KILSHANE POWER PLANT SID, CO. DUBLIN

Ronan Mac Diarmada & Associates

Landscape Architects & Consultants

RMDA
LANDSCAPE ARCHITECTS + CONSULTANTS

LANDSCAPE RATIONALE

Client: Kilshane Energy Ltd

Nov 2025

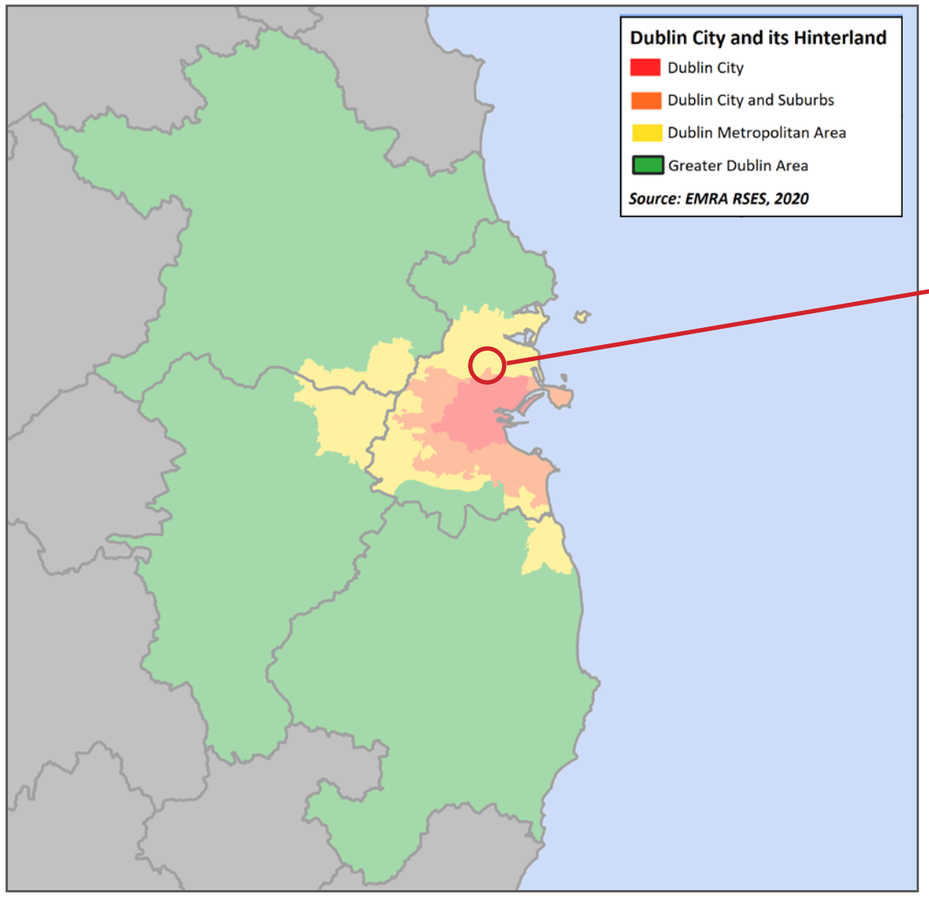
CONTENTS

1. SITE CONTEXT AND ANALYSIS

The proposed development site is located on the southern side of the L3120 Kilshane Road, in north County Dublin.

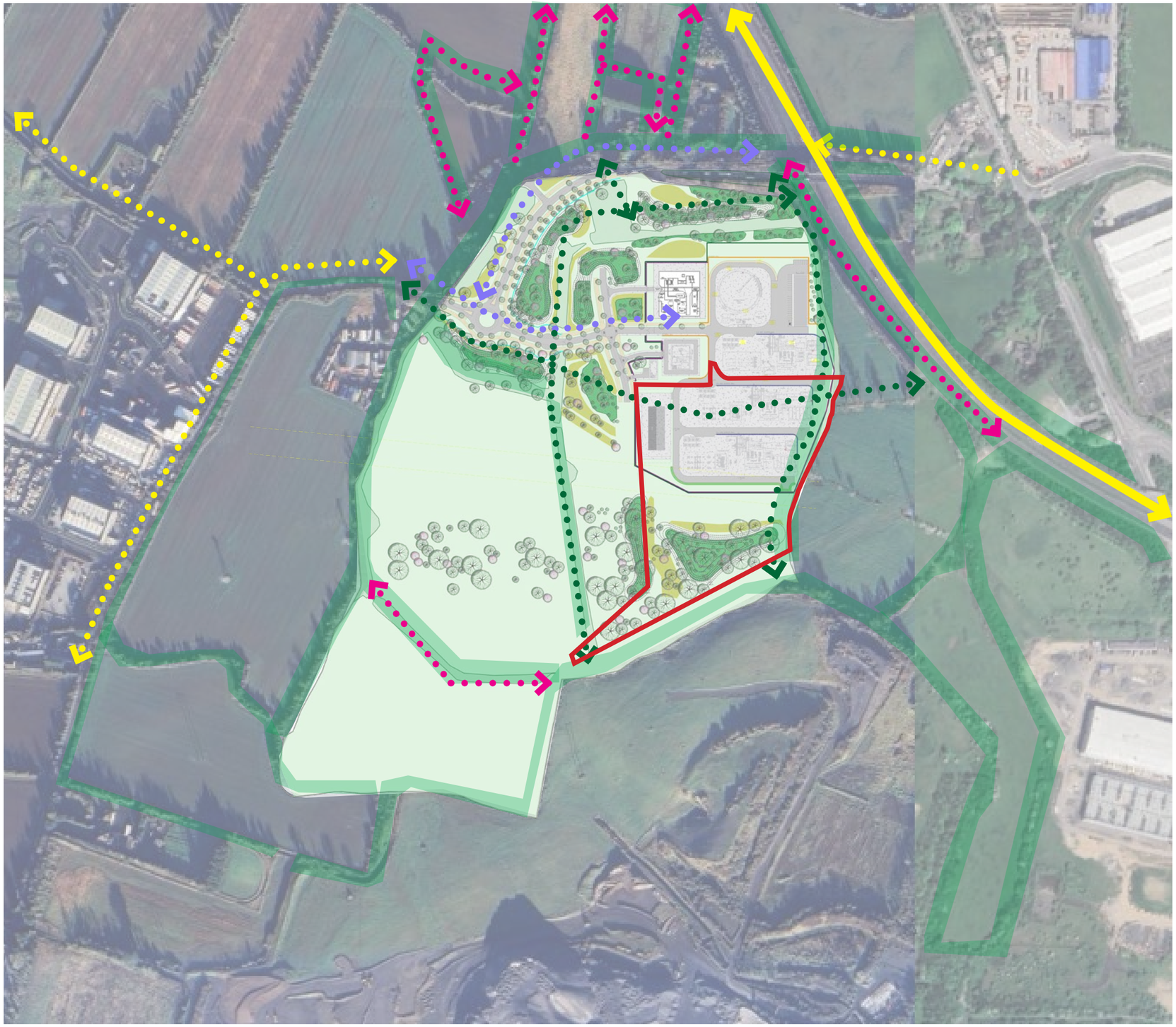
The site fronts onto Kilshane Road, a local connector linking the N2 to a network of rural and suburban roads serving the surrounding industrial, commercial, and agricultural lands. The N2 lies to the west, providing direct access to Dublin city and regional destinations.

