

# LAND PLANNING & DESIGN

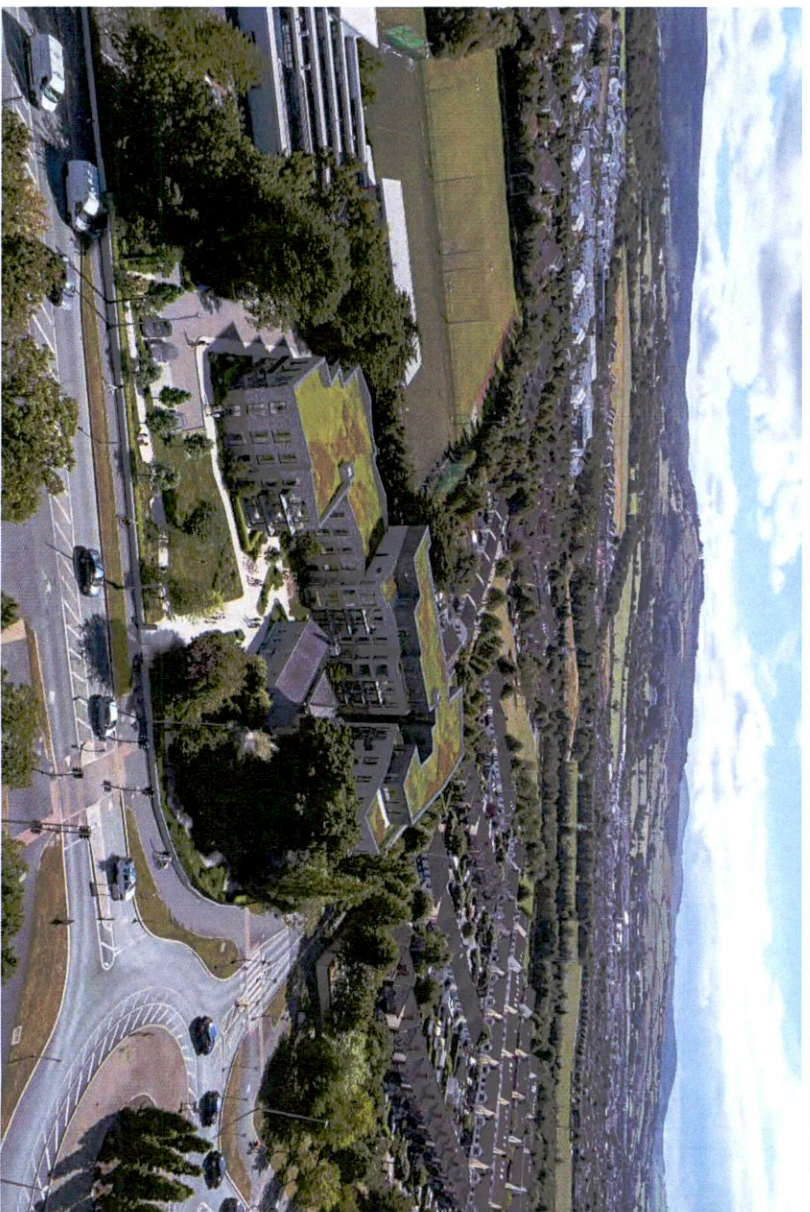
## **CUNNANE STRATTON REYNOLDS LAND PLANNING & DESIGN**

Scholarstown House 0.67 HA Site at  
Scholarstown Road, Dublin 16  
Co. Dublin

### **LANDSCAPE DESIGN REPORT**

**Job no. 22159**

**20<sup>th</sup> October 2022**



**CONTENTS**

SITE CONTEXT	Page 2
PLANNING CONTEXT	Page 4
LANDSCAPE DESIGN CONCEPT	Page 5
PROPOSED LANDSCAPE DESIGN	Page 6
MATERIAL FINISHES	Page 16
PLANTING	Page 17
MAINTENANCE AND MANAGEMENT	Page 19

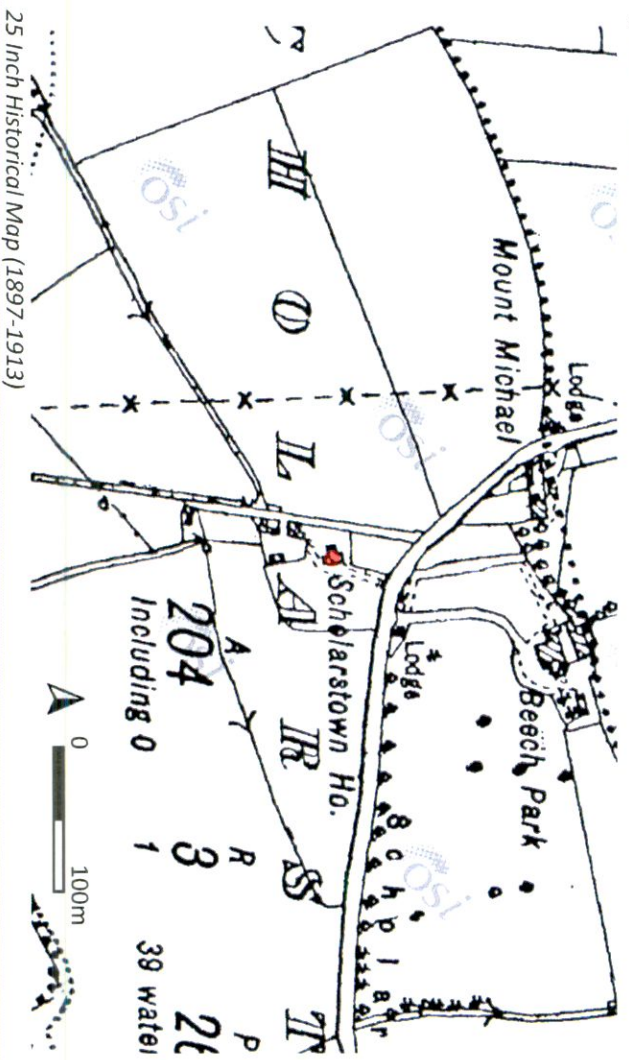
## SITE LOCATION & CONTEXT

The subject site is situated to Scholarstown, Dublin 16, located at southeast corner to the junction of Scholarstown Road and Orlagh Grove. It is about 450m away to M50 motorway exit 12 and beside No. 15/175 Dublin bus route. The most significant feature with historical value on site is Scholarstown House, reputedly first built in 1588, it is a detached two-storey house, which was rebuilt after a fire in 1909. A lot of the original fabric and its attractive setting early twentieth-century house have been retained. Nowadays, the house is listed as a protected structure, (South Dublin County Council Development Plan 2016-2022) and within the National Inventory of Architectural Heritage (NIAH).

Generally speaking, the site is flat, with 2-2.5m high walls surrounding the site and mature vegetation on the East, West and South boundaries. It banks down from the Scholarstown Road, with an approx. 2.5m change in level across the overall site. Thus, views into and out of the site are limited. From the inside of site, views are fully opened in front of the house creating an attractive 'aspect' from the house over the large lawn.

