

Residential Development at
Leopardstown Road,
Sandyford, Dublin

Ronan Mac Diarmada & Associates

Landscape Architects & Consultants



LANDSCAPE CONCEPT

On behalf of:
DLR

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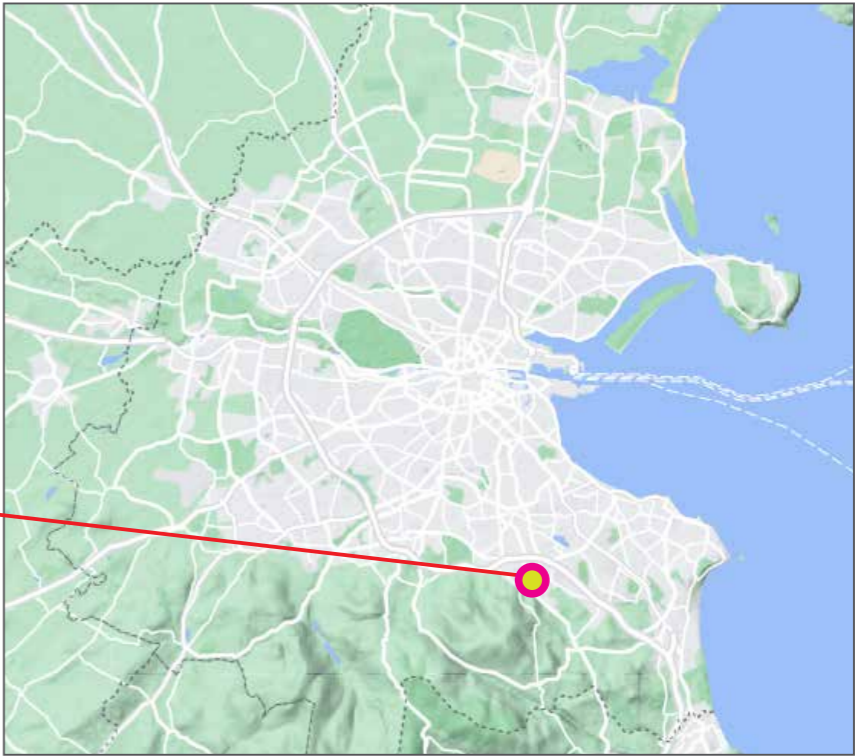
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1. SITE CONTEXT



Subject Lands



2. DESIGN PROPOSAL



SOFT LANDSCAPE

Proposed Tree Planting 150cm ht.

T1 *Amelanchier lamarckii*
 T2 *Magnolia stellata*
 T3 *Viburnum opulus*
 T4 *Acer palmatum*
 T5 *Rhus typhina*
 T6 *Prunus avium* 'Plena'
 T7 *Arbutus unedo*
 T8 *Malus* 'John Downie'^A

Proposed Tree Planting 18-20cm girth

T9 *Pyrus calleryana* 'Chanticle'
 T10 *Betula pendula*
 T11 *Fagus sylvatica*
 T12 *Acer campestre* 'Elsrijk'
 T13 *Arbutus unedo*

Existing Trees/Hedgerow Retained

Existing Trees/Hedgerow Removed

G1 Amenity Grass
 300mm min. Topsoil depth

G2 Amenity Grass - Rear Gardens
 300mm topsoil depth

M1 - 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:

S1 - Shrub Planting
 450mm topsoil depth

Code	Species Name	Specification	Plant/m2
	<i>Agapanthus africanus</i>	c/g 2L 30-40cm ht.	7m ²
	<i>Allium ursinum</i>	c/g P9 20-30cm ht.	7m ²
	<i>Eryngium</i> 'Bowles' Mauve'	c/g 2L 30-40cm ht.	5m ²
	<i>Libertia grandiflora</i>	c/g 3L 30-40cm ht.	3m ²
	<i>Kniphofia</i> 'Royal Standard'	c/g 2L 30-40cm ht.	7m ²
	<i>Tubaghia violacea</i>	c/g 2L 30-40cm ht.	3m ²

S2 - Tree Pit Shrub Planting

Species Name	Specification	Plant/m2	%
<i>Persicaria affine</i>	c/g 1L 20-30cm ht.	7m ²	50
<i>Astible</i>	c/g 2L 30-40cm ht.	7m ²	5
<i>Iris siberica</i>	c/g 2L 30-40cm ht.	7m ²	15
<i>Helleborus</i>	c/g 2L 30-40cm ht.	7m ²	10
<i>Kniphofia Red Hot Poker</i>	c/g 2L 30-40cm ht.	7m ²	15
<i>Carex pendula</i>	c/g 2L 30-40cm ht.	7m ²	15

S3 - Woodland Groundcover Planting Mix

Extensive Green Roof

H1 - Native Hedgerow (450mm topsoil depth / 100cm Double Staggered Row)

Species Name	Specification	Centres	%
<i>Ilex aquifolia</i>	100cm ht.	500mm	50
<i>Crataegus monogyna</i>	100cm ht.	500mm	50

H1 - Structural Hedgerow (450mm topsoil depth / 100cm Single Row)

