



Parkgate Street
Landscape Design Report
January 2020
MITCHELL + ASSOCIATES

Context

Policy review

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Mitchell + Associates have prepared this Landscape Design Statement as part of the proposed residential development at Parkgate Street, Dublin.

The report is intended to be read in conjunction with the submitted drawings and the other consultants' documentation.

Policy review

The landscape treatment for the proposed Development is derived from the planning and urban design strategies and principles outlined within Dublin City Council Development Plan, and other National Guidance.

Dublin City Council Development Plan

The site in question has been zoned as follows:

Z5 To consolidate and facilitate the development of the central area, and to identify, reinforce, strengthen and protect its civic design character and dignity.

Z6 To provide for the creation and protection of enterprise and facilitate opportunities for employment creation.

Z9 To preserve, provide and improve recreational amenity and open space and green networks.

The Z9 zoning refers to the riverside part of the site.

Chapter 10 Green Infrastructure, Open Space & Recreation

The Development plan outlines a Green Infrastructure Strategic Approach that aims to create sustainable connectivity between green areas and to provide for the recreational and amenity needs of the population.

Although all Policies and objectives outlined in the Development Plan are relevant at some level to each and every proposed development, the following are the most pertinent to this site.

GI4: To co-ordinate open space, biodiversity and flood management requirements, in progressing a green infrastructure network.

GI5: To promote permeability through our green infrastructure for pedestrians and cyclists.

GI02: To apply principles of Green Infrastructure development to inform the development management process in terms of design and layout of new residential areas, business/ industrial development and other significant projects.

GI04: To improve pedestrian and cycle access routes to strategic level amenities while ensuring that ecosystem functions and existing amenity functions and existing

amenity uses are not compromised and existing biodiversity and heritage is protected and enhanced.

GI8: To protect and enhance views and prospects which contribute to the appreciation of landscape and natural heritage.

GI25: To make provision for habitat creation/maintenance and facilitate bio-diversity by encouraging the development of linear parks, nature trails, wildlife corridors, urban meadows and urban woodlands.

GI27: To minimise the environmental impact of external lighting at sensitive locations to achieve a sustainable balance between the needs of an area, the safety of walking and cycling routes and the protection of light sensitive species such as bats.

GI30: To encourage and promote tree planting in the planning and development of urban spaces, streets, roads and infrastructure projects.

Chapter 08 Movement & Transport

MT11: To continue to promote improved permeability for both cyclists and pedestrians in existing urban areas in line with the national Transport Authority's document 'Permeability - a best practice guide'. Also, to carry out permeability and accessibility study of appropriate areas in the vicinity of all Luas, rail and BRT routes and stations, in co-operation with Transport Infrastructure Ireland and the National Transport Authority.

M12: To improve the pedestrian environment and promote the development of a network of pedestrian routes which link residential areas with recreational, educational and employment destinations to create a pedestrian environment that is safe and accessible to all.

Chapter 09 Sustainable Environmental Infrastructure

SI6: To promote the protection and improvement of the aquatic environment, including through specific measures for the progressive reduction of cessation of discharges and emissions.

SI8: To mitigate the effects of floods and droughts subject to environmental assessments.

SI18: To require the use of Sustainable Drainage Systems in all new developments, where appropriate, as set out in the Greater Dublin Regional Code of Practice for Drainage Works:

- The infiltration into the ground through the development of porous pavement such as permeable paving, swales and detention basins.

- The holding of water in storage areas through the construction of green roofs, rain water harvesting, detention basins, ponds and wetlands.

- The slow-down of the movement of water.

Other National Guidance documents that have influenced the design proposal/Strategy are as follows:

Sustainable Urban Housing: Design standards for New Apartments 2018

Sustainable Residential Development in Urban Areas 2009

Building Regulations - Part M Access and Use

Building Regulations - Part K Stairways, Ladders, Ramps and Guards

Design Manual for Urban Roads and Streets (DMURS)