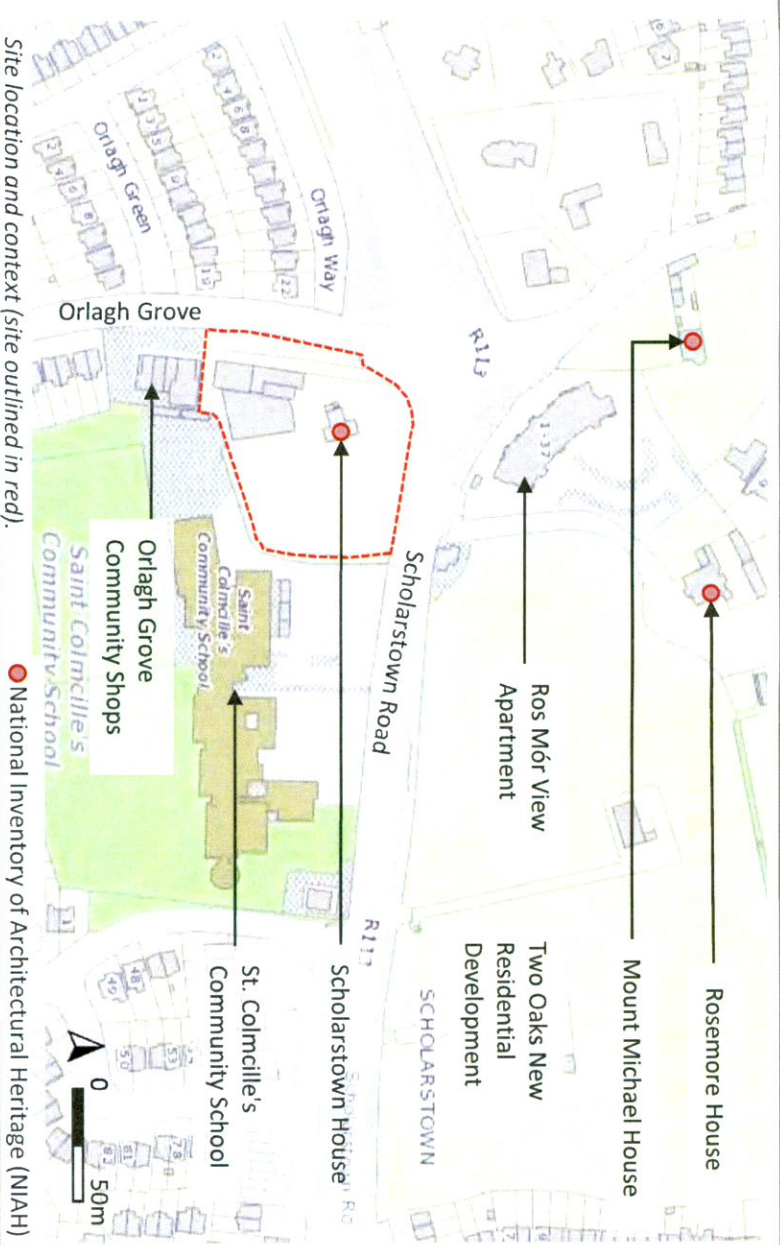
The site's main entrance is off Scholarstown Road. It is small but neat and with clear delegation between pedestrian and vehicular access. A second farmyard entrance located at the Orlagh roundabout is smaller but overgrown with vegetation so has limited accessibility. Directly adjoining the site is a school to the east and community shops with car parking to the southwest corner. The general area is predominantly residential. To the north on Scholarstown Road are Ros Mór View 4 storey apartments and new 3-6 storey apartments and houses called "Two Oaks" currently under construction.

Planting and grass cover most of the site with hard surfaces limited to around the old barn and gravel driveway and paths around Scholarstown House. The trees were assessed by an arborist and only a few deemed of moderate quality. These include 2 Sycamore trees, a group of 3 Western Red Cedar, a Sycamore, an Apple and 1 Lawson Cypress in the centre. Most of the site's remaining trees are classed as having low value including the distinct lines of Popular trees, Monterey Cypress and Leylandii hedgerow along the boundaries. A further 16 trees are recommended for removal due to being in poor health.



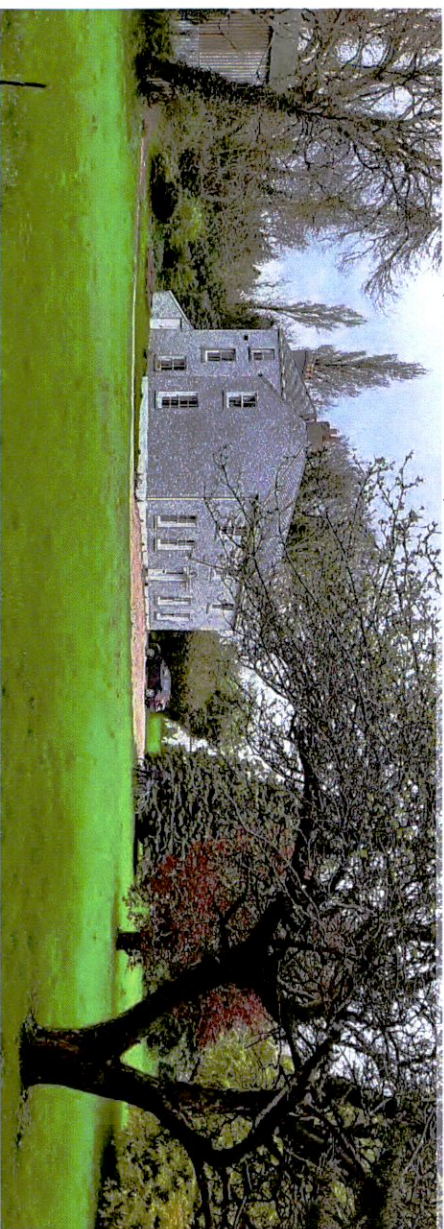
25 Inch Historical Map (1897-1913)

## Scholarstown House 0.66 HA Site, Dublin 16



Site location and context (site outlined in red).

● National Inventory of Architectural Heritage (NIAH)



View of the Scholarstown House from south-east of the site.



Main structures on site – the Scholarstown House and an old barn.

## EXISTING FEATURES & VIEWS

## Scholarstown House 0.66 HA Site, Dublin 16



- Existing Access to the Site
- Existing Residential Area
- Proposed Residential Area
- Community School Area
- Existing Grocery & Take-away
- Existing Structure on Site
- Bus Stop
- Existing Wall – Light Yellow with Brick Strips, approx. 1.8m ht.
- Existing Wall – Beige, approx. 2m ht.
- Existing Wall – Boundary to School
- Area, Dark Grey Wall with Steel Railing
- Views limited to within the site
- Views - towards the site



Scholarstown House and entrance lawn

## POLICY CONTEXT

## Scholarstown House 0.66 HA Site, Dublin 16

The proposed site is situated in the South Dublin County Council jurisdiction. The legislative context for development is set out in the **South Dublin County Development Plan 2022-2028** and **Sustainable Urban Housing: Design Standards for New Apartments** (2020). The site is zoned for Existing Residential (RES-R2).

The planning related landscape policies and objectives that relate to the proposed site are listed as follows:

### Natural and Built Heritage:

- NCBH11 Objective 3: To protect and retain existing trees, hedgerows, and woodlands which are of amenity and / or biodiversity and / or carbon sequestration value and / or contribute to landscape character
- Policy NCBH19 Protected Structures: Conserve and protect buildings, structures and sites contained in the Record of Protected Structures and carefully consider any proposals for development that would affect the setting, special character or appearance of a Protected Structure including its historic curtilage, both directly and indirectly.

### Green Infrastructure and Development Management:

- Policy G12: Strengthen the existing Green Infrastructure (GI) network and ensure all new developments contribute towards GI, in order to protect and enhance biodiversity across the County.
- Policy G14: Require the provision of Sustainable Drainage Systems (SuDS) in the County and maximise the amenity and biodiversity value of these systems.
- Policy G16: Improve the accessibility and recreational amenity of the County's GI in order to enhance human health and wellbeing while protecting the natural environment within which the recreation occurs.
- Policy G17: Protect, conserve and enhance landscape, natural, cultural and built heritage
- In the case of small-scale developments this may consist of a simple landscape plan provides for connection to local or primary GI corridors.
- Development sites not located within proximate to designated GI Cores or Corridors should identify the nearest designated GI Core, Corridor or Stepping Stone and make provision for GI interventions on the site to provide a link to local Stepping Stones, Cores or Corridors. The closest SDCC Green Corridors (GI) are the Primary M50 corridor, approximately 280m away to west of the site, and the Secondary M50-DLR Crosslink, approximately 300m away to the north.
- The incorporation of nature-based solutions such as SuDS schemes, permeable paving, green and blue roofs, green walls, swales, SuDS tree pits, raingardens, ponds to support local biodiversity and mitigate potentially harmful effects of development.
- Where possible, no net loss of existing trees/hedgerows on site.
- The design will include a provision of new native tree and plant species as well as pollinator friendly species within developments, consistent with National Pollinator Plan.
- GI plan and Green Space Factor scoring to be included as part of the landscape plans submitted for the Planning process.

### Community Infrastructure and Open Space:

- Public Open Space Minimum Standards: Overall Standard - 2.4ha /1000 population; New Residential Development on Lands in Other Zones including mixed use - Minimum 10% of site area.
- Open spaces should be designed and located to be publicly accessible by sustainable means such as walking, cycling and public transport depending on the type of open space, and should be usable by all residents of the County.
- Communal open spaces should form an integral part of scheme design, be screened from full public view and access through design and/or formal barriers.
- Communal amenity space within apartment and/or housing developments should be provided as a garden within the courtyard of a perimeter block or adjoining a linear apartment block.

