LAND PLANNING & DESIGN

CUNNANE STRATTON REYNOLDS

LAND PLANNING & DESIGN

Ringwood Phase 2 Development, Station Road, Blarney, Cork

Landscape Design Rationale

PROJECT NO. 21619

December 2025



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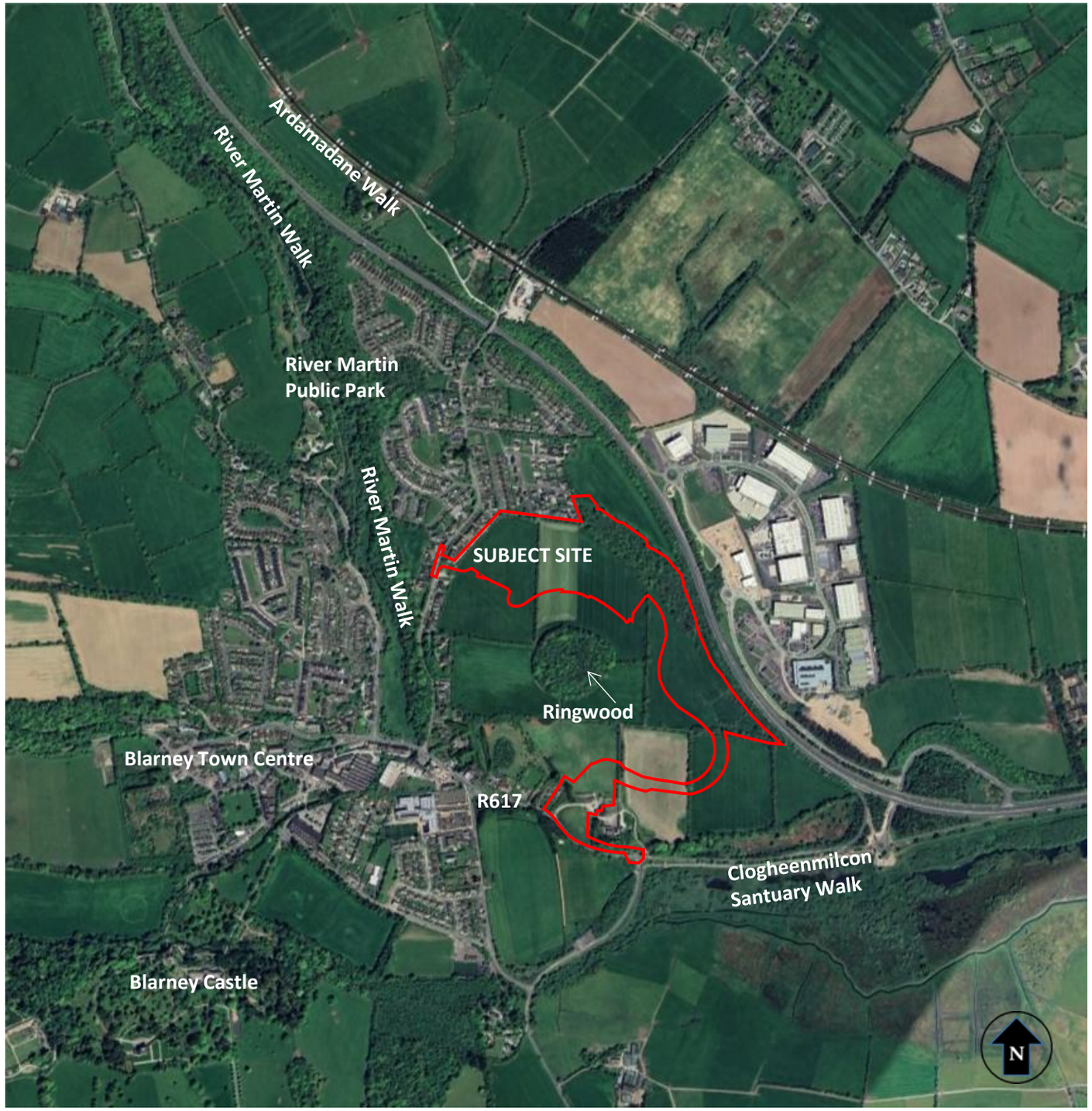
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01. INTRODUCTION, CONTEXT & ANALYSIS

INTRODUCTION & SITE LOCATION



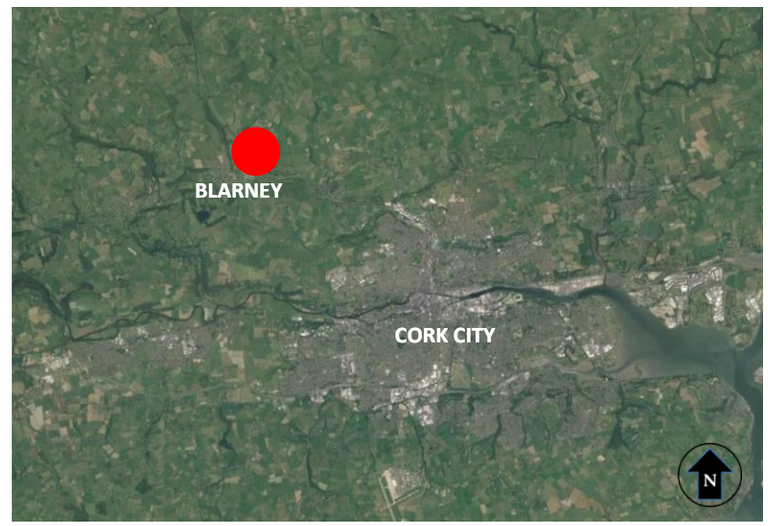
Phase 2 Site Map

Ringwood Phase 2 development site is located at the north-eastern edge of Blarney Village and is accessed via the R617 and Station Road

The northern part of the subject site adjoins the Ringwood Phase 1 site, currently the subject of a planning application and appeal to An Board Pleanala.

The site forms part of a larger land holding in Ringwood which are shown on a masterplan in section 4 of this report for context purposes..

An additional lands at Stoneview, located further north and to the east of the N20 National Primary Road, are in the ownership of the applicant.



Context map

EXISTING SITE CONDITION:
LOCAL LANDSCAPE/TOWNSCAPE CHARACTER

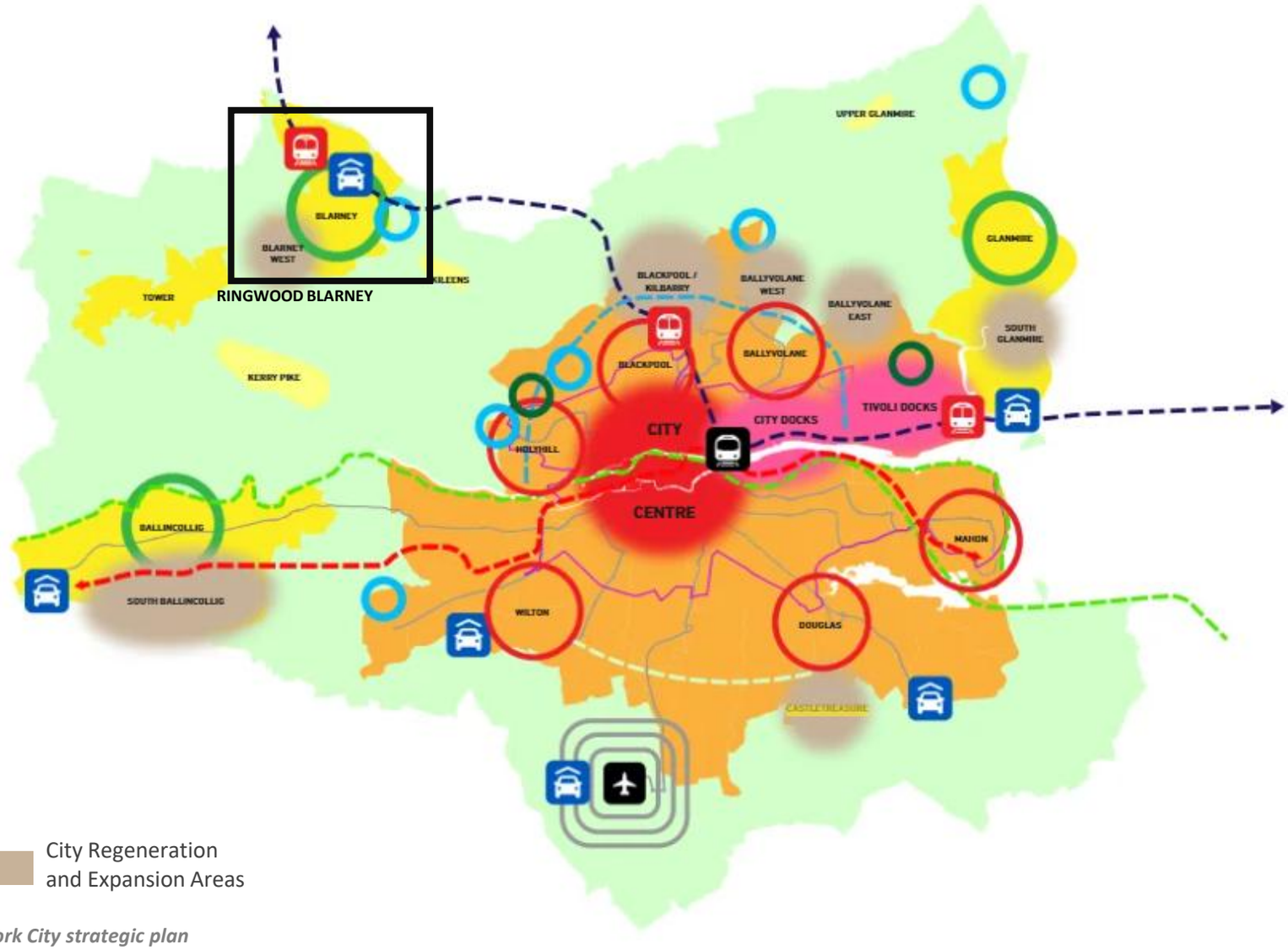
Blarney, has undergone considerable growth in recent years. Despite its progress, Blarney has managed to preserve its village character and compact urban fabric with the world renowned Blarney Castle located close to the village core.

As part of a comprehensive plan for the city's expansion, the consolidation and expansion of seven strategic areas have been identified in Cork City Council Development Plan 2022-2028, one of which is Blarney East/Ringwood.

Objective 10.63

Blarney East / Ringwood Expansion Area

To support the compact growth and development of Blarney East / Ringwood Expansion Area as a strategic City consolidation and expansion area, as identified in the Core Strategy. All development shall be designed, planned and delivered in a co-ordinated and phased manner, using a layout and mix of uses that form part of an emerging neighbourhood integrated with the wider area.

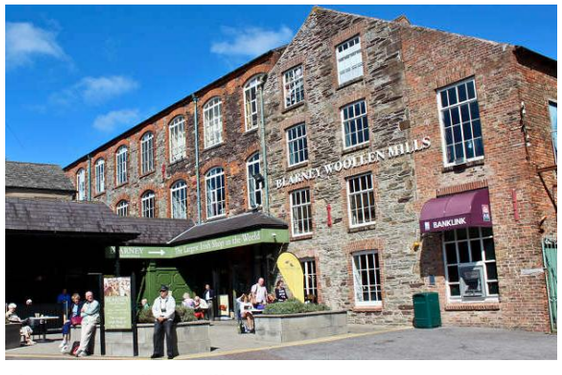


City Regeneration and Expansion Areas

Cork City strategic plan



Blarney Castle, historical city heritage



Blarney Woollen Mills, town centre



River Martin walkway to northwest of the site

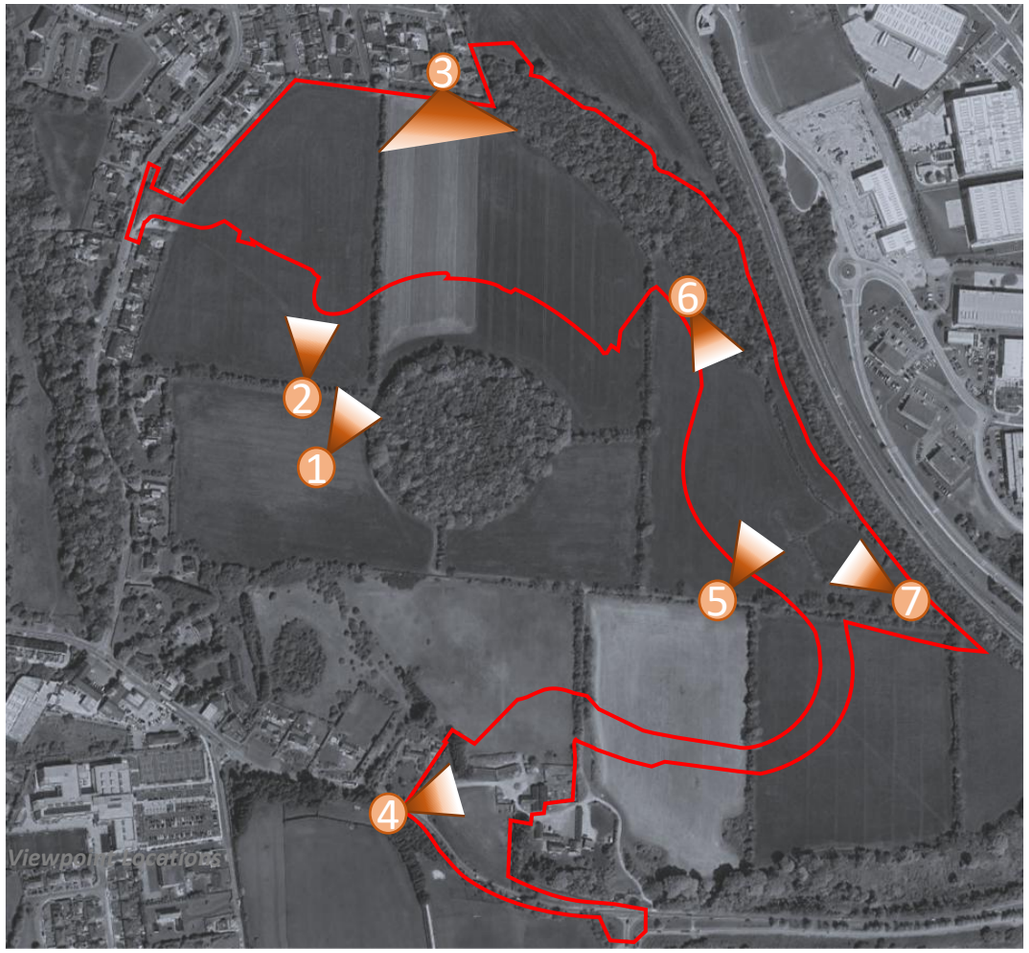


Ringwood woodland adjacent to the southern boundary of the site

EXISTING SITE CONDITION:
PHOTOGRAPHS



View 01 View north-eastward from Ringwood





View 02 View northward from southern boundary



View 03 View southward from northern boundary

EXISTING SITE CONDITION:
PHOTOGRAPHS



View 04 R617 Site Entrance Location



View 05 View north-eastward toward N20 corridor and Blarney Business Park



View 06 View southward along eastern edge of Wet Wood WN6



View 07 View northward across proposed Attenuation / Wetland Amenity Area

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EXISTING SITE CONDITION:
EXISTING VEGETATION & GREEN NETWORK



LEGEND

- Existing trees
- Existing hedgerows
- Existing woodland

GREEN & BLUE INFRASTRUCTURE:
KEY DEVELOPMENT PLAN OBJECTIVES

Cork City Development plan 2022-2028 Volume 1, Chapter 6 sets out a number of principles and themes as well as key components of Green and Blue infrastructure (GBI) which are summarized below and inform the site-specific GBI proposals for the subject site as outlined on page 29-30.

