Green Infrastructure Plan



Prepared for AFEC International on behalf of The Libermann Trust Company CLG

Templeogue College, Templeville Road, Co Dublin



1.0 SITE LOCATION AND DESCRIPTION

The Application Site comprises a community residential building located on the northern side of Templeville Road, Templeogue Village. The subject site is part of the larger Templeogue College site which has buildings located on the eastern part of the site along with a gym and swimming pool building. The existing residential building (not currently in operation) has a separate access from the school on Templeville Road. A Circle K petrol station is located to the west of the site with large area of open space/sports grounds associated with the College located to the north of the subject site.

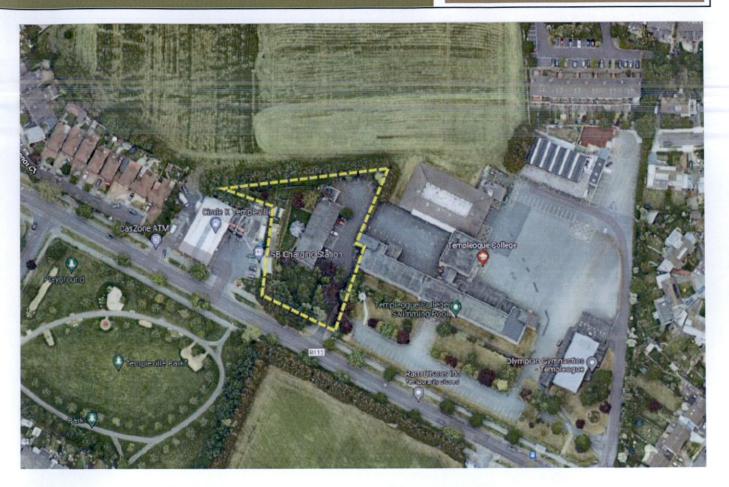
Permission is sought for the following works:

- The change of use of Templeogue College Community Residence and garage (c.767sqm) to a special educational needs school.
- Reconfiguration and refurbishment (internal and external alterations) of existing building with new extension (c.9sqm) to the rear.
- Revised internal layout consists of 4no. classrooms and related ancillary school facilities (including reception area, principal's office, meeting room, living skills room, staff room, student, and staff WC. 's and shower room, a sensory room, storage, and new stairs.
- Reconfiguration of existing garage for rear access.
- Minor alterations to the existing facades and siteworks to facilitate the proposed development: including
 - 5 no. new car parking spaces and drop-off point;
 - development of rear garden to include landscaping for 2no. soft play areas;
 - a new pedestrian access from Temple Ville Road





Existing trees and Hedgerows on site.



Aerial view of subject site - Google images 2023

2.0 RELEVANT PLANNING HISTORY

The subject site is zoned Zoning Objective 'RES': To protect and/or improve residential amenity' under the 2022-2028, South Dublin County Development Plan. There is no recent planning history attached to the application site itself, the following planning activity on lands in the vicinity is relevant to the proposed development.

Adjoining School

SD18A/0442- Construction of an approx. 440sq.m two storey extension to the existing school; 1 construction studies room, prep. area and project store at ground floor level; 2 mainstream classrooms and 2 AEN resource rooms at first floor level along with ancillary areas and all associated site works. Permission granted.

S95A/0512 - New single storey teaching annex, to the rear with associated site works and additional car parking. Granted permission 7th December 1995, and final grant dated 25th January 1996. Permission granted.

3.0 RELEVANT PLANNING POLICY

Relevant Policy in South Dublin County Development Plan 2022-2028

Chapter 4 Green Infrastructure – South Dublin County Development Plan 2022-2028

The EU defines Green Infrastructure (GI) as:

" a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services such as water purification, air quality, space for recreation and climate mitigation and adaptation."

Policy GI1:

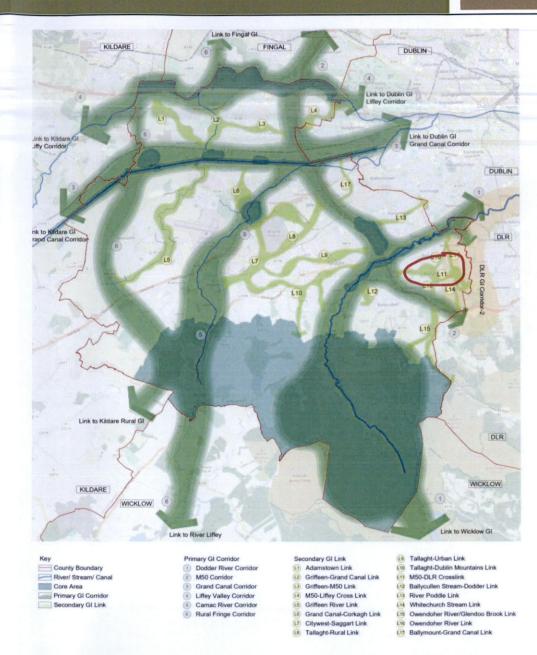
Protect, enhance and further develop a multifunctional GI network, using an ecosystem services approach, protecting, enhancing and further developing the identified interconnected network of parks, open spaces, natural features, protected areas, and rivers and streams that provide a shared space for amenity and recreation, biodiversity protection, water quality, flood management and adaptation to climate change.

