

# *Landscape Rationale*

*To be read in conjunction with landscape drawings*

## **Proposed Development St. Edmunds, Palmerstown (SHD)**

Ronan Mac Diarmada & Associates

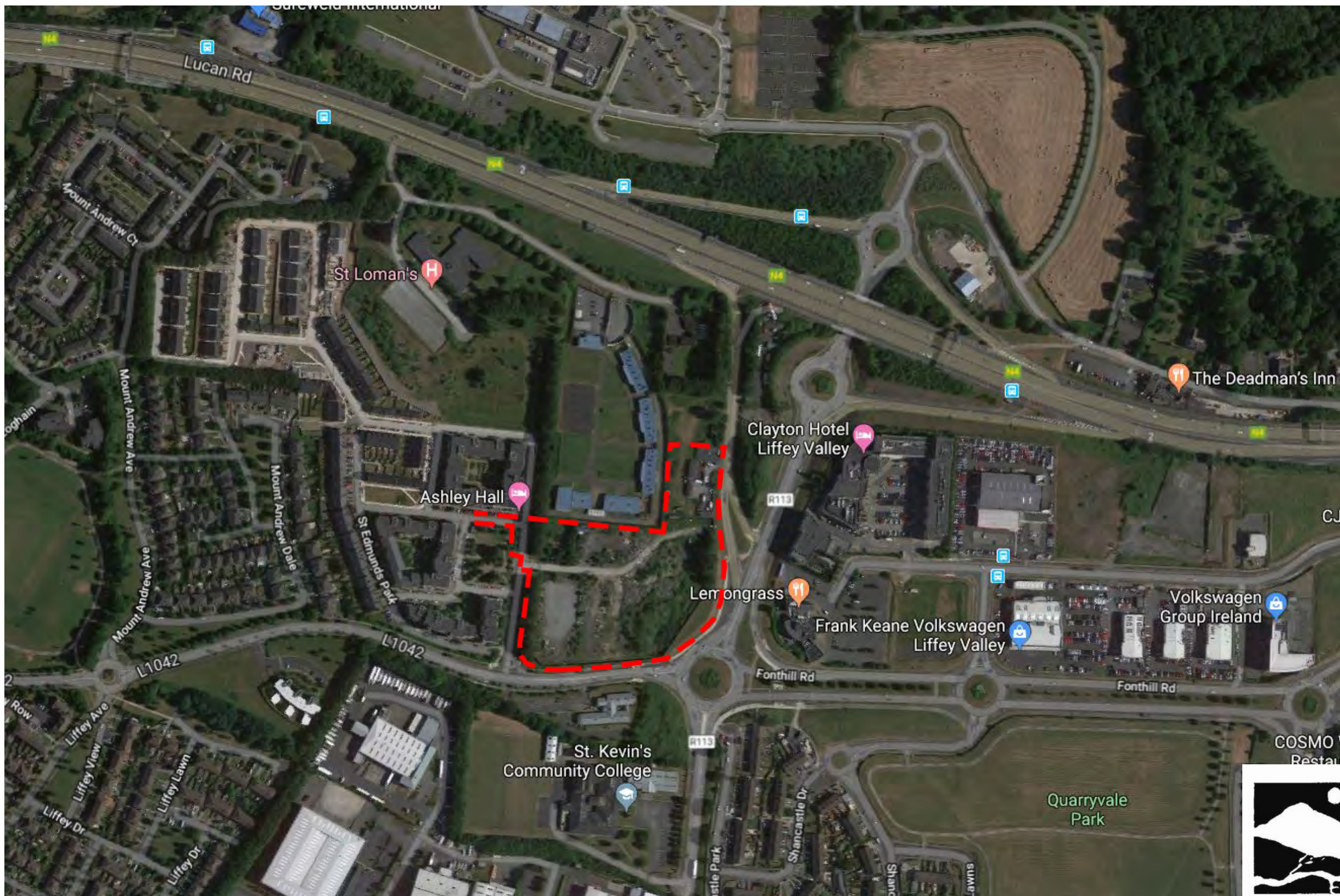
Landscape Architects & Consultants





# St. Edmunds

## Site Context – Surrounding Location





# St. Edmunds

## Landscape Masterplan SHD

(Before : Compliance based on Grant of permission

(Proposed : Initial SHD Layout )



Terracing and  
Signage to SDCC  
lands





# St. Edmunds

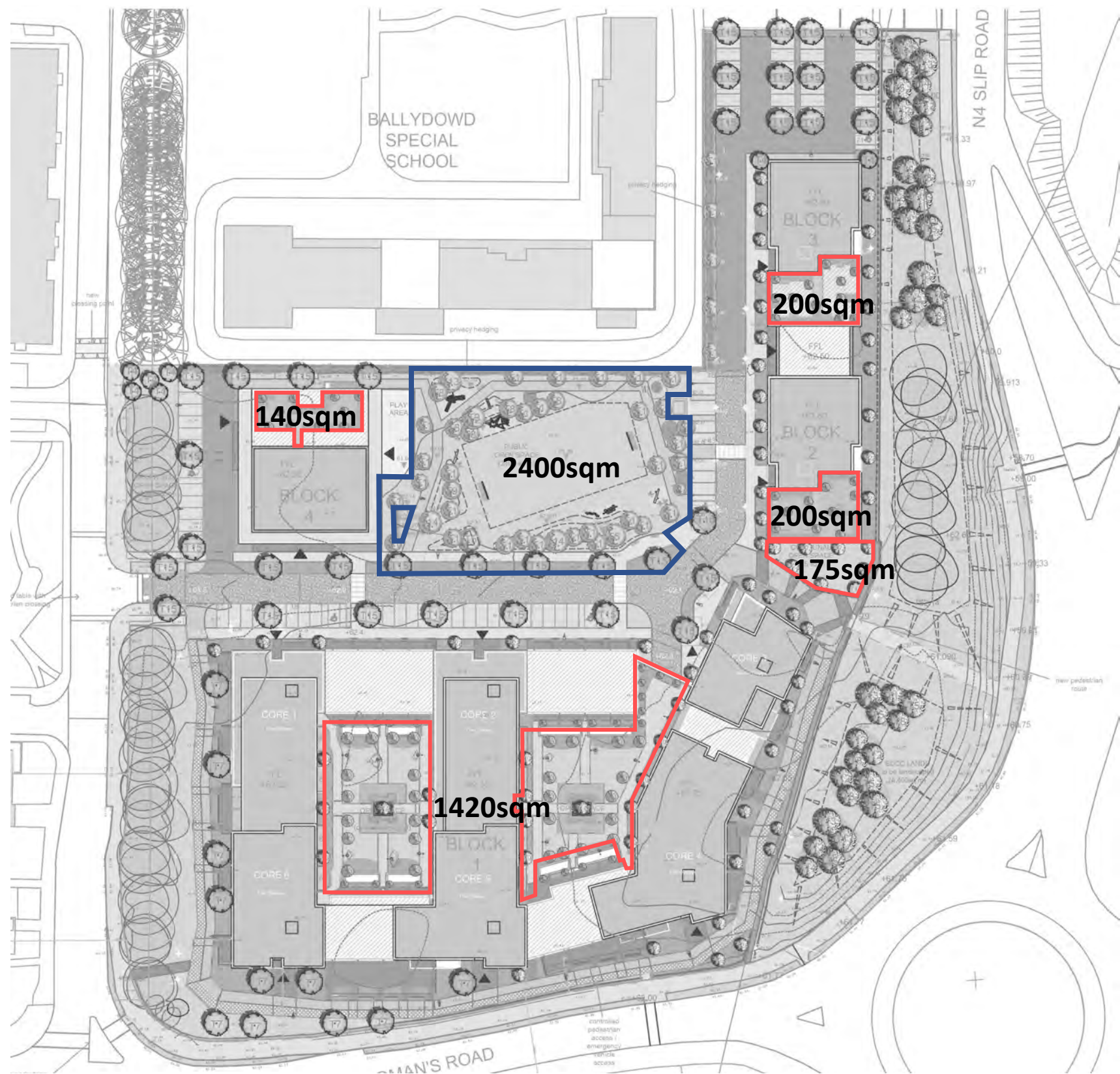
## Landscape Masterplan SHD Proposed





# St. Edmunds

## Open Space & Communal Space



Public Open Space Breakdown as per Architect\*

### PUBLIC OPEN SPACE

GROSS SITE AREA (Including SDCC Lands & OMC lands): 27249sqm - 2.72 ha  
NET SITE AREA: 20688sqm - 2.06 ha

Public Open Space provided: 2400 sqm (11.6%)

Communal Open Space provided:	
BLOCK 1	1420 sqm
BLOCK 2	200 sqm
SHARED BETWEEN BLOCK 1 & 2	175 sqm
BLOCK 3	200 sqm
BLOCK 4	140 sqm

- Communal Open Space
- Open Space

The Quality, functionality and usability of the open space has been developed with the end user as the focal point.

It has been developed to provide a wide range of amenity and activity on the main open space.

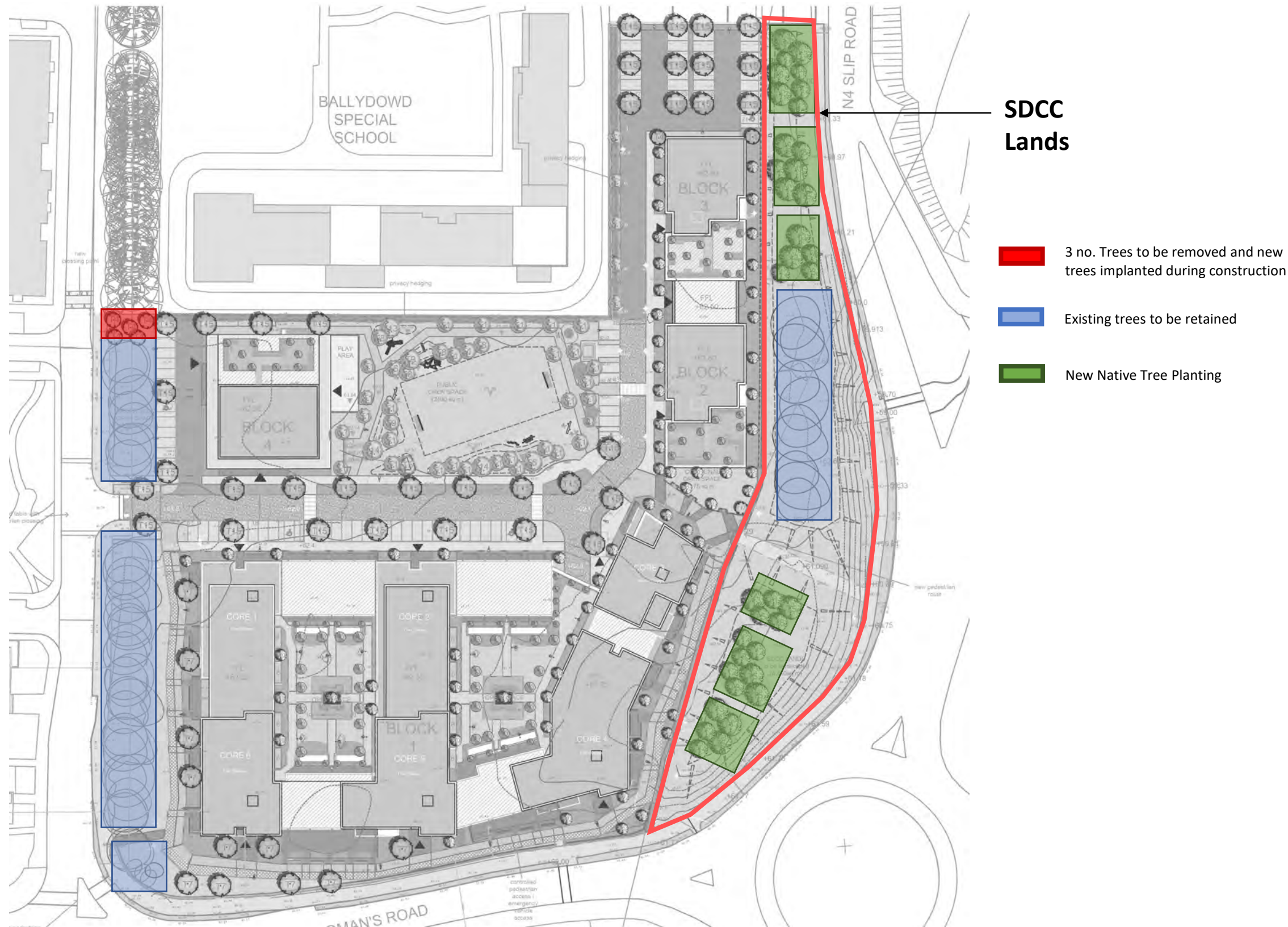
A large kick about with goal posts on either end is proposed, a number of play items for children aged 2 – 12 years old are also included.

A number of natural play items, rocks and tree trunks have been located along with the slopes and mounds proposed for the open space.