All-Ireland Pollinator Plan 2015-2020

Dublin City Parks Strategy

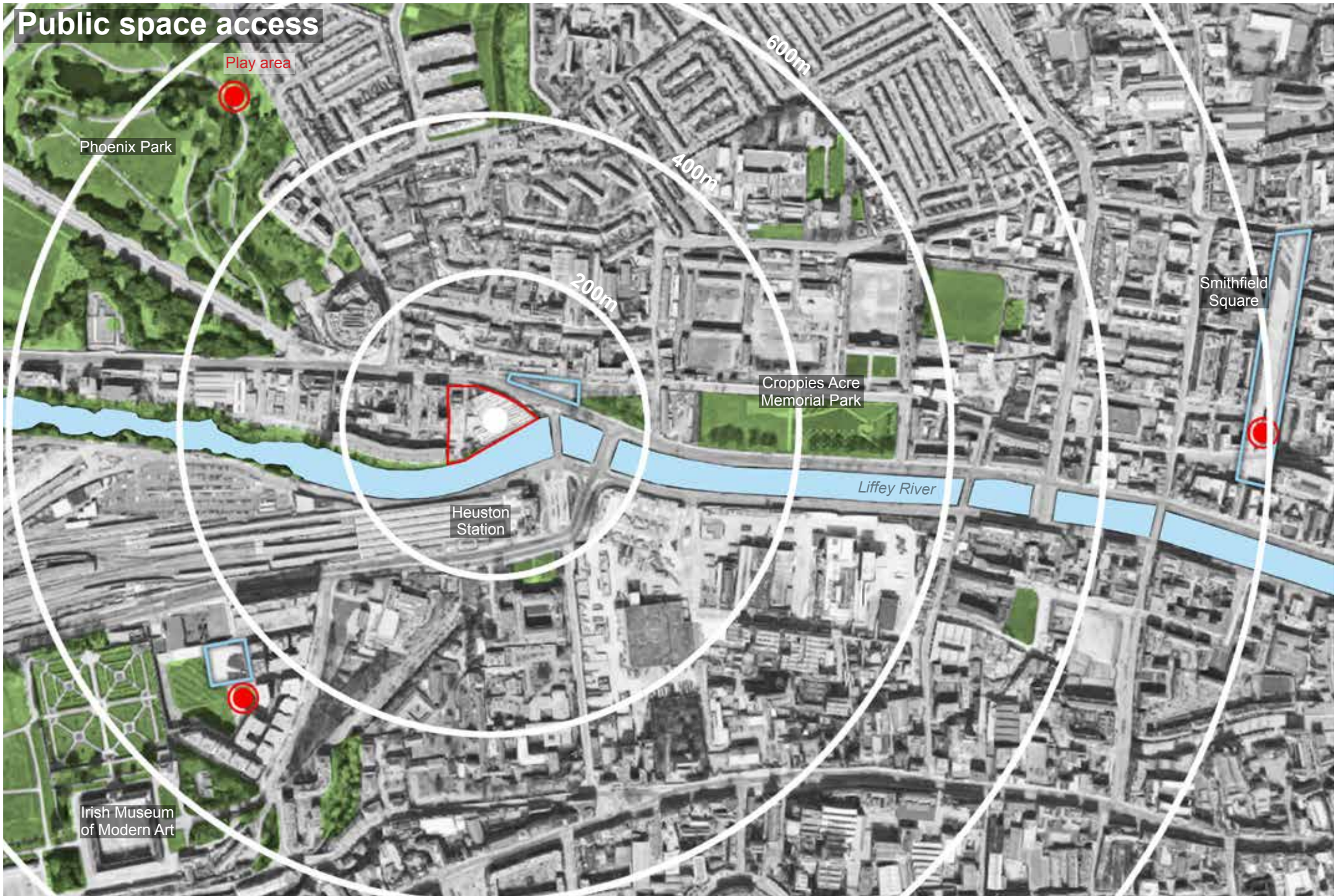
Play Space Guidelines 2007

Ready, Steady, Play! A National Play Policy
Dublin City Play Plan 2012 - 2017

National Landscape Strategy for Ireland 2015-2025

Dublin City Tree Strategy 2016-2020

Your City Your Space Public Realm Strategy 2012



Site context and description

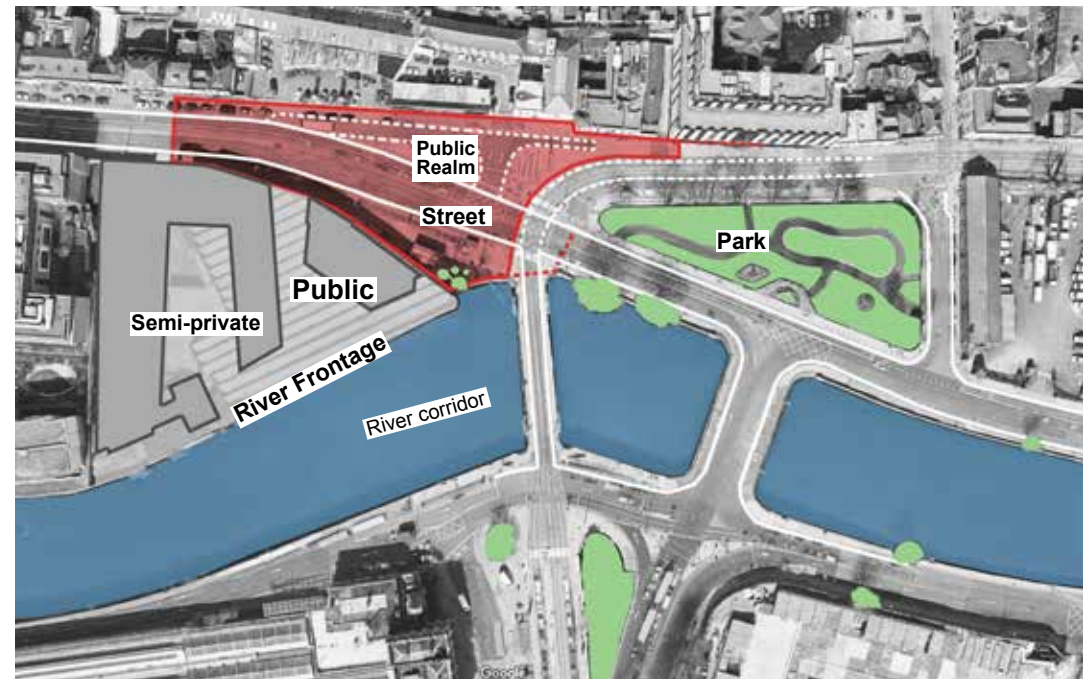
The site is located at an important location in the city: the River Liffey meets Parkgate St at Sean Heuston Bridge and Croppies Memorial Park, leading on to Wolf Tone Quay and Croppies Acre. The circa 0.82 ha triangular site is bounded to the northern and southern sides by this confluence of the river and Parkgate Street, The land rises gently towards the west, and sits beneath the escarpment that rises dramatically to the north beyond Parkgate St. The roads and footpaths from this point eastwards run parallel to the river forming Dublin's Quays. Remnants of quay or mooring structures are evident beside the tall stone boundary wall at the river edge. This edge is visible from the opposite bank at Heuston Station, and forms an interesting riverside boundary in stone and brick, terminating in a round turret downstream and a square tower and two riverside buildings upstream. At the eastern end, between the turret and a small painted brick sub station is a small piece of fenced in ground that is barely noticeable in the cityscape except that it has 4 semi mature Lime trees (*Tilia* spp). Homeless people camp out in tents in this unobtrusive space. To the west, the site is book-ended by Parkgate Place, a development of offices and apartments. The site is enclosed on Parkgate Street by a high wall, which is part of the industrial structure that occupies most of the site. Views in to the site are only glimpsed through the stone archway which is a protected structure. The site also contains the now boarded up structure of Kingsbridge House. The Heritage Report (By ARC) gives a comprehensive description of the origins of the site, its uses and buildings.

There is a public riverwalk upstream of the site, associated with Parkgate Place. Beyond that the character of the river corridor begins to change to one with less overt urban influence.

The Phoenix Park is approx. 200m to the west, which is a major green open space including a local play area about 400m from the site. The grounds of the Irish Museum of Modern Art with its formal gardens and meadows are approx. 600m to the south west across the river. Closer by is Heuston South Quarter with its emergent civic space and play area.

The river is tidal up to Islandbridge, and so the scene on the river at this location changes dramatically with the tides. At high tide it can be used for recreation, when people can be seen in training skiffs; at low tide, mud flats are revealed, active with gulls and cormorants, as well as another confluence, as the River Camac joins the Liffey at the opposite quay at Heuston station.

Public Realm context



Public Realm





Needs and considerations

The landscape design evolved from a series of practical considerations and needs stemming from the end users of the development, the day to day management & accessibility while at all times being cognisant of the relevant building regulations.

There are no trees on the site, but there are 4 semi mature Lime trees (*Tilia* spp) in DCC land to the east, and are incorporated into the proposed permeable river edge. (see arborist report).

The development is intended for users consisting of a likely diverse demographic and as such it is necessary to design a sense of place, with stimulating and vibrant spaces supporting a combination of amenity uses that help to build a sense of community, many of which relate to the building uses.

Universal access is another consideration in the design process. The site has to address the needs of the development's residents, workers and visitors, to promote social interaction and to generate an integrated community in order for this development to become a successful neighbourhood.

The sustainability of the development and in particular the approach to address surface water run-off by means of Sustainable Drainage Systems (SuDS) is a key component in how the design of the landscape has evolved with the design team.

There are opportunities to incorporate some cultural heritage interpretation in the scheme.



Landscape design strategy

The overall aim of the landscape design is to create a high quality attractive environment for people who use the scheme whether they live work or visit there. The landscape design also responds to the landmark architectural design at this key location in the city. The strategy to open the site and make it permeable to the river generates a bright south facing civic space and river walk, effectively connecting Parkgate St with the Liffey through the otherwise impermeable site. A second, semi public, space - the residential courtyard - also links Parkgate Street with the river connecting through the protected archway on the street to the river buildings.

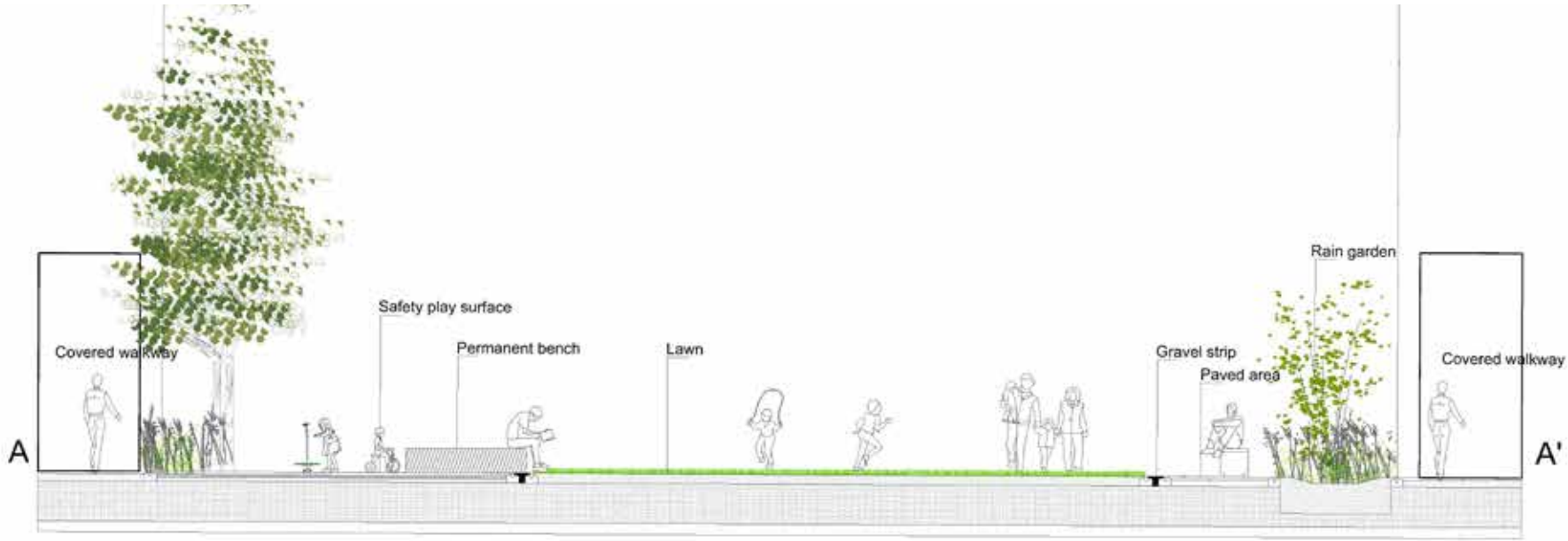
The design layout, building on the architectural orientation, is intended to mitigate wind on the ground plane, making the already southerly facing spaces more comfortable. Seating faces in different directions, in shade or sun, with views outwards or inwards to give choice depending on the weather.