PRINCIPLES AND THEMES

Green infrastructure includes the integration of vegetation, trees, and open green spaces, while **blue infrastructure** focuses on sustainable water management through features such as streams, wetlands, swales, dry basins, and infiltration systems.
By combining these two strategies, any new development will promote sustainability, enhance biodiversity, support healthy ecosystems and neighbourhoods, and improve the overall quality of life for residents. Successful implementation will require thoughtful planning, collaboration with key stakeholders, and the use of innovative design solutions.
These measures are central to creating sustainable, forward-thinking neighbourhoods that prioritise both people and nature.

KEY COMPONENTS

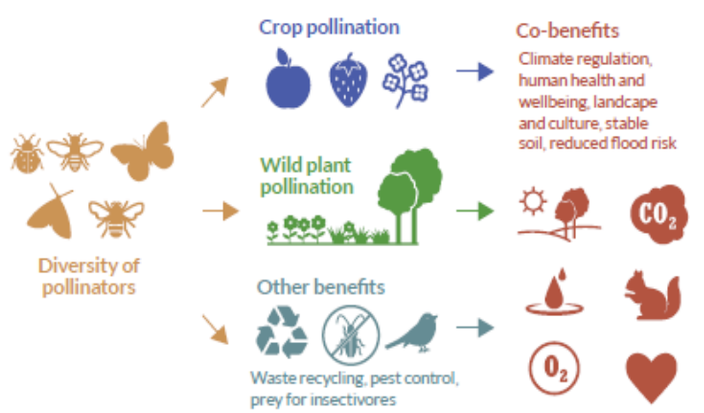
Sustainable Urban Drainage Systems (SuDS) aim to manage stormwater effectively, minimize flood risks, and promote sustainable water management practices. By implementing a comprehensive SUDS strategy, the development site can enhance its resilience to extreme weather events, protect water resources, and create a more sustainable and environmentally friendly living environments. SuDS proposals must be developed appropriate to local site ground conditions.
SuDS components can make a significant contribution at to the biodiversity (ecological) value of an area (eg. rain gardens, swales, detention basins, trees). It is this biodiversity and ecology

SUDS EXAMPLES:
- Permeable Paving
- Rain Gardens
- Swales
- Infiltration Basins



SuDs example

Biodiversity in housing developments is crucial. It means a variety of plants, animals, and insects can thrive, creating a balanced environment. This diversity improves air quality, promotes pollination for gardens, and enhances residents' well-being. Preserving biodiversity ensures a healthier and more sustainable living space for everyone.
Enhance biodiversity is done by choosing native plant species that naturally belong to the area and including pollinator-friendly non-native species to attract bees and butterflies. This thoughtful landscaping promotes a thriving ecosystem, supports local wildlife, and contributes to the overall well-being of both nature and residents.



The benefits of protecting pollinators

Open spaces and recreation are integral components of green infrastructure in housing developments. Emphasizing the preservation of existing habitats and the establishment of new ones within amenity spaces is essential. This approach fosters biodiversity and enhances the overall ecological balance. Ensuring robust connectivity among all green spaces contributes to a cohesive and well-integrated environment. Beyond providing areas for leisure and physical activity, this systematic incorporation of green infrastructure elevates the quality of life for residents. It also underscores a commitment to sustainable urban planning, creating neighbourhoods that harmoniously blend with nature while offering residents accessible and thriving green environments.



Variety of use and function within open spaces

EXISTING GREEN & BLUE INFRASTRUCTURE (GBI):
LOCAL AREA OVERVIEW

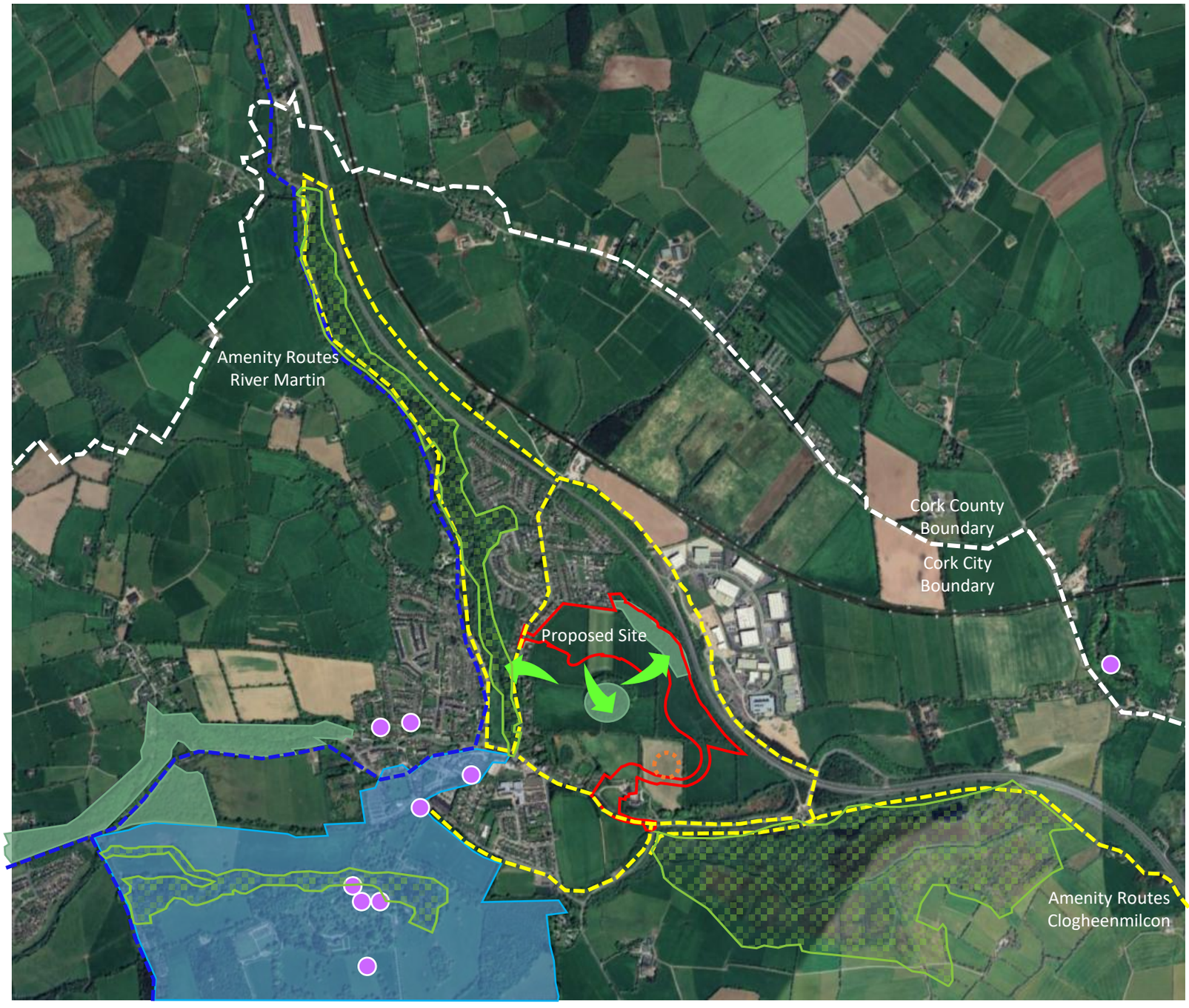
The green and blue infrastructure strategy for Ringwood Phase 2 development aims to enhance connectivity with the existing framework of natural habitats and amenities in the locality.

There are a number of existing habitats and amenity sites in the locality including the River Martin Amenity Walk, Clogheenmilcon Amenity Route and Ardamadane Walk which are shown opposite.

These, along with the natural assets on the subject site, including Ringwood woodland, native hedgerows and the WN6 Wetwood, form the basis for enhancing the local green and blue network.

LEGEND

- Proposed Natural Heritage Areas
- Architectural Conservation Area
- Designated Scenic Route
- Local Amenity Routes
- Woodland
- Proposed Phase 2 Development Site
- Protected Structures
- County Boundary
- Archaeological site
- Habitats links from the site



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02. WIDER RINGWOOD CONTEXT MASTERPLAN

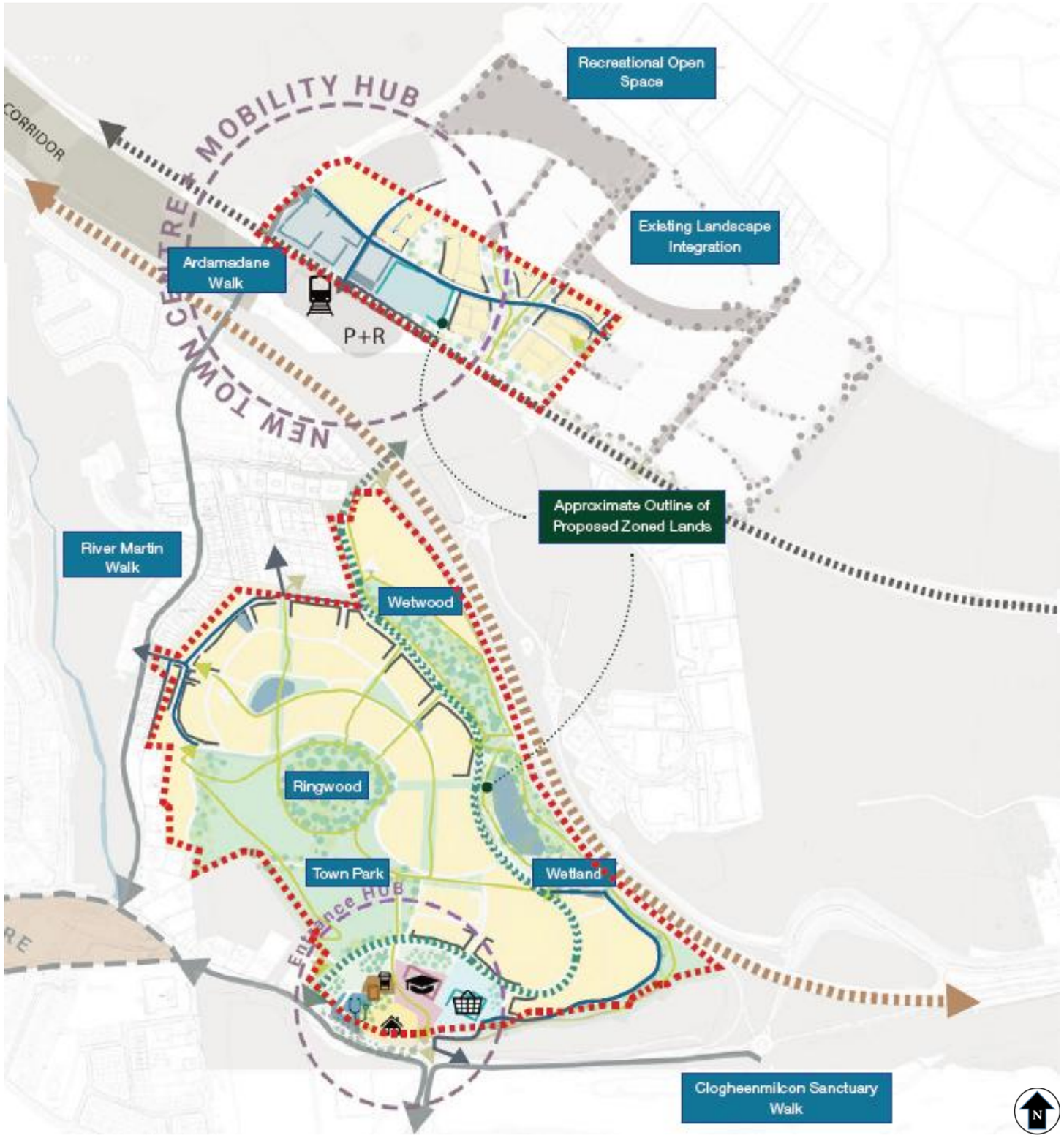
EXTRACT FROM REZONING SUBMISSION NOVEMBER 2025:
WIDER RINGWOOD MASTERPLAN

The Ringwood Masterplan provides context for the Phase 2 LRD planning application showing:-

