



Proposed SHD At  
Belcamp, Dublin 17

Ronan Mac Diarmada & Associates  
Landscape Architects & Consultants



**LANDSCAPE RATIONALE**

April 2022



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## CONCLUSION





## SITE CONTEXT



## Site Location



 Land Ownership Outline

Ronan MacDiarmada & Associates, RMDA Ltd. have been engaged by Gerard Gannon Properties to provide Landscape Architectural Services for the lands at Belcamp Lands.

The Belcamp SHD lands span across two local authorities Dublin City Council and Fingal County Council. They are divided by the Mayne River corridor running from the western side of the site to the eastern side.

RMDA have been appointed to design and enhance the DCC lands on the southern side of the river while TBS (The Big Space) are designing the FCC lands on the northern side. It has been a collaborative process between the two landscape practices to enrich the open space for the benefit of the future residents and establish a neighbourhood that is delivered as one combined development.

We are fortuitous to have unique elements within the Belcamp lands such as the Walled Garden, Belcamp Hall, Washington Monument, the Ice House and the River Mayne Corridor to strengthen our proposed landscape design strategies. Another element of the lands to take into account are earlier phases which have been granted planning permission, are under construction, or are subject to current/forthcoming planning applications to FCC.



## SITE ANALYSIS





## Constraints

## Existing Cultural, Historical, Landscape Features



River Mayne Corridor Habitat Space



Central Historic Landscape

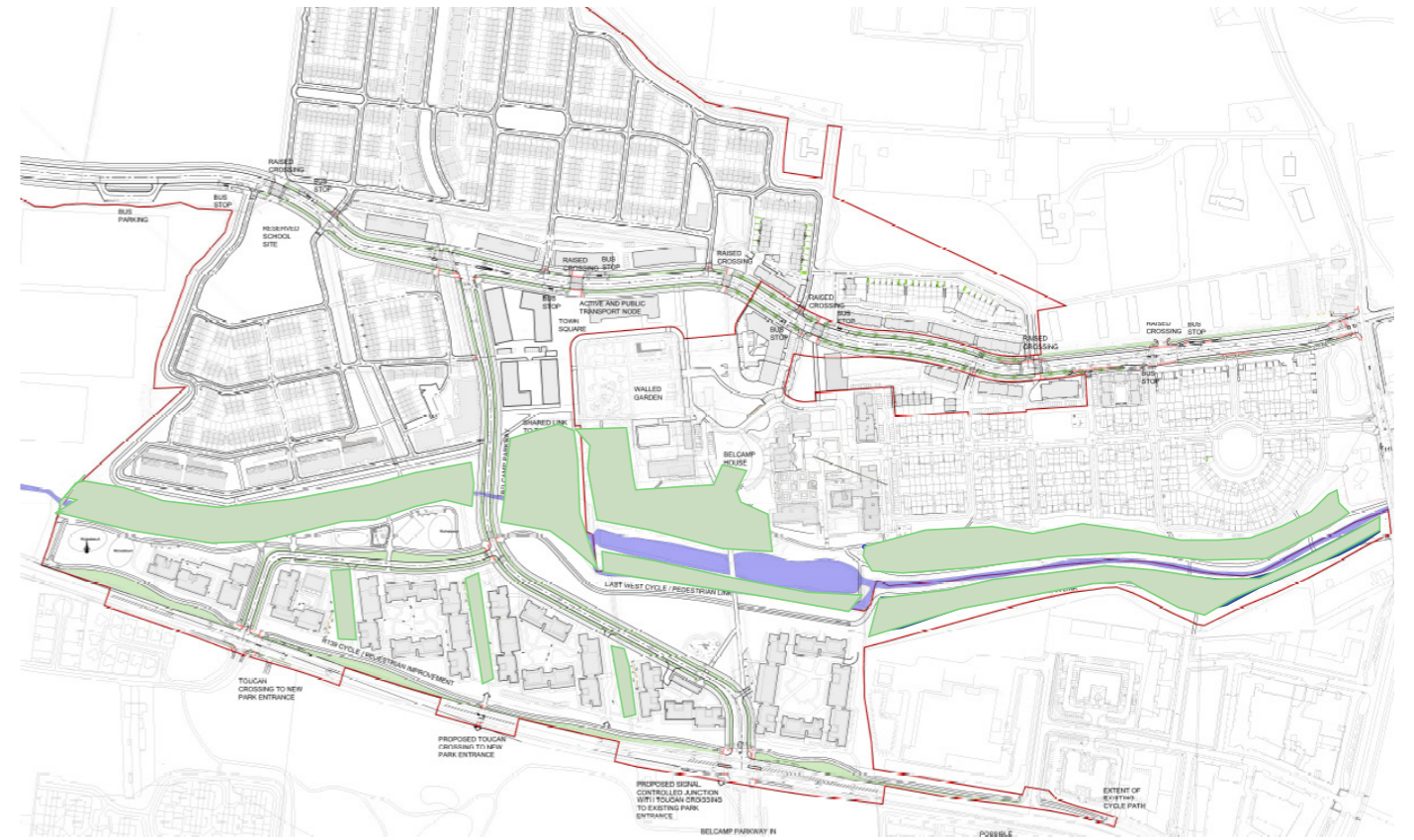
1. Walled Garden
2. Belcamp Hall
3. Washington Monument
4. Ice House







Site Topography

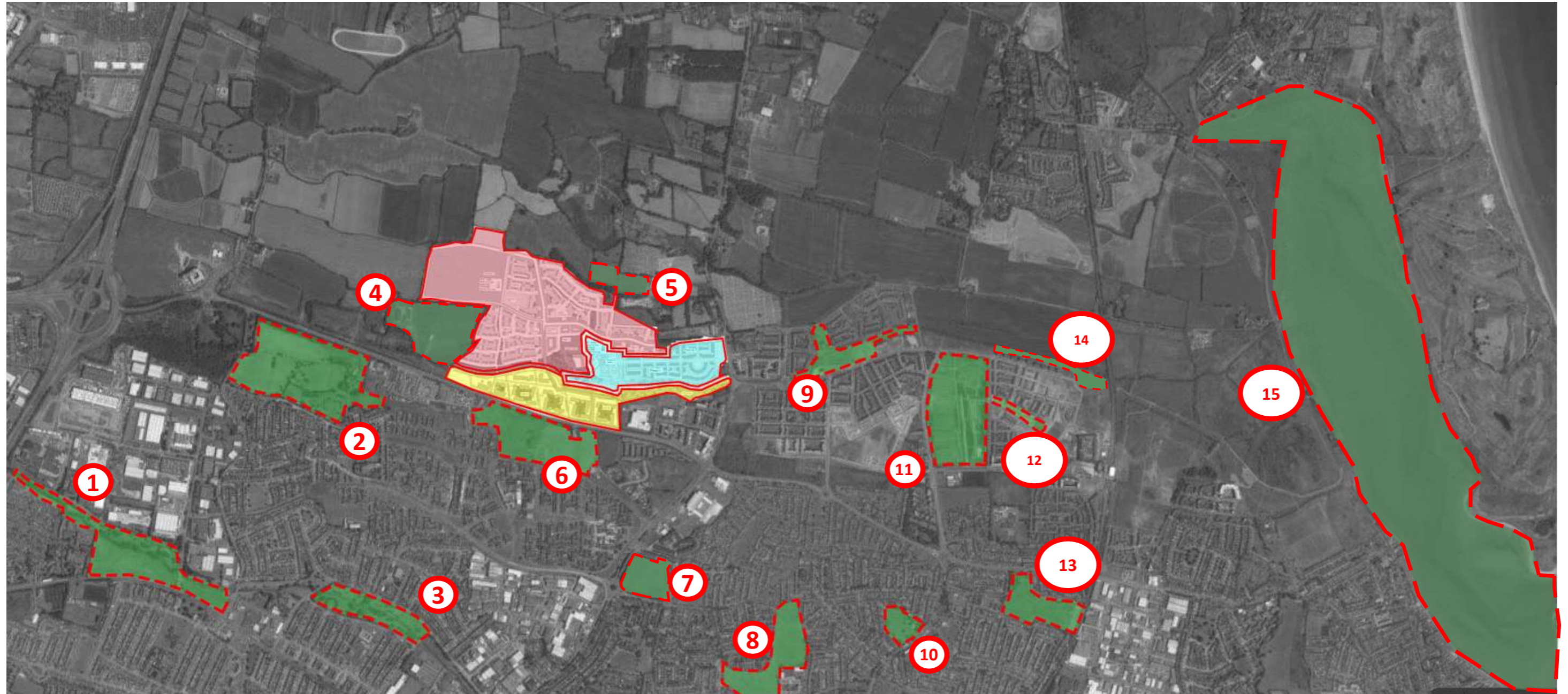


Site Vegetation








Existing Open Space



- |                              |                             |
|------------------------------|-----------------------------|
| 1. Coolock Lane Park         | 10. Grangemore Park         |
| 2. Belcamp Park              | 11. Father Collins Park.    |
| 3. Stardust Memorial Park    | 12. Beltree Park.           |
| 4. Craobh Ciarán GAA Grounds | 13. Donaghmede Park         |
| 5. Innisfails GAA Grounds    | 14. Marrsfield Linear Park  |
| 6. Darndale Park             | 15. Baldoyle Nature Reserve |
| 7. O'Tooles GAA Ground       |                             |
| 8. Donahies Field            |                             |
| 9. Balgriffin Park           |                             |

- |   |                             |
|---|-----------------------------|
|  | DCC Lands – SHD Application |
|  | FCC Lands – SHD Application |
|  | Separate Application        |





## Existing Site

## Photos



1.



2.



4.



Aerial showing location of images



3.



5.





## DESIGN PROPOSAL



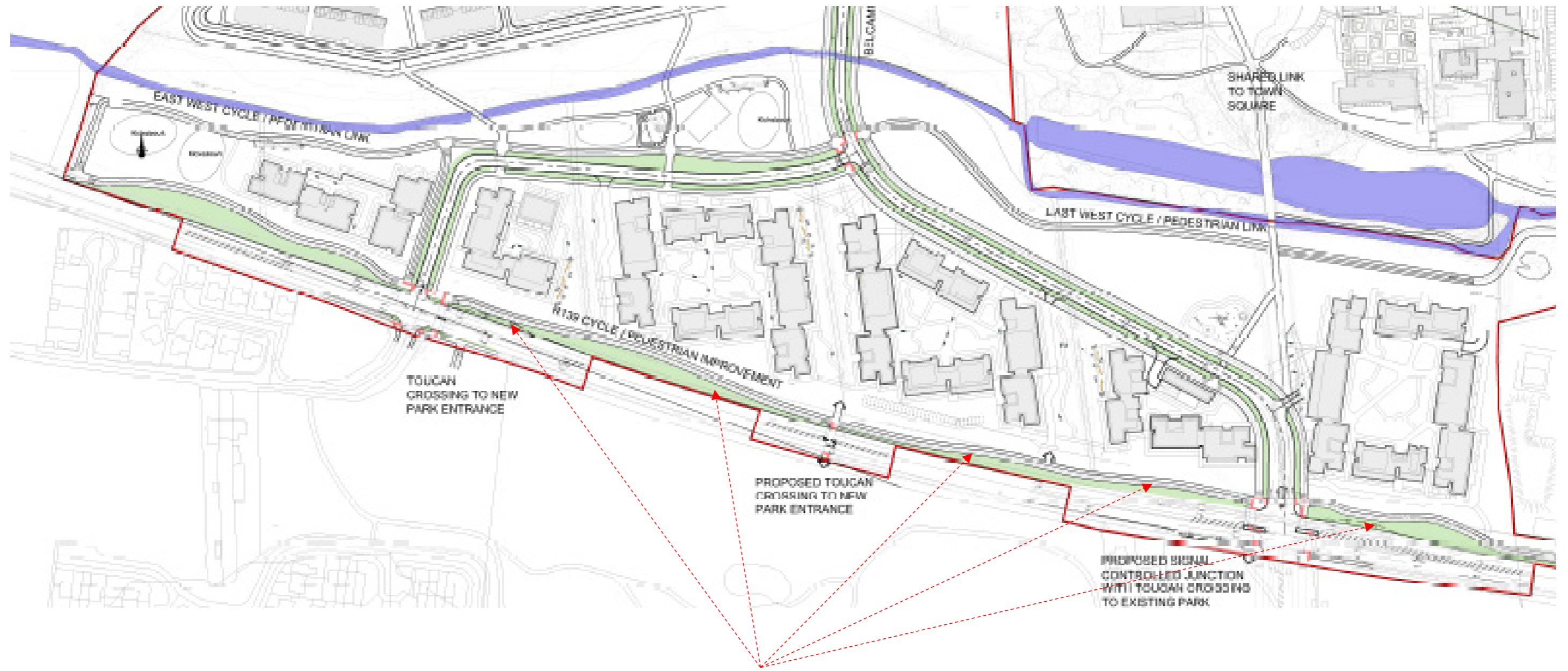










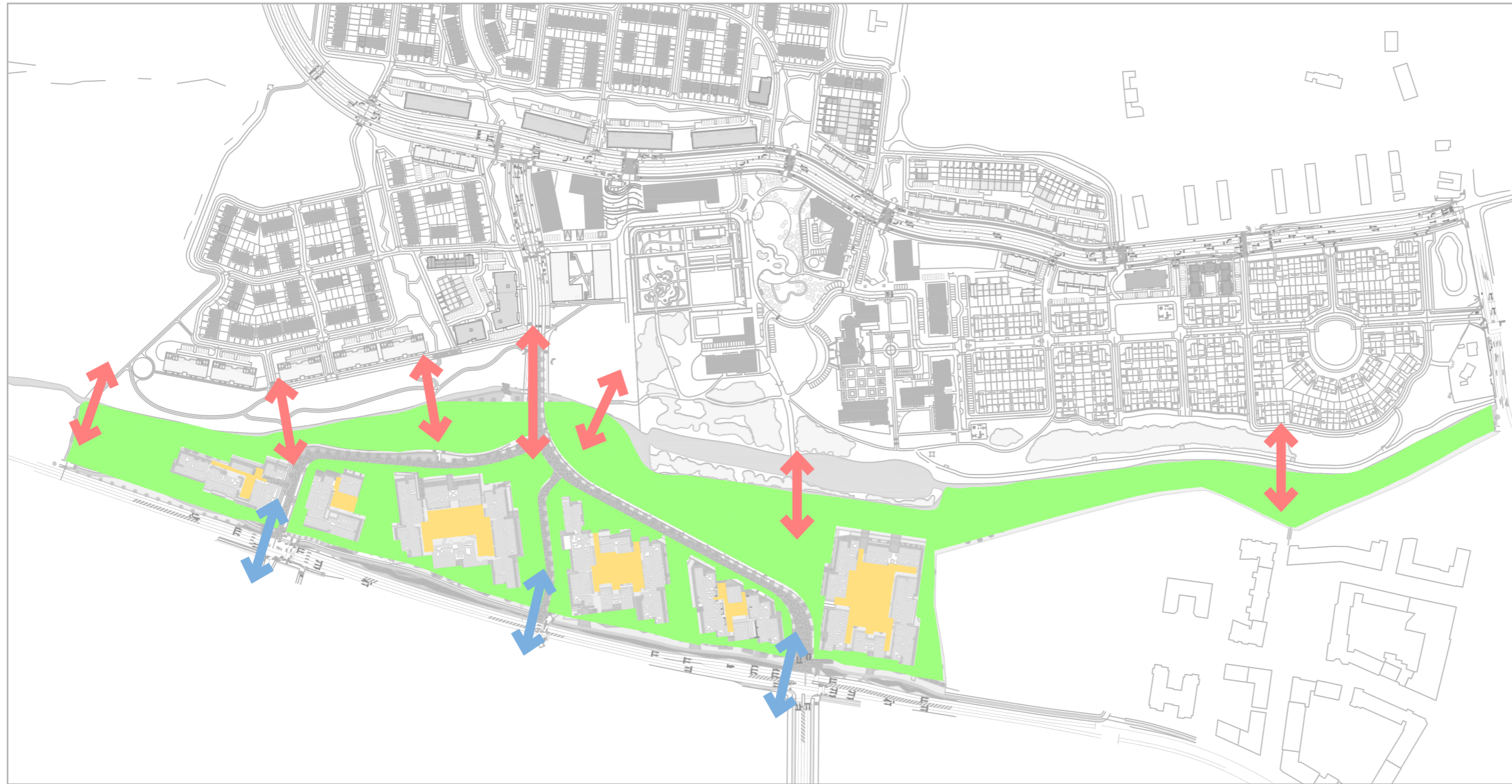






Existing Hedgerows retained along R139



## Concept Design

## Open Space





-  Public Open Space
-  Communal Open Space
-  Connections between DCC & FCC Lands
-  Connections to existing Darndale Park









