversity Data Centre mapping system. These included rare and protected species. Records were requested for all species appearing within the study area or immediately surrounding the study area (2km)[3].
- Data held on the NPWS Article 17 datasets for protected species[4]

[1] https://www.dlrcoco.ie/planning
[2] https://www.pleanala.ie/en-ie/home
[3] https://maps.biodiversityireland.ie/Map
[4] https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17

- Review of the updated Dundrum Living Streets Phase 1 Part 8 and Preliminary Design Report and associated drawings, together with available Information on the wider Dundrum Living Streets project, to inform the Assessment of potential ecological and cumulative effects.

4.2 Field Surveys

Field surveys were carried out on August 30th 2025. Habitats were identified, mapped, and classified, and dominant plant species were noted in accordance with guidelines from the JNCC (2007) and The Heritage Council (2010). Habitats were classified as per Fossitt (2000). Plant nomenclature follows the BSBI's List of Accepted Plant Names (BSBI, 2007). Fauna surveys were carried out in accordance with NRA (2009) guidance.

A confirmatory ecological walkover was undertaken on September 19th 2026, to review the current ecological conditions within the inspected parts of the proposed development area. The walkover covered accessible areas of Main Street and Sandyford Road within and immediately adjoining the proposed works area.

The inspected areas comprised a heavily urbanised streetscape dominated by roads, footpaths, buildings, commercial premises and other artificial surfaces. Vegetation was limited to small areas of amenity planting, sparse roadside vegetation and existing roadside trees.

No Third Schedule invasive non-native plant species were recorded in the areas inspected. No additional habitat features or other biodiversity concerns were identified during the walkover. These observations supplement the previous ecological surveys and relate specifically to the areas inspected on September 19th 2026.

5 Ecological Impact Assessment

5.1 Key Ecological Receptors

In accordance with TII (2009), impact assessment is only undertaken of 'key ecological receptors' (KERS). KERS are within the zone of influence of the Project and are "both of sufficient value to be material in decision making and likely to be affected significantly". To qualify as KERS, features must be of local ecological importance (higher value) or higher.

Features falling below this threshold are not assessed. Impacts are described as being either significant or not significant. Broadly, significant effects encompass impacts on the structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution) (CIEEM, 2018).

5.2 Zones of Influence and Potential Impacts or Effects

The Zone of Influence (ZoI) of a proposed development is the area within which ecological features may be affected by its construction or operation, including associated ancillary activities. In accordance with NRA (2009)

and CIEEM (2018, updated September 2024), the ZoI is determined by considering the nature, extent, magnitude and duration of potential impacts, the presence of pathways through which these impacts may occur, and the sensitivity of ecological receptors within the receiving environment.

Different impacts may have different geographical extents, and the ZoI is therefore not defined by a single fixed distance. Rather, it encompasses areas within which potential source–pathway–receptor connections exist. Ecological features located beyond the immediate development boundary may fall within the ZoI where ecological, hydrological or other functional connectivity exists.

Based on the nature and scale of the Proposed Development, the receiving environment and the potential pathways for ecological effects, the following zones of impact have been considered:

- **Habitat Loss, Fragmentation and Degradation:** All areas within the Proposed Development boundary, including temporary construction areas, access routes and associated infrastructure. The Assessment also considers adjoining habitats that may become fragmented, isolated or degraded as a consequence of the works.

- **Disturbance to Birds and Other Fauna:** A precautionary distance of 500 m from the Proposed Development has been considered for potential disturbance arising from noise, vibration, lighting, visual disturbance and human activity. This distance is refined according to species sensitivity and the nature of the disturbance. For example, disturbance to otter breeding or resting sites is generally considered within 150 m of the works, while effects on other mammals and breeding birds are typically more localised, often within 50 m.

- **Water Quality and Hydrological Impacts:** All surface water features intersecting the Proposed Development or occurring within 100 m of the works, together with hydrologically connected upstream and downstream watercourses and associated habitats. The Assessment considers potential impacts arising from sedimentation, pollution, changes in drainage patterns and alterations to water quality or quantity.
- **Introduction or Spread of Invasive Alien Species (IAS):** The Proposed Development site, adjoining lands and habitats, and potential haul routes associated with the movement of construction materials, soil, machinery and vegetation. The Assessment considers the potential for construction activities to facilitate the introduction or spread of IAS within or beyond the development boundary.

- **Cumulative and In-Combination Effects:** Other existing, permitted or proposed developments and activities that may affect the same ecological receptors as the Proposed Development. A precautionary search area of 500 m has been considered for localised terrestrial impacts, with developments within 5 km upstream or downstream also considered where relevant hydrological connectivity exists. The Assessment is receptor-based and extends beyond these distances where necessary to identify potential cumulative effects arising through shared ecological pathways.

The overall ZoI encompasses these individual zones of impact and any additional areas with ecological connectivity to the Proposed Development, including adjoining woodlands, hedgerows, treelines, wetlands, watercourses and other semi-natural habitats.

Publicly available spatial datasets, including EPA waterbody and catchment mapping, NPWS designated site mapping and aerial imagery, were reviewed to identify potential ecological and hydrological connections between the Proposed Development and sensitive ecological receptors. These were considered alongside the field survey findings to establish the extent of the ZoI and identify Key Ecological Receptors (KERs) requiring further assessment.

The distances identified above represent precautionary assessment parameters rather than fixed limits of ecological effects. Where a potential impact pathway extends beyond these distances, the ZoI has been extended accordingly. Conversely, where no credible source–pathway–receptor connection exists, significant effects on the relevant ecological feature are not anticipated.

5.3 Ecological Evaluation and Impact Assessment

The methodology for this report was informed by CIEEM's *Guidelines for Ecological Impact Assessment in the UK and Ireland* (2018, as updated in September 2024). These guidelines informed the evaluation of ecological receptors, the Assessment of impacts and their effects, and the development of mitigation and enhancement measures. The Assessment also had regard to the National Roads Authority's (now Transport Infrastructure Ireland) *Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes* (2009) and the Environmental Protection Agency's *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (2022).

5.3.1 Assessing Ecological Value

The 'ecological value' of an area or feature is therefore defined with reference to geographical context. That is, whether it is valuable locally, regionally, nationally, or internationally. This is assessed by ecologists on reviewing survey outcomes. Key criteria include the presence of designated sites and whether the site or feature contains protected species or areas of high biodiversity. The criteria for ecological value are given in Table 2.

Table 2: Ecological Value Criteria

Ecological Value	Criteria
International	• European Sites, including Special Areas of Conservation (SAC) & Special Protection Areas (SPA). • Sites that satisfy the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended). • Features essential to maintaining the coherence of the Natura 2000 Network. Sites containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive. • Resident or regularly occurring populations (assessed to be important at the • national level) of the following: • Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and/or • Species of animals and plants listed in Annex II and/or IV of the Habitats Directive.
National	• Natural Heritage Area (NHA). National Nature Reserves (NNR). • Resident or regularly occurring populations (important at the national level) of the following: • Species protected under the Wildlife Act 1976, as amended); and/or • Species listed on the relevant Red Data list. • Sites containing 'viable areas' of the habitat types listed in Annex I of the Habitats Directive.
Regional	• Areas are subject to a Tree Preservation Order. • Resident or regularly occurring populations (assessed to be important at the Regional level) of the following: • Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; • Species of animals and plants listed in Annex II and/or IV of the Habitats Directive; Species protected under the relevant Red Data list. • Sites containing areas of the habitat types listed in Annex I of the Habitats Directive that do not satisfy the criteria for valuation as of International or National importance. • Regionally important populations of species or viable areas of semi-natural • habitats or natural heritage features identified in the National or Local Biodiversity Action Plan (BAP), if this has been prepared. • Sites containing semi-natural habitat types with high biodiversity in a regional context and a high degree of naturalness, or populations of species that are uncommon within the region.

Ecological Value	Criteria
	• Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.
Local	• Locally important populations of priority species or habitats or features of natural heritage importance identified in the Local BAP, if this has been prepared; Resident or regularly occurring populations (assessed to be important at the Local level) of the following: • Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; • Species of animal and plants listed in Annex II and/or IV of the Habitats Directive; Species protected under the Wildlife (Northern Ireland) Order 1985 (as amended); and/or • Species listed on the relevant Red Data list containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality; Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value; • Sites containing small areas of semi-natural habitat that are of some local importance for wildlife; • Sites or features containing non-native species that are of some importance in maintaining habitat links.

5.4 Predicted Impacts and Significance

These potential impacts have been assessed in accordance with the CIEEM (2018). The duration of impacts is assessed according to EPA guidelines (EPA, 2002). These guides assess the impact and significance upon features of sites proposed for works. Impact significance must be assessed in the context of the site's and the features under study's ecological values.

