SOUTH DUBLIN COUNTY COUNCIL



INTERNAL MEMORANDUM

Department: Parks & Landscape Services / Public Realm

Date: 22/09/2022

Sarah Watson, Area Planner

Planning Department

Development:

The proposed primary school will extend to c3,355sq.m will be 2 storeys in height and will comprise 16 no. classrooms with an additional 2 classroom Special Educational Needs Unit; a General Purpose Hall and all ancillary teacher and pupil amenities and facilities. The proposed development also provides for hard and soft play areas, including 2 no. outdoor ball courts, blcycle parking, staff car parking, vehicle drop off and set down areas. Photovoltaic Panels (PV) are proposed on roofs in addition to EV Charging Points and a packaged Biomass heating plant. The proposed development also provides for all I_Hndscaping and boundary treatments and all associated site development works. Access to the site will be via a new junction and access road off Thomas Omer Way. The new access road will run south off Thomas Omer Way and then west into the site. The proposed access road Is in accordance with the Clonburris Strategic Development Zone (SDZ) Planning Scheme and incorporates public lighting, footpaths and cycle tracks. A further pedestrian / cycle only connection to Thomas Omer Way Is also proposed along the western green corridor, west of the proposed school building

Location:

Thomas Omer Way, Balgaddy, Lucan, Dublin

Applicant: Department of Education

Reg. Ref: SDZ22A/0011

Zoning: Clonburris Strategic Development Zone

Development Area 10: Kishogue North East

Character Area: KNE-S2

Site Area: 1.91 ha

Recommendation: Significant Additional Information

Main issues:

1. Impact on Green Infrastructure: Does not comply with SDCC and Clonburris SDZ Planning Scheme GI Strategy

A GI Strategy has not been provided showing GI on site and the local context. The existing green infrastructure has been ignored. There is no GI Plan for the site. The GI plan will inform the design and layout of the proposals. The proposals are not compliant with:

a) <u>Clonburris SDZ Planning Scheme 2019</u> The required Green Infrastructure links have not been provided. The scheme requires a **Strategic Green Corridor** including a strategic green walking route along the western and southern boundaries and a **local green corridor** along the northern boundary with Thomas Omer Way. The existing trees along the northern boundary provide several GI functions including creating a corridor for wildlife, cleaning the air, reducing noise and should be retained.



Clonburris Parks and Landscape Strategy: Appendix 2 Na Cluainte Park North, Indicative Design

- b) <u>SDCC County Development Plan (2022-2028)</u> <u>Green Infrastructure Strategy</u> in relation to submission of a **Green Infrastructure Plan** and **Green Space Factor**.
- c) <u>Does not comply with SDCC Sustainable Water Management Policy and SuDS Guidelines</u> The proposed system is not SuDS compliant. The four pillars of SuDS: amenity, biodiversity, water treatment and attenuation have not been delivered.

A *minimum* 10m riparian setback is required from all existing watercourses. The watercourse along the western and northern boundaries have not been incorporated into the SUDS water management, GI and landscape plans. They form part of local and strategic green corridors therefore the setback should be greater than the minimum.

Use of small scale natural SuDS to create/enhance Local Green and Strategic Green Infrastructure Links is required by the Planning Scheme.

The landscape has not been sufficiently used to manage surface water run-off close to source. SDCC advice is that 'underground tank systems should only be considered as a last resort'.

The applicant needs to demonstrate compliance with the above policies.

2. Impact on existing hedgerows and biodiversity:

The development encroaches on barony boundary (heritage) hedgerow along the western and southern boundaries. The proposals remove sections of Barony Hedgerow which is to be retained as a Strategic Green Corridor (Clonburris Parks and Landscape Strategy).

The removal of mixed native semi-mature trees along the northern boundary incompatible with the requirement for a Local Green Infrastructure link.

To be in compliance with the SDZ the amount of compensatory hedgerow must be at least equal to that being removed.

There are conflicts between hedgerow loss indicated by the arborist's drawings/report and the landscape plan.

3. Ecological Impact, particularly on bats.

Green infrastructure is used for foraging bats and requires protection and enhancement. A bat survey has not been carried out. Lighting design should be sensitive to presence of foraging and commuting bats. A comprehensive bat survey and an assessment of the lighting design by a suitably qualified bat expert is required.