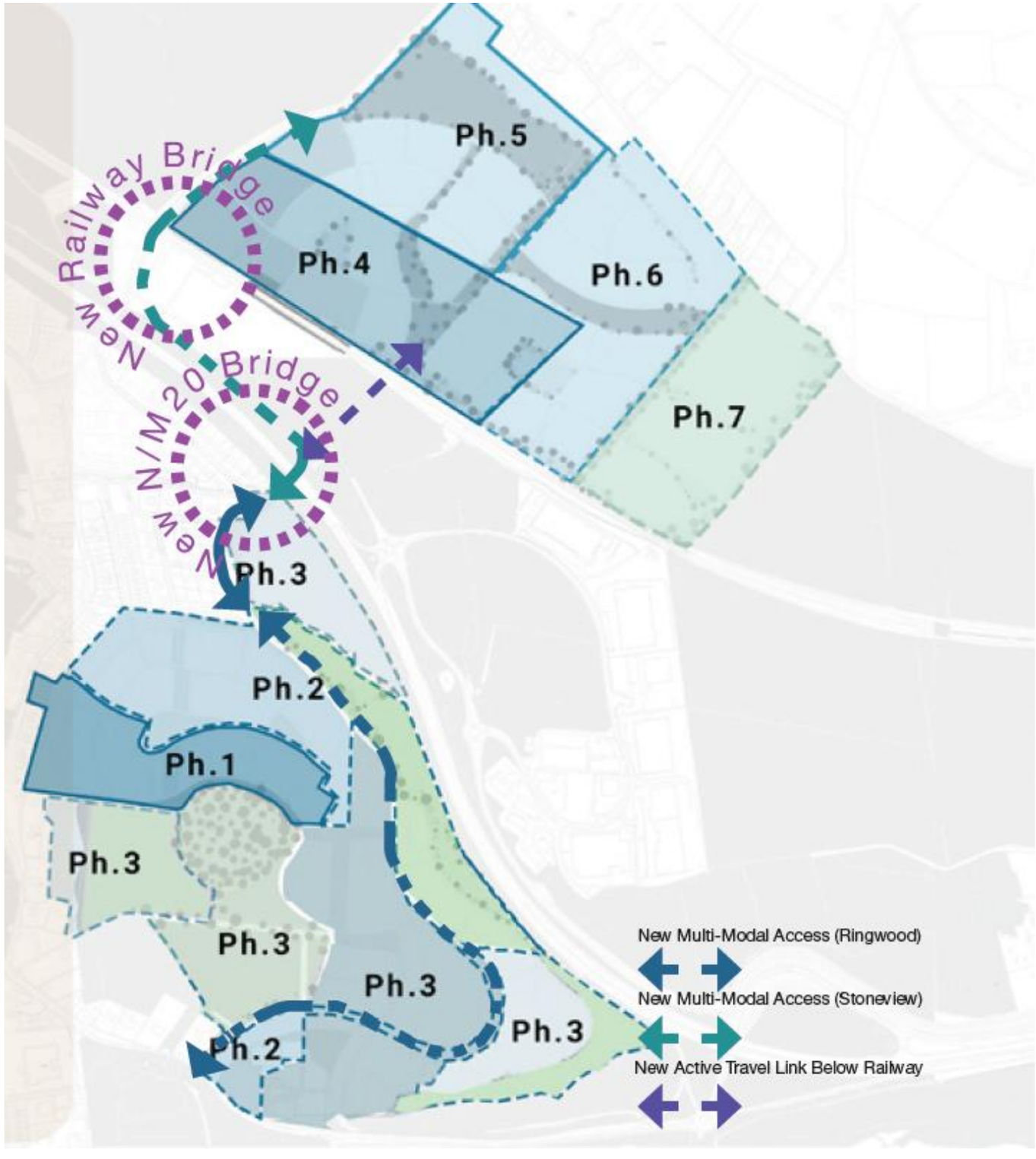
- Lands zoned for housing phases 1-5
- Proposed Town Park including Ringwood woodland
- Pedestrian and Cycle Network access from the emerging neighbourhoods to public open spaces, the local green network and the proposed Town Park.

Each development phase will make a positive contribution toward enhancing and extending the green network. Retention and protection of key site assets such as Ringwood, the WN6 Wetwood, and site hedgerows provides the basis for a range of unique site amenities which will be enhanced by means of additional tree planting, wetland habitat establishment, hedgerow planting and pollinator planting. Ringwood woodland, a prominent local landscape feature will be sensitively managed to conserve and diversify its habitat and biodiversity potential.

The Town Park will serve the emerging neighbourhoods and the wider population of Blarney with play facilities, multi-functional meadows spaces, exercise routes, viewing points, habitat interpretation, cycle and walking routes and car parking facilities.



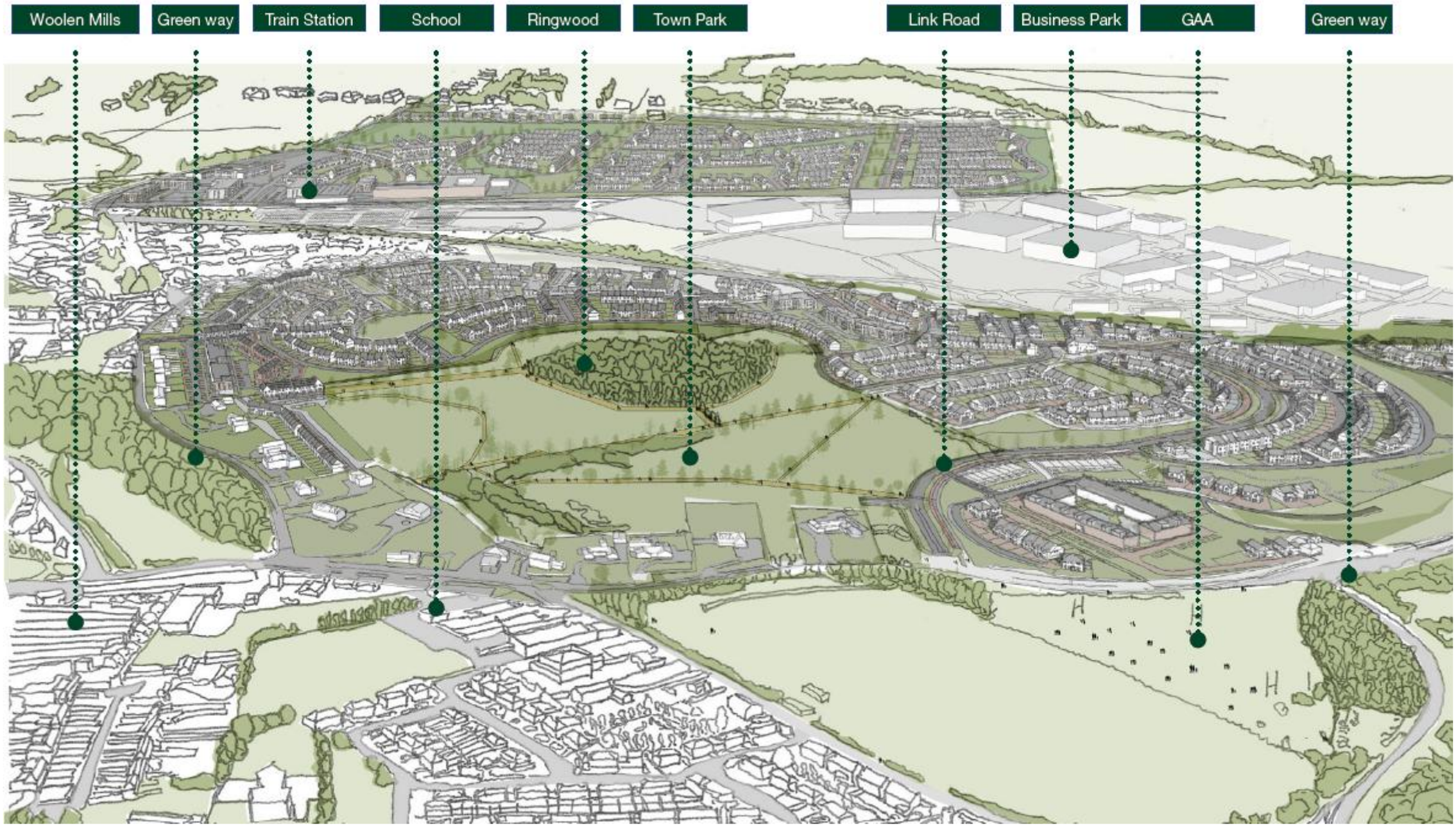
EXTRACT FROM REZONING SUBMISSION NOVEMBER 2025:
RINGWOOD MASTERPLAN PHASING DIAGRAM



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EXTRACT FROM REZONING SUBMISSION NOVEMBER 2025:
RINGWOOD MASTERPLAN BIRD'S EYE



TOWN PARK:
Extract from **Ringwood Town Park Vision Brochure** submitted with Re-Zoning Application, November 2025













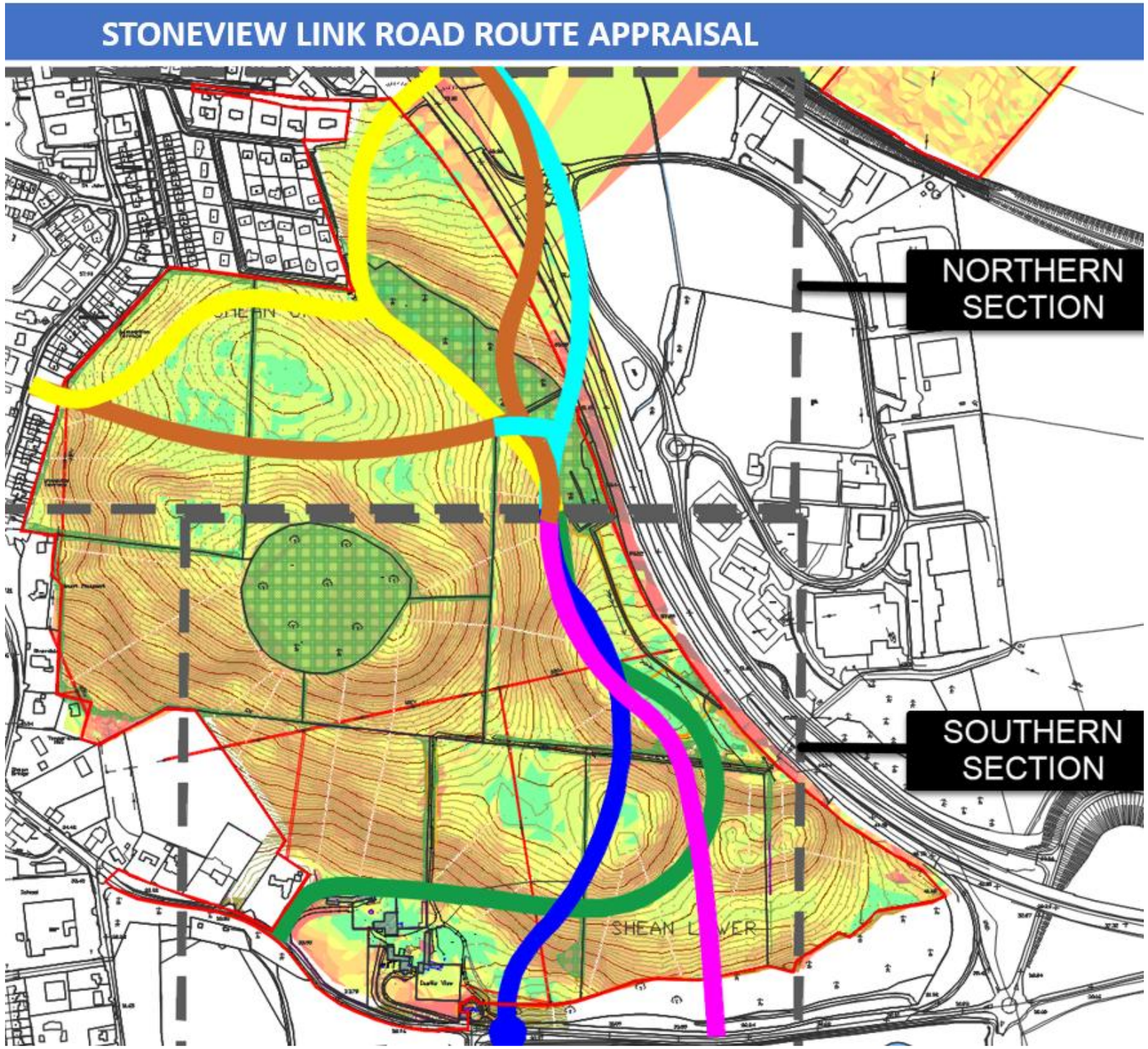


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03. PHASE 2 INTERFACE WITH WET WOODLAND WN6 – LANDSCAPE/TREES/ECOLOGY CONSIDERATIONS

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CONTEXT:
STONEVIEW LINK ROAD ROUTE APPRAISAL



Extract from Stoneview Link Road Route Appraisal report prepared by MHL Consulting Engineers

The Route Option Selection process for the road considered three options, two of which bisected the woodland (brown and blue options shown opposite). These were discounted in favour of the preferred option (yellow route) which is aligned along the western edge of the woodland. This is considered to be the least impactful option as it avoids splitting the woodland into two separate blocks.

TREE LOSS & TREE RETENTION:



Distributor road interface with existing Wet Woodland WN6

Distributor Road Interface with Wet Willow-Alder-Ash Woodland (WN6): Arboricultural Impacts

A number of mature trees along the western edge of the woodland will be affected by the road alignment and associated roadside embankments. These are detailed in a specialist arborist's report which accompanies this submission, the key details of which are summarised as follows:

Total no. of trees to be removed = 15no. four of which of which are already in poor condition and recommended for removal. These are summarised as follows;

A1 Category Trees = 4 no.

A2 Category Trees = 4 no.

B1 Category Trees = 3 no.

U Category Trees = 4 no.

7 no. Oak trees are affected; 3 A1, 3 A2 & 1 B1 category

1 no. Beech tree is affected; A1 category tree

The remainder of the trees are Ash, Spruce and Sycamore

Re-alignment of the road has resulted in less encroachment and a significant reduction in the number of mature trees affected (15no. in comparison with 46 no. originally impacted).

LANDSCAPE & ECOLOGY:
KEY CONSIDERATIONS & MITIGATION MEASURES



View of Wet Woodland WN6, Ringwood & associated site hedgerows



Northern end of Wet Woodland WN6



Mature tree at woodland edge

Landscape Effects

The natural characteristics of the site impart a capacity to accommodate development which results in limited landscape or visual impacts in the wider landscape. The undulating topography and the screening effect of the woodland trees and hedgerows help integrate the proposed residential neighbourhood .

While the proposed phase 2 development will incur inevitable internal change on the site as it transitions from greenfield to housing development, the capacity of the site to absorb this change will not be diminished as the wetwood will continue to function as a significant buffer along the N20 road corridor.

The design process has also accommodated a re-alignment of the proposed link road following feedback from Cork City Council with the result that the southern section of road has been moved westward to minimise impact on the woodland edge. This has resulted in less encroachment and a significant reduction in the number of mature trees affected (21no. instead of 46 no.).

Ecological Effects

Refer to Chapter 11 of the EIAR which addresses ecological effects and mitigation measures.