The 'ecological value' of an area or feature is therefore defined with reference to geographical context. That is, whether it is of value locally, regionally, nationally or internationally. This is assessed by ecologists on reviewing survey outcomes. Key criteria include the presence of designated sites and whether the site or feature contains protected species or areas of high biodiversity. The criteria for ecological value are given in Table 3 below.

Table 3: Ecological Value Criteria

Ecological Value		Description
Significant Negative Effect	**Major Adverse**	• Loss of, permanent damage to or adverse impact on any part of a site of international or national importance; • Loss of a substantial part or key feature of a site of regional importance; • Loss of favourable conservation status (FCS) of a legally protected species; • Loss of or moderate damage to a population of nationally rare species.
	Moderate Adverse	• Temporary disturbance to a site of international or national importance, but no permanent damage; • Loss of or permanent damage to any part of a site of regional importance; • Loss of a key feature of local importance; • A substantial reduction in the numbers of legally protected species such that there is no loss of FCS, but the population is significantly more vulnerable; • Reduction in the amount of habitat available for a nationally rare species, or species that are notable at a regional or county level.
No Significant Effect	**Minor Adverse**	• Temporary disturbance to a site of regional value, but no permanent damage; • Loss of, or permanent damage to, a feature with some ecological value in a local context but that has no nature conservation designation; • A minor impact on legally protected species but no significant habitat loss or reduction in FCS; • A minor impact on populations of nationally rare species or species that are notable at a regional or county level.
	Negligible	• No impacts on sites of international, national or county importance; • Temporary disturbance or damage to a small part of a feature of local importance; • Loss of or damage to land of negligible nature conservation value; • No reduction in the population of legally protected, nationally rare, nationally scarce or notable (regional level) species on the site or its immediate vicinity. • Beneficial and adverse impacts balance such that resulting impact has no overall effect upon the feature.
	Minor Beneficial	• A small but clear and measurable gain in general wildlife interest, e.g., small-scale new habitats of wildlife value created where none existed before or where the new habitats exceed in area that habitats lost.
Significant Positive	**Moderate Beneficial**	• Larger new scale habitats (e.g., net gains over 1 ha in area) created leading to significant measurable gains in relation to the objectives of biodiversity

Ecological Value		Description
Effect		action plans.
	Major Beneficial	• Major gains in new habitats (net gains of at least 10 ha) of high significance for biodiversity being those habitats, or habitats supporting viable species populations, of national or international importance cited in Annexes I and II of the Habitats Directive or Annex I of the Birds Directive.

5.4.1 Impact Duration and Likelihood

The duration of impact must also be considered when assessing overall ecological impacts. Criteria for Assessment of duration of impacts used (EPA 2002); the following terms when quantifying duration:

Table 4: Impact Duration and Timescales

Impact Duration	Timescale
Momentary	seconds to minutes
Brief	Less than a day
Temporary	Up to 1 year
Short-term	1-7 years
Medium-term	7-15 years
Long-term	15-60 years
Permanent	Over 60 years

6 Ecological Assessment

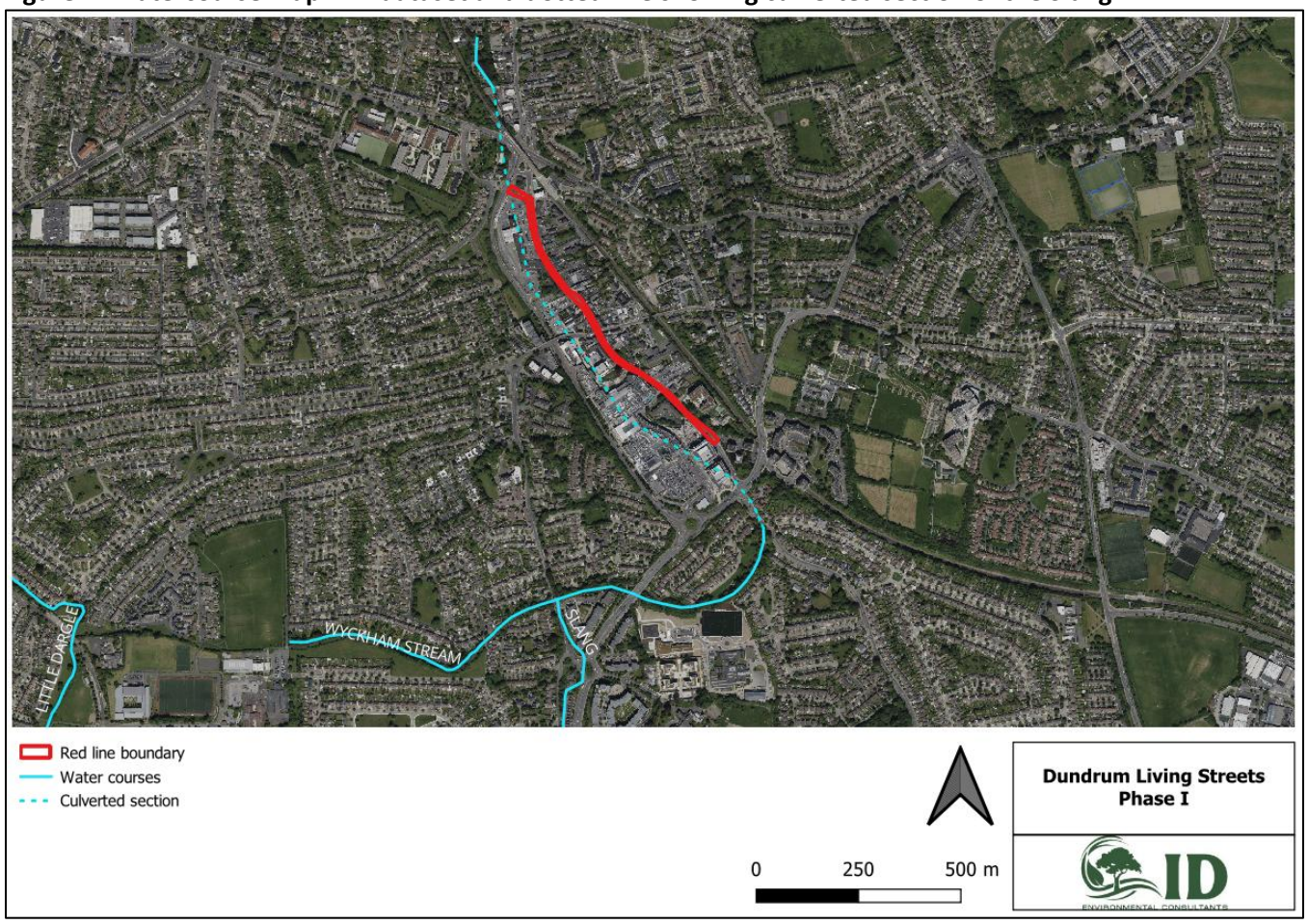
6.1 Watercourses and Surface Water Bodies

The nearest identified watercourse to the proposed development site is the River Slang, a tributary of the River Dodder within the Liffey Catchment. Within the vicinity of Dundrum Town Centre, the River Slang has been entirely culverted, flowing through an engineered subsurface channel beneath the built environment. The nearest open section of the Slang is over 200m south of the project red line boundary. According to the Environmental Protection Agency's (EPA) Water Framework Directive (WFD) monitoring data for the 2019–2024 reporting period, the River Slang is classified as having "Moderate" ecological status. While the Dodder River system itself is not designated under the EU Birds or Habitats Directives, it ultimately discharges into Dublin Bay, which supports several European sites, including South Dublin Bay SAC (Site Code: 000210) and South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024).

As set out in Section 1.9 of the Site-Specific Flood Risk Assessment (DBFL, 2026), the site lies within the River Slang catchment. The proposed surface water drainage infrastructure will connect to the existing surface water network, which ultimately discharges to the River Slang via existing outfalls. No direct discharge to the River Slang is proposed. Some existing gullies appear to connect to the combined sewer network, and the routing of certain

existing connections and outfalls remains to be confirmed. This includes the drainage serving a low-lying section of Ballinteer Road outside the site boundary. This section lies within the River Slang catchment, and its drainage is understood to discharge to the River Slang culvert. Further investigation is required to confirm the full drainage route.

Figure 2: Watercourse map EPA dataset and dotted line showing culverted section of the Slang



6.2 Designated Sites

Sites designated for the conservation of nature in Ireland include:

- Special Areas of Conservation (SACs) and:
- Special Protection Areas (SPAs).
- Natural Heritage Areas (NHAs)
- proposed Natural Heritage Areas (pNHAs)
-

SPAs and SACs form the *Natura 2000* network of sites. SPAs and SACs are prime wildlife conservation areas in the

country, considered important at both European and Irish levels. SPAs and SACs are designated under the EU Habitats Directive, transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended.