The Public Realm Section has assessed the proposed development in accordance with:

- 1. Clonburris Strategic Development Zone Planning Scheme
- 2. Clonburris Parks and Landscape Strategy
- 3. Clonburris Biodiversity Management Plan and
- 4. South Dublin County Council County Development Plan 2022 2028 (CDP)

The development proposals need to demonstrate compliance with the following requirements and objectives of the planning scheme and the CDP:

1 CLONBURRIS SDZ PLANNING SCHEME

Section 2.3 Green and Blue Infrastructure (GI), P35:

Key Principles

- 'To protect, enhance and develop an interconnected green and blue infrastructure network of parks, open spaces, hedgerows, grasslands, protected areas, rivers and streams for amenity and recreation, biodiversity protection, flood management and adaptation to climate change'
- > To retain and improve key landscape and ecological features such as hedgerows, the Grand Canal and the Griffeen River
- > To incorporate new elements of Green and Blue Infrastructure such as tree planting, parks and natural open spaces and sustainable drainage systems
- > To connect parks and areas of open space with ecological and recreational corridors to aid the movement of biodiversity and people and to strengthen the overall green infrastructure network
- > To support native plant and animal species and encourage corridors for their movement and,
- To seek to retain hedgerows, aquatic habitats and established treelines wherever possible

 Blue and green spaces will cover approximately 30% of the SDZ lands. Developments on the SDZ

 lands should identify and protect (where possible) the existing green infrastructure elements on the
 lands including green open spaces, hedgerows, large trees, watercourses and other natural physical
 features as these are a strong part of the lands history and will define the character of areas and
 help to create attractive neighbourhoods.

'New green spaces will be interconnected with existing green infrastructure to form multifunctional corridors and hubs ... through existing and proposed Parks, ... through existing hedgerows ... and connecting into existing green spaces outside the SDZ lands. Local level green infrastructure corridors shall be provided along the new urban structure of streets and spaces (i.e., trees, tree lines, swales margins)'.

Section 2.11 Biodiversity and Natural Heritage, P86:

Hedgerows

The important hedgerow along the Neilstown/Cappagh boundary should be enhanced and protected and as much as possible of the over thirty kilometres of hedgerow on the SDZ lands should be retained and protected and where these hedgerows cannot be retained, a new hedgerow network composed of the same species shall be planted along roadways within the development.

Where possible, trees along the boundary of the SDZ lands be protected and retained.

A Method Statement for the construction, planting regime and species selection of both 'dry' and 'wet' hedgerows shall be provided with all planning applications for developments within 10m of existing hedgerows along the barony boundary, the Grand Canal and the Griffeen and Kilmahuddrick streams.

Section 2.8 Built Form and Design

P64, Street Planting

Streets should be generously planted at frequent intervals to soften the impact of parking and strong building frontages at intervals of 14-20 metres. Street trees should be planted in areas such as medians, verges and build outs. In the interest of biodiversity and place making, reduced spacing between street trees should be considered where appropriate and achievable.

Section 2.10 Landscape and Open Space

(Table 2.10.5 P.83) requires:

Design Criteria for Local Links:

'Tree lined street and avenues' and

'Incorporation of small-scale SUDS features such as swales, where appropriate'.

Section 2.2 Movement and Transport

(P.29) requires that:

'Local Streets will act as quieter traffic calmed thoroughfares." A key component of traffic calmed streets are street trees.

The Planning Scheme designates:

- a) A Strategic Green Corridor along the western and southern boundaries of the proposed site, defined by existing/improved hedgerows along this Barony boundary.
- b) A Strategic Green Walking Route along the Barony Boundary
- c) A 'waterway/suds along the southern boundary
- d) A Local Green Corridor along Thomas Omer Way
- e) Tree Lined Streets along the vehicular accessways, i.e., street trees on both sides

Refer Figure 2.3.1 Clonburris SDZ Planning Scheme, extract below.



Extract from Figure 2.3.1 Green Infrastructure, Clonburris SDZ Planning Scheme 2019

2.3.2 Green Infrastructure Network

Figure 2.3.1 | Green Infrastructure



Figure 2.3.1 The Site in context



Extract from Figure 3.3.21 Kishogue North East

Key Objectives for Development Area 10, Kishogue North East

'To provide significant and integrated SUDS infrastructure, including a high amenity retention pond/ lake to enhance green and blue infrastructure and ecological connectivity'

2. CLONBURRIS SDZ PARKS AND LANDSCAPE STRATEGY

4.1 Existing Tree, Hedgerow & Vegetation Retention

'Developments on the lands should identify and protect, where possible, the existing green infrastructure elements on the lands including green open spaces, hedgerows, large trees, watercourses and other natural physical features as these are a strong part of the lands history and will define the character of areas and help to create attractive neighborhoods.

'New green spaces will be interconnected with existing green infrastructure to form biodiversity corridors.'



7 Strategic Routes and Local Links

'The proposed strategic routes and local links will create a network between open spaces. The SDZ Planning Scheme has planned these to incorporate existing green infrastructure elements of the lands including hedgerows and watercourses, forming biodiversity corridors. Existing vegetation is to be retained where possible and carefully managed in accordance with the specifications of a qualified arborist. Additional planting is to

be incorporated **to supplement loss of vegetation** and to improve the proportion of native species on site. Where connections are required to be made through existing hedgerows, all works are to be coordinated with an arborist and ecologist as part of the planning application process.'