Compensation for loss of Wet Woodland Trees

Compensation is provided in the form of proposed tree planting immediately to the south of the wet woodland along the N20 corridor and within the SuDS Amenity/Biodiversity Area where a total of 86 no. trees will be planted.

Refer to planting schedule on Landscape Masterplan drg. no. BLR-2-02-XX-00-DR-CSR-LA-100.

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04. PHASE 2 DESIGN CONCEPT

DESIGN CONCEPT:
LANDSCAPE MASTERPLAN



Extract from Landscape Master Plan drg.no. BLR-2-02-XX-00-DR-CSR-LA-100

Ringwood Phase 2 Landscape Design

The design strategy for Ringwood Phase 2 is based on the retention and protection of existing site habitats and the provision of comprehensive mitigation measures where any unavoidable losses occur such as along the western edge of Wetwood WN6 as outlined in Section 3 above.

Phase 2 Green Network provision comprises;

1. Public open spaces distributed provision in the Phase 2 housing area in compliance with the standards set out in Cork City Council Development Plan 2022-2028.

2. The WN6 Wetwood which provides a significant buffer between Phase 2 and the N20 road corridor. It also provides an attractive backdrop to pedestrian and cycle routes along the Stoneview link road.

3. A wetland area to the south of the wetwood incorporating SuDS attenuation basins and meadows which will provide opportunity for recreational pursuits such as picnicking, walking, cycling, jogging and informal play. A planting strategy for the area developed in conjunction with the project ecologist will enhance the biodiversity potential of the area as an extension to the existing WN6 Wetwood. The focus will be on native willow and alder planting along with Bulrush *(Typha sp.) in the basin areas*.

4. Tree and native understorey planting along the Stoneview link road corridor will mitigate the loss of trees along the eastern edge of wetwood WN6.

5. A comprehensive planting strategy at the R617 entrance along with site signage, seating and sculpture will integrate the pump station and enhance the experience and ambience of the gateway hub and access to the Town Park.

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DESIGN CONCEPT:
PHASE 2 NEIGHBOURHOOD PUBLIC OPEN SPACES- INSPIRING IMAGES







Running paths and walkways





Neighbourhood amenity spaces for use by all age groups



Flexible-Use Open Space



Offroad pedestrian amenity paths

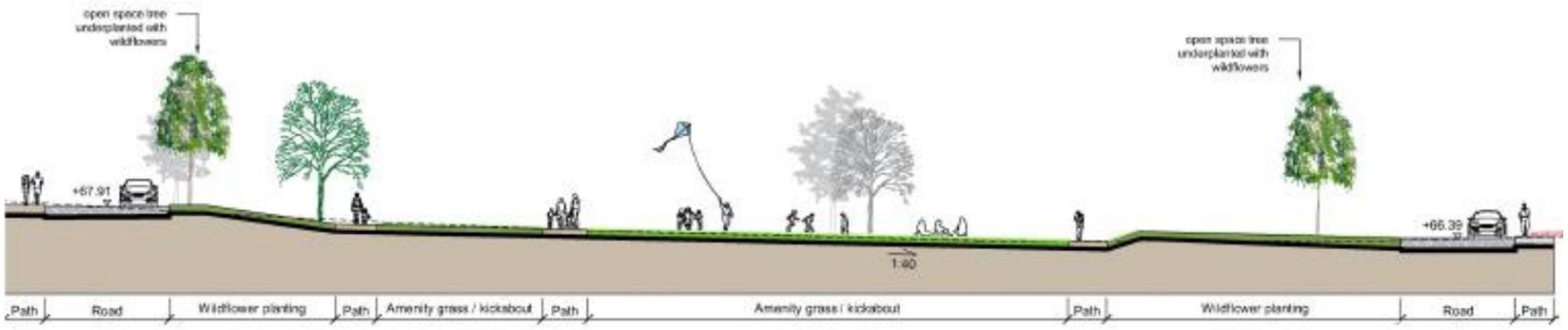




Neighbourhood natural play and seating areas

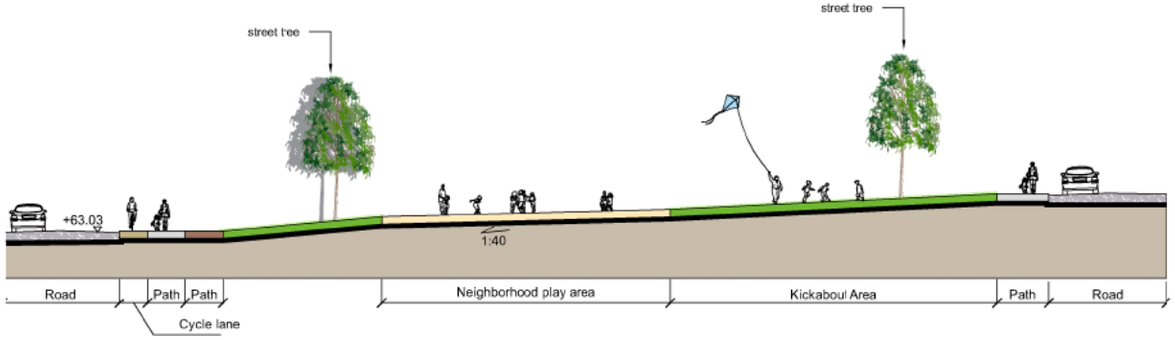
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PHASE 2 HOUSING AREA:
SITE SECTIONS