The immediate surroundings are characterised by a mix of light industrial facilities, open agricultural fields, and green spaces. To the east lies Dublin Airport. The site occupies a transitional zone between rural landscape and established industrial estates, forming part of the wider suburban fringe of Dublin.



SITE LYOUT

Green Infrastructure with Site Context & Proposed Development



- Strong Green Buffer
- Main Green Linkages
- Secondary Green Linkages
- Vehicular Linkages

2. LANDSCAPE MASTERPLAN

Existing Hedges
To be retained

SOFT LANDSCAPE
Proposed Tree Planting
Fagus sylvatica 'Dawyck', Quercus robur, Fagus sylvatica, Aesculus hippocastanum, Pinus sylvestris, Salix alba tristis, Acer pseudoplatanus, Acer platanoides, Prunus avium, Juglans regia

Amenity Grass - Public Area
300mm min. Topsoil depth

Mounding

Woodland Meadow Mix
Species Name
Allium ursinum , Campanula latifolia, Circea lutetiana, Digitalis purpurea, Fragaria vesca, Geranium robertianum Geum urbanum, Hyacinthoides non-scripta, Hypericum pulchrum, Primula vulgaris, Silene dioica, Silene flos-cuculi Stachys sylvatica, Teucrium scorodinia, Torilis japonica, Vicia sepium, Viola riviniana.

Wild Flower Meadow
An appropriate dry meadow type with wildflowers for these areas would simulate NVC type MG5. Appropriate herbs for this type of meadow include:

Common knapweed (Centaura nigra), Ribwort plantain (Plantago lanceolata) Red clover (Trifolium pratense), Bird's-foot trefoil (Lotus corniculatus), Bulbous buttercup (Ranunculus bulbosus), Meadow buttercup (Ranunculus acris), Lady's-bedstraw (Galium verum), Cowslip (Primula veris), Oxeye daisy (Leucanthemum vulgaris), Yellow Rattle (Rhinanthus minor), Common sorrel (Rumex acetosa), Burnet saxifrage (Pimpinella saxifraga), Autumn hawkbit (Leontodon autumnalis), Rough hawkbit (Leontodon hispidus)

H1 - Proposed Native Hedgerow
450mm topsoil dept/100cm Double Staggered Row
Species Name
Craetagus monogyna, Prunus spinosa, Ilex aquifolium, Rosa canina, Loniceria periclymenum 'Graham Thomas'

HARD LANDSCAPE
Main Roadway
(to Engineer's Specification)
Tarmacadam or similar approved

Concrete
(to Engineer's Specification)
In-situ concrete. Brushed with trowel edge finish
or similar approved

Cycle Path
(to Engineer's Specification)
Tarmacadam, colour to be decided
or similar approved

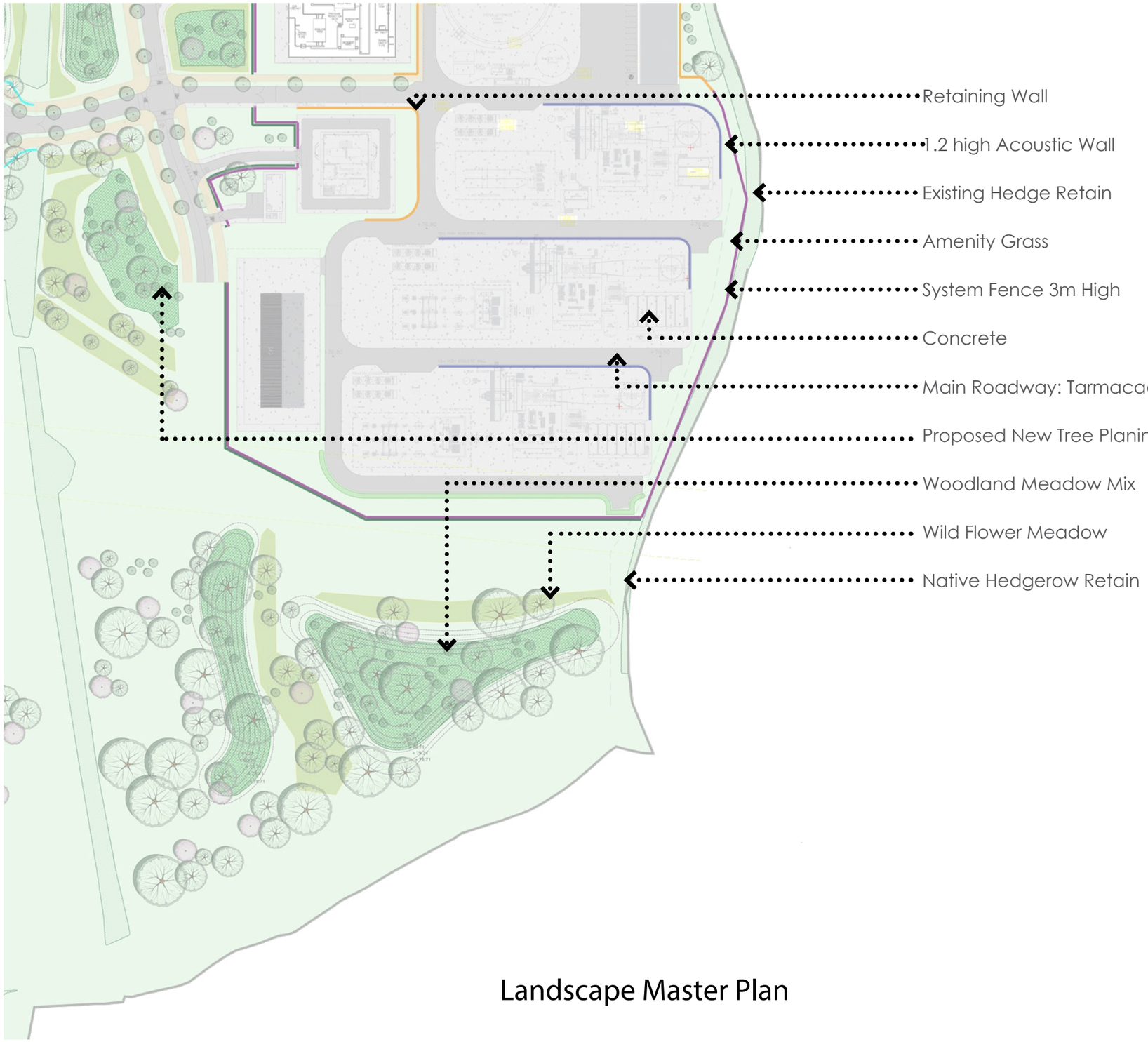
BOUNDARY TREATMENTS
Boundary Treatment 1
System Fence 3m high
or similar approved

Boundary Treatment 2
2m High Butt wall and Railing
or similar approved

Boundary Treatment 3
12m High Acoustic Wall
or similar approved

Boundary Treatment 4
Retaining Wall
or similar approved

2.1 LANDSCAPE MASTERPLAN - PLANNING



Landscape Master Plan

2.2 LANDSCAPE DESIGN OBJETIVES

Landscape:

The landscape plan presents a design that is focused on providing a sympathetic environment to the existing surrounding landscape.