 A. Primary - Class 1  
Parkland/Habitat Area - 58,887m<sup>2</sup>

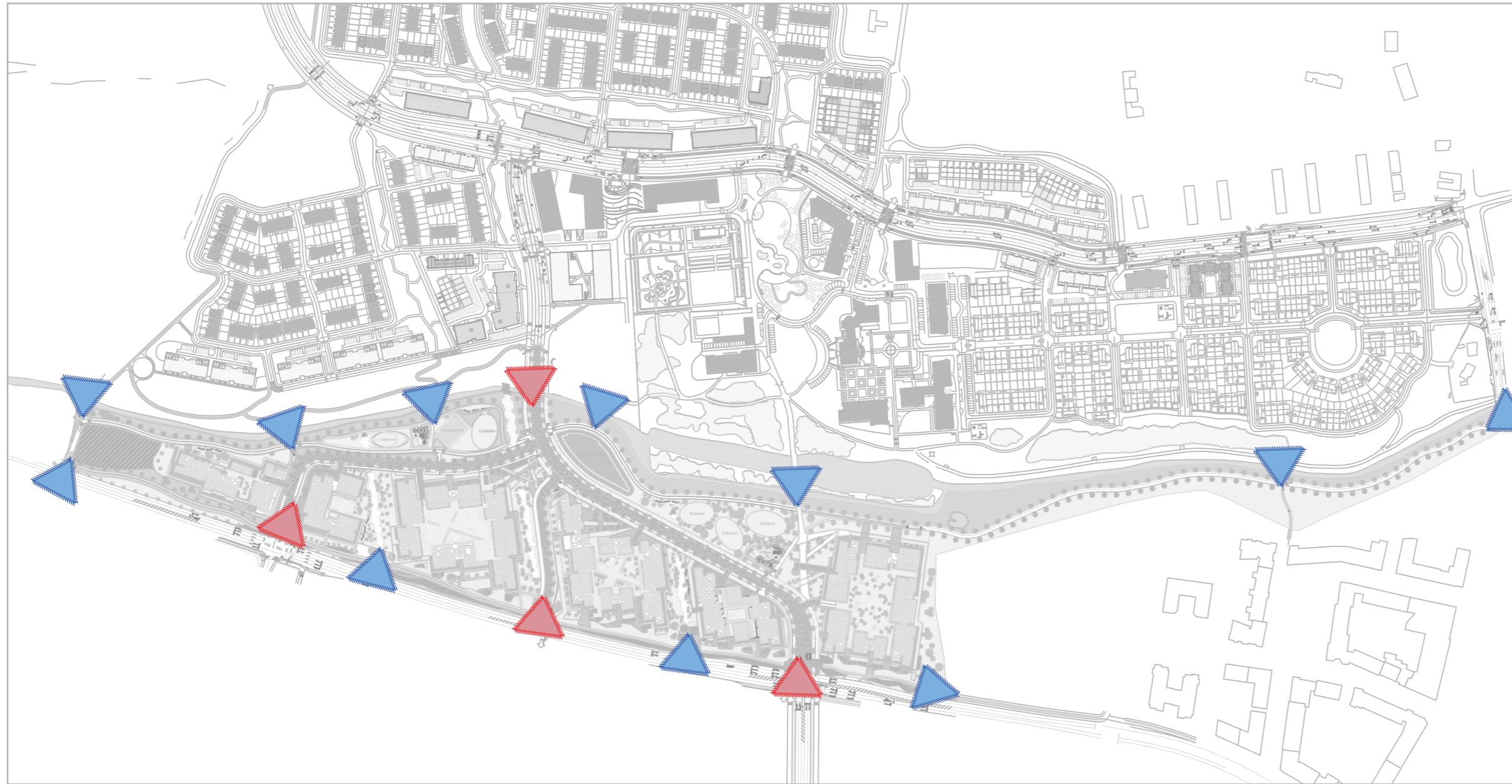
 B. Secondary - Class 2  
Street Frontage - 12,046m<sup>2</sup>


 A. Primary - Class 1  
Urban Plaza & Pocket Parks - 16,983m<sup>2</sup>


 C. Tertiary - Class 3  
Communal - 8,480m<sup>2</sup>

Total Public Open Space - 96,396m<sup>2</sup>

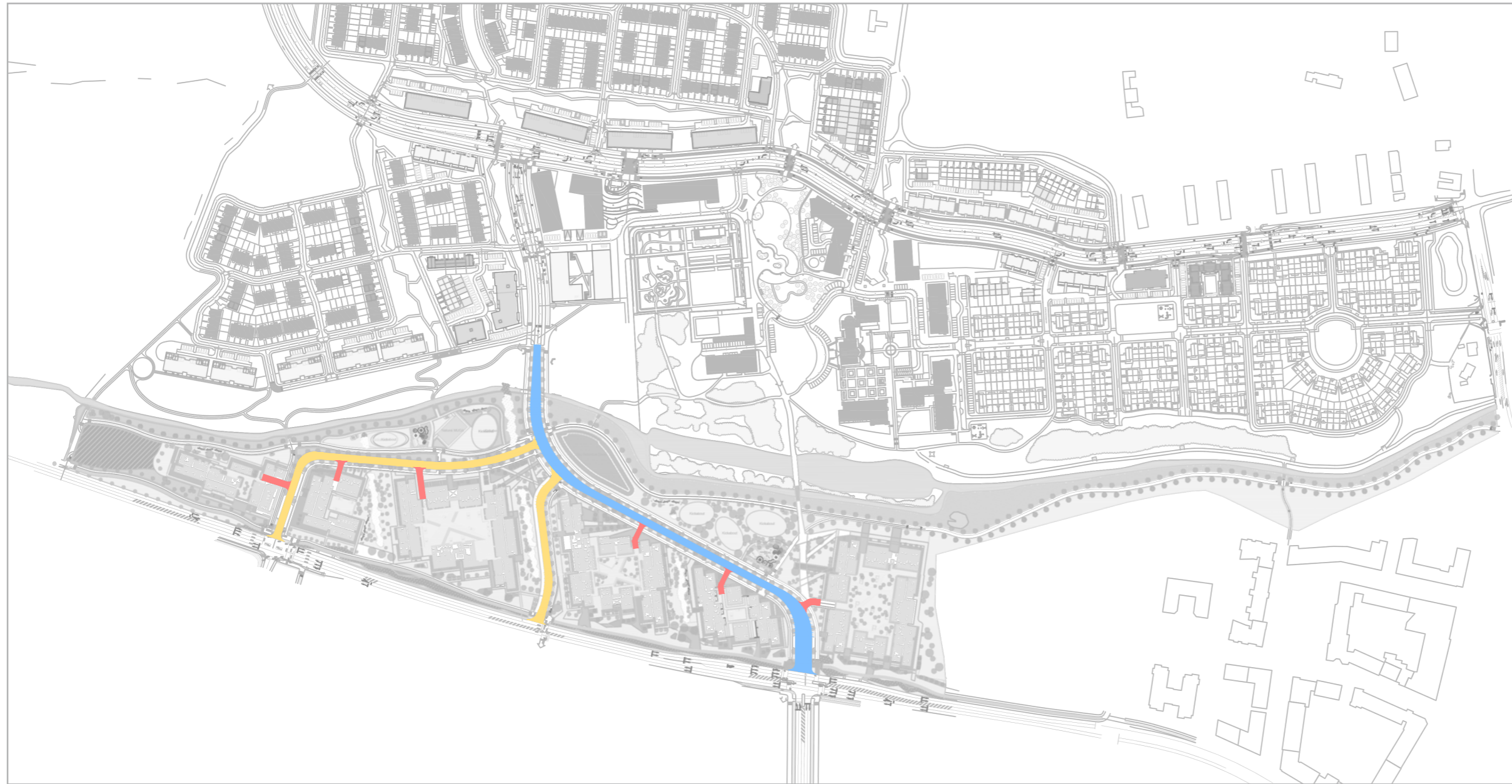




 Vehicle Entrance Node  
Announcing change of Area &  
Change of Landscape

 Pedestrian Entrance Node  
Announcing change of Area &  
Change of Landscape





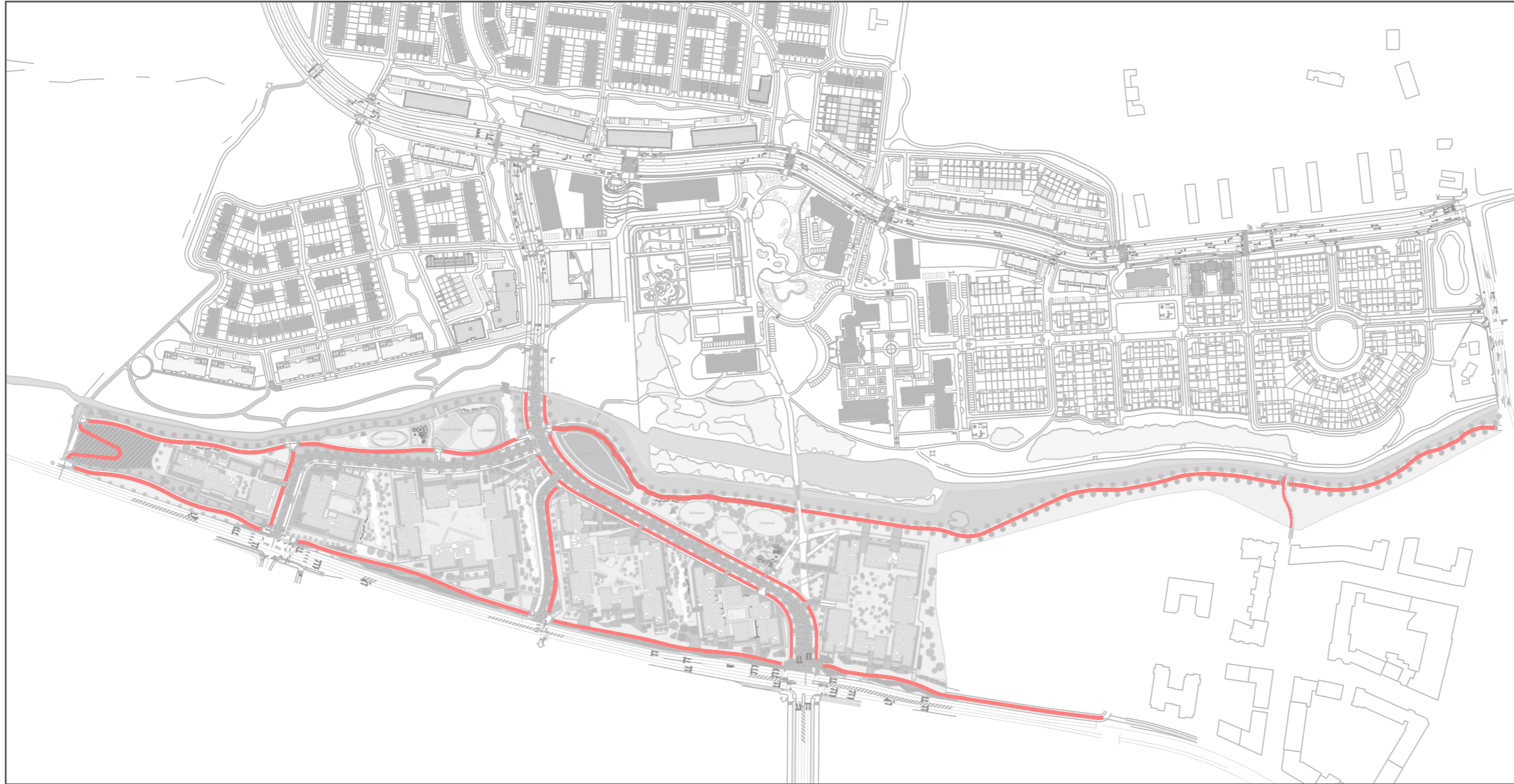
 Primary

 Secondary

 Entrances



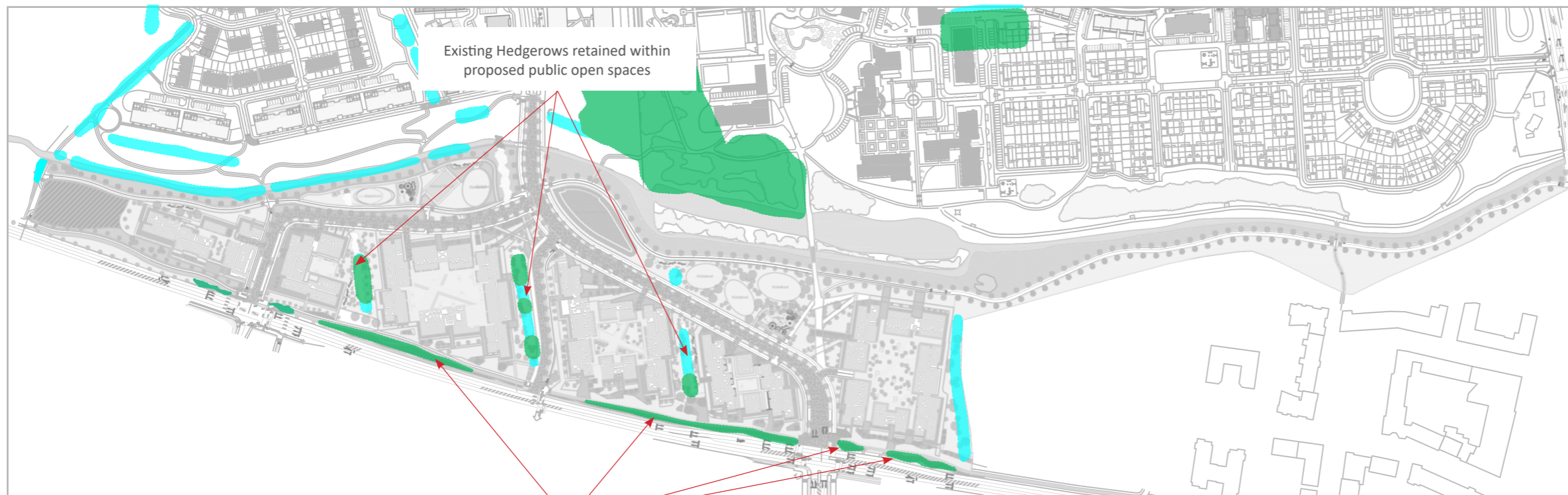








## Arboricultural Impact


## Retention of Existing Hedge



-  Existing Hedgerow to be retained, augment where necessary with native species.
-  Existing Woodland Hedgerow to be retained