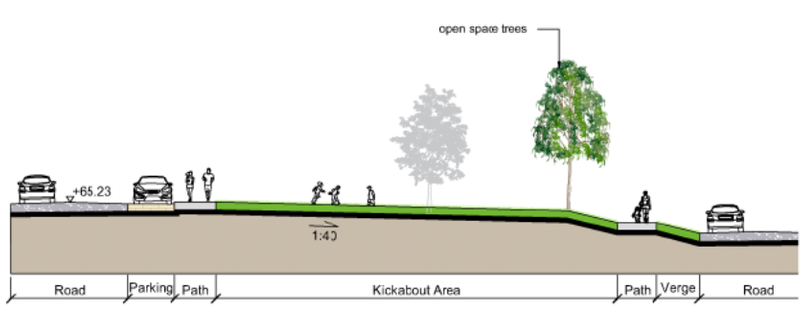


SECTION A-A

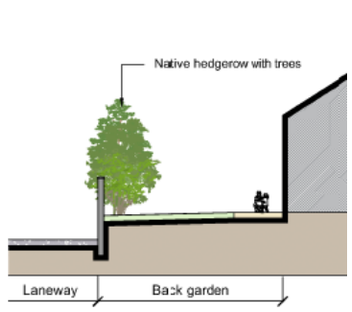




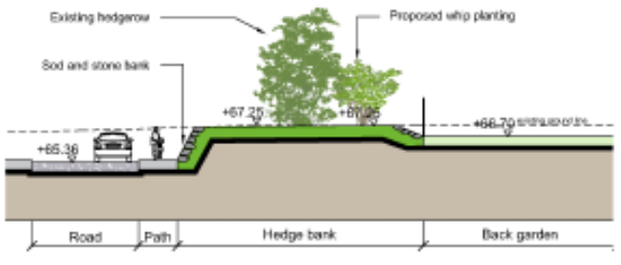
SECTION D-D



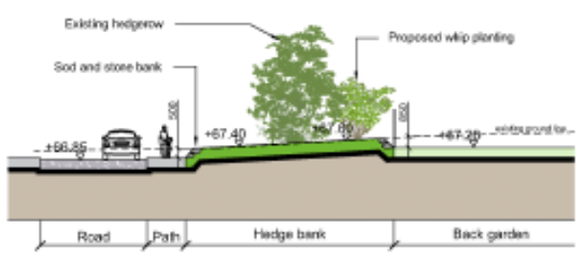
SECTION E-E



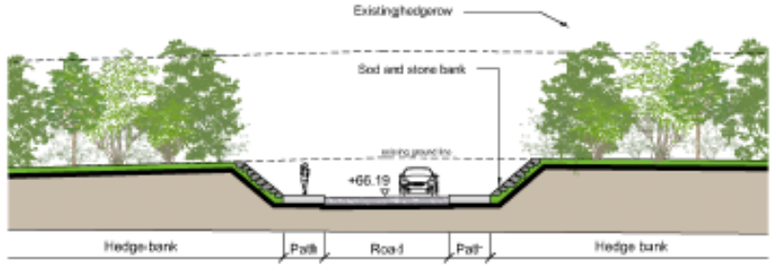
SECTION R-R



SECTION G-G

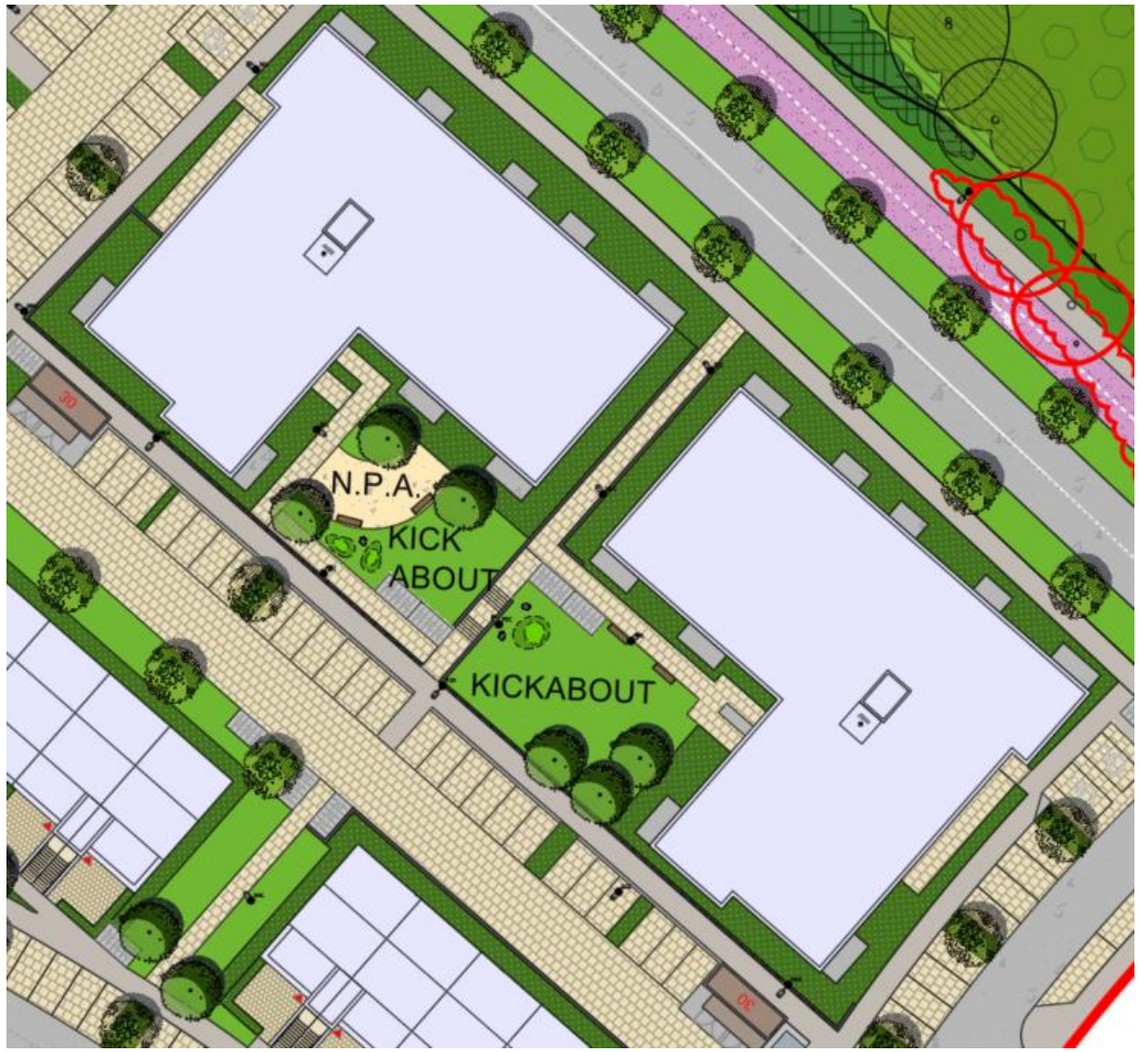


SECTION H-H



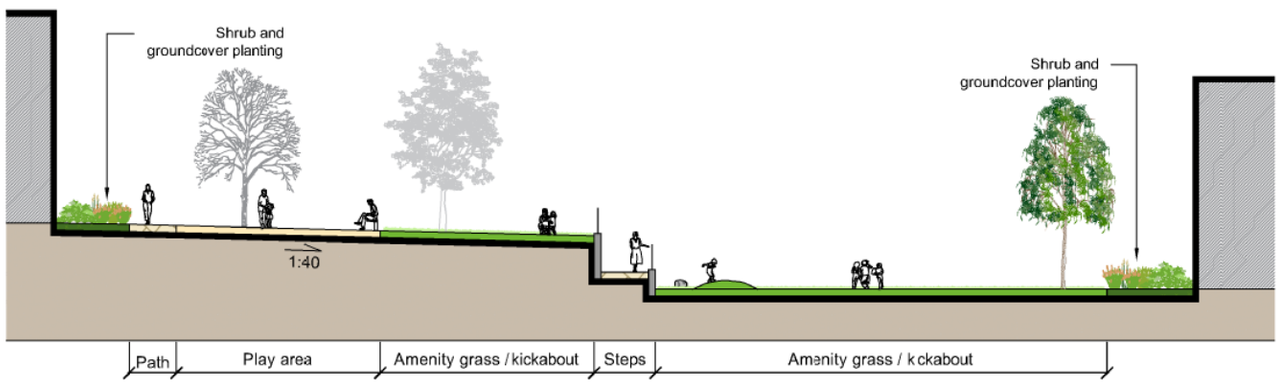
SECTION I-I

DESIGN CONCEPT:
COURTYARD DETAILS – COURTYARD A



Extract from Landscape Master Plan drg.no. BLR-2-02-XX-00-DR-CSR-LA-100





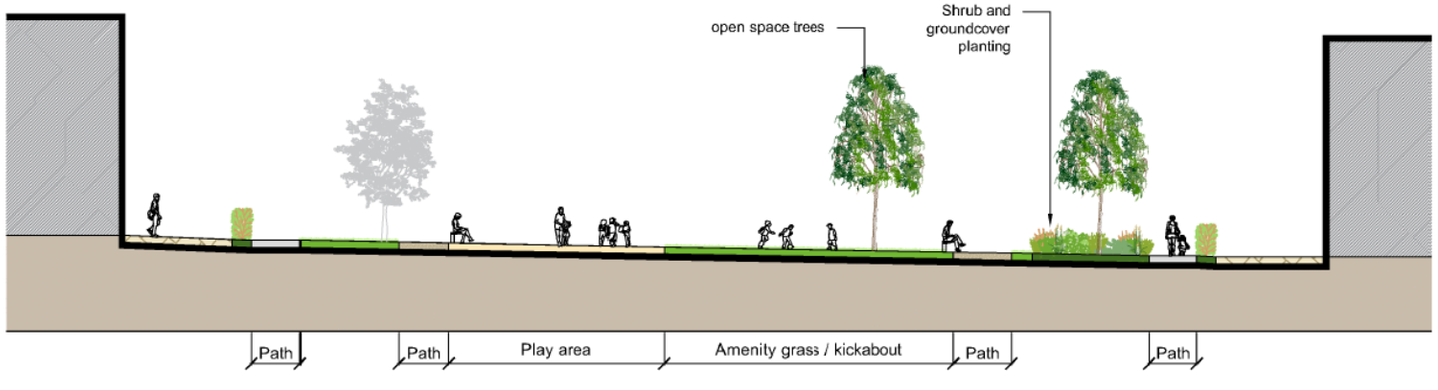
Section C-C



DESIGN CONCEPT:
COURTYARDS DETAILS – COURTYARD B



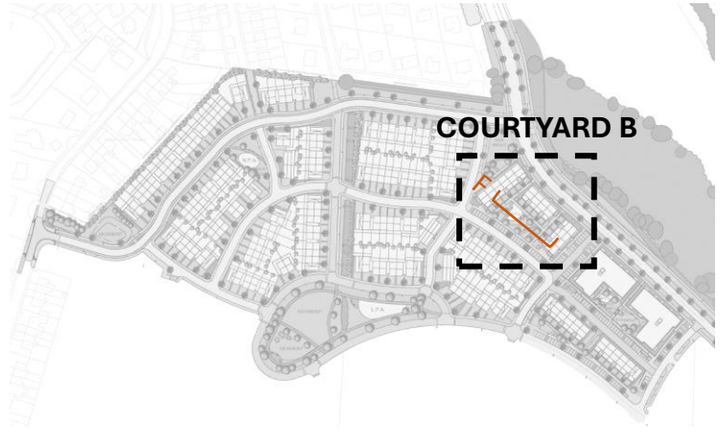
Extract from Landscape Master Plan drg.no. BLR-2-02-XX-00-DR-CSR-LA-100



Section F-F

LEGEND

- PROPOSED STREET TREES
- PROPOSED NATIVE / OPEN SPACE TREES -to be under-planted with bulbs
- PUBLIC AMENITY GRASS
- PROPOSED SHRUBS AND GROUND COVER PLANTING
- NEIGHBOURHOOD (NPA) PLAY AREA Rubberised mulch
- NATURAL PLAY ELEMENTS - grass mounds, boulders, tree logs, etc
- ROAD SURFACE TO ENGINEERS SPEC
- CONCRETE FOOTPATH
- FEATURE PAVING/PARKING SURFACE & FRONT GARDENS
- FEATURE SEATING



DESIGN CONCEPT:
WETWOOD WN6 & SUDS AMENITY / BIODIVERSITY AREA



SuDS area with standing water after heavy rainfall

The SuDS Amenity/Biodiversity Area is located on low-lying ground immediately to the south of the WN6 wet wood adjacent to the N20 corridor and forms part of the engineers' drainage strategy for the wider Phase 2 site.

The proposed SuDS basin is expected to be dry for much of the year and has been configured to provide opportunities for informal play and recreation during dry spells. The site sections on page 26 and the Recreation and Amenity Plan on page 28 show how the area is to be constructed to provide useable spaces, pedestrian and cycle access, interpretation, seating and picnic facilities. The area will provide significant additional amenities supplemental to the open space amenities already provided throughout the main Phase 2 housing area.

In addition, the biodiversity potential of the area is to be enhanced with the provision of significant tree planting with the emphasis on native species and foraging plants.

Notwithstanding the loss of part of the western fringe of wet wood WN6 to accommodate the site access road as outlined in section 3, the woodland is to be retained and protected as a valuable habitat and buffer along the N20 corridor which will be experienced by pedestrians and cyclists using the proposed network of amenity routes throughout the site.





Native wetland trees and habitat interpretation



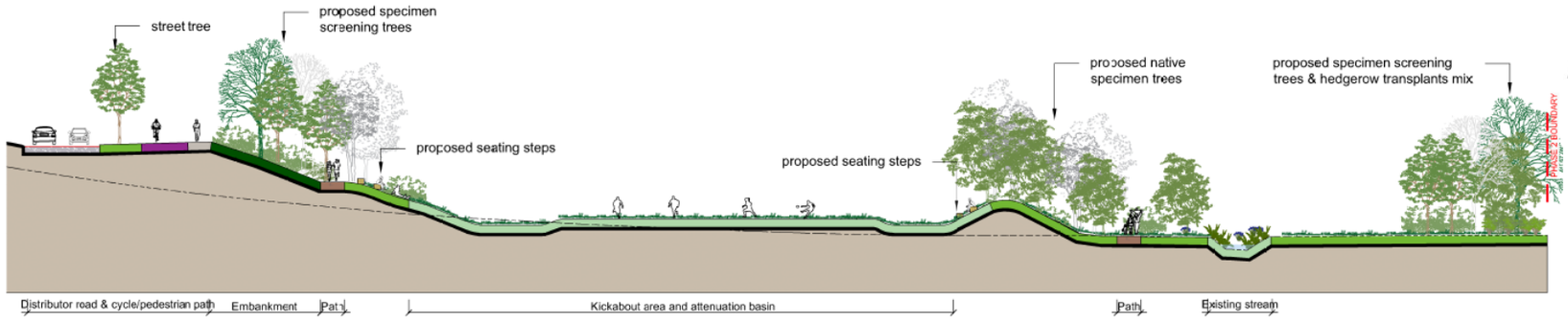
Semi-wet attenuation basin





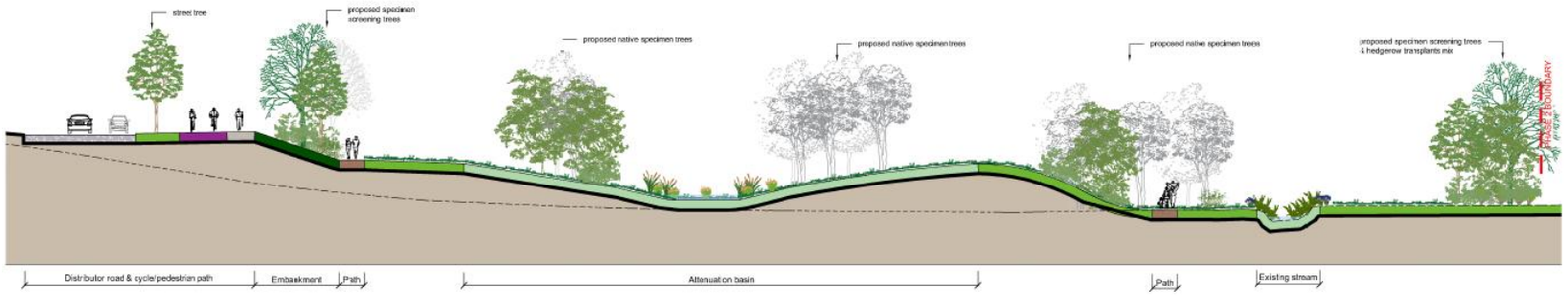
Seating and Picnic facilities

SUDS AMENITY / BIODIVERSITY AREA:
SITE SECTIONS

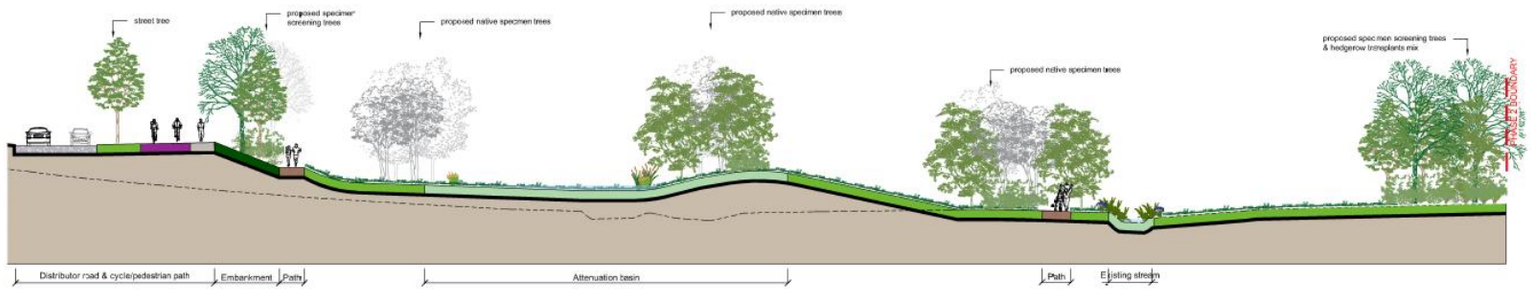


SECTION J-J

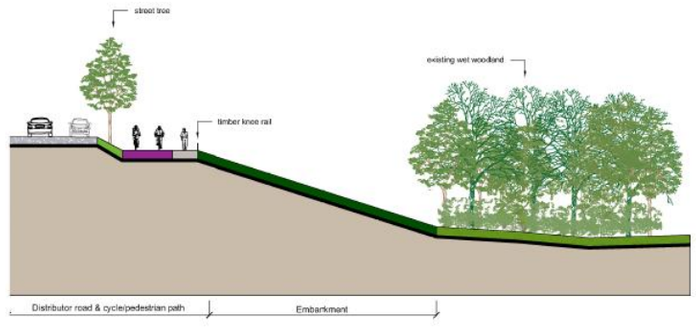




SECTION K-K



SECTION L-L

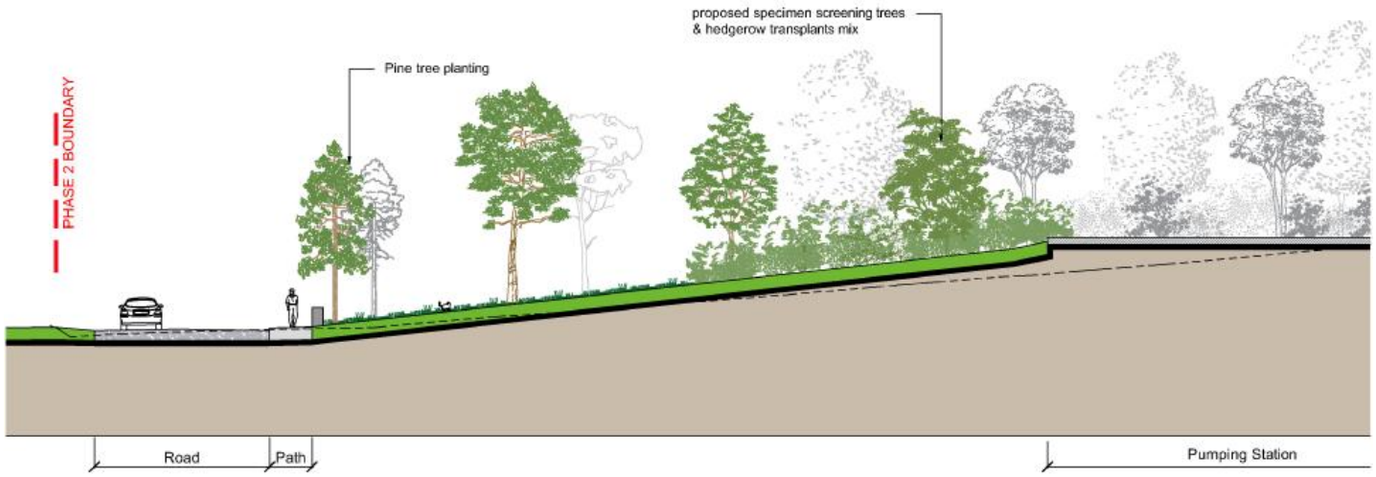


SECTION M-M

Distributor road interface with existing Wet Woodland WN6

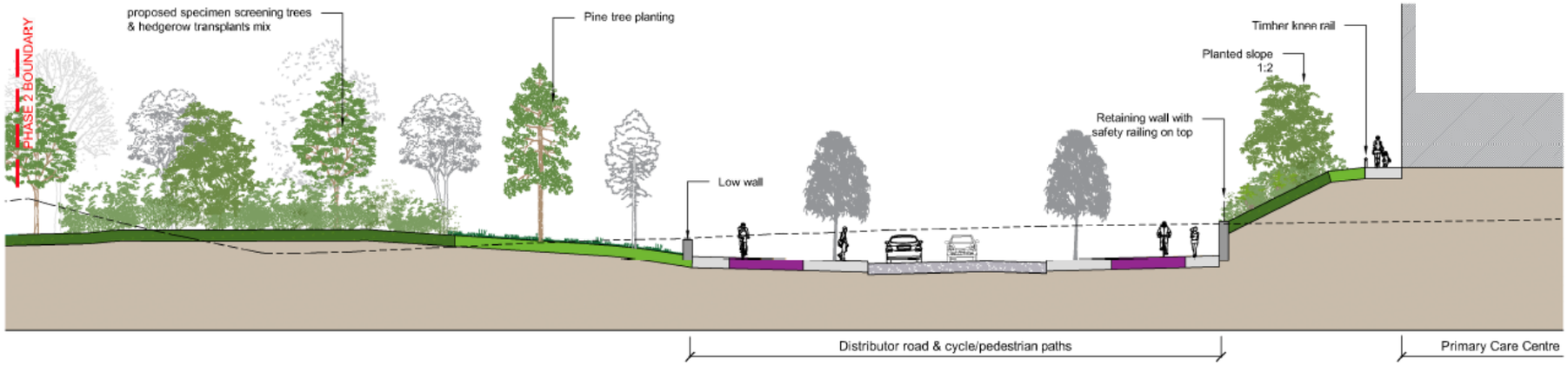
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PRIMARY CARE CENTRE AREA:
SITE SECTIONS