GI1 Objective 1:

To establish a coherent, integrated and evolving GI Network across South Dublin County with parks, open spaces, hedgerows, trees including public street trees and native mini woodlands (Miyawaki-Style), grasslands, protected areas and rivers and streams and other green and blue assets forming strategic links and to integrate and incorporate the objectives of the GI Strategy throughout all relevant land use plans and development in the County.

GI1 Objective 4:

To require development to incorporate GI as an integral part of the design and layout concept for all development in the County including but not restricted to residential, commercial and mixed use through the explicit identification of GI as part of a landscape plan, identifying environmental assets and including proposals which protect, manage and enhance GI resources providing links to local and countywide GI networks.



Green Infrastructure Strategy for South Dublin County Council with approximate subject site outlined in red.

GI2 Objective 1:

To reduce fragmentation and enhance South Dublin County's GI network by strengthening ecological links between urban areas, Natura 2000 sites, proposed Natural Heritage Areas, parks and open spaces and the wider regional network by connecting all new developments into the wider GI Network.

GI2 Objective 2:

To protect and enhance the biodiversity and ecological value of the existing GI network by protecting where feasible (and mitigating where removal is unavoidable) existing ecological features including tree stands, woodlands, hedgerows and watercourses in all new developments as an essential part of the design and construction process, such proactive approach to include provision to inspect development sites post construction to ensure hedgerow coverage has been protected as per the plan.

GI2 Objective 4:

To integrate GI, and include areas to be managed for biodiversity, as an essential component of all new developments in accordance with the requirements set out in Chapter 12: Implementation and Monitoring and the policies and objectives of this chapter

GI2 Objective 5:

To protect and enhance the County's hedgerow network, in particular hedgerows that form townland, parish and barony boundaries recognising their historic and cultural importance in addition to their ecological importance and increase hedgerow coverage using locally native species including a commitment for no net loss of hedgerows on any development site and to take a proactive approach to protection and enforcement

Objective 6:

To continue to support and expand the County Pollinator Plan through the management and monitoring of the County's pollinator protection sites as part of the Council's commitment to the provisions of the *National Pollinator Plan* 2021-2025.

GI2 Objective 10:

To enhance biodiversity and the health of pollinator species by banning the use of glyphosphate in or close to public parks, public playgrounds, community gardens / allotments and within residential estates, whether by directly employed Local Authority staff or private contractors.

Policy GI4: Sustainable Drainage Systems

Require the provision of Sustainable Drainage Systems (SuDS) in the County and maximise the amenity and biodiversity value of these systems.

GI4 Objective 1:

To limit surface water run-off from new developments through the use of Sustainable Drainage Systems (SuDS) using surface water and nature-based solutions and ensure that SuDS is integrated into all new development in the County and designed in accordance with South Dublin County Council's Sustainable Drainage Explanatory Design and Evaluation Guide, 2022.

Green Space Factor (GSF)

The quantity and quality of green infrastructure provided by new development will be improved by the implementation of a Green Space Factor (GSF) for South Dublin. The GSF is a measurement that describes the quantity and quality of landscaping and GI across a defined spatial area. This measurement comprises a ratio that compares the amount of green space to the amount of impermeable 'grey' space in a subject site.

L13 River Poddle Link - follows the course of the River Poddle as it flows eastward from Tymon Park to the County boundary at Kimmage. The banks of the Poddle are marked with intermittent planting, serving as a sort of green buffer between the residential areas of Walkinstown and Templeogue. The Poddle then passes just north of the public open at Wainsfort Manor, before linking through a number of interconnected open spaces around the Priory Walk Park near Kimmage Priory. Here the Poddle's banks are marked with intermittent tree planting. The Poddle is then culverted, though a pedestrian link connects the Priory Walk Park to a wooded area with a pond located just behind the Orchard residential area.