Natural Heritage Area (NHA) is the basic designation for wildlife in Ireland. These are areas considered important for their habitats or species of plants and animals. They first entered European Law under the 1976 Wildlife Act, were then transposed into Irish law through the 1997 Natural Habitats Regulations (S.I. No. 94 of 1997), and finally gained full statutory recognition in Ireland with the passing of the Wildlife (Amendment) Act 2000.

pNHA sites were published on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. These sites are designated as being of significance for species and habitats. While not afforded the same protection as sites protected under the Habitats Directive, they are subject to protection through the following mechanisms:

- Agri-environmental farm planning schemes such as ACRES (Formally the GLAS)
- Forest Service requirement for NPWS approval before they will pay afforestation grants on pNHA lands
- Recognition of the ecological value of pNHAs by Planning and Licensing Authorities.

All designated sites within close proximity to the proposed development were considered during the desktop study stage of this screening assessment to assess the potential for significant effects on their Qualifying Interests/Special Conservation Interests and Conservation Objectives, where available.

Designated sites identified for the conservation of nature surrounding the proposed works are detailed in Table 6. Maps of designated sites are shown in Figures 3 and 4.

Table 6: Designated sites surrounding the proposed development site

Site Code	Site Name	Distance	Designation	Connectivity to project site
001753	Fitzsimon's Wood	1.8km	pNHA	None
004024	South Dublin Bay and River Tolka Estuary	3.8km	SPA	Possible hydrological*
000210	South Dublin Bay	3.8km	SAC	Possible hydrological*
001205	Booterstown Marsh	3.9km	pNHA	Possible hydrological*
002104	Grand Canal	4.4km	pNHA	None
000991	Dodder valley	5.7km	pNHA	None
001209	Glenasmole Valley	6.5km	SAC	None
004040	Wicklow Mountains	6.7km	SPA	None

Site Code	Site Name	Distance	Designation	Connectivity to project site
001207	Dingle Glen	7km	pNHA	None
004006	North Bull Island	7.3km	SPA	Possible hydrological*
001211	Loughlinstown Woods	8.4km	pNHA	None
001206	Dalkey Coastal Zone and Killney Hill	8.5km	pNHA	None
000725	Knocksink Wood	8.5km	SAC	None
000206	North Dublin Bay	8.8km	SAC	Possible hydrological*
000713	Ballyman Glen	9.9km	SAC	None
004172	Dalkey Island	9.9km	SPA	None
003000	Rockabill to Dalkey Island	10km	SAC	Possible hydrological*
000128	Liffey Valley	10.2km	pNHA	None
001212	Lugmore Glen	11km	pNHA	None
001755	Glencree Valley	11.5	pNHA	None
000178	Santry Demesne	12.2km	pNHA	None
001768	Powerscourt Woodland	12.7	pNHA	None
000202	Howth Head	14.2km	SAC	Possible hydrological*
000199	Baldoyle Bay	14.7km	SAC	None
004016	Baldoyle Bay	14.7km	SPA	None
000714	Bray Head	14.9km	SAC	None

*Possible via Slang–Dodder–Dublin Bay from surface water drains within the development footprint

An indirect hydrological pathway to downstream European sites in Dublin Bay exists via the existing surface-water drainage network, the River Slang and the River Dodder. The accompanying AA Screening Report (IDEC, 2026) assessed this pathway. It concluded that likely significant effects on European sites could be excluded, either alone or in combination with other plans or projects, without reliance on mitigation.

An Appropriate Assessment Screening Assessment was carried out by the present authors for the Proposed Development. The AA Screening Report concluded the following:

In our professional opinion and in view of the best scientific knowledge and in view of the conservation objectives of the European sites reviewed in the screening exercise, the proposed development individually/in combination with other plans and projects (either directly or indirectly) is not likely to have any significant effects on nearby designated sites. ***Therefore, progression to Stage 2 Appropriate Assessment is not required.***

No risks to the conservation objectives or integrity of any nationally or internationally designated site are predicted as a result of the proposed works for one or a combination of the following:

- Significant buffer distance between the works area to the European site
- Lack of connectivity between the works areas and the designated area
- Size, scale and location of the proposed development
- The nature of the site's conservation objectives
- No impact or change to the management of any designated area or
- No change to the chemical or physiological condition of any designated site as a result of the proposed works.

Figure 3: European Designated Sites Map

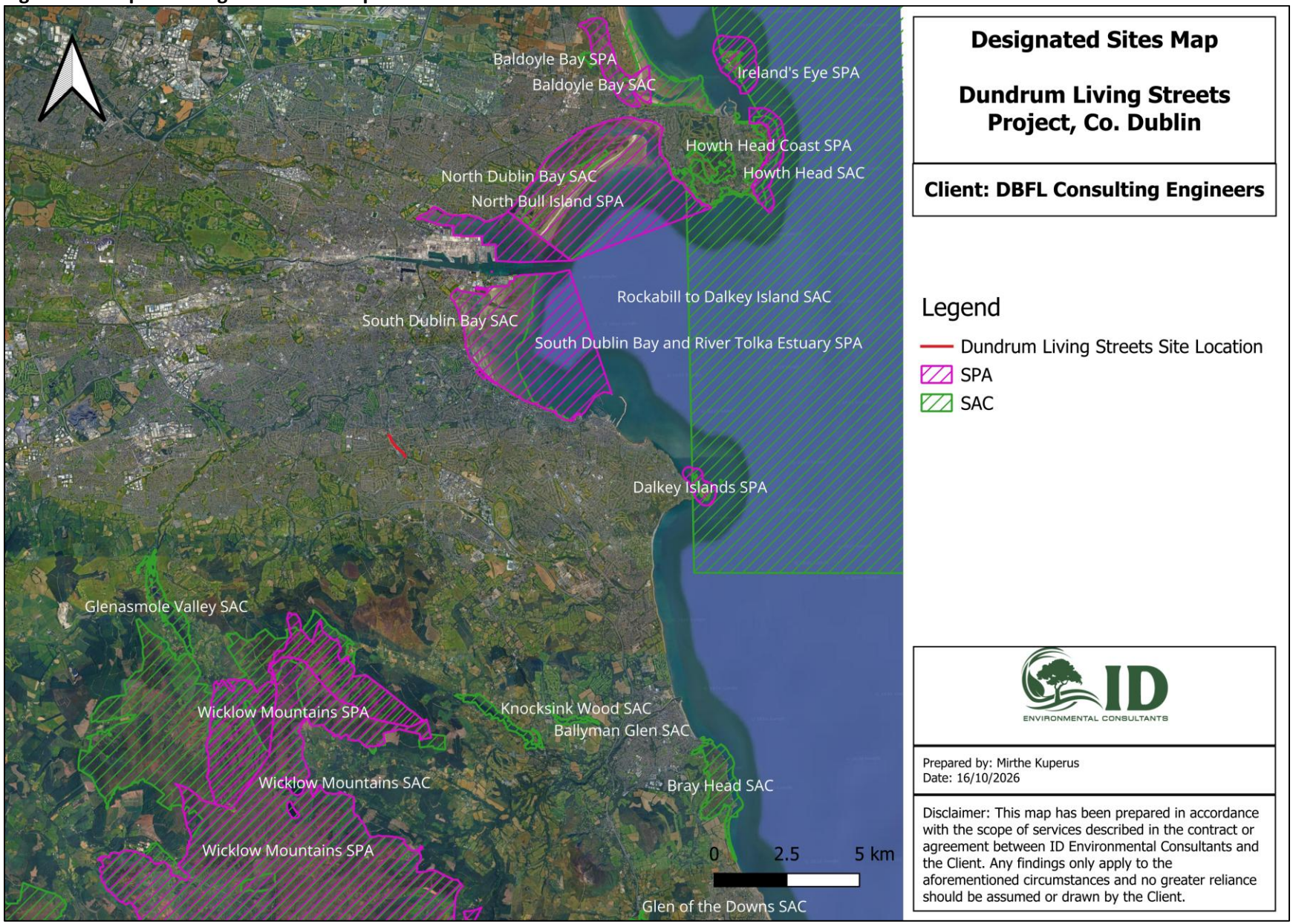
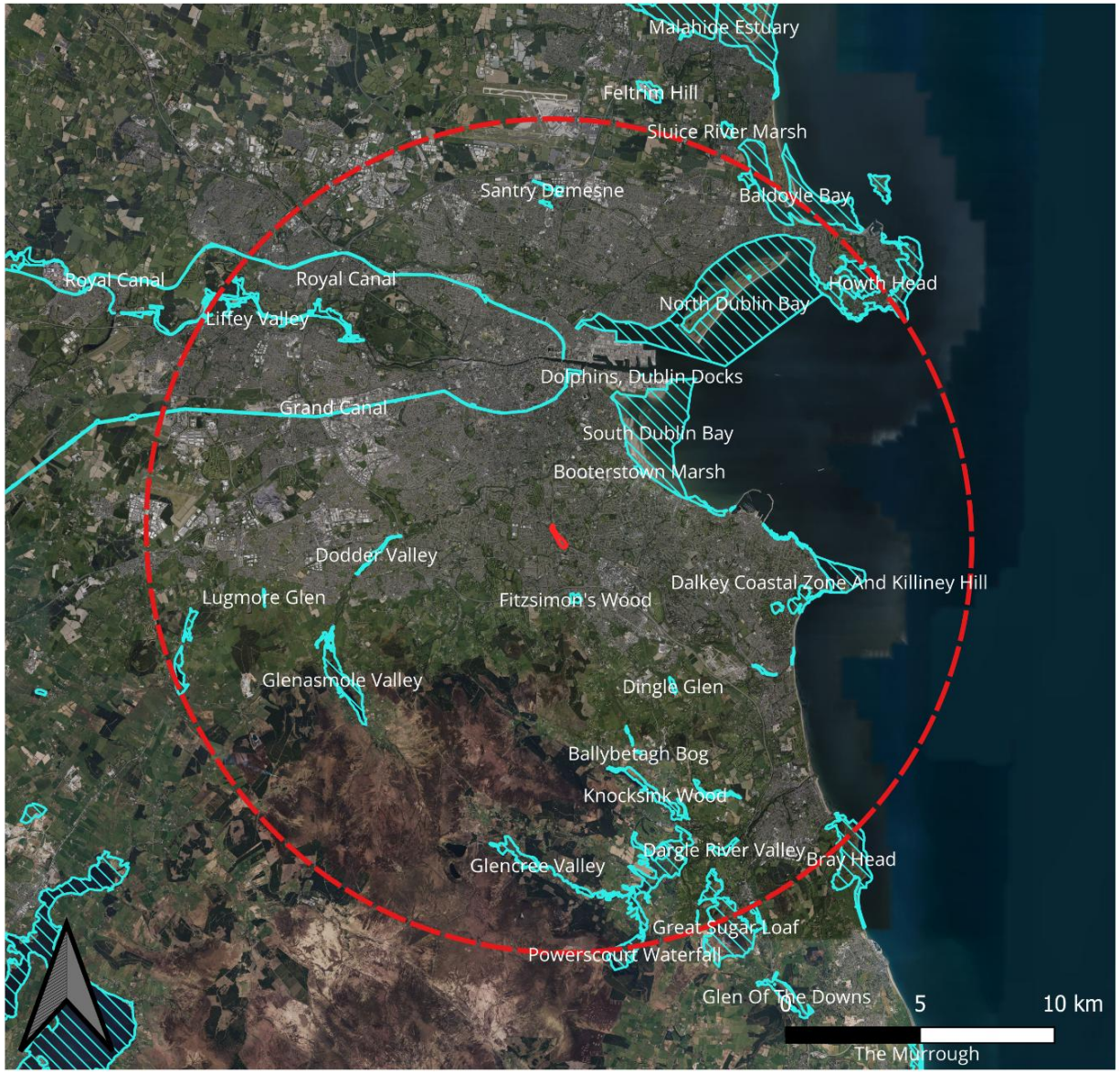