Species Name	Specification	Centres
<i>Prunus lusitanica</i>	100cm ht.	500mm



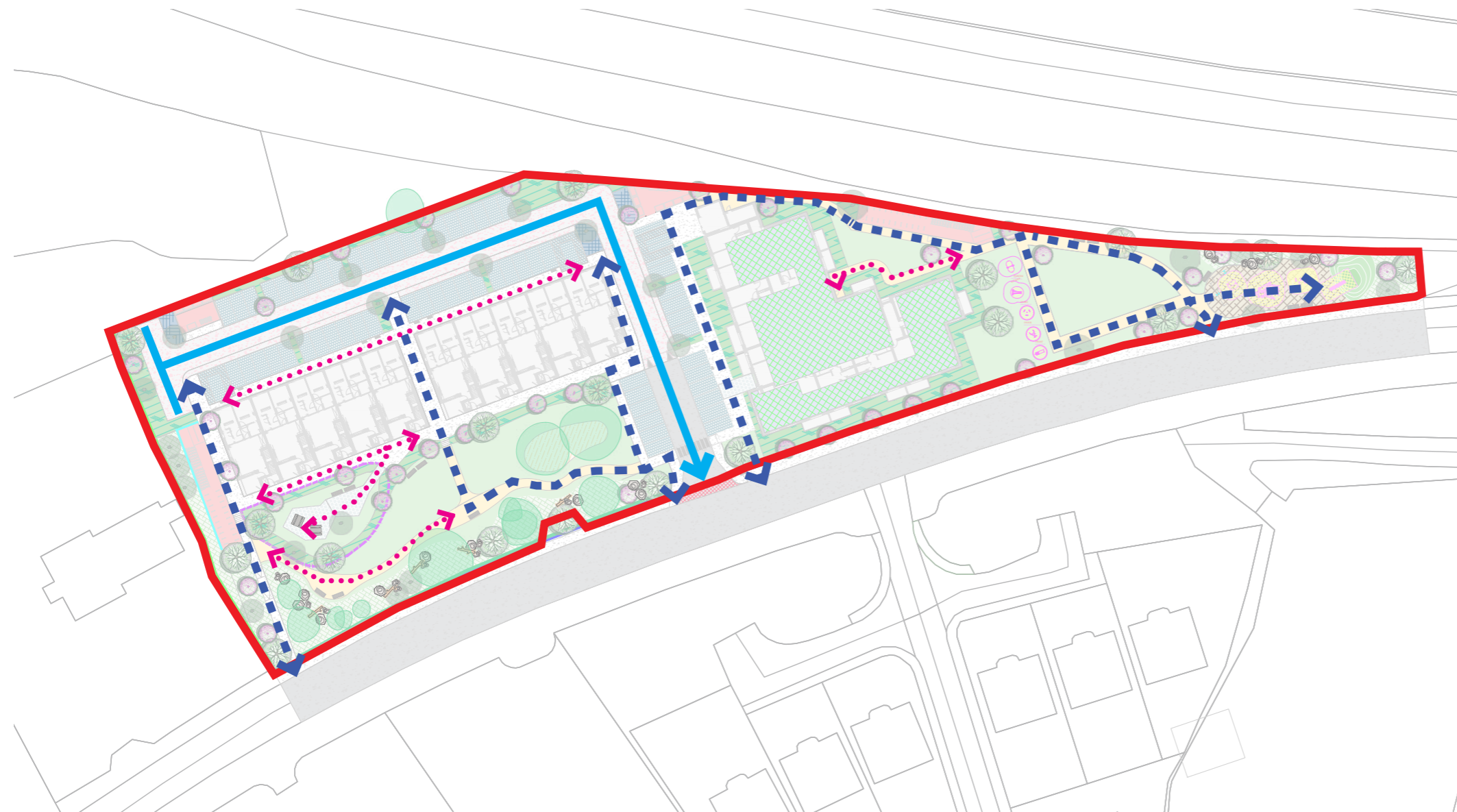
Open Space Categories



-  Public Open Space - Public realm, linear park, congregation areas, recreation
-  Communal Open Space - gathering/seating space, visual amenity, sensory planting, roof terrace
-  Play Space - 385m² (included in P.O.S.)



Proposed Open Space - CGI - View A



Primary Route

Secondary Route

Streetscape

Connectivity

A key objective of the scheme to reduce car dependency by providing high quality pedestrian and cycle networks. The provision of green infrastructure integrates the new development with the existing greenway.

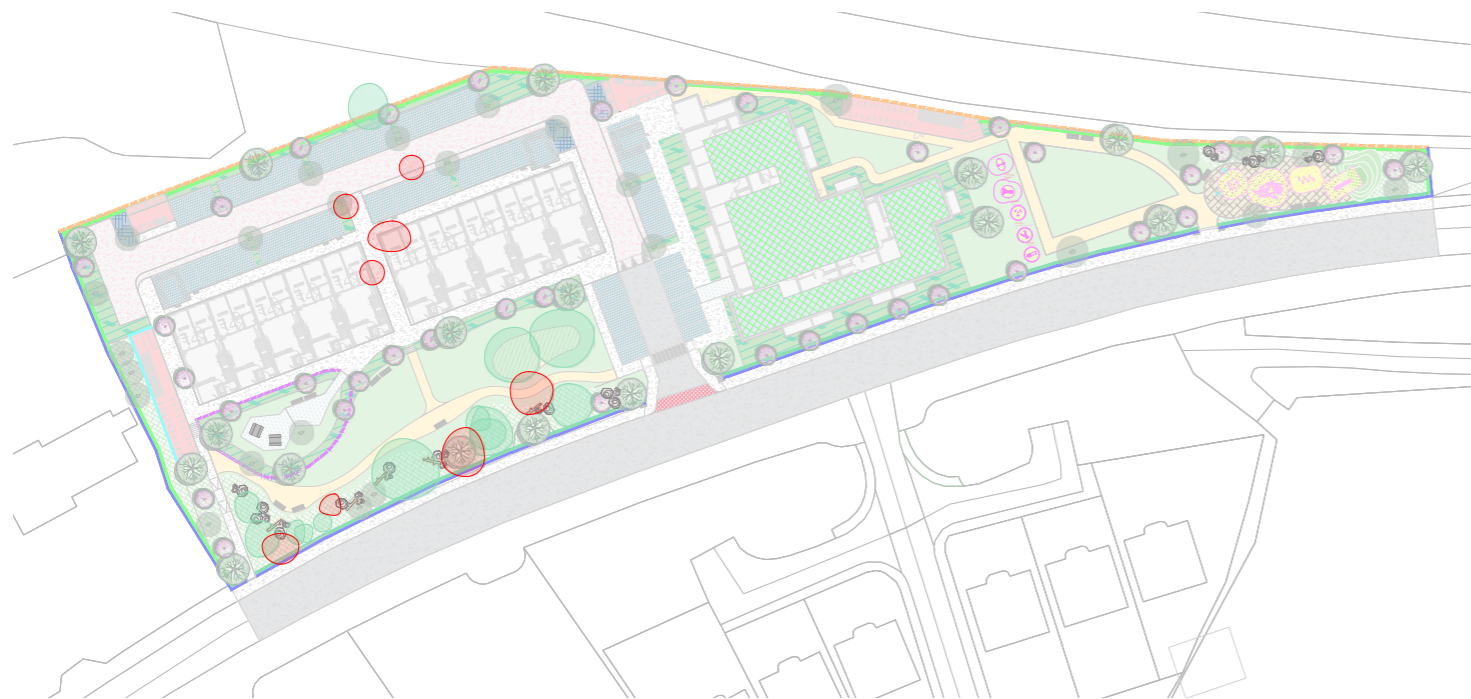
The increased permeability of the development it's context is important to connect residents to surrounding opportunities.