### Public Realm:

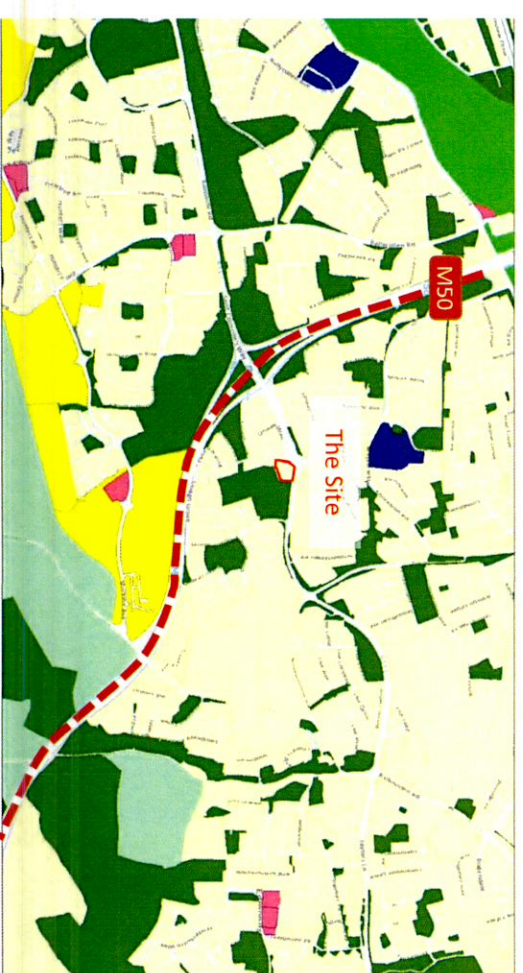
- Allow the use of sustainable forms of transport such as walking, cycling and public transport, with clearly defined footpaths and cycleways linking all buildings and public areas.
- Promote greater connectivity and permeability throughout the development through the provision of a network of well-connected public spaces and streets.

### Children's Play Areas:

- According to SDC Development Plan 2022-2028, residential developments of 30 units or over shall include provision for children's play in semi-private or public open spaces, in accordance with the Young Children's Area for Play (YCAP), or a Local Equipped Area for Play (LEAP) strategies. Natural play area are considered acceptable.
- According to Design Standards for New Apartments (2020), developments of 25 or more units with two or more bedrooms, 85-100m<sup>2</sup> play spaces are needed for toddlers and children up to the age of 6, with suitable play equipment, seating for parents/guardians, and within sight of the apartment building.

### Bicycle Parking Standards:

- Bicycle parking and storage following national minimum standards:
  - 1 cycle storage space per bedroom for residents
  - 1 space per 2 residential units for visitor cycle parking.



0 500m

Land use zoning map (Proposed site Indictively outlined in red line) Source: 2016-2022 SDCC Development Plan

## LANDSCAPE DESIGN CONCEPT

Scholarstown House 0.66 HA Site, Dublin 16

### Aims and Objectives

In incorporating the site features, planning policies and development constraints, the following were determined to be the main aims and objectives for the landscape design proposals.

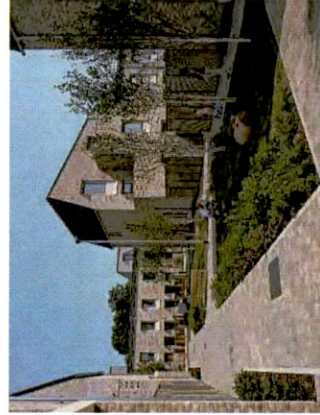
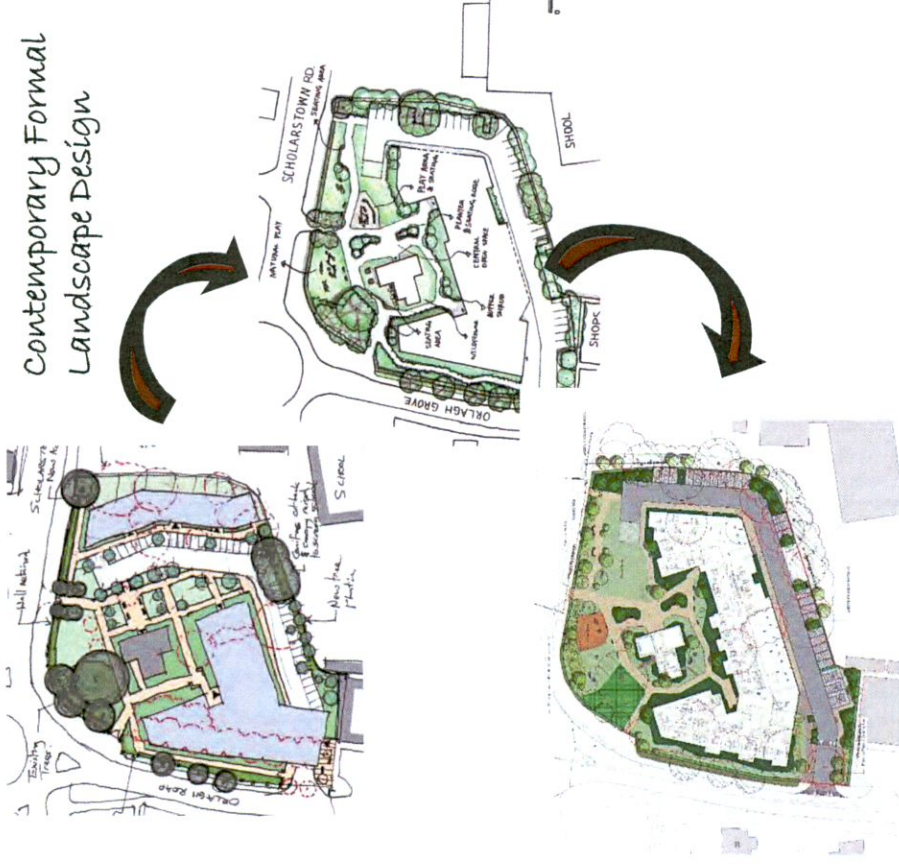
- To protect the aspect for the protected structure, Scholarstown House, and enhance its landscape setting.
- To retain existing trees where ever possible.
- To provide an open space / communal amenity spaces that provides usable and aesthetically pleasing landscaping for the residents and for the wider community.
- To provide for new and enhanced biodiversity and wildlife habitats that connect into the wider green infrastructural corridors, and incorporate the all Ireland pollination plan.
- Provide for adequate play facilities.
- Provide for activity spaces for all users and all age groups.
- Ensure universal access through the development and BCAR Part M access to the buildings.
- Incorporate as much nature based SuDS requirements as is feasibly possible.
- Provide adequate facilities for bike parking and links to the Scholarstown Road cycle route.

### Design Concept

The design concepts was developed from these aims and expanded to create landscaped spaces around the existing house that respected its setting but with a modern twist that reflected the proposed modern apartment development and the modern needs for open space use. This was achieved by utilising the geometry within the existing house and its setting, and reflecting it within the proposed design, and then taking it off-kilter with diagonal lines, and proportional radii, whilst still keeping the symmetry and alignment with the existing house.

The planting design was developed around creating a strong, structured and dynamic aesthetic, whilst still contributing back to nature through the use of native species, retained trees and pollinator friendly plants.