Figure 4: Nationally Designated Sites Map



Nationally Designated Sites Surrounding

Dundrum Living Streets Project, Co. Dublin

Legend

Site boundary

Site boundary

15km buffer

Designated Sites

NHA

pHNA

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Prepared by: Tommy Szlaga
Date:30/09/2025
Version number: 1
Project: Dundrum Living Streets Project

Disclaimer: This map has been prepared in accordance with the scope of services described in the contract or agreement between ID Environmental Consultants and the Client. Any findings only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client.

6.3 Habitats and Flora

Habitats were identified, mapped, and classified, and dominant plant species were noted in accordance with Fossitt (2010) guidelines. Habitats were classified in accordance with Fossitt (2000). Plant nomenclature follows the BSBI's List of Accepted Plant Names (BSBI, 2007). The survey timings fall within the recognised optimum period for vegetation surveys/habitat mapping i.e. April to September (Smith et al., 2011). The habitat assessment surveys described in this report have been undertaken with reference to the following guidelines and interpretation documents:

- Fossitt, J.A. (2000) A Guide to Habitats in Ireland. The Heritage Council, Kilkenny.
- Smith, G.F., O'Donoghue, P., O'Hora, K. and Delaney, E., 2011. Best practice guidance for habitat survey and mapping. The Heritage Council: Ireland.
- JNCC. (2010). Handbook for Phase 1 habitat survey - A technique for environmental audit.
- Commission of the European Communities (2007) Interpretation manual of European Union habitats. Eur 27. European Commission DG Environment.
- NPWS (2013) The Status of EU Protected Habitats and Species in Ireland. Habitat Assessments Volume 2. Version 1.1. Unpublished Report, National Parks and Wildlife Service. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.
- NPWS (2019).The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O'Neill

Habitats considered ecologically significant, particularly those that may correspond to those listed in Annex I of the EU Habitats Directive 92/43/EEC, were identified and classified as Key Ecological Receptors (KERs). Field surveys focusing on flora and habitat were carried out on the August 30th. The desktop assessment of recorded flora via the NBDC[5] shows no records of protected or rare flora within 2km of the subject lands.

The confirmatory walkover on September 19th 2026 found that the inspected areas remained predominantly characterised by Buildings and Artificial Surfaces (BL3), with limited amenity planting, sparse roadside vegetation and existing trees. No additional habitat types or notable botanical features were recorded within these areas.

6.4 Habitat Description

The proposed Phase 1 works are primarily located within existing urban roadways and associated hardstanding areas along Main Street and Sandyford Road, Dundrum, Co. Dublin. The wider ecological survey area also included Dundrum Bypass and Wyckham Way, and relevant habitat observations from these areas are retained as part of the ecological baseline. The surrounding landscape comprises established residential, commercial and retail development, predominantly corresponding to **Buildings and Artificial Surfaces (BL3)**. Additional habitats recorded include **Treelines (WL2)** of lime (*Tilia × europaea*) bordering the footpaths along the southern side of Dundrum Bypass, while birch (*Betula* spp.) treelines are found along Main Street and Sandyford Road. **Hedgerows (WL1)**, primarily composed of sycamore (*Acer pseudoplatanus*), with some ash (*Fraxinus excelsior*), birch (*Betula* spp.), willow (*Salix* spp.), bramble (*Rubus fruticosus* agg.), and butterfly bush (*Buddleja davidii*), are present along

[5] https://maps.biodiversityireland.ie/Map

the eastern boundary of Dundrum Bypass and wrap around the southern edge of Wyckham Way. **Amenity Grasslands (GA2)** occur adjacent to residential housing east of Dundrum Bypass.

6.4.1 Invasive Species

The invasive alien species assessment comprised a desktop study and targeted field surveys, undertaken to identify the potential for Invasive Alien Species (IAS) to occur within the study area and to assess the risk of their introduction or spread as a result of the proposed development.

The assessment was carried out with reference to:

- The Wildlife Acts 1976–2023, as amended
- The European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended; European Union (Invasive Alien Species) Regulations 2024 (S.I. No. 374 of 2024)
- The Third Schedule of the Habitats Regulations
- The National Roads Authority (2010) Guidelines for the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads Schemes
- The Chartered Institute of Ecology and Environmental Management (CIEEM, 2017) Guidelines for Preliminary Ecological Appraisal

No Third Schedule invasive species were identified within or directly adjacent to the proposed development site. The Dundrum Town Centre area comprises a heavily modified landscape, with the majority of vegetation cover consisting of non-native ornamental shrubbery. Species with a medium ecological impact, including butterfly bush (*Buddleja davidii*) and sycamore (*Acer pseudoplatanus*), were recorded during site visits. However, these species do not require any management actions.

No Third Schedule invasive non-native plant species were recorded in the areas inspected during the confirmatory walkover on September 19th 2026. No additional invasive-species constraint was identified within these areas.