EXISTING TREES



EXISTING HEDGEROWS



REMOVAL TREES



REMOVAL HEDGEROWS



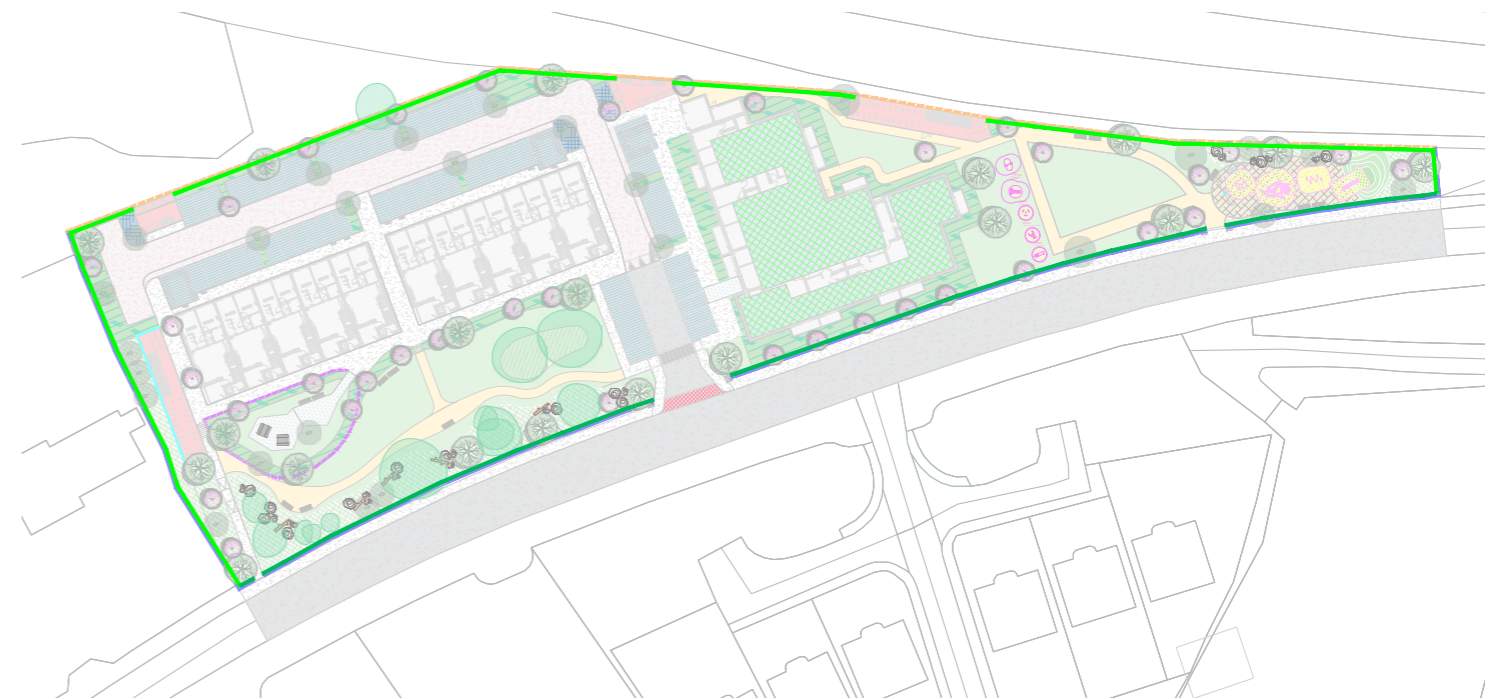
RETAINED TREES



RETAINED HEDGEROWS



PROPOSED TREES



PROPOSED HEDGEROWS



Benefits of natural play spaces:

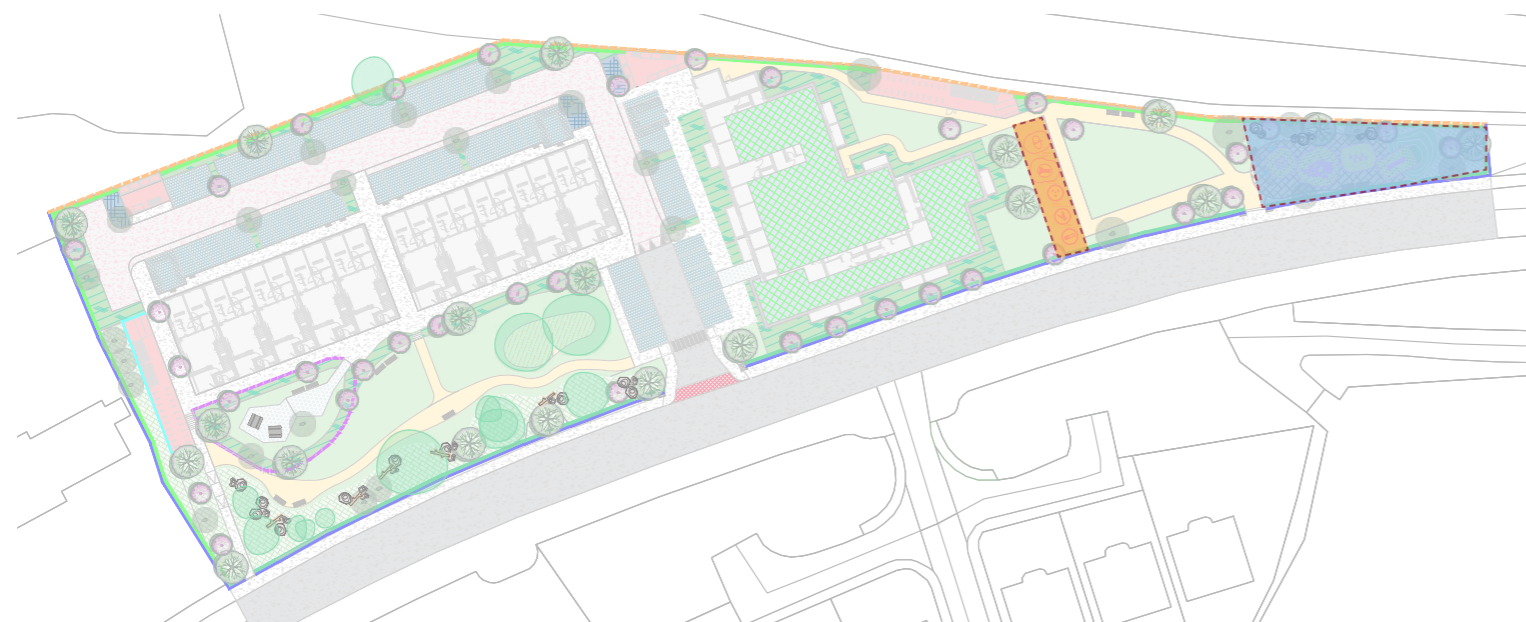
- Development of social skills, cooperation, and problem-solving abilities
- Stimulates imagination and creativity more than traditional playgrounds
- Adapts to natural topography and environment for sustainability