# St. Edmunds

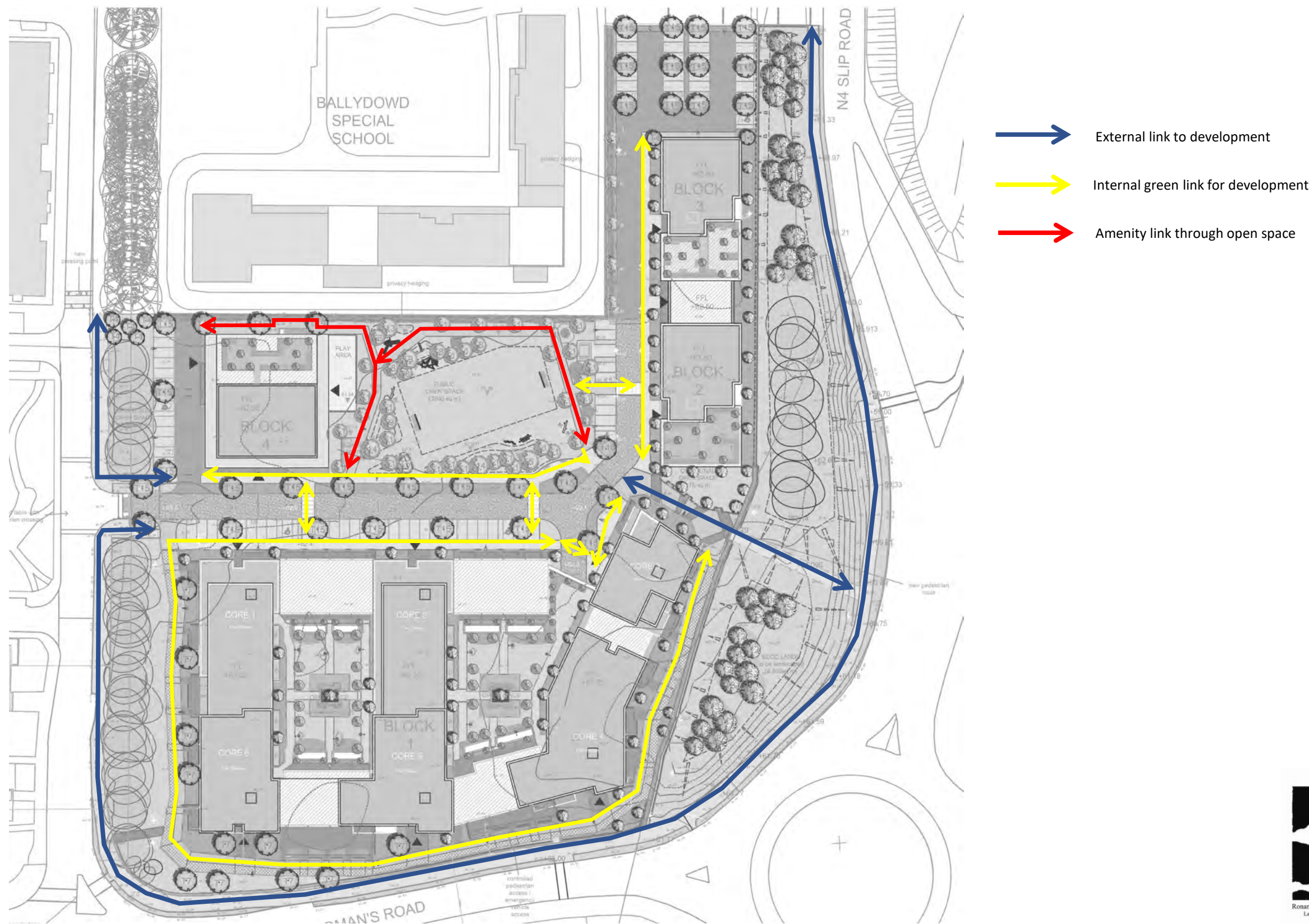
## Existing Trees & Proposed Trees





# St. Edmunds

## Pedestrian Linkage through Development





# St. Edmunds

## Landscape Masterplan

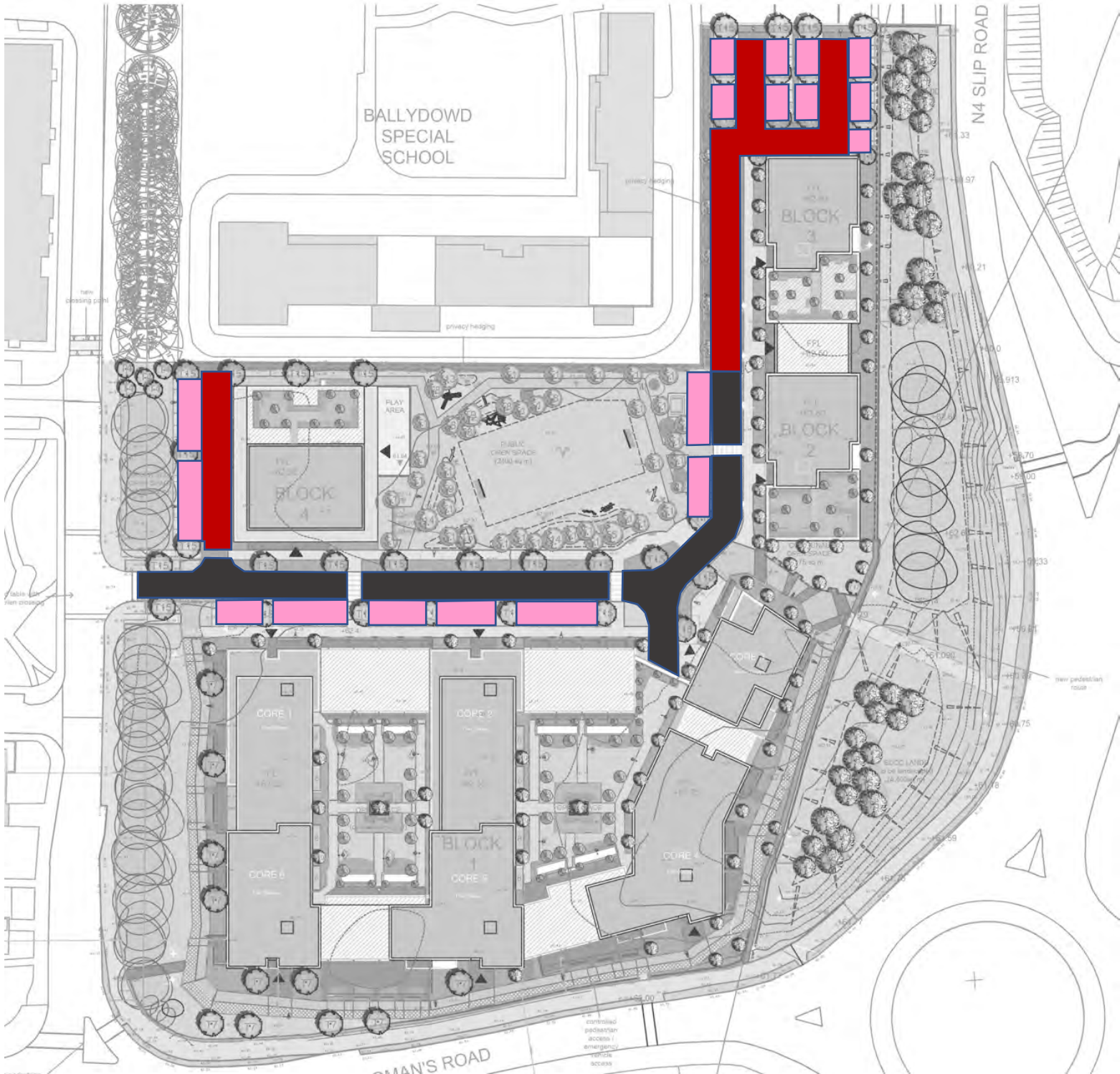
### Road Treatment

- Tarmacadam
- Rustic Paving Block (200x100x80mm)
- Tarmacadam with colour chip

Tarmacadam with colour chip



Rustic Paving Block to on street parking



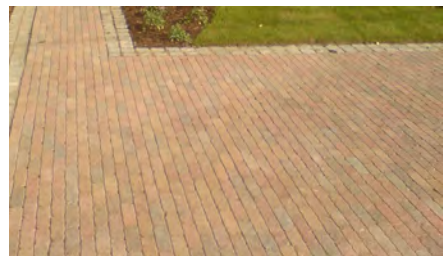


# St. Edmunds

## Landscape Masterplan

### Hardscape Treatment (or similar approved)

- Heather brick paving 200x50mm
- Silver paving 240x160 & 160x160mm
- Natural grey paving 200x100mm
- Recon granite flag paving 600x300mm



Heather paving



Silver paving



Natural Grey paving



Recon granite paving



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# St. Edmunds

## Landscape Masterplan

Path Treatment (or similar approved)

- Resin Bond path
- Concrete path
- Grasscrete – planted with Armeria maritima



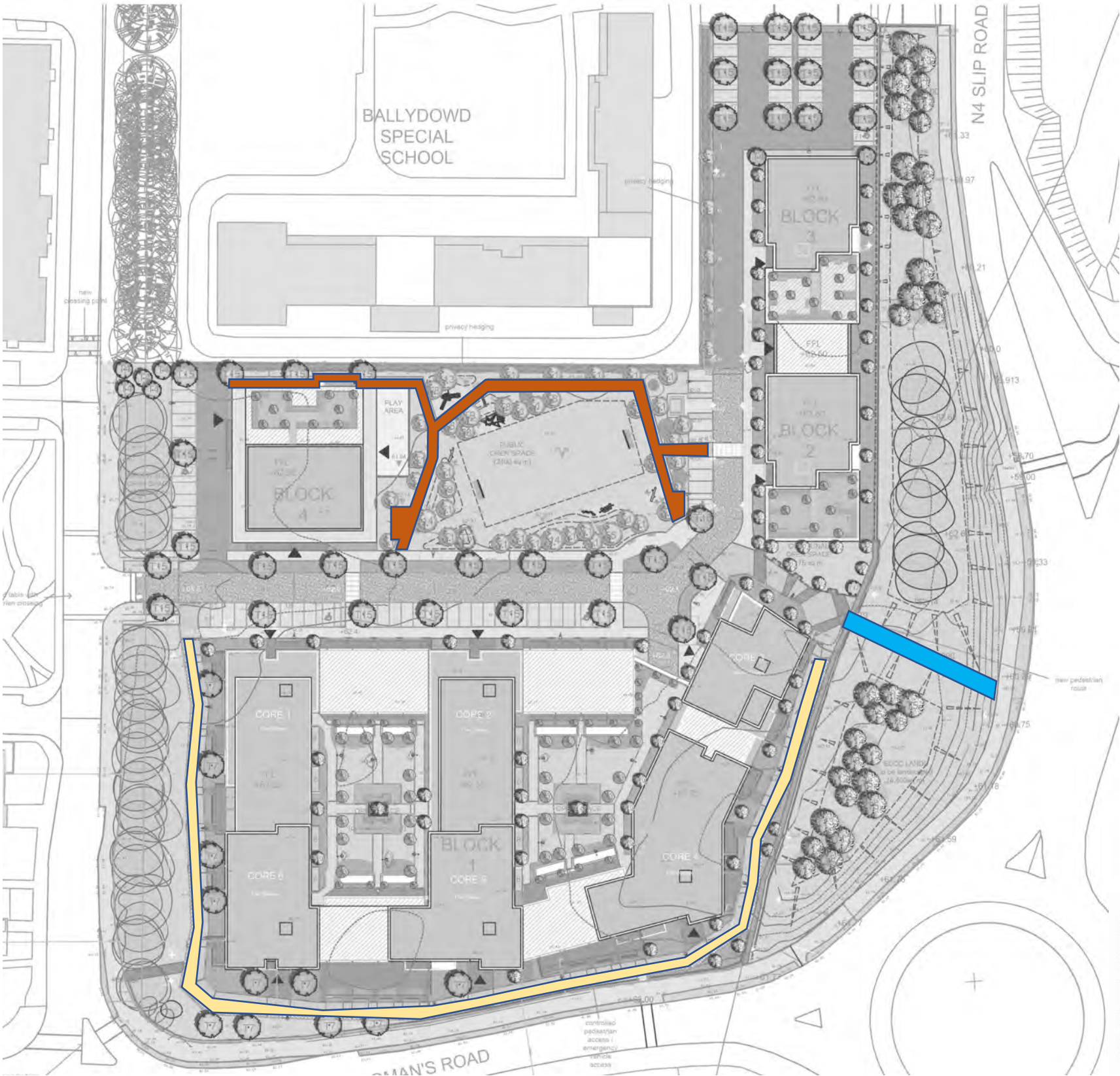
Beige Tarmac



Concrete Path to Open Space



Grasscrete planted with Armeria maritima





# St. Edmunds

## Proposed Design for Public Open space (Compliance & SHD)

(Before : Compliance Layout)



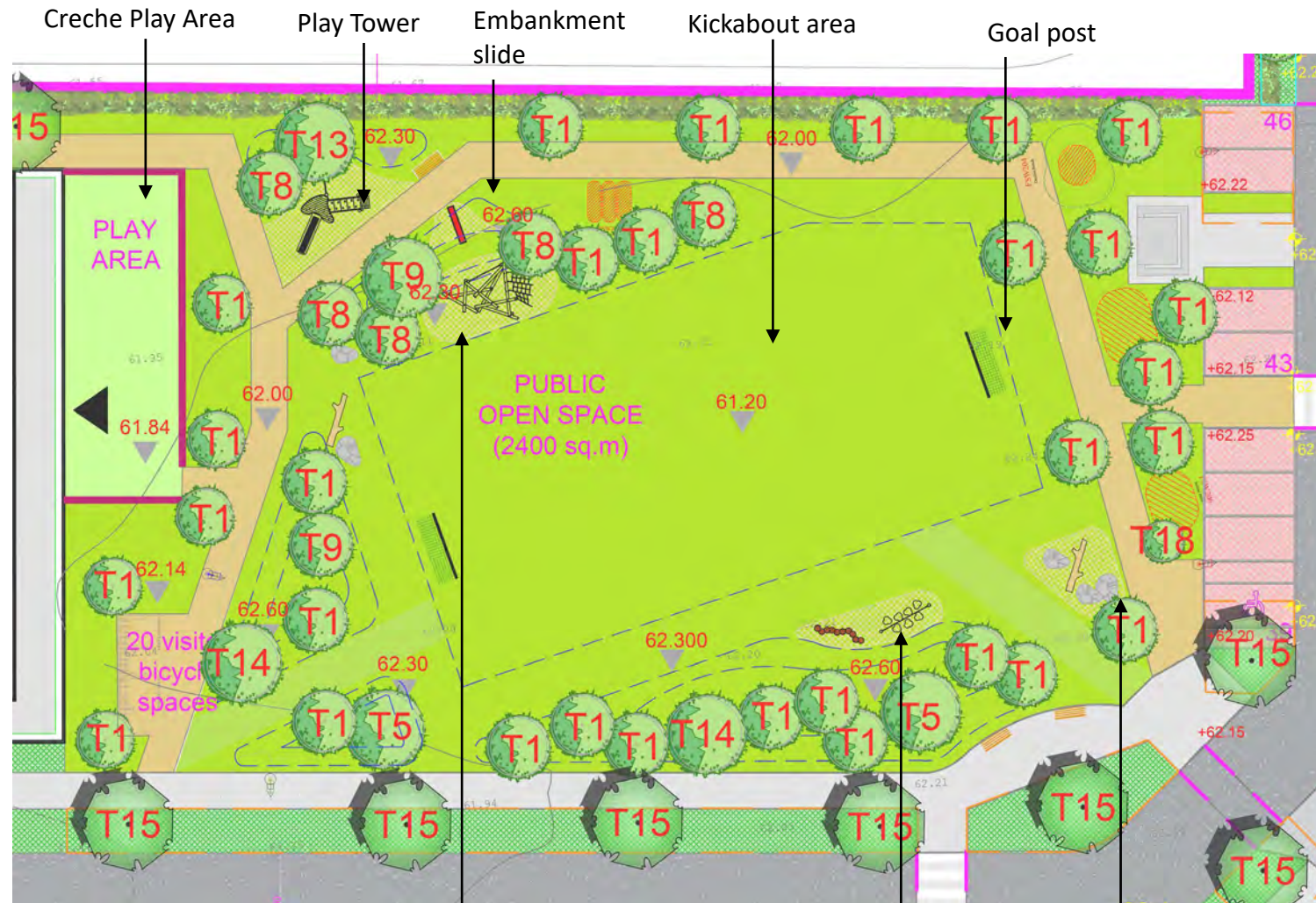
(Proposed : Initial SHD Layout )