Figure 5: Habitats within the Proposed Development Site and surrounding area



Habitat Map

Dundrum Living Streets Project, Co. Dublin

Legend

Site boundary

Length of the proposed scheme

Habitats

GA2 - Amenity Grassland

WL1 - Hedgerow

WL2 - Treeline

BL3 - Buildings and Artifical Surfaces

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Disclaimer: This map has been prepared in accordance with the scope of services described in the contract or agreement between ID Environmental Consultants and the Client. Any findings only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client.

6.5 Otters

Otters, along with their breeding and resting places, are protected under the provisions of the Wildlife Act, 1976, as amended by the Wildlife (Amendment) Act, 2000. Otters have additional protection under the Habitats Directive, which is transposed into Irish law by the European Communities (Natural Habitats) Regulations (S.I. 94 of 1997), as amended. No suitable habitat for otters was found within the proposed development site or within 150m of the nearest works.

6.6 Other Fauna

Badgers (*Meles meles*) and their refugia are protected under the Wildlife (Amendment) Act 2000, the Wildlife Act 1976, and European legislation. One badger record in the NBDC dates back to 2013. No signs of badgers were recorded within the survey area during field surveys in September 2025.

Both the Red Squirrel (*Sciurus vulgaris*) and the Pine Marten (*Martes martes*) are protected under the Irish Wildlife Act (1976), the Wildlife (Amendment) Act (2000), and Appendix III of the Bern Convention. The European Union's Habitats and Species Directive further obliges Ireland to maintain the favourable conservation status of both of these species throughout their home range. No records of Pine Marten or Red Squirrel are found on the NBDC database for the area. No signs of either species were found within or surrounding the study area.

6.7 Bats

All bat species are protected by law in Ireland at a national and European level. Nationally, the Wildlife Act 1976 (amended 2000) makes it an offence to wilfully interfere with or destroy bats' resting or breeding places. All species of Irish bats are listed under Schedule 5 of the Wildlife Act (1976), making it 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 occupies a structure or place that it uses for that purpose.

The EU 'Habitats' Directive (92/43/EC; transposed into Irish law by EC Birds and Natural Habitats Regulations (S.I. 477 of 2011) provides legal protection for bats and their roosts at a European Union level. In addition, the Irish government are signatories of the 1979 Bonn 'Convention on the Conservation of Migratory Species of Wild Animals' and the 1982 Convention on the 'Conservation of European Wildlife and Natural Habitats'. Ireland must also fulfil its commitments under the 1991 'Eurobats Agreement' to conserve bats in Europe. Under the EU Habitats Directive, lesser horseshoe bats are listed as an Annex II species (afforded special protection). All other Irish bat species are listed in Annex IV (general protection) of this directive.

Regulation 51(2) of the 2011 Regulations provides – ("(2) 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— (a) deliberately captures or kills any specimen of these species in the wild, (b) deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration, (c) deliberately takes or destroys

eggs of those species from the wild, (d) damages or destroys a breeding site or resting place of such an animal, or (e) 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."

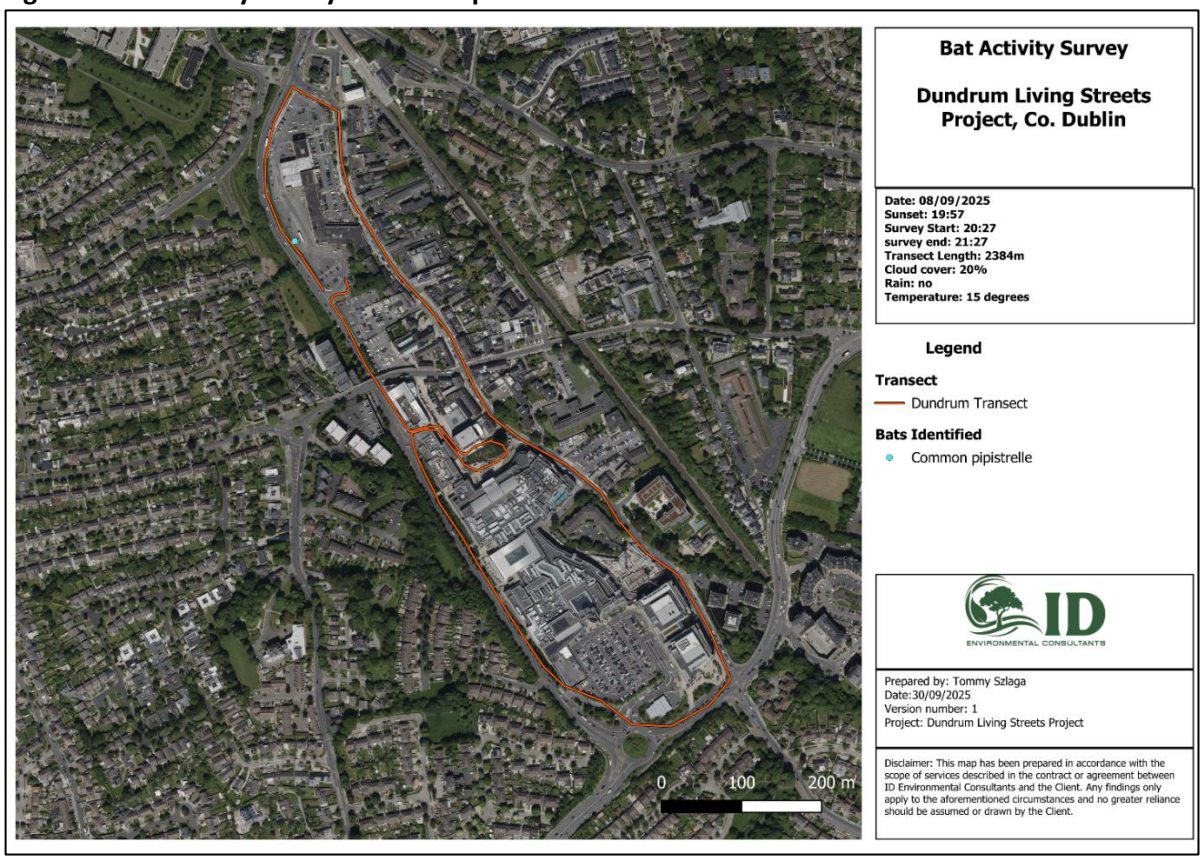
6.7.1 Bat Activity Surveys

A bat transect survey was undertaken within the vicinity of the proposed development area to assess bat activity and potential usage of the site by commuting or foraging bats. The survey was conducted in accordance with best practice guidance as outlined in "Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023)", published by the Bat Conservation Trust. Echolocation recordings were conducted using a handheld Echo Touch Meter Pro 2. Recordings were stored for later analysis. Bat sonograms were manually analysed and identified to species level using specialist software, Wildlife Acoustics Kaleidoscope Viewer Pro.

The proposed development site was recorded as having negligible bat roosting potential and negligible foraging potential due to lack of connectivity, lack of suitable roost features, and high levels of noise and light pollution associated with heavily developed and urbanised areas.

No roosts were identified during the transect; a single common pipistrelle (heard, not seen) was identified. A full account of survey findings is included in Figure 6.

Figure 6: Bat activity survey results map



6.8 Birds

Breeding-season surveys were undertaken on the Proposed Development site in September 2025. Wintering surveys were carried out in November 2025. While this breeding bird survey was carried out outside the key season, the abundance of suitable nesting habitat within the site of works was almost nil.

All species recorded were typical of an urban environment and included swift (*Apus apus*), common starling (*Sturnus vulgaris*), lesser black-backed gull (*Larus fuscus*), black-headed gull (*Chroicocephalus ridibundus*), herring gull (*Larus argentatus*), common blackbird (*Turdus merula*), feral pigeon (*Columba livia domestica*), Eurasian jackdaw (*Corvus monedula*), chaffinch (*Fringilla coelebs*) and rook (*Corvus frugilegus*).

Gull species were particularly active during the survey period and were frequently observed flying, circling, calling, foraging and occasionally roosting within and above the site. Mixed groups often congregated and squabbled over food scraps, resulting in near-constant vocal activity typical of urban gull assemblages.

Wintering-season observations recorded a range of waterbirds using the wider area, including black-headed gull (*Chroicocephalus ridibundus*), herring gull (*Larus argentatus*) and lesser black-backed gull (*Larus fuscus*). A wide variety of passerines was also recorded throughout the winter period. These included coal tit (*Periparus ater*), blackbird (*Turdus merula*), song thrush (*Turdus philomelos*), robin (*Erithacus rubecula*), blue tit (*Cyanistes caeruleus*), chaffinch (*Fringilla coelebs*) and wren (*Troglodytes troglodytes*). Additional passerine species such as collared dove (*Streptopelia decaocto*), feral pigeon (*Columba livia domestica*), hooded crow (*Corvus cornix*), jackdaw (*Corvus monedula*), magpie (*Pica pica*), pied wagtail (*Motacilla alba*), rook (*Corvus frugilegus*) and starling (*Sturnus vulgaris*) were also present. Observed behaviours included perching, foraging, roosting, local commuting and vocalising.