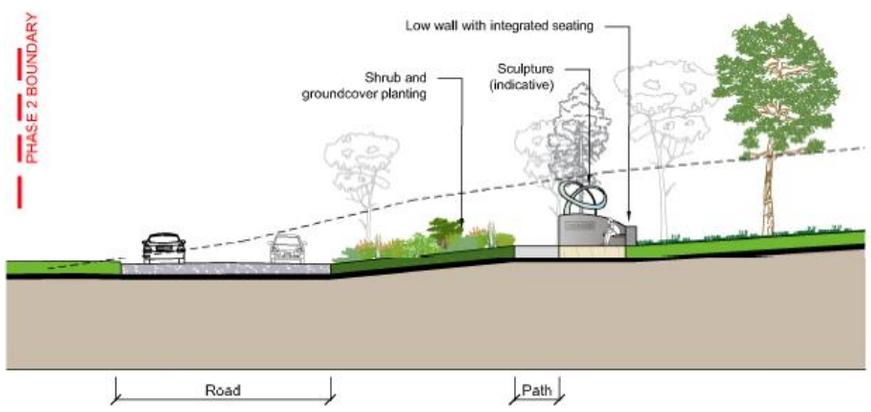


SECTION N-N

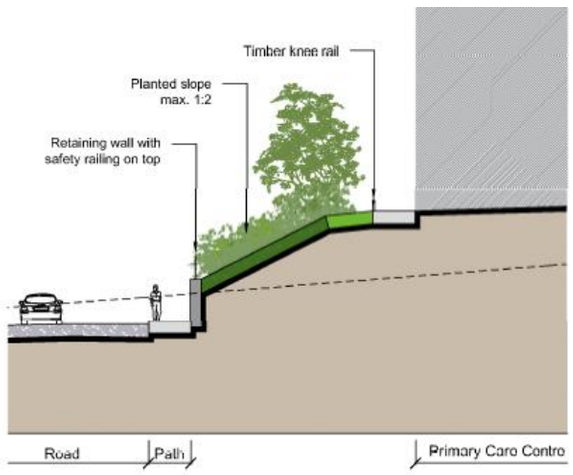




SECTION O-O



SECTION P-P



SECTION Q-Q

LAND PLANNING & DESIGN

DESIGN CONCEPT:
RECREATION & AMENITY

The recreation & amenity strategy is based on the delivery of public open spaces which offer accessible areas for children's play and social interaction.

The establishment of home-zones/shared spaces promotes pedestrian-friendly streets with reduced vehicular speeds, creating safer environments which encourages play and social engagement.

The public open spaces cater for children's play with excellent passive supervision from adjacent houses.

Retained and proposed green infrastructural elements will enhance the experience of the outdoors, provide seasonality and a sense of connectivity with nature and biodiversity.

As per the Public Open Space Provision – Quantitative/Qualitative Standards from Cork City Development Plan 2022 we are providing:

15% usable open space within the developable area.

The significant additional recreational space and amenities provided in SuDS / Amenity / Biodiversity Area is additional to the 15% figure. (Refer also to page 25 for additional details).



LAND PLANNING & DESIGN

DESIGN CONCEPT:
NATURE-BASED SUSTAINABLE DRAINAGE SYSTEMS (SuDS)

Indicative Imagery



Sustainable Drainage Systems (SuDS) are designed to maximise the opportunities and benefits we can secure from surface water management by managing rainwater close to where it falls. Some types of SuDS include planting, others include proprietary products.

SuDS can improve the quality of life in developments and urban spaces by making them more vibrant, visually attractive, sustainable and more resilient to change, by improving urban air quality, regulating building temperatures, reducing noise and delivering recreation and education opportunities.

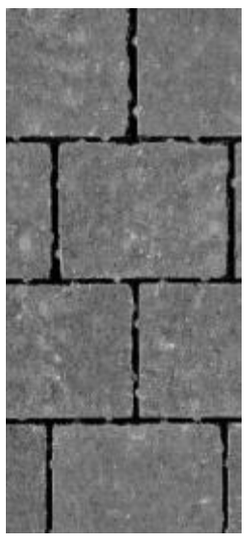
Examples of SuDS include:
- Swales, detention basins, ponds and wetlands
- Pervious pavements
- Trees capture rainwater and provide evapotranspiration, biodiversity and shade
- Soakaways and infiltration basins
- Bioretention systems, including rain gardens, collect runoff, allowing it to pond temporarily on the surface before filtering through vegetation and underlying soils.
- Rainwater harvesting systems

SuDS can be applied anywhere including open spaces, developments, parking areas, streets, parks etc and measures for incorporating these throughout the subject site.

Please refer to Engineer's Report for details.









LAND PLANNING & DESIGN

DESIGN CONCEPT:
GREEN INFRASTRUCTURE & BIODIVERSITY NET GAIN



LEGEND

- Existing trees retained
- Existing wet wood
- Existing hedgerow retained
- Proposed native hedgerow planting
- Proposed compensation trees and hedgerows
- Proposed street trees
- Proposed open space trees
- Proposed SuDS Amenity / Biodiversity Area trees
- Proposed garden trees
- Existing hedgerow/trees removed

Vegetation	Removed
Hedgerow	313 linear m
Woodland	2185 m2
Existing trees	53 no.

Vegetation	Proposed (Compensatory)
Hedgerow	665 linear m
Street trees	303 no.
Open space trees	126no.
SuDS Amenity / Biodiversity Area trees	342 no.
Compensation trees for loss of wet woodland trees	86 no.
Garden trees	141 no.
Screening trees	122 no.

DESIGN CONCEPT:
MATERIALS & FINISHES

All materials will be designed to a high standard, be robust and withstand a long life, as well as meet the CE standard.





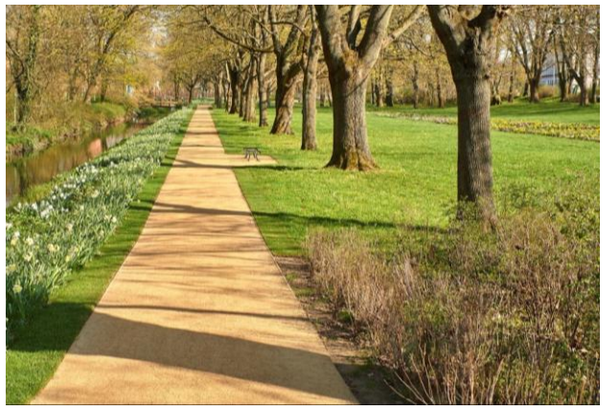
Feature paving





Play/open space surfaces







Variety of path surfaces



Permeable pavers



Textured entrance/edge paving



Feature seating

LAND PLANNING & DESIGN

DESIGN CONCEPT:
TREES & HEDGEROWS

The proposed design utilizes trees to provide structure throughout the site. These would all be native species, delivering significant biodiversity and pollinator benefits.

Tree and hedgerow species beneficial for bats.
Refer to planting schedule on landscape masterplan BLR-2-02-XX-00-DR-CSR-LA-100 for full list.

OPEN SPACE TREES



Alnus glutinosa



Quercus petraea

STREET TREES



Prunus padus 'Fastigiata'





Sorbus aucuparia / Betula Pendula

SPECIMEN TREES



Malus syvestris



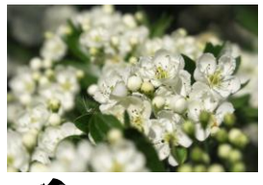


Prunus species

HEDGEROW MIXES

















Potential species mix: Hawthorn, Blackthorn, Hazel, Guelder Rose, Holly, Dog Rose

DESIGN CONCEPT:
SHRUBS, GROUNDCOVER & PERENNIALS

The proposed design features shrub planting to designate different areas, soften edges, and create inviting spaces. These would be fully native species, enhancing biodiversity throughout the site.

Supplementing the more structural shrubs and trees would be pollinator-friendly bulbs and perennials, as well as a differential mowing regime in grassed areas to encourage native wildflowers.

POLLINATOR ORNAMENTAL HEDGE



Brachyglottis 'Sunshine'



Ligustrum ovalifolium

SHRUBS



Rosmarinus officinalis







Bergenia eroica / Pieris japonica / Stachys byzantina

BULBS AND PERENNIALS



Potential species mix: *Anemone nemorosa, Geranium robertianum, Hyacinthoides non-scripta, Muscari 'Blue Spike', Oxalis acetosella, Primula vulgaris, Viola riviniana, Colchicum sp., Crocus sp., Galanthus nivalis, Salvia sp., Anemone × hybrida, Anemone hupehensis, Aster sp., Chrysanthemum sp., Dahlia sp., Helleborus sp., Rudbeckia 'Goldstrum' Calamagrostis 'Karl Foerster', Stipa 'Ponytails'*

PLANTS BENEFICIAL FOR BATS



Hebe sp., Lavandula angustifolia, Erysimum 'Bowles's Mauve', Ajuga reptans, Hedera helix, Origanum vulgare

Note: Refer to planting schedule on landscape masterplan BLR-2-02-XX-00-DR-CSR-LA-100 for full list.

DIFFERENTIAL MOWING REGIME



A differential mowing regime can allow for both reduced maintenance needs, with less intensive and extensive mowing throughout the site, and enhanced biodiversity. By mowing fewer areas and mowing less often, native grasses and wildflowers can flower and set seed, creating more rich ecological processes throughout the site. This can also create attractive patterns within the landscape to further user interest.

LAND PLANNING & DESIGN

05. MAINTENANCE & MANAGEMENT

INTRODUCTION

This document sets out the proposed maintenance and management plans for the establishment and ongoing maintenance of the landscape element of the proposed development. There will be a minimum 18 months defects period on all soft landscape works implemented. Thereafter the landscaping will be maintained in perpetuity consecutive 12 months periods.

1.0 SOFT LANDSCAPE WORKS SPECIFICATIONS

1.1 Site Clearance Generally

- General: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
- Stones: Remove those with any dimension exceeding 25mm.
- Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life. In accordance with current Health and safety legislation.
- Vegetation: remove all weed growth.
- Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.

1.2 Weed Control

Remove all noxious and undesirable weeds from the sit. Weeds shall include: Ragwort, Himalayan Balsam, Giant hogweed & Japanese knotweed, Thistle, Dock, Common Barberry, Male Wild Hop and Spring Wild Oat, or any other noxious species identified by the Department of Environment. For the removal of certain species such as Japanese Knotweed a method statement is to be prepared and submitted to the Department of Environment.

1.3 Standards

In preparing the landscaping, supplying plants and maintaining the landscaping the following standards are to be adhere to:

- BS 3882 Specification for topsoil and requirements for use
- BS 3936-1 to 10 Specification for the supply of nursery stock
- NPS National Plant Specification
- BS 3998 Tree Works: Recommendations
- BS 4428 Code of Practice for general Landscape Operations
- BS 5837 Tree in relation to Construction
- BS 7370-1 to 5 Grounds Maintenance
- BS 8545 Trees: from nursery to independence in the landscape- recommendations
- BS 8601 Specification for subsoil and required use
- BS EN 1722-9 Fences Specification for mild steel - low carbon steel - fences with round or square verticals and flat horizontals

The latest publications for each document are to be used.

1.4 Soil Conditions

- Soil for cultivating and planting: Moist, friable and do not plant if waterlogged.
- Frozen or snow covered soil: Give notice before planting. Provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing.

1.5 Climatic Conditions

- General: Carry out the work while soil and weather conditions are suitable.
- Strong winds: Do not plant.

1.6 Times of year for planting

- Deciduous trees and shrubs: Late October to early March.
- Evergreens/Conifers: October/November or Feb/ March.
- Container Grown plants: Any time of years.

1.7 Mechanical Tools

Restrictions: Do not use within 100mm of tree and plant stems.

1.8 Watering

- Quantity: Wet full depth of topsoil.
- Application: Even and without damaging or displacing plants or soil.
- Frequency: As necessary to ensure establishment and continued thriving of planting.

1.9 Preparation, Planting and Mulching Materials

General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.

1.10 Plants/ Trees - General

- Condition: Materially undamaged, sturdy, healthy and vigorous.
- Appearance: Of good shape and without elongated shoots.
- Hardiness: Grown in a suitable environment and hardened off.
- Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
- Budded or grafted plants: Bottom worked.
- Root system and condition: Balanced with branch system.
- Species: True to name.

1.11 Container Grown Plants/ Trees

- Growing medium: With adequate nutrients for plants to thrive until permanently planted.
- Plants: Centred in containers, firmed and well watered.
- Root growth: Substantially filling containers, but not root bound, and in a condition conducive to successful transplanting.
- Hardiness: Grown in the open for at least two months before being supplied.
- Containers: With holes adequate for drainage when placed on any substrate commonly used under irrigation systems.

LAND PLANNING & DESIGN

1.12 Labelling And Information

General: Provide each plant/ tree or group of plants/ trees of a single species or cultivar with supplier's labelling for delivery to site, showing:

- Full botanical name., Total number, Number of bundles, Part bundles.
- Supplier's name, Employer's name and project reference.
- Plant specification, in accordance with scheduled National Plant Specification categories and BS 3936.

1.13 Plant/ Tree Substitution

Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering. Submit alternatives, stating the price and difference from specified plants/ trees. Obtain approval before making any substitution.

1.14 Plant Handling, Storage Transport and Planting

- Standard: To HTA 'Handling and Establishing Landscape Plants'.
- Frost: Protect plants from frost.
- Handling: Handle plants with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
- Planting: Upright or well balanced with best side to front.

1.15 Treatment of Tree Wounds

Cutting: Keep wounds as small as possible.

- Cut cleanly back to sound wood using sharp, clean tools.
- Leave branch collars. Do not cut flush with stem or trunk.
- Set cuts so that water will not collect on cut area.
- Fungicide/ Sealant: Do not apply unless instructed.

1.16 Protection of Existing Grass

- General: Protect areas affected by planting operations using boards/ tarpaulins.
- Excavated or imported material: Do not place directly on grass.

Duration: Minimum period.

1.17 Surplus Material

Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, pruning's and other arising's: Remove.

1.18 General Planting/Seeding

- Planting shall be carried out within the contract period but not during periods of frost, drought, cold drying winds or when the soil is waterlogged, or when the moisture of the soil exceeds field capacity.
- All containers and protective coverings including biodegradable coverings to root systems shall be removed prior to planting. Roots, except for emergent vegetation, shall be teased out from the root-ball, spread evenly and not twisted.