### Contemporary Formal Landscape Design



Precedent of landscape design concept





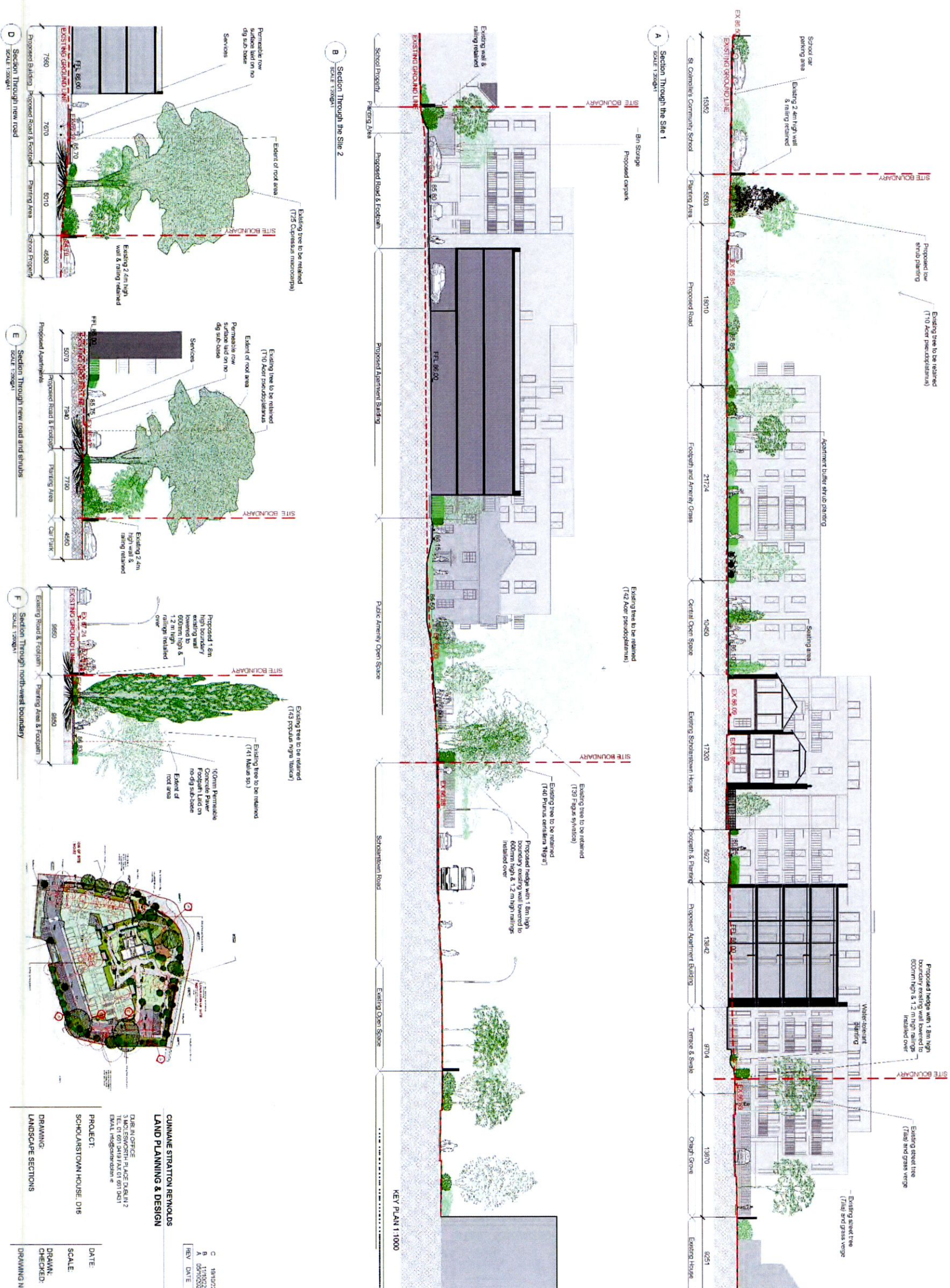
CGI view of the open space around the existing house



# LAND PLANNING & DESIGN

## LANDSCAPE SECTION

## Scholarstown House 0.66 HA Site, Dublin 16



REV	DATE	AMENDMENT
C	18/02/22	NOTES
B	11/02/22	SECTION TEXT REVISED
A	09/02/22	SECTION OVERSEEN

### CUNNANE STRATTON REYNOLDS LAND PLANNING & DESIGN

DATE IN OFFICE: 3/02/2022  
 PROJECT: SCHOLARSTOWN HOUSE, D16  
 DRAWING: LANDSCAPE SECTIONS

DATE: SEP 2022  
 SCALE: 1:200 @ A1 / 1:400 @ A3  
 DRAWN: FOL  
 CHECKED: LC  
 DRAWING NO: 22159-2-201

# CUNNANE STRATTON REYNOLDS LAND PLANNING & DESIGN



CGI view of the open space and play area around the existing house

# LAND PLANNING & DESIGN



Scholarstown House 0.66 HA Site, Dublin 16

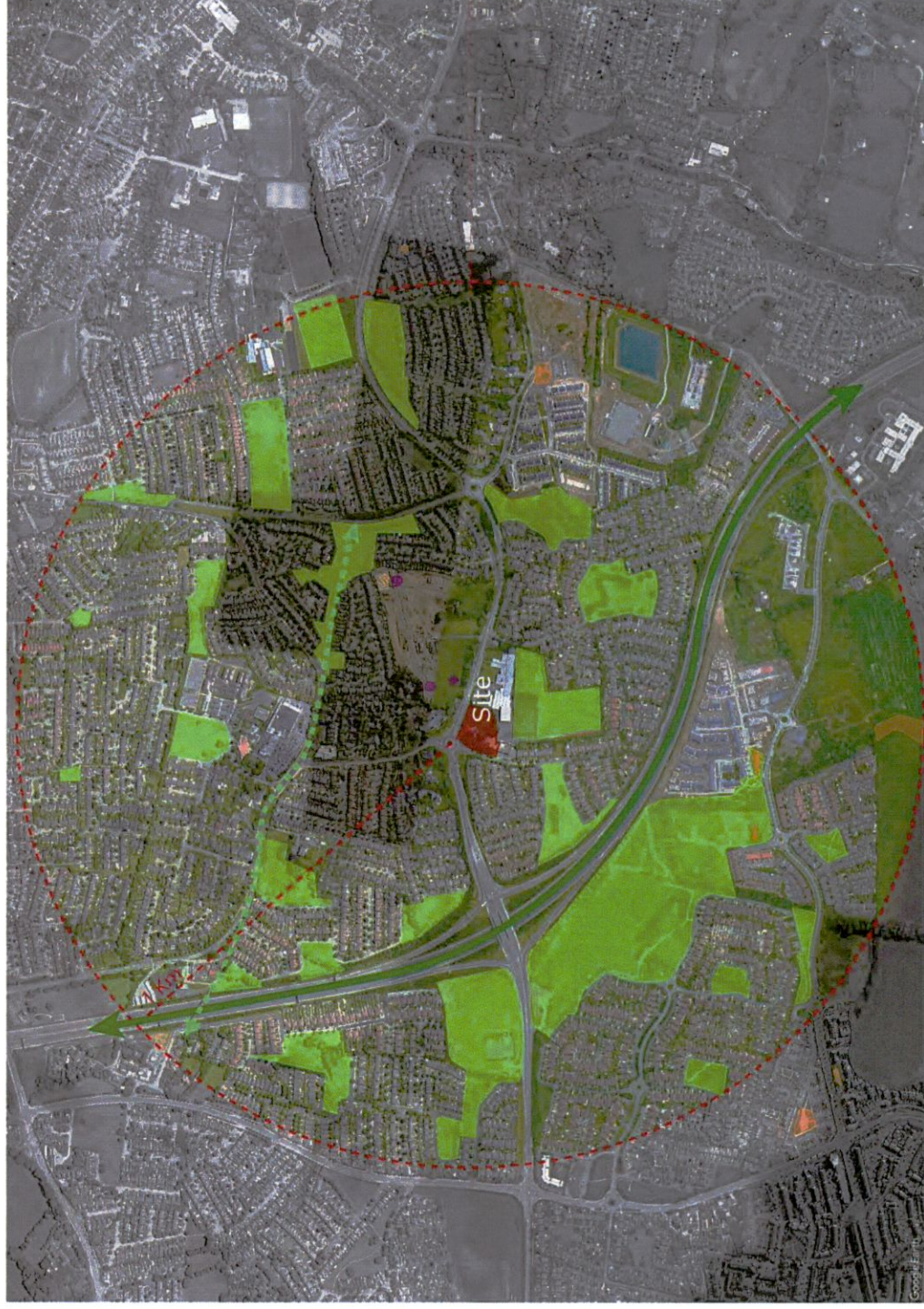
## GREEN INFRASTRUCTURE

Scholarstown House 0.66 HA Site, Dublin 16

The green infrastructure plan for this development will draw upon that set out in the South Dublin Country Development Plan.

The scheme will:

- Utilise the existing GI network of paths, roads and open spaces by connecting into these corridors.
- To design the site's corridors as effective corridors for pedestrians, cyclists and wildlife.
- These corridors have been located to link up open spaces within the proposed development and connect to the wider green infrastructure network including the nearest SDCC primary M50 and secondary N50-DLR GI corridors, surrounding established residential areas and the new Two Oaks residential development to enable healthy and sustainable communities.
- The proposals will seek to retain and enhance existing natural features across the site, wherever possible. The loss of tree cover will be compensated by the planting of a variety of new trees through the site which will include native species. The Landscape Masterplan provides details of the existing vegetation to be removed, existing trees being retained and the mix of new planting through the site.
- All planting will be selected that is supportive of the All Ireland and Pollinator Plan.
- The proposed species rich grassland and native wildflower mixes will create swards of diverse meadow grassland which will support a rich diversity of invertebrates, birds and mammals species.
- Sustainable Urban Systems (SUDS) in the form of swales, permeable paving and a green roof on the apartment block will be provided to control and manage surface overflow. The vegetation cover of the green roof and swales will also provide biodiversity benefits.