7.1 Strategic Routes

Design Principles:

- Retention and enhancement of existing trees, hedgerows and vegetation where possible
- Provision of safe cycle and pedestrian routes
- Proposed new pedestrian and cycle bridges
- Provision of seating and amenity areas
- Coordination of lighting provision with ecologist
- Managed vehicular access for loading and emergency services

7.2 Local Links

Local links shall be designed with the following outline design principles in mind:

- Use of small scale SUDS features where appropriate
- Provision of safe pedestrian and cycle links including provision for suitable surface materials and appropriate lighting
- Proposed tree lined streets and avenues
- Appropriate tree species for street width and scale with guidance from DMURS
- Appropriate tree species with regard to biodiversity and future management, with guidance from SDCC Tree Management Policy
- Provision of suitable way-finding to guide users between strategic parks and open spaces, high light access points

Local links should provide safe and coherent connections between strategic spaces and act as mobility routes between different zones e.g. residential and commercial, residential and educational.

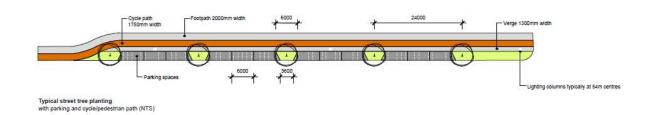
8 Tree Planting

Tree species should be selected for longevity, suitability to local soil conditions and micro-climate, biodiversity (native species) and suitability for close proximity to residential buildings. A range of tree species and sizes should be utilised from semi-mature specimen trees to multistems. The All-Ireland Pollinator Plan 2015-2020 should be used to form the basis of the proposed tree species. 'South Dublin County Council's Tree Management Policy 2015-2020' has also been consulted.

8.1 Street Tree Planting

'Street trees should be considered as an integral part of the street environment (DMURS 2013) with the size and species selected proportionate to the width of the street and planted at frequent intervals.

Medians, verges and build outs should be used as areas in which to plant trees, as well as within privacy strips on residential streets.





Proposed tree species should be selected for longevity, suitability to local soil conditions and micro-climate, mature size, habit, proximate user activities, biodiversity and where required suitability to close proximity to residential buildings. Proposed tree sizes should range from semi-mature specimen trees to multi-stemmed tree planting. Proposed trees should comprise predominantly of native species.

Consideration should be given to planting areas of trees in **copses or groupings**, whether as an extension to an existing hedgerow, or new independent planting as these form hubs which contribute to the biodiversity matrix, particularly if linked to other hubs with corridors such as streams/rivers or hedgerows.

3. Clonburris SDZ Biodiversity Management Plan - Objectives

Habitat Retention

HR01 Where feasible having regard to the SDZ Masterplan proposed developments should **retain** habitats of ecological value that can be accommodated. **Particular consideration must be given to retaining ecological features which provide connectivity between habitats (e.g. hedgerows and treelines)** to promote green and blue infrastructure within the SDZ lands. **Retention of townland boundary hedgerows** within open space, which have high biodiversity and heritage value should be given priority.

HR02 Where hedgerows, treelines, woodland and other semi-natural habitats are being retained within the SDZ lands, **details of their management and protection should be provided in a Habitat Management Plan (HMP)** to be provided to the Council by the developer alongside the planning documentation.

HR10 Where woodland or individual trees are being retained, the root protection zone / area must be calculated by a qualified arborist. Protective barriers must be installed to exclude construction activities from the root protection area of the woodland / trees in accordance with BS 5837

HR12 The Parks and Landscape Strategy indicates the retention of 7,720m of hedgerow / linear woodland habitat within the strategic open spaces - 5,200m along the canal, 520m along the Griffeen river and 2,000m of hedgerow within parks and open spaces. **When final landscape designs are being prepared for open spaces, this level of retention is considered to be the minimum acceptable.**

HR13 Where hedgerows and treelines are being retained, the root protection zone / area must be calculated by a qualified arborist. Protective barriers must be installed to exclude construction activities from the root protection area of the hedgerows and treelines during construction works in accordance with BS 5837.

Habitat Creation

HC15 The planting of hedgerows within the parks areas and along roadways is a key habitat creation objective. Planting of hedgerows should also be considered in Development Areas. Species lists must be comprised of a range of native species and preferably comprised of the species already present locally. Species should include a range of trees and shrubs as well as suitable understorey planting. Full species lists for the hedgerows within Clonburris SDZ can be found in the document Ecological survey of Clonburris Strategic Development Zone, Clondalkin, Co. Dublin (FERS Ltd., 2018).

HC16 Where hedgerow planting is proposed within the lands, the **new hedgerows should take the form of a double line of native tree with shrub species. Translocation of existing hedgerows and their seed banks to new locations should be considered where feasible**. Hedgerows must be correctly maintained according to the following document: The Heritage Council (2016) Conserving Hedgerows.

HC17 Hedgerow locations must be chosen to connect features of ecological value (particularly the Griffeen River, the Grand Canal and the railway line, as well as existing hedgerows, treelines and woodland) to the ecological network in the wider landscape where possible and promote green infrastructure within the lands. This can be achieved by planting hedgerows where they do not already exist and in this way minimising the number of gaps in the hedgerow network that would affect ecological connectivity within the SDZ lands and the surrounding areas.

