



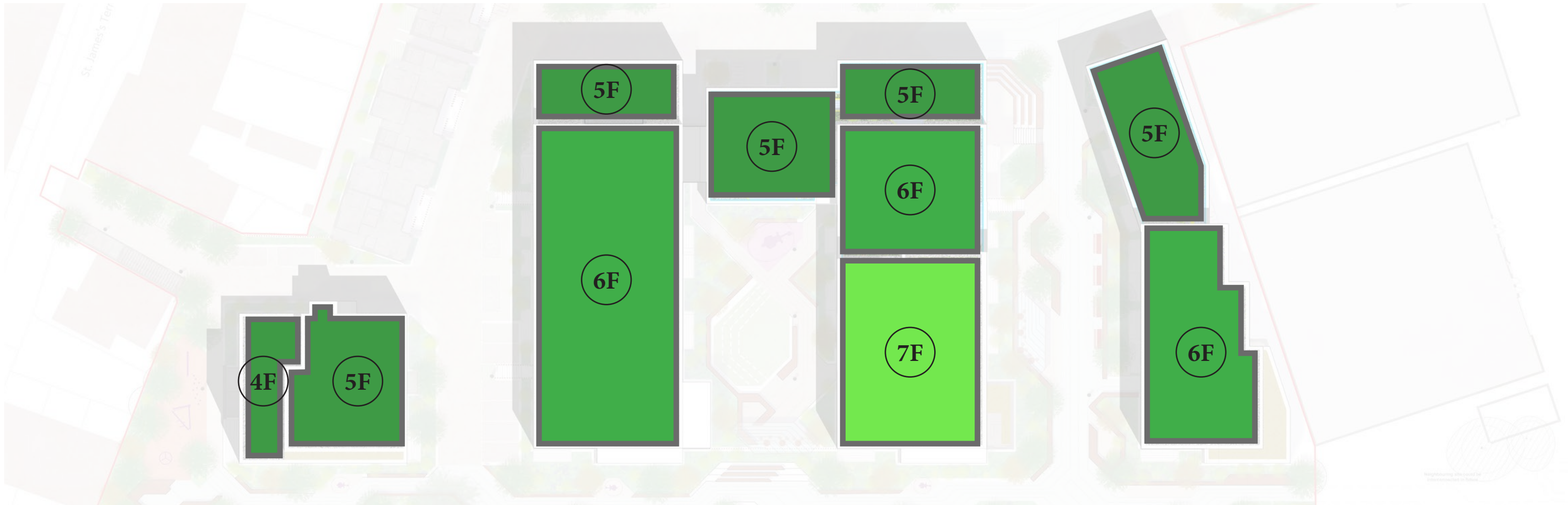
Bernard
Seymour
Landscape
Architects

White Heather
Landscape Report
08.12.2025
(Part 2 of 2)

Roofscape Potential

Key Elements

- Uppermost roofs have potential for significant nature roofs (4th, 5th, 6th, and 7th level depending on block and massing layout). It is proposed that these will have Intensive green roofs for greater nature potential, and also blue roof storage where build-up depth is sufficient i.e. on maintenance-only roofs, not the accessible terraces where accessibility at thresholds creates a pinch-point for available depths.
- Mid-level roofs with access from the blocks provide a wonderful opportunity for accessible roof gardens. These are laid out across Blocks 3 and 4, and split between levels 5F and 6F. These spaces have good access to sunlight towards the south, as overshadowing by the blocks will be minimal, and some areas will even have views to the canal.



Biodiversity Features



Maintenance-only green roofs to be intensive systems, with some microhabitats placed on top

Functional Elements



Small provision of PV panels on main blocks + maximise greening around (although gravel req. underneath)



Nature-positive roofs can have simple but effective features such as a pond liner zone to catch rainwater for temporary nature pools. This is in the soil layer at the top, and doesn't impact waterproofing or insulation areas

Recreational Features



Large areas of planting with seating pockets in amongst

Practical Use of the Space



Planted buffer on 2-3 sides to create privacy for residents and neighbours alike



Positive mix of biodiverse planting and accessible paved spaces



Modest pergola shelter to enable use of roof in bad weather & protect from seagulls during nesting season

Project Example: 8th Lock, Royal Canal Park

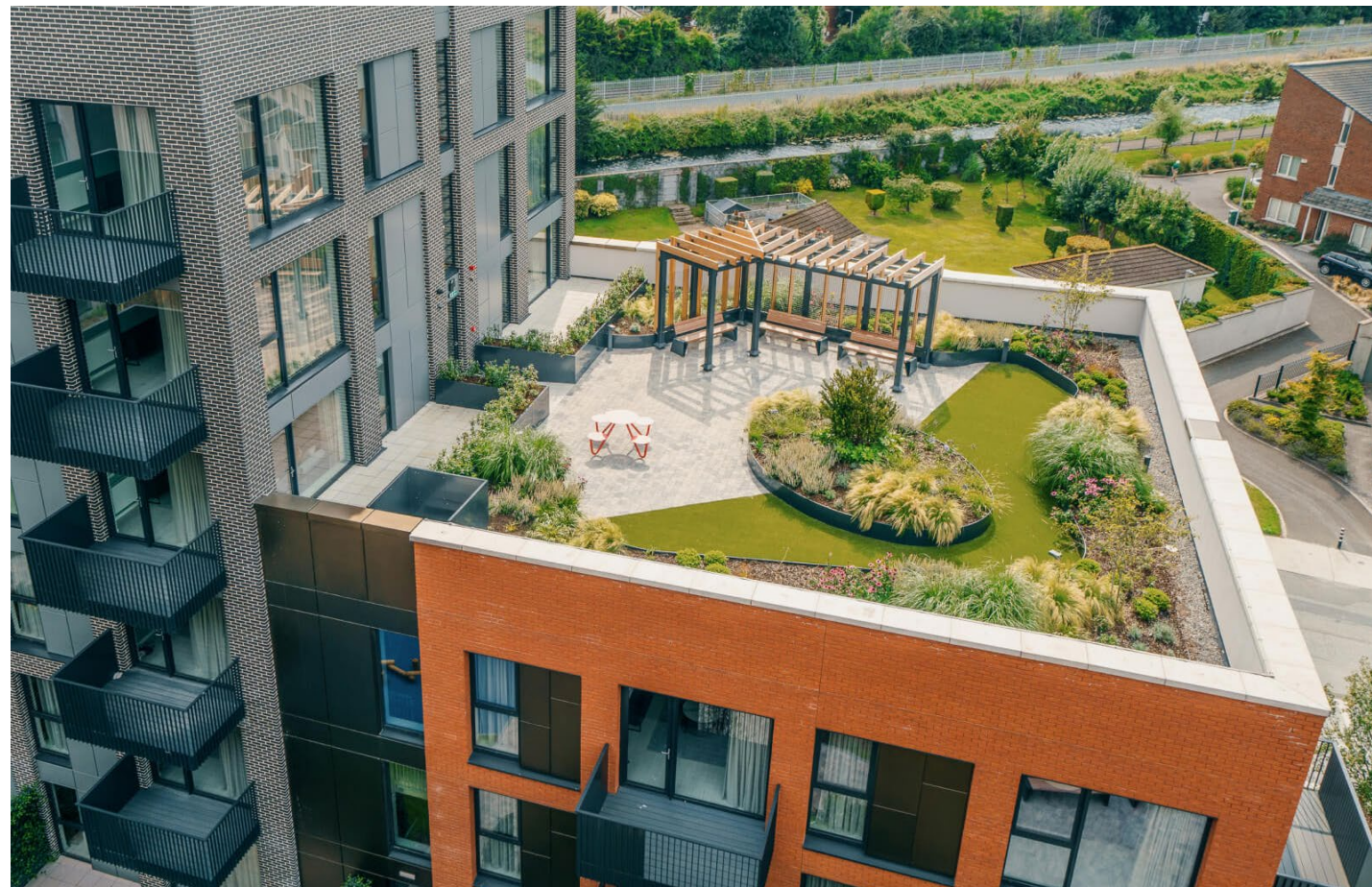


Glimpses of pergolas from street level provide visual interest and sense of activity

Project Example: Kings Building (BSLA project)



Glimpse of rooftop trees/shrubs from the street creates a pleasant verdant moment