Sustainability:

Permeable paving and the attenuation pond work together to address SuDS across the site and contribute to creating a sustainable and future-proof residential development that is sympathetic to the natural environment.

Place:

The proposed development is designed with a strong focus on enhancing the quality of life for the residents by incorporating strategic planting and a thoughtful landscape design, the project aims to foster a distinctive sense of place that seamlessly integrates with the context.

Native planting has been prioritised throughout the landscape plan to improve biodiversity and strengthen the green infrastructure of the area. The use of locally sourced species will support the local ecosystem, providing habitat for native fauna and contributing to a healthier, more sustainable environment.

3. BOUNDARY TRATMENT PLAN

BOUNDARY TREATMENTS

Boundary Treatment 1
System Fence 3m high
or similar approved

Boundary Treatment 2
2m High Butt wall and Railing
or similar approved

Boundary Treatment 3
12m High Acoustic Wall
or similar approved

Boundary Treatment 4
Retaining Wall
or similar approved

Existing Hedges
To be retained

H1 - Proposed Native Hedgerow
450mm topsoil dept/100cm Double Staggered Row
Species Name
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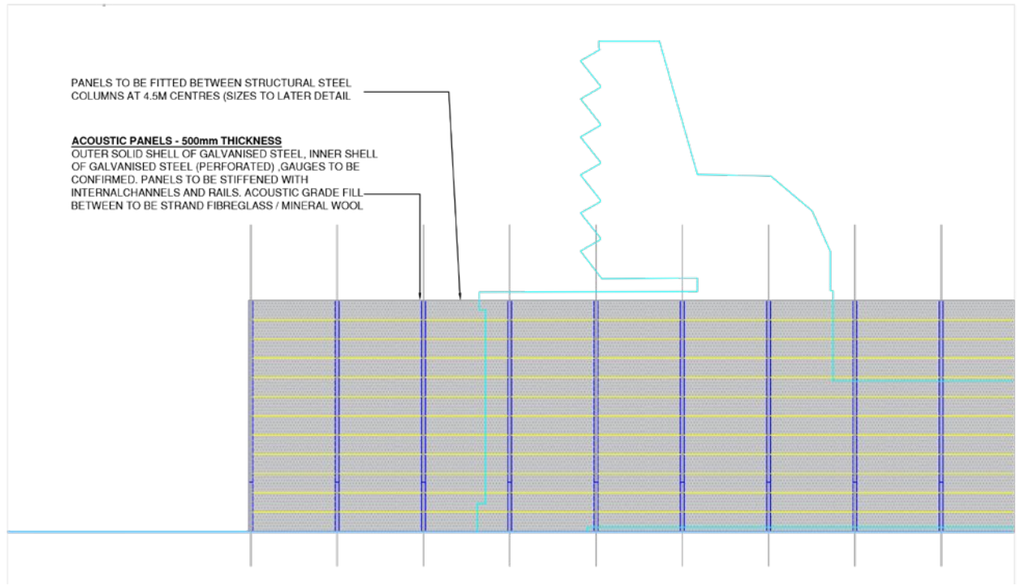
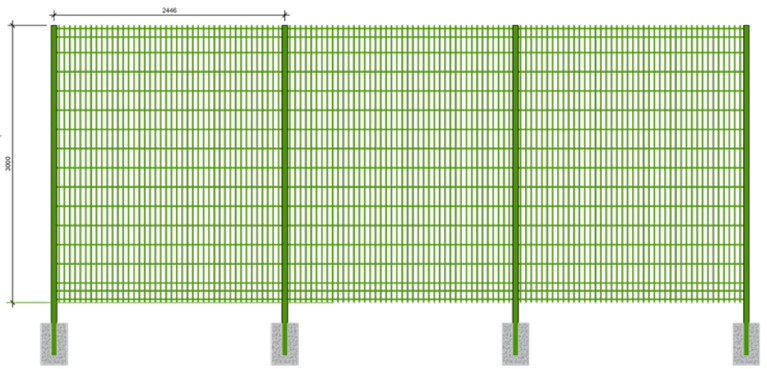




3M System Fence
Post: 60x60mm RHS at 2.446m centres, panel fixed to posts with 25 x 25mm slotted clamp bar using NK M8 tamper- resistant bolt and threaded nutserts.
Mesh Aperture: 200 x 50mm
Wire Diameter: 6mm horizontal, 5mm vertical.

3. PROPOSED PLANTING

SOFT LANDSCAPE
Proposed Tree Planting
Fagus sylvatica 'Dawyck', Quercus robur, Fagus sylvatica, Aesculus hippocastanum, Pinus sylvestris, Salix alba tristis, Acer pseudoplatanus, Acer platanoides, Prunus avium, Juglans regia

Proposed Tree Planting

Fagus sylvatica 'Dawyck'

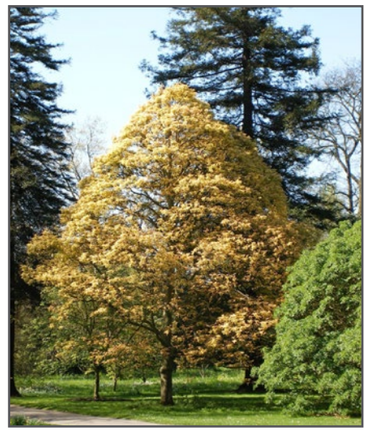
Quercus robur

Fagus sylvatica

Aesculus hippocastanum

Pinus sylvestris

Salix alba tristis



Acer pseudoplatanus

Acer platanoides

Prunus avium

PROPOSED PLANTING

Proposed Wild Flower Meadow Planting

Wild Flower Meadow
An appropriate dry meadow type with wildflowers for these areas would simulate NVC type MG5. Appropriate herbs for this type of meadow include:

Common knapweed (Centaura nigra), Ribwort plantain (Plantago lanceolata) Red clover (Trifolium pratense), Bird's-foot trefoil (Lotus corniculatus), Bulbous buttercup (Ranunculus bulbosus), Meadow buttercup (Ranunculus acris), Lady's-bedstraw (Galium verum), Cowslip (Primula veris), Oxeye daisy (Leucanthemum vulgaris), Yellow Rattle (Rhinanthus minor), Common sorrel (Rumex acetosa), Burnet saxifrage (Pimpinella saxifraga), Autumn hawkbit (Leontodon autumnalis), Rough hawkbit (Leontodon hispidus)

Common knapweed

Ribwort plantain

Red clover

Bird's-foot trefoil

Bulbous buttercup

Meadow buttercup

Lady's-bedstraw

Cowslip

Oxeye daisy

Yellow Rattle

Common sorrel

Burnet saxifrage

Autumn hawkbit

Rough hawkbit

PROPOSED PLANTING

Proposed Woodland Meadow Mix Planting

Woodland Meadow Mix
Species Name
Allium ursinum , Campanula latifolia, Circea lutetiana, Digitalis purpurea, Fragaria vesca, Geranium robertianum Geum urbanum, Hyacinthoides non-scripta, Hypericum pulchrum, Primula vulgaris, Silene dioica, Silene flos-cuculi Stachys sylvatica, Teucrium scorodinia, Torilis japonica, Vicia sepium, Viola riviniana.