# St. Edmunds

## Proposed Design for Public Open space

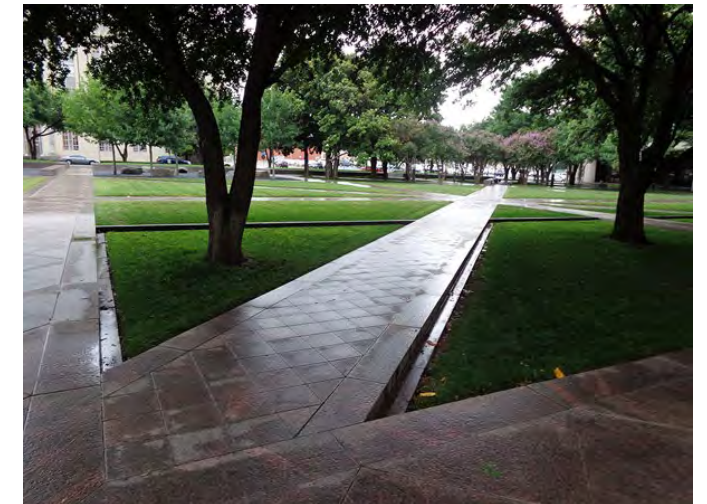
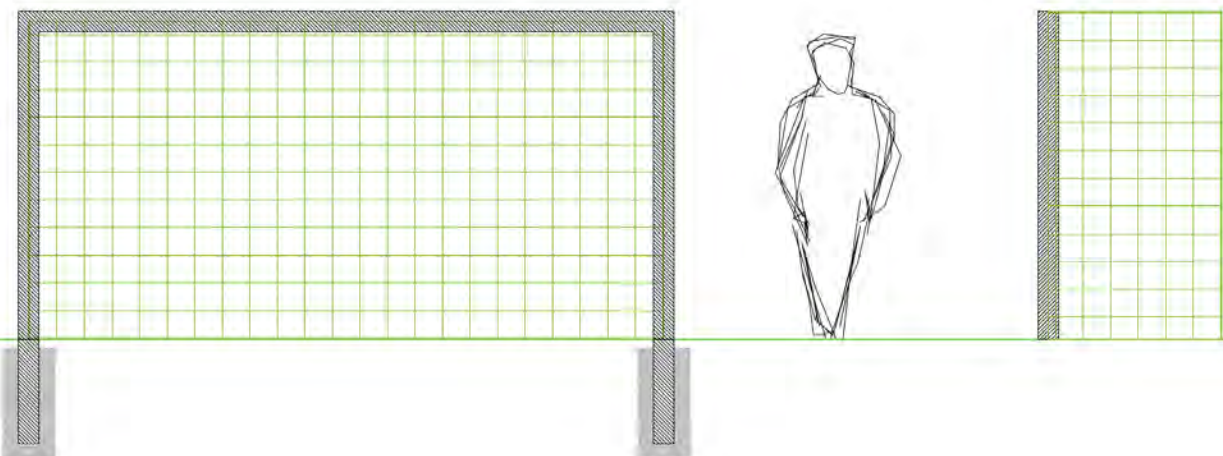


Pick up sticks

Balancing rope and Stepping logs

Rocks

**Soccer Goal Posts Spec:**  
 Manufactured from wood, metal or approved material.  
 Distance between the posts is 3.54M.  
 Distance from lower edge of the crossbar to the ground is 1.77M.  
 Goalposts & the crossbar must be white & do not exceed 120cmØ.  
 Nets may be Provided.





# St. Edmunds

## Children's play items

### Embankment Slide

Age range :3+

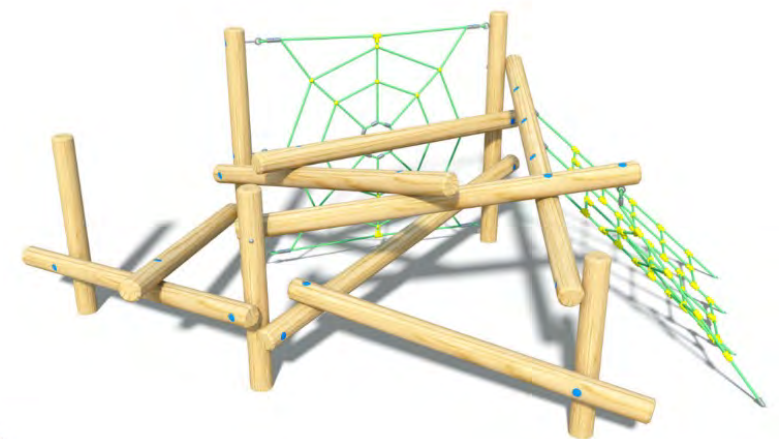


The Central Open Space is the location of both formal and informal play elements. The mounding combined with both tree planting and play items provides a unique source of adventure for the children. There is also a kickabout space for older children to utilise.

### Play Tower and slide Age range :3+



### Pick up sticks Age range :6+



### Stepping Logs Age range :3+



### Waterlilies balancing post Age range :2+



### Play Item Specification

Natural Play items taken from the Kompan, Buglo, Wicksteed Range or similar Approved.

All Products are manufactured from Robinia wood. Robinia is a type of Hardwood Timber with unique properties of strength and durability.

Robinia wood does not rot or give the user splinters and is also vandal resistant.

It is perfect for a natural play scheme.

Each Play Item has a fall zone protected with Safagrass Matting or TigerMulch.

Safagrass is an environmentally friendly, non-slip, impact absorbing safety surface.

Matting products are available in various sizes and critical fall heights (CFH).

Matting is secured with Pegs and Ties.

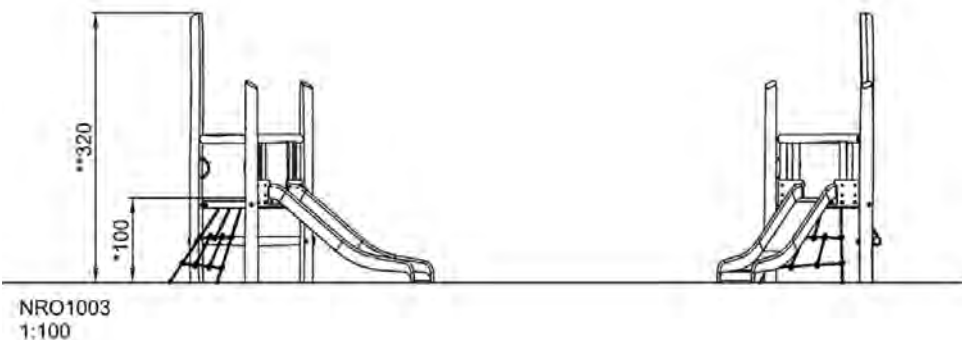
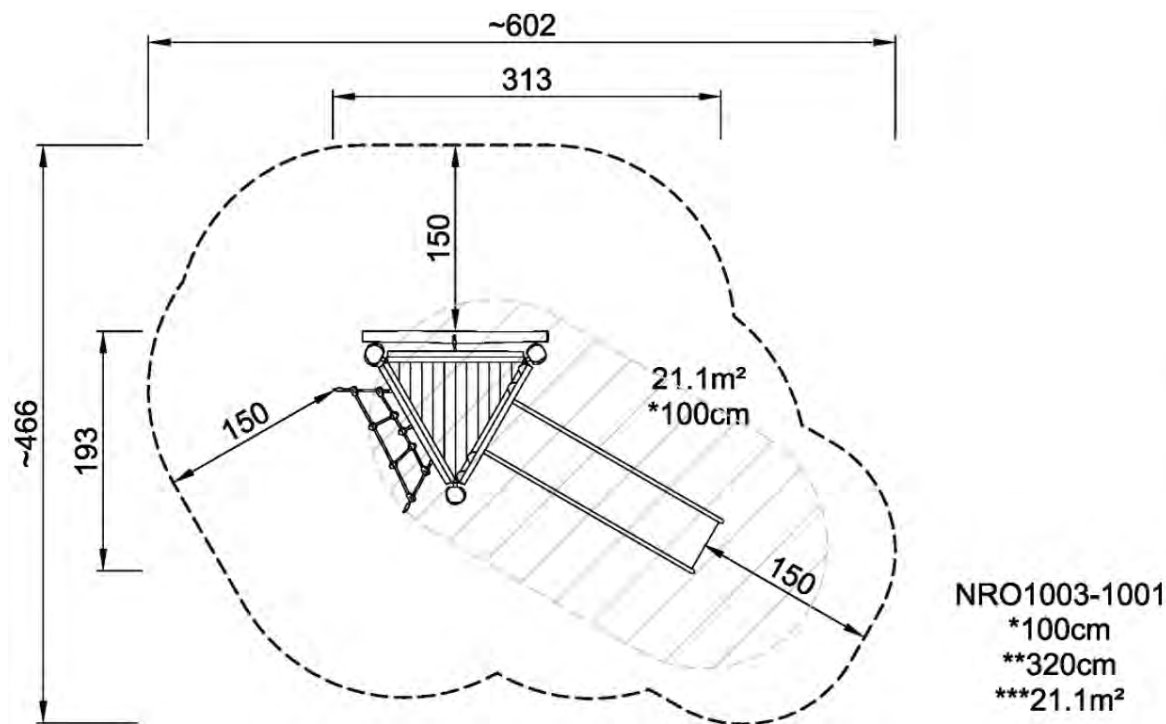
Safagrass Matting must meet with standards EI1177.



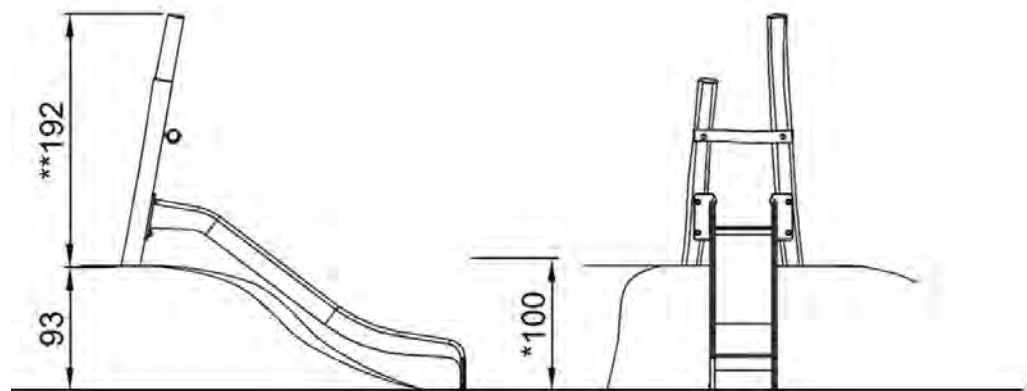
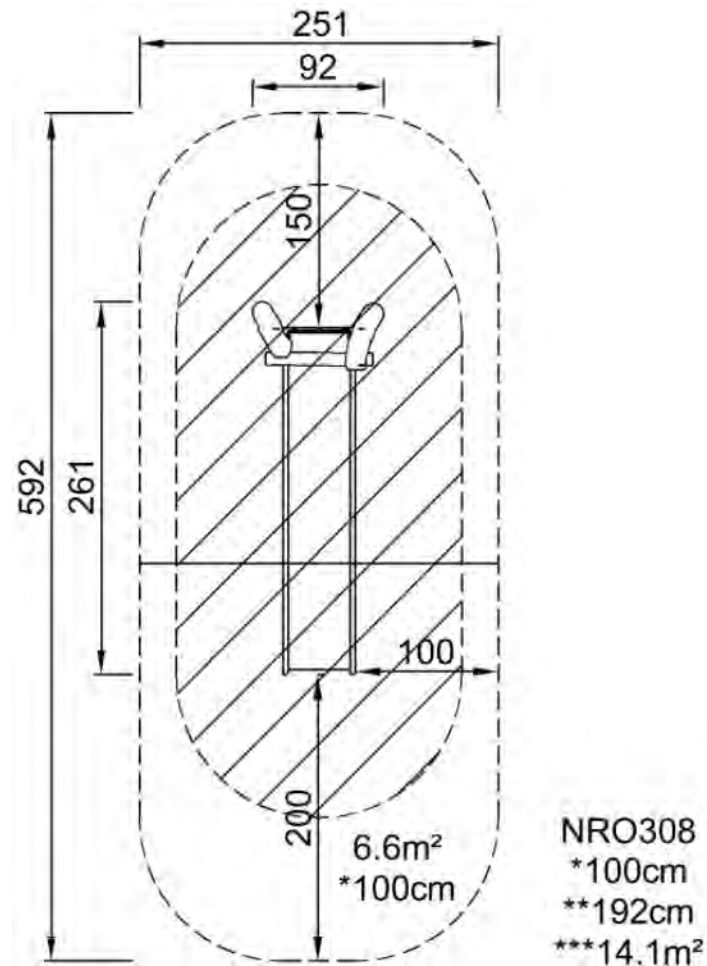
# St. Edmunds