A series of roofgardens step up through the scheme providing additional amenity to the residents, with views out across the locality and sheltered spaces to maximise the potential of the gardens.

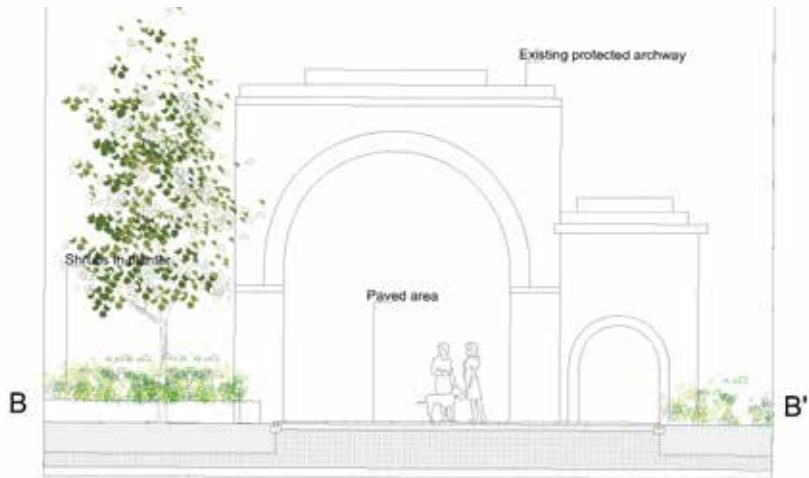
Early sketch design



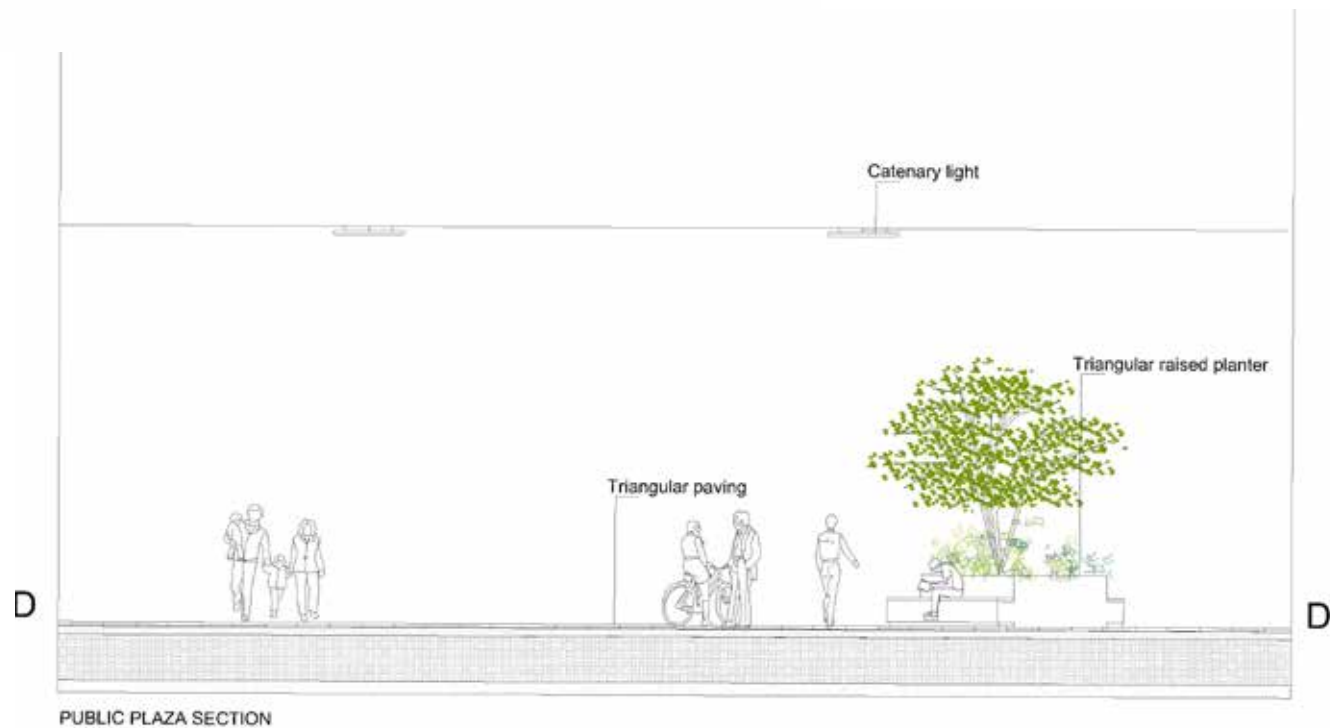
Sections



RESIDENTIAL COURTYARD SECTION



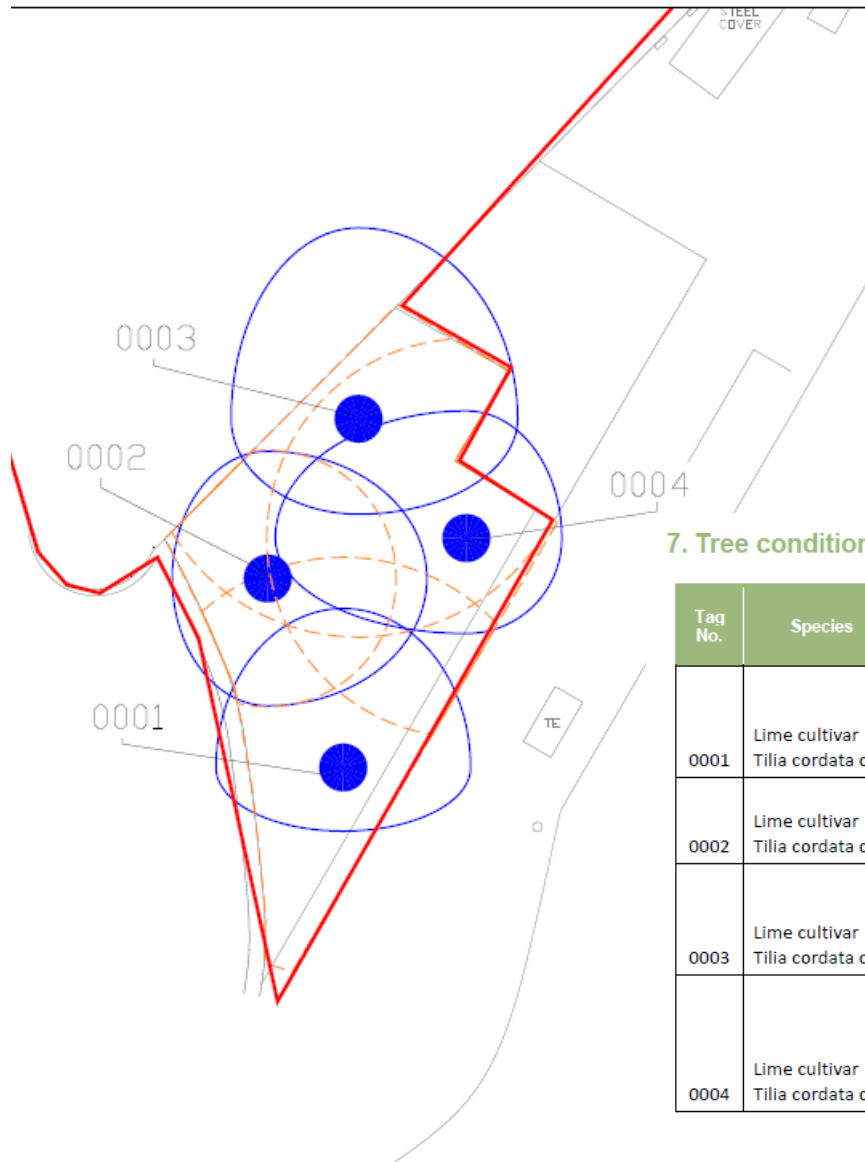
EXISTING PROTECTED ARCHWAY SECTION



Existing trees



Tree survey



7. Tree condition analysis & preliminary recommendations

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Landscape and Arboricultural Category	Useful Life Expectancy
0001	Lime cultivar <i>Tilia cordata</i> cv	Early-mature	Good	Trunk with a lean toward north-east due to competition from neighbouring tree. Lean not significant with crown vertical in orientation. Upper canopy relatively well developed with no visible defects.	No action necessary	B2	30-40
0002	Lime cultivar <i>Tilia cordata</i> cv	Early-mature	Good	Trunk co-dominant from 3m with a wide union between stems. Upper canopy relatively well developed with no visible defects.	No action necessary	B2	30-40