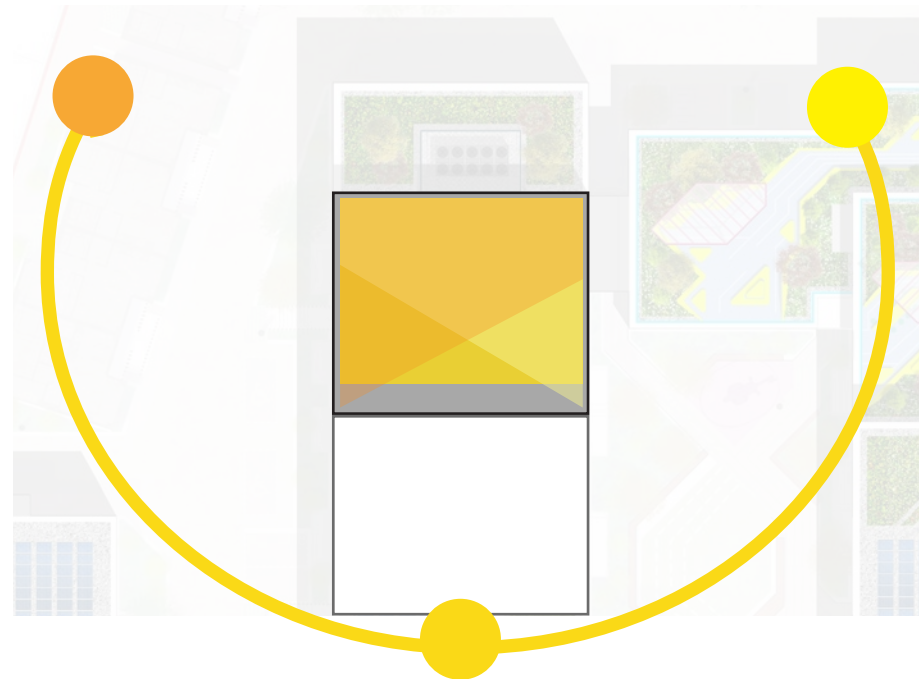


Modest pergola shelters on 3-4 roofs to enable use of roof in bad weather



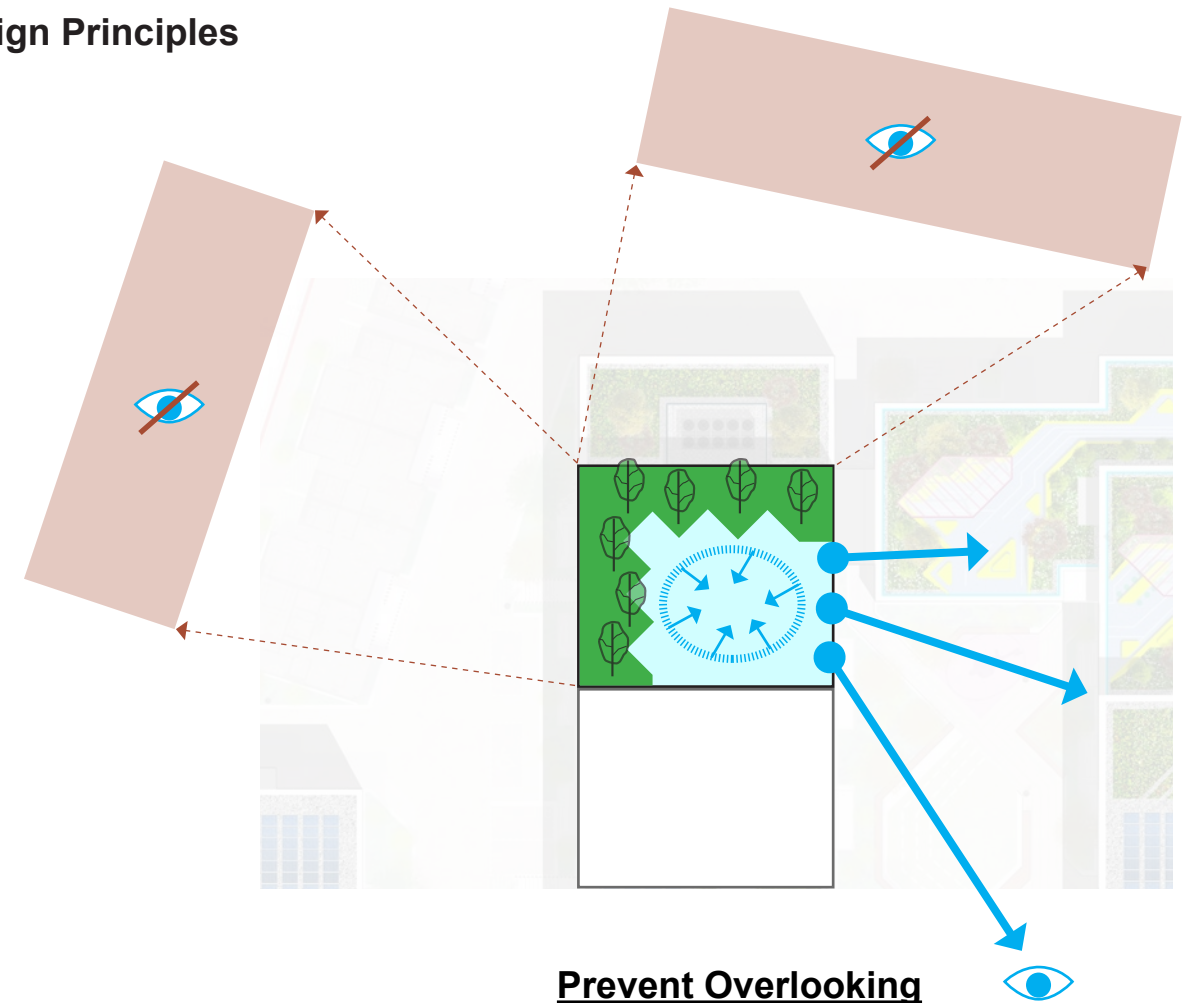
Simple open timber pergola creates zone protected from rain (if roof glazed)

Roof Terrace Design Principles



Sun Orientation

Some overshadowing is created by the higher up massing, but otherwise good access to sunlight to the south, and the east and west for morning and evening light respectively.



Prevent Overlooking

The soil mounding required for trees and ground planting is focused towards the outer edges of the terraces, to both provide privacy for neighbouring buildings, and create shelter from northerly winds. View angles are focused inward or towards the canal



Safety & Biodiversity

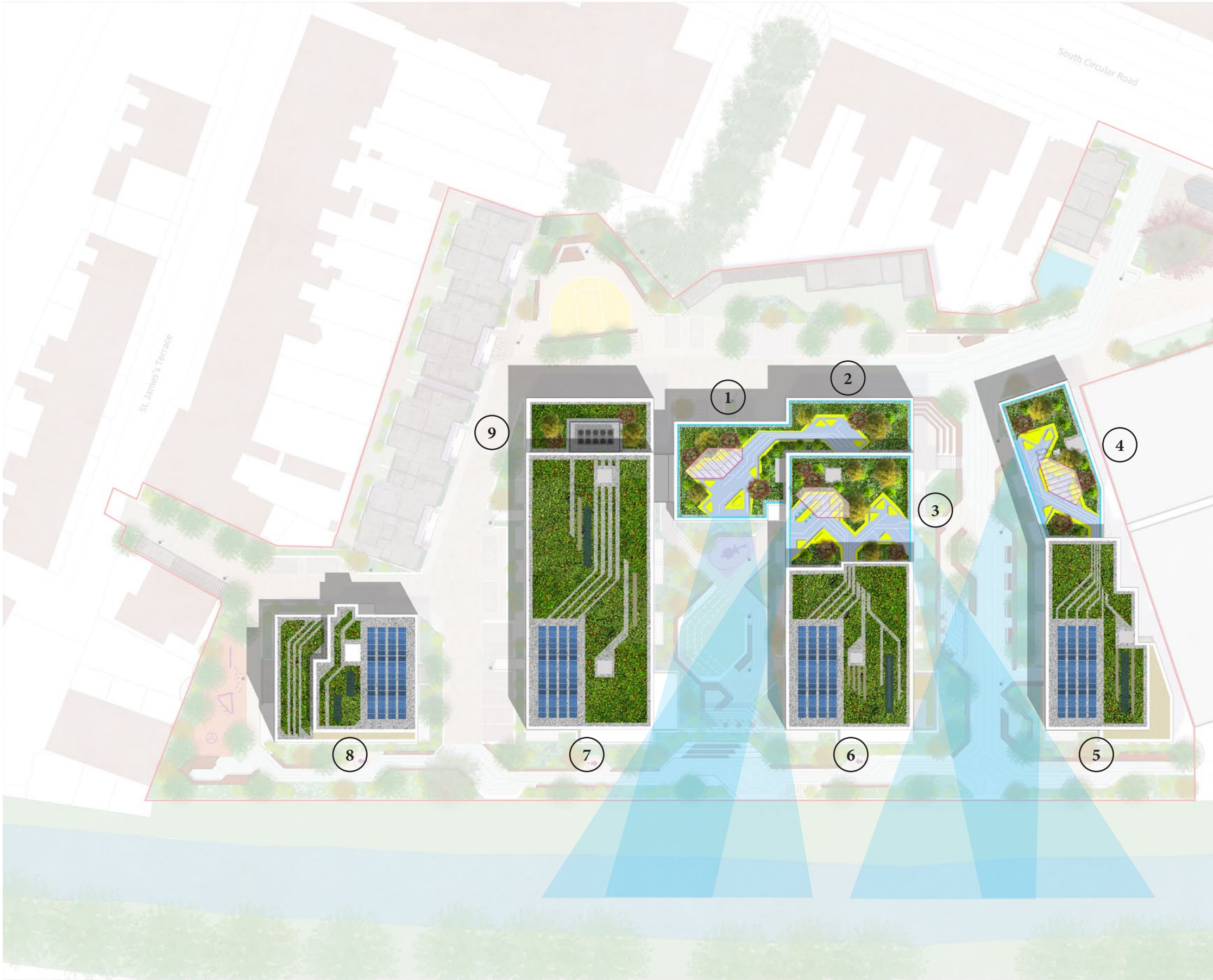
The balustrading is generally provided at the parapet, as this allows safe usage of the space for users but also greater safety for maintenance workers, rather than requiring specialist cable-connection access. This position also allows for more soil mounding, and therefore a larger scale and variety of roof-suited species. A key challenge of roof terrace use in Dublin is seagulls angrily protecting their young in nesting season - keeping the balustrade out to the parapet helps to limit nesting channels to the maintenance green roofs higher up.