## Children's play items

### Play Tower and slide



### Embankment Slide

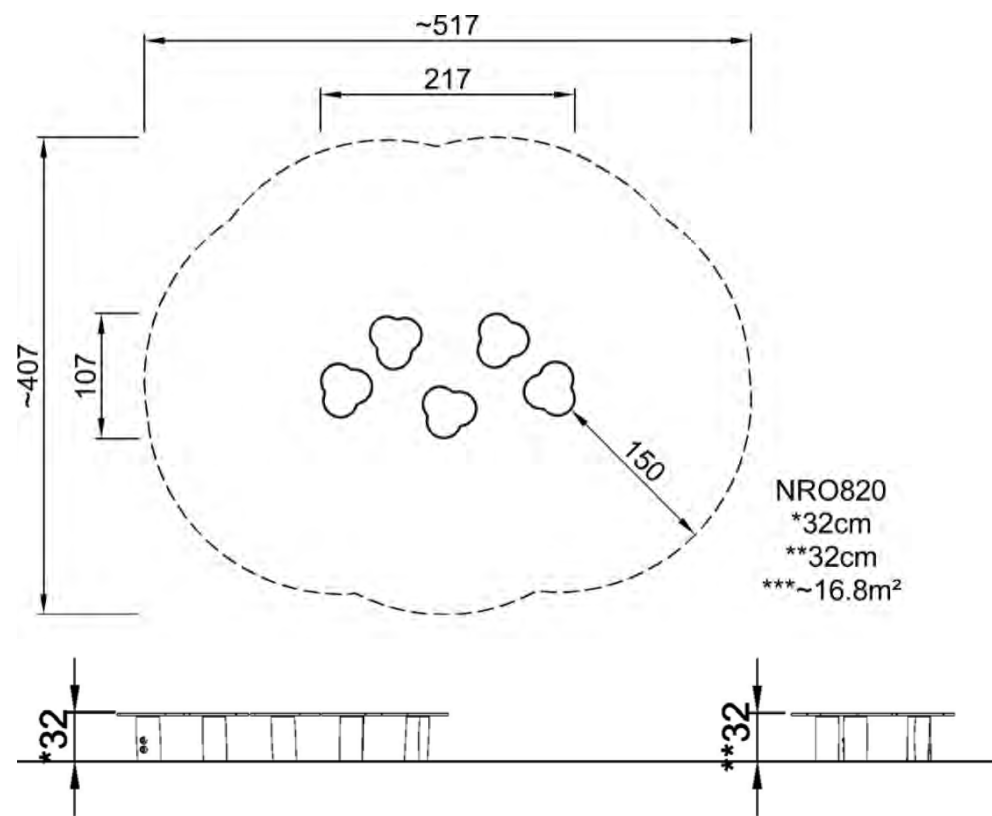




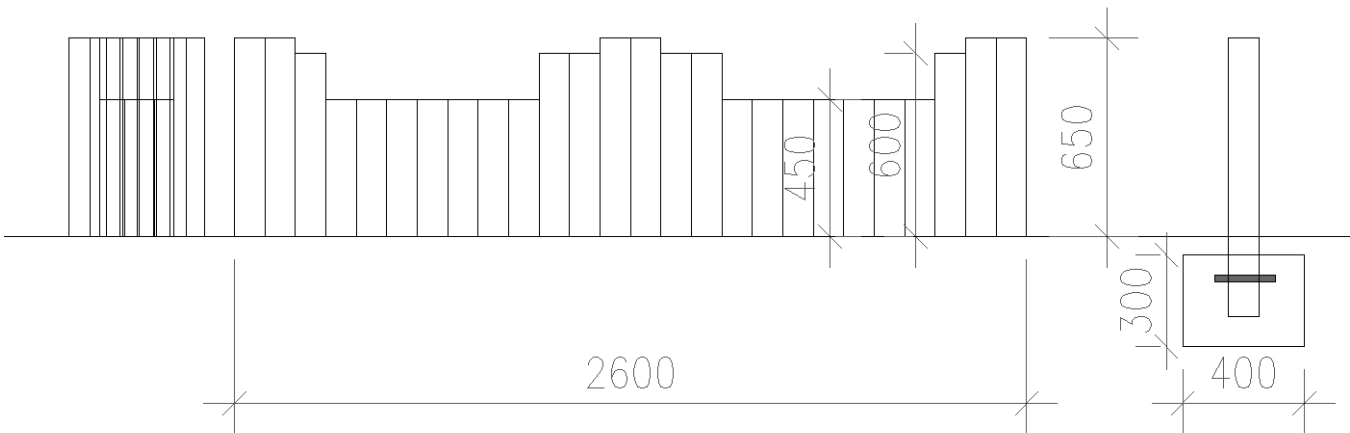
# St. Edmunds

## Children’s play items

### Waterlilies balancing post



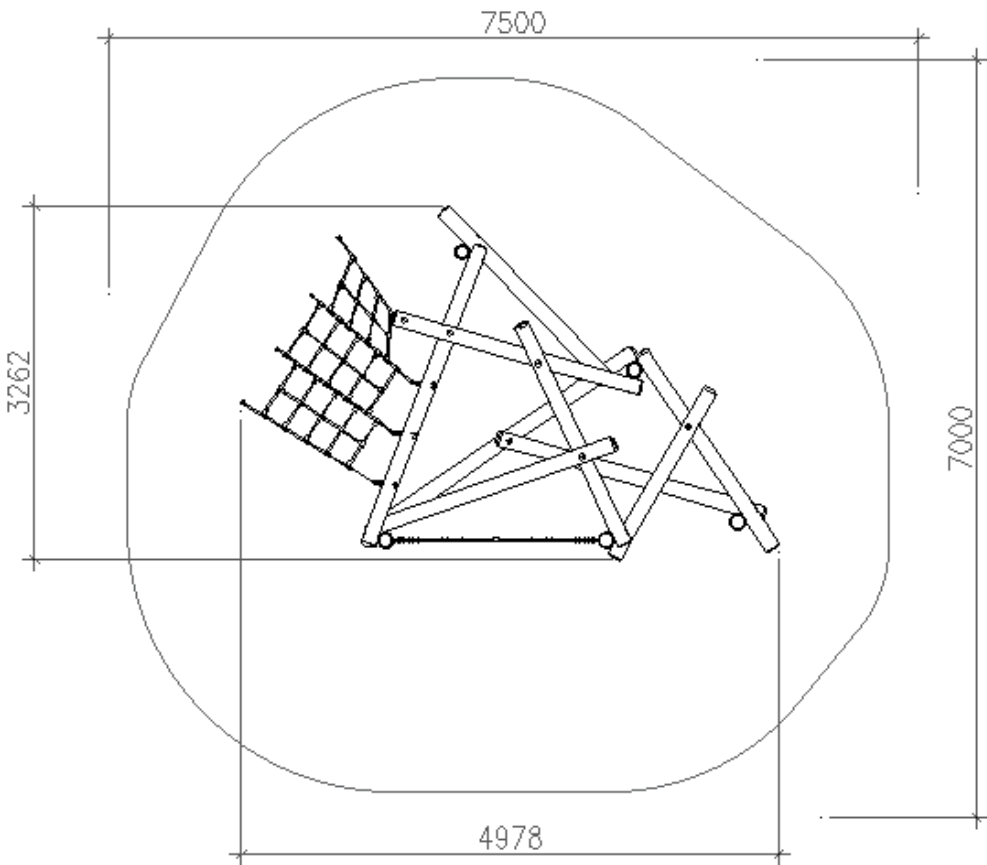
### Stepping Logs



### Pick up sticks

PICK-UP STICKS PICUS4  
46.5 SQ METRES 70mm WETPOUR  
22.0 LINEAR METRES WETPOUR EDGING  
MAX FFH = 1850mm

44.5 SQ METRES 55mm TILES  
25.0 LINEAR METRES TILE EDGING  
32 GRASS MATS  
182 MATTA MATS





# St. Edmunds

## Calisthenics items



Note: South Dublin County Council Parks Department to be advised of proposed calisthenics elements prior to ordering & to be involved in construction of same.

**Kompan Calisthenics equipment is made from steel elements covered with double layer of powder coating. Wet Rubber Pour Surfacing.**