### GREEN INFRASTRUCTURE LEGEND

- ↔ Existing M50 Primary GI Corridor
- Existing M50-DLR Cross Link Secondary GI Corridor
- Proposed Site
- Existing Recreational Open Spaces
- Existing Playgrounds located within new residential areas
- Proposed playgrounds within the Two Oaks Residential Development (under construction)

Green Infrastructure and Recreational Spaces within 11km of the Proposed Site: Scale: NTS

## GREEN INFRASTRUCTURE - GREEN SPACE FACTOR



Green Infrastructure within the proposed site and immediate area Scale: NTS

- Existing Open Space
- Existing Trees Retained
- Existing Trees Removed
- Proposed Trees
- GI Links
- ↔ Main Road Network

### Summary of Site's Tree and Hedgerow cover:

The table below indicates the quantities of tree and hedgerow planting being replaced, retained and newly planted. Further details of existing trees being retained and removed can be found in the supporting arborist's report and plans. While details on the proposed developments' new and retained landscape planting are detailed in the Landscape Masterplan (Dwg: 22159-2-101) and SDDC's Green Factor Score table opposite.

Vegetation Type	Quantity				Difference
	Existing	Removed	Retained	Proposed	
Trees	96no.	75no.*	16no.	49	-31
Hedgerow	0m2	0m2	0m2	498m2**	+498m2

\* 7no. of the trees to be removed are in poor health and recommended for removal by the arborist regardless of any proposed development occurring on the site.

A further 14no. trees form a single block of early mature leylandii trees of low arboricultural value. Most trees to be removed are graded as category C low quality.

\*\* Proposed hedgerows will include both formal hedging and native screen planting along the site's boundaries and internal spaces.

### South Dublin Green Space Factor:

- Green Space Factor (GSF) for the Proposed Development has been measured across the site is rated at **0.58**, which is +0.08 above the required scoring for new residential developments. as indicated in the accompanying GSF table.

## Scholarstown House 0.66 HA Site, Dublin 16

Green Space Factor Tool  
South Dublin County Council

Comhairle Contae  
Atha Cliath Theas  
South Dublin County Council

**User input indicated by Orange fields**

Scholarstown House

User Input	
Zoning lookup	RES
Minimum GI Score	0.5

1. Enter Development Site Area m <sup>2</sup> <a href="#">HERE</a>				
<b>Surface Type (see tab for detailed descriptions)</b>	<b>Factor</b>	<b>Proposed Surface Area m<sup>2</sup></b>	<b>Factor Values</b>	<b>7900</b>
1. Short Lawn	0.3	1063	319	
2. Tall Lawn (wild, not mown)	0.5	113	57	
Permeable Paving	0.3	1674	502	
Vegetation		0	0	
4a. Vegetation-Shrub below 3cm	0.4	0	0	
4b. Vegetation-Shrub / Hedgerow above 3cm	0.5	1514	757	
4c. Vegetation-Pollinator friendly perennial planting	0.5	190	95	
4d. Vegetation-Preserved hedgerow	1.2	0	0	
<b>Trees</b>				
5a. New trees	0.6	468	281	
5b. Preserved trees	1.2	1249	1499	
7. SUDS intervention (rain garden, bioswale)	0.6	77	46	
<b>Green Roof</b>				
9a. Green Roofs- Intensive green roof (substrate is 1 metre or greater in depth)	0.7	0	0	
9b. Green Roofs - Extensive green roof (less than 1 metre in depth)	0.6	1730	1038	
10. Green wall	0.4	0	0	
11. Retained Open Water	2	0	0	
12. New open water	1.5	0	0	
<b>Total Equivalent Surface Area of Greening</b>		<b>8077.50</b>	<b>4593.15</b>	
	<b>Green Factor Numerator</b>		<b>0.58</b>	

Minimum Required GI score	Final GI score	Result
<b>0.5</b>	<b>0.58</b>	<b>0.08</b>

**EXISTING TREES**

**Existing Trees:**

The existing grounds consisted of a mature landscaped setting with very mature parkland trees, conifers, lawn and ornamental garden. Tree species include amongst other: Beech - *Fagus sylvatica*, *Sycamore* - *Acer pseudoplatanus*; Ash - *Fraxinus excelsior*; Golden Western Red Cedar - *Thuja plicata* 'Zebrina'; Leylandii - x *Cupressocyparis leylandii*; Monterey Cypress - *Cupressus macrocarpa*; and Lombardy Poplar - *Populus nigra* 'Italica'. Adjoining the site along Orlagh Groove are street trees of Lime - *Tilia cordata*.

It was identified in the arborist's report that a lot of these trees are over mature, large conifers / evergreens and Wych Elm trees which suffer from Dutch Elm disease.

While a considerable amount of trees are to be removed. The proposed development has been designed to retain the trees that contribute to the setting of the protected structure, provide screening for the school, lend a level of maturity to the site, and help maintain green corridors for wildlife.

To ensure appropriate retention of the existing trees, wherever possible a no-dig policy will be used for the construction of paths and road surfaces, including the construction access surfaces. For details of the no-dig construction method see detail opposite and sections on drawing no. 22159-2-201. Trees will require some pruning back or crown shaping to facilitate the construction of the proposed building and to compensate for the minor loss or impact on tree roots. Such works will be carried out with the aim of improving the longevity of the retained trees.



View of mature conifers along the East and South.



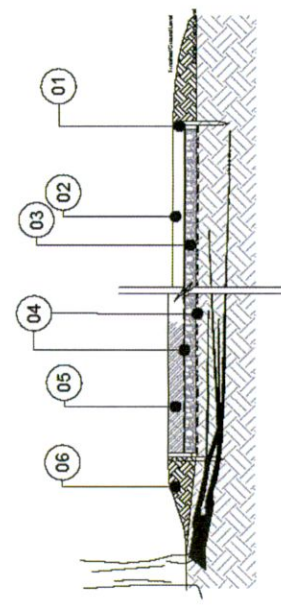
View of mature *Betula pendula* and *Fraxinus excelsior* in the centre of the view and *Populus nigra* 'Italica' along the West boundary in the back drop.

**Scholarstown House 0.66 HA Site, Dublin 16**



Landscape Plan showing existing trees retained and removed, (dwg no. 22159-2-101),

1. Timber edging 25x200mm, pressure treated and screw fixed in place to a 25x300mm timber stake.
2. Ballylusk 10mm to dust 'Beige' self-binding gravel rolled to a finished depth of 75mm. IMPORTANT: To compact self-binding gravel to 75mm depth, an initial un-compacted layer of 90mm will be required. Finished surface to be rolled with max. 11ton roller or whacking plate.
3. 75mm deep CORE root protector barrier: product: CGC001: backfilled with clean washed, free-draining 30-40mm granular material, ci.805 no fines or equivalent. Supplier: www.corelp.co.uk.
4. Geotextile membrane layer; Product: TRP membrane, laid on even ground after existing turf layer is removed by hand in tree root zone & ground to be leveled and lightly consolidated sub-base. Supplier: www.corelp.co.uk.
5. 100mm asphalt footpath surface. Asphalt to engineers spec.
6. Ground level either side to be graded to halfway up outer face of square edge face of kerb stone.
7. For no-dig area, remove turf, level area and build up as per detail. No-dig area should be for total area under root zone of existing trees. See arborists tree protection drawing for area to be protected.
8. Note: max. buildup over existing ground level to be 250mm.