Furnishing to Encourage Usage

It is crucial that features are provided that will encourage people to get good use of the space. The most important element is the pergola shelter, which allows residents to enjoy the terrace in changeable weather (much of the time in Ireland) and to duck under if a sudden shower arrives. It also deals with potential seagull interactions during nesting season. Herring gulls - an Amber-listed species - are attentive, protective parents, and can sometimes swoop above people to warn of nearby chicks. Having a protective, covered feature central to the design provides a solution if this occurs and causes nervousness among some people. Fixed seating and tables are also placed throughout to create a variety of spatial experiences.

Roofscape Masterplan
(Refer also to Drawings)



Views south towards the canal, trees and mountains

- 1 B03 5F: Central Accessible Roof Terrace
- 2 B03 5F: Entrance garden to Central Roof Terrace
- 3 B03 6F: Upper Accessible Roof Terrace
- 4 B04 5F: B04 Accessible Roof Terrace
- 5 B04: Intensive Green Roof with PVs + habitat features
- 6 B03: Intensive Green Roof with PVs + habitat features
- 7 B02: Intensive Green Roof with PVs + habitat features
- 8 B01: Intensive Green Roof with PVs (two levels)
- 9 B02: Intensive Green Roof + Screened M&E Plant

Terraces designed to face south towards the sun and the canal views, and away from neighbouring buildings to the north & west

Roof Terrace Design Principles - Prevent Overlooking



The first two items of the ABP Decision on the previous scheme are quoted below. While most of the points relate to scale, architecture and massing, we felt it was important to consider the landscape designs through this lens too, to avoid contributing to potential and perceived issues, and also to perhaps ameliorate the situations where possible:

*“1. Having regard to the design and layout of the proposed development and in particular to the scale and proximity of elements adjacent to existing residential properties, it is considered that the proposed development would have significant adverse impacts on residential amenities by way of **overlooking**, overbearing, and overshadowing. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.*

*2. The proposed development would have an adverse impact on the adjoining “Z2” Conservation Area at South Circular Road, in particular houses numbers 309 to 319 South Circular Road, by way of **overlooking**, overshadowing and visual impacts, contrary to Policy BHA9 of the Dublin City Development Plan 2022 - 2028, which seeks to protect the special interest and character of “Z2” Conservation Areas. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.”*

The first item in the points above that has overlap with the landscape design is overlooking. In a central urban site like this, it is important to try to maximise the available spaces for quality of life, residential amenity and biodiversity value. We have therefore sought to create appealing spaces that add to the amenity of the apartments and offer residents another dimension outdoors from their homes, and more private than the ground floor open spaces. At the same time, it is of key importance to avoid creating a sense of a visible vantage point from which people might appear to unduly peer into neighbouring homes. While this aspect exists already with apartment windows and balconies, up on the roofs where there is more space to work with, there is the opportunity to create planted buffers in key orientations so as to direct residents away from neighbouring streets, and towards the canal or the newly created public spaces within the site. The section above (and plans on following pages) show the strategy at work. In order to achieve sufficient soil depth for rooftop tree species (approx. 750mm), mounding up from the edges is the most sensitive approach. If these planted zones are placed primarily towards the outside of the development, it prevents the residents from accessing the balustrade edges that face towards neighbouring buildings. The central and inward facing sides - particularly towards the canal - are then paved and furnished to focus the terrace usage that side. So apart from the occasional maintenance worker, these sides should remain uninhabited. In contrast, the view *from* the neighbouring buildings will be ameliorated by a view of verdant foliage and substantial planting atop the volumes, which should help soften the visual of the massing, and help nestle the open pergola shelters into the ensemble.

Roof Terrace Design Principles - Avoid Overbearing



ial (24 mm Lens) Angle of View 39° Horizontal (50 mm Lens)



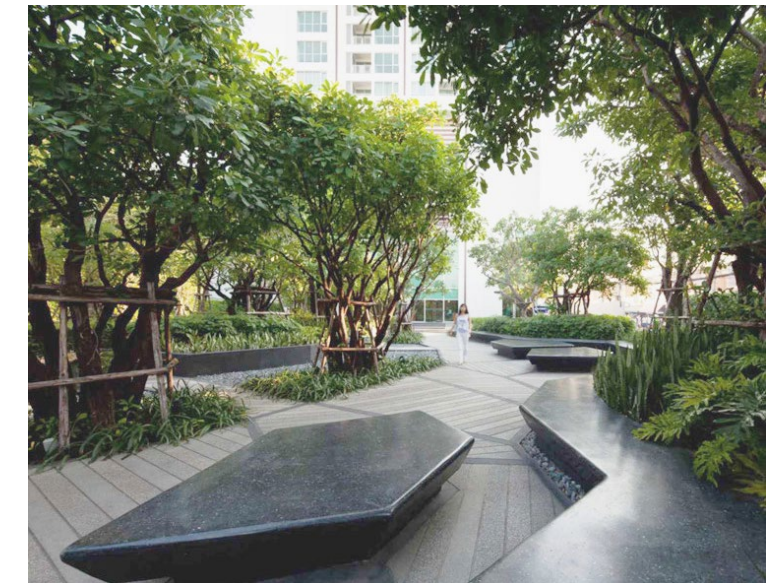
Angle of View 73° Horizontal (24 mm Lens) Angle of View 39° Horizontal (50 mm Lens)

*“1. Having regard to the design and layout of the proposed development and in particular to the scale and proximity of elements adjacent to existing residential properties, it is considered that the proposed development would have significant adverse impacts on residential amenities by way of overlooking, **overbearing**, and overshadowing. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.*

The second element in the ABP points above that has overlap with the landscape design is overbearing, albeit perhaps to a smaller degree. The architecture has been carefully shaped to push, trim and set-back the massing volumes in order to reduce overbearing, and to meet the neighbouring edges of the site with a more human scale. Then when considering those volumes for the landscape design, the opportunity to establish additional visible greenery and nature value was sought as another potential benefit in a central urban site like this. While the uppermost roofs are earmarked for green roofs (and Intensive systems too, which have a higher biodiversity value than Extensive systems such as sedum), little of that will be visible to people on the ground, and will certainly not register amongst the volume of the overall project. However those very set-backs and volume reductions have created a fantastic opportunity of more easily accessible spaces on the lower levels, where residential amenity can be increased, and maintenance access is more straightforward. On these roofs the benefit of larger planting is magnified, whereby residents of the development can experience them directly and sit amongst them, while once they reach a certain scale they will register on the scale of the overall massing, becoming visible at certain angles from the street - softening the edges and providing glimpses of urban nature pockets.

The two images above show the closest angles from the LVIA assessment. View 04 (left) shows the modest planting that should be visible on the 5th floor of Block 02, helping to screen the heat pump extraction vents. Little of the planting on the top level will be visible at the start, although with the Intensive soil depths, some self-seeded local species will arise over time. Then in View 08 (right), the greening on the other main Blocks (03+04) becomes visible. Here the modest sizes of the roof species mingle with the impressive urban scale of the retained Copper Beech tree on the corner, and help augment the verdant impression. This will be particularly valuable slightly closer in, when the Storage World shed would otherwise dominate the arrival, these additional glimpses of planting help to soften the composition from above. Suitable rooftop species such as birch, malus and amelanchier can provide a vibrant seasonal mix at a visible scale, while not growing too large as to cause weight issues in future decades. The open-structure pergola would be a simple form with open sides and a glazed top, to shelter people from rain. Such features are invaluable to the usability of landscape schemes in Ireland, tailoring the design to the context of our changeable climate. Again the accessible terrace spaces are set to the far side, so only the greening will register, and then the pergola on the primary terrace for Block 04 (5F) will be glimpsed through the foliage from this side. The proposed solid timber of this open structure would silver naturally in the first year and blend in further to the tones of the trees and sky. And as per the explanations on the previous page, the users of these spaces won't be visible from the street, but glimpsing these elements from below give a hint as to the positive pocket gardens above.