**1. Incline press** Age range :13+



**2. Dip Bench** Age range :13+



**3. Push up bars** Age range :13+



**4. Decline Bench** Age range :13+

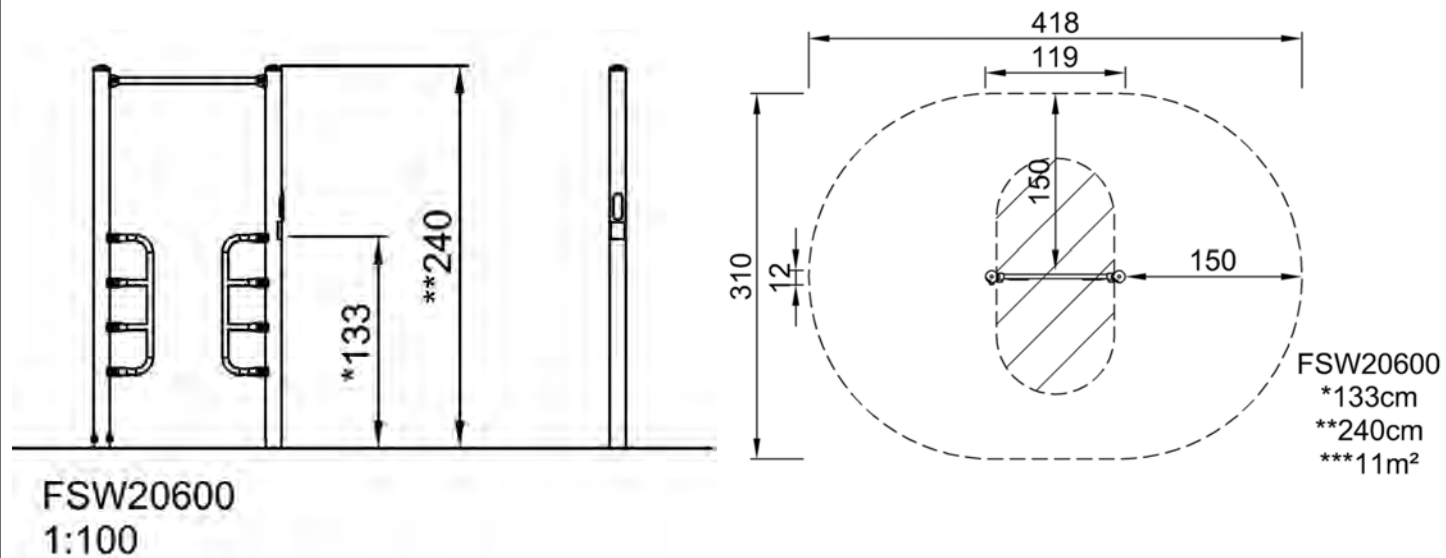




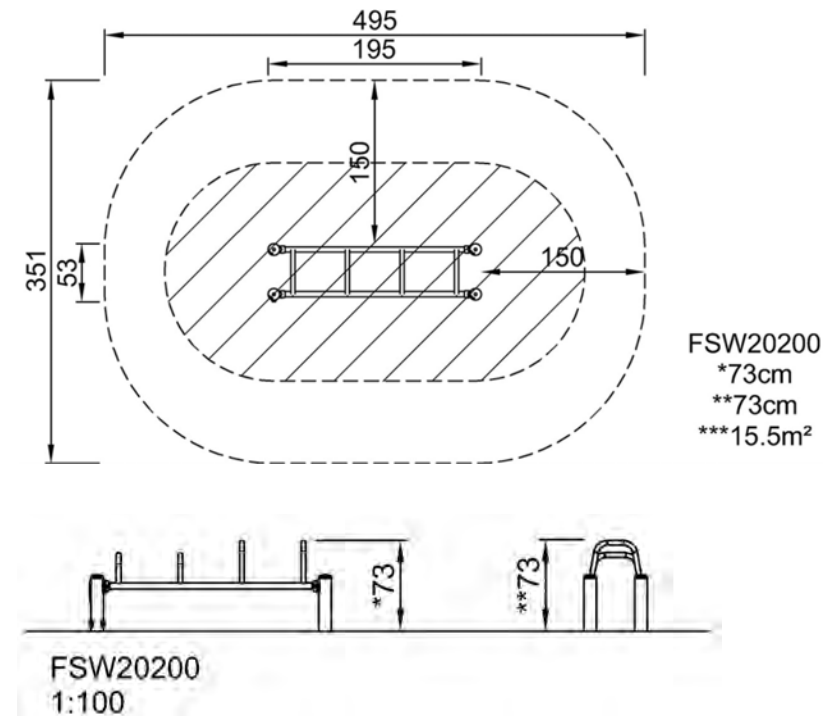
# St. Edmunds

## Calisthenics items

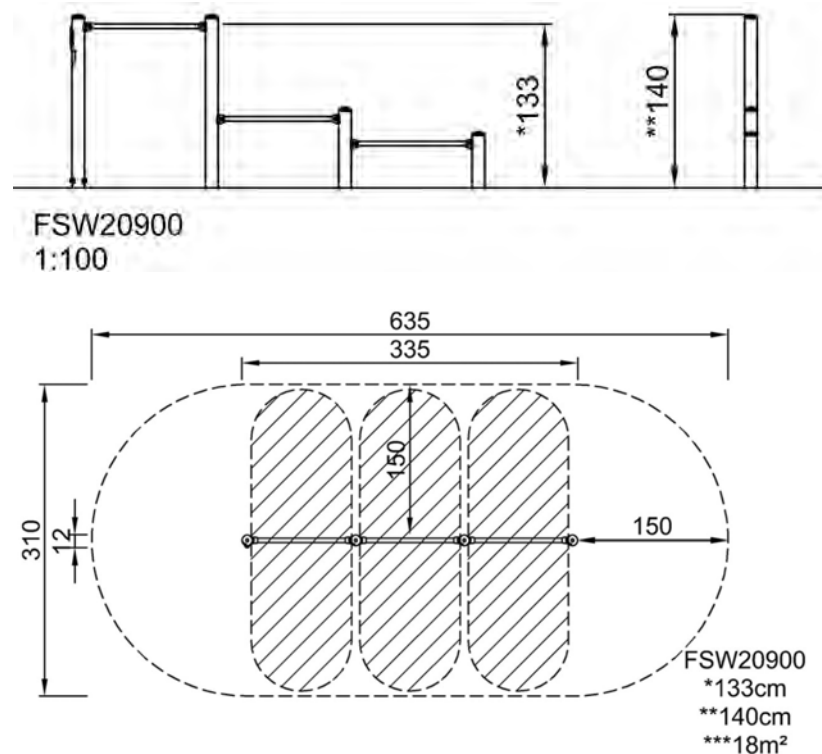
### 1. Incline press



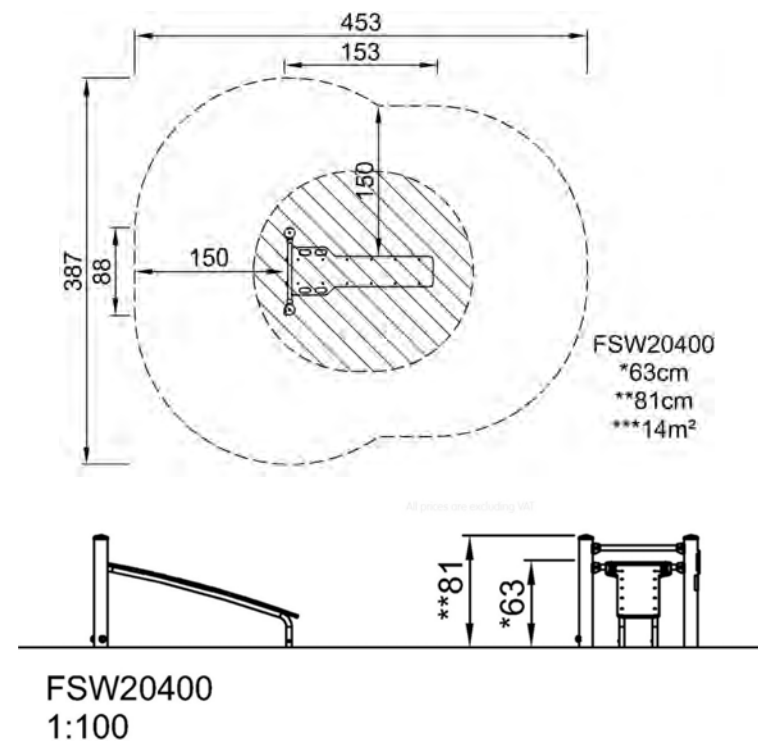
### 2. Dip Bench



### 3. Push up bars



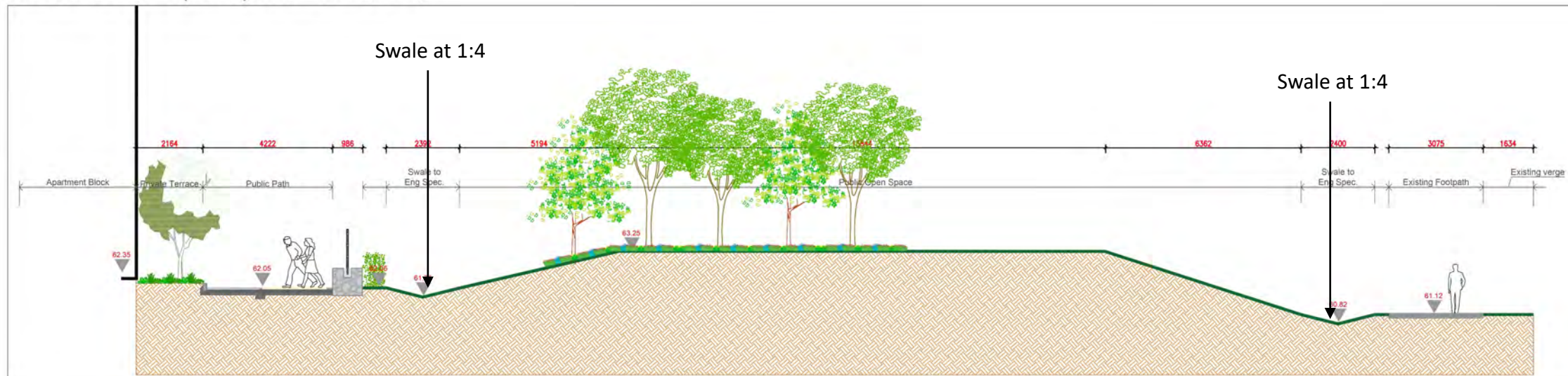
### 4. Decline Bench





# St. Edmunds

## Eastern Boundary

Section H-HH - Open Space *Scale (1:100)*



# St. Edmunds Communal Courtyards



Vents screened



Vents screened



Defensive Planting

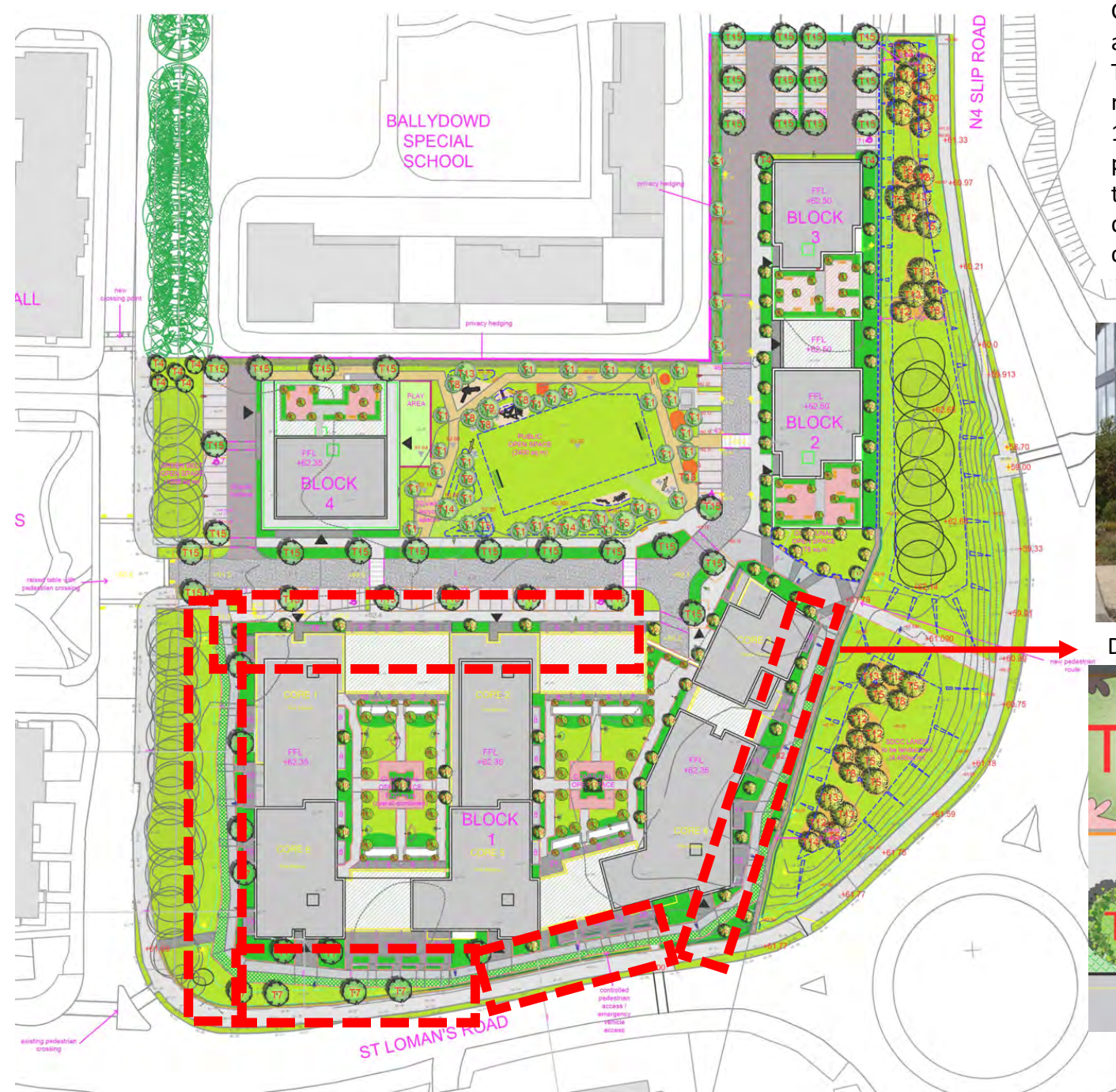
Green/Sedum Roofs

Seating



# St. Edmunds

## Interaction between private ground floor terraces and the streetscape

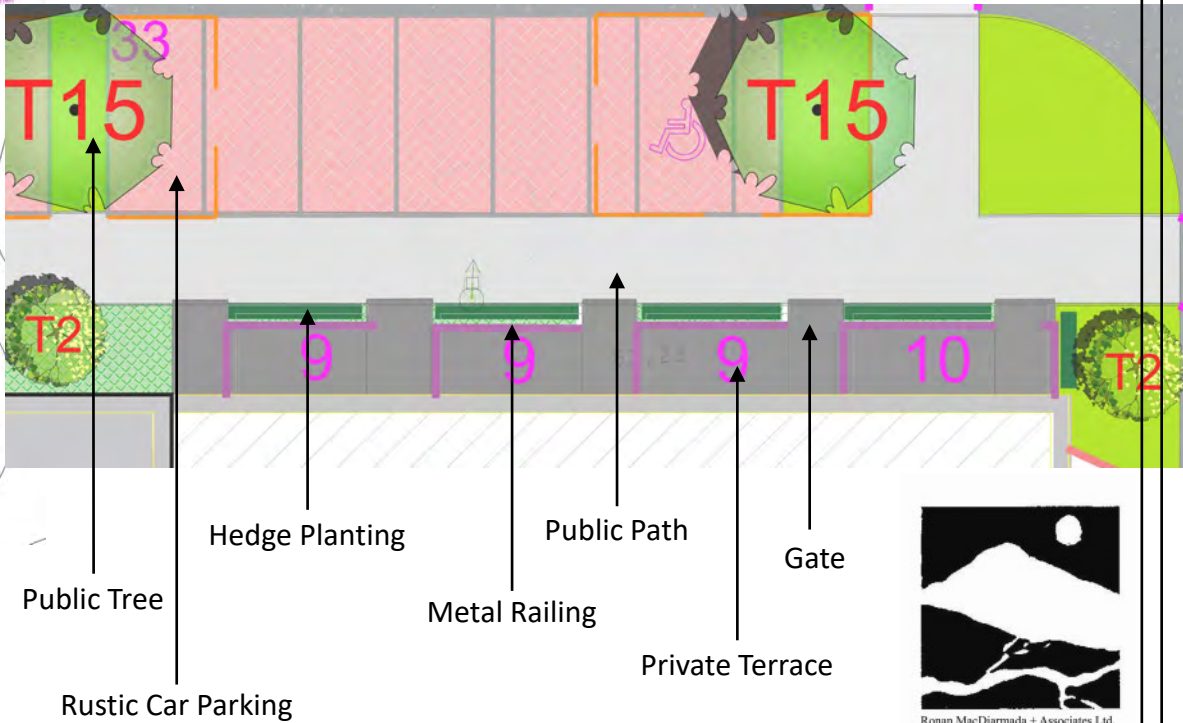


Locations of Private ground floor terraces outlined in red.

Ground floor terraces are located around the perimeter of blocks 1 & 2. They are screened from the public realm and communal open spaces by a 1.2m high glass balustrade and hedge planting to enhance privacy. Each terrace has a gate so therefore own door access from the street and communal open space is possible.

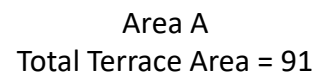
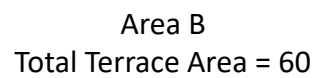


Detail of terraces



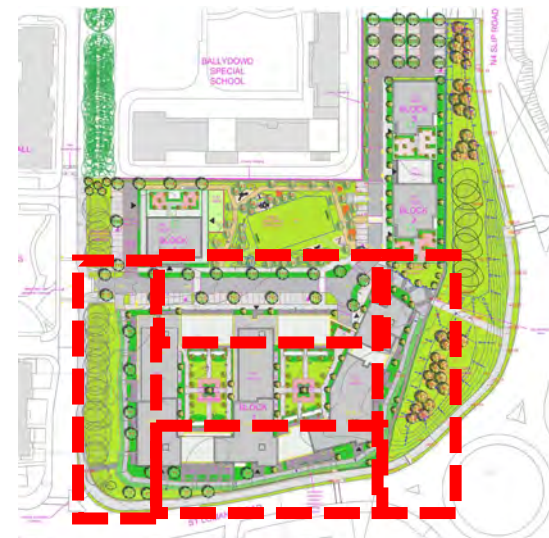


## Terrace areas and boundary treatment



Technical drawing of a fence section showing two types of slats:

- Top section:** Labeled "50mm x 5mm on flat". It shows a series of horizontal slats with a width of 50mm and a thickness of 5mm. The spacing between the slats is 100mm. The total height of this section is 2000mm.
- Bottom section:** Labeled "50mm x 5mm on upright". It shows a series of vertical slats with a width of 50mm and a thickness of 5mm. The spacing between the slats is 100mm. The total height of this section is 2000mm.





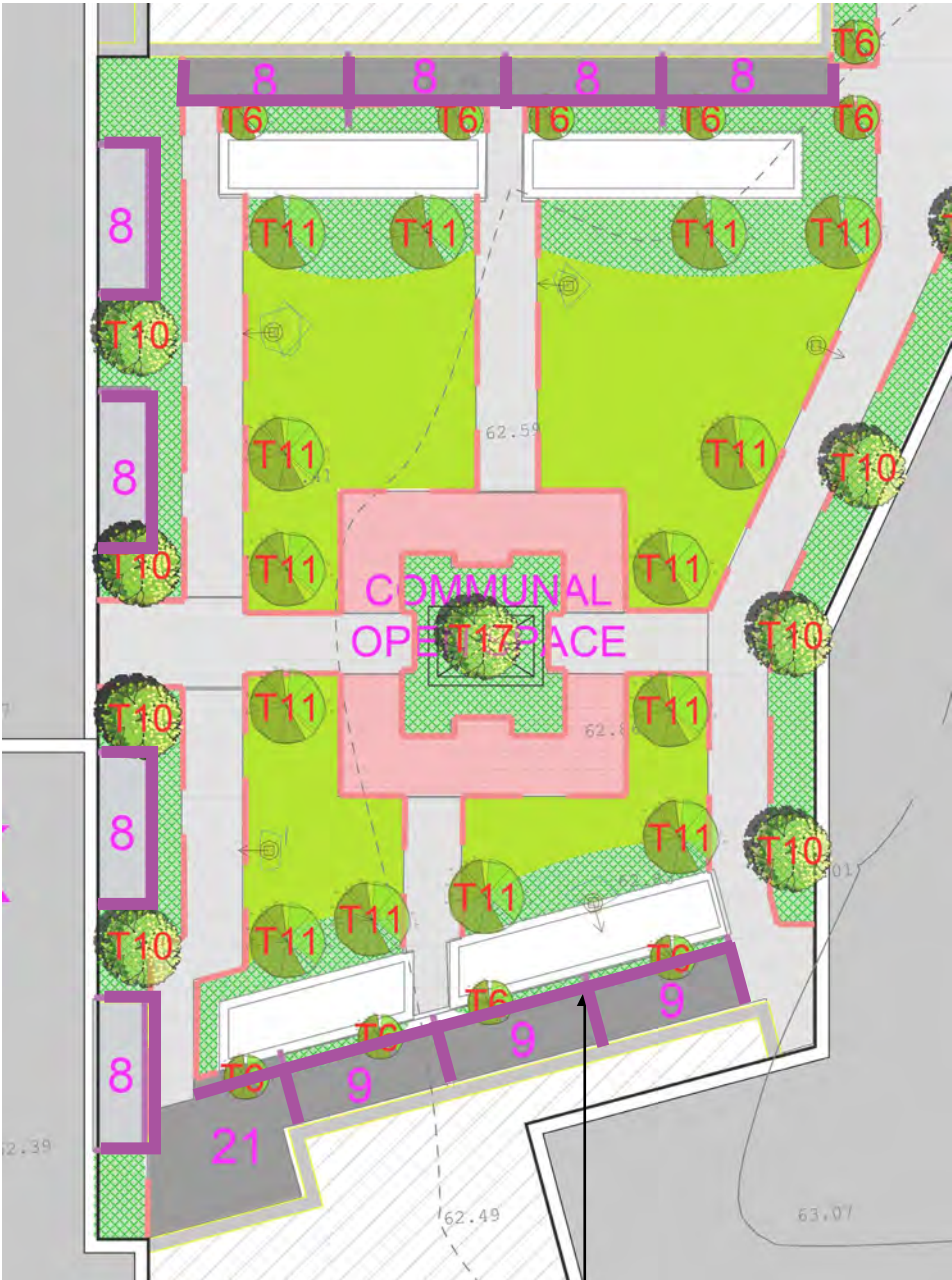
# St. Edmunds

## Terrace areas and treatment



Total Terrace Area = 95

Recon Granite paving to terrace



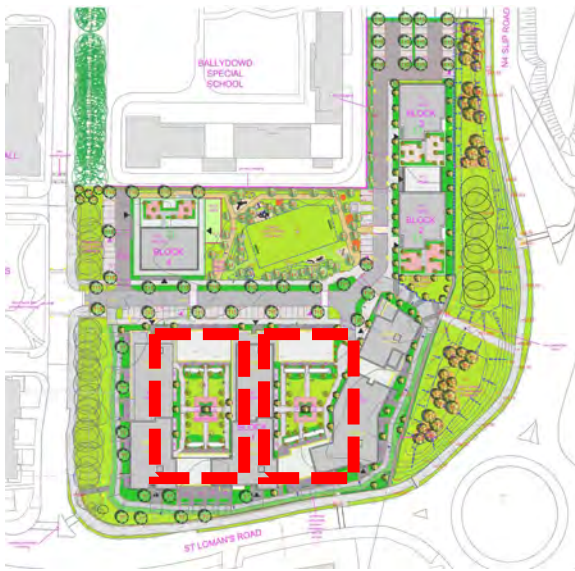
Total Terrace Area = 104

Metal Railing with hedge to private terrace boundary

The communal /private terrace space has been altered to provide for more defensible space for the private units.

Paths have been directed away from the private spaces as much as possible.