Allium ursinum

Campanula latifolia

Circea lutetiana

Digitalis purpurea

Hypericum pulchrum

Primula vulgaris

Silene dioica

Fragaria vesca

Geranium robertia-num

Silene flos-cuculi

Stachys sylvatica

Teucrium scorodo-nia

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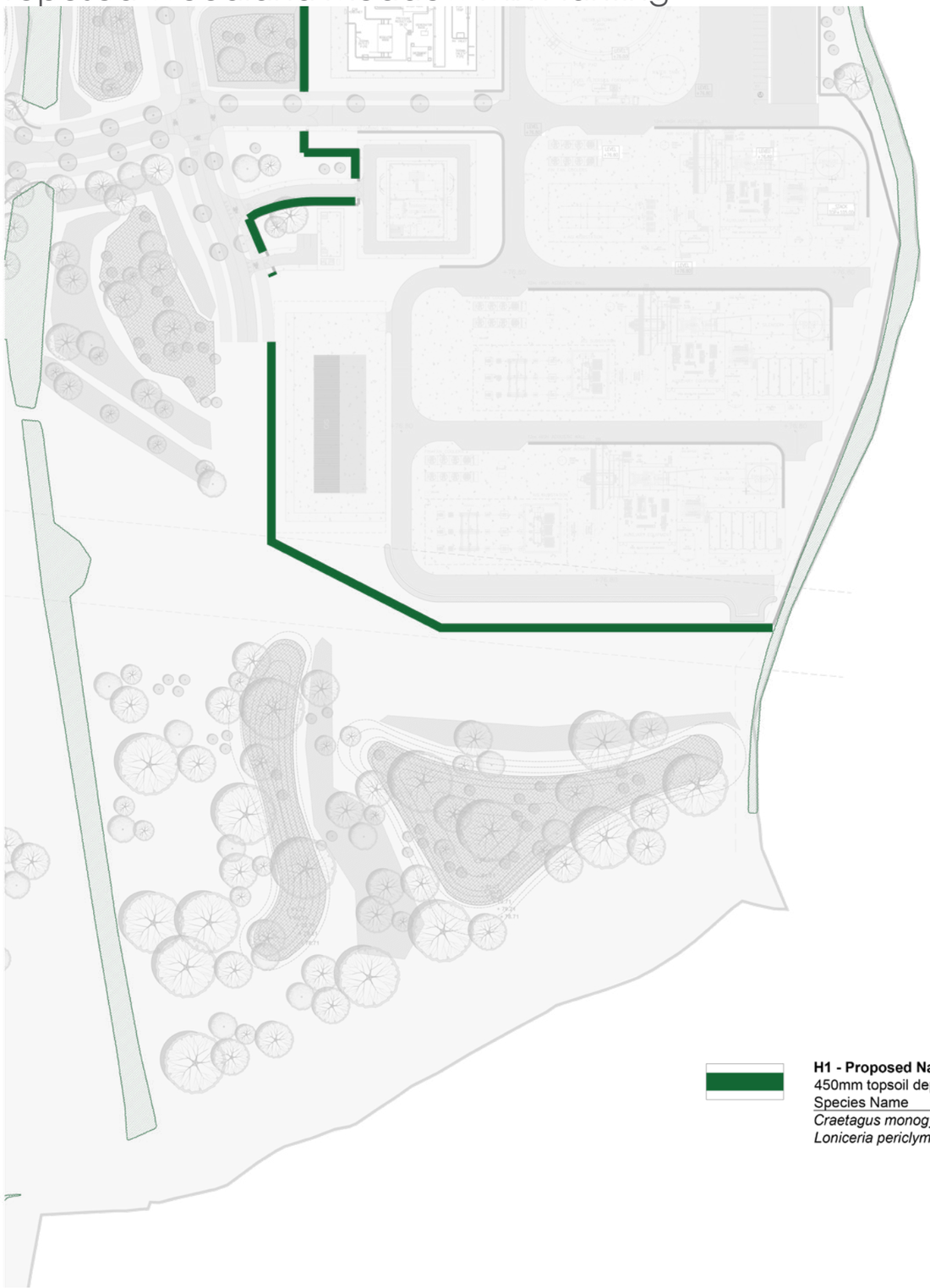
Vicia sepium

Viola riviniana

PROPOSED PLANTING

Proposed Woodland Meadow Mix Planting



H1 - Proposed Native Hedgerow
450mm topsoil dept/100cm Double Staggered Row
Species Name
Craetagus monogyna, Prunus spinosa, Ilex aquifolium, Rosa canina, Loniceria periclymenum 'Graham Thomas'

Proposed Native Hedgerow

Craetagus monogyna

Prunus spinosa

Ilex aquifolium

Rosa canina

Loniceria periclymenum
Graham Thomas

GREEN INFRASTRUCTURE OBJ.

Polidy GINHP1

Response to Green Infrastructure Objectives in Fingal Development Plan 2023 - 2029

Policy GINHP10 –
Green Infrastructure and Development :

Seek a net gain in Green Infrastructure through the protection and enhancement of existing assets, through the provision of new Green Infrastructure as an integral part of the planning process, and by taking forward priority projects including those indicated on the Development Plan Green Infrastructure maps during the lifetime of the Development Plan.

Response

Our design fully aligns with Policy GINHP10 by seeking a net gain in Green Infrastructure through the following measures:

Protection and Enhancement of Existing Assets:
Preservation of Natural Features: Existing trees, hedgerows, and waterways have been carefully integrated into the design, ensuring their protection and enhancement. Buffer zones have been created around these features to safeguard their ecological value.