P05 ROOT PROTECTION BARRIER - GRAVEL SURFACE

# LAND PLANNING & DESIGN

## OPEN SPACES QUANTUM

Scholarstown House 0.66 HA Site, Dublin 16

### Open Space Quantum:

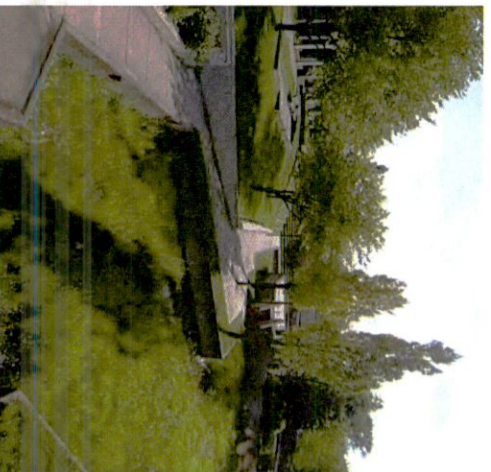
- Site Areas = **79002**
- Minimum Public Open Space: 10% of site area = **7900m<sup>2</sup>**
- Minimum Communal Open Space:
  - 1 bedroom – 5m<sup>2</sup>/unit x 32 = 160m<sup>2</sup>
  - 2 bedrooms – 6m<sup>2</sup>/3p unit x 1 = 6m<sup>2</sup>
  - 2 bedrooms – 7m<sup>2</sup>/4p unit x 33 = 231m<sup>2</sup>
  - 3 bedrooms – 9m<sup>2</sup> /5p unit x 10 = 90m<sup>2</sup>
 Minimum Communal Open Space: **487m<sup>2</sup>**
- **Total Public and Communal Open Space required = 12277m<sup>2</sup>**
- **Total Public & Communal Open Space provided = 2057m<sup>2</sup>**  
 Overall Total: 26% of site area and + 780m<sup>2</sup> of min area requirements
- Children's Play Areas: combined for semi-private and public open spaces.
  - 85-100m<sup>2</sup> for toddlers and children up to the age of 6 for schemes of between 25 and 99 units.
- **Total Play Area Provided = 114m<sup>2</sup> within the open space**  
 Overall Total: ±14m<sup>2</sup> of min area requirements

Due to the heritage context of the existing house and the need to maintain the open aspect looking out from the house and towards it, along with the requirement to retain existing features such as the existing gates to the development, it is proposed to combine the communal amenity space and public open spaces. The gates to the development will be retained for heritage value but left open, with all open space maintained by a private management company. Facilities within the open space have been designed so that public access does not impinge on the amenity of residents, with seating and gathering areas located in a variety of locations, with more intimate spaces closer to the apartments. This is strengthened by the planting design which progresses from openness to privacy as the open space moves more towards the apartments.



Public and Communal Open Space Provided

Similar examples of combined communal amenity space and public open space include, Ferrybank (1) and Herbert Hill (2) in Dundrum, Dublin 14 and Ardilea Crescent (3), Heidelberg, Dublin 14.



Examples of Open Space / Communal open space style

## LANDSCAPE DESIGN

### Play Space – To Communal Amenity Space

Play is how children learn about themselves and the world we live in and has been described as 'The work of the child' by Mary Montessori.

Currently the nearest larger playground for older kids is 1.3km walk away in Knocklyon Park, however there will be a new playground within 350m in the new Two Oaks development on the opposite side of Scholarstown Road. Other small parks can be found within other recent housing estates within the wider area while much of the open space around more established residential estate, including those off of Orlagh Grove, are predominantly grassland and lack any dedicated play facilities.

In accordance with the development plan, the play area will be a min. of 100m<sup>2</sup>, be 5m from the nearest residential dwelling and have min. 5 pieces of equipment.

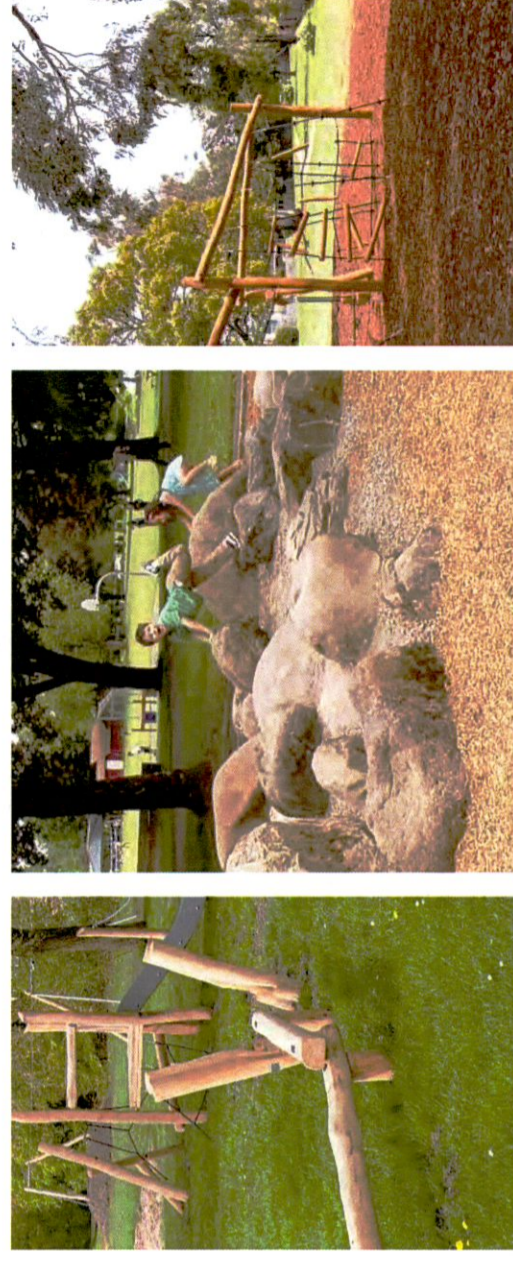
The play area will be designed to act as instigator of natural play rather than a director of what that play will be and to inspire the imagination. It will include for interesting and varied topography, hiding places, trees, grass and soft safety surfaces. The play space will challenge the children in relation to running, jumping, rolling, climbing and balancing, while also experiencing a range of emotions such as opportunities to be powerful/powerless, scared/confident, and in/out of control. It will provide the children with a freedom of choice, spontaneity, and an absence of directly imposed rules.

### Furnishings & Surfaces:

Furnishings will be similar to what is illustrated in the images displayed. Natural logs and balancing elements etc. The play area will have an engineered wood chip surface and grass.

### Safety:

All furnishings and surfaces within the children's play spaces will be to ISEN 1176/ISEN 1177 standards and meeting the RoSPA, NSC and other appropriate health and safety requirements. The play space has been designed around the Ready, Steady, Play! And Naps, Leaps and Neaps guidelines.



Plan of playground, Scale: NTS



1. Climbing frame
2. Balancing Logs
3. Rocker
4. Seesaw platform
5. Mound and rocks

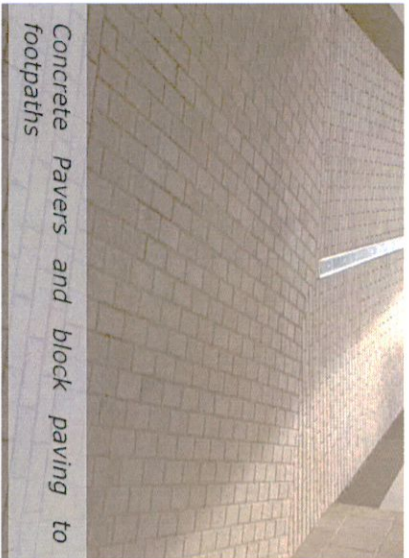


# LAND PLANNING & DESIGN

## MATERIAL FINISHES

Scholarstown House 0.66 HA Site, Dublin 16

A robust palette of quality materials is envisaged. Used creatively to form well functioning and sustainable and beautiful residential places. All materials will be designed to a high standard, will be robust and withstand a long life, as well as meet the CE standard. All areas will be designed to facilitate universal access to all users and be in compliances with Part M of the building regulations, as well as meet the CE standard. A full quality audit will be carried out prior to installation of all materials. All street lighting will be positioned so no closer than 6m from a tree or the tree species used will be of a fastigate nature, with a canopy that will be no closer than 3m from a lamppost. For lighting proposals see the engineer's drawings. For boundary materials see architect's drawings and documents.