HC18 Where existing tree planting is present along roadsides, supplementary native understorey shrub and herbaceous planting should be considered. This would help compensate for the loss of hedgerow habitat and strengthen green and blue infrastructure within the lands.

HC19 Where hedgerows are being retained within parkland, consideration should be given to incorporate sufficient space for hedgerows to develop into linear woodland features.

HC20 For every tree felled within the Clonburris SDZ, a replacement tree should be planted within the SDZ. Planning proposals shall demonstrate same. This ensures compliance with South Dublin County Council's Tree Management Policy.

HC21 Preferably, all tree planting (including street planting) should be of native species. Where this is not possible, tree species should be chosen with regard to the All-Ireland Pollinator Plan's Pollinator Friendly Planting Code.

HC22 Where tree planting is proposed, multi aged canopy is preferred. Semi mature specimens will be required at strategic locations. This will help compensate for the loss of mature trees across the SDZ and immediately provide nesting and feeding habitat for fauna species.

HC23 Tree planting must take into consideration the connectivity of existing ecological features (e.g. hedgerows, treelines, woodland, watercourses) within the SDZ lands and planting must aim to contribute towards it. This can be achieved by, for example, planting trees and/or groups of trees relatively close to each other across amenity grasslands and wildflower meadows thus providing 'stepping stones' for wildlife over open areas, and/or by planting treelines along streets and other linear features and consequently improving green

Bats

BA02 All proposals for development near bat roosts or ecological corridors must address the potential adverse impacts of lighting on bats. Lighting should be at a low level, directional and should follow guidance provided by Bat Conservation Trust (2018). Guidance note 08/18 Bats and artificial lighting in the UK. Lighting plans near ecological corridors should be reviewed by a suitably qualified bat ecologist. If adverse impacts are anticipated, a derogation licence must be obtained from the NPWS.

Ba04 Any developments located close to a known bat roost or ecological corridor should consider incorporating enhancement measures into the design. Appropriate measures may include installing bat boxes onto buildings, planting hedgerows, pond creation and planting of night-scented flowers

Ba05 All proposed developments within Clonburris SDZ must consider installing bat bricks into the building's design following manufacturer's advice.

Development Area 10 Kishogue NE - Suggested Biodiversity Measures

Na Cluainte North

- Retention of treelines and enhancement of treelines
- Retention, enhancement and creation of hedgerows
- Retention, enhancement and creation of woodland (pockets in park, near railway line and Grand Canal and around other water features)
- Planting of native flowering and fruiting tree species
- Creation of short-flowering species rich grassland (roadside verges, pavement verges)
- Creation of long-flowering wildflower meadows (areas in parkland)
- Herbaceous pollinator-friendly planting (urban planters, areas of annual bedding)
- Creation and enhancement of ponds, swales and other water-retention features
- Addition of bird and bat boxes on trees
- Addition of leaf litter and log piles, earth banks and bee and bug hotels

Suggested Biodiversity Measures for Schools

- Planting of native flowering and fruiting tree species
- Creation of short-flowering species rich grassland (roadside verges, pavement verges)
- Creation of long-flowering wildflower meadows (areas in school grounds)
- Herbaceous pollinator-friendly planting (urban planters, areas of annual bedding)
- Bird boxes on trees and on buildings (House martin, swallow and swift boxes on buildings)
- Bat boxes on trees and buildings
- Installation of hedgehog passes
- Addition of leaf litter and log piles, earth banks and bee and bug hotels

B. SDCC County Development Plan (2022-2028) Green Infrastructure (GI) and Natural Heritage and Biodiversity requirements:

Refer to Chapter 4 of the County Development Plan: chapter-4-green-infrastructure.pdf (sdcc.ie)

POLICY GI1: OVERARCHING

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 2: To implement and monitor the South Dublin County GI Strategy during the lifetime of this plan and develop a fit for purpose GI scoring for the County which will support ongoing identification, protection, enhancement and management of GI in the County and which will enable the assessment and monitoring of GI interventions in the County.

GI1 Objective 3: To facilitate the development and enhancement of sensitive access to and connectivity between areas of interest for residents, wildlife and biodiversity, and other distinctive landscapes as focal features for linkages between natural, semi natural and formalised green spaces where feasible and ensuring that there is no adverse impact (directly, indirectly or cumulatively) on the conservation objectives of Natura 2000 sites and protected habitats outside of Natura 2000 sites.

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.

GI1 Objective 7: To develop linked corridors of small urban 'Miyawaki' native mini-woodlands, a minimum of 100 sq m in size, to capture carbon and encourage biodiversity in suitable existing built-up areas, in low grade parkland, and other areas of zoned lands where deemed suitable and appropriate.

GI1 Objective 8: To increase over the lifetime of this plan the percentage of land in the County, including residential, managed for biodiversity including supporting the delivery of the objectives of the County Pollinator Plan and to continue to investigate the potential for the use of low-mow methods during the lifetime of the Plan

POLICY GI2: BIODIVERSITY

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 3: To retrospectively repair habitat fragmentation and provide for regeneration of flora and fauna where weaknesses are identified in the network through the implementation of new GI interventions.