Calisthenics Workout Spaces:

- Allows residents to engage in calisthenics exercises for physical fitness
- Encourages a healthy and active lifestyle within the residential community

- Natural Play Space
- Calisthenics Space



Structured Play Space:

- Promotes physical development, coordination, and motor skills in children
- Provides a safe and engaging play environment for children within the residential development



Communal Play Spaces:

- Fosters social interaction, community bonding and sense of belonging among residents
- Creates shared spaces for children and families to play and connect

Natural Play Elements

Junior Play - Under 5 years of age

All surfaces manufactured and installed to EN 1176 and all play equipment manufactured and installed to EN1177



Junior Play - Over 6 years of age

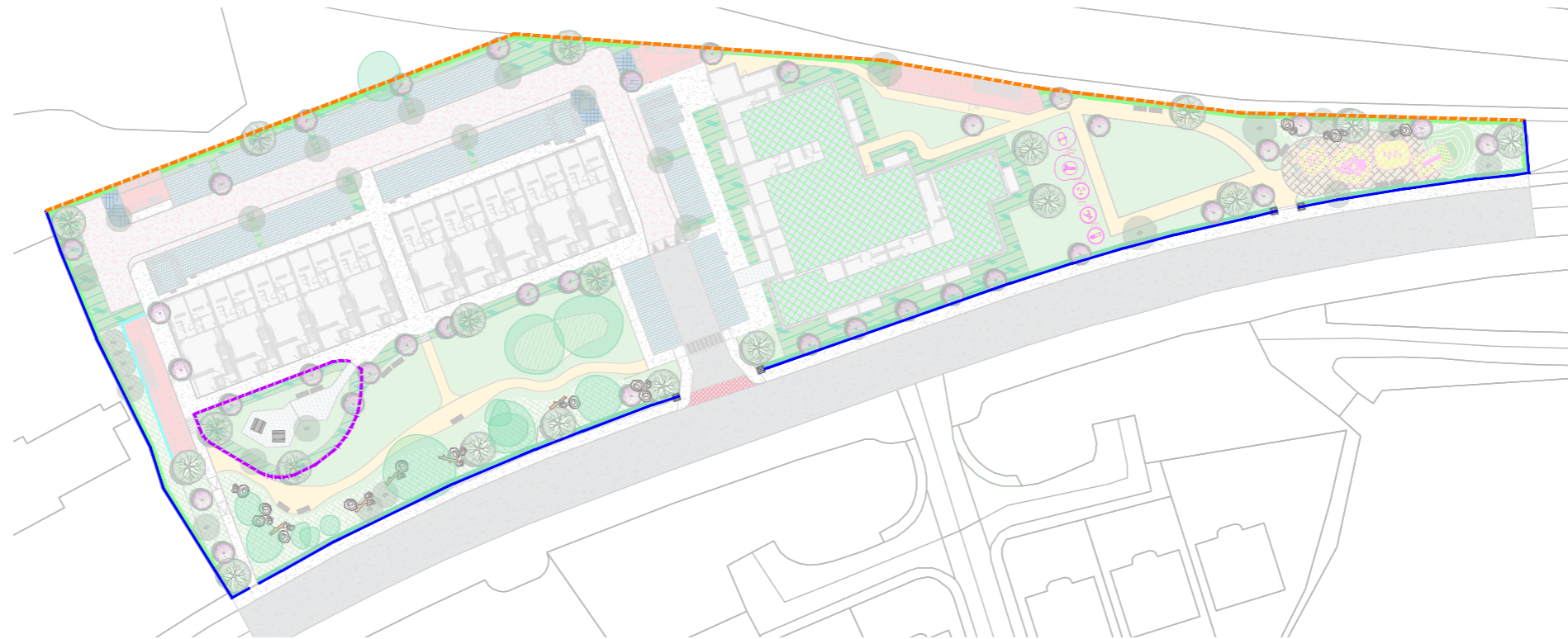
All surfaces manufactured and installed to EN 1176 and all play equipment manufactured and installed to EN1177.



Natural Play Equipment

Natural playgrounds help children to develop other beneficial behaviors in addition to physical skills. These behaviors include social skills, cooperation, and the ability to solve problems.