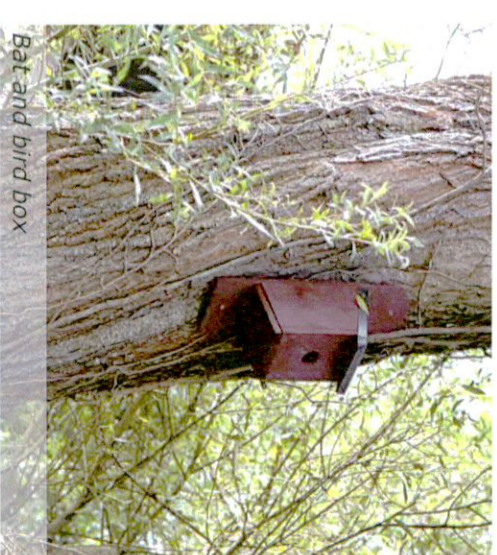
Concrete Pavers and block paving to footpaths



Recon Concrete slab paving to entrances and plaza



Private garden/terraced paving



Bat and bird box



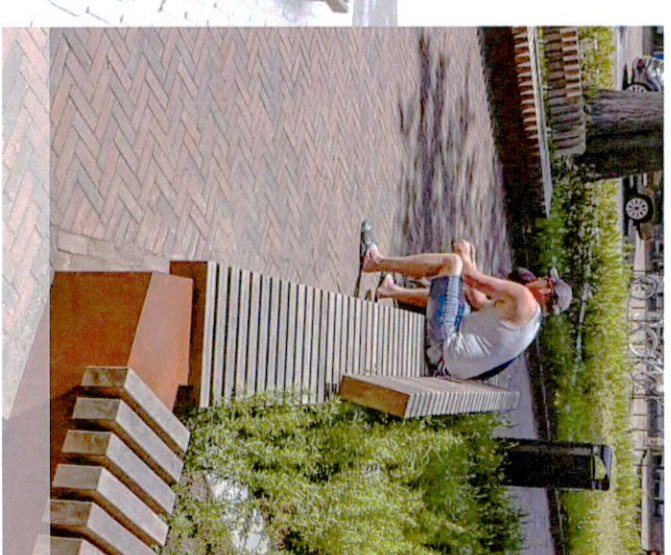
Self-binding gravel



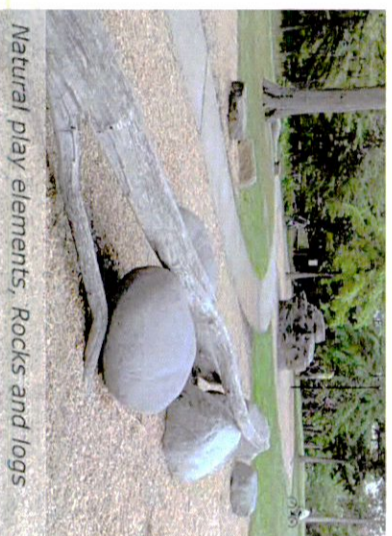
Permeable concrete paving to parking areas



Seating, timber and steel



Engineered wood chips to play areas



Natural play elements, Rocks and logs



Bins, steel



Steel Bike stand

Planting has been designed to: create seasonal variety, provide screening, create an interesting setting for the kids, use native plants for educational purposes as well as contribute towards the local biodiversity. Full details of plant species can be found on the drawings, and the operations, maintenance and management requirements are outlined in the following pages.

**Street Trees:**



*Acer campestre*  
'Elsrijk'



*Quercus robur*



*Tilia cordata*  
'Greenspire'

**Shrub Boundary Screening :**



*Corylus avellana*



*Viburnum opulus*



*Euonymus europaeus*



*Cornus sanguinea*



*Sambucus nigra*



*Ligustrum vulgare*

**Specimen Shrubs:**



*Acer japonicum*



*Amelanchier lamarchii*



*Syringa vulgaris*  
'Charles Joly'

**Ornamental Trees:**



*Ilex aquifolium*



*Magnolia x solangeana*



*Crataegus monogyna*

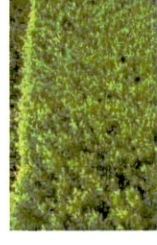


*Prunus avium*  
'Plena'



*Sorbus aucuparia*

**Hedges:**



*Ilex crenata*



*Crataegus monogyna*



*Acer platanoides*



*Acer robur*  
'Scanlon'



*Alnus cordata*



*Betula pendula*



*Pinus sylvestris*

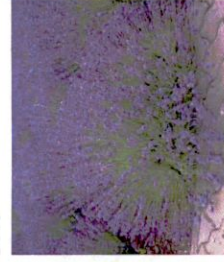


*Fagus sylvatica*

**Shrub-Low Screen:**



*Pinus mugo*  
'Mops'



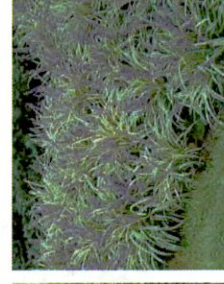
*Lavandula angustifolia*



*Viburnum davidii*



*Carex morrowii*



*Liriope muscarii*



*Buxus sempervirens*

**Swale Planting:**



*Filipendula vulgaris*



*Carex pendula*



*Primula veris*



*Caltha palustris*



*Iris pseudacorus*



*Lythrum salicaria*

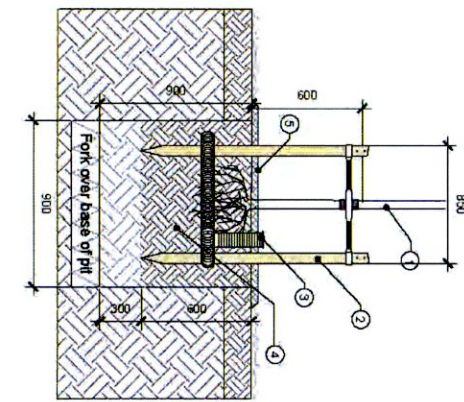
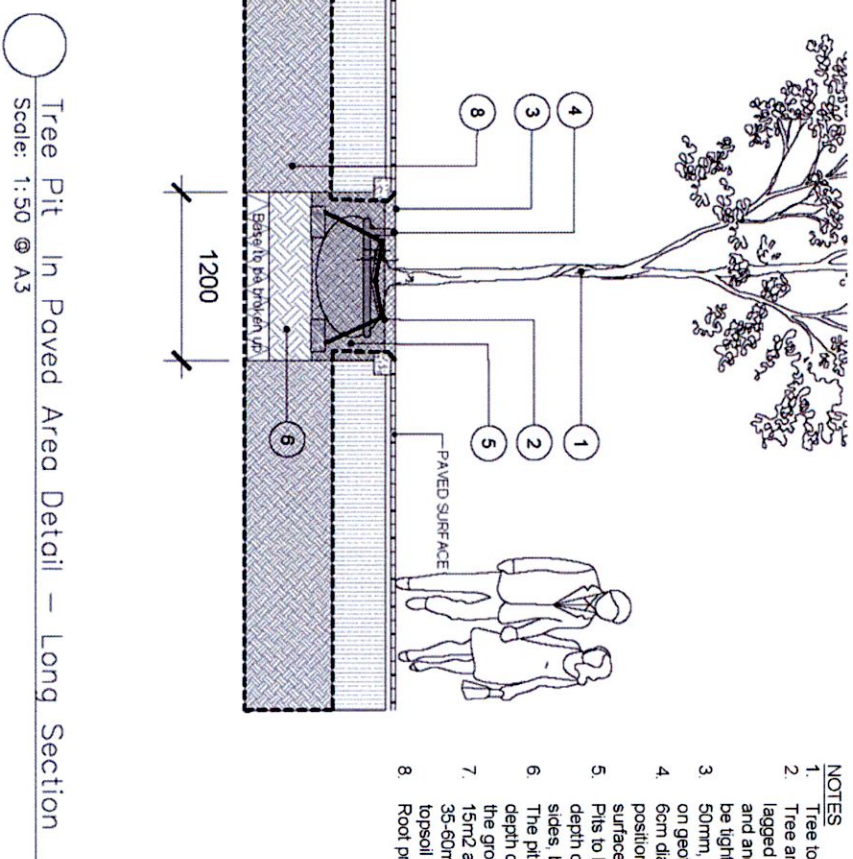
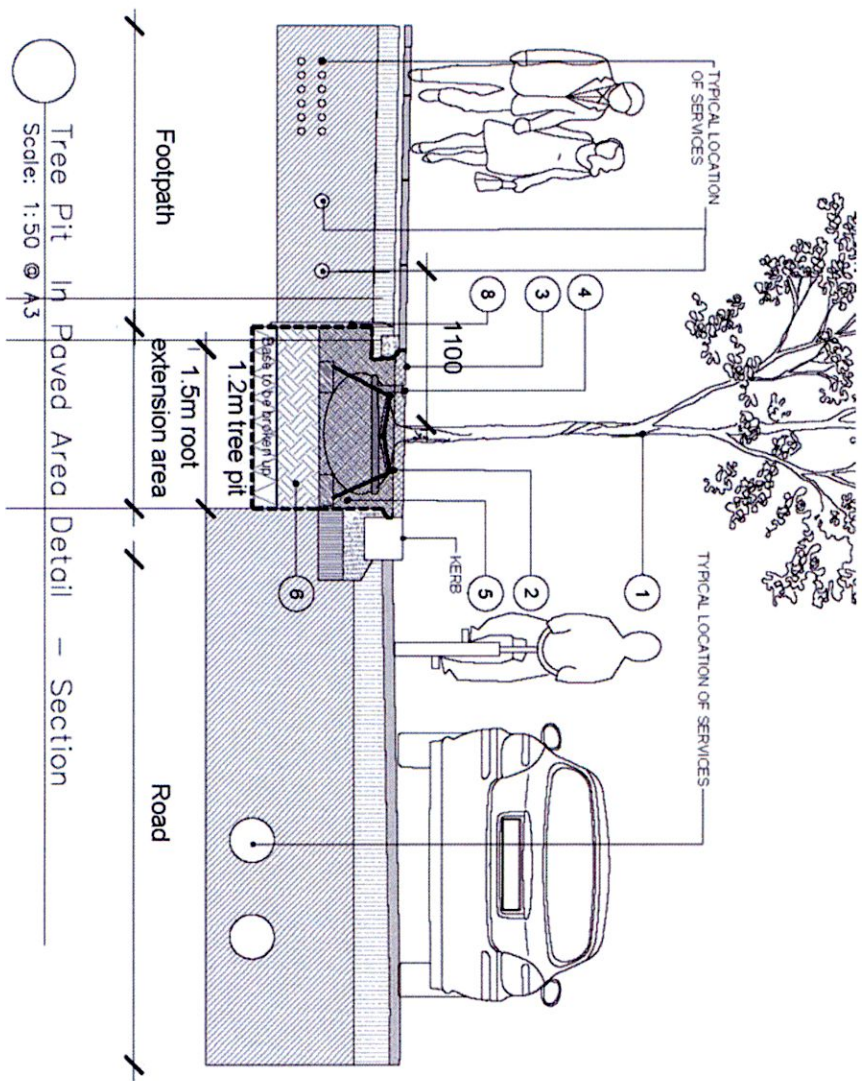