6.9 Cumulative and In combination Effects

Cumulative effects may arise where the impacts of the proposed development combine with those of other existing, permitted or proposed developments to affect the same ecological receptors. These effects may result from concurrent or successive works, permanent changes to the same habitat network, or impacts transmitted through a shared pathway such as drainage to a watercourse.

The cumulative ecological assessment follows CIEEM (2018, updated September 2024). The findings on potential in-combination effects on European sites are addressed separately in the Appropriate Assessment (AA) Screening, with reference to European Commission (2021) guidance.

6.9.1 Geographic Boundaries and Temporal Scope

The proposed development comprises Phase 1 of the wider Dundrum Living Streets project, a defined and independently deliverable package of works along Main Street and Sandyford Road. The geographical scope of the assessment was determined by the Zone of Influence (ZoI) of the proposed works, taking account of the ecological receptors present and the potential for shared ecological or hydrological pathways. The assessment considered both concurrent and successive construction works, as well as the combined effects of permanent

habitat changes and operational activities.

6.9.2 Identification of Relevant Plans and Projects

The assessment drew on the planning review in Section 2.3 of the EIA Screening Report (MDB, 2026), which identified 22 planning entries within approximately 50 m of the proposed route using records from Dún Laoghaire–Rathdown County Council and An Coimisiún Pleanála reviewed in September 2026. The 50 m buffer was used to identify nearby developments. The review also considered projects with potential links beyond this distance through drainage to the River Slang or connections with the wider active travel network. Extensions of duration and amendments were considered alongside their parent permissions.

The principal permitted developments identified were the 107-apartment Ironworks development at Dundrum Town Centre (ACP305261 and associated permissions) and the 21-apartment development to the rear of Nos. 7–9 Main Street (ACP317253, D22A/0421). The remaining planning entries largely relate to changes of use, shopfronts and signage, small extensions, demolition and other localised works. The review also considered the planned DLR Connector and Taney Road to N11 Active Travel Route. The completed Slang River Greenway forms part of the existing ecological baseline.

6.9.3 Assessment of Cumulative Effects

The principal potential for cumulative effects arises during construction. Concurrent or successive external works could increase the intensity or duration of localised disturbance from noise, dust or temporary lighting where the same ecological receptors are exposed. There is also potential for cumulative water-quality effects where sediment-laden runoff from separate construction sites enters a shared drainage pathway to the River Slang. This pathway is most relevant at the River Slang crossing and at work areas that drain to the watercourse. Given their nature and scale, the minor developments identified in the planning review are unlikely to contribute materially to these effects.

The planned DLR Connector has the clearest potential for interaction with the proposed development. The schemes intersect at the junction of Main Street, Kilmacud Road Upper, Sandyford Road and Ballinteer Road, where concurrent or successive works could increase the intensity or duration of localised disturbance. The detailed design and construction programme for the DLR Connector were unconfirmed at the time of the review, so the extent and duration of any overlap remain uncertain. The planned Taney Road to N11 Active Travel Route lies to the north-east, with no direct overlap identified in the planning review.

The available Information indicates that the proposed development and the projects reviewed are unlikely to cause significant cumulative habitat loss, fragmentation, or operational disturbance. No significant adverse cumulative ecological effects are predicted. The AA Screening concluded that the proposed development is unlikely to have significant effects on European sites in combination with other plans or projects.

6.10 Summary of Key Ecological Receptors (KERs)

Table 8: Ecological evaluation of ecological resources within and surrounding the subject lands

Habitat/Species/Site	Highest Ecological Valuation Level	Key Ecological Receptor inside the ZOI	Rationale
Designated Sites			
European sites	International	No	No possible connectivity exists between the proposed development and any European Designated Site based on the source pathway receptor methodology. This was confirmed during an Appropriate Assessment Screening Assessment carried out by the present authors for the Proposed Development. (IDEC (2026)).
pNHAs and Nationally Designated Sites	National	No	No possible connectivity exists between the proposed development and any Nationally Designated Site based on the source pathway receptor methodology. For the pNHA's, given the lack of physical pathway, and the fact that they are designated primarily for habitats, flora and fauna occurring within their boundaries, and will not be subject to habitat loss, disturbance and/or displacement during the construction phase or any phase of the development, no impact is envisaged.
Habitats & Flora			
Rivers and surface water bodies	High Local Importance	Yes	No surface water body is found within or adjacent to the proposed works. The closest surface section of the Slang is over 200m from the works at their closest point. However local surface water draisn eventaully drain into this watercourse. While there is a minor potential impact from surface water entering drains during an intense rainfall event that could eventually reach the river, the limited scale of works at any one time, along with the separation distance and dilution factors, means no significant adverse effects are expected. Best practice site management procedures have been outlined below for the construction phase of the development.

Habitat/Species/Site	Highest Ecological Valuation Level	Key Ecological Receptor inside the ZOI	Rationale
Amenity grassland (GA2)	High Local Importance	No	This habitat lies outside the footprint of the proposed site of works.
Treeline (WL2) and Hedgerows (WL1)	High Local Importance	No	Habitat outside the ZOI for this development. Small amounts of vegetation and tree clearance will occur; however, effects will not be significant. Landscaping is a key part of the plan and will increase plant abundance and diversity within the proposed development area above baseline condition.
Invasive Species	-	No	No Third Schedule invasive species were identified within or directly adjacent to the proposed development site. The Dundrum Town Centre area comprises a heavily modified landscape, with the majority of vegetation cover consisting of non-native ornamental shrubbery. Species with a medium ecological impact, including butterfly bush (*Buddleja davidii*) and sycamore (*Acer pseudoplatanus*), were recorded during site visits but were recorded outside the works areas.
Fauna			
Bats	National importance	No	The proposed development site was recorded as having negligible bat roosting potential and negligible foraging potential due to lack of connectivity, lack of suitable roost features, and high levels of noise and light pollution associated with heavily developed and urbanised areas. A dedicated bat survey identified no potential roost sites; a single common pipistrelle (heard, not seen) was identified. A full account of survey findings is included in fig 4. Therefore, the impact on bats can be classified as negligible.
Otters	National and International importance	No	No habitat suitable for otter was recorded within the ZOI of the proposed Project. Therefore, the impact on otters is negligible.
Terrestrial mammals	High Local Importance	No	No other protected mammal species were recorded within the Project ZOI.
Breeding Birds	High Local Importance	No	All works are confined to the existing urban and hardscaped environment of Dundrum Town Centre. This area already experiences high levels of anthropogenic noise and activity,

Habitat/Species/Site	Highest Ecological Valuation Level	Key Ecological Receptor inside the ZOI	Rationale
			and any bird species potentially present in the wider area are likely to be habituated to such urban disturbance. Any removal of trees and shrubs will be minor and will have no significant impact.
Cumulative and In Combination Impacts	-	No	Several other projects have been considered as part of the assessment process. A search of the planning records of Dún Laoghaire-Rathdown County Council and An Coimisiún Pleanál was carried out as part of the desktop study, and a number of relevant planning applications were reviewed. Given the small scale, short-term construction phase, and the fact that the proposed development is consistent with the existing land use in the area, the Project is not expected to result in any significant in-combination effects with other plans or projects.

7 Ecological Impact Assessment

7.1 Water Quality and Aquatic Fauna

While considered unlikely, impacts on water quality are possible during the construction phase of the proposed development. In a worst-case scenario, without mitigation, an accidental pollution event of sufficient magnitude could affect water quality in the Slang River via surface water drainage channels within the development footprint. Mitigation measures are required to avoid significant negative effects during construction. A reduction in local water quality could affect the aquatic habitats and natural conditions of these watercourses.

7.1.1 Construction Phase Impacts

Potential for **minor adverse temporary impacts** in the absence of mitigation. Deterioration of water quality arising from the indirect effects of contaminated run-off or discharge into the aquatic environment through siltation, nutrient release and/or contamination. The construction phase of the development will involve site preparation (e.g., earthworks, excavation, etc.) and the storage of sands and soil used for the construction phase. Without mitigation, the proposed construction works could result in sediment run-off during prolonged heavy rain. Similarly, without mitigation, machinery operation and refuelling during construction could result in hydrocarbon leaks.

7.1.2 Operational Phase Impacts

No significant effect predicted. Once operational, there will be limited opportunities for ground disturbance and, as such, negligible potential for adverse effects.