0003	Lime cultivar <i>Tilia cordata</i> cv	Early-mature	Good	Trunk multi-stemmed from 3m with tight unions between stems. However unlikely to be significant at present. Canopy toward west has been reduced in the past but overall crown relatively well developed.	No action necessary	B2	30-40
0004	Lime cultivar <i>Tilia cordata</i> cv	Early-mature	Good	Upper canopy topped to west over neighbouring building reducing the trees visual quality. Remaining crown relatively well developed. Trunk co-dominant from 2m with a tight union and included bark between stems.	No action necessary	B2	30-40

Public open space

The public open space is a plaza that connects Parkgate Street with the river, and therefore has a southerly aspect. It provides a setting for the buildings that can be used in a casual, social and incidental way, with opportunities to be programmed for specific activities.

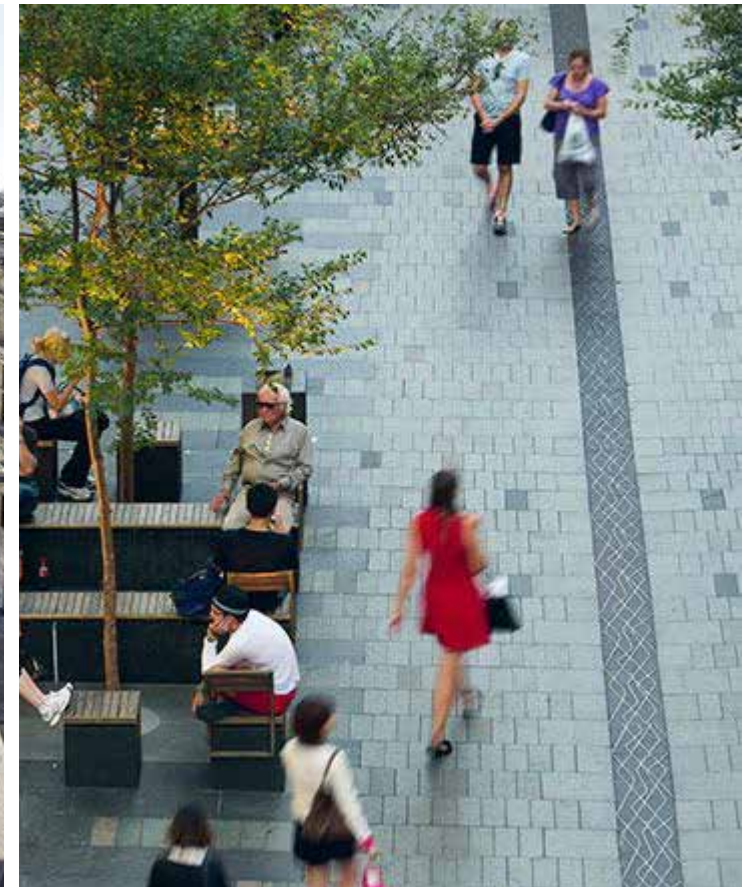
Four semi mature Lime trees are located outside the site to the eastern corner, within a railed space. It is intended, with the agreement of DCC Parks Dept., to retain the trees and open this space as an access along the river wall towards the main plaza space.

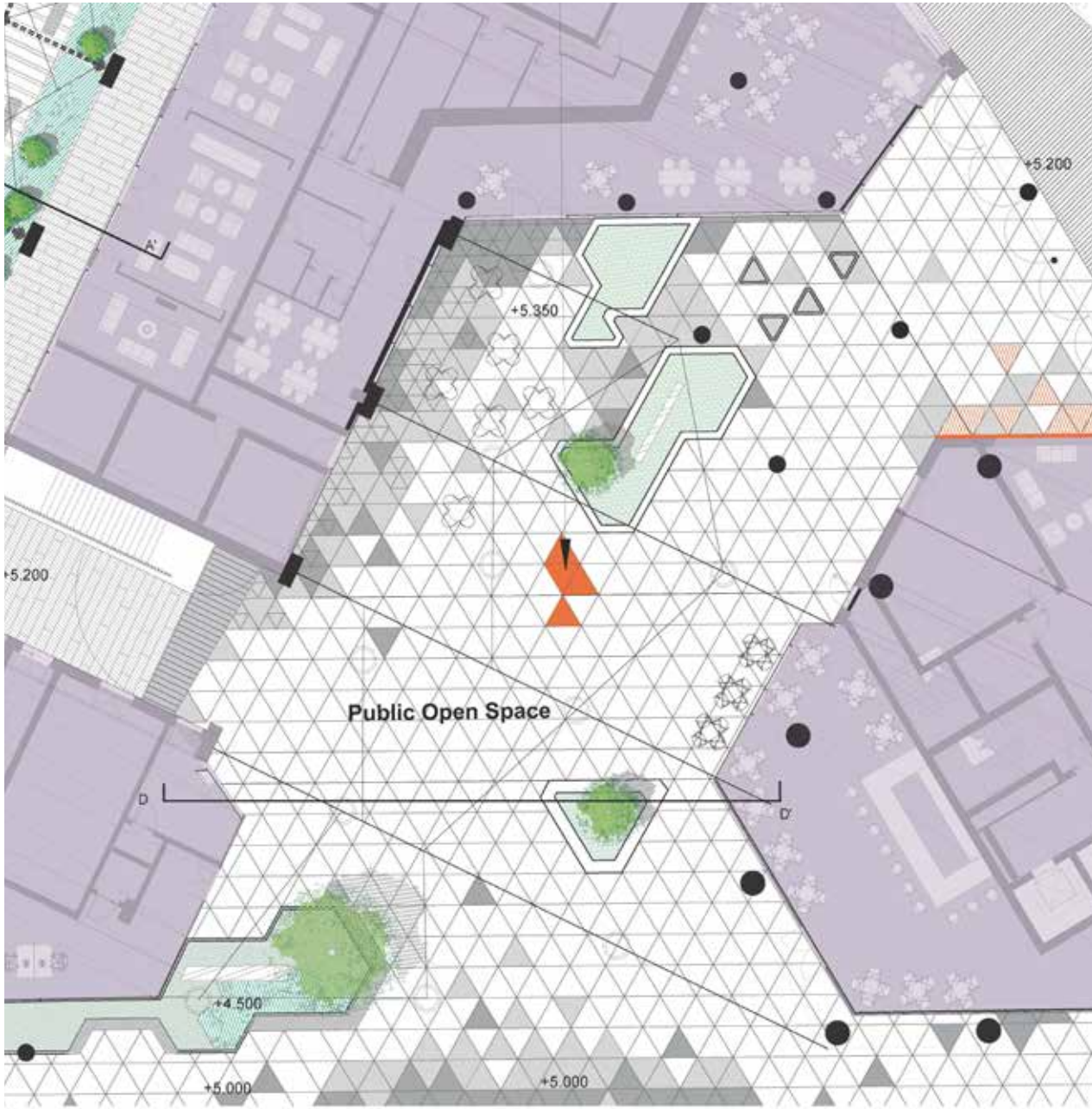
The space is carpeted with a high quality paving unit with stone detailing forming a triangular patterning that responds to the geometry of the site.