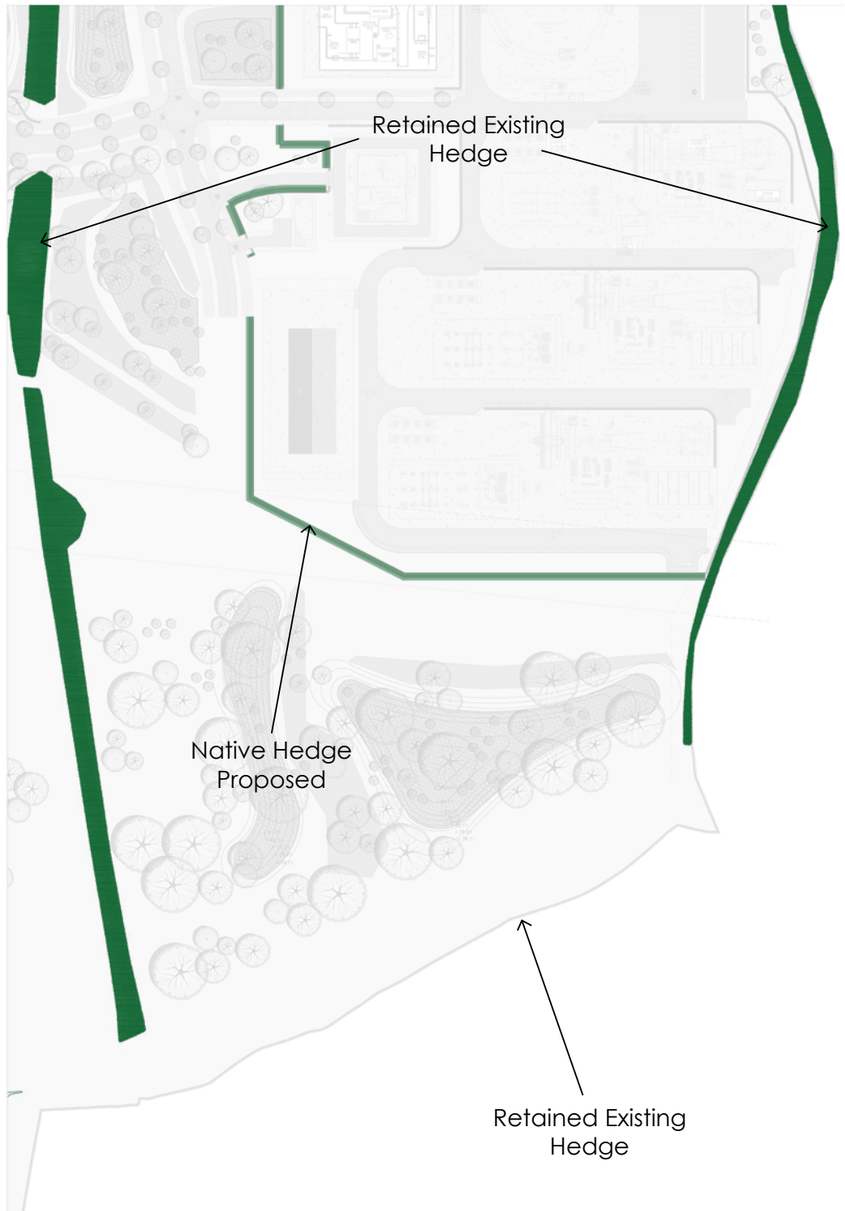
Enhancement of Ecosystem Services:
We have improved existing habitats with native planting, and biodiversity-focused management practices, supporting pollinators.

Integration with the Planning Process:
Green Infrastructure has been a guiding principle from the concept stage, ensuring seamless integration into the broader development layout.

Alignment with Development Plan Green Infrastructure Maps:
Our proposal directly addresses priority projects outlined in the Development Plan. Specific features, have been positioned to align with identified green infrastructure opportunities.

Collaborative Approach:
Partnerships with local authorities, stakeholders and aviation authorities ensure our design supports long-term objectives, contributing to the Green Infrastructure network at a regional scale while respecting the safety concern beside air plane traffic.

RETAIN & PROPOSED HEDGEROWS



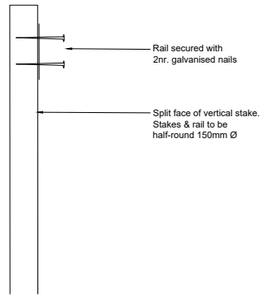
Native Hedgerows functionally create habitat links throughout the site which would be beneficial for commuting and foraging for animal specieS

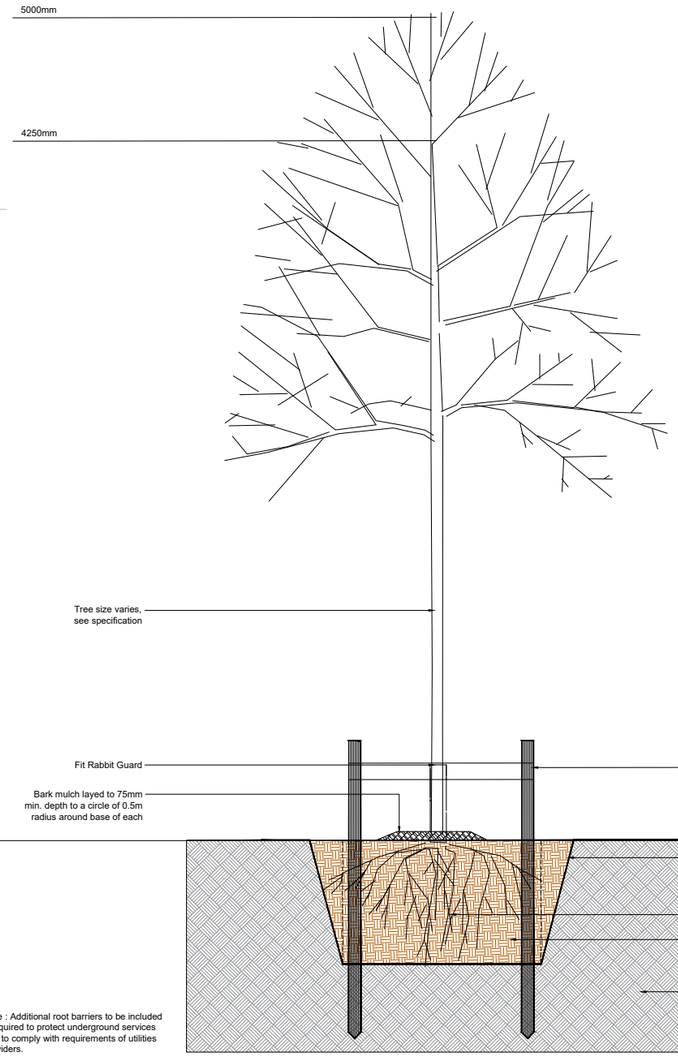
4. LANDSCAPE DETAILS

D4 **Tree Planting Detail - Double Staking**
Extra heavy standard trees (in excess of 14cm girth)
Scale 1:20

Note : Trees to be a minimum of 5-7m away from Light Standards

End Elevation
(not to scale)