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.

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 GI3: SUSTAINABLE WATER MANAGEMENT

GI3 Objective 2: To require development proposals that are within riparian corridors to demonstrate how the integrity of the riparian corridor can be maintained and enhanced having regard to flood risk management, biodiversity, ecosystem service provision, water quality and hydromorphology.

GI3 Objective 3: To promote and protect native riparian vegetation along all watercourses and ensure that a minimum 10m vegetated riparian buffer from the top of the riverbank is maintained / reinstated along all watercourses within any development site.

GI3 Objective 4: To uncover existing culverts where appropriate and in accordance with relevant river catchment proposals to restore the watercourse to acceptable ecological standards for biodiversity wherever possible improving habitat connection and strengthening the County's GI network.

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.

GI4 Objective 2: To incorporate a SuDS management train during the design stage whereby surface water is managed locally in small sub-catchments rather than being conveyed to and managed in large systems further down the catchment.

GI4 Objective 3: To require multifunctional open space provision within new developments to include provision for ecology and sustainable water management.

GI4 Objective 4: To require that all SuDS measures are completed to a taking in charge standard.

GI4 Objective 5: To promote SuDS features as part of the greening of urban and rural streets to restrict or delay runoff from streets entering the storm drainage network.

GI4 Objective 6: To maintain and enhance existing surface water drainage systems in the County and promote and facilitate the development of Sustainable Drainage Systems (SuDS), including integrated constructed wetlands, at a local, district and County level, to control surface water outfall and protect water quality.

POLICY GI5: CLIMATE RESILIENCE

GI5 Objective 3: To ensure compliance with the South Dublin Climate Change Action Plan and the provisions of the Council's Tree Management Strategy.

- Increase the County's tree canopy cover by promoting annual planting, maintenance preservation and enhancement of trees, woodlands and hedgerows within the County using locally native species and supporting their integration into new development.
- Identify suitable sites for new urban trees including Miyawaki style mini woodlands, where feasible.
- Support the implementation of a co-ordinated regional approach to the maintenance of trees and support the work of the Regional Steering Group on Tree Management to which South Dublin County Council is a participant.

- Promote the establishment of tree trails in public parks across the County.
- Promote the planting of new woodlands and forestry within appropriate open space and park locations within the County.
- To plant "pocket forests" in tracts of open grassland to act as an oasis for biodiversity.
- To recognise the value of mature trees in terms of carbon sequestration and amenity over saplings.

GI5 Objective 4: To implement the Green Space Factor (GSF) for all qualifying development comprising 2 or more residential units and any development with a floor area in excess of 500 sq m. Developers will be required to demonstrate how they can achieve a minimum Green Space Factor (GSF) scoring requirement based on best international standards and the unique features of the County's GI network. Compliance will be demonstrated through the submission of a Green Space Factor (GSF) Worksheet (see Chapter 12: Implementation and Monitoring, Section 12.4.2).

GI5 Objective 6: To provide more tree cover across the county, in particular to areas that are lacking trees, with an emphasis on planting native Irish trees as appropriate.

POLICY GI7: LANDSCAPE, NATURAL, CULTURAL AND BUILT HERITAGE

GI7 Objective 1: To protect, conserve and enhance natural, built and cultural heritage features and restrict development that would have a negative impact on these assets in accordance with the provisions of Chapter 3: Natural, Cultural and Built Heritage of this Development Plan.

GI7 Objective 2: To protect and enhance the landscape character of the County by ensuring that development retains, protects and, where necessary, enhances the appearance and character of the landscape, in accordance with the provisions of South Dublin's Landscape Character Assessment and the provisions of Chapter 3: Natural, Cultural and Built Heritage of this Development Plan.

POLICY NCBHI1: OVERARCHING

NCBH1 Objective 1: To protect, conserve and enhance natural, cultural and built heritage features, seeking opportunities to identify, retain, protect, and incorporate heritage assets into plans and development.

NCBH1 Objective 2: To support the objectives and actions of the County Heritage Plan and the County Biodiversity Action Plan in the promotion and protection of natural, built and cultural heritage, and to take full cognisance of the County's Landscape Character Assessment and the County Geological Audit in the sustainable management of development.

POLICY NCBHI2: BIODIVERSITY

NCBH2 Objective 1: To support the implementation of the National Biodiversity Action Plan (2017-2021) and the All-Ireland Pollinator Plan (2021-2025) and to support the adoption and implementation of the South Dublin County Biodiversity Action Plan (2020-2026) and Pollinator Action Plan (2021-2025) and any superseding plans.

NCBH2 Objective 3:

To protect and conserve the natural heritage of the County, and to conserve and manage EU and nationally designated sites and non-designated locally important areas which act as 'stepping stones' for the purposes of green infrastructure and Article 10 of the Habitats Directive.

Policy NCBH10: Invasive Species

Protect against and prevent the introduction and spread of invasive species within the County and require landowners and developers to adhere to best practice guidance in relation to the control of invasive species.