The treatment of the river wall reveals its character and detail, and opens views out to the river and Heuston Station beyond. It also functions as a sheltering element to the riverside space.

A key tree is located in the space which acts as a visual pivot, seen from across the river and from Parkgate Street. It is located in a planted area which also provides seating and a raingarden. Both this raingarden and the ones in the residential courtyard filter water and discharge to the river in an animated way – demonstrating the workings of a sustainable drainage system.

Other seating and planted elements populate the space, and their triangular form gives diverse opportunities for sitting in shade or sun, with views outwards or within the space.





Catenary lighting is proposed across the plaza in order to free up the ground plane and to form some visual containment across the height of the space.



Residential Space



The arrangement of the residential blocks around the courtyard space allows for a communal garden that serves the residents, many of whom have a view over the space. The open space is conceived as a green space, in contrast to the public plaza. The outdoor amenity uses are supported by the functions of the adjacent buildings; the outdoor space allows spill-out from the building, and the colonade gives shelter to the edges.

This open space will provide a secure and safe outdoor setting. It consists of an open grass plane, with a birch grove, structural planting, flowering mixes to encourage pollinator species, raingardens, seating and a play area for toddlers and young children. Cast iron columns and beams from the original factory are re-used as a pergola, modulated to fit with the proposed buildings facades. This structure emphasises the route of the linear path and raingardens leading towards the river. These elements all combine to generate a pleasant and inviting garden.

A discrete area associated with the river building allows a south facing view across the river.



Streetscape



- Merging with plaza
- Existing 'heritage' light columns
- Existing trees in porous surfacing
- Loading Bay
- Bus stop
- Bike racks



Roofgardens





- Views and windscreening
- Shelter and internalised spaces
- Services and fittings
- Modular prefabricated planting systems
- Sustainable Drainage in intensive and extensive (Sedum) roofs.

LEGEND

- NEW SMALL TO MEDIUM TREE PLANTING
- SHRUB PLANTING IN PLANTER
- NATURAL FLAG PAVING
- HEDGE
- SEATING ELEMENT
- GLAZED STRUCTURE
- PART 9 BOUNDARY LINE

INDICATIVE PLANT LIST

PROPOSED TREES

Roof level small area trees:	Size
Aucuba spp.	15-18cm
Amelanchier spp.	2.5m high
Adiantum spp.	1m high
Betula spp.	1.4-1.6 cm
Corylus spp.	2.5m H

FORMAL HEDGE PLANTING

Species	Size
Prunus laurocerasus	60-80cm H, 12cm
Buxus sempervirens	60-80cm

SHRUB HERBACEOUS AND GROUNDCOVER PLANTING

Water friendly

Species	Size
Anemone japonica 'Pine Heron'	2L
Berberis amabilis	2L
Clematis arvensis	5L
Dryopteris erythrosora	2L
Eschscholzia 'Apple Blossom'	2L
Heuchera micrantha 'Palace Purple'	2L
Helianthus scaberrimus	2L
Hydrangea quercifolia	5L
Lupinus 'Prince Igor'	2L
Lupinus muscardi	2L
Lupinus albus	2L
Mechanitis serotina 'Gardenia'	5L
Pachyrhizus terestris	2L
Pennisetum alopecuroides	2L
Salvia spp.	2L
Sarcocolla hookeriana	5L
Verbena bonariensis	2L
Vinca minor 'Gertrude Jekyll'	2L
Hypericum calycinum	2L

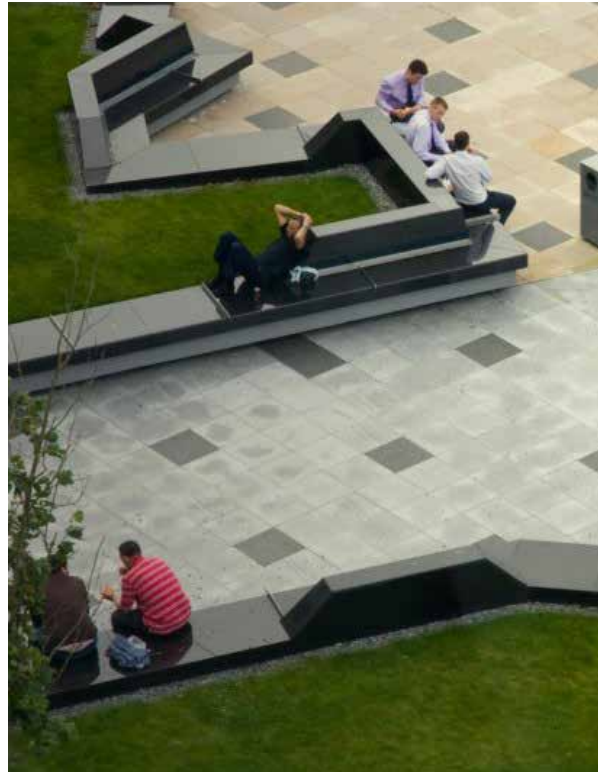
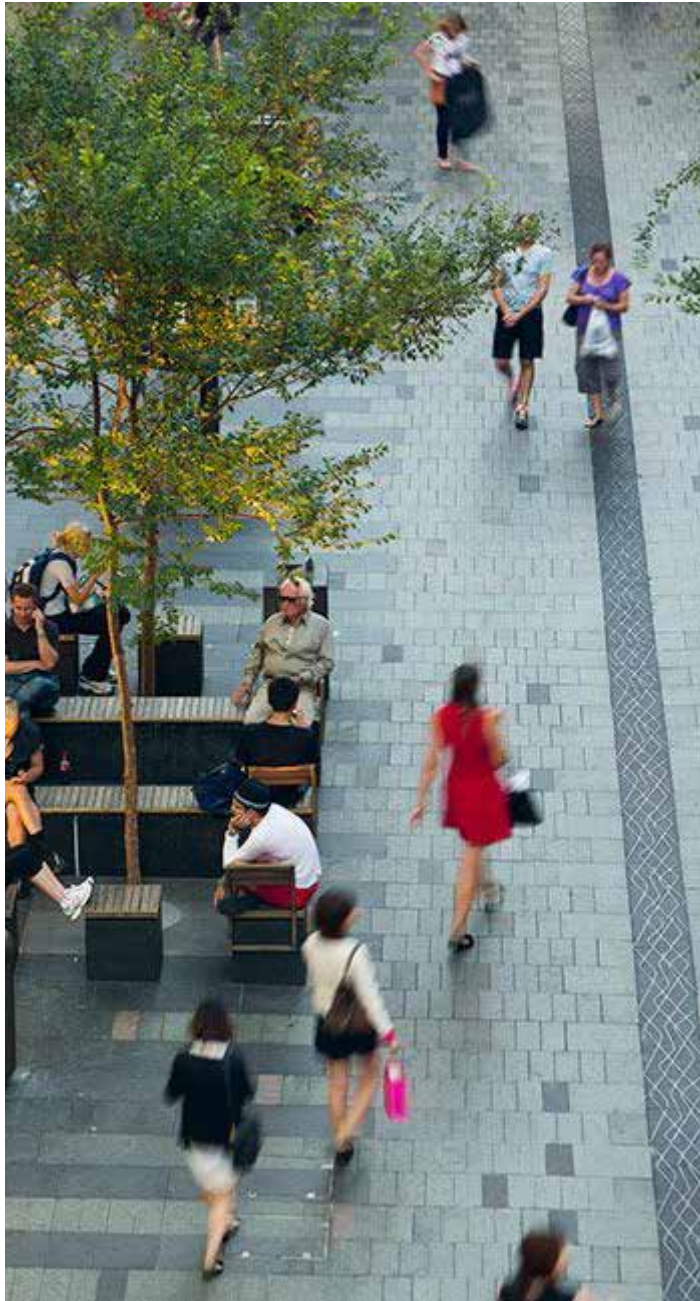
CLIMBERS