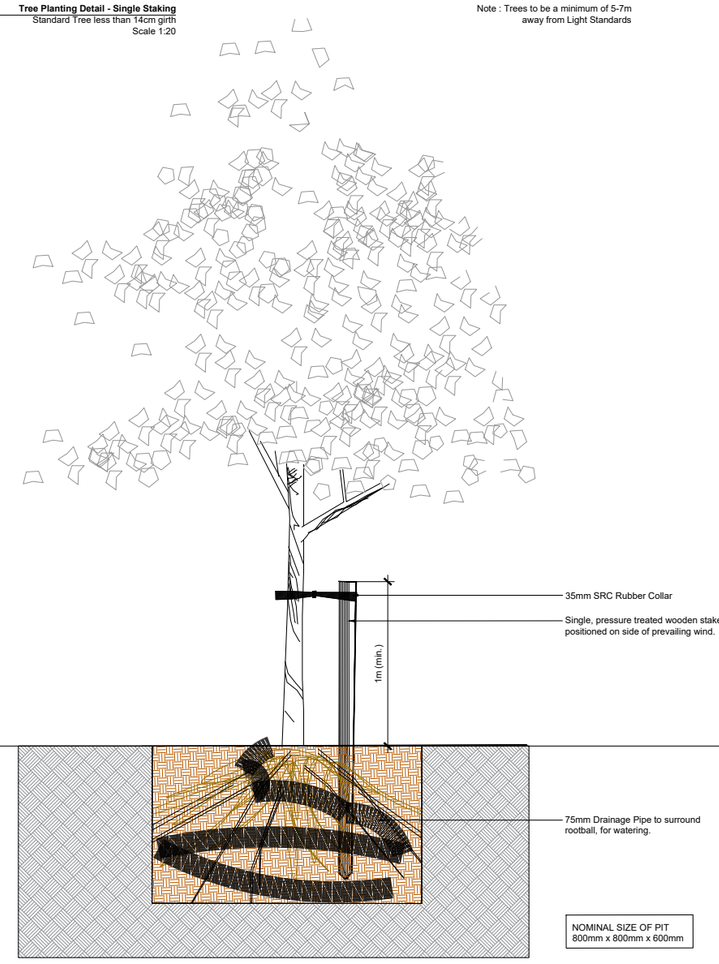




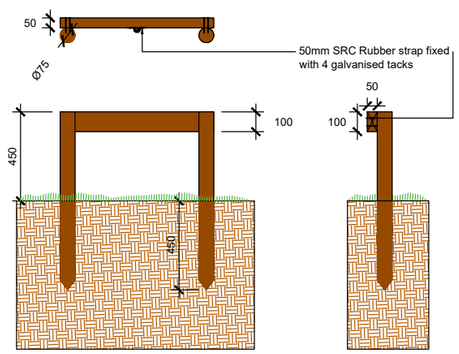
Note : Additional root barriers to be included if required to protect underground services and to comply with requirements of utilities providers.

D5 **Tree Planting Detail - Single Staking**
Standard Tree less than 14cm girth
Scale 1:20

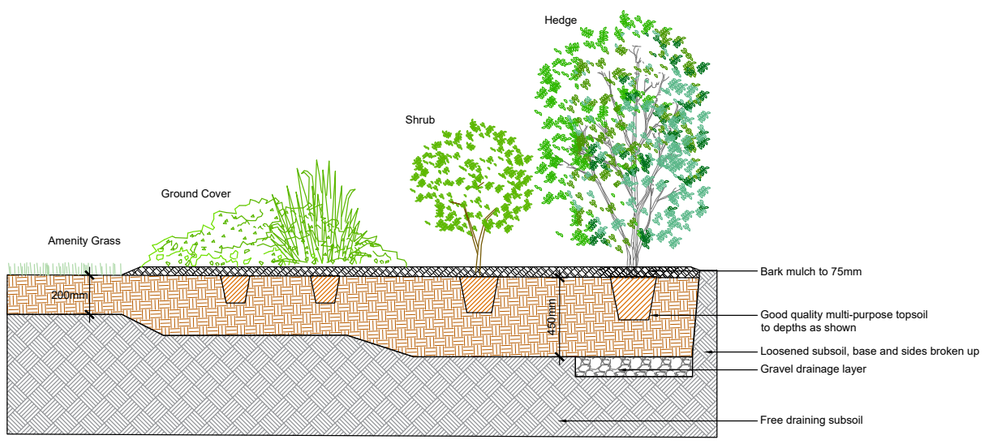
Note : Trees to be a minimum of 5-7m away from Light Standards



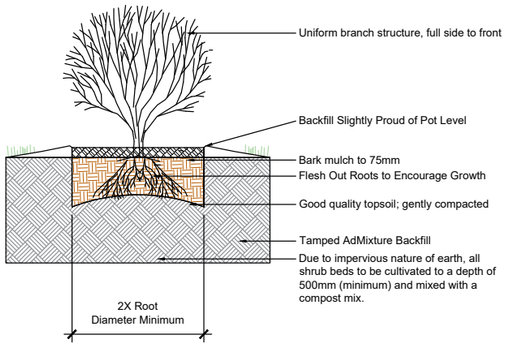
D1 **Staking Detail**
Scale 1:20



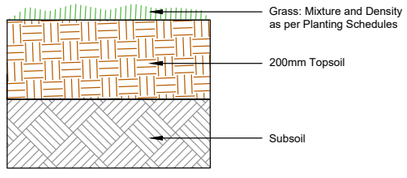
D2 **Minimum Soil Depths**
Scale 1:20



D3 **Shrub Planting Detail**
Scale 1:20



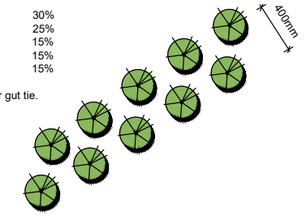
D7 **Amenity Grass Planting**
Scale 1:10