Several pedestrian paths align with the course of the River Poddle as it passes through L13. However, these do not link to create a coherent route of travel. There is a significant opportunity to implement additional pedestrian and cycle links between existing pathways in order to create a local greenway route that extends from Tymon Park to Kimmage.

Objectives

- To implement the ICW at Tymon Park proposed as part of the River Poddle Flood Alleviation Scheme
- To protect and enhance the existing pond and woodland area at the Orchard as a local biodiversity hotspot.
- To monitor and ensure ongoing maintenance of the River Poddle's Water Quality.

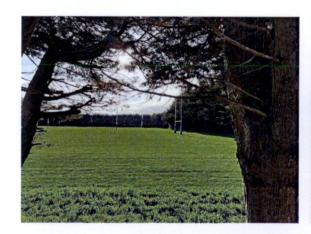
Green Infrastructure Plan

GV-1

To improve connectivity between Dodder GI and adjacent areas managed for biodiversity by daylighting its tributaries in appropriate locations, including the Poddle, Whitechurch Stream, Owerdoher Stream and Ballycullen Stream.



Subject site outlined in red.





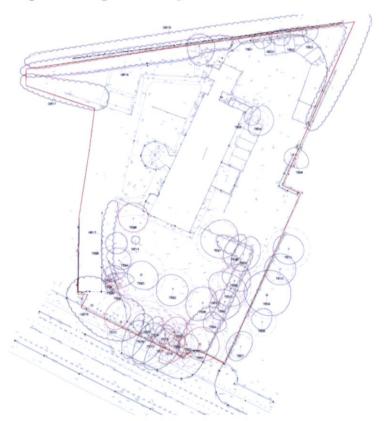
Adjoining green spaces - St Marys RFC & Templeville Park.

4.0 SITE ANALYSIS

The subject site is located to the west of Templeogue College, on the northern side of Templeville Road. It contains an existing building, car park and landscaped area. The area surrounding the site is residential.

The front of the site is covered with a number of mature and semi mature trees. To the north is a mature hedgerow with intermittent trees which bounds the site to a number of playing fields associated with Templeogue college. To the south of the site across Templeville Road is another green area – Templeville Park. This is a small grassed area with some play equipment, benches and semi mature trees.

To the west of the site is a Circle K filling station and associated hardcourt. To the east of the site is Templeogue College building.



Existing Site showing existing building and trees marked from the tree survey.

4.1 Invasive Species

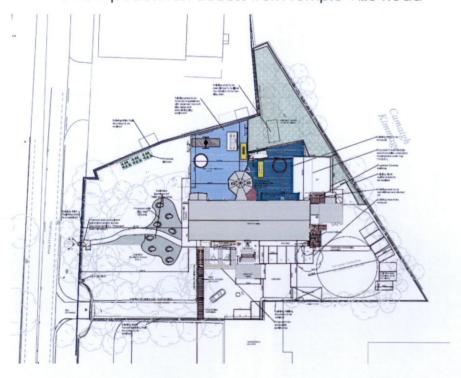
A site survey carried out on the site on the week of January the 30th found no invasive species present on the site. No invasive species such as Japanese knotweed, Giant hogweed and Giant rhubarbs have been recorded on site. As this is a change of use application and the level of landscaping to be carried out is minimal invasive species are deemed to be not an issue in the proposed works to be carried out on site.

5.0 PROPOSED DEVELOPMENT AND LANDSCAPE DESIGN APPROACH

5.1 Proposed Development

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Proposed Site Layout

5.2 Landscape Design Principles and Approach

The proposed landscape design has been developed following the site analysis as set out in this report. The existing trees on site and the Tree and Hedgerow Survey has led the landscape design approach that has been taken which aims to:

- Protect and enhance existing trees and mature hedgerows.
- Provide opportunities for a safe and active green network.
- Maintain wildlife corridors around and through the development.

The main focus of the landscape design is the protection of the existing trees to the front and rear of the existing building. The site is located to the east of L13 as outlined in the County Green Infrastructure Plan and as such is an important green stepping stone link between the adjoining green spaces and the River Poddle. It is proposed to carry out minimal landscape works and to retain the existing character of the site in so far as is deemed practicable. Any trees to be removed as outlined in the tree removals plan will be replaced by native species as outlined in the Landscape Plan.

The proposal requires the construction of a new pedestrian footpath from Templeville Road. This footpath is located within the RPAs of retained trees and is required to be constructed using a no-dig design to minimise the impact on tree roots as requested by the consulting arborist following the tree survey carried out of the site.