Parkland Railing
1.8m high



Parkland Railing
1.2m high



Timber Noise Barrier Fencing
2m high



Stone Wall Pier
Varies in Height according to wall



3. LANDSCAPE FEATURES3

Proposed Planting - Shrubs



Persicaria affine



Bergenia cordifolia



Libertia grandiflora



Aucuba japonica



Prunus 'Otto luyken'



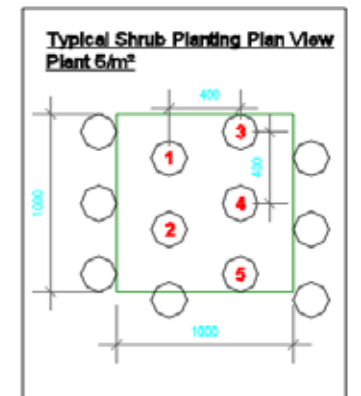
Lavandula angustifolia



Hypericum hidcote



Astelia 'Silver Spear'



Agapanthus 'Blue Giant'



Kniphofia 'Royal standard'



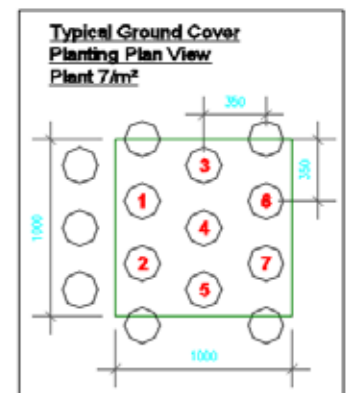
Nerine bowdenii

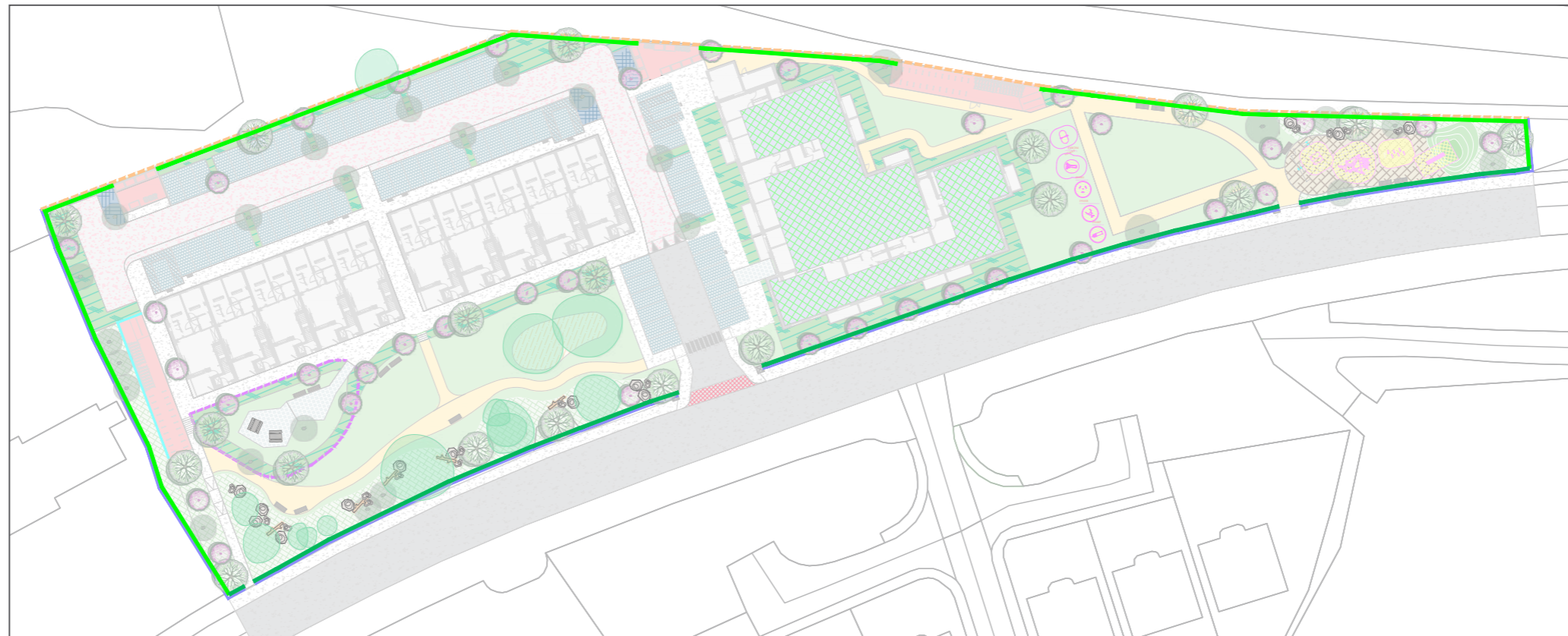


Sedum spectabile



Miscanthus sinensis





Ilex aquifolium



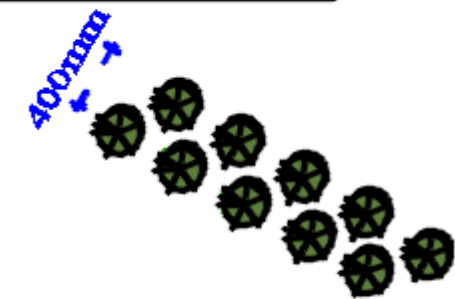
Crataegus monogyna



Prunus lusitanica

Hedgerow Planting Detail

Hedge mix
60-90mm



50 x 50 stake tied with a single rubber gut tie.
2 rows @ 500mm centres -400mm apart,