Roof Garden Design - Accessible Terraces



Seating pockets amongst shrubs and planting

- 1 Upper Roof with Intensive Green Roof & PVs; Gravel and log microhabitats laid to form a graphic pattern. This design device helps to integrate functional elements like lift overruns into a cohesive whole
- 2 Buffer planting towards north/east/west-ward faces
- 3 Shelter pergola with picnic tables underneath
- 4 Planter edge with seating towards main spaces
- 5 Fixed furniture activating the space
- 6 Paved out to balustrade towards canal view







Gravel micro-habitats laid to form a cohesive pattern

Open Space Diagram

(Refer also to OMP information)



- | | | | |
|---|---|---|--|
|  | Public Open Space: Main, Central pedestrianised, and pedestrian-priority route (further space around kiosk not counted in area) |  | Dedicated play and sports zones: Toddler Play (45m ²) ; Children Play (105m ²); Sports Play (250m ²) |
|  | Communal Activity Space: For Block and Duplex residents, plus zones including play areas for all ages (Toddler to Adult) |  | Linear Park is a substantial residential and Biodiversity amenity for the site, though is zoned Z9 so is a separate designation |

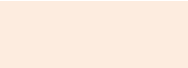


Pedestrian-Priorities + Vehicular Routes

(Refer also to Systra information)



Pedestrian + Pedestrian Priority



Pedestrian Priority



Car Access for Residents (Frequent Use)



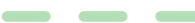
Access + Turning for Delivery, Bins & Creche Drop-off
(Semi-Frequent Use)



ESB Van Access (Very infrequent Use)



Car Access for Storage World Customers (Frequent Use)



Access for Waterways Ireland Maintenance (Very Infrequent Use)



Fire Tender Access (Very infrequent Use, Possibly Never)



Planting

The planting is a crucial layer to the design that will generate the largest biodiversity benefit, while improving the aesthetic setting of the buildings and also providing some functional features as screening and buffers.

The full planting plan will be finalised for Stage 3 once the final areas and forms have been fixed down, but the schedule below gives a flavour of the scale and variety we will seek to achieve with the scheme, The main structure being to have a layered approach to the different scales, from larger street tree to shrubs, to bushes, groundcover and even seasonal bulbs. These will also vary depending on location and adjacencies, so as to create a range of experiences and interest around the site.



Layered mixes of species for groundcover planting in most locations



Variety of larger street tree species to make an early impact



Medium-sized multi-stems shrubs and bushes for lower scale foliage



Layered mixes of species for groundcover planting in most locations

[illegible]

Planting Schedule (see separate drawing for more information)

SuDS Strategy

(Refer also to BM information)



Permeable Paving in Pedestrian areas & Parking Spaces



Permeable Street paving
(NB. Many non-permeable paving areas can be arranged to flow into certain planted areas)



Surface Planting permeability



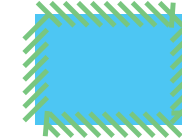
Potential for planting to receive runoff from high-quality granite paving (Rain Gardens)



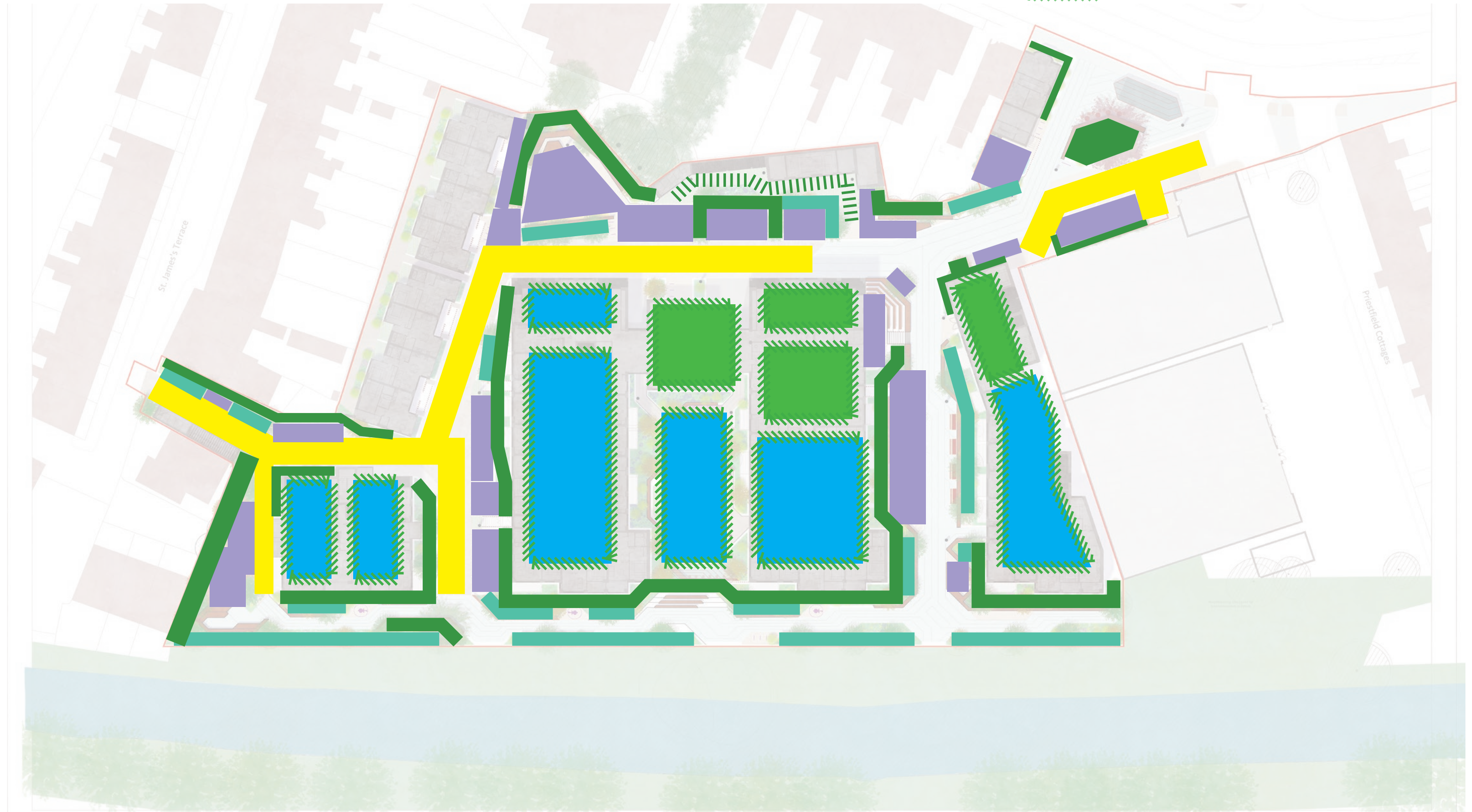
Permeable 'Grasscrete' pavers



Significant areas of roof/podium space with Intensive green roof soakage.



Significant areas of roof/podium space with Intensive green roof soakage, with sufficient depths to also include blue roof storage