Hedgerow pruned to 1m height and shaped along the R139

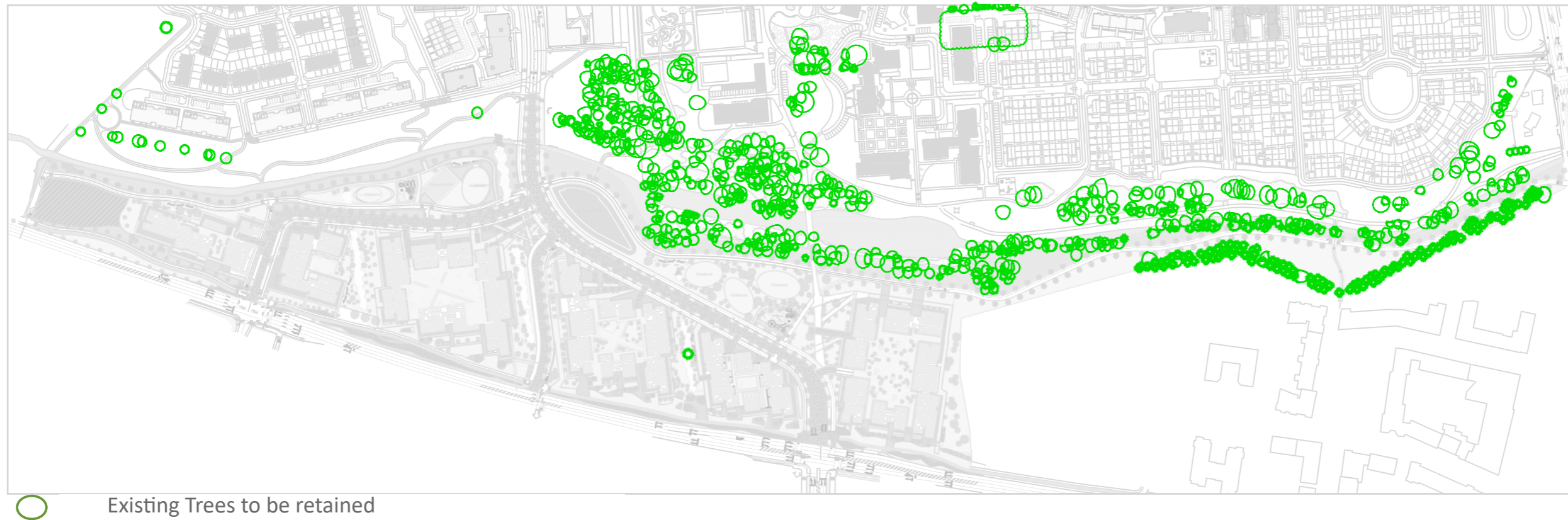


-  Existing Hedgerow to be retained, augment where necessary with native species. Hedgerow pruned to 1m height and shaped along the R139

76.6% of hedegrows retained, approximately.  
(1892/2467 linear metre)



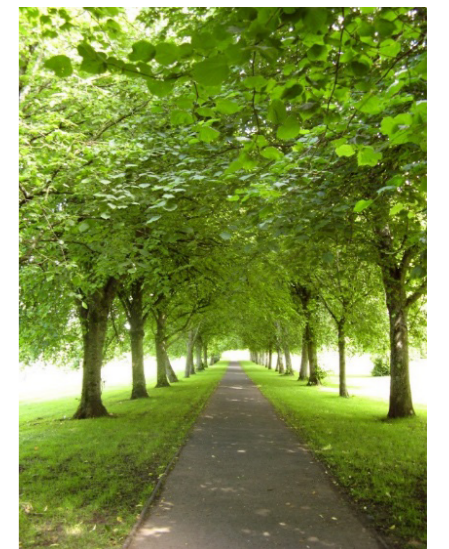






## Landscape Detail Areas

## Primary Open Space - Parkland/Habitat

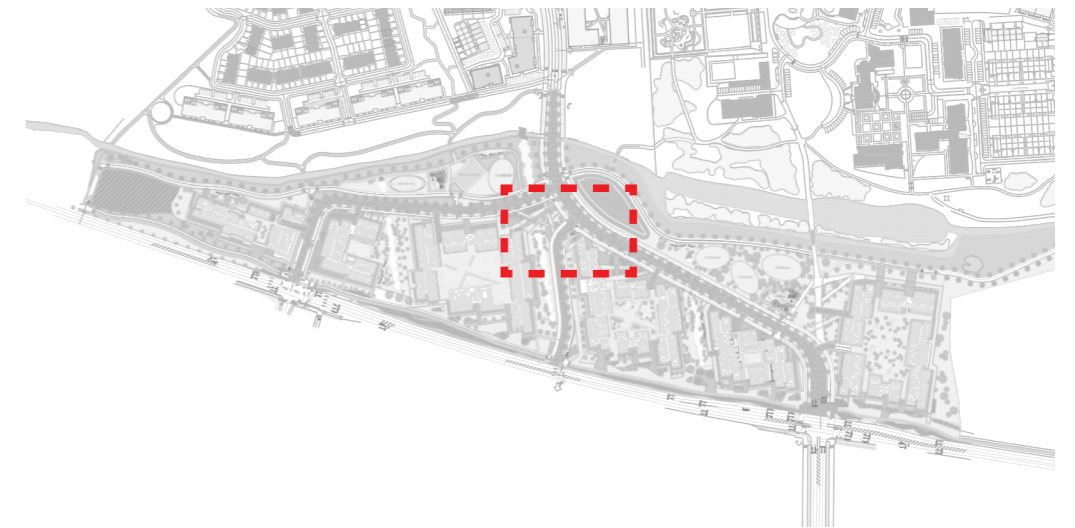


Indicative Images



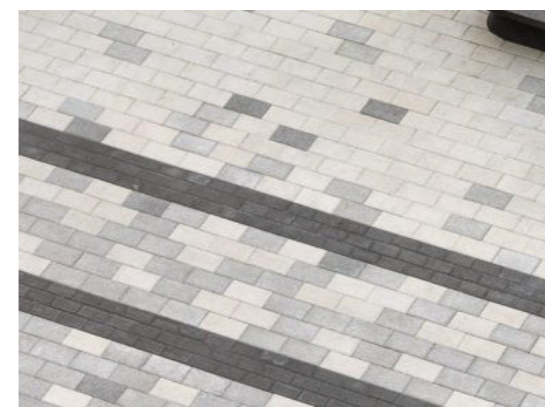
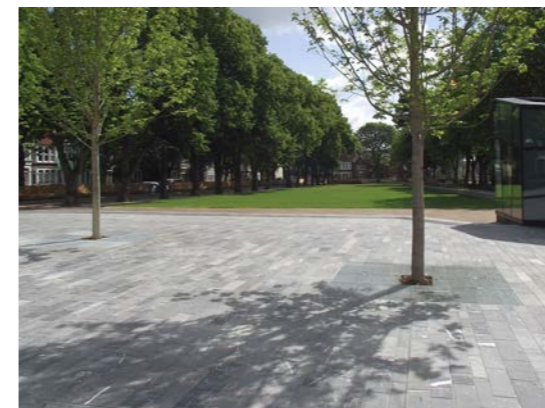
## Landscape Detail Areas

## Primary Open Space - Urban Plaza



Location Plan

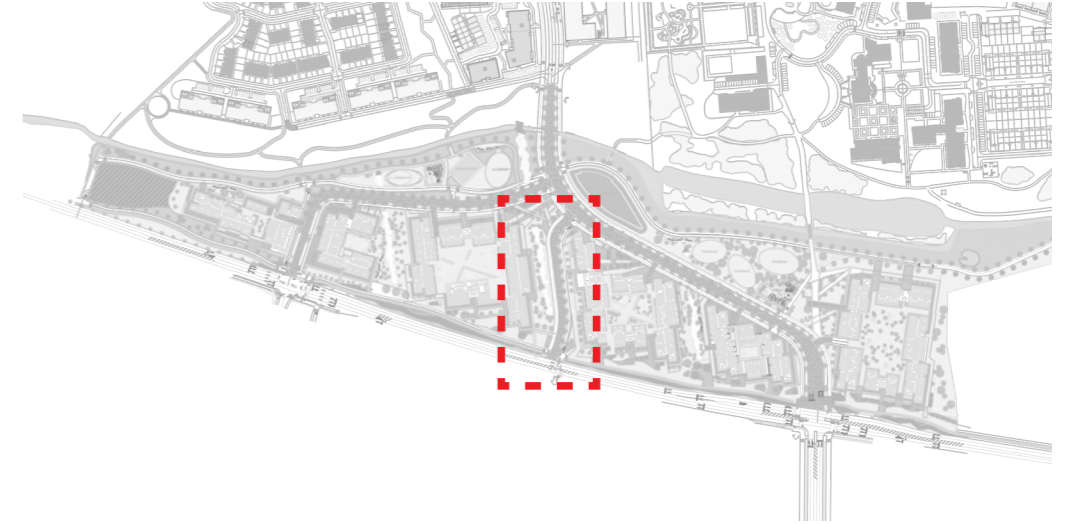
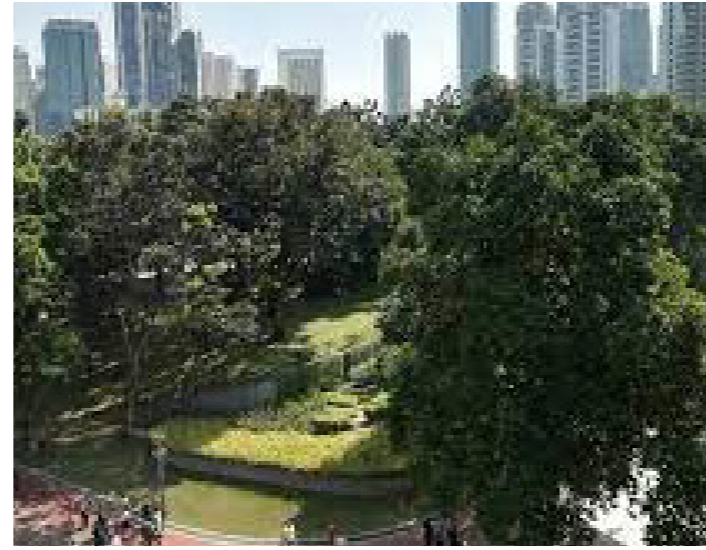
## Reference Images



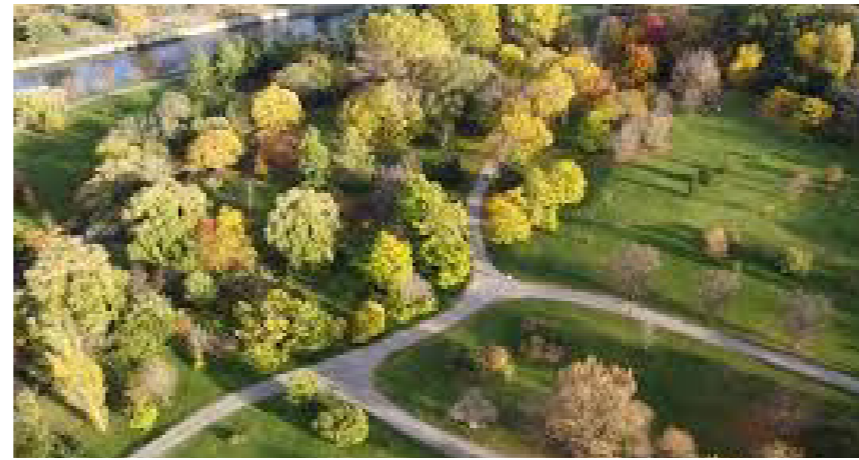


## Landscape Detail Areas

## Primary Open Space - Pocket Park



Location Plan

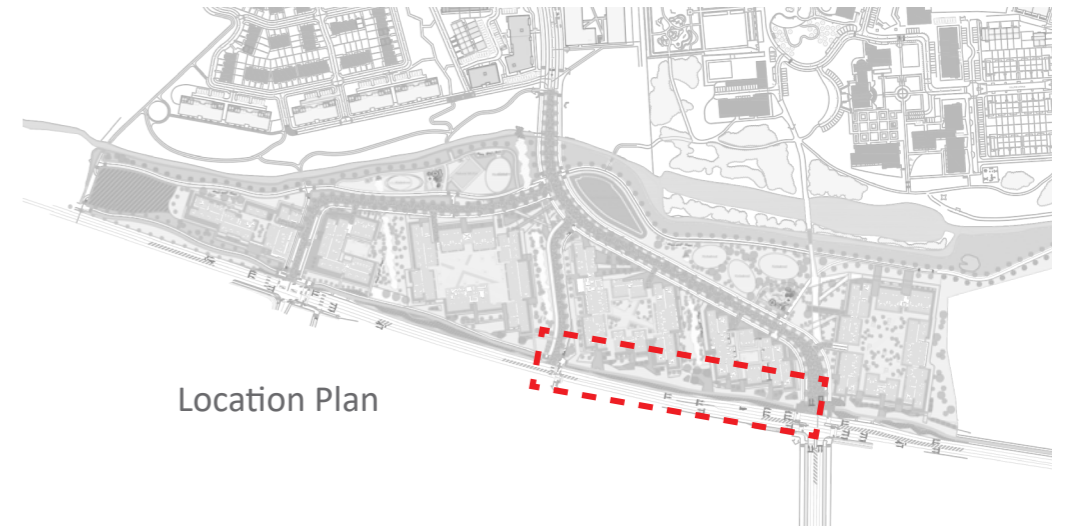
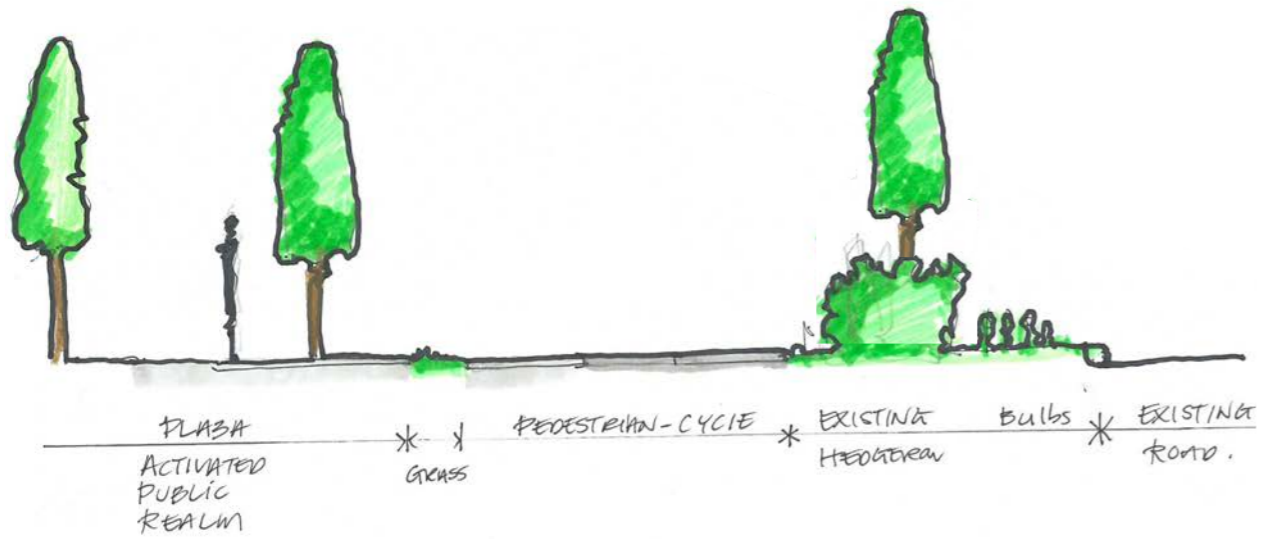