Species	Size
Hydrangea anomala ssp. petiolaris	5L
Trachelium pentstemonifolium	5L
Clematis montana 'Rosa'	5L

PROJECT: Parkgate St
 CLIENT: [Redacted]
 DRAWING NUMBER: [Redacted]
 DRAWN BY: [Redacted]
 CHECKED BY: [Redacted]
 DATE: 10/12/2019
 SCALE: 1:1000
 SHEET: [Redacted]

MITCHELL + ASSOCIATES
 LANDSCAPE ARCHITECTURE URBAN DESIGN

Strategy: Sociability



Strategy : Play and Playfulness

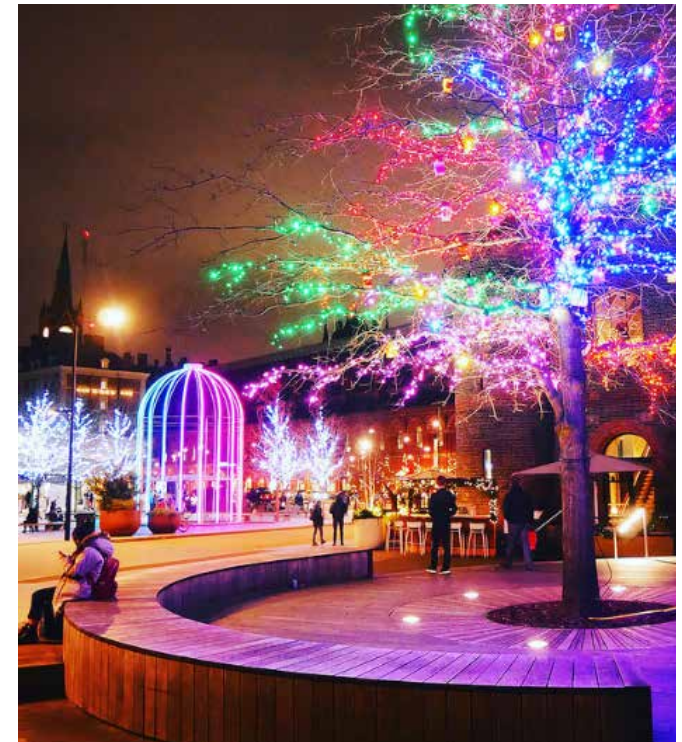
TODDLER PLAY AREA - COURTYARD



OLDER PLAY - STREET AND NEIGHBOURHOOD PARKS



PLAYFULNESS - FORM AND LIGHT



Strategy : Lighting



Circular catenary light: Public Sq



Star/ spot catenary light: Public Sq



3m Pencil light (Hess Riva) Residential Sq

Strategy : Sustainability : SuDS & Biodiversity

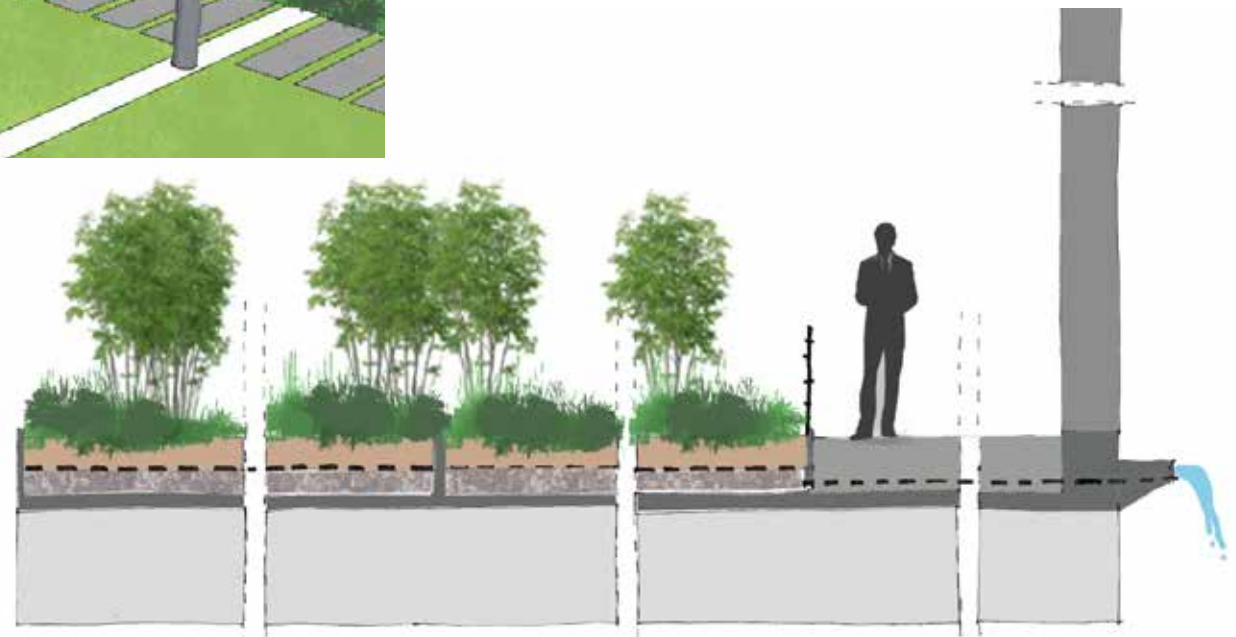


Raingardens and Sustainable Drainage



Raingarden

The drainage design is closely aligned with the landscape design, creating both filtration and attenuation in the form of green roofs and raingardens. The visibility of drainage is an important element in allowing people to understand the path of water towards the river, particularly in such a prominent riverside location. The water is delivered to the river in an open spout, which becomes a feature of the river wall.



Typical Section

Softworks

The softworks relates to visual amenity and biodiversity in tree selection, planting beds, raingardens and green roofs. The planting palette has been selected for the creation of a high visual amenity and environmentally appropriate to the new context, based on the National Pollinator Plan.

A large specimen Lime tree (*Tilia* spp) is selected for each of the ground spaces, and supplemented with smaller tree planting including the River Birch grove (*Betula nigra*)

Seasonal interest through leaf shape and texture, leaf colour change, spring flowers, winter bark colour etc will contribute towards creating distinct character areas in the tree planting structure.

The plant species list will be a mix of native species and ornamental species for high biodiversity value, for seasonal interest and for a wide variety of species adapted to the variable site conditions of both bright sun and semi shade.

The plant selection will incorporate the following characteristics:

Varying flower and leaf colour; bulbs, herbaceous, deciduous and evergreen shrubs and deciduous garden scaled trees; plants that attract insect life. Native and non-native species are used to achieve the objectives of biodiversity, visual amenity and maintenance requirements. Planting will have seasonal interest.