Proposed Planting - Wildflower



Yellow Rattle
Rhinanthus minor



Ribwort plantain
Plantago lanceolata



Red clover
Trifolium pratense



Meadow buttercup
Ranunculus acris



Lady's-bedstraw
Galium verum



Cowslip
Primula veris



Oxeye daisy
Leucanthemum vulgare



Bird's-foot trefoil
Lotus corniculatus



Common knapweed
Centaurea nigra



Common sorrel
Rumex acetosa



Burnet saxifrage
Pimpinella saxifraga



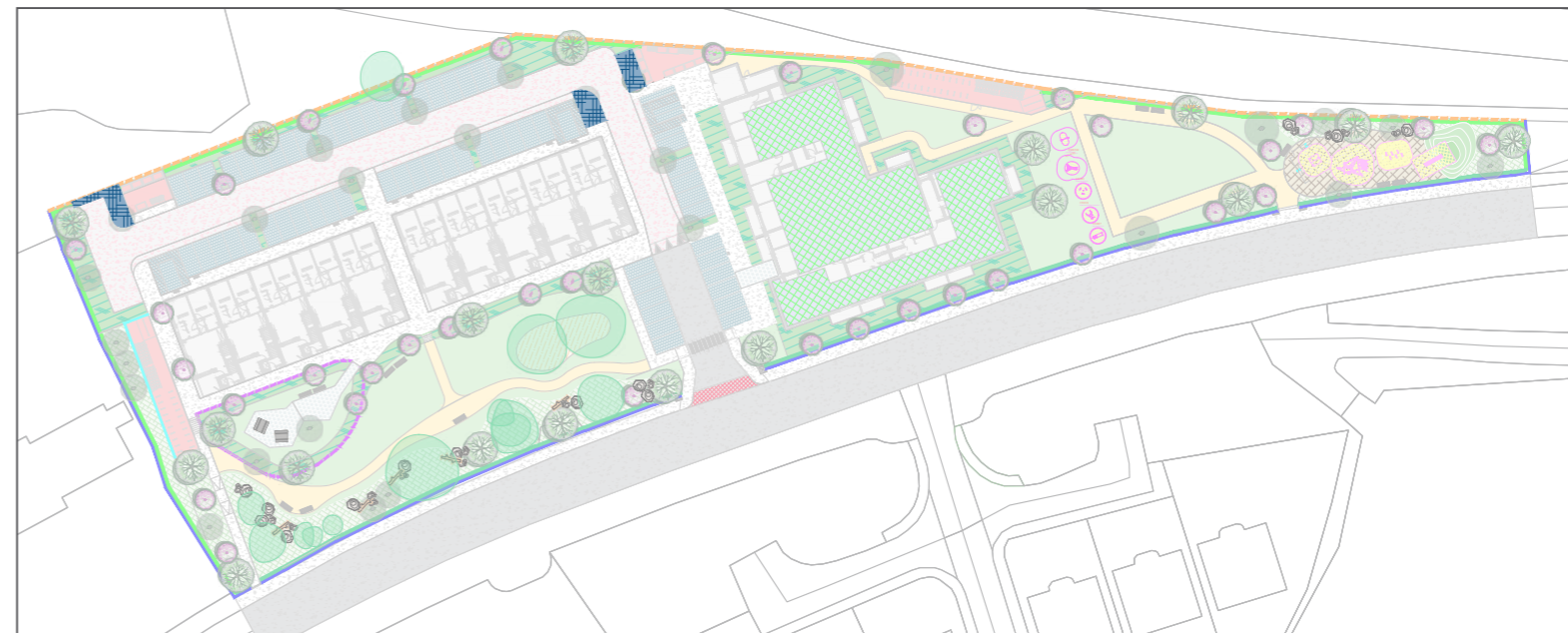
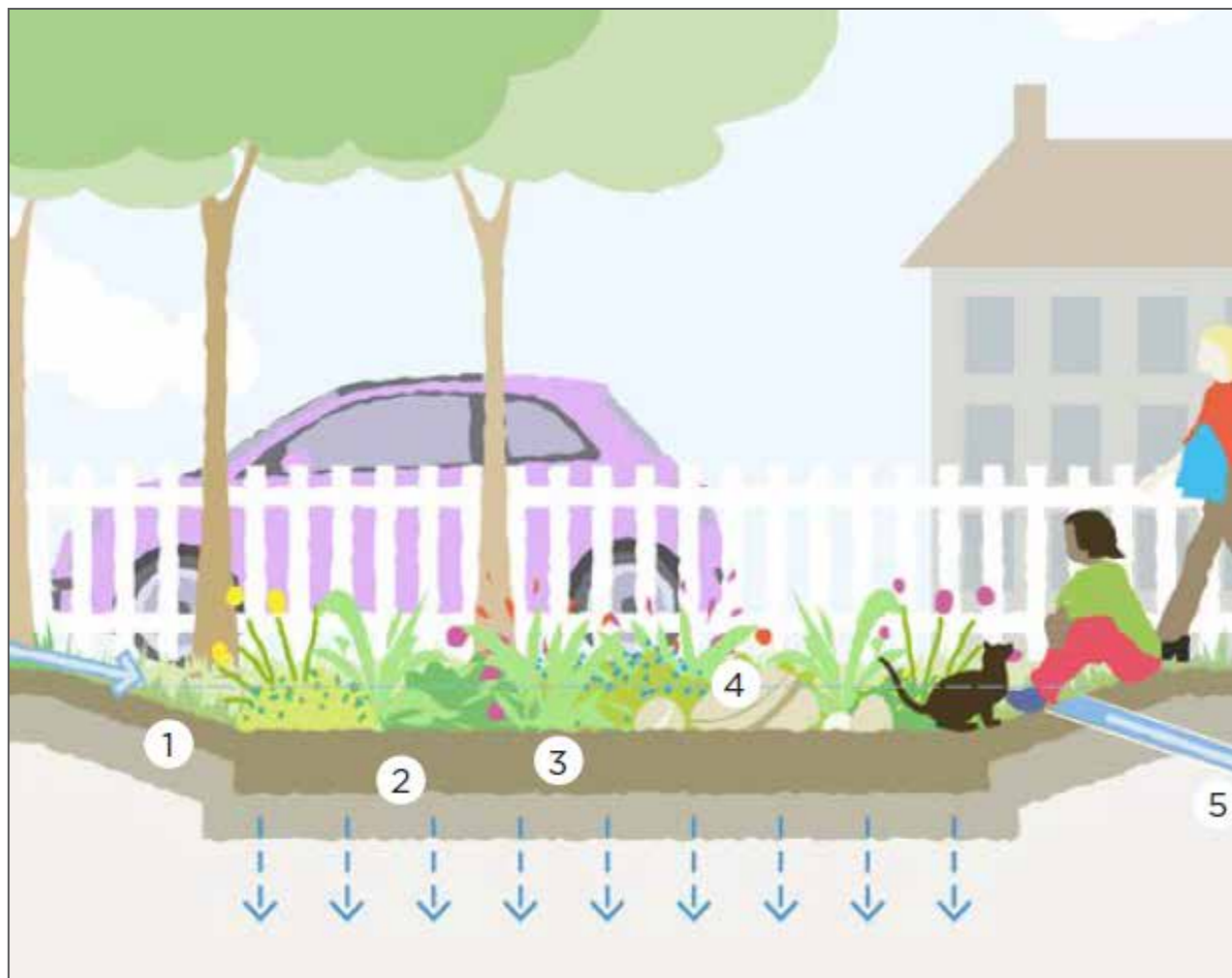
Autumn hawkbit
Leontodon autumnalis



Rough hawkbit
Leontodon hispidus

Note: The Wildflower Meadow will need to be cut once in Autumn (Late August/Early September) with a tractor and mower. Leave the mowings for a few days to allow seed to drop to the ground. Then it should be baled and bales removed.