  All plant material shall be planted upright or placed so as to be well-balanced. Extreme care is to be taken to avoid damage to the root system, stem and branches when planting. The plant shall be positioned such that after planting the original soil mark on the stem is at finished ground level.
- Following completion of planting, grass seeding and turf laying, the soil over the whole of the planted, seeded or turfed area shall be sufficiently watered to achieve its field capacity.
- On completion of planting, watering and mulching, all areas shall be left tidy and weed-free and shall be maintained in a tidy and weed-free state until completion of the works.
- For shrub and transplant pit planting, notch planting and ordinary planting, the plant positions shall be set at equal centres in order to obtain a natural dense cover when mature. For notch and pit planting plants shall be planted in parallel lines. Planting positions in each row shall be staggered with the previous row.
- Finely-broken backfill material shall be carefully spread around roots and root trainers of all plants and the plants given slight shake to ensure that all interstices/ gaps are filled with soil, which shall then be consolidated by heeling. Careful filling and heeling shall continue as necessary at 150mm layers.

1.18.1 Mulching

Newly planted shrub areas shall be mulched immediately after planting to a depth of 50mm or in accordance with the details indicated on the drawing. Mulch shall be coarse chipped tree bark, composted for 2-4 months. Particle size 25-75mm diameter. No Fines.

1.18.2 After Planting & Mulching

- Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil.
- Firming: Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
- All areas shall be left tidy and weed-free and shall be maintained in a tidy and weed-free state until completion of the works.

1.19 Tree Planting

Attached in the appendix are typical tree planting details for this site.

1.19.1 Tree Pits

- Sizes: at least 300mm greater than rootball in all directions.
- Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
- Pit bottoms: With slightly raised centre. Break up to a depth of 100mm.
- Pit sides: Scarify.

1.19.2 Semi-Mature Trees

- Standard: Prepare roots and transplant to BS 8545.
- Planting shall be carried out by positioning the tree in the centre of the pit closely against the tree stake and spreading the tree roots to their fullest extent.
- Backfilling material: Previously prepared mixture of topsoil excavated from pit and additional compost as required.
- Immediately following planting, trees with stakes shall be secured with tree ties. Tree ties shall be fixed so that movement of the tree shall not cause damage or abrasion to the bark, top tie to be 50mm below top stake.

1.19.3 Staking Generally
Softwood, peeled chestnut, larch or pine, straight, free from projections and large or edge knots and with pointed lower end. Adjustable rubber ties to be fixed to all trees and at the correct size for the tree.

1.19.4 Mulch Circles/Squares
All existing trees/newly planted trees within open grass areas or grass verges shall have 50mm depth mulch circle/square of a maximum 1m diameter or as allowed by verge width.

1.20 Shrub Planting
- All shrubs are to be pit planted. General pit dimensions are to be wide enough to accommodate roots when fully spread and 75mm deeper than root system.
- Break up base of pit to a depth of 150 mm, incorporating soil ameliorant/ conditioner at 50 g/m².
- Pits to be backfilled with previously excavated material. Backfilling to be done in layers of 150mm depth; at each stage the filling to be firmly consolidated.
- Soil ameliorants can be premixed with the soil applied or mixed in during planting.
- Soil ameliorants to consist of an approved compost at 10L per m2; and 150g/m2 of 10:10:10 NPK slow release fertilizer, or as approved.
- All shrub areas to be finished, with 75mm of medium grade bark mulch.

1.21 Hedgerow Planting
- Preparation: Dig trench to 500mm width for single staggered row, ensuing pit base is broken up 100mm deeper than plant rootball.
- Ameliorants: Compost at 10lt/m2 and 10:10:10 NPK slow release fertiliser at 150g/m2.
- Planting: Mix in soil ameliorants with excavated topsoil, or if there is poor topsoil then mix in with imported new topsoil. Firm down topsoil lightly in layers of 150mm by treading.
- Additional Requirements: If there is no existing fencing or barrier, install a protective fence to stop people walking through it until hedge is established. If there is livestock adjoining hedge install a stockproof fence or electrical fence 1m from hedge line until hedge is established.
- Prior to new growth cut the hedge back by 300mm to encourage new growth from base.

1.23 Removing Trees and Shrubs
- Identification: Clearly mark trees and hedges to be removed.
- Work near retained trees: Where canopies overlap, take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained.

1.24 Failures of Planting
- Defects due to materials or workmanship not in accordance with the Contract: Plants/ trees/ shrubs that have failed to thrive.
    - Exclusions: Theft or malicious damage after completion.
    - Rectification: Replace with equivalent plants/ trees/ shrubs.
- Replacements: To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.

1.25 Green Roofs
Due care is to be taken when planting in gardens to ensure no damage occurs to the waterproof membranes. All planting is to be laid over a green-roof system that complies with EEuropean Federation of Green Roof Associations, (EFB), or equivalent, and in accordance with the drawings provided.

1.26 Grass Seeding

1.26.1 Herbicide Application
- Type: Suitable for suppressing perennial weeds and existing grass.
- Glyphosate and other controlled chemical pesticides will not be used under any circumstances.
- Suitable herbicide use to the instruction of a registered professional user.
- Timing: Allow fallow period before cultivation.
- Duration: As manufacturer's recommendation.

1.26.2 Seedbed cleaning before sowing
Operations: Herbicides as per registered professional user only.

1.26.3 Cultivation
- Compacted topsoil: Break up to full depth.
- Soil ameliorant/ Conditioner/ Fertilizer are to be used to boost late seeding only. Type to be used is to be agreed with the administrating body depending on the time of year and the condition of the soil.
- Tilth: Reduce topsoil to a tilth suitable for blade grading.
    - Depth: 75 mm.
    - Particle size (maximum): 20 mm.
- Material brought to the surface: Remove stones and clay balls larger than 50 mm in any dimension, roots, tufts of grass, rubbish and debris.

1.26.4 Topsoiling
- Areas to be reinstated shall be top-soiled to a min. depth of 150mm.
- Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
- General: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
    - Corrosive, explosive or flammable;
    - Hazardous to human or animal life;
    - Detrimental to healthy plant growth.

1.26.5 Grading
- General appearance to be achieved: A fine graded finish to bring the ground to a uniform and even grade at the correct finished levels with smooth, flowing contours.
- Topsoil condition: Reasonably dry and workable.
- Contours: Smooth and flowing, with falls for adequate drainage.
- Hollows and ridges: Not permitted.
- Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.
- Blade grading: May be used to adjust topsoil levels provided depth of topsoil is nowhere less than 150mm.
- Give notice: If required levels cannot be achieved by movement of existing soil.

LAND PLANNING & DESIGN

1.26.6 Fertilizer for Seeded Areas

- Types: Apply both:
    - Superphosphate with a minimum of 18% water-soluble phosphoric acid.
    - A sulphate of ammonia with a minimum of 20% nitrogen.
- Application: Before final cultivation and three to five days before seeding/turfing.
- Coverage: Spread evenly, each type at 70 g/m², in transverse directions.

1.26.7 Final Cultivation

- Timing: After grading and fertilizing.
- Seed bed: Reduce to fine, firm tilth with good crumb structure.
- Depth: 50-100mm.
- Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over compacted.
- Remove surface stones/earth clods exceeding:
    - Pastoral areas: 50mm.
    - Fine lawn areas: 10mm.
- Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.

1.26.8 Grass Seed

- All seeds shall carry appropriate certificates.
- Seed shall be purchased fresh for each growing season and seed purchased impervious sowing seasons is not to be used.
- Seed shall be stored under non-transparent wrapping, off the ground, in a dry, shaded place, in well ventilated conditions under cover and shall be protected from vermin and contamination until required for use.
- No seeding shall take place until the seedbed is completed. All seeding shall be carried out within the sowing season.

1.26.9 Sowing

- General: Establish good seed contact with the root zone.
- Method: To suit soil type, proposed usage, location and weather conditions during and after sowing.
- Distribution: 2 equal sowings at right angles to each other.
- Protection: fence off areas with suitable fencing to stop people or animals from trampling new growth.

1.26.10 Grass sowing season

Grass seed generally: April to June or August to November.

1.27 Cleanliness

After completion of all works remove all debris and waste material from site.

- Soil and arisings: Remove from hard surfaces and grassed areas.
- General: Leave the works in a clean tidy condition at completion and after any maintenance operations.

2.0 MAINTENANCE

The maintenance programme will be organised on the basis of specific **performance standards** which must be met by the contractor at all times and will be the basis on which this contract will be assessed. Along with these performance standards a monthly report sheet shall be filled out and returned each month. Details of the performance standards are outlined below.

Remove all noxious and undesirable weeds from the sit. Weeds shall include: Ragwort, Himalayan Balsam, Giant hogweed & Japanese knotweed, Thistle, Dock, Common Barberry, Male Wild Hop and Spring Wild Oat, or any other noxious species identified by the Department of Environment. For the removal of certain species such as Japanese Knotweed a method statement is to be prepared and submitted to the Department of Environment.

Performance Standards and Maintenance Operations

2.1 Grassed Areas

2.1.1 Fine-Cut Grass Areas

Fine cut grass areas shall achieve an even cover of vegetation of uniform height and colour comprising predominantly of grass species. No more than 5% of the grass areas shall contain dicotyledonous (dicots) weeds, except clover. Grass cutting shall not be carried out during excessively wet or waterlogged conditions. Contractor to inform administrative authority if conditions are unsuitable.

Fine-Cut Mowing

Where practical fine grass areas shall be cut using a cylinder mower, otherwise a rotary mower shall be used. All grass clippings shall be collected and removed off-site after each cut.

Lawn grass cutting shall be carried out every 10-14 days during the growing season, (throughout the period of March to October), but will need to be adjusted according to season's weather conditions. Grass shall be kept at a maximum height of 50mm and minimum height of 35mm. A minimum of 24 cuts shall be carried out annually.

Weed Control

Lawn grass areas shall be treated using an approved selective Glyphosate-free herbicide according to a registered professional user and manufacturer's instructions. Areas of invasive and noxious species in the lawn or areas, shall be mechanically removed or spot sprayed by a registered professional user.

Fertilizer

Approved fertilizer shall be applied 2no. times per year to lawn areas if required due to poor grass growth / establishment or yellowing. Spring fertilizer application of NPK ratio 9:7:7 shall be applied in May of each year and Autumn/Winter fertiliser of NPK ratio 3:12:12 shall be applied in October of each year to all fine cut grass areas.

2.1.2 Amenity Grass Areas

Amenity grass areas shall achieve an even cover of vegetation of uniform height and colour comprising predominantly of grass species. Unless otherwise agreed with the landscape architect no more than 15% of the grass areas shall contain dicotyledonous (dicots) weeds, except clover. Grass cutting shall not be carried out during excessively wet or waterlogged conditions. Contractor to inform administrative authority if conditions are unsuitable.

Amenity Grass Mowing

Where practical grass areas shall be cut using a cylinder mower, otherwise a rotary mower shall be used. Unless excessive or unsightly, or likely to cause a nuisance or damage to the sward, arisings shall be spread evenly over sward areas collected.

Lawn grass cutting shall be carried out every 10-14 days during the growing season, (throughout the period of March to October), but will need to be adjusted according to season's weather conditions. Grass shall be kept at a maximum height of 75mm and minimum height of 35mm. A minimum of 24 cuts shall be carried out annually.

Weed Control

Areas of invasive and noxious species in lawns, shall be mechanically removed. Glyphosate and other chemical pesticides will not be used under any circumstances unless otherwise instructed by a registered professional user. Weed infestations shall be reviewed in the context of the aesthetic and amenity functioning of the grass and if necessary controlled or eradicated.

Fertilizer

Approved fertilizer shall be applied 2no. times per year to lawn areas if required due to poor grass growth / establishment or yellowing. Spring fertilizer application of NPK ratio 9:7:7 shall be applied in May of each year and Autumn/Winter fertiliser of NPK ratio 3:12:12 shall be applied in October of each year to all fine cut grass areas.

2.1.4 Edging and Strimming

Grass edges along pathways, planting borders, roadways, trees, lampposts, signs and any other obstacle shall be kept neat and tidy at all times.

Between the months of March and October inclusive edging shall be carried out to all areas of grass abutting isolated/ specimen trees or shrub borders or mulch circles. These areas shall be maintained using a half moon tool or similar to maintain straight or curved defined line and shall be carried out a minimum of 2 - 3 times per year.

Mowing strips against permanent obstacles shall be a max. width of 150mm and shall be maintained using a hand strimmer. Large areas of desiccated/ burnt off grass are not permitted. Strimming shall be carried out a min. of 12 times per year.

Grass clipping and all arisings shall be swept up and removed off site.

2.1.5 Spring Bulbs in Grassed Areas

Only cut grassed areas populated by spring bulbs after the leaves of the bulbs have died down and/or yellowed completely. Initially reduce height by one third, followed by a 2-3 stage further reduction over two weeks to achieve desired grass height.

2.1.6 Failed areas

Areas of grass which fail or are damaged or worn shall be reinstated by re-turfing or re-seeding in accordance with the original specification.

2.2 Shrub Planting

Shrub areas shall be kept litter and weed free, particularly of perennial weeds. Healthy growth shall be maintained to cover as much as possible of the planting area and allowing the individual plants to achieve as near as possible their natural form. With the exception of hedges, boxing or pruning to shapes is prohibited. Plants shall be contained with designed planting areas and pruned to avoid obstructing pathways or sightlines. Climbers are to be pruned and tied into trellises as required, with two main inspections annually to check trellis system is intact and anchor points are secure.

2.3 Pruning

In general pruning shall be done only to enhance natural growth. Dead, damaged and diseased portions of the plant will be removed. All cuts shall be flush and clean, leaving no stubs or tearing of bark. All major pruning shall be done following flowering or during plant's dormant season. Emergency or minor pruning shall be done when needed.

Pruning shall be carried out to maintain proper size in relationship to adjacent plantings and intended function. Remedial attention and repair to shrubs shall be provided as appropriate by season or in response to incidental damage.

Groundcover plants shall be pruned as required to restrain perimeter growth to within planting bed areas where adjacent to walks and curbs. Tip prune selected branches of low growing shrub or groundcover masses to maintain even overall heights and promote fullness.