Lighting Strategy



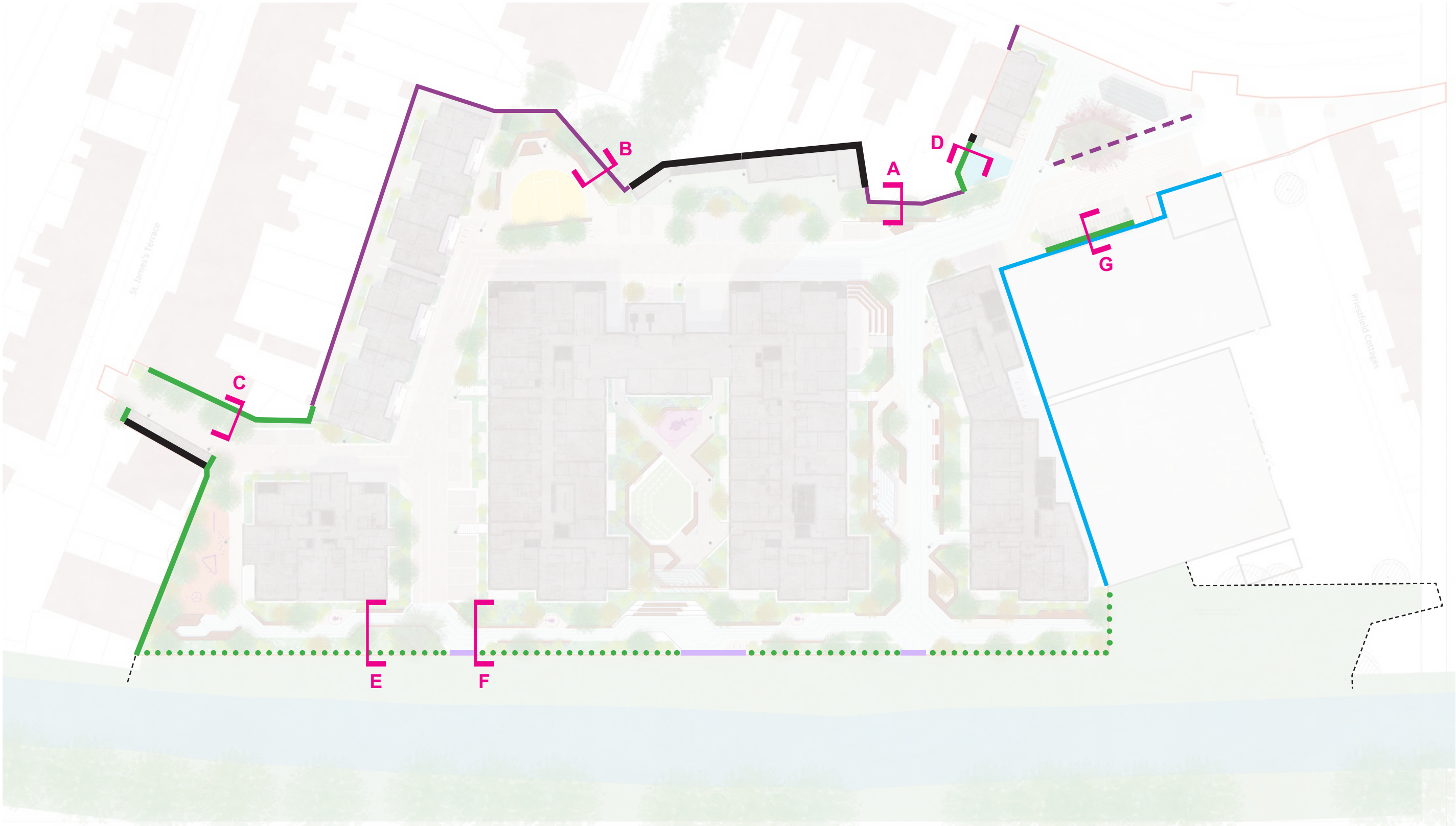
Olivio by Selux

- Tall streetlight; 6m high; multiple directional heads to maximise flexibility + minimise clutter
- Mid streetlight; 4m high; multiple directional heads to maximise flexibility + minimise clutter
- Feature Lighting in furniture; Low lux levels; Linear LEDs facing down to paving from bench overhang
- Canal-side requires very low lux levels due to nature corridor therefore no lighting poles; Low lux level Linear LEDs facing downward to paving from bench overhangs (calculation confirmations in detailed design stage)

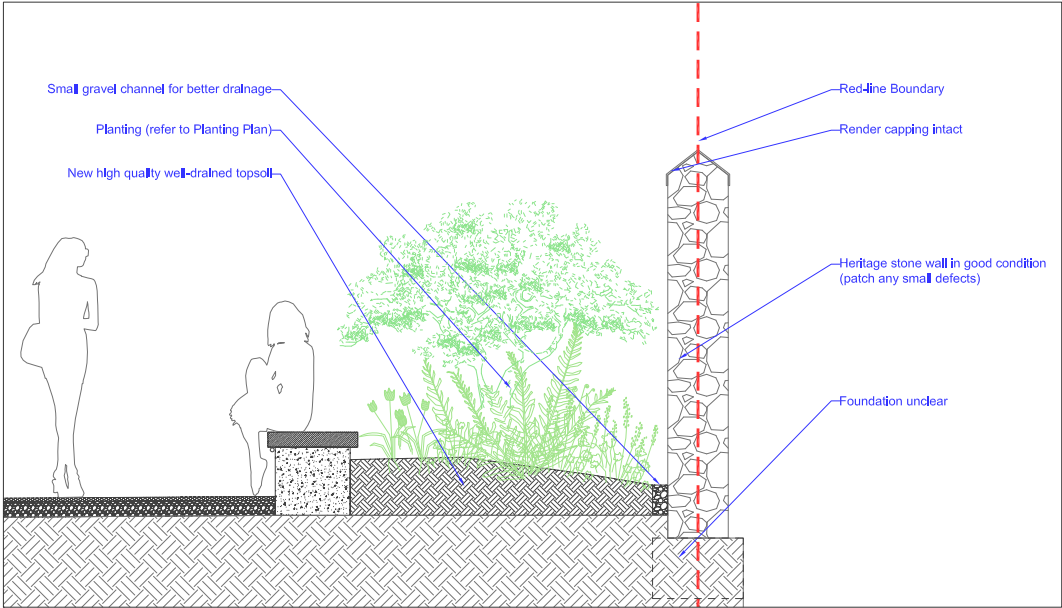
Boundary Treatments



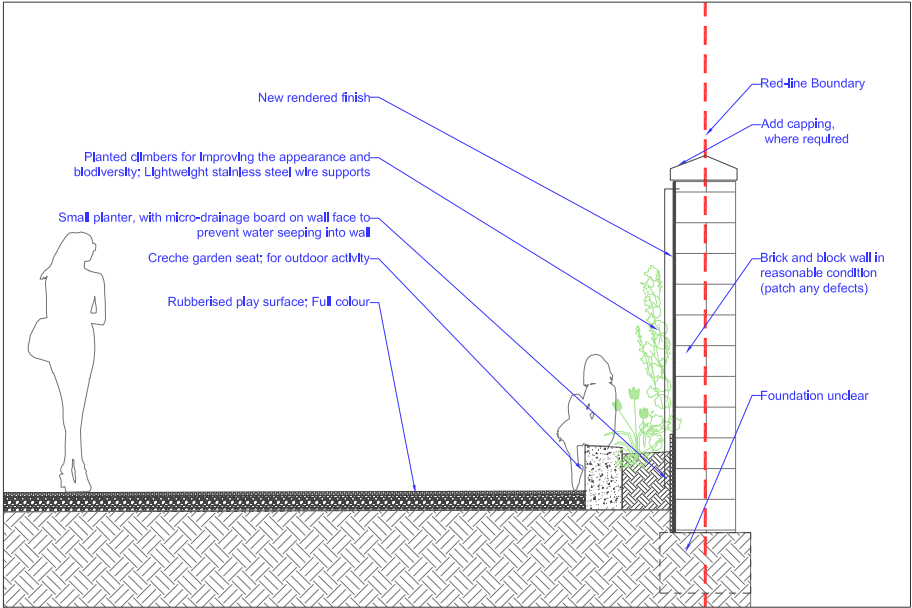
- Existing wall retained and repaired as required (in most places is a heritage stone wall)
- Existing stone+brick wall dismantled to protect root zone of main tree, and to improve safety at entrance. Stone used to repair stone walls as per above
- Existing boundary retained + repaired, and new structure built against (to architect detail)
- Existing boundary retained (mostly brick + block walls); plant climbers on inside (some self-clinging species, some via lightweight wires)
- Shed facade remains as is
- Approximate Neighbouring walls/fencing along canal, creating landlocked Waterways Ireland property
- Substantial planting boundary; no rigid structure so as to maintain permeable nature corridor; could include metal-edge element to denote property line
- Flush kerb to denote property line to landlocked Waterways Ireland property along canal; enables ease of access for Waterways Ireland maintenance, and interconnectivity for wildlife