SUDs - Rain Garden



Rain Garden Locations

Raingardens are designed to collect and manage reasonably clean water from roofs and low pollution risk drives and pathways. They are generally installed where community or private maintenance is available to upkeep these attractive features.

Key aspects of raingarden design include:

1. gentle side slopes with water collected at the surface
2. a free-draining soil, sometimes with an underdrain to avoid permanent wetness
3. a minimum of 450mm improved topsoil with up to 20% coarse compost
4. garden plants that can tolerate occasional submersion and wet soil – this includes most garden plants other than those particularly adapted to dry conditions
5. an overflow in case of heavy rain or impeded drainage.

Furniture Palette



Wooden seating

Play Equipment Palette



Play Equipment

- Wooden Log
- Stepping logs
- Balance Beam
- Mound & Slide
- Bird's nest
- Rope nest swing



Calisthenics Equipment

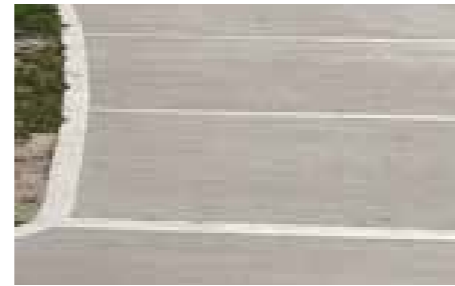
- incline press
- decline bench
- dip bench
- in shape step up

Surface Palette

In-situ Surfaces



SMA w/ Black Chip



Brushed exposed aggregate concrete

Paths

Surfacing for high impact areas across the development



Ballylusk Dust Path



Play Surfacing

Paving Palette

Feature Paving

Light coloured flags to maximum light w/ contrasting paving blocks



Permeable Paving



Feature Paving



Permeable Paving

Permeable surfaces direct rainfall straight into a SuDS structure for cleaning and storage or infiltration into the ground. Utilising:

1. pervious surface to allow water through the pavement surface
2. an open-graded sub-base layer that provides structural strength to the pavement with about 30% by volume available for water storage. The subbase designed structurally and hydraulically.
3. to avoid silt washing off adjacent landscape areas and leading to localised surface clogging., the following measures have been considered:
 - sloping adjacent landscape areas away,
 - using paved or turfed surfaces to adjacent areas,
 - proposing soil in adjacent planting beds at min. 50mm below the top of kerb with dense ground cover to bind the soil.

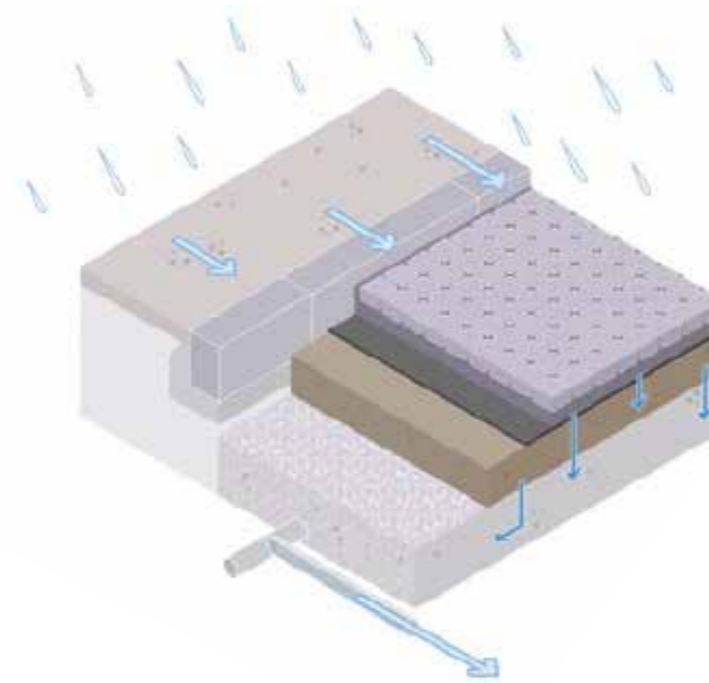


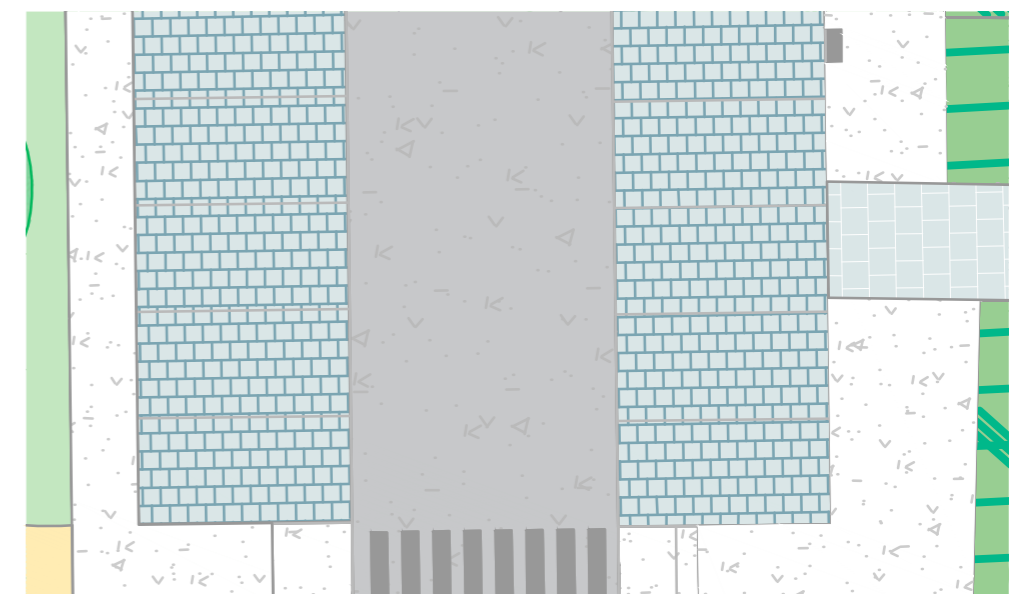
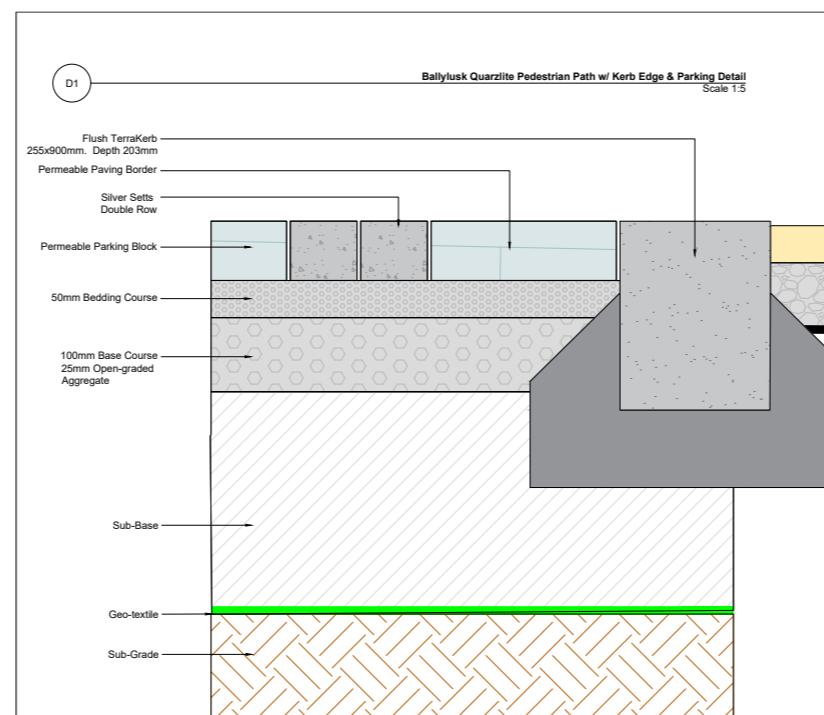
Diagram of Permeable Paving in parking bays