Specimen tree planting

Tree pit and paving (DCC footpath)

Planting beds
45-600mm soil depth

Roofgarden planters - specialist lightweight soil 'Enrich'



Reinforced grass

Fibreturf or similar

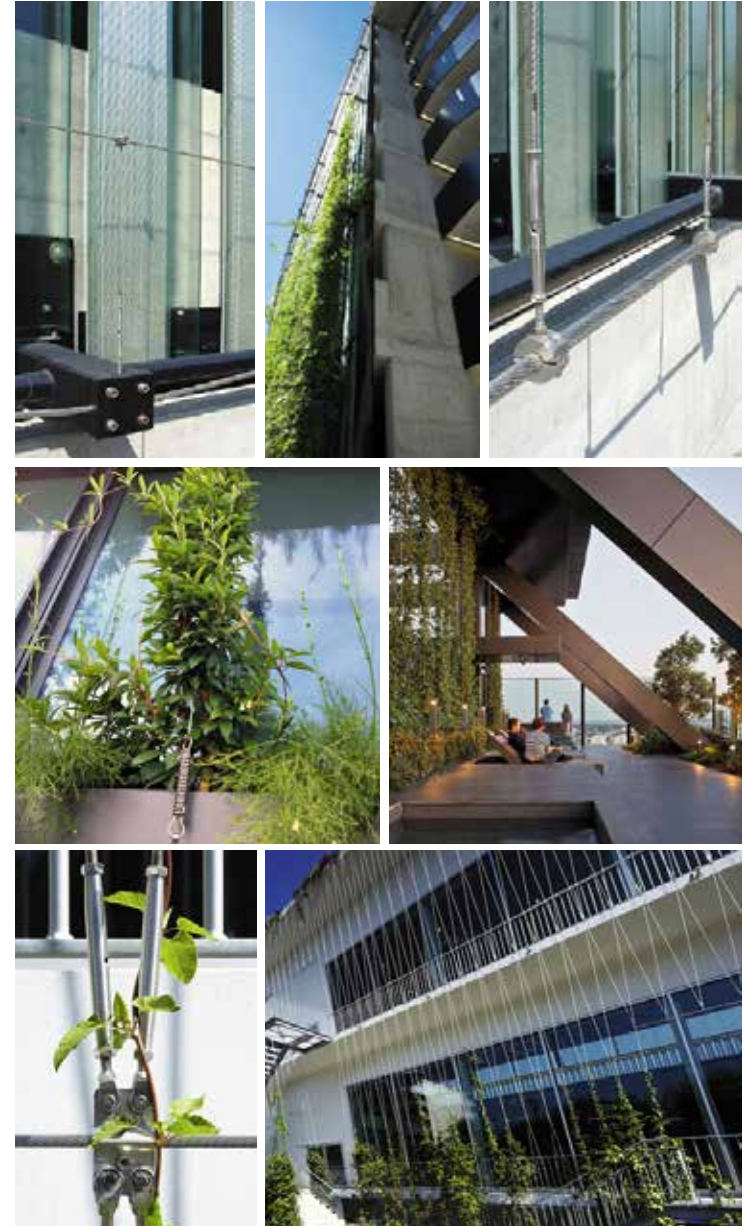
Climbing plants



Self clinging



Wiring systems (Jakob Inox)



Materials: Planter Beds

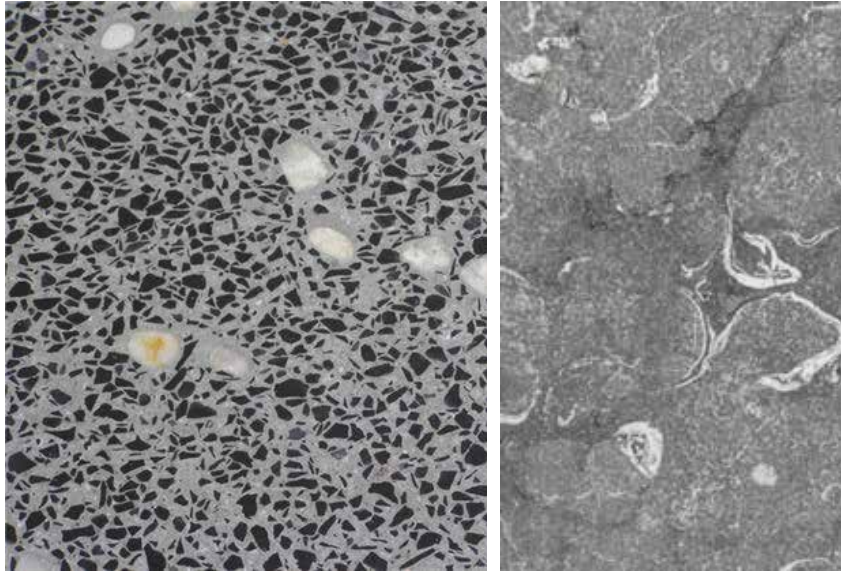


In situ block planters with stone and timber cladding (Ground floor open space and raised raingardens)



Prefabricated steel planter boxes (roofgardens) (based on OMOS S21 planters)

Paving and landscape elements



Paving Materials

Concrete aggregate and pre cast concrete

Stone detailing

Inlay detailing

Compacted gravel (Ballylusk) at residential Birch grove and existing trees.

The hardworks are designed as high quality paving with stone detailing, and elements pick up on the architectural detailing and finishes. A range of public seating is provided some as benches and others as seats with arms and backrests. Contemporary railings (some retractable) and gates approx 1.5m high define the public space and residential courtyard, with bespoke railings to fit the protected archway.