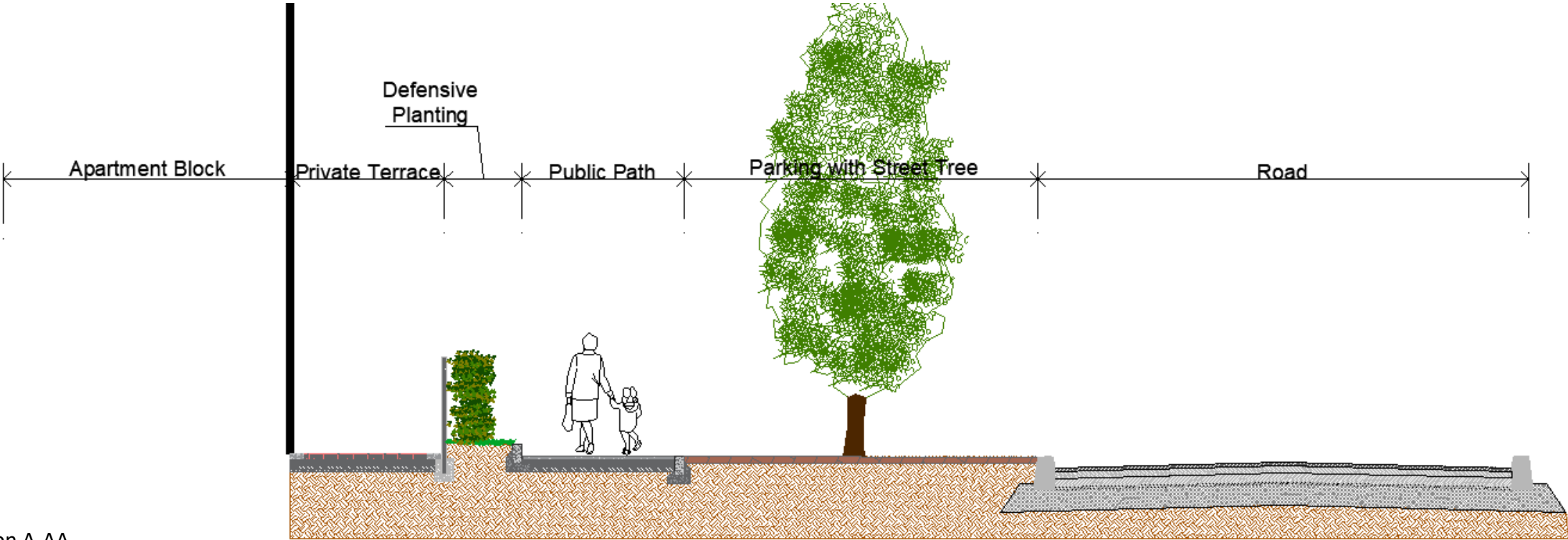
Planting of medium sized shrubs to provide for a soft boundary has been included to increase the privacy of the individual unit and reduce the impact of noise if any.



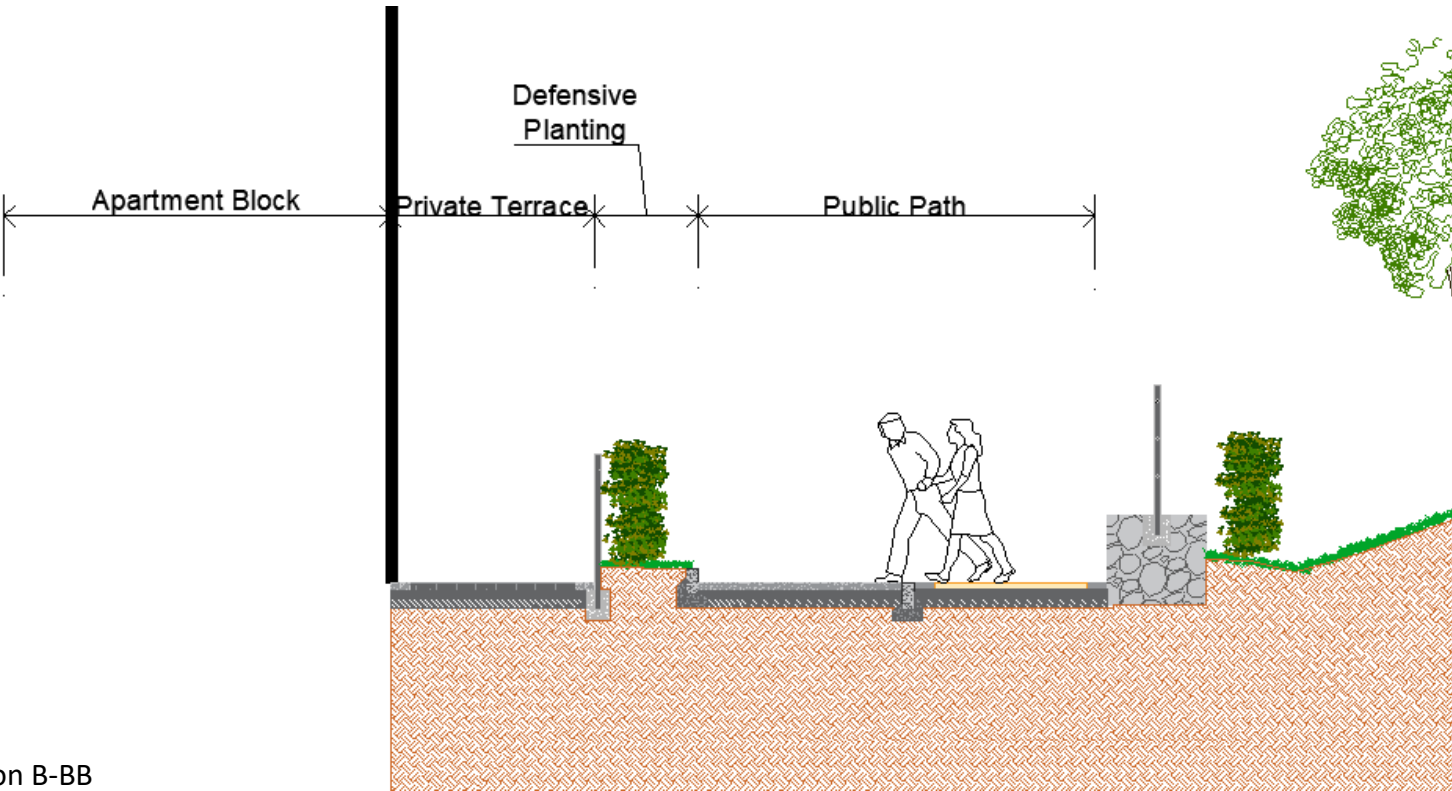


# St. Edmunds

Interaction between private ground floor terraces and the streetscape/public paths



Section A-AA.



Section B-BB



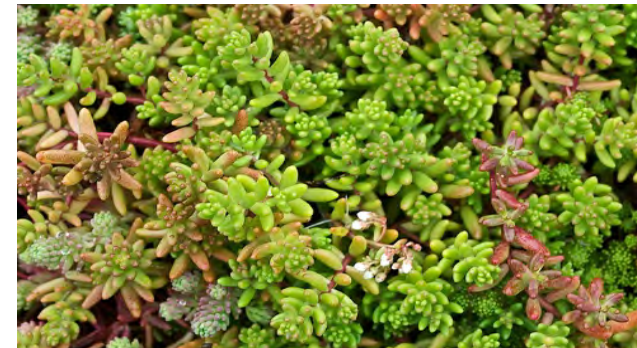


# St. Edmunds

## 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 is able to 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.

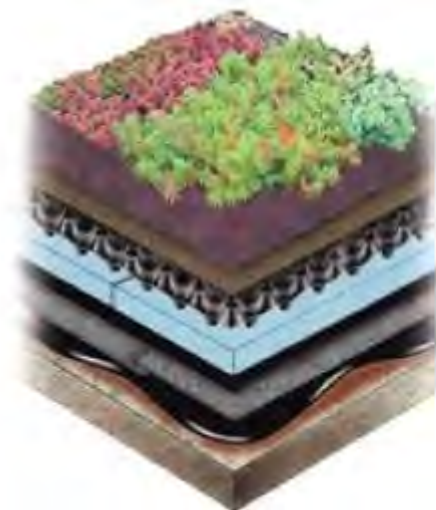




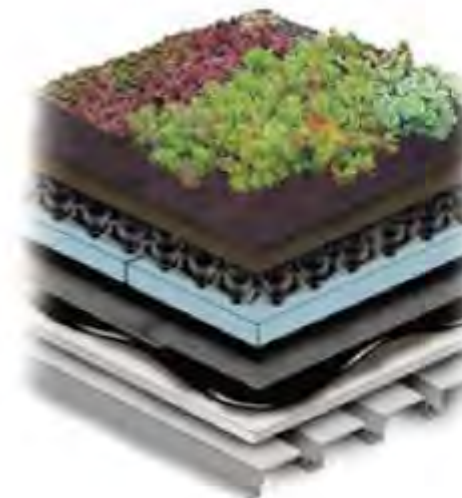
# St. Edmunds

## Sedum Roof

- **Drainage:** Vegetative roof drainage design must both maintain optimum growing conditions in the growth medium and manage heavy rainfall without sustaining damage due to erosion or ponding of water.
- **Plant nourishment and support:** The engineered medium must be carefully designed to provide for excellent plant growth, no wind scouring, and proper water holding capacity.
- **Protection of underlying waterproofing systems:** Vegetative roof assemblies must protect the underlying waterproofing system from human activities (including the impact of maintenance) and biological attack, and solar degradation. A capillary break immediately above the membrane is required for most membranes.
- **Waterproofing systems:** Waterproofing is critical for protecting the structure from water intrusion.
- **Insulation systems:** Insulation is critical for saving energy.



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)

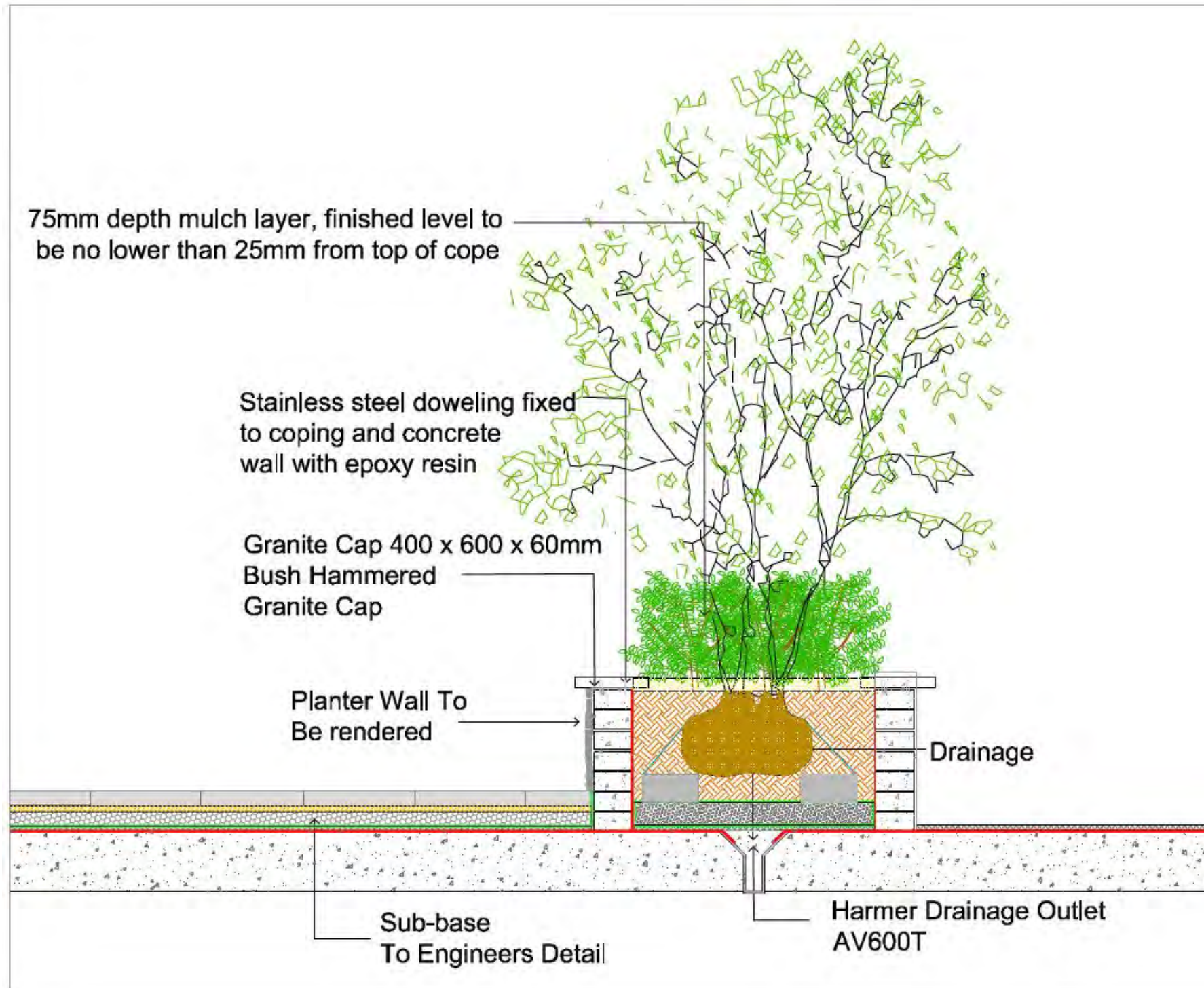


Extensive Vegetation (Sedums, etc.)  
Growing Media  
Filter Fabric  
Moisture Retention / Drainage Panel  
Insulation  
Root Barrier  
Protection Course and Capillary Break  
Waterproofing Membrane (hot rubberized asphalt depicted)  
Substrate (metal deck with gypsum board depicted)