Certain plants, such as Cornus spp. will require heavy annual pruning in order to maintain healthy colourful stems and healthy leaves. All arising's from pruning shall be removed of site.

2.4 Weed Control

Planting beds shall be maintained relatively weed free (no more than 10% of weed cover at maximum) by hand weeding or spot spraying any emergent weeds during the growing season with Glyphosate-free herbicide or approved equivalent. Saplings shall be removed from all planting areas on emergence or immediately after to prevent establishment.

Specific weed control operations shall be carried out a min of 9no. times per year, however it will be the contractor's duty to control weeds by hand weeding or other accepted method if weed cover exceeds 10% of the planting area.

2.5 Mulching

Shrub beds shall contain a min. depth of 50mm bark mulch throughout the year. Contractor to top-up as 2 times per year or as appropriate to maintain depth. Mulch is not required in areas where plant foliage completely covers the soil surface, such that the soil is not visible through the foliage. The contractor shall spot treat to remove emergent weeds as specified above but do not cultivate or incorporate the mulch into the soil. Any mulch outside of designated planting areas shall be returned to the planter on a weekly basis.

Mulch shall be uniform in colour and appearance, and free of leaves, sticks, or trash. Mulch may be chipped or shredded wood, bark. When replacing existing mulch, use a mulch product that is similar in appearance to that already at the site.

2.6 Tree Planting Care

Trees shall be maintained in a healthy, vigorous growing condition with a well-shaped framework for future growth.

2.7 New Tree Planting

Spring and autumn of each year during the maintenance period the trees, double-stakes, rabbit guards and ties shall be checked and adjusted, the soil firmed, any dead wood removed back to healthy tissue and mulch adjusted to original levels. Any broken stakes or ties evident throughout the maintenance period shall be replaced.

A 1m-diameter mulch circle/square shall be maintained at the base of each tree located in open grass areas or grass verges. Top up bark mulch to 75mm where required and make good any mulch mats.

During the first growing season all standard trees / semi-mature trees shall be watered at least five times during the growing season - in April, May, June, July and August unless otherwise directed by the Landscape Architect. During the second growing season trees will be kept well watered, particularly during June, July and August.

The edge of the mulch circle shall be maintained in a neat and tidy condition as above.

The surface of all planting pits is to be kept free of weeds during the maintenance period by mehanical weeding of annual weeds and perennial weeds - to be carried out on three visits during the growing season.

2.9. Tree Stakes and Ties

Check tree stakes and ties on each maintenance visit. Repair, strengthen and adjust (loosen / tighten) to ensure optimum functioning and trees not being damaged by poor fixings. If trees no longer require stake / tie remove. Prior to handover, check all tree stakes and ties and remove those no longer required.

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2.8 Woodland/Scrub Area Management

Woodland areas specified shall be maintained in a healthy, vigorous condition and free from litter and noxious weeds throughout the year.

Certain areas of woodland may require thinning over the 5-year period. These areas shall be thinned by no more than 10%, removing only the weaker tree specimens. Thinning shall be carried out as directed onsite by administrative authority.

Weed control around trees bases and in shrub areas will be achieved by mulches and mulch top ups only. Contractor to ensure that no damage is caused to trees by herbicide application.

Areas of natural scrub as indicated on the maintenance plans shall be contained by trimming back once per year. The contractor shall control noxious weeds. This shall be carried out 2no. times per annum.

All clearance operations within woodland and scrub areas shall be carried out outside of the bird-nesting season to preserve the bird life in the area. This season extends from the 1st March to 31st August.

2.9 Green Roof System and Irrigation

Care is to be taken not to damage any fleeces or waterproof membranes during maintenance. Irrigations systems are to be blown-out and a full pressure test carried out annually and monitored for leaks. Remove soil and dead foliage from irrigation pipes to ensure they do not get blocked. Cut back root systems if they become entangled in the irrigation system. Regular monitoring (bi-monthly) should occur to ensure the timer system and moisture monitoring system, are working efficiently and make adjustments to suit the weather conditions, if required.

2.10 Litter Clearance/Pick-up

The contractor shall maintain all areas free from litter. This shall mean the removal of all extraneous litter, rubbish and any other debris from all areas, which will include grass areas, planted areas, carparks, footpaths as well as woodlands and tree canopies.

Notwithstanding the above it is expected that the contractor and his staff shall take sufficient pride in the appearance of the site and that they would pick up all visible litter during every site visit.

In addition to removal of litter from footpaths, planted areas, etc., the contractor shall make provision for the immediate (within 1 days of notification) arrangement for collection and removal of all extraneous matter which has been deliberately been deposited on site by persons known or unknown (fly-tipping).

2.11 Replacements

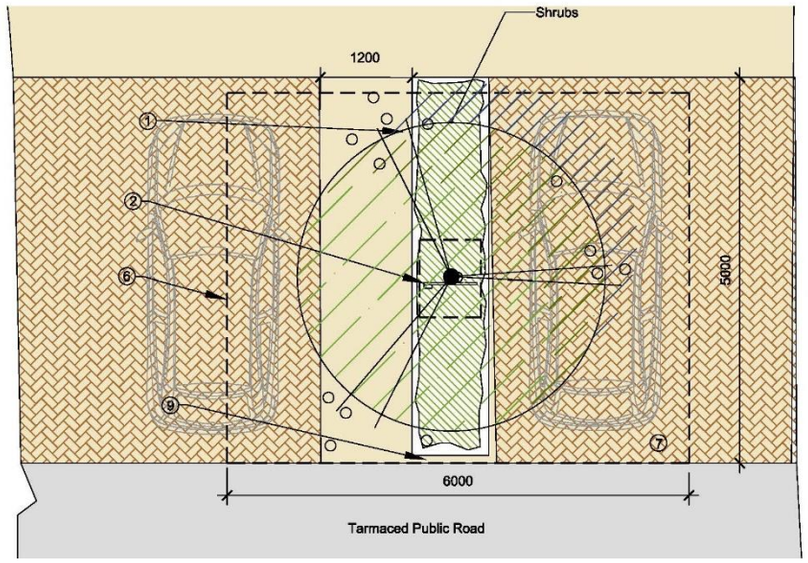
Any tree, hedge or shrub that is removed, uprooted, destroyed or becomes seriously damaged, defective, diseased, or dead shall be replaced in the same location with another plant of the same species and size as that originally planted within the defect period after planting. All such replacements shall be carried out in the first available planting season after the requirement to do so is recognised.

2.12 Wetland Attenuation Area

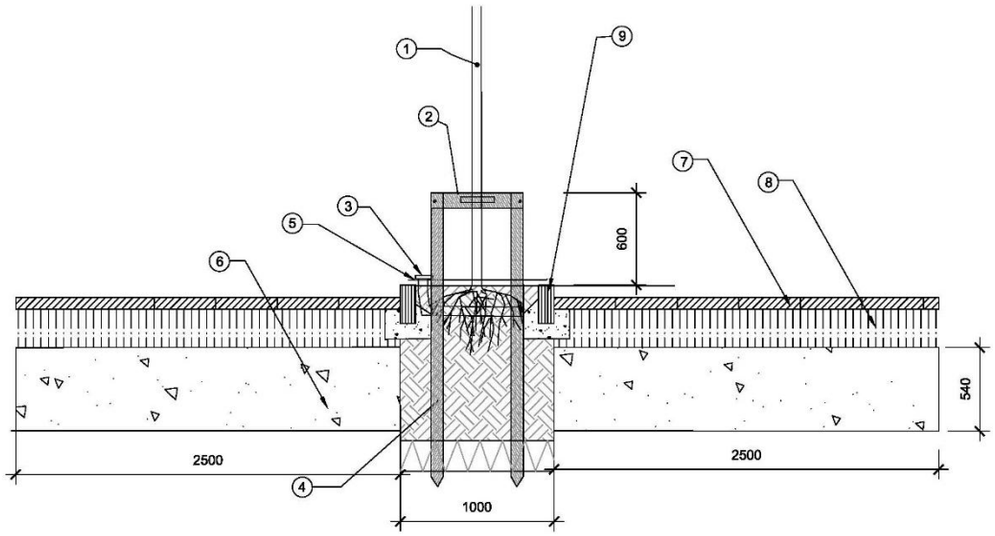
The wetland attenuation area and adjoining recreational spaces are comprised of:-

- Attenuation basins which do not have artificial liners and which will be planted with Bulrushes *(Typha sp.).* The side slopes will be planted with willow and alder species. Short -term maintenance will focus on the establishment of planted species with weed control measures in place for the first three years while on-going maintenance will focus on ensuring that tree species do not encroach or affect the outfalls from the basins.
- Meadow areas with willow and alder tree planting along with open space areas to facilitate informal play and picnic benches. Short -term maintenance will focus on the establishment of planted species with weed control measures in place for the first three years while on-going maintenance will focus on ensuring that open space areas remain functional with one or two mowing operations per year along with inspections for the condition of picnic tables.
- Circulation paths around the attenuation basins and through the meadow areas will require minimal maintenance. Inspections will ensure that any encroachment from adjoining tree branches will be acted on, however, relatively open willow/alder tree cover is envisaged.

Tree planting detail



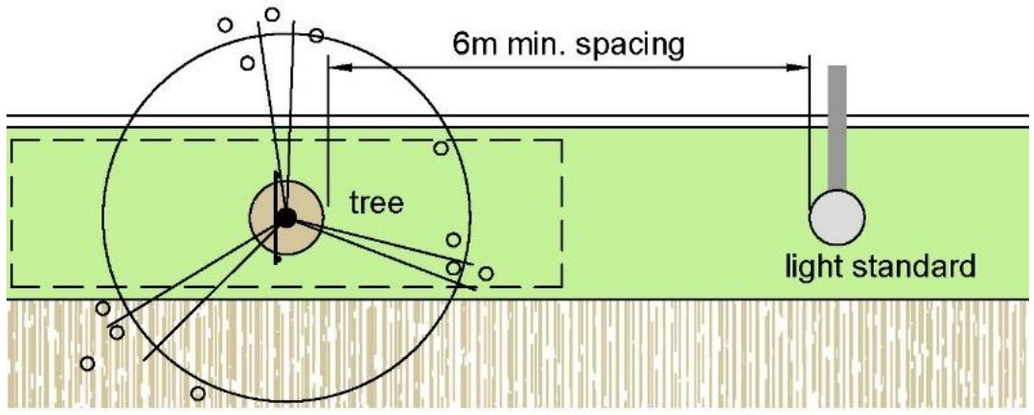
VO1: Street Tree Pit Detail – Plan



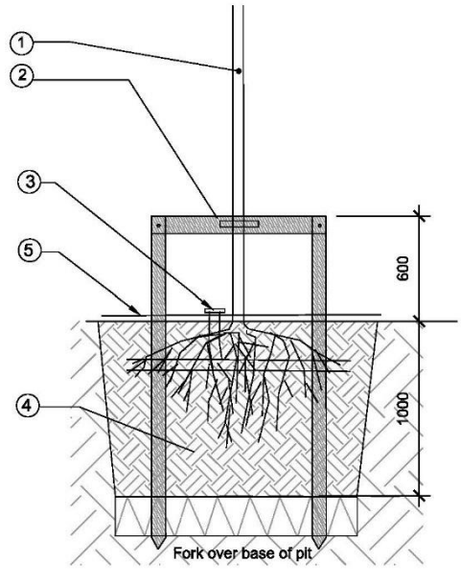
NOTES

1. Tree to have a clear stem height of 2000mm.
2. 2no. 75mm diameter stakes pressure treated driven 1300mm below ground 600mm above ground with specified biodegradable adjustable tie affixed to tree & stake.
3. 6cm diameter perforated flexible plastic drainage pipe positioned as shown over rootball with one end open to surface to facilitate watering.
4. Pits to be size 80x125x100cm. Remove the full depth of topsoil and set aside for reuse. Scarify sides, break up base of pit to a depth of 200mm and incorporate a soil ameliorant into base. Back fill pit with topsoil mixed with soil ameliorants in 150mm firmed-in layers. All planting to receive a minimum of 25lt water per m2 immediately after planting.
5. 50mm bark mulch in 80cm dia circle to base of trunk.
6. 16m3 area root zone under permeable paving for parking bays, made up of 50% 70-100mm aggregate sizes, 30% multipurpose topsoil and 20% grit (20mm down).
7. Permeable parking paving to engineers spec.
8. Sub base to parking to engineers spec.
9. Kerb to engineers spec.

VO1: Street Tree Pit Detail – Section



VO2: Street Tree Pit and Light Standard Detail – Plan



NOTES

1. To have a clear stem height of 2000mm.
2. 2no. 75mm diameter stakes pressure treated driven 1300mm below ground 600mm above ground with specified biodegradable adjustable tie affixed to tree & stake.
3. 6cm diameter perforated flexible plastic drainage pipe positioned as shown over rootball with one end open to surface to facilitate watering.
4. Pits to be size 1x1x1mm or 15cm wider than rootball which ever is greater. Remove the full depth of topsoil and set aside for reuse. Scarify sides, break up base of pit to a depth of 200mm and incorporate a soil ameliorant into base. Back fill pit with topsoil mixed with soil ameliorants in 150mm firmed-in layers. All planting to receive a minimum of 25lt water per m2 immediately after planting.
5. 50mm bark mulch in 80cm dia circle to base of trunk.

VO2: Street Tree Pit Detail – Section

LAND PLANNING & DESIGN

3.0 Maintenance Programme

This programme is a guideline only and times of operations may vary on approval by landscape architect.

ONGOING REQUIREMENTS:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Lawn grass cutting (Min 24 cuts)		*	**	**	***	***	***	***	***	**	**	
Edging to lawn grass areas				*			*			*		
Rough Grass							*					
Fertiliser application to lawn grass areas.					*		*			*		
Hedge pruning/cutting					*			*			*	
Shrubs pruning and feeding				*		*			*			
Weed control of hedge and shrub planting areas		*	*	*	*	*	*	*	*	*	*	
Tree pruning											*	*
Removal of tree stakes (3-5yr)				*								
Mulch top-up to tree circles/ squares						*				*		
Weed control to tree mulch circles				*			*			*		
Weed control to shrubs & hedgerow				*			*			*		
Watering of new trees (or after 3 weeks of no rain)				*	*	*	*	*				
Trimming of scrub areas												*
Weed control of scrub areas				*					*			
Weed control to footpaths, cycle paths.				*								
Litter Clearance/pick up	***	***	***	***	***	***	***	***	***	***	***	***