Permeable parking surfaces



Permeable Parking Pavers



Permeable Parking Pavers

Drainage - Green / Sedum Roof

- The root system: Sedum has very shallow roots, a key requirement for an extensive green roof, considering the modest depth of the substrate layer.
- Sedum is also drought-resistant
- Sedum needs relatively little nutrients and maintenance compared to other types of plant
- Sedum is very resilient to diseases and insects
- Sedum is also very adaptable: due to its capacity to adapt its metabolic system in periods of drought, it can survive in extremely dry conditions where other types of plants would die. And furthermore, Sedum recovers remarkably quickly as soon as water becomes available again.



Green Roof/Sedum Roof

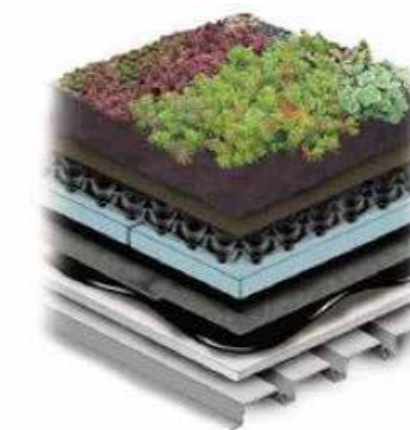


Option 1.

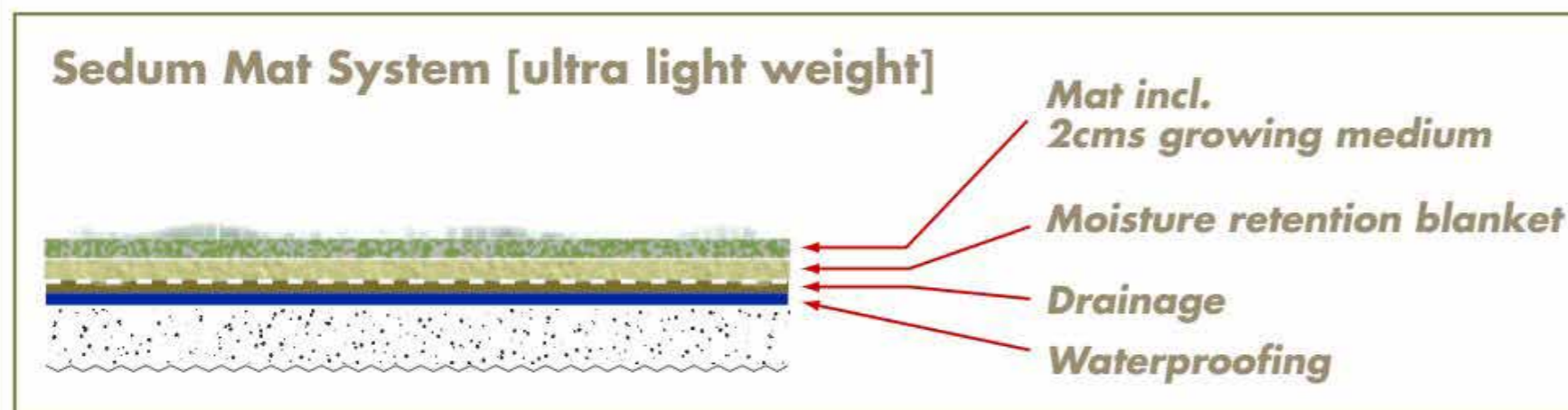


- Extensive Vegetation (Sedums, etc.)
- Growing Media
- Filter Fabric
- Moisture Retention / Drainage Panel
- Insulation
- Root Barrier
- Protection Course and Capillary Break
- Waterproofing Membrane (hot rubberized asphalt depicted)
- Substrate (concrete deck depicted)

Option 2.



- Extensive Vegetation (Sedums, etc.)
- Growing Media
- Filter Fabric
- Moisture Retention / Drainage Panel
- Insulation
- Root Barrier
- Protection Course and Capillary Break
- Waterproofing Membrane (hot rubberized asphalt depicted)
- Substrate (metal deck with gypsum board depicted)



MULTIDISCIPLINARY DESIGN TEAM



Ronan Mac Diarmada & Associates
Landscape Architects & Consultants

Tootenhill Cottages, Rathcoole, Co. Dublin, D24 XA02
TEL 01 4124476
EMAIL info@rmda.ie
WEB www.rmda.ie