NCBH10 Objective 1: To ensure that development proposals do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are or were previously present, applicants should submit a control and management programme with measures to prevent, control and / or eradicate the particular invasive species as part of the planning process and to comply with the provisions of the European Communities Birds and Habitats Regulations 2011 (S.I. 477 / 2011).

To ensure compliance with the Clonburris SDZ Planning Scheme, Parks and Landscape Strategy, Biodiversity Management Plan and the County Development Plan (2022-2028), it is recommended that the following Significant Additional Information is requested:

1. Green Infrastructure:

Green infrastructure plan and proposals that demonstrate:

i. The protection and enhancement of a Strategic Green Corridor along the Western and Southern Boundaries that define the Barony boundary – by greater retention of trees and hedgerows and inclusion of nature-based SuDS incorporating a 'waterway/SuDS' along the southern boundary.

A Local Green Corridor along the boundary with Thomas Omer Way. The removal of trees and hedgerow along the northern boundary to make way for more open planting is contrary to SDCC Green Infrastructure Policies. Retention of existing treeline; strengthening of planting proposals and incorporation of nature-based SuDS.

ii. Provision of street trees 18-20cm girth on both sides along local roads within the development, as identified by Clonburris Parks and Landscape Strategy. Landscape Plan to extent to include the whole of the development, i.e., include vehicular access road



iii. Provide a Green Infrastructure Plan: demonstrate compliance with the requirements of 12.4.2 of the County Development Plan: i.e. how the proposals contribute to the protection or enhancement of Green Infrastructure in the County through the provision of green infrastructure elements, having regard to:

- ii. Where the development site is located within or close to a Core or Corridor the development should, at a minimum, protect any existing GI assets and enhance same (for example, not breaking a GI Corridor but enhancing same with a connecting piece of planting, retaining hedgerows or woodlands);
- iii. The characteristics and assets of the proximate GI Core, Corridor or SteppingStone should be reflected within proposed development, for example continuation of hedgerows, tree planting, waterways;
- iv. Development should seek to enhance or restore features that act as ecological corridors, particularly water features, hedgerows, tree lines, areas of un-cultivated land. These, or some element of them, should be incorporated into the proposed development to create pathways for wildlife and / or increase amenity value;
- v. Development sites which are not located proximate to designated GI Cores or Corridors should identify the nearest designated GI Core, Corridor or Stepping Stone and make provision for GI interventions on the site which could eventually provide a link to local Stepping Stones, Cores or Corridors;
- vi. Developers should be aware that ecological corridors can also act to quickly spread non-native invasive species. Therefore, identification and control of invasive species site should be included in planning applications and the GI Plan.
- vii. All development proposals shall be accompanied by a Green Infrastructure Plan, which will normally be submitted as part of the suite of Landscape Plans that are required for a development. Plans shall include the following:
- viii. Site location plan showing the development site in the context of the wider GI as shown on the Council's GI Plan for the County;
- ix. Site survey and analysis, identifying existing GI Infrastructure and key assets within the site;
- x. Indicate how the development proposals link to and enhance the wider GI Network of the County;
- xi. Proposed GI protection, enhancement and restoration proposals as part of the landscape plan, where appropriate, for the site;
- xii. Proposals for identification and control of invasive species.

ADDITIONAL INFORMATION

2. Bat Survey

A comprehensive bat survey and an assessment of the lighting design by a suitably qualified bat expert.

ADDITIONAL INFORMATION

3. Tree and Hedgerow Retention

A hedgerow management plan that shows:

- The protection and enhancement of the hedgerow network, in particular hedgerows that form townland, parish and barony boundaries
- ii) The amount of trees and hedgerow being removed and the amount of compensatory/replacement hedgerow being planted as part of the proposals.

To be in compliance with the SDZ, and the requirement of no net loss of hedgerow across the scheme, the amount of compensatory/replacement hedgerow provided in this development shall be at least equal to that being removed. The compensatory/replacement hedgerow can be planted within the site area or within the wider SDZ.

ADDITIONAL INFORMATION

4. Tree and Hedgerow Protection

- Revision of tree and hedgerow protection plan to reflect revised design to create
 Strategic and Local Green Corridors.
- ii) A Method Statement for the construction, planting regime and species selection of both 'dry' and 'wet' hedgerows (all planning applications for developments within 10m of existing hedgerows along the **barony boundary**).