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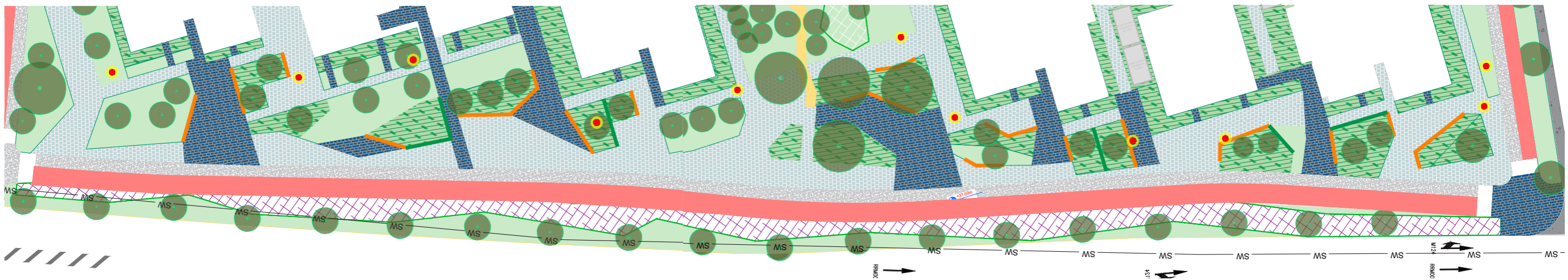


## Landscape Detail Areas

## Secondary Open Space - Street Frontage - R139



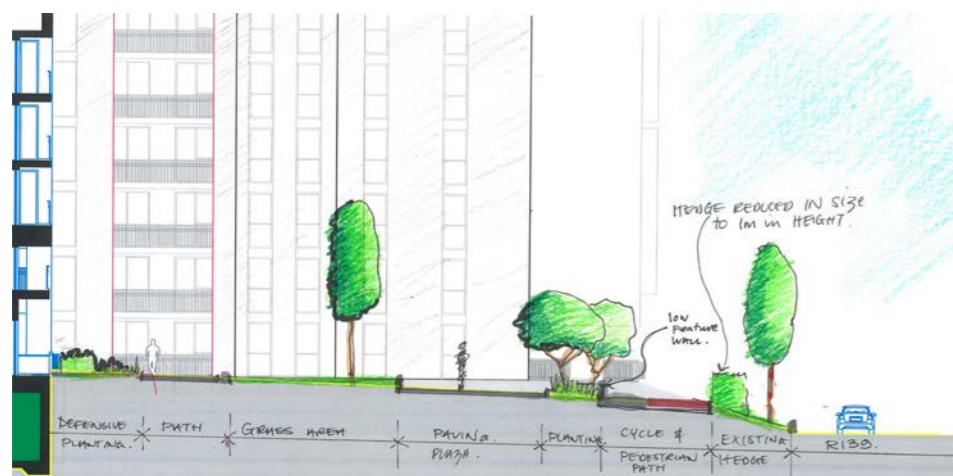
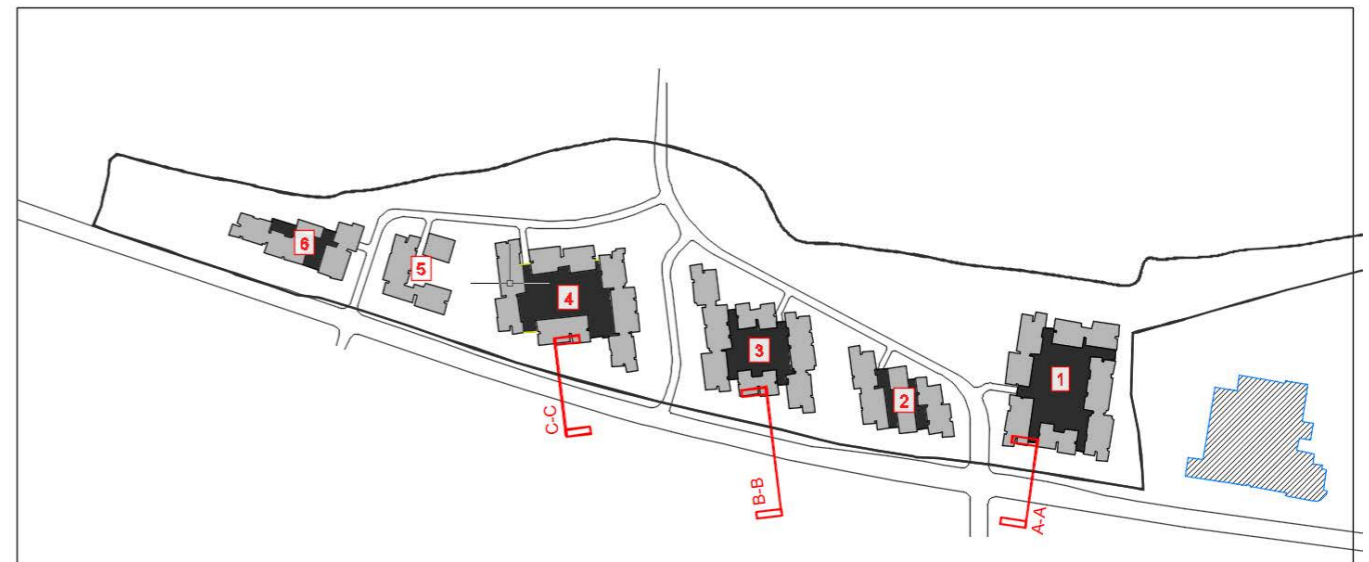
Location Plan







Key Plan



Corner of Block 1 - Looking North East

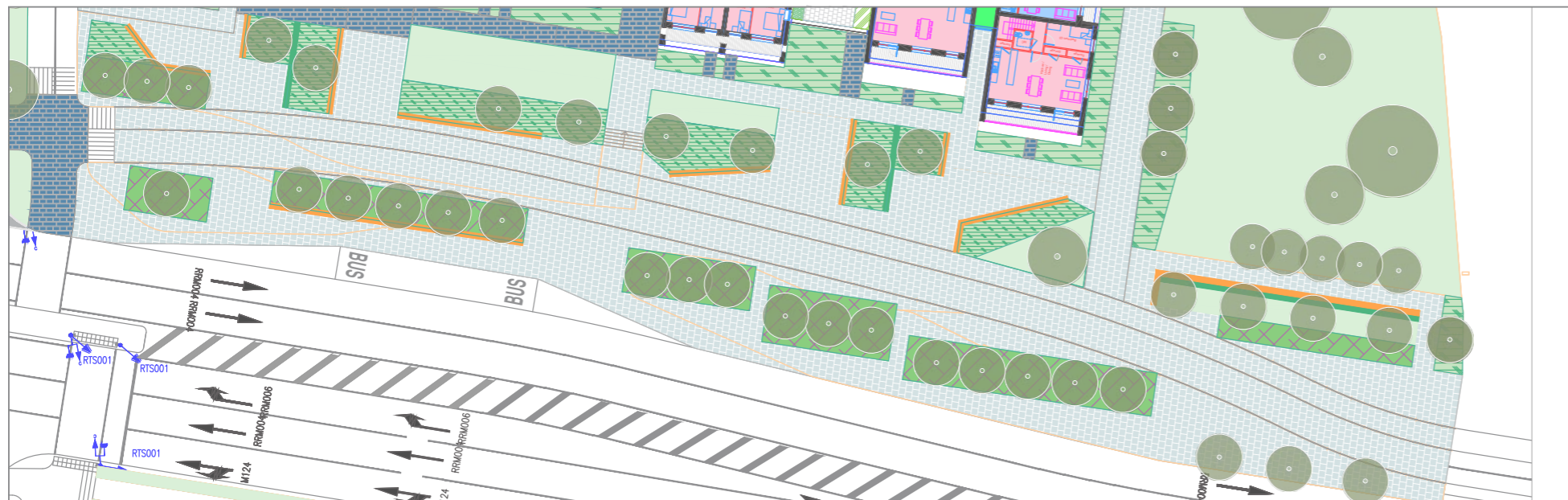
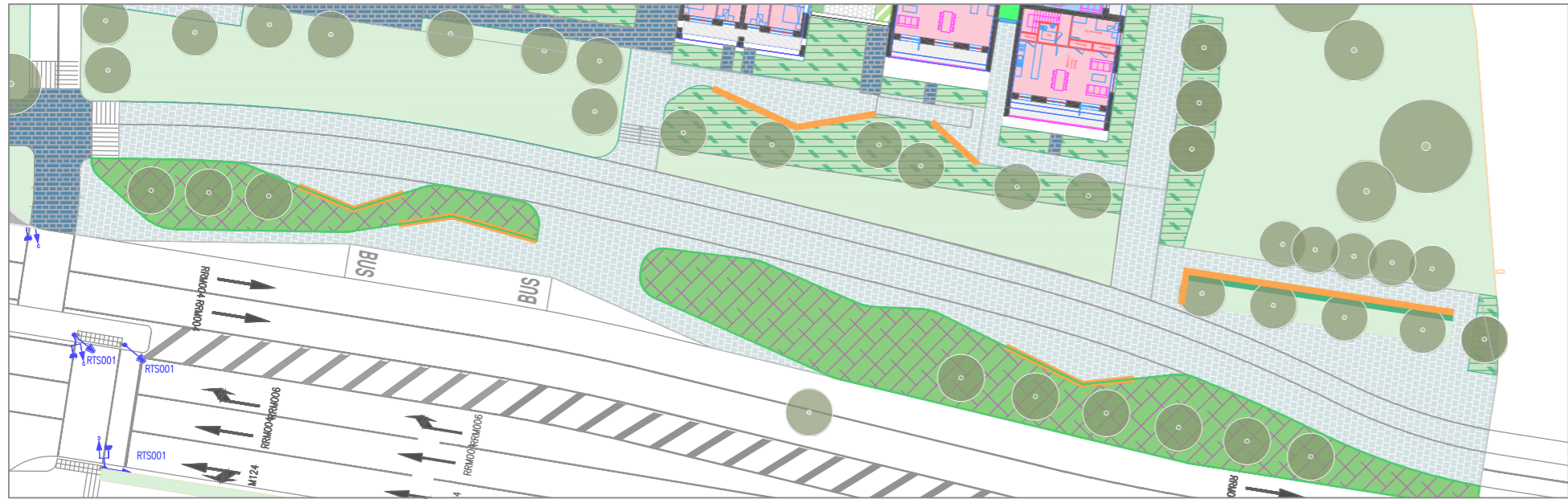


Section C - C - Block 4



## Landscape Detail Areas

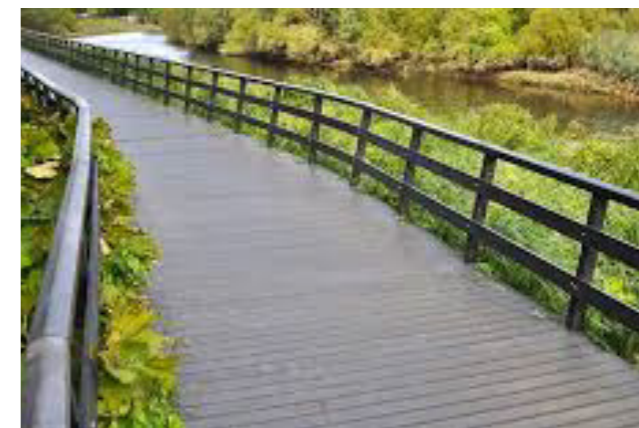
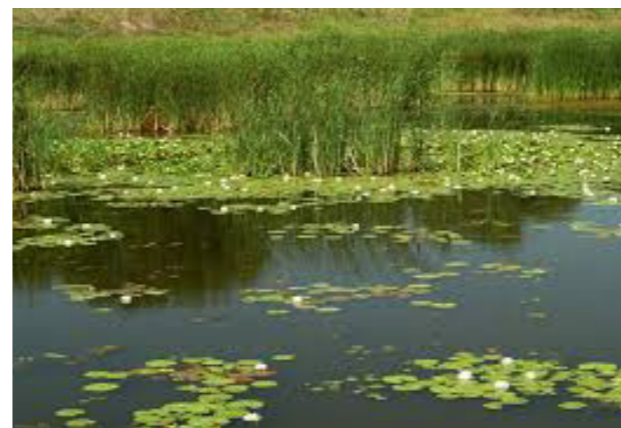
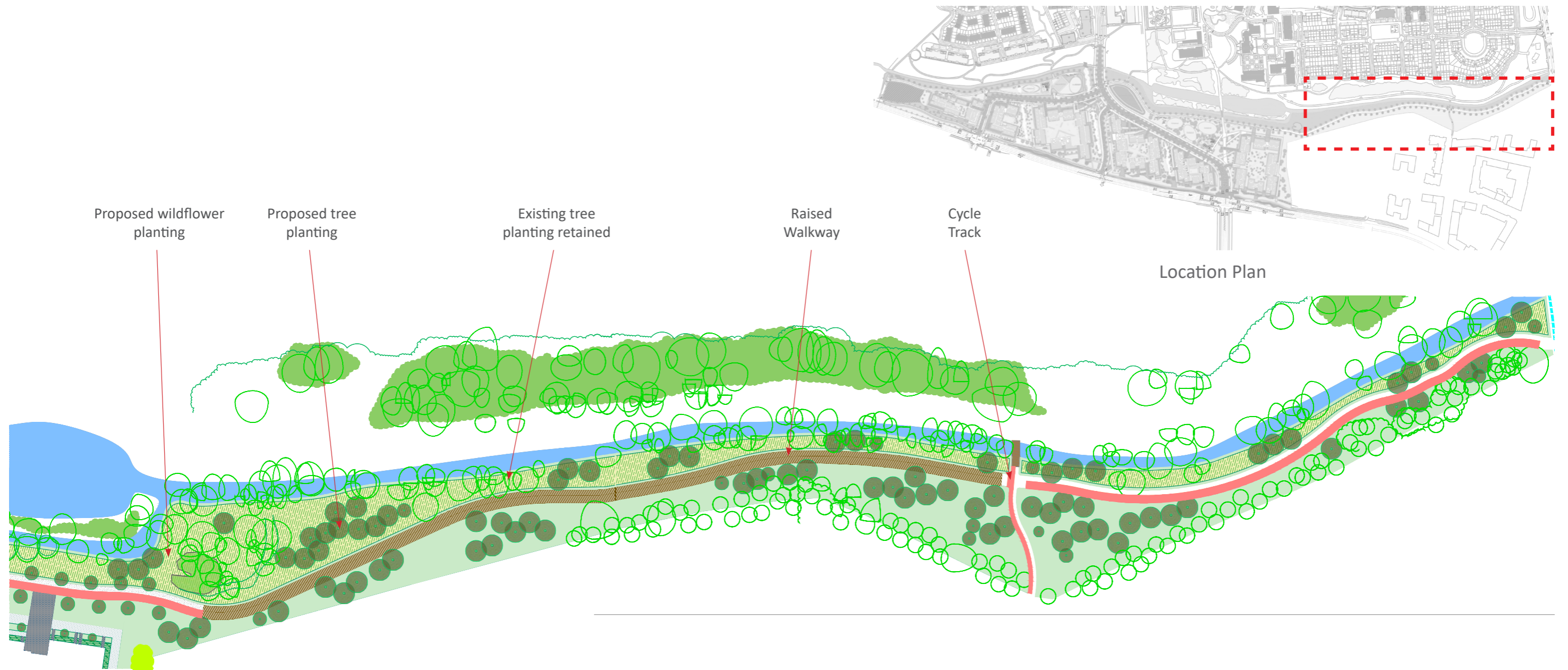
## Street Frontage - Alternative Options