*Eupatorium cannabinum*

## PLANTING DETAILS

Scholarstown House 0.66 HA Site, Dublin 16

### Typical Planting And Tree Root Protection Details



Tree Pit Detail – In Grass/Shrub areas  
Scale: 1:50 @ A3

#### NOTES

1. Tree to have a clear stem as indicated on planting plan.
2. 75mm diameter stakes pressure treated driven 1000mm below ground 400 - 600mm above ground, with specified biodegradable rubber strap around wire at tree and nailed to 100x30x950mm crossbar. Locate stakes 475mm from tree trunk.
3. 60mm diameter perforated flexible plastic drainage pipe positioned as shown over rootball with one end open to surface to facilitate watering and capped.
4. Tree pits to be min. size 900 x 900 x 900mm. Remove the full depth of topsoil and set aside for reuse. Scarfy sides and back fill pit with 400mm depth of subsoil in 200mm layers and lightly firmed in. Incorporate a soil ameliorant into base and back fill remainder of pit with topsoil mixed with soil ameliorants in 150mm firmed-in layers. All planting to receive a minimum of 25 lt water per m<sup>2</sup> immediately after planting.
5. 50mm medium grade bark mulch in 800mm dia circle to base of trunk.

- #### NOTES
1. Tree to have a clear stem height of 2m.
  2. Tree anchoring system, using 3no. 8 thread steel wire cables lagged up over timber frame over rootball using webbing straps and anchored using 3no. 100 x 15 x 20cm sleepers. Straps to be tightened using ratchet tensioner.
  3. 50mm, 6mm Arbour resin 30-50mm depth on 30mm 6mm grit on geotextile filtration membrane.
  4. 60mm diameter perforated flexible plastic drainage pipe positioned as shown over rootball, with capped end open to surface and finished level with the ground.
  5. Pits to be size 1200mmx1200mmx1200mm. Remove the full depth of topsoil (to BS882) and set aside for reuse. Scarfy sides. Break up base of pit to a depth of 200mm.
  6. The pit will be back filled with subsoil (to BS8601) to 300mm depth or to a level that allows the rootball to sit comfortably in the ground.
  7. 15m<sup>2</sup> area root zone under paving surface, made up of 50% 35-60mm aggregate, 30% clean horticultural sand, 20% loam topsoil to BS882, rapped in a large gauged geotextile.
  8. Root protection barrier, ribbed polyethylene.

Tree Pit In Paved Area Detail – Long Section  
Scale: 1:50 @ A3

### 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 site. 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.

## OPERATIONS

Scholarstown House 0.66 HA Site, Dublin 16

### 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 Extra Heavy Standard 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.

**OPERATIONS**

**Scholarstown House 0.66 HA Site, Dublin 16**

**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/m<sup>2</sup>.
- 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 m<sup>2</sup>; and 150g/m<sup>2</sup> 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/m<sup>2</sup> and 10:10:10 NPK slow release fertiliser at 150g/m<sup>2</sup>.
- 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.
- Maintain hedges at height indicated on drawings.

**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.
- Defects Period: 5 years.

**1.25 Grass Seeding**

**1.25.1 Herbicide Application**

- Type: Suitable for suppressing perennial weeds and existing grass.
- Timing: Allow fallow period before cultivation.
- Duration: As manufacturer's recommendation

**1.25.2 Seedbed cleaning before sowing**

Operations: Kill pernicious weeds with selective contact herbicide.

**1.25.3 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 administering 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.

**1.25.4 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 Units 66&67nd 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.

**1.25.5 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.

**1.25.6 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/m<sup>2</sup>, in transverse directions.

### 1.25.7 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.

### 1.25.8 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.

### 1.25.9 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.

### 1.25.10 Grass sowing season

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

### 1.26 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 site. 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-Units 66&67ter 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 herbicide according to manufacturer's instructions. Areas of invasive and noxious species in the lawn or areas, shall be spot sprayed.

**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 spot sprayed.

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 trimmer. 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.



## MAINTENANCE

Scholarstown House 0.66 HA Site, Dublin 16

### 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 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 9mo. times per year, however it will be the contractor's duty to control weeds by hand weeding or other if weed cover exceeds 10% of the planting area.

### 2.5 Watering

The Contractor will be responsible for the watering of all trees and shrubs during the maintenance period. Watering shall mean applying clean health water (chlorinated water accepted) to moisten the full depth of root run of each tree or shrub. Avoid washing or compaction of the soil surface. Any landscaping damage, discolouration or falling to show signs of healthy growth as a result of under watering will be replaced at the contractors cost.

The contractor will notification the Landscape Architect and keep a record of attendance for each visit. Spot checks will be made to ensure full compliance with this condition. It will be the Contractor's responsibility to source water for these applications. Additional watering may be required depending on weather.

The frequency of watering must be increased should the weather conditions turn excessively dry. It is the contractor's responsibility to monitor weather conditions to ensure the watering schedule is adjusted accordingly. It will be the responsibility of the Contractor to notify the Client of any additional requirements and agree the number of additional watering visits.

### 2.6 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.

### 2.7 Pest and Disease Control

The contractor will be responsible for maintaining the plants in a healthy and vigorous growth. Where disease, pest damage or fungi ingress is identified, the Contractor is to inform the Landscape Architect/ Client's Representative and agree treatment prior to application.

### 2.8 Tree Planting Care

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

### 2.8.1 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 hand weeding of annual weeds, and spot application of translocated herbicide, (as per manufacturer's instructions), for perennial weeds to be carried out on three visits during the growing season.

#### **2.8.2. 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.

#### **2.8.3 Existing Trees**

The existing trees will have post remedial work to ensure their retention and protection during construction. All works to existing trees should be carried out in accordance with the Arboarist's report.

#### **2.9 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 Units 66&67nd 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 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 5 years after planting. All such replacements shall be carried out in the first available planting season after the requirement to do so is recognised.

## MAINTENANCE

Scholarstown House 0.66 HA Site, Dublin 16

### 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
Grass cutting (Min 24 cuts)		*	*	**	***	***	***	***	***	**	*	
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 (after 3-5yr)				*								
Mulch top-up to tree circles/squares						*				*		
Herbicide app. to tree mulch circles				*			*			*		
Herbicide app./weeding to shrubs & hedgerow				*			*			*		
Watering of new trees (or after 2 weeks of no rain)				*	*	*	*	*	*	*	*	*
Application of residual weed killer to footpaths, cycle paths.				*								
Litter Clearance/pick up	*	*	*	**	***	***	***	***	***	**	*	*