ADDITIONAL INFORMATION

REASON: To ensure the protection, safety, prudent retention and long-term viability of trees to be retained on and immediately adjacent to the route

5. Local road/Street trees

Landscape proposals that extend to the full of the redline boundary including (the) vehicular access road(s) and demonstrate trees to be provided as per the Scheme:

- a) A high quality of Street Tree planting along vehicular accessways (local roads) to strengthen Green Infrastructure links.
- b) 'Streets should be generously planted at frequent intervals to soften the impact of parking and strong building frontages at intervals of 14 20 metres. In the interest of biodiversity and place making, reduced spacing between street trees should be considered where appropriate and achievable. (Planning Scheme P64).
- c) Thomas Omer Way (Local Green Corridor): Retention of existing trees and enhanced planting shall be provided by additional trees, hedgerow, grassed and planted swales and small-scale SuDS as appropriate to create a Local Green Corridor along this street as required by the Planning Scheme.
- d) Western and Southern Boundary (Strategic Green Corridor) Retain all of the existing hedgerow and strengthen existing proposals and create the required Strategic Green Corridor. Enhanced planting shall be provided by additional street trees, hedgerows, grassed

and planted swales and small-scale SuDS as appropriate to create a Strategic Green Corridor. The SDZ drawings require a waterway/SuDS along the southern Strategic Green Corridor.

- e) Trees lined roadways on both sides. The applicant is referred to the Clonburris SDZ Planning Scheme 2019, Clonburris SDZ Parks and Landscape Strategy and DMURS (2019) for guidance on street tree provision and appropriate design layouts for local roads/streets.
- f) All Street Trees and trees adjacent to hard surfaces shall have suitable tree pits that incorporates SuDS bioretention features including sufficient growing medium.
- g) Street Trees to be planted at:
 - Minimum 18-20m girth along local roads

ADDITIONAL INFORMATION

6 SUDS

The Clonburris SDZ strategy requires a green infrastructure-based approach to drainage and stormwater management. SuDS are to be designed as an ecological resource according to SDCC guidelines to include the four pillars of SuDS: amenity, biodiversity, water quality treatment and attenuation. These shall be of a high quality, designed as a series of 'wet' and 'dry' landscape elements to achieve a multifunctional space for amenity, biodiversity and surface water management.

It is essential that open spaces accommodating SUDS measures such as rain gardens, SuDS bioretention tree pits and swales are designed in order to achieve a balance between surface water management, amenity and biodiversity.

The four pillars of SuDS have four pillars have not been adequately provided. SuDS features are restricted to permeable paving in parking bays; two SuDS bioretention tree pits and one swale. Only the permeable paving has been included in the attenuation calculations. Hardstand car parking areas have not been sufficiently broken up with planting such as trees incorporating SuDS bioretention. A petrol interceptor is proposed. The latter is considered by our SuDS guide to be a source of contamination and is not recommended. The proposals are lacking in source control such as further bioretention, SuDS tree pits, raingardens, swales etc., that can deliver multifunctional benefit including attenuation. The existing river/stream along the northern boundary identified in the engineering and invasive species reports should have a minimum 10m setback, as required by the

SDCC CDP. The SuDS/waterway along the southern boundary has not been provided and is a requirement of the planning scheme. The planning scheme (Flood Risk Assessment) identifies a watercourse along the western boundary. This has not been identified in any of the surface water management proposals.

An attenuation tank is proposed. SDCC do not permit underground tanks as part of SuDS schemes where the full natural potential of the site to manage surface water runoff has not been explored

There are conflicts between the SuDS proposals shown on MMOS Design Engineers Plan Ref 22087-MMS-ZZ-ST-DR-C-1002 and the CPL Landscape Proposals Ref. 202217 LP 01.

The following additional information is requested:

- A SuDS proposal that complies with SDCC SUDS Explanatory Design an Evaluation Guide; the Clonburris SDZ Planning Scheme, Parks and Landscape Strategy and Biodiversity Management Plan and SDCC County Development Plan 2022-2028.
- ii. Concept plans showing existing and proposed flows.
- iii. Additional natural SUDS features shall be incorporated into the proposed drainage system for the development, particularly along strategic and local green links, e.g. bioretention tree pits, swales, rain gardens, green roofs etc.
- iv. Swales to be planted with native and pollinator perennial riparian wildflowers using local species. Full species lists for the SDZ can be found in Ecological Survey of Clonburris (FERS Ltd., 2018)
- v. The SuDS proposals should be a collaboration between landscape architect and the drainage engineer to integrate the SuDS into the landscape design proposals providing amenity, biodiversity, water quality treatment as well as quality and attenuation.
- vi. Drainage and Landscape proposals to be consistent regarding SuDS provision. For example, only grasscrete shown on landscape plan; this is omitted from Engineers drawing; None of the SuDS proposals on engineers plans are shown on landscape proposals.
- vii. Drainage design proposals for the site that incorporate the waterway/SuDS/wetland along the southern site boundary.
- viii. Demonstrate how the proposed natural SUDS features will be incorporated and work within the drainage and landscape design for the proposed development.
- ix. Details on how each SuDS element function as part of the overall treatment/management train.
- x. Demonstrate the biodiversity, amenity, water quality and attenuation value of all SuDS features including proposals for integrating the existing ditch to the northwest.

- xi. Any proposed swales should be used for attenuation as well as conveyance of overland flow.