## Landscape Detail Areas

## Wetland Area







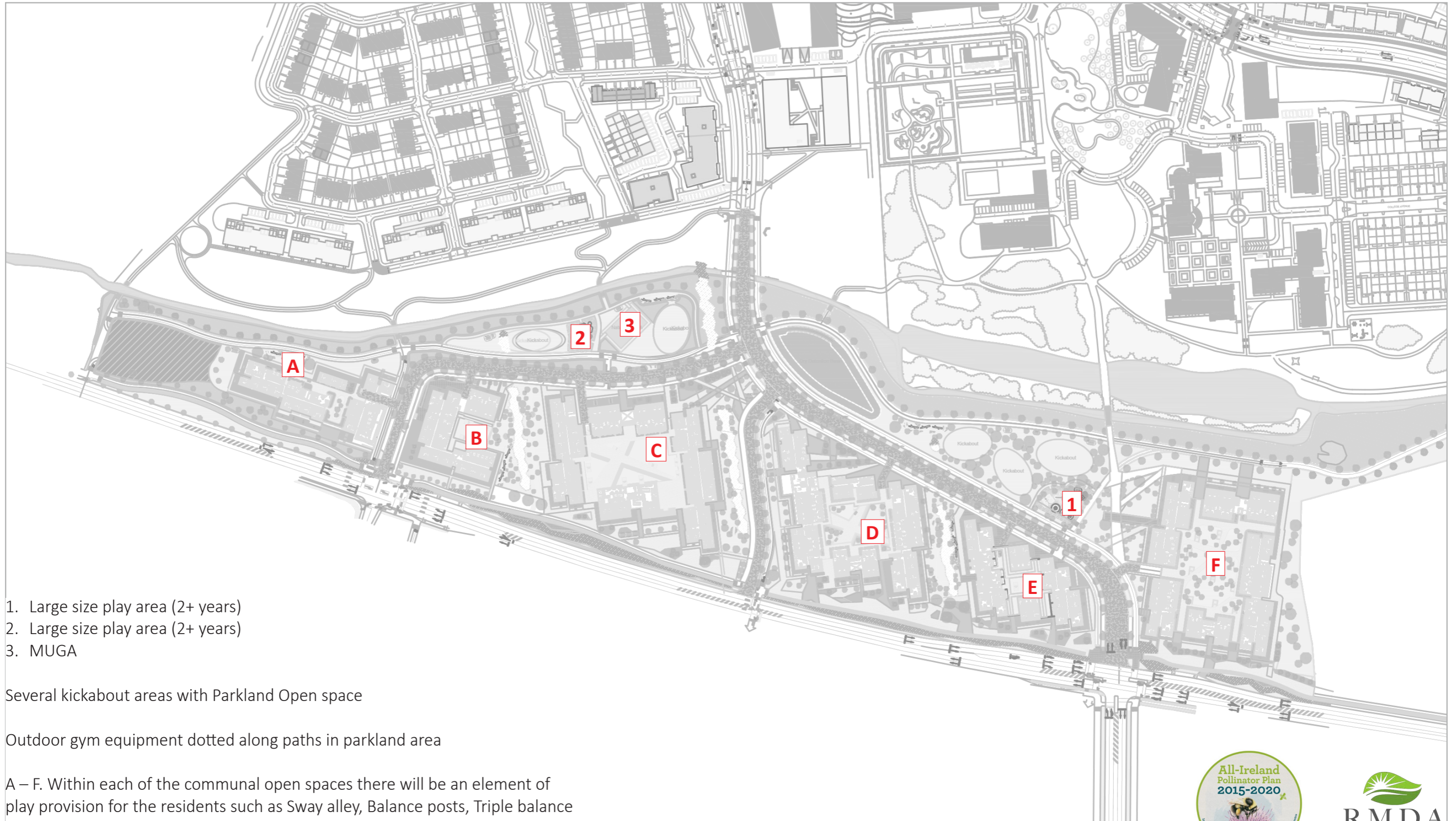
Location Plan





## Play Amenity

## Play/Gym / Calisthenic Equipment



1. Large size play area (2+ years)
2. Large size play area (2+ years)
3. MUGA

Several kickabout areas with Parkland Open space

Outdoor gym equipment dotted along paths in parkland area

A – F. Within each of the communal open spaces there will be an element of play provision for the residents such as Sway alley, Balance posts, Triple balance beam, Crawling pyramid & Stilts.





## Play Amenity

## Structured Space

### Movement

Tree planting and gentle grass mounding are ideal places to hide. These changes in levels are suitable for jumping and running down gentle hills. Some Wooden seating areas could be suitable for climbing. Proposed playground located in open space will accommodate climbing.

### Stimulation of the five senses

Natural elements throughout open space provide quiet places, dark and bright areas that appeals to a child senses. Sensory and textured plants planted throughout the space will appeal to the senses.

### Experiencing change in the natural and built environment. Experiencing the seasons

The contrast between open space and paving provides opportunities to learn and play. Natural elements in open space such as trees will allow Children to experience changes in seasons.

### Social interactions

Meeting points and a number of seating areas will encourage social interaction. Kick about spaces also encourage interaction

### Playing with identity

Role play, Places to hide in the natural elements of open space.

### Experiencing a range of emotions

This bespoke designed open space will appeal and evoke children's emotions.

### Capabilities of play such as tumble ,chase game.

Extensive grass areas throughout the open space are ideal for kickabout and chasing games.

### Varied and interesting physical environment.

A bespoke designed space that has gentle grass mounding thus providing a change in levels. This provides a varied and interesting physical play environment.

### We are proposing a natural playground.

Natural playgrounds help children to develop other beneficial behaviours in addition to physical skills. These behaviours include social skills, cooperation, and the ability to solve problems. In addition, natural playgrounds stimulate a child's imagination and creativity more than a traditional playground More sustainable Blend in with natural environment – slopes etc



Please find drawings with proposed Play space, we have developed the play space as per the Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities. In this we have provided for approximately 100 sq. metres of play space per communal open space.

We are proposing two large public play areas within the parkland. Its intend to provide between 15 - 20 items of play. We have taken the quantum from 4.13 of the Guidelines.

Within small play spaces (about 85 – 100 sq. metres) for the specific needs of toddlers and children up to the age of six, with suitable play equipment, seating for parents/guardians, and within sight of the apartment building, in a scheme that includes 25 or more units with two or more bedrooms; and

Within play areas (200–400 sq. metres) for older children and young teenagers, in a scheme that includes 100 or more apartments with two or more bedrooms.



## Play Amenity

## Communal Play Items & Outdoor Gym Equipment



Play & Stay



Talk & Tumble with Tunnel



Home & Garden



House Slide



Double Toddlers Castle



Pull Up Station Pro



Parallel Bars



Overhead Ladder



Push Up Bars





## LANDSCAPE FEATURES





## Hard Landscape Palette

### Surfaces

#### PAVING PALETTE



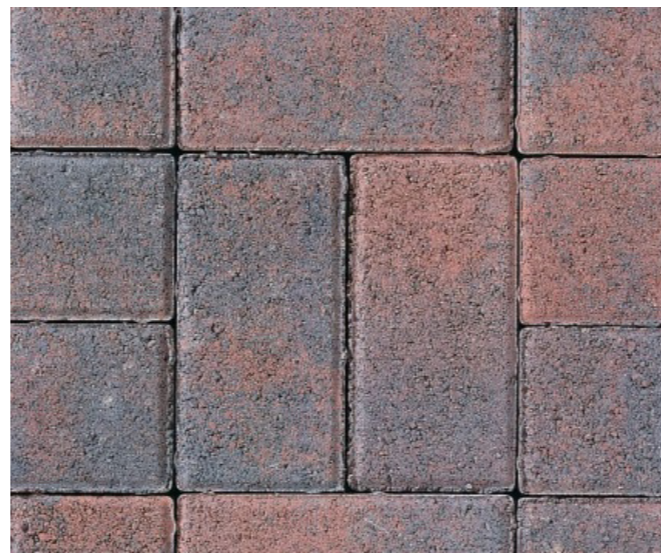
Silver 240 x 160, 160 x 160x 50mm  
(pedestrian) 80mm (traffic)



Silver surface drain



Charcoal 480 x 120, 360 x 120 x 50mm



Permeable Paving for Car Parking  
200x100x60 Rustic with silver border

#### IN-SITU PALETTE



Ballylusk Dust Path  
(pedestrian path)



Coloured tarmac  
(cycle path)



Graphite 300x200x60mm



Brushed Concrete with  
trowel edge finish (streets)



Rocks



Tree Trunk



## Hard Landscape Palette

## Finishes



Wood Seating



Bollards



Litter Bins



Bike Stands



Tree Grille



Planter Walls



## Proposed Planting

### Street and Open Space Trees



*Prunus avium* 'Plena'



*Acer griseum* 'Multi-stem'



*Fagus sylvatica* 'Dawyck'



*Betula jacquemontii*  
multi stem



Proposed Trees Location



*Acer campestre* 'Elsrijk'  
Underplanted with



*Betula pendula*



*Carpinus betulus* 'Frans fontaine'



*Corylus columna*



*Pyrus calleryana*  
'Chanticleer'



*Amelanchier lamerckii*

Note: Planting shown throughout rationale are mature and are not indicative of size that shall be planted first.





# Landscape Features

## Proposed Planting

## Shrubs



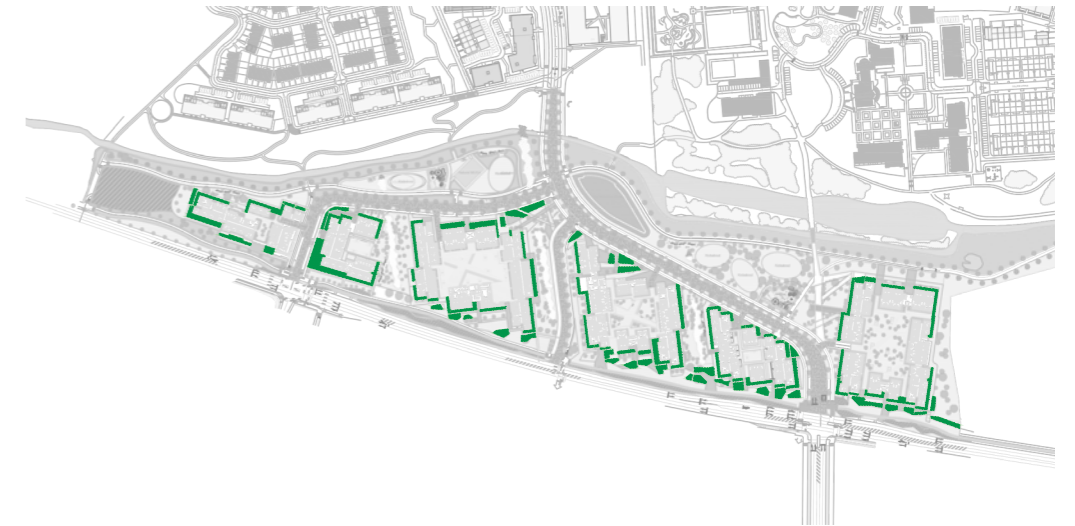
Persicaria affine



Bergenia cordifolia



Libertia grandiflora



Proposed Shrub Location



Prunus 'Otto luyken'



Lavandula angustifolia



Hypericum hidcote



Astellia 'Silver Spear'



Aucuba japonica



Miscanthus sinensis



Agapanthus 'Blue Giant'



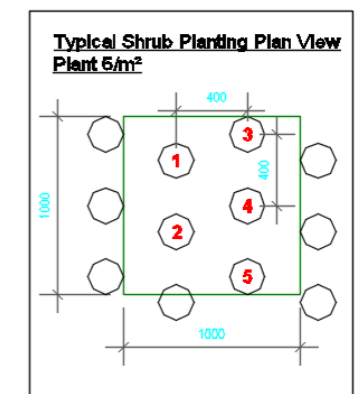
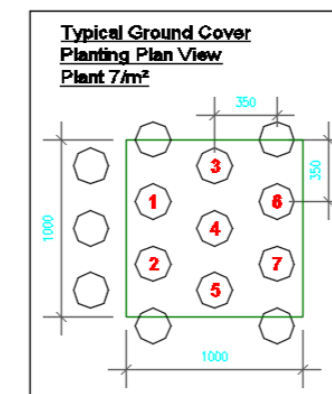
Kniphofia 'Royal standard'



Nerine bowdenii



Sedum spectabile





## Proposed Planting

### Wildflower Mix



Ribwort plantain  
*Plantago lanceolata*



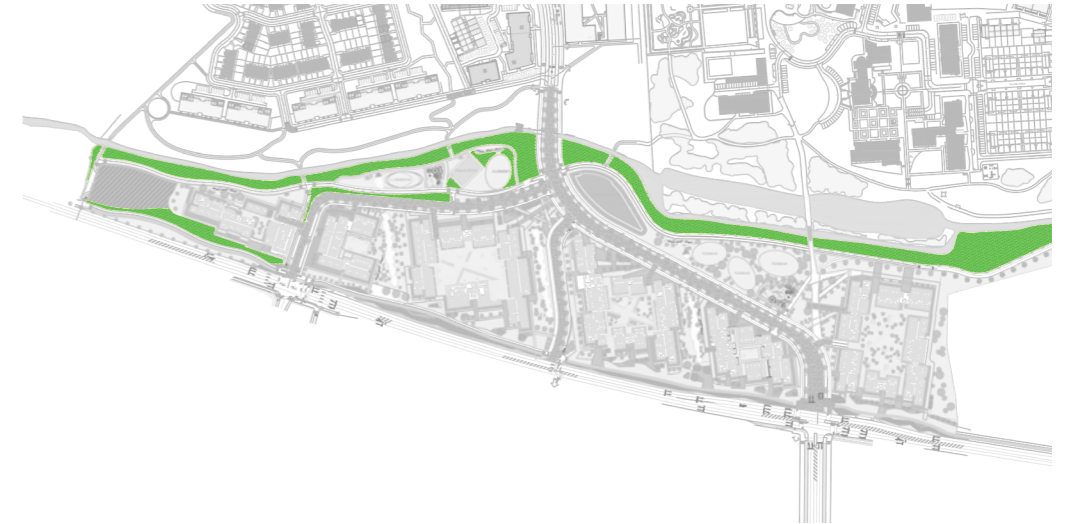
Red clover  
*Trifolium pratense*



Bird's-foot trefoil  
*Lotus corniculatus*



Bulbous buttercup  
*Ranunculus bulbosus*



Proposed Wildflower Location



Meadow buttercup  
*Ranunculus acris*



Lady's-bedstraw  
*Galium verum*



Cowslip  
*Primula veris*



Oxeye daisy  
*Leucanthemum vulgare*



Yellow Rattle  
*Rhinanthus minor*

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.