D8 **Native Hedgerow Planting Mix - H2**
Scale 1:5

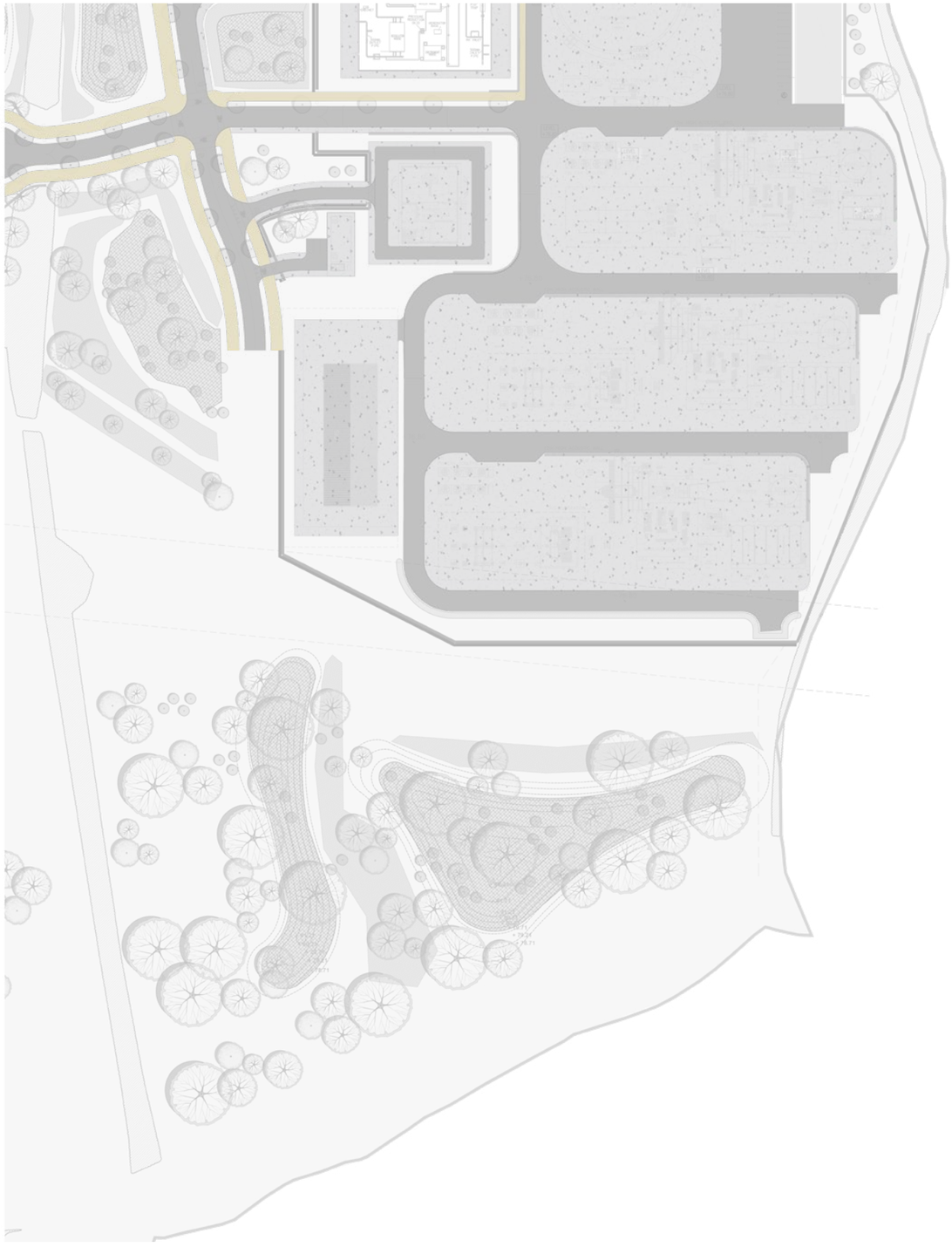
Crataegus monogyma	b/r 60/90cm	30%
Prunus spinosa	b/r 60/90cm	25%
Ilex aquifolium	b/r 60/90cm	15%
Loniceria periclymenum	b/r 60/90cm	15%
Rosa canina	b/r 60/90cm	15%

50 x 50 stakes tied with a single rubber gut tie.
Double staggered row
400mm between rows
Planted at 500mm centres