Brushed Stainless Steel bike racks



Contemporary railings defining spaces



Brushed Stainless Steel bins



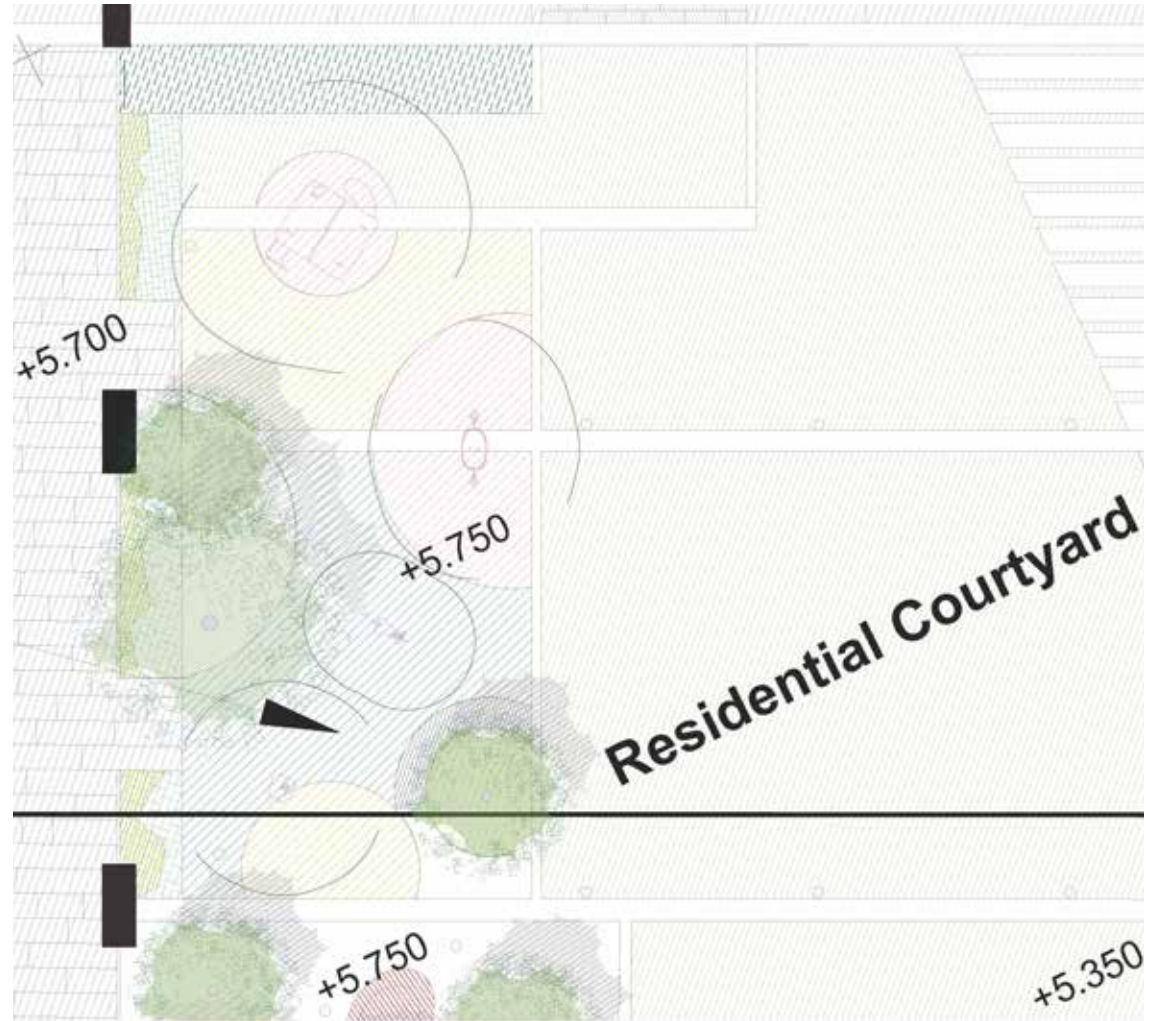
Materials: Play



Play House for toddlers



Balance Equipment

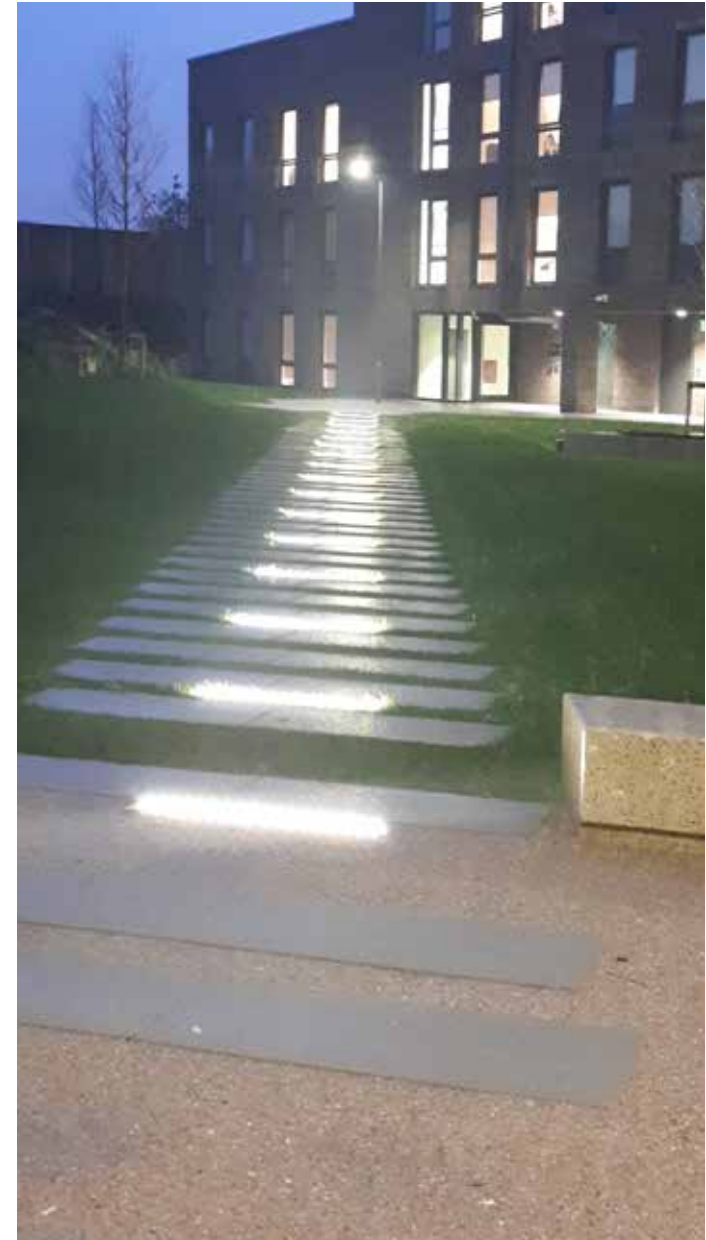


Materials: Compacted Gravel & Paving in Grass

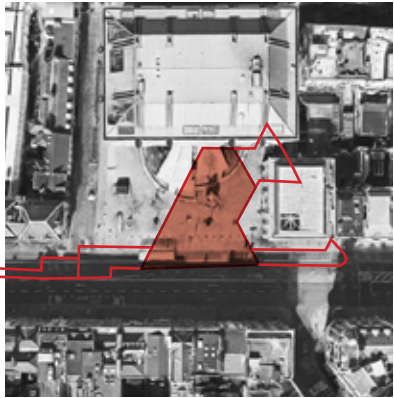


COMPACTED GRAVEL

- Ballylusk chippings



Comparison and spaces: Spatial



Central bank about **1500m²**



Wolf Tone square about **2000m²**



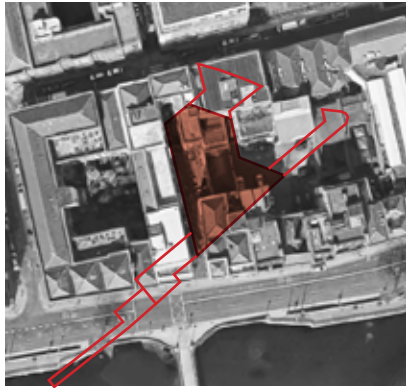
Bernardo square about **800m²**



Public space: 1561m² (Core space 812m²)

0 50m

Comparison and spaces: Spatial



The last supper 200m²



Meeting house square about 1000m²



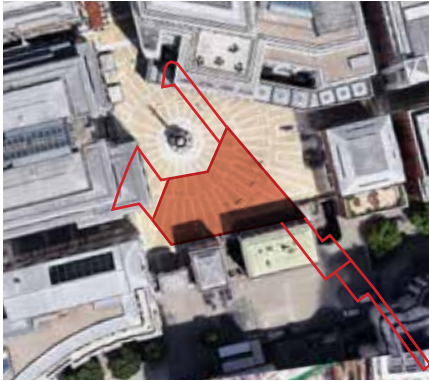
Temple bar square 1000m²



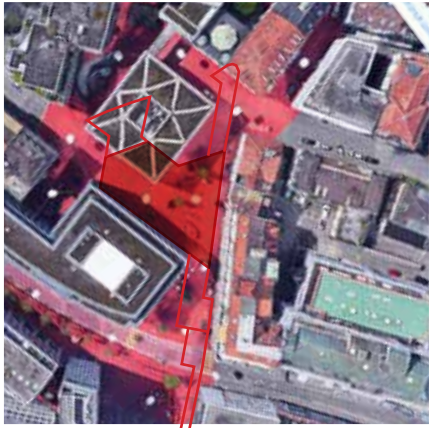
Public space: 1561m² (Core space 812m²)

0 50m

Comparison and spaces: Benchmark



Paternoster sq London about **2000m²**



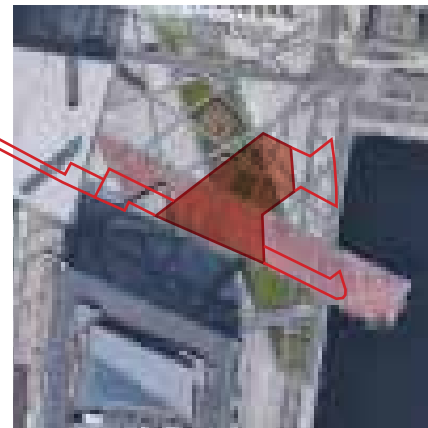
Roter Platz St Gallen Switzerland about **1000m²**



Public space: 1561m² (Core space 812m²)



Kings cross London about **2500m²**



Grand Canal Dock about **6000m²**



0 50m

Notes