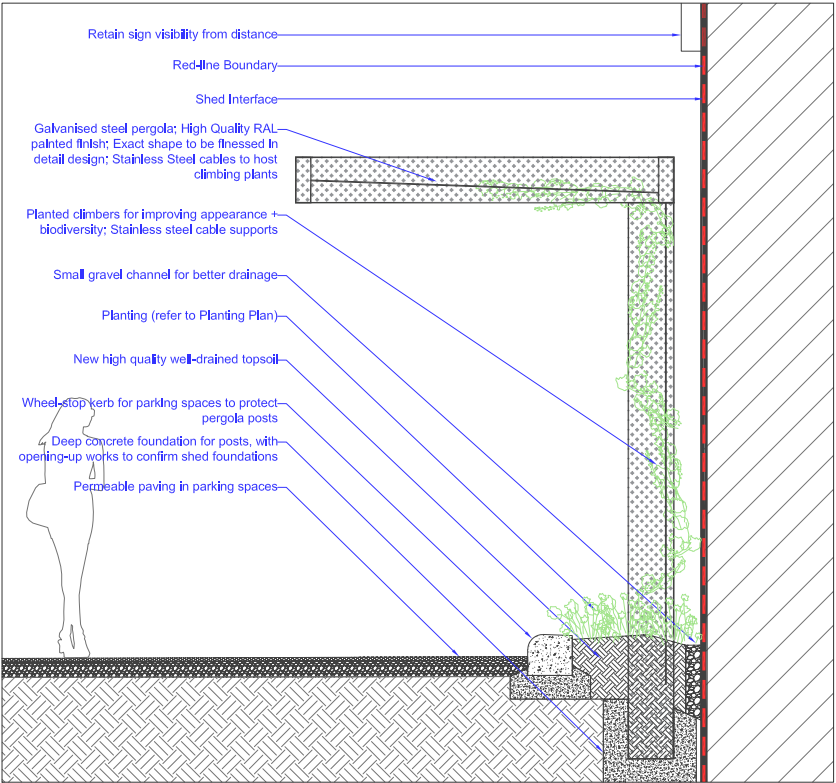
Boundary Treatments



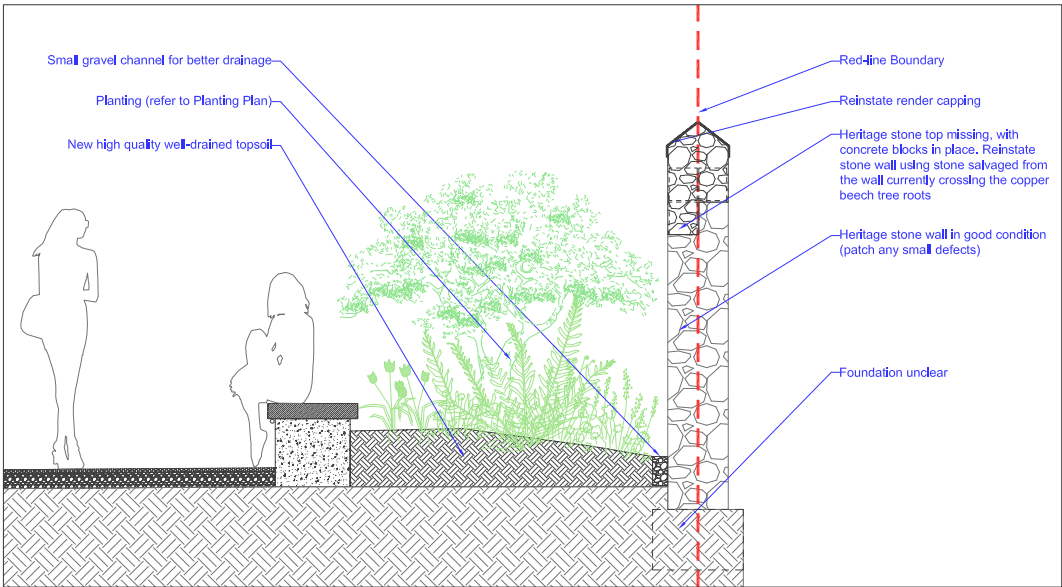
A - Stone Wall in Good Condition, minor repairs



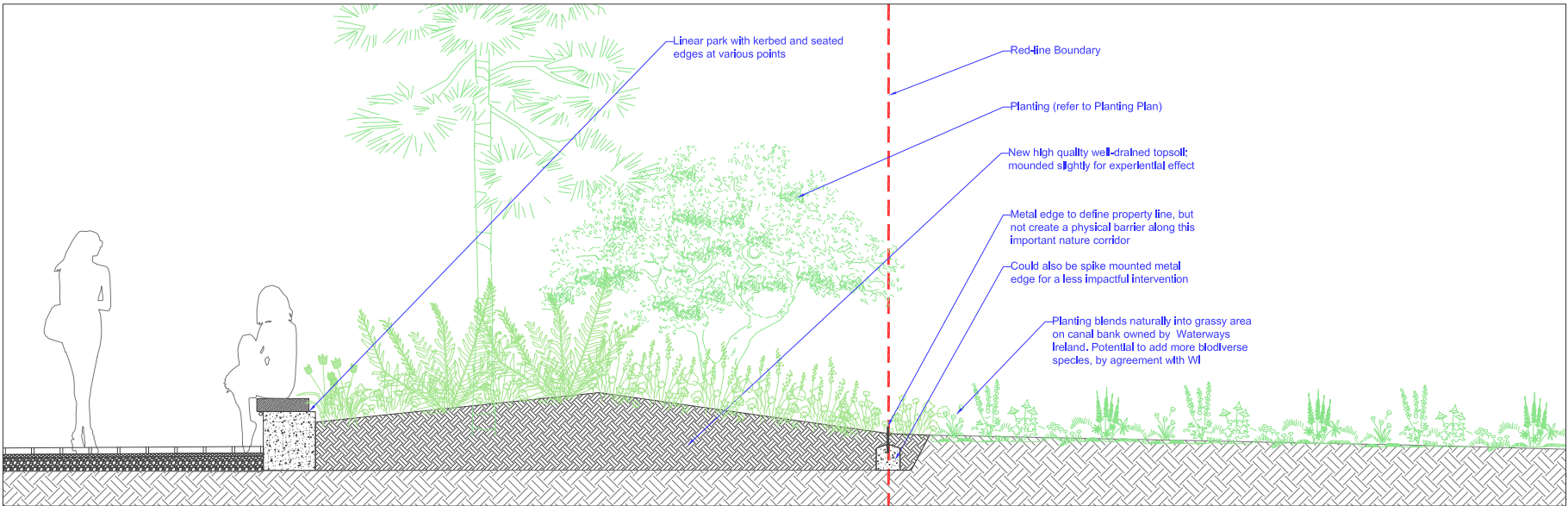
D - Brick + Block Wall in Good Condition, but to be replastered



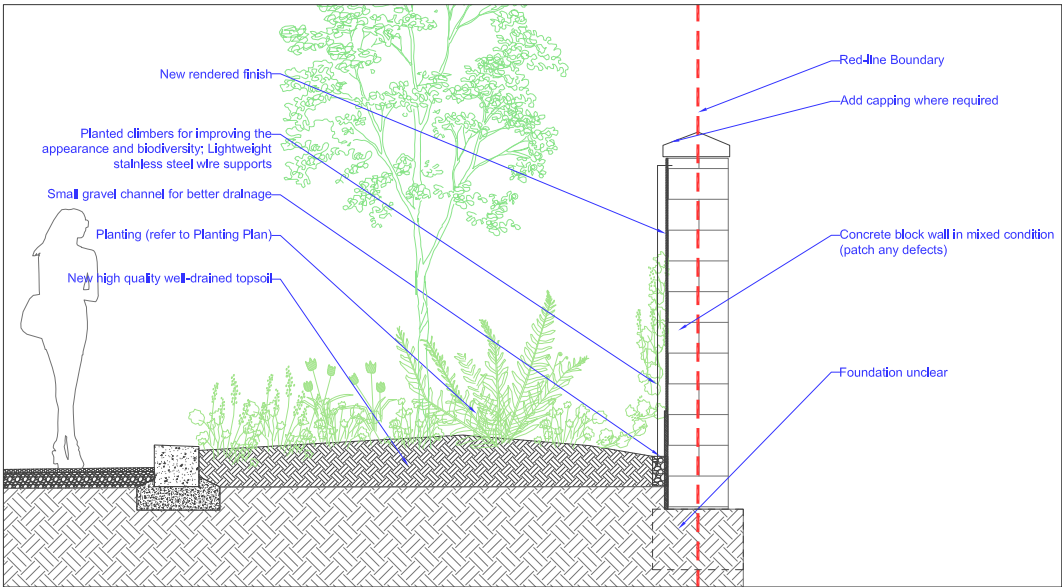
G - Planted pergola along shed interface



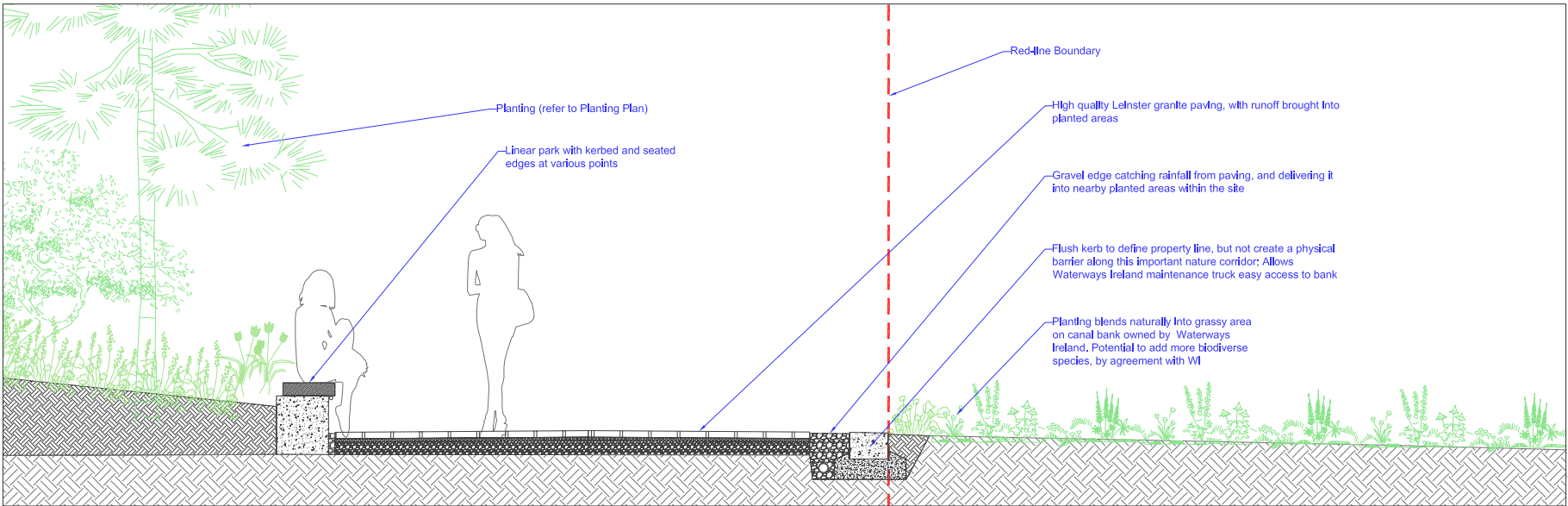
B - Stone Wall needing rebuilding and repair