7.2 Habitats – Construction Phase

Due to the limited number of green spaces in the surrounding environment, treelines along Sandyford Road provide ecological value for local birds and insects. Vegetation removal, including partial loss of treelines, may result from the Project and could slightly negatively affect the site's identified ecological features.

7.3 Habitats – Operational Phase

No significant adverse operational-phase impacts on habitats are predicted because of the proposed Phase 1 development.

7.4 Birds – Construction

The partial loss of sections of treelines and hedgerows may be required to be removed to facilitate construction. If works take place during the breeding season, Minor adverse, non-significant temporary impacts to local breeding bird populations are likely in the absence of mitigation.

7.5 Birds – Operational

As no further excavation or construction works are required during the operational phase of the proposed Project, no further habitat impacts are envisaged.

8 Avoidance and Mitigation Measures

Mitigation is prescribed in accordance with the EPA draft guidance on EIAR (EPA, 2017), which requires avoidance as the first approach. Where this is not feasible, measures should be adopted to prevent impacts from giving rise to adverse effects (e.g., designing bunded chemical storage). Where impacts cannot be avoided (e.g., noise generation), mitigation by reducing the impact is required to limit the receptor's exposure to an acceptable level (often achieved by interrupting the pathway between the source and receptor). The primary parties responsible for implementing these measures include the applicant and the construction team (site manager, project environmental manager, and site operatives).

8.1 General Mitigation Measures and Construction Environmental Management Planning (CEMP)

A CEMP (DBFL, 2026) has been developed that outlines the approach that will be adopted for environmental management throughout the Project works at the site, with the primary aim of reducing and avoiding any adverse effects from construction stages on the environment with particular regard to water quality within local water bodies and local habitat areas. The CEMP works best as a live document and should be developed in conjunction

with the main contractor, considering the recommendations of this EcIA and all other documentation related to environmental protection.

8.1.1 CEMP Objectives

The objectives of this CEMP and any subsequent Contractor CEMP are, therefore, to:

- Act as a continuous link and reference document for environmental issues between the design, construction, testing and commissioning stages of the Project;
- Demonstrate how construction activities and supporting design shall properly integrate the requirements of environmental legislation, planning consent conditions, policy, good practice, and those of the environmental regulatory authorities and third parties;
- Record environmental risks and identify how they will be managed during the construction period;
- Record the objectives, commitments and mitigation measures to be implemented together with the programme of works and date of achievement;
- Identify key staff structures and responsibilities associated with the delivery of the Project and environmental control and communication and training requirements as necessary;
- Describe the Contractor's proposals for ensuring that the requirements of the environmental design are achieved, or are in the process of being achieved, during the Contract Period;
- Act as a vehicle for transferring key environmental Information at handover to the body responsible for the operational management of the proposed development site. This shall include details of the asset, short and long-term management requirements, and any monitoring or other environmental commitments (where required); and
- Provide a review, monitoring and audit mechanism to determine the effectiveness of and compliance with environmental control measures and how any necessary corrective action shall take place (where required).

8.1.2 These CEMP Areas

The following areas should be addressed as part of the Project CEMP

- Environmental Management;
- Roles and Responsibilities
- Biodiversity
- Water Quality
- Noise and Vibration
- Dust
- Rubbish, Litter and Waste; and

- Potentially Hazardous Wastes arising

8.1.3 Severe Weather Events

Works should be suspended if severe weather events, including any of the following weather conditions, are forecast or occur:

- 10 mm/hr (i.e. high-intensity local rainfall events);
- >25 mm in a 24-hour period (heavy frontal rainfall lasting most of the day); or
- >half monthly average rainfall in any 7 days.

Prior to works being suspended, the following control measures shall be completed:

- Secure all open excavations;
- Provide temporary or emergency drainage to prevent back-up of surface runoff; and
- Avoid working during heavy rainfall and for up to 24 hours after heavy events to ensure drainage systems are not overloaded.

8.2 Water Quality and Aquatic Fauna – Mitigation

- The following mitigation measures will ensure there are no impacts on water quality in the immediate vicinity of the proposed development from the release of hydrocarbons, polluting chemicals, sediment/silt and contaminated water control during the construction stage of the proposed development and therefore no potential impacts on the depositing/lowland river habitat (River Slang)

- Specific measures to prevent the release of sediment above baseline conditions to the existing surface water drainage network during the construction work, which will be implemented as the need arises. These measures include, but are not limited to, silt fences, silt curtains, settlement lagoons, and filter materials.

- Provide exclusion zones and barriers (e.g. silt fences) between earthworks, stockpiles, and temporary surfaces to prevent sediment from washing into the existing drainage systems and, in turn, the downstream receiving water environment.

- A register of all hazardous substances, which will either be used on site or expected to be present (in the form of soil and/or groundwater contamination), shall be established and maintained. This register will be available at all times and shall include, at a minimum:
  - Valid Safety Data Sheets;
  - Health & Safety, Environmental controls to be implemented when storing, handling,
  - using and in the event of spillage of materials;
  - Emergency response procedures/precautions for each material; and
  - The Personal Protective Equipment (PPE) required when using the material.
  - Implementation of response measures to potential pollution incidents.

- Robust and appropriate Spill Response Plan and Environmental Emergency Plan shall be prepared prior to works commencing, and they will be communicated, resourced and implemented for the duration of the works. Emergency procedures/precautions and spillage kits will be available, and construction staff will be trained and experienced in emergency procedures in the event of accidental fuel spillages.

- All trucks shall have a built-on tarpaulin that will cover excavated material as it is being hauled off-site, and wheel wash facilities will be provided at all site egress points.

- Machinery arriving on site should be cleaned and free from invasive species.

- Water supplies shall be recycled for use in the wheel wash. All waters shall be drained through appropriate filter material before discharge from the construction sites.

- The removal of any made ground material that may be contaminated from the construction site, and its transportation to an appropriate licenced facility, shall be carried out in accordance with the Waste Management Act, best practice, and relevant guidelines.

- The appointed contractor shall prepare and adopt a discovery procedure for contaminated material prior to excavation works commencing on site. These documents shall detail how potentially contaminated material will be dealt with during the excavation phase.

- Implementation of measures to minimise waste and ensure correct handling, storage and disposal of waste (most notably wet concrete, pile arisings and asphalt).

- All of the above measures implemented on site will be monitored throughout construction to ensure they are working effectively, implement maintenance measures if required and applicable, and address any potential issues that may arise.

8.3 Habitat and Flora

Proposed mitigation measures are summarised below:

- Existing vegetation was considered from the outset of the design process in order to minimise the impact of the development, particularly on existing trees.
- Site engineering, drainage, ducts and other infrastructure has been designed to minimise impact.
- Replacement planting is proposed as part of the landscape plans issued by Dermot Foley Landscape Architects.
- The following mitigation measures are proposed:
    - To protect trees to be retained, fell adjacent trees to be removed and grind out stumps in accordance with BS5837:2012;
    - Implement tree protection measures for trees to be retained in accordance with BS5837:2012 before any demolition or construction works proceed;

- Where required strip and store topsoil in accordance with BS4428:1989 and BS3882:2007;
- Install proposed replacement and additional proposed planting and seeded areas in accordance with the Typical Soft Landscape Details issued by Áit Urbanism + Landscape Ltd s and included separately as part of this planning submission.
- Install proposed tree, groundcover, grassland, and wetland planting in accordance with the proposed landscape plans;
- Where temporary construction is needed, lighting will be directed away from retained vegetation and ecological corridors where practicable. Light spill outside the working area will be minimised.

8.4 Birds

- Any trimming of vegetation should be carried out outside of the bird breeding season (March 1st – August 31st). If vegetation clearance must occur within the breeding season, then an Ecological survey will be required. This will examine the area(s) of construction/clearance no more than 48 hours before works. These surveys will determine the presence/absence of nesting birds, and if active nests are present, no cutting will take place. They will have the authority to include a buffer zone if needed until any species have moved location.

8.5 Predicted Residual Impacts of the Proposed Development

Following the full implementation of both the mitigation and recommended measures, the residual impacts on biodiversity are considered imperceptible to not significant for the proposed Project.

9 Conclusion

No significant adverse ecological effects are predicted as a result of the Proposed Development. No Annex I habitats or habitats of greater than high local ecological importance were identified within the development site. Furthermore, no rare, threatened or protected plant species listed in the Irish Red Data List (Wyse Jackson et al., 2016) or the Flora (Protection) Order 2022 were recorded during the ecological surveys.