# St. Edmunds

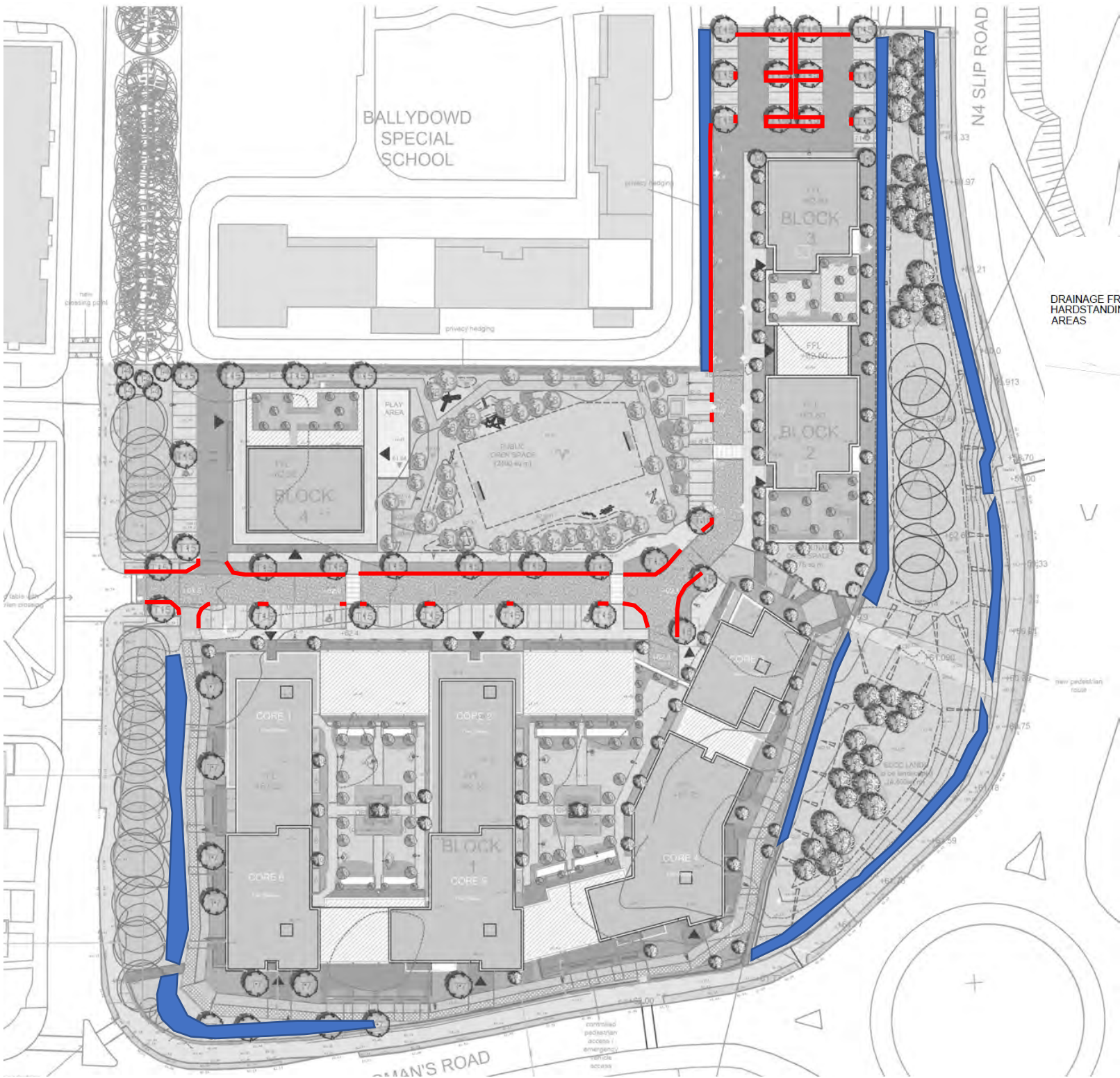
## Raised Planter Detail





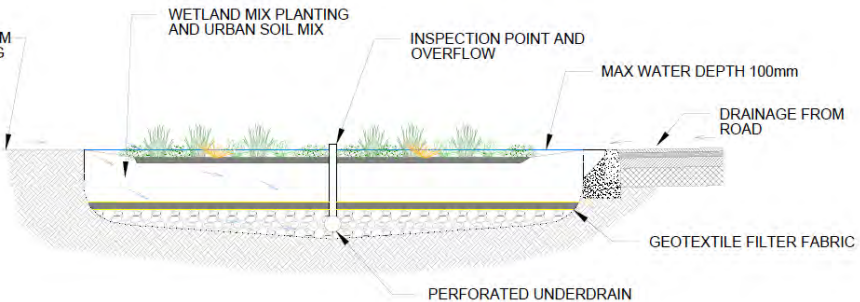
# St. Edmunds

## Swale and drop kerb locations



- Swale Locations
- Drop Kerb Locations

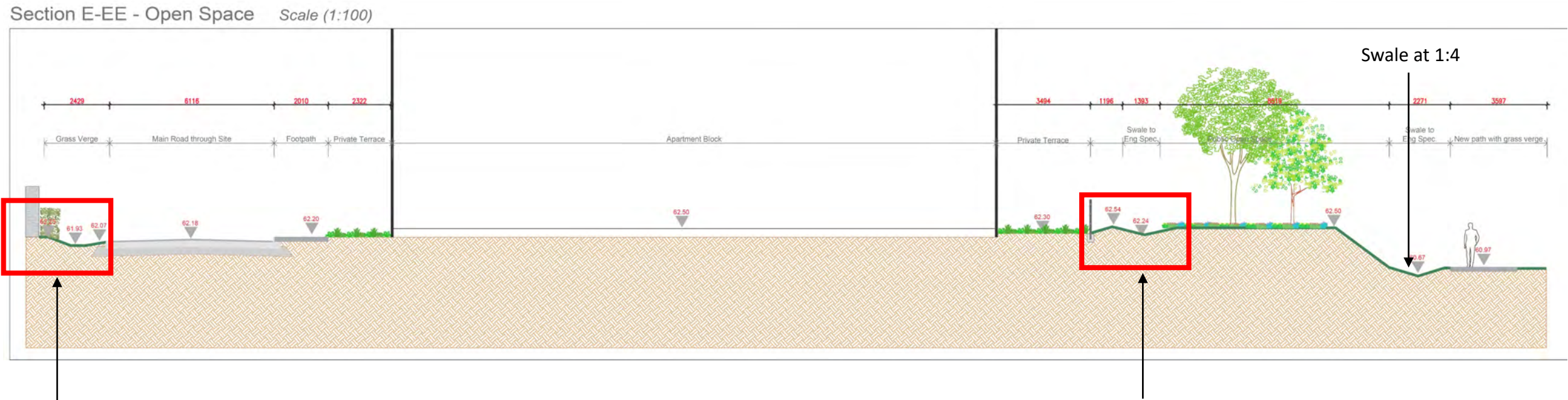
Bio-retention Detail to Drop Kerb Locations. See engineer Dwgs. and report for more details





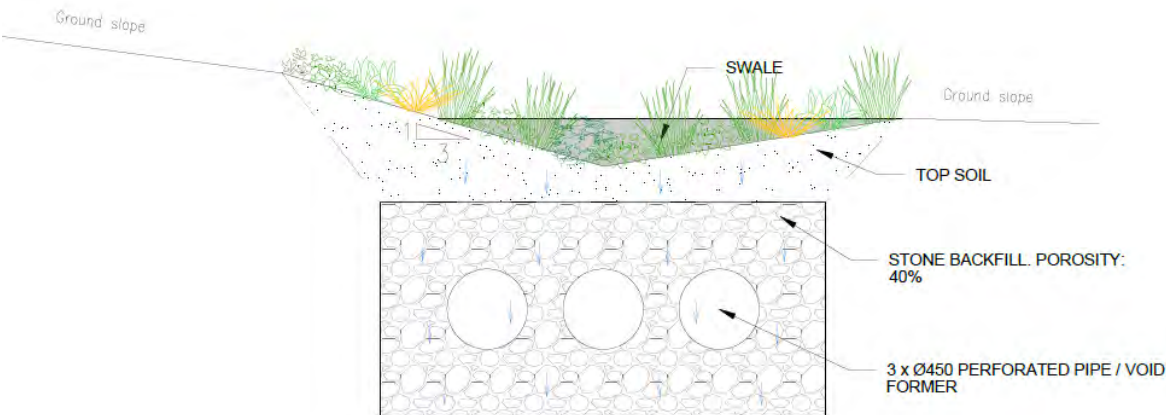
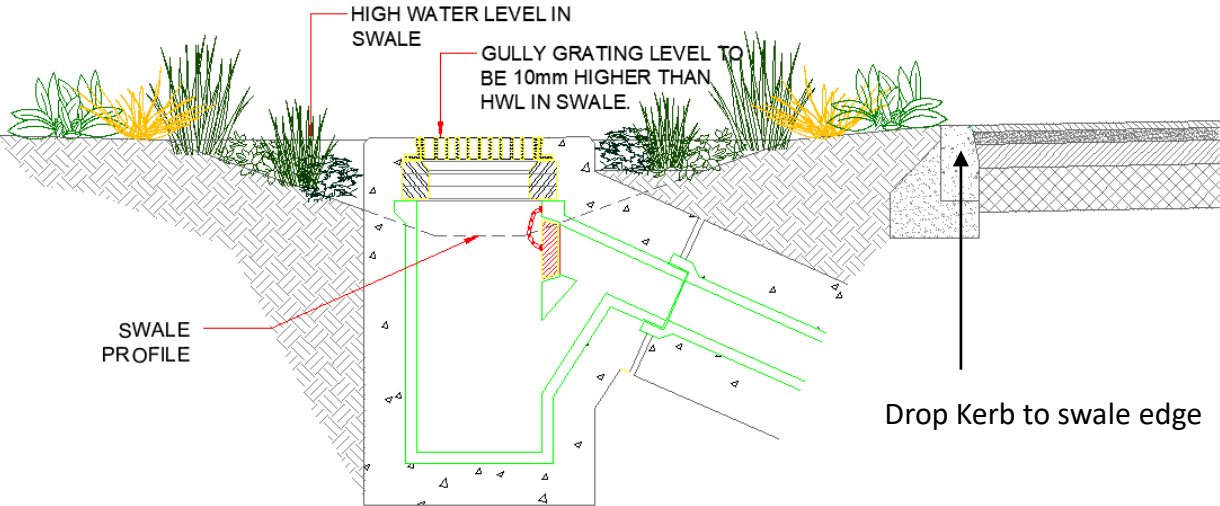
# St. Edmunds

## Example of Swale Details



Swale to Roadside, Drop Kerb. Please see Engineer drawings and report for more detail

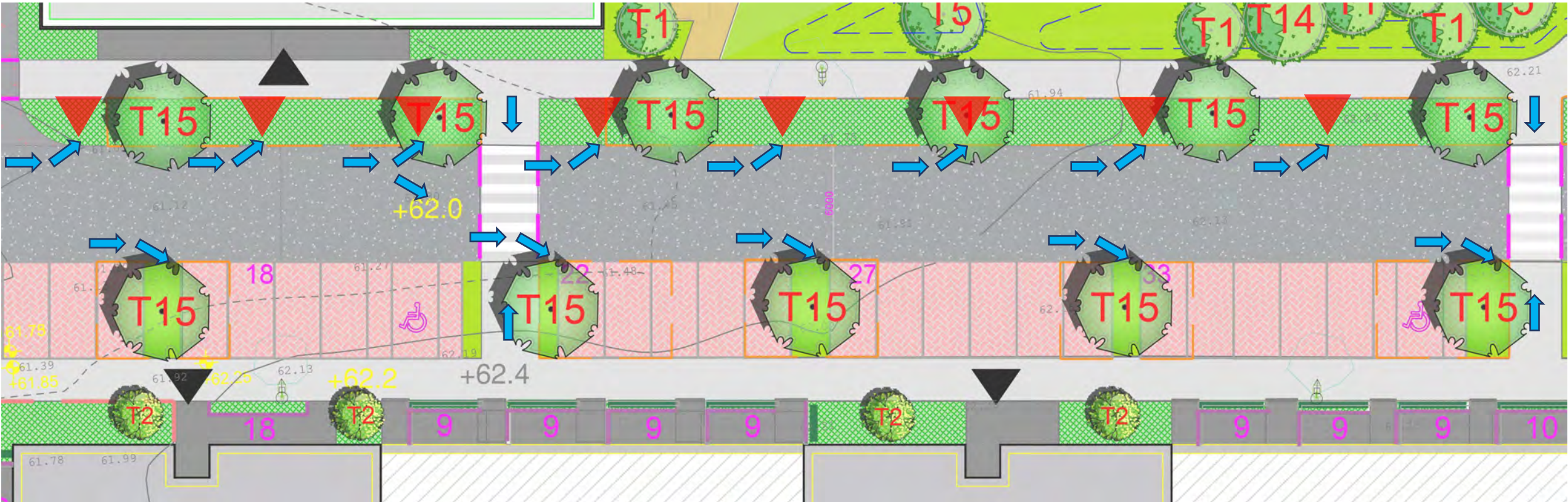
Swale to Open Space. Please see Engineer drawings and report for more detail





# St. Edmunds

## Drop Kerb Water Flow Example

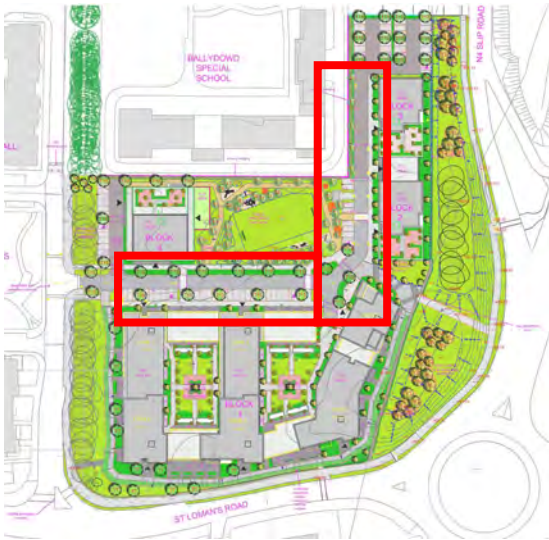


Drop Kerb Location



Surface Water Flow

Please see Engineer Dwgs. for more details on drop kerb locations and swales



Location Plan

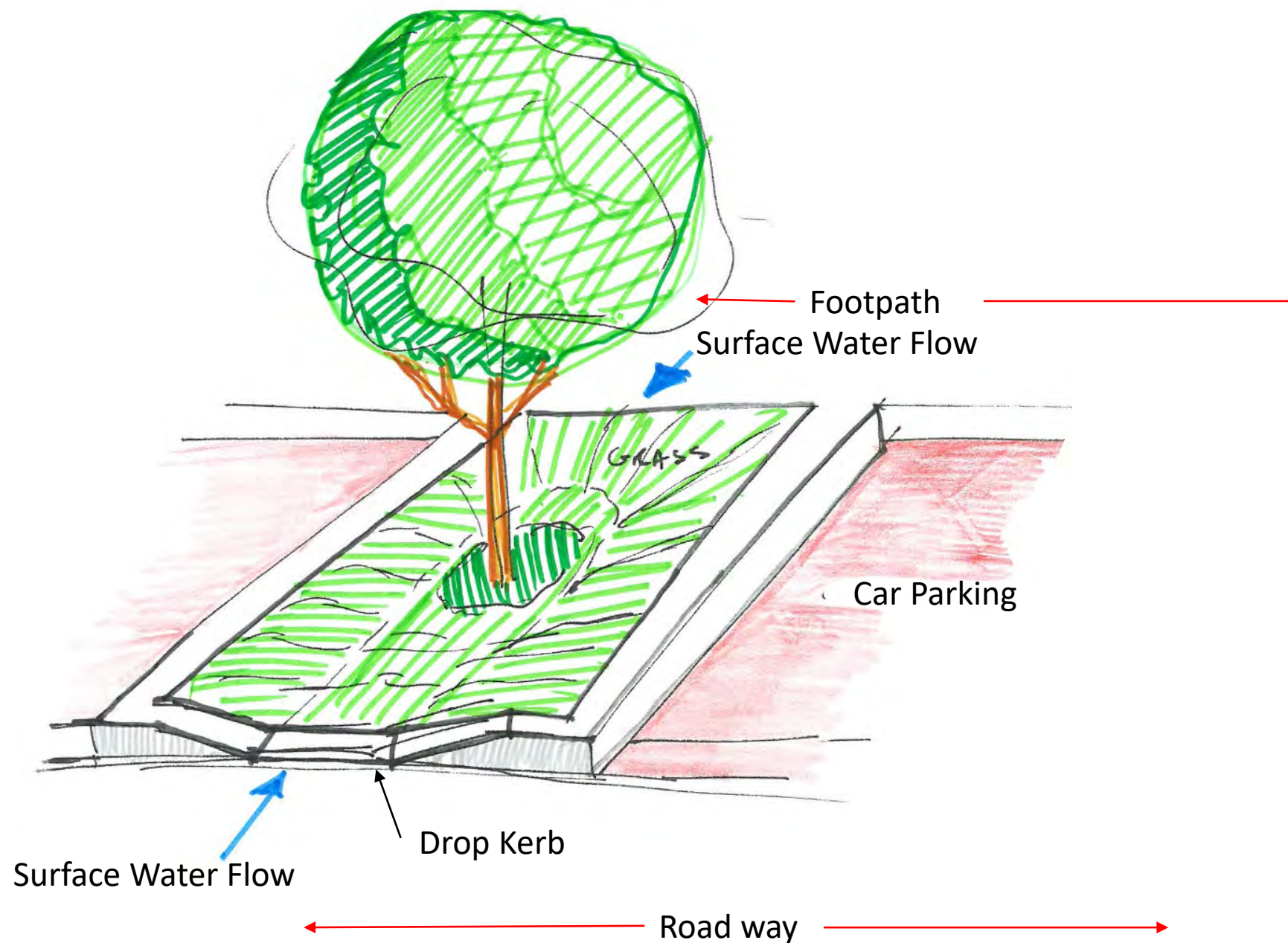


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# St. Edmunds

## Tree Pit Detail



### Groundcover

Persicaria affine  
Hedera helix 'Hibernica'  
Vinca minor  
Bergenia spp.