E - Linear Park interface with Canal bank (planting). Canal lands likely to remain nature space until/unless Greenway details decided. Clear boundary delineation, but allowing nature to flow easily between the sites as this is an important nature corridor



C - Concrete Block wall in need of repair + plaster refacing

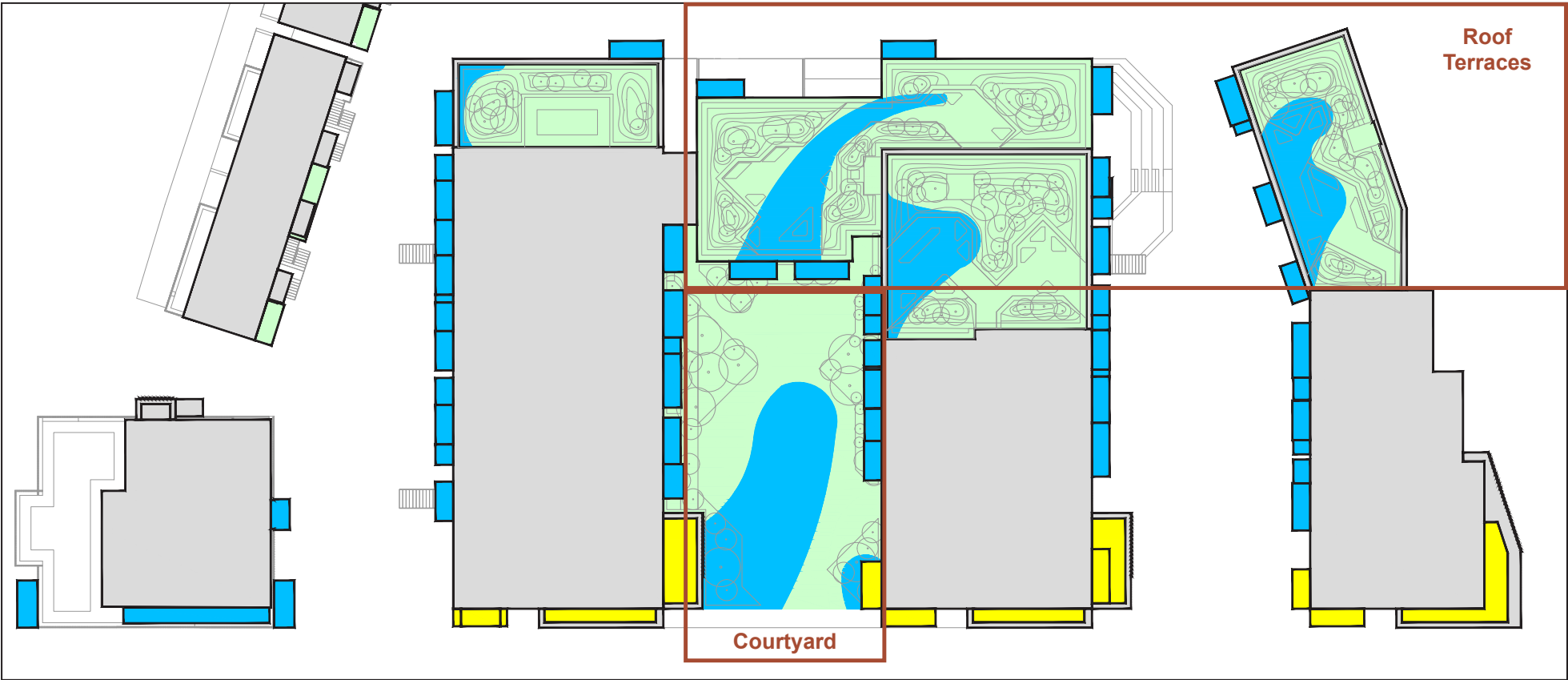


F - Linear Park interface with Canal bank (Paving). Canal lands likely to remain nature space until/unless Greenway details decided. A gate/fence boundary at this point would not do much unless it was 2m tall, which would kill the nature connection, while easy access to the bank is required by Waterways Ireland maintenance.

Wind Conditions: Analysis, Critique & Mitigation



Views south towards the canal, mature trees and mountains



Extract from RWDI Wind Report

Holistic Design Approach

We have considered the prospective weather conditions - such as sun aspect, rain showers, and wind sheltering throughout our design process. We have prioritised these elements while also factoring in other important features such as privacy, views to the canal, functional adjacencies, entrances, maintenance, vehicular use (day-to-day and occasional) and many more. This is a multi-layered and interconnected process that involves overlapping complexities and functional, experiential and aesthetic requirements that sometimes compete with each other. We see it as a big part of our specialisation to try wring as much positive benefit out of all these potential factors as possible. It would be great to have every landscape area in a scheme to have equally fine access to sunlight, beautiful views, and full shelter from wind and rain, however due to site varieties, building arrangements, existing contexts and all the other functional competing requirements, that is never possible or realistic. We can see a strong example of that at this site. A fantastic location with excellent aspect towards the sunshine, and access to great views of the grand canal and the mountains beyond, both to the south of the site. However, as much of the prevailing wind across Dublin arrives from the West and South West, opening towards these valuable features also opens towards the direction of the more regular wind aspect. This is where a critical analysis of the priorities of the outcome are crucial. It would be a poor outcome indeed if the aim to create perfect wind conditions for every spot, through adding baffles or excessive packing of trees resulted in the blocking off of the sunshine to the courtyard and terraces, and the views out to the canal and mountains.

Methodology Variation

In the Wind Analysis report provided by RWDI they explain that the methodology used is a 'Desk-based assessment... based upon analysis of meteorological conditions for Dublin, adjusted to the Site, and a review of the scheme drawings in the context of the meteorological data and surrounding area'. This is as distinct from a Wind Modelling Assessment using Computational Fluid Dynamic

(CFD) software. The desk-based approach is an accepted format of assessment, but it would be important to note that it would likely be more open to variation based on individual assessor, level of experience, degree of cautiousness etc. whereas a computer model may be solely an output based on the inputted information. An example of this variation in outcome can be seen by looking at the Wind Analysis Report on the previous Planning Application for this site (see Extract Page on following page). The buildings in that application were generally taller - which often means greater wind-speeds due to down-drafting - however the outcome of the computer modelling analysis was that the courtyard that is common to both schemes performed very well. The roof terraces in that application were mostly on the southern side of the building, which you would expect would make them more problematic from a wind perspective, however again they were found by the model to be suitable for their uses. The point to be made is not that one is more accurate or one is wrong, but more so that if there are evident uncertainties within a discipline due to a methodology variations, then we need to be cautious in overly weighting factors which by their implementation would badly damage other positive and important factors for residential amenity, such as access to sunshine and views.