A no-dig design involves constructing the hard surface above the existing ground level using a cellular confinement system, or similar approved. See details on the landscape plan and as outlined in the tree survey report. The finishing surface material must be permeable in order to maintain water infiltration and gaseous exchange within the rooting area of the tree. The use of this system will ensure that major damage does not occur to the roots of the tree or the structure function of the soil in which they are growing. The installation of the path is required to be carried out under arboricultural supervision.

The refurbishment of existing hard standing within the RPAs of retained trees has the potential to cause damage to existing tree roots. To minimise this impact, the excavation of existing hard standing is not permitted to exceed the depth of the existing sub-base layer. All such works must be carried out in a controlled manner and under the direct guidance of the arboricultural consultant

The All Ireland pollinator plan (2021-2025) has informed the planting pallet and soft landscape approach. Replacement tree species have been considered in the context of the existing trees on site.

Green Infrastructure Plan



Landscape Masterplan

Tree protection measures – All retained trees can be successfully protected during the proposed development works by using robust fencing and ground protection measures which comply with the recommendations outlined within BS 5837:2012.

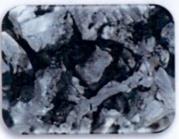
To access the rear of the site, a temporary construction access route is required to be installed within the RPAs of retained trees. This access route must be constructed using an above-ground cellular confinement system.

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

5.5 SUDS and Permeability

The green infrastructure concept involves the planning, management and engineering of green spaces in order to provide specific benefits to society. As this is a change of use application no works carried out are deemed to have an impact on the surface water runoff. A proposed soft play area will replace an existing grassed area. It is proposed to use Rosehill Inplay granulate for this safety surface as it is a permeable surface with subbase material under the soft play area being a depth of stone which will allow rainwater runoff to be attenuated fully on site and infiltrate directly into the ground. There is no proposal to increase discharge from the site to the existing drainage network, with everything controlled and contained on site.

| Particle Shape | EN 14955 (2005) Surfaces for sports areas - determination of composition and particle shape of unbound mineral surfaces for outdoor sports areas | Angular, A3 |
|----------------|--|-------------|
|----------------|--|-------------|



| Bulk Density | EN 1097-3 (1998) Tests for mechanical and physical properties of aggregates - Part 3: Determination of loose bulk density and voids. | 0.422 g/cm ³ |
|-----------------------|--|-------------------------|
| Artificial Weathering | EN14836 (2005) Synthetic surfaces for outdoor sports areas. Exposure to artificial weathering. | 4/5 |
| Toxicology | DIN 18035 - 7 and NF P90-112 | |

Rosehill Porous Safety Surfacing.

5.6 Green Space Factor

Minimum scoring requirements are based on the land-use zoning of a site (See GI5 Objective 4), this applies to all development comprising 2 or more residential units and any development with a floor area in excess of 500 sq m. Qualifying developments are required to reach the minimum Green Space Factor (GSF) score established by their land use zoning. This is a change of use application with a proposed rear extension of 9sqm. In this case the Green Space Objective is not deemed as applicable. There is currently circa 52-55% 'green space' existing on site and the proposal is not deemed to affect this figure.

PLANTING PLAN

Proposed Planting will provide:

Colour and year round interest Sensory garden Native species included Lower- Maintenance

Pollinator friendly plants

PROPOSED TREE PLANTING









Sorbus aria

Quercus robor

Malus sylvestris

PROPOSED SENSORY GARDEN PLANTNG - Riased Planters











Rosmarinus officinalis

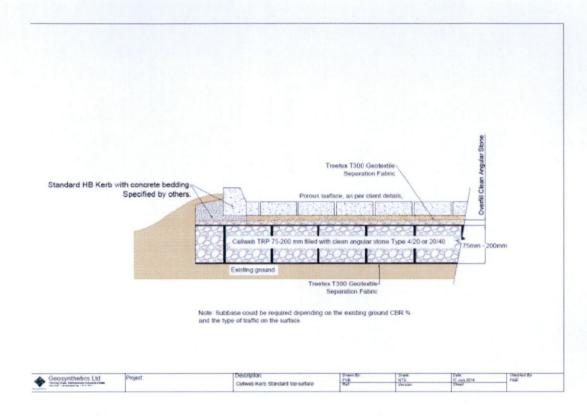
Thymus vulgaris

ris Nepeta grandiflora

Allium schoenoprasum

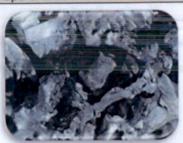
Melissa officinalis 'All Gold'

MATERIALS and HARD LANDSCAPING



Cellular confinement system – for new footpath linking to Templeville Road.

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Safety Surfacing Colour Options