5. HARD LANDSCAPE DETAILS

Surface Pallete



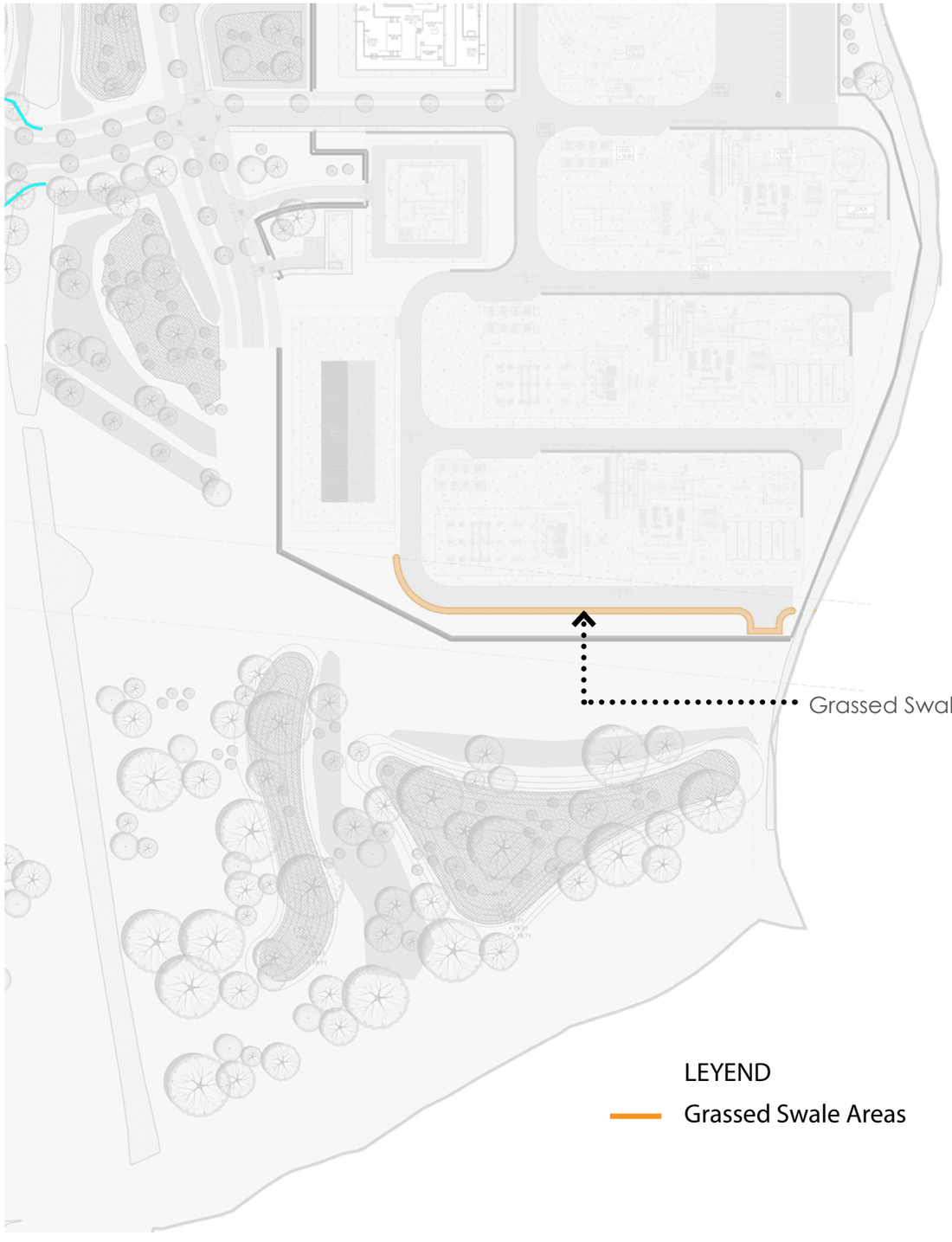
Homezone Residential Roadway
Tarmacadam

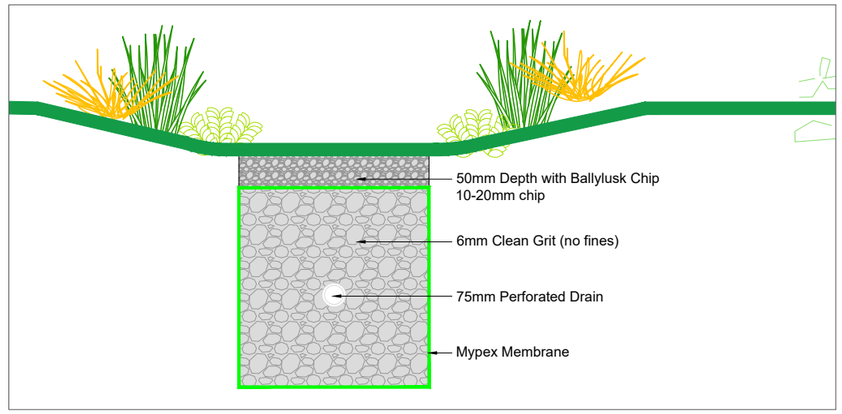
Brushed Concrete

Cycle Path / Trail
Tarmacadam, colour to be decided

5. SUDS FEATURES

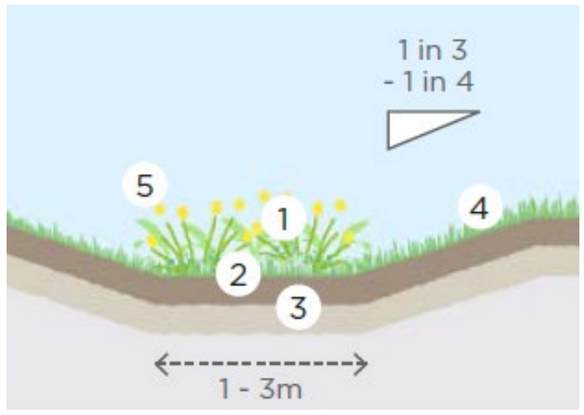
Swales

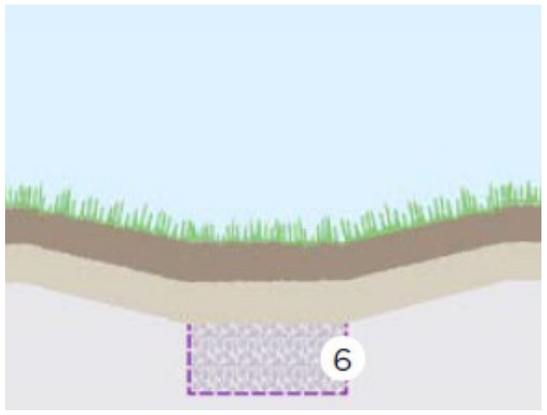




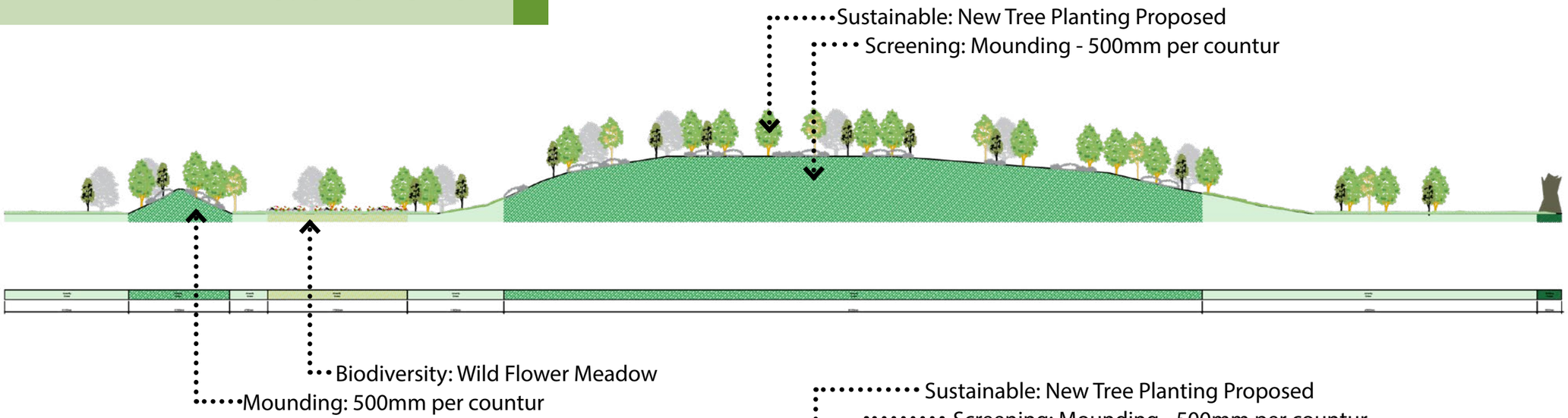
Swales are shallow, flat bottomed vegetated channels which can collect, treat, convey and store runoff.

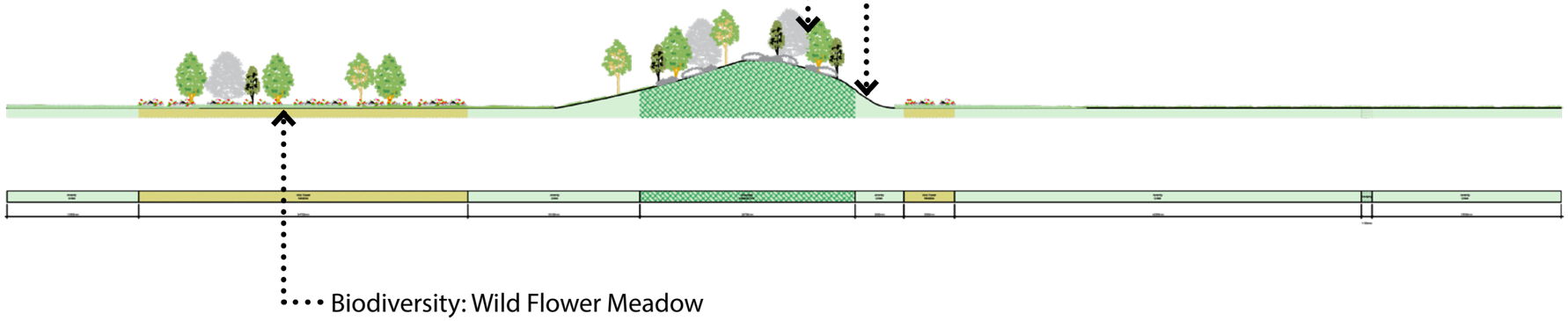
1. The basic profile is a 1 in 3 or 1 in 4 side slopes to a flat base falling at no more than 1 in 50 to prevent erosion. Checkdams or terraced swales can be used to mitigate risk of erosion where 1 in 50 falls cannot be achieved.
2. Base width less than 1m wide will increase the risk of erosion and ditch forming, conversely, base width wider than 3m a meandering channel can develop.
3. 150mm clean topsoil over subsoil. Ripping or light harrowing will improve establishment of the swale by providing a key for the topsoil, encourage deep rooting and assist infiltration.
4. Where swale vegetation is kept less than 100mm, the shoulders at the top of the swale can be 'scalped' leaving bare soil. The shoulders should therefore be rounded to prevent this happening.
5. Swale can be vegetated with more biodiverse plants to attract pollinators etc.
6. Swale can be under-drained using a filter drain to create a dry swale.





6. SECTIONS


Sustainable: New Tree Planting Proposed
Screening: Mounding - 500mm per countur
Biodiversity: Wild Flower Meadow
Mounding: 500mm per countur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