Mitigation

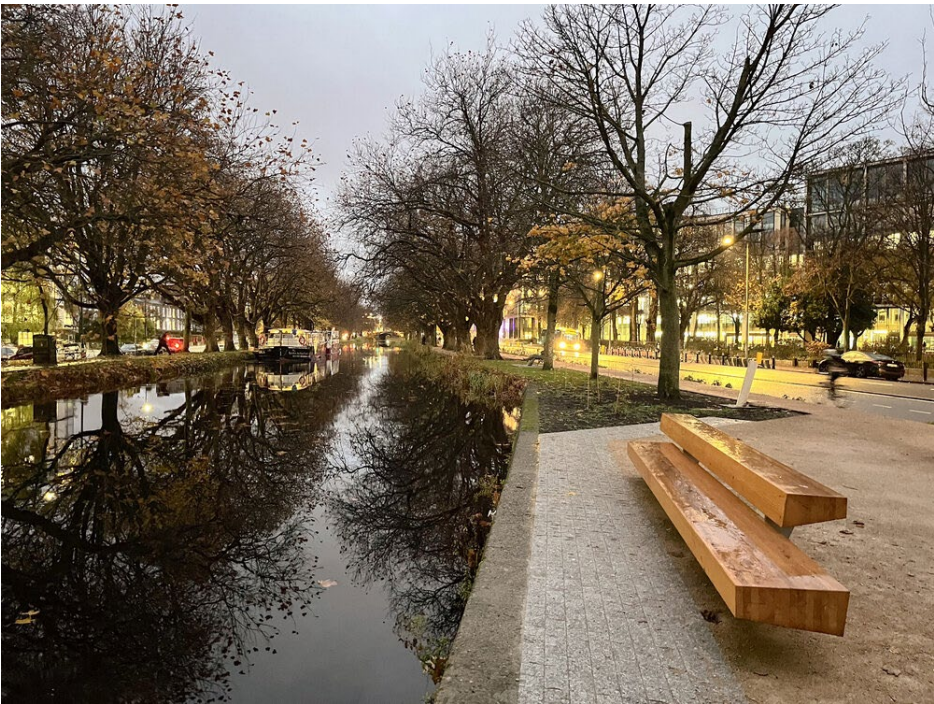
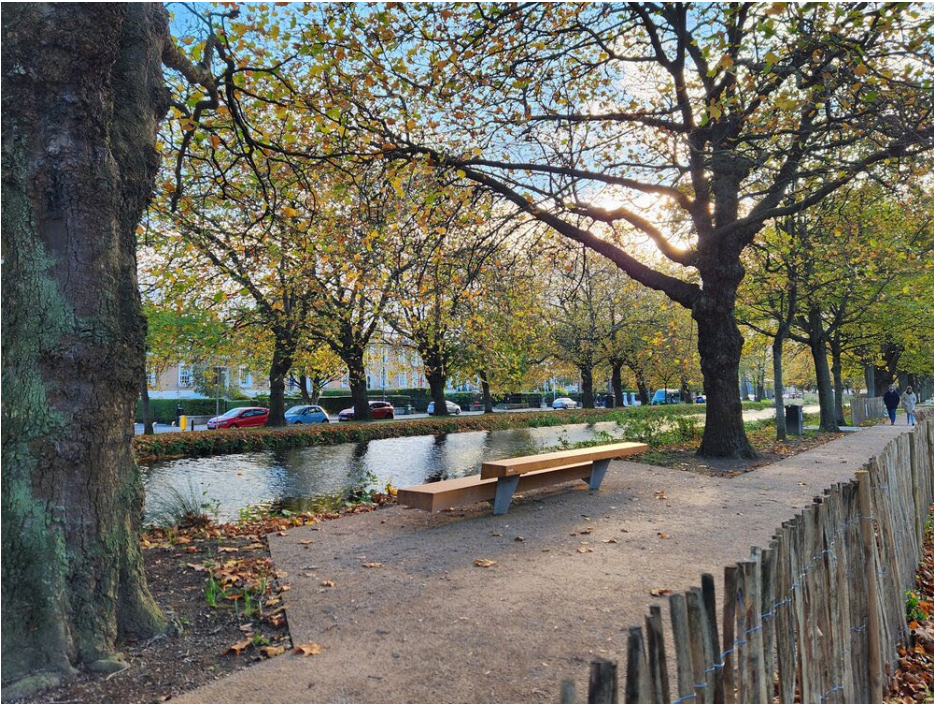
The proposed mitigations outlined on page 16, if implemented in full would result in a very damaging outcome of the overall design, as they don't consider the valuable site-specific assets we have here, again the views to the canal, mountains, and the sunshine. In section 4.3 the category thresholds are discussed in more detail: *"If the measured wind conditions exceed the threshold wind speed for more than 5% of the time, then they are unacceptable for the stated pedestrian activity"*. This is a very low percentage threshold, and in theory anywhere deemed to have 'Standing conditions' may still have sitting conditions up to 95% percent of the time, so it is important to retain the balance of all other important criteria too, and not have one excessively weighted.

On the courtyard level, to fully pack the open side of the courtyard - the one facing the canal and sunshine - with trees or other barriers would be completely counterproductive to the benefits of this unique site. Therefore we have responded by increasing the number and quantity of the trees on either side, while keeping the central zone open. This should buffer the wind speeds, but not overshadow the main residential courtyard, or block the canal views for the courtyards and all the residents facing onto it. Also the shelter pergola introduced in this central location - which hosts seats facing the canal and the informal amphitheatre - now has a glazed roof, so that should improve sheltering further.

Similarly for the roof terraces, the higher wind areas are also where the sun and views are oriented. As outlined earlier in this report, the whole roof design is arranged to both prevent overlooking to existing buildings outside the site, and to orient towards the sun and views. If some of the seats in these areas receive greater than 5% of wind at strolling conditions, the value of them for the rest of the time is still extremely high, so to block off these views and sunshine for the sake of increasing that percentage comfort does not follow a holistic design approach balancing all competing benefits and restrictions. It would also be a huge shame to do this based on the estimated outcomes from a Desk-Based assessment, which whereas another assessment might deem it fine as is, especially if it gave greater weight to the fact that most of the accessible terraces have a massing floor one storey higher than them directly to the west/south-west, which would be expected to help greatly with wind sheltering from this direction.

Therefore on the terraces we propose an increase in the size and numbers of the planting, but to keep these highly valuable paved and seating zones facing the canal/mountain views, and towards the sun. The large proportion of the time when they receive comfortable wind conditions will be augmented by the greater access to sunshine, and the nice views will encourage greater usage of the whole space overall.

Wind Conditions: Analysis, Critique & Mitigation



Recent BSLA Project along the Grand Canal near the White Heather site. In a wind workshop for the White Heather site, RWDI said that such seating, and other existing seats all along the canal, would also not likely be 'considered as overall being suitable for sitting use' under their interpretation of the Lawson criteria. Following that logic, there would be no seats along the canal, as they would exceed comfortable wind thresholds for more than 5% of the time.

White Heather Residential
Microclimatic Wind Analysis and Pedestrian Comfort



4.0 Pedestrian Comfort

4.2 Ground Level

CFD simulations were undertaken to determine the Lawson Criteria results for the proposed development.

Pedestrian comfort at ground level was assessed by predicting Lawson Criteria values at 1.5m above ground level.

Grey/ cyan contours illustrate areas deemed "Suitable for Long Term Sitting" and "Suitable for Short Term Sitting" respectively as well as standing. Green contours indicate areas "Suitable for Walking and Strolling", with yellow illustrative of being "Suitable for Business Walking". Red areas highlight zones as "Not Suitable for Pedestrian Comfort".

Fig. 4.2.1 indicates sheltered wind conditions at ground level, with the majority of the site determined by the methodology to be suitable for "Short/Long Term Sitting".

The U-Shaped footprint of the proposed development provides a self-sheltering effect, resulting in comfortable wind conditions for users of both the public and private outdoor amenity spaces. The presence of landscaping in the centre of the development provides suitable sheltering and prevents regions of pedestrian discomfort being formed due to a "funnelling effect".

Additionally, the proposed Canal Amenity to the South of the development is predicted to experience a comfortable wind environment, with all of this area deemed suitable for "Short/ Long Term Sitting".

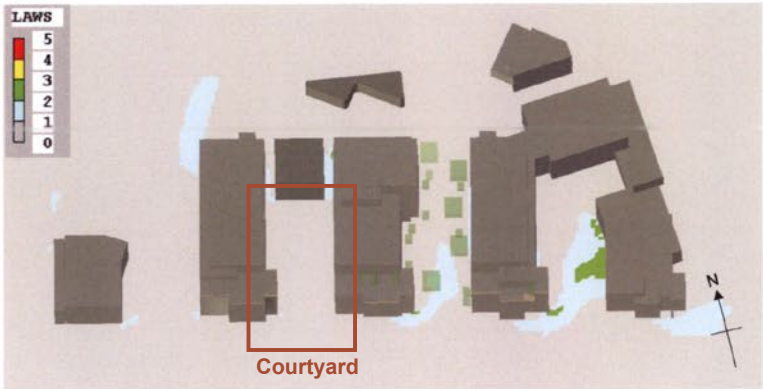


Fig. 4.2.1 - Lawson Criteria at 1.5m above Ground Level

Page extract from the Wind Analysis Report in the previous planning application (where the massing was mostly taller). This used 'Computational Fluid Dynamic modelling' rather than a 'Desk-based Assessment', and found that the same residential courtyard, and upper roof terrace levels performed well for comfort levels. Therefore it is important to be aware that different methodologies may yield different results, and so to factor this in when balancing the hierarchy of overlapping and competing design factors.