Common knapweed  
*Centaurea nigra*



Common sorrel  
*Rumex acetosa*



Burnet saxifrage  
*Pimpinella saxifraga*



Autumn hawkbit  
*Leontodon autumnalis*



Rough hawkbit  
*Leontodon hispidus*





## Proposed Planting

## Detention Basin - Wetland Habitat



Marsh bedstraw *Galium palustre*



Greater bird's-foot trefoil *Lotus pedunculatus*



Sneezewort *Achillea ptarmica*



Proposed Wetland Habitat Location



Purple loosestrife *Lythrum salicaria* (tall)



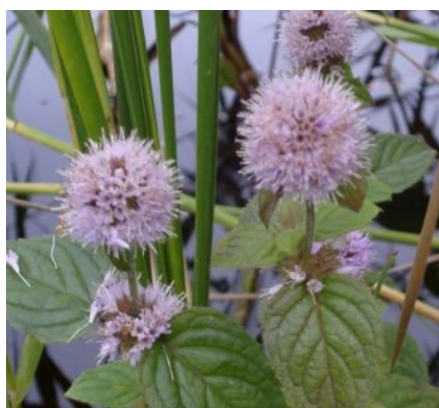
Hemp-agrimony *Eupatorium cannabinum* (tall)



Marsh violet *Viola palustris*



Angelica *Angelica sylvestris* (tall)



Water mint *Mentha aquatica*



Marsh marigold *Caltha palustris*



Ragged robin *Silene (Lychnis) flos-cuculi*



Gypsywort *Lycopus europaeus*



Meadowsweet *Filipendula ulmaria* (tall)



Valerian *Valeriana officinalis* (tall)

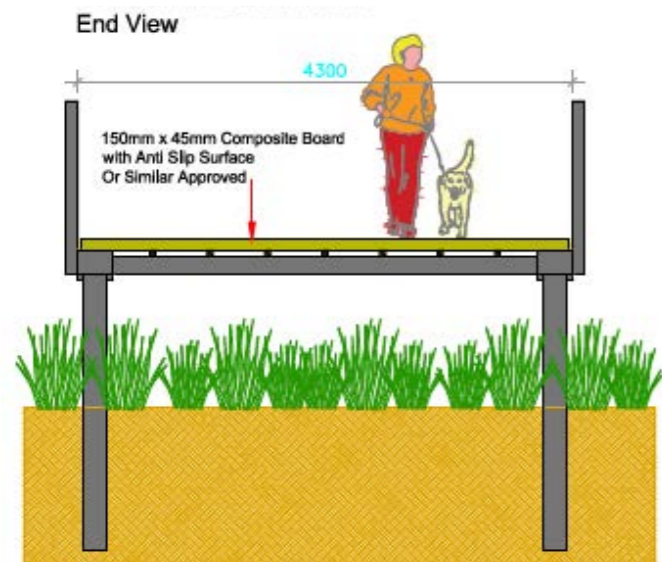


## Landscape Treatments

## Wetland Walkway



Location Plan



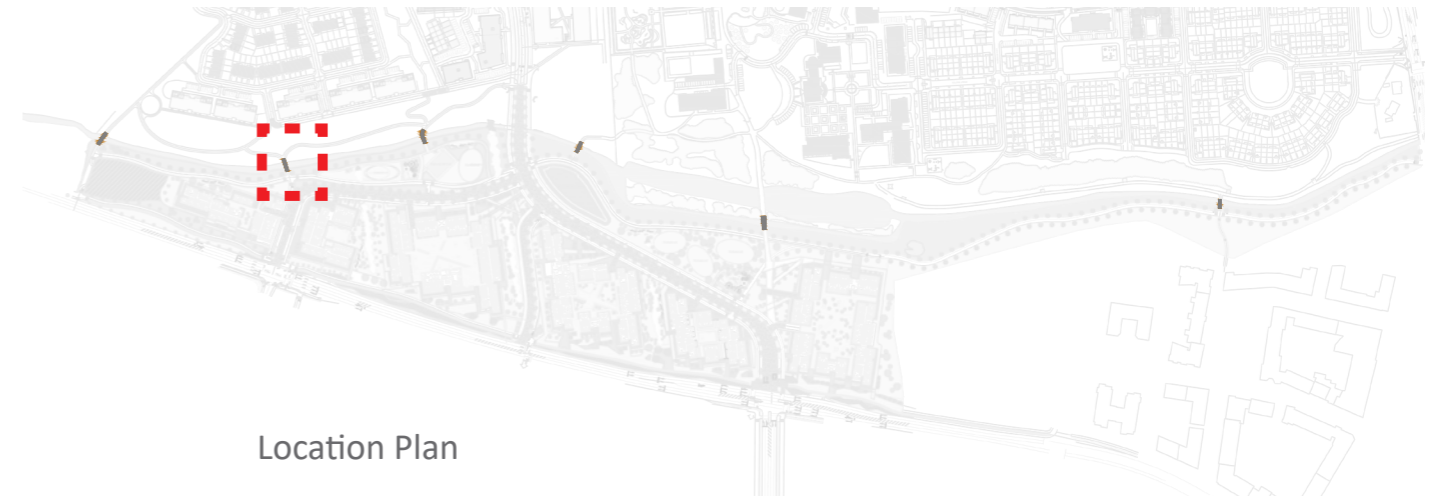
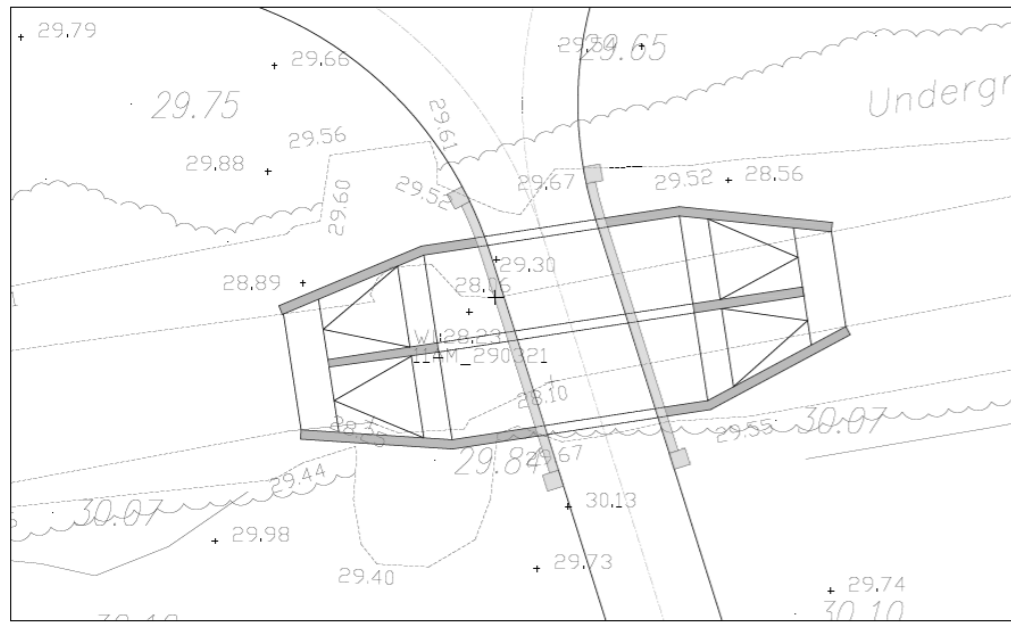
### STEEL REINFORCED BRIDGE SECTION