The Proposed Development is not anticipated to result in significant adverse effects on protected species or habitats of ecological importance. Nevertheless, in accordance with best ecological practice, any necessary tree or vegetation removal should, where practicable, be undertaken outside the bird breeding season (1 March to 31 August inclusive) to minimise the risk of disturbance to nesting birds. Where trees or other vegetation are removed, appropriate compensatory planting should be undertaken to offset habitat losses and maintain ecological connectivity.

Subject to implementing these measures, no significant residual adverse ecological effects are anticipated during either the construction or operational phases of the Proposed Development.

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Appendix 1: Site Photos

Typical landscape of the Proposed Site of Works	Butterfly bush adjacent to the Dundrum bypass
	
Mature treeline adjacent to Sandyford Road	**Amenity grassland adjacent to site of works**





Appendix 2: Site Layout Drawings

Figure A2.1: Proposed Landscape Design — Sandyford Road



Figure A2.2: Proposed Landscape Design — Sandyford Road

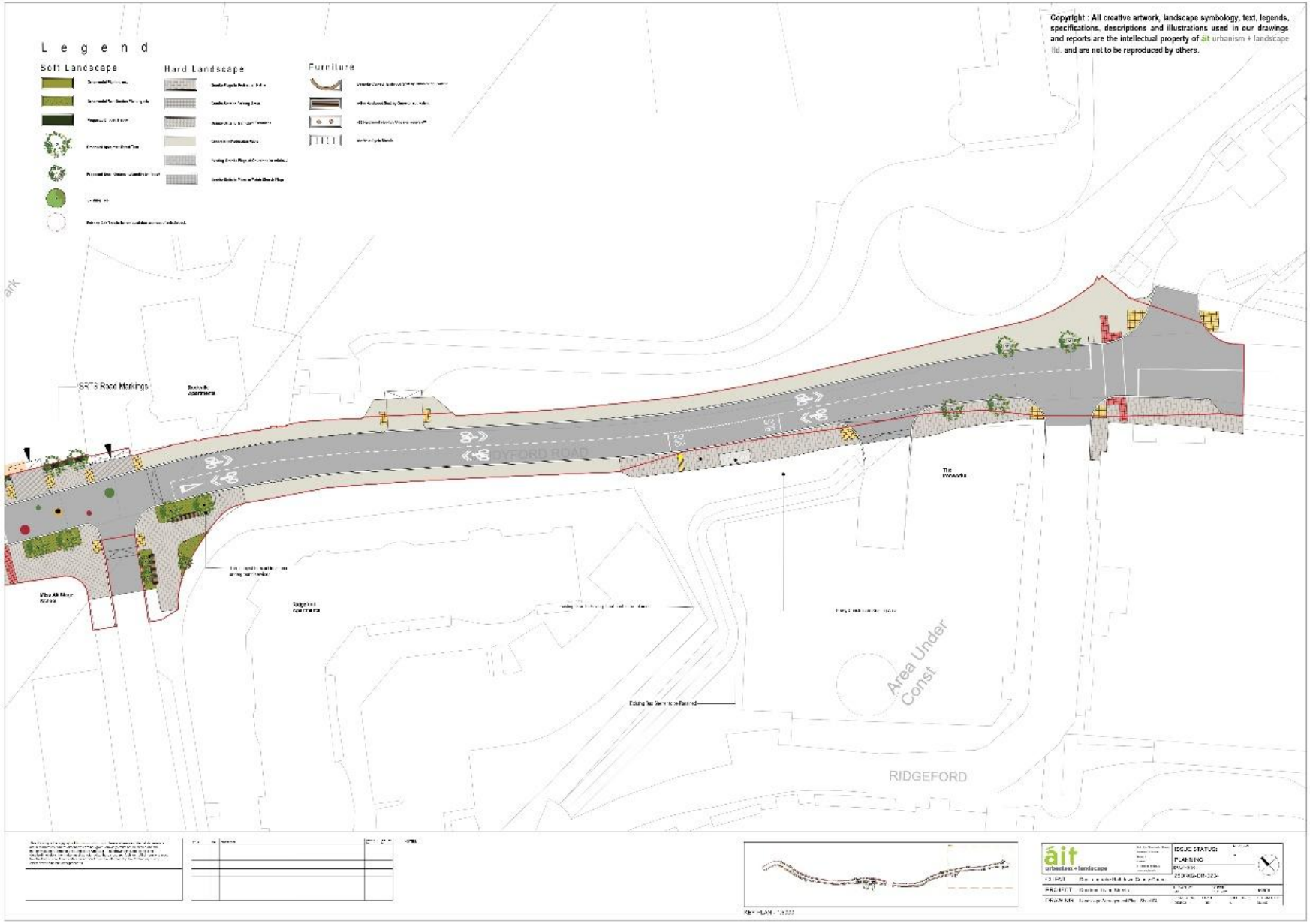

Figure A2.3: Proposed Landscape Design — Main Street

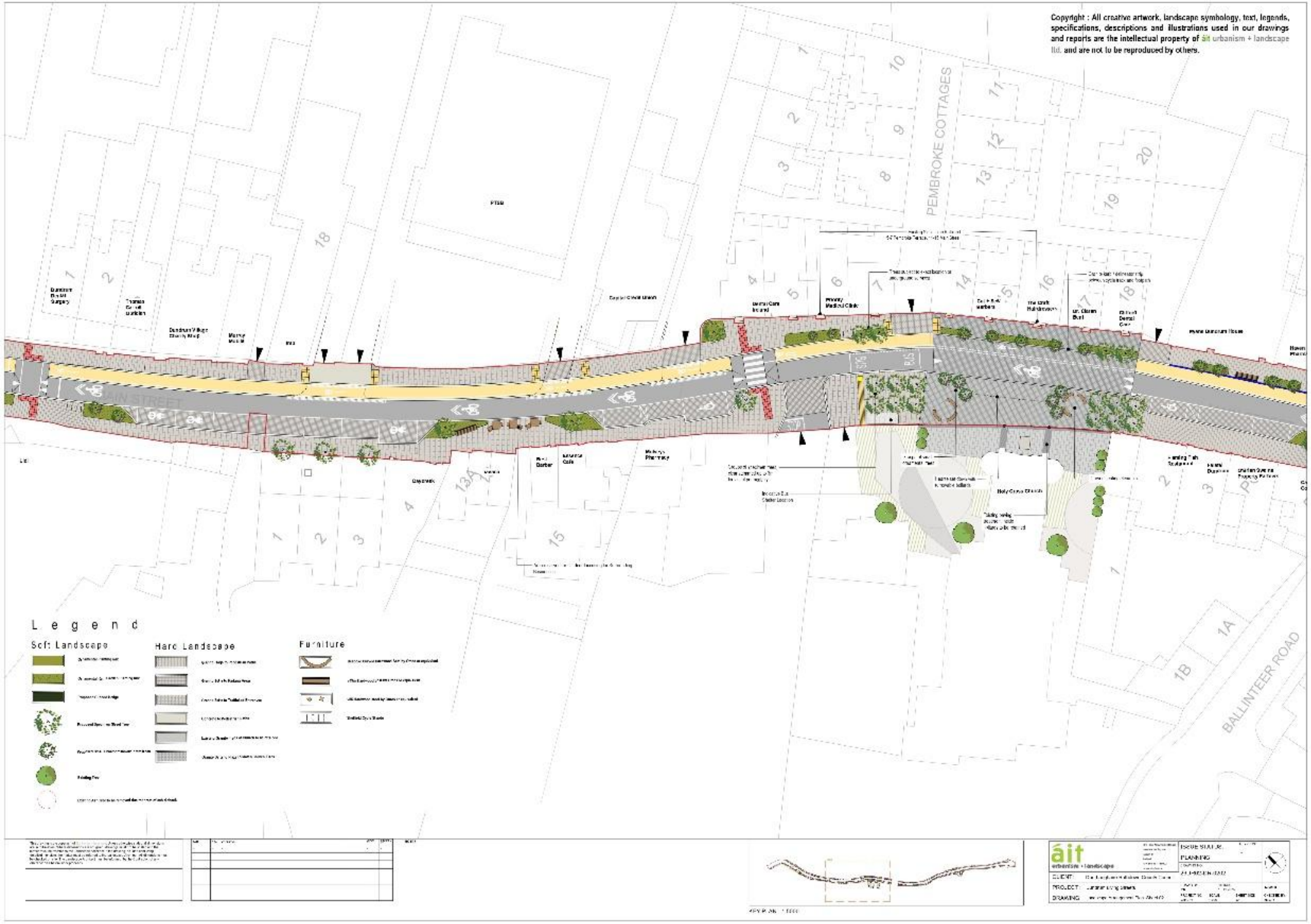

Figure A2.4: Proposed Landscape Design — Main Street