### Perennials

Ligularia przewalskii 'The Rocket'  
Astilbe spp. (Snowdrift, Hyacinth)  
Iris siberica  
Iris pseudoacorus  
Achillea millefolium 'Song Siren Laura'  
Helleborus foetidus  
Salvia spp (variety to be chosen for wet)

### Bulb/Corm/Rhizome

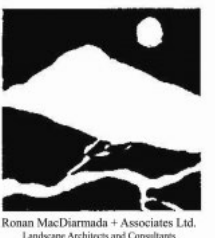
Aquilegia canadensis  
Kniphofia uvaria  
Crocosmia spp  
Allium spp

### Grass:

Carex pendula

### Fern

Dryopteris felix-mas  
Dryopteris dilatata



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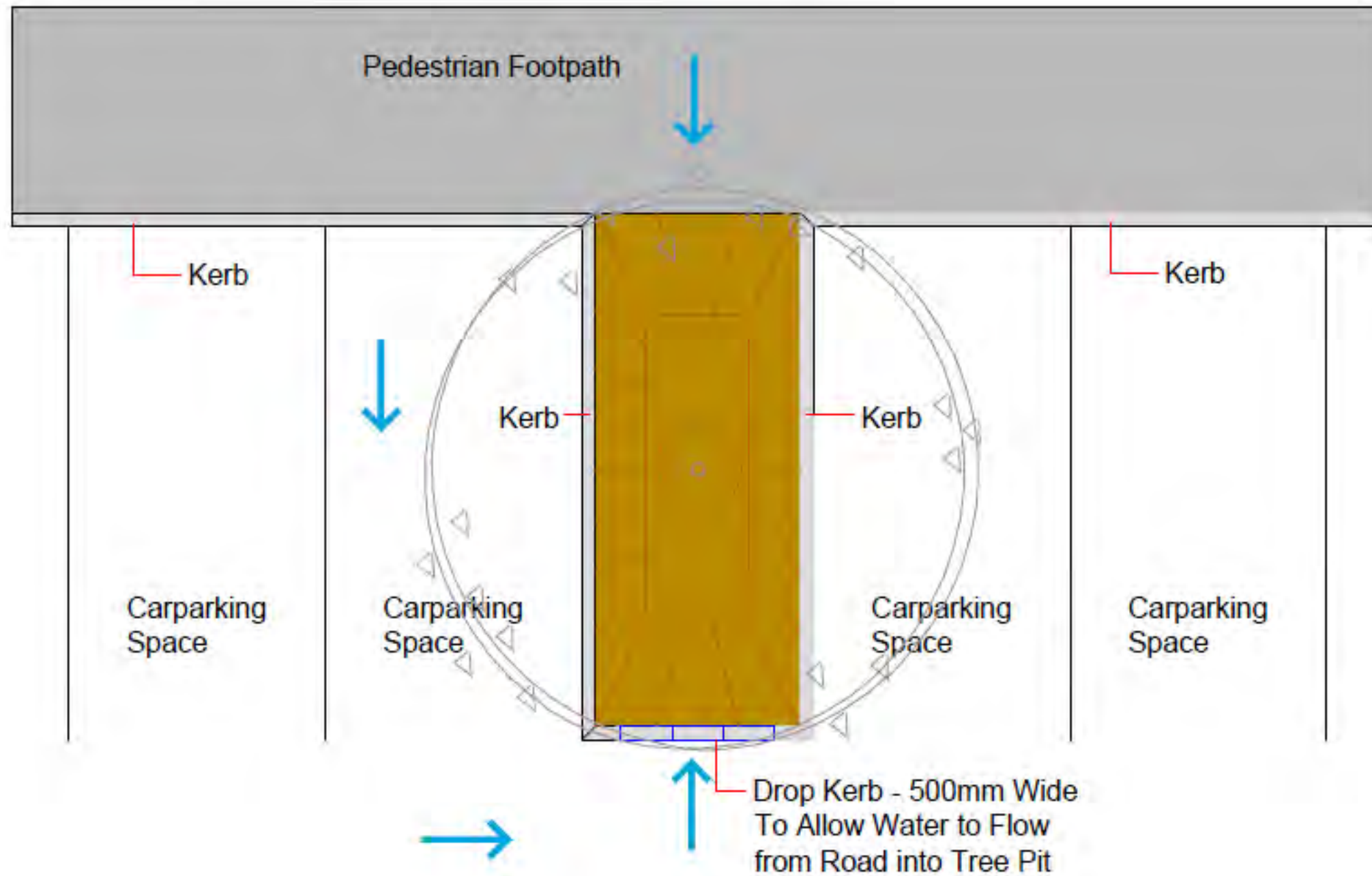


# St. Edmunds

## Drop Kerb Detail

→ Surface Water Flow

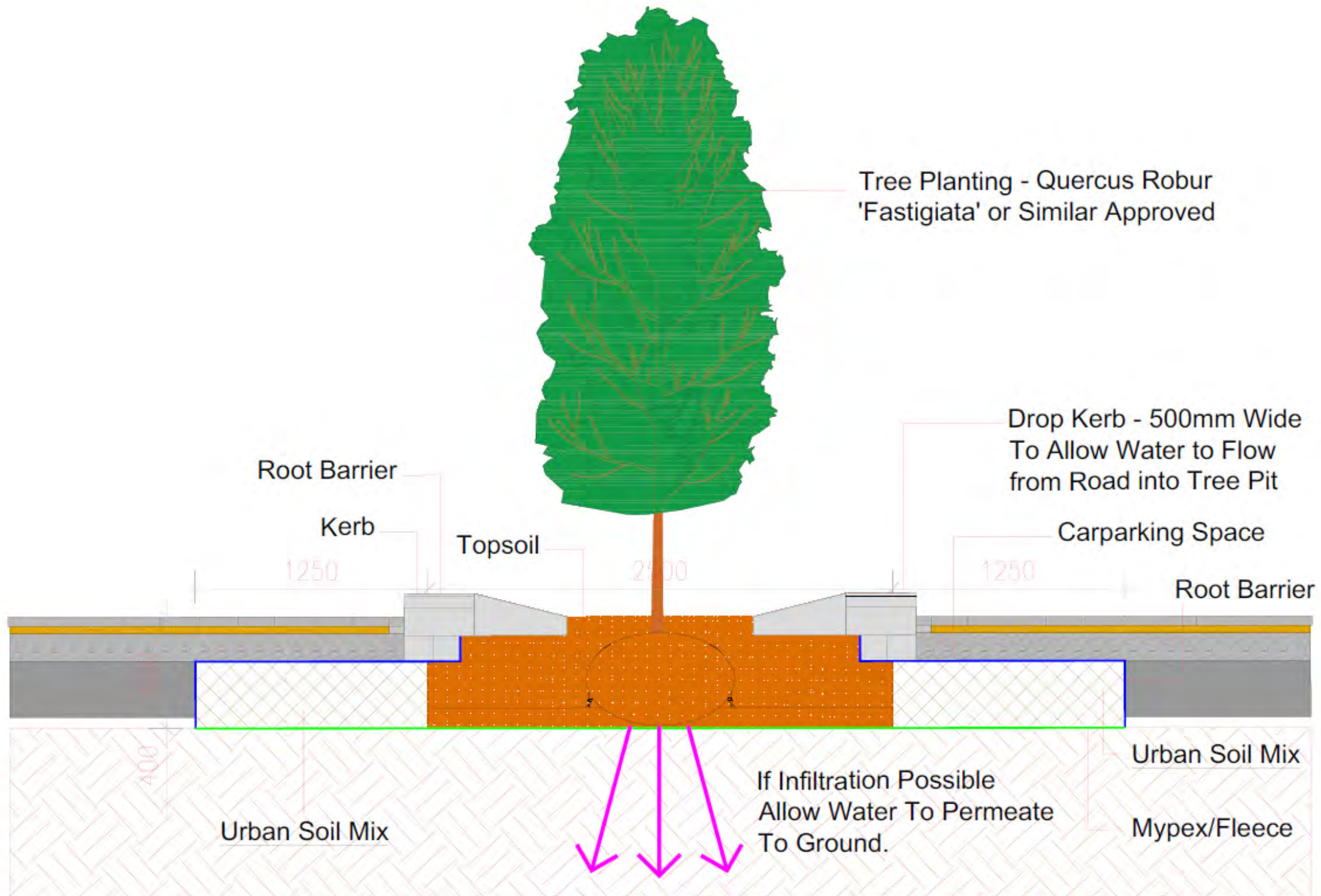
### Plan View of Tree Pit





# St. Edmunds

## Drop Kerb Detail





# St. Edmunds

## Suggested Surface Treatments

( or similar approved)



Charcoal paving



Tarmac with colour chip



Heather paving



Natural Grey paving

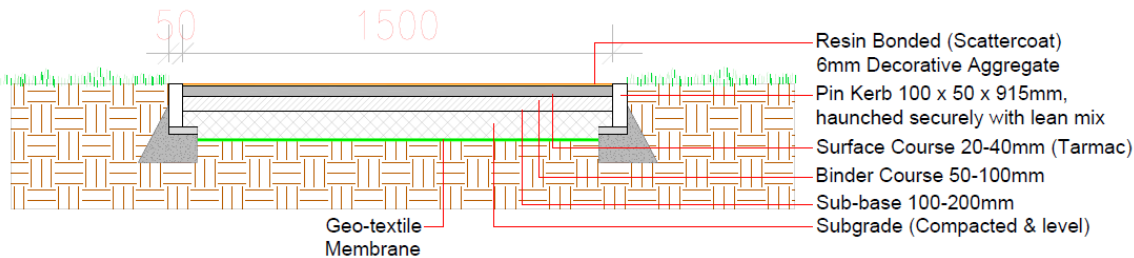


Beige Tarmac

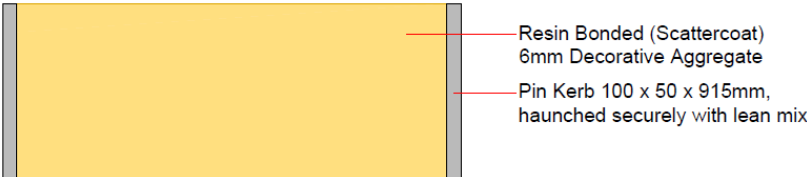


Rustic paving

### Resin Bonded (Scattercoat) Pedestrian Path Detail



N.B. Resin Bonded Surfacing is weather dependant. The traditional laying season is typically April to September to avoid cold wet weather and dew in the air, ground temperature must be >10°C, as the resin is sensitive to moisture before curing.





# St. Edmunds

## Suggested Planting

### Proposed Tree Planting

- |     |                               |
|-----|-------------------------------|
| No. | Name.                         |
| 1.  | Betula pendula                |
| 2.  | Laurus nobilis - Cone Shaped  |
| 3.  | Carpinus betulus 'Fastigiata' |
| 4.  | Acer campestre 'Elsrijk'      |
| 5.  | Fagus sylvatica               |
| 6.  | Rhus typhinia                 |
| 7.  | Fagus sylvatica 'Dawyck'      |
| 8.  | Larix decidua                 |
| 9.  | Betula pendula 'Multi-stem'   |
| 10. | Acer palmatum                 |
| 11. | Amelanchier lamarckii         |
| 12. | Tilia cordata 'Greenspire'    |
| 13. | Quercus robur                 |
| 14. | Pinus sylvestris              |
| 15. | Quercus robur 'Fastigiata'    |
| 16. | Malus 'John Downie'           |
| 17. | Arbutus unedo                 |
| 18. | Viburnum opulus               |



Carpinus betulus ‘Fastigiata’



Laurus nobilis



Betula pendula – multi-stem



Quercus robur ‘Fastigiata’



Malus 'John Downie’



Betula pendula

### Proposed Hedge Planting

- |     |                                 |
|-----|---------------------------------|
| No. | Name.                           |
| 1.  | Prunus lusitanica (Single Row)  |
| 2.  | Elaeagnus ebbingei (Single Row) |
| 3.  | Native Hedgerow (Double Row)    |
|     | 50% Craetagus monogyna          |
|     | 35% Prunus spinosa              |
|     | 5% Ilex aquifolium              |
|     | 5% Rosa canina                  |
|     | 5% Lonicera periclymenum        |
|     | 'Graham Thomas'                 |



Elaeagnus x ebbingei



Prunus lusitanica



Amelanchier lamarckii



# St. Edmunds

## Suggested Planting

### Proposed Groundcover & Shrub Planting

- | No. | Name                     |
|-----|--------------------------|
| 1.  | Pericaria affine         |
| 2.  | Hedera helix hibernica   |
| 3.  | Lavandula angustifolia   |
| 4.  | Prunus 'Otto Luyken'     |
| 5.  | Libertia grandiflora     |
| 6.  | Crocsmia citronella      |
| 7.  | Rhododendron yakushmanum |
| 8.  | Sedum spectabilis        |
| 9.  | Skimmia japonica         |
| 10. | Miscanthus sinensis      |
| 11. | Crocsmia lucifer         |
| 12. | Phyllostachys aurea      |
| 13. | Fragaria ananassa        |
| 14. | Hemerocallis 'Tejas'     |
| 15. | Astelia 'Silver Spear'   |
| 16. | Vinca minor              |
| 17. | Agapanthus blue storm    |
| 18. | Perovskia atriplicifolia |
| 19. | Bergenia cordifolia      |
| 20. | Helleborus niger         |



Libertia grandiflora



Bergenia cordifolia



Sedum spectabile



Perovskia atriplicifolia



Vinca minor



Astelia 'Silver Spear'



Hedera helix Hibernica



Lavandula angustifolia



Miscanthus sinensis

### Proposed Bulb Planting

- | No. | Name.               |
|-----|---------------------|
| 1.  | Crocus sativus      |
| 2.  | Galanthus nivalis   |
| 3.  | Muscari armeniacum  |
| 4.  | Colchicum autumnale |
| 5.  | Narcissus jonquilla |



Crocus sativus



Galanthus nivalis



Muscari armeniacum