 They should also have an amenity and biodiversity value.
- xii. A comprehensive SUDS Management Plan shall be submitted to demonstrate that the proposed SUDS features have reduced the rate of run off into the existing surface water drainage network. A maintenance plan shall also be included as a demonstration of how the system will function following implementation.
- xiii. A minimum 10m setback from the top of the bank from watercourses bounding the site.
- xiv. Demonstrate how the integrity of the riparian corridor can be maintained and enhanced having regard to flood risk management, biodiversity, ecosystem service provision, water quality and hydromorphology (GI3 Objective 2 and 3)
- xv. Inclusion of all above ground SUDS features in attenuation calculation (avoid underground systems). SDCC do not accept underground tanks unless it is demonstrated that above ground SuDS devices are not feasible.

The applicant is recommended to contact the Public Realm and Water and Drainage Department to discuss.

ADDITIONAL INFORMATION

REASON: In the interest of amenity, biodiversity and water management; compliance with development Plan Policy, the provision, establishment and maintenance of a reasonable standard of landscape and proper planning and sustainable development of the area.

7 LANDSCAPE PLAN

A revised detailed landscape plan, to be agreed with Public Realm, with full works specification, that accords with the specifications and requirements of Council's Public Realm Section. The revised landscape plan shall maximise the retention of existing boundary hedgerows, integrate tree planting and SuDS drainage to provide strong green infrastructure links throughout the development in accordance with Clonburris SDZ Planning Scheme, Parks and Landscape Strategy, Biodiversity Management Plan and SDCC County Development Plan (2022-2028).

The revised Landscape Proposals shall incorporate:

i. Street trees that are in line with the requirements set out in the Clonburris Strategic Development Zone Planning Scheme (Clonburris SDZ) 2019; Clonburris Parks and Landscape Strategy, Clonburris Biodiversity Management Plan and the 'Design Manual for Roads and Streets (DMURS) 2019. Street tree provision to incorporate small scale

- SuDS features that enhance biodiversity, provide amenity, manage surface water volume while providing water quality treatment.
- ii. Details of roadside tree planting to be submitted to the Public Realm Section of SDCC for agreement. Urban tree pits to include SUDs measures / storm water attenuation. The applicant shall submit cross section details of the SUDs tree pits, including growing and drainage/storage media.
- iii. Trees along local roads to be a minimum of 18 to 20-centimetre girth (cmg) at planting as per the requirements of the Clonburris SDZ Parks and Landscape Strategy. For suggested native species see P. 53 of the Strategy.
- iv. Retained, removed and compensatory hedgerow to be clearly identified on LandscapePlans.
- v. Details of all natural SuDS features including swales, rain gardens, bioretention tree pits, channel rills, filter strips, ponds, detention basins with lower areas allowed to fill first (low flow channels), wetlands etc; and to be shown on the landscape plans
- vi. Landscape masterplan/planting plan to clearly delineate lighting to ensure tree planting proposals are realistic and not damaging to the Strategic Green Corridor and to Bats. If this is not currently the case, proposals to be revised to ensure street tree delivery.
- vii. Tree and hedgerow protection measures: show extent and position of tree and hedgerow protection fences including protection of all vegetation along the Strategic Green Corridor along the Barony Boundary.
- viii. The relevant requirements of the Clonburris Parks and Landscape Strategy.
- ix. Landscape Proposals to reflect the requirements of above additional information to deliver the required green infrastructure.

ADDITIONAL INFORMATION

The applicant is recommended to contact the Public Realm Department to discuss.

REASON: In the interest of amenity, compliance with Clonburris SDZ Planning Scheme, Parks and Landscape Strategy, Biodiversity Management Plan, SDCC Development Plan Policy; the provision, establishment and maintenance of a reasonable standard of landscape; and proper planning and sustainable development of the area.

8 Green Space Factor (GSF)

The applicant has not submitted any information in relation to the Green Space Factor. This is a requirement of the SDCC CDP (2022-2028).

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. As a planning tool, this ratio is used to assess both the existing green cover within a site and the impact of new development, based on the quantity and quality of new green space provided. Greening factors have been adopted and implemented across the UK, Europe and the United States to help ensure that new development makes a positive contribution to the local environment. By ensuring that new development meets minimum standards for the provision of GI the GSF aims to secure a positive contribution to biodiversity, amenity, air quality, stormwater management, temperature regulation and other ecosystem services. The GSF prioritises the retention of existing GI features within a subject site, in order to support the protection of the County's existing GI network. At the same time, the GSF will ensure that new development incorporates new landscaping and GI features, contributing to the enhancement of the overall GI network. Chapter 12, section 12.4.2 provides further detail on the requirements for the GSF as part of planning applications.

ADDITIONAL INFORMATION

REASON: In the interest of amenity, compliance with Clonburris SDZ Planning Scheme, Parks and
Landscape Strategy, Biodiversity Management Plan, SDCC Development Plan Policy; the provision,
establishment and maintenance of a reasonable standard of landscape; and proper planning and
sustainable development of the area.

Fionnuala Collins
Assistant Parks Superintendent

Endorsed By: Laurence Colleran
Senior Executive Parks Superintendent