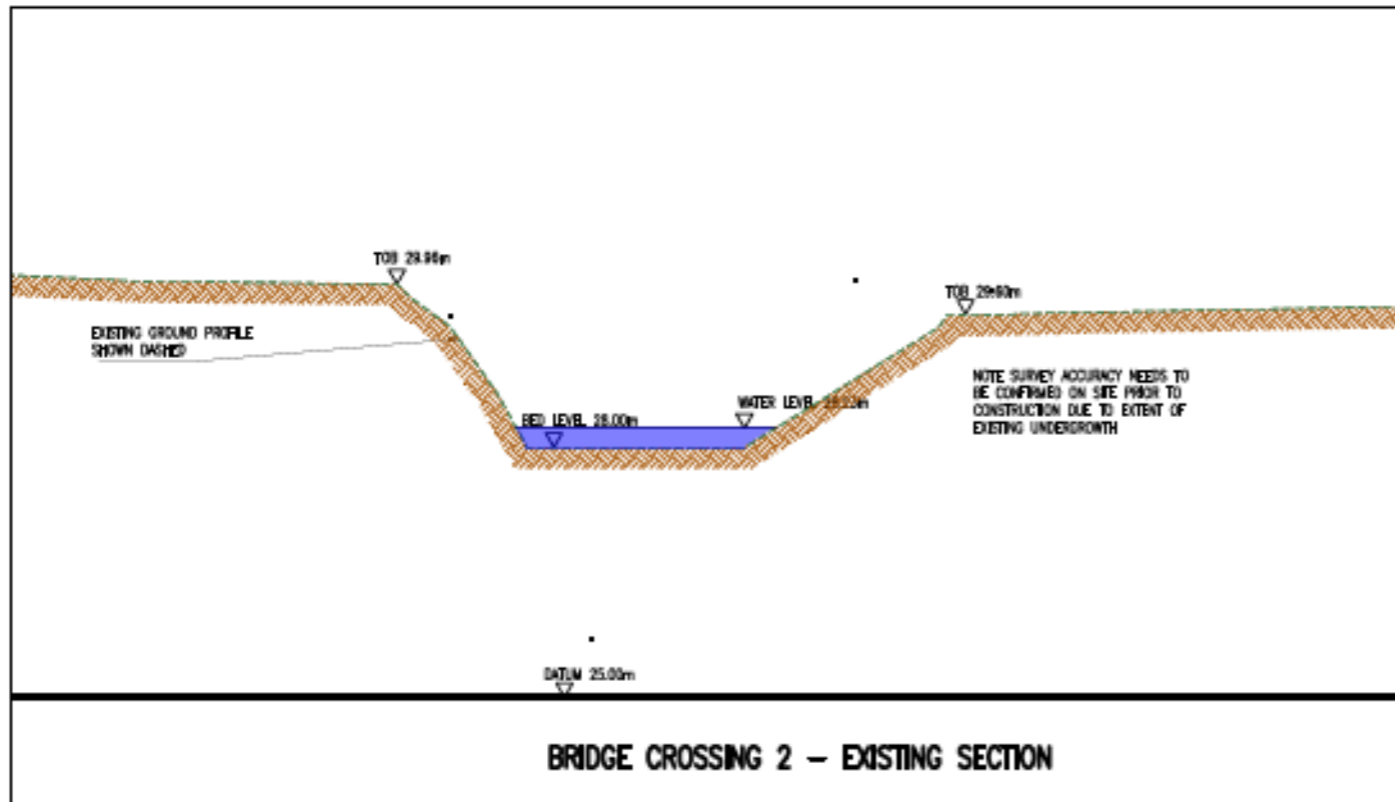
Indicative Images



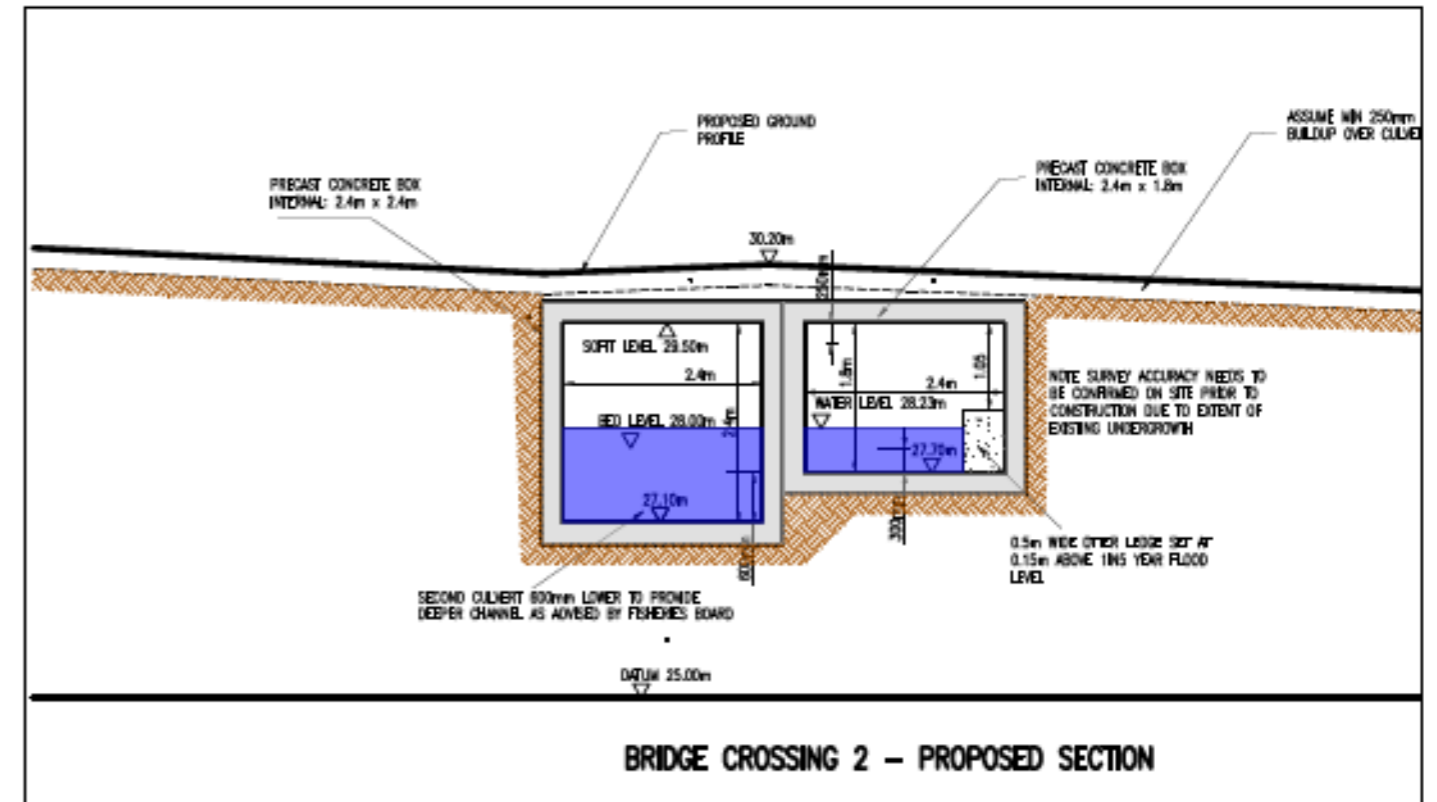




Location Plan



BRIDGE CROSSING 2 – EXISTING SECTION

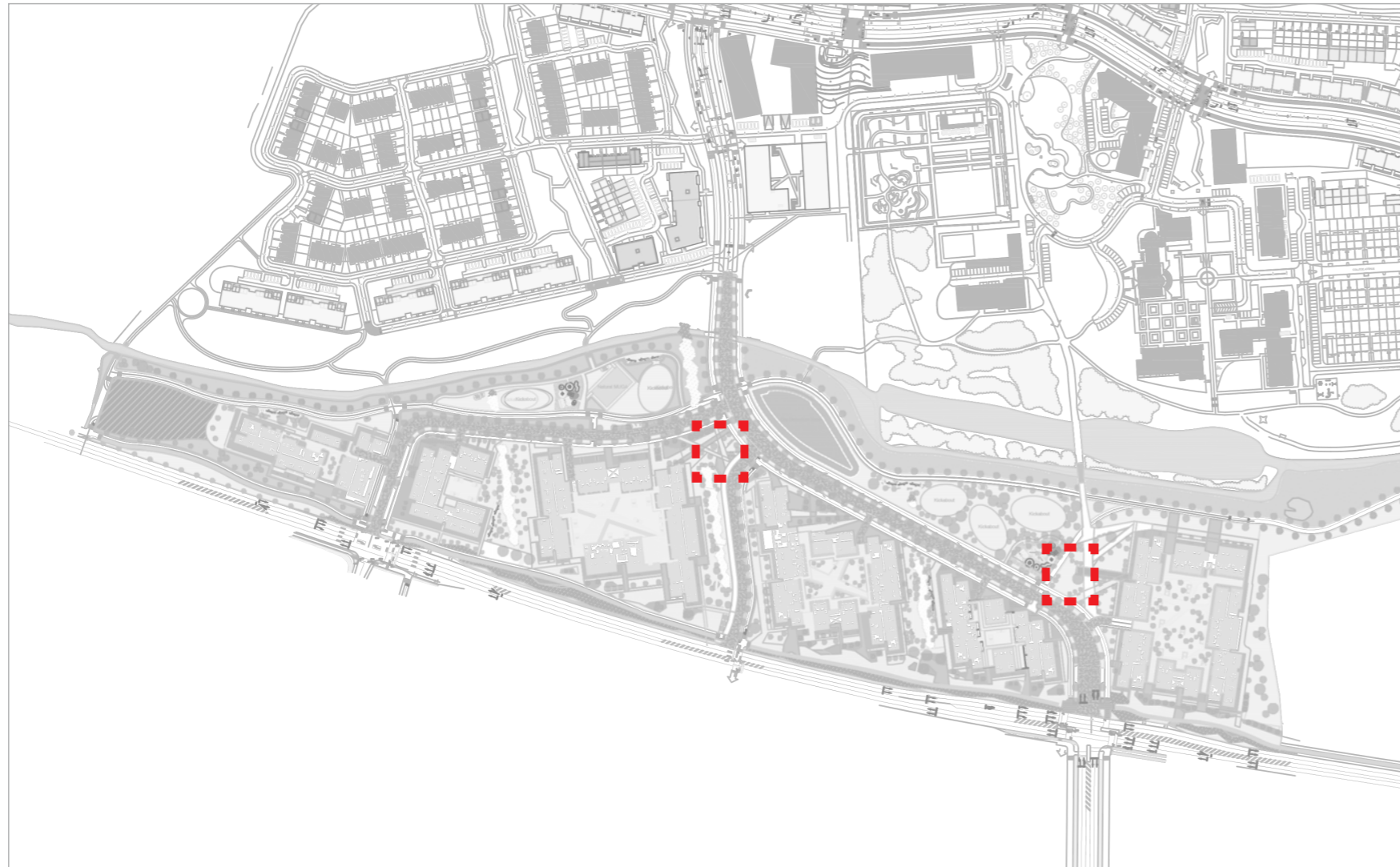


BRIDGE CROSSING 2 – PROPOSED SECTION

Excerpt from Engineer's drawing no. 19-114-P1160 'River Mayne Bridge Crossings Sheet 1'







Suggested Location of Public Art Piece/Sculpture



The art piece is to be viewed by all, both the future residents of the development and the wider public who will make use of the proposed facilities' within the Urban Plaza.



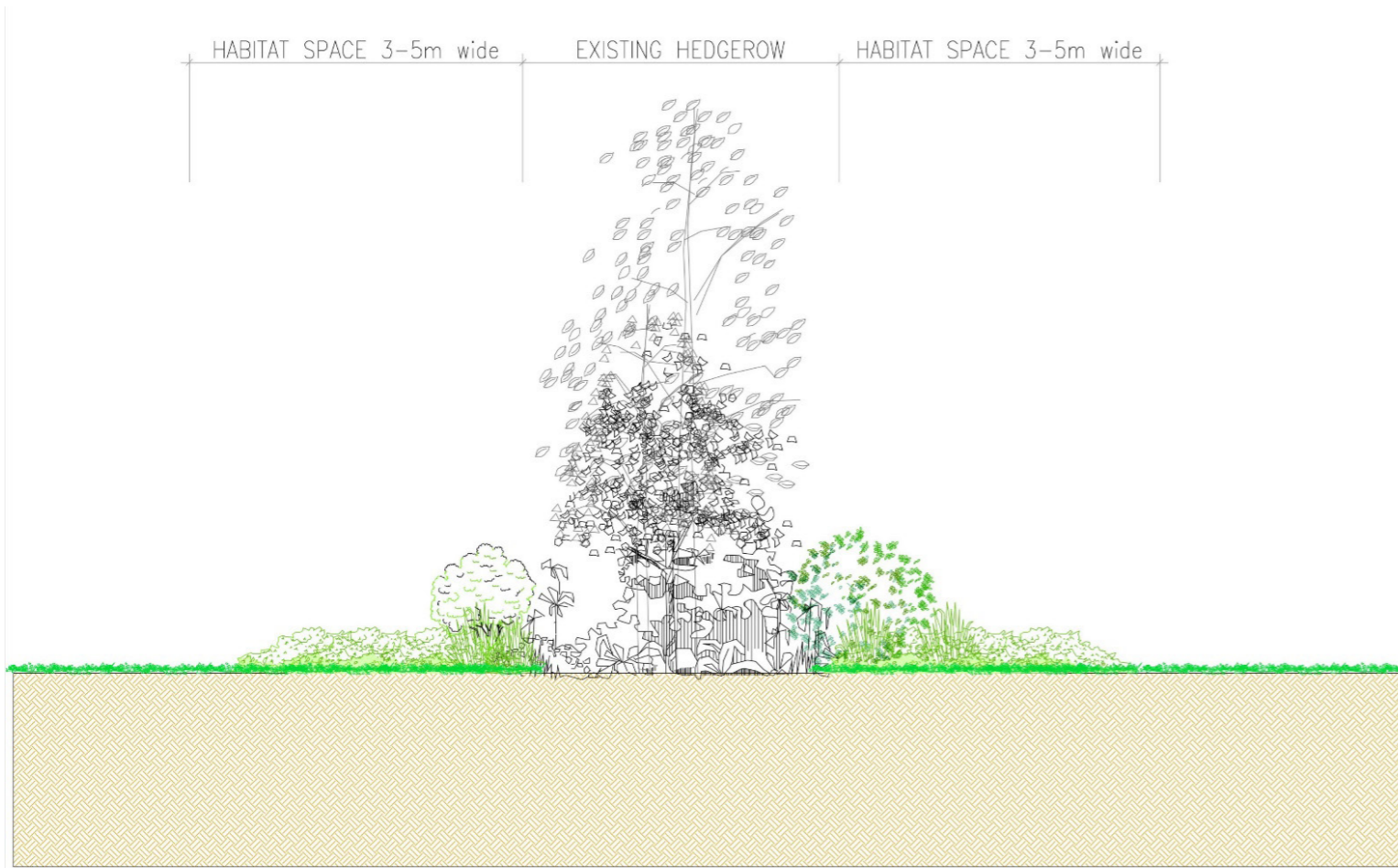


## DETAILED DESIGN





## Drainage - SUDs & Landscape Strategy



Where detention basins are required and located within the central open space areas, the south facing aspects will be terraced while the north facing aspects will be sloped with a 1:6 gradient. Side slopes will receive a Parkland grass mix, requiring a less intensive maintenance regime.

The creation of Habitat spaces along the retained hedgerows for birds, insects, badgers & bats is a vital element to the Green Infrastructure in this development. These areas will not be mown or sprayed so that wildlife can thrive uninterrupted by humans and create a stronger biodiversity within the development.

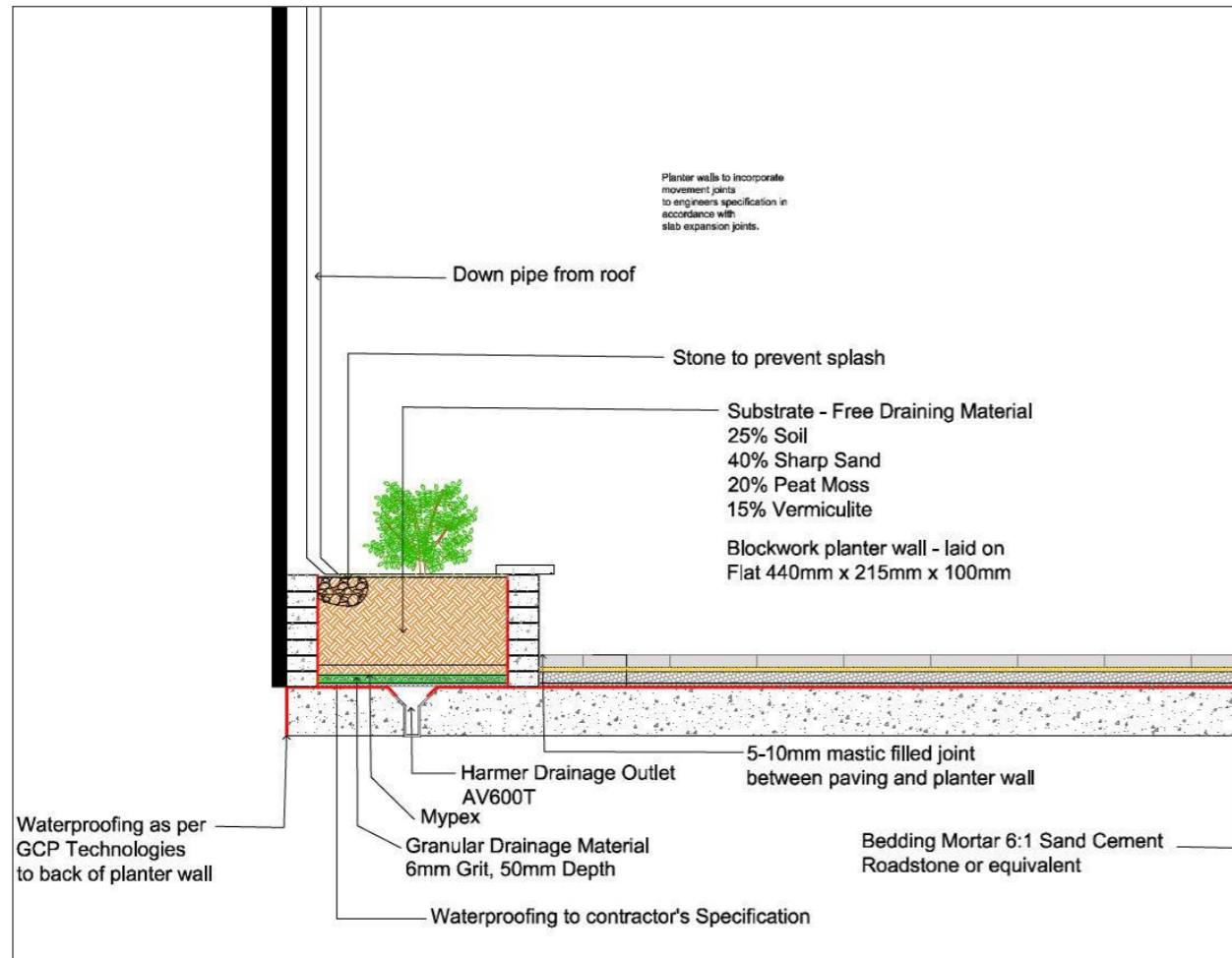
Proposed new integrated SUDs using the landscape network.



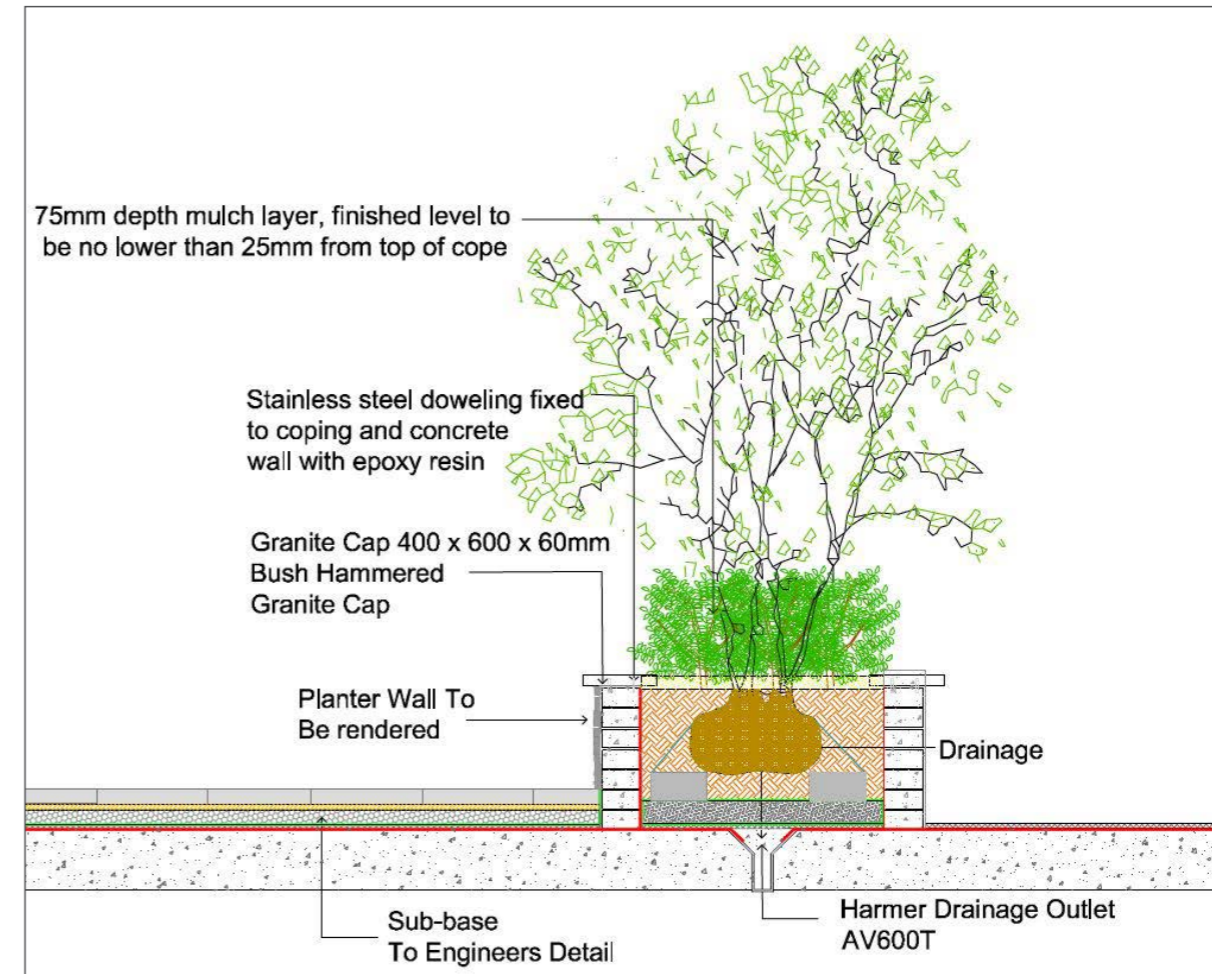


## Drainage

## Rain Garden



## Planter Walls



- Provides treatment at source
- Provides treatment of water, cleaning and reducing amount of hydrocarbons.
- Plants soak up excess water
- Rain gardens to provide treatment of water from roof.



Planter/Vent Walls on Podium & Pedestrian Street





## 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



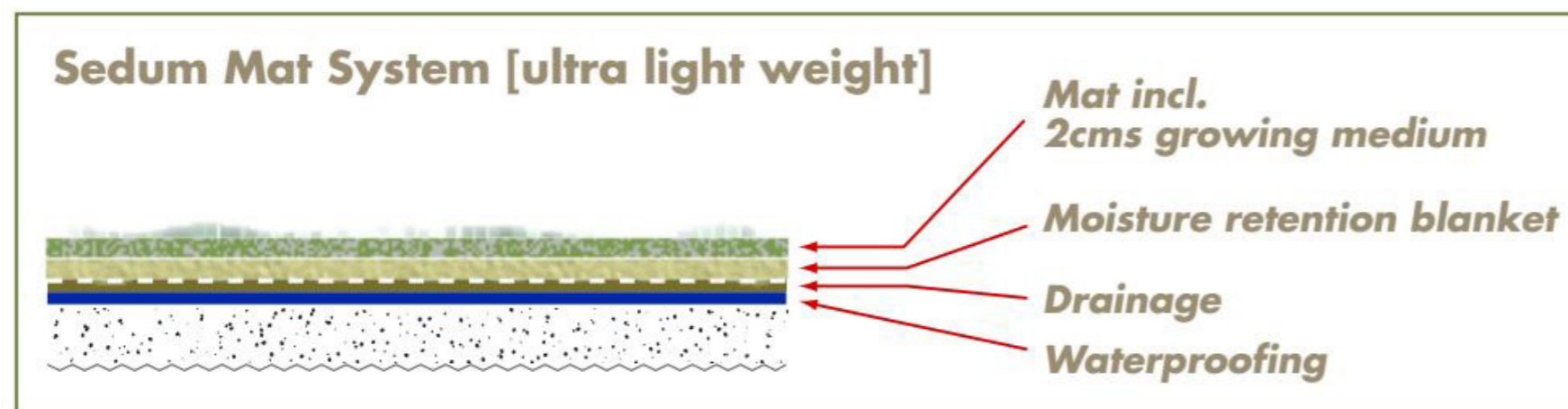
- Extensive Vegetation (Sedums, etc.)
- Growing Media
- Filter Fabric
- Moisture Retention / Drainage Panel
- Insulation
- Root Barrier
- Protection Course and Capillary Break
- Waterproofing Membrane (hot rubberized asphalt depicted)
- Substrate (concrete deck depicted)

Option 1.

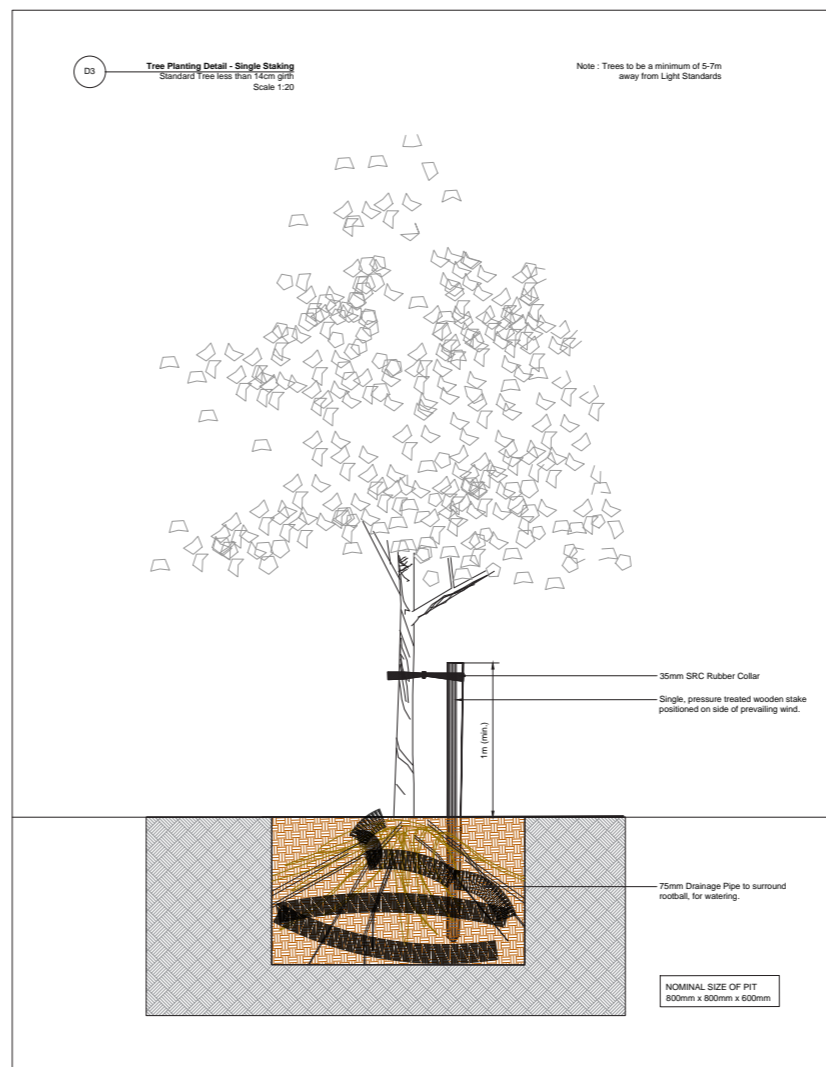
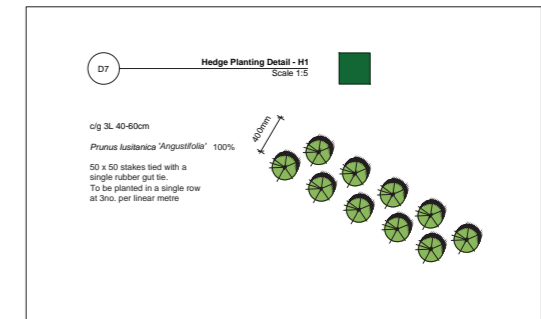
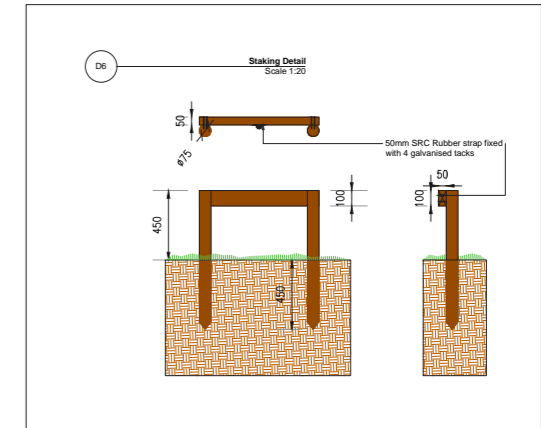
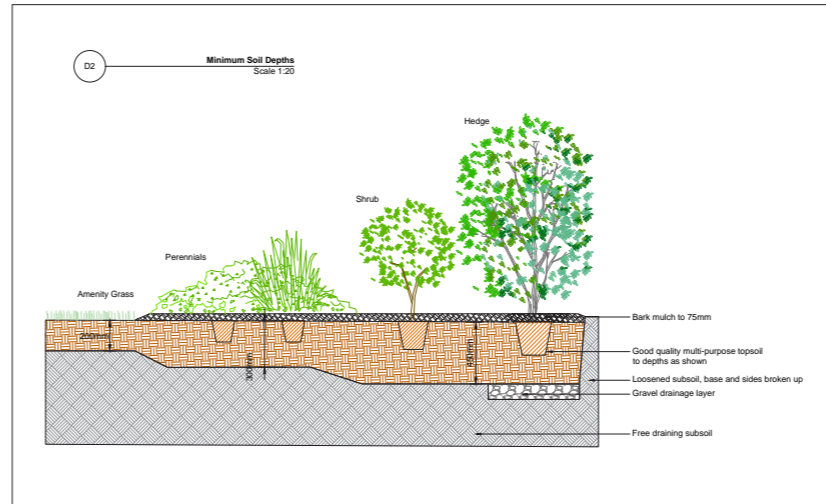
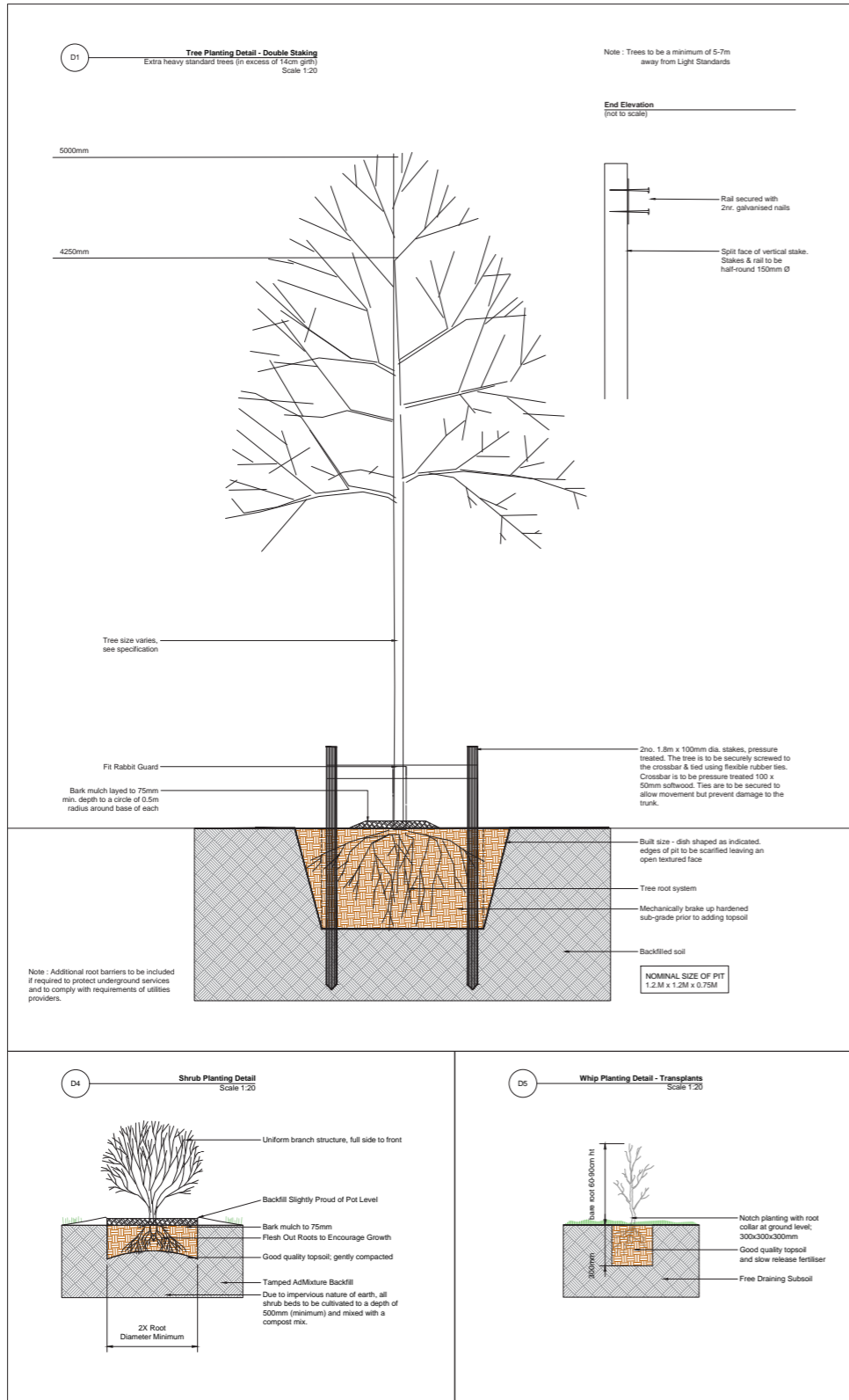


- Extensive Vegetation (Sedums, etc.)
- Growing Media
- Filter Fabric
- Moisture Retention / Drainage Panel
- Insulation
- Root Barrier
- Protection Course and Capillary Break
- Waterproofing Membrane (hot rubberized asphalt depicted)
- Substrate (metal deck with gypsum board depicted)

Option 2.









## CONCLUSION





# Conclusion

We have provided several distinct landscape areas which create a series of coherent and interlinked spaces that promote permeability and promote a varied and interesting landscape that shall provide amenity at all levels for all future residents. The cohesive approach to the landscape will provide a series of landscape spaces which responded to the demands of residential occupants. The Promoters desire is to create a sense of place and a high quality public realm environment. The landscaped spaces will promote permeability and activity, suitable for all age groups that will benefit both the residents of the new scheme and the wider community in the vicinity of Belcamp as a whole.

