Great Northern Warehouse, Manchester

PRIVATE GARDENS AND TERRACES LIGHTING STRATEGY

NOVEMBER 2022
STATUS: FOR INFORMATION

Great Northern Warehouse

Private Gardens and Terraces Lighting Strategy

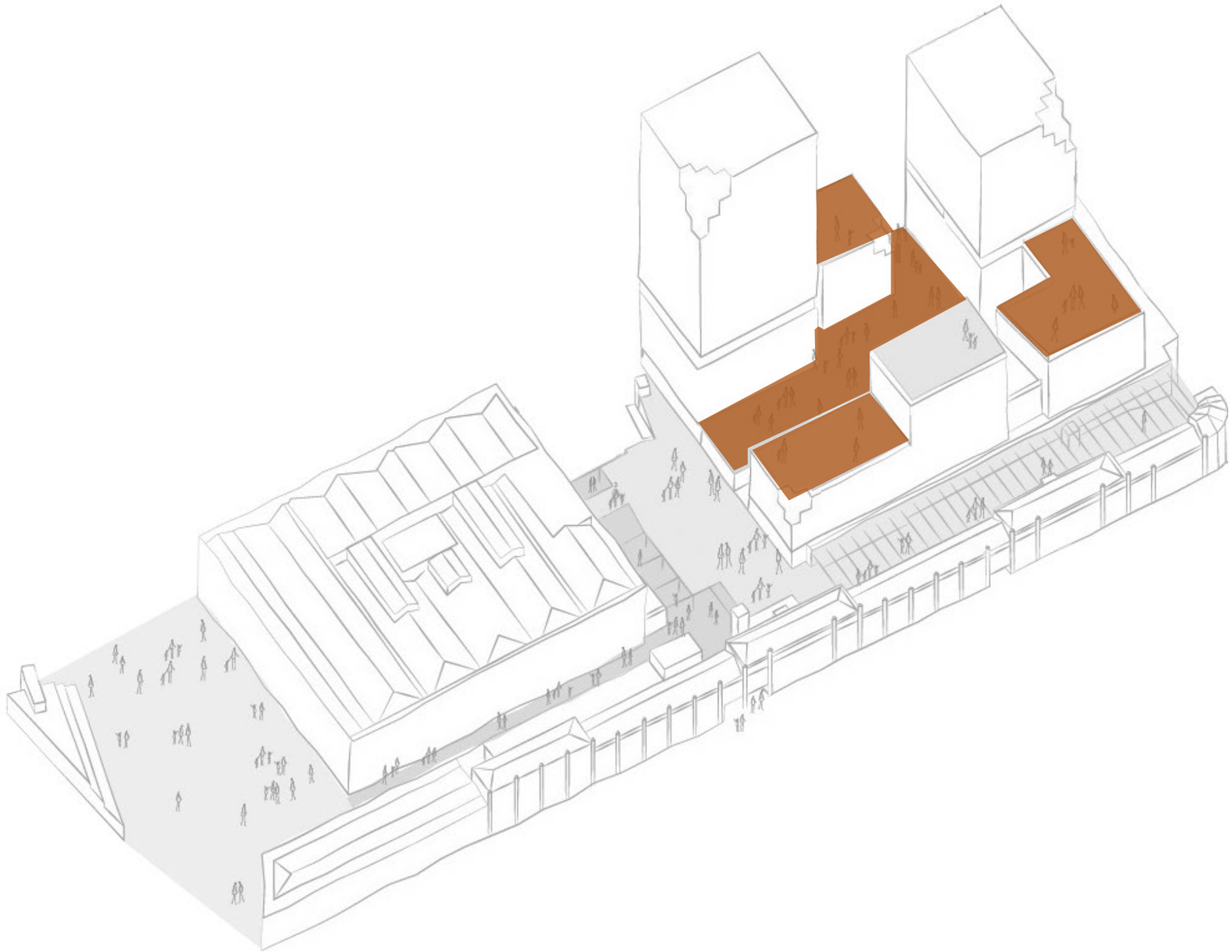


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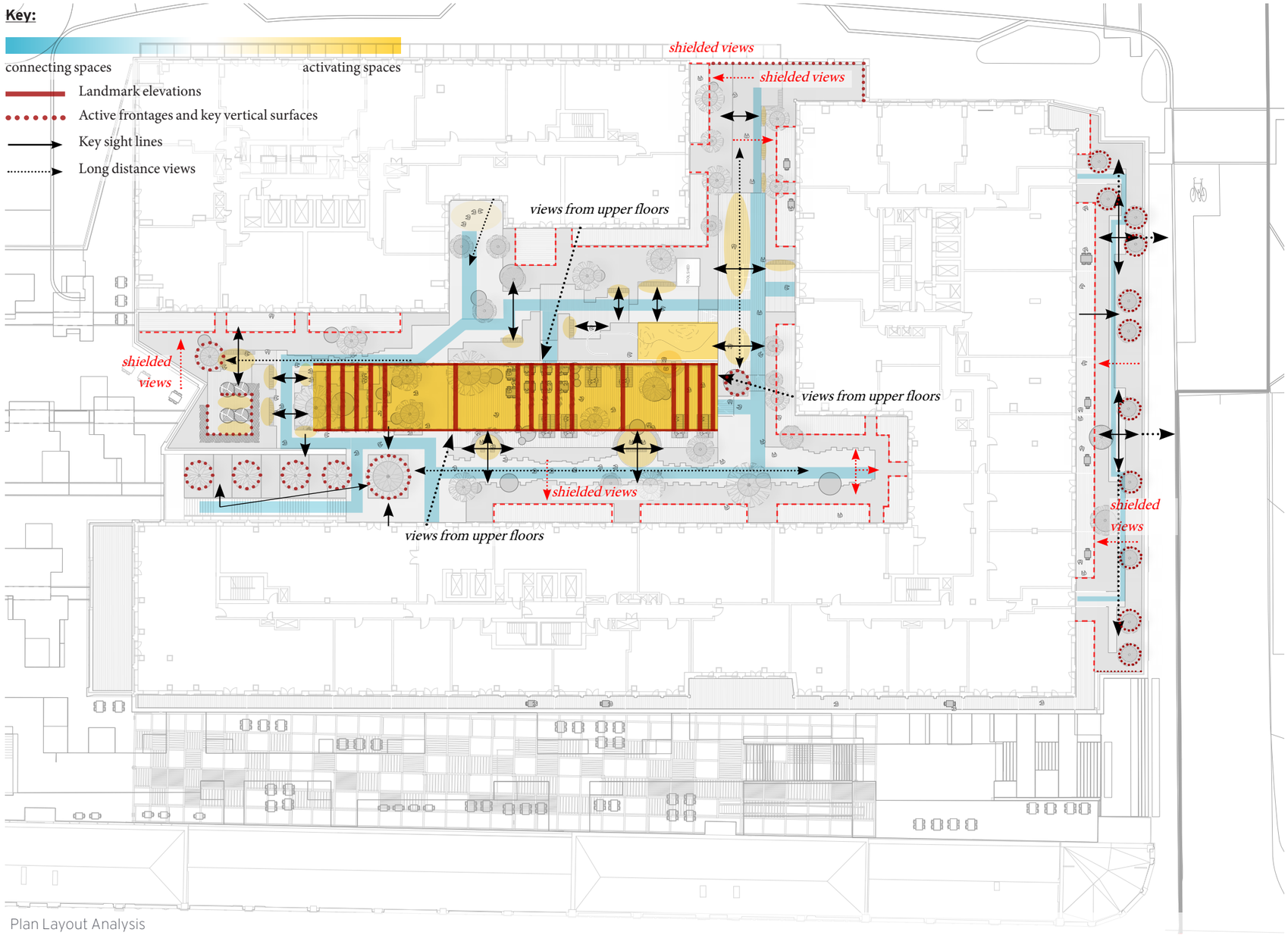
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1. Podium Gardens and Terrace

1.1 Analysis and Key Considerations



Plan Layout Analysis

Observations

Visibility, privacy and comfort are key considerations for the design of the podium garden lighting. To reduce the risk of light trespass the following principles will be followed through:

- low level shielded lighting to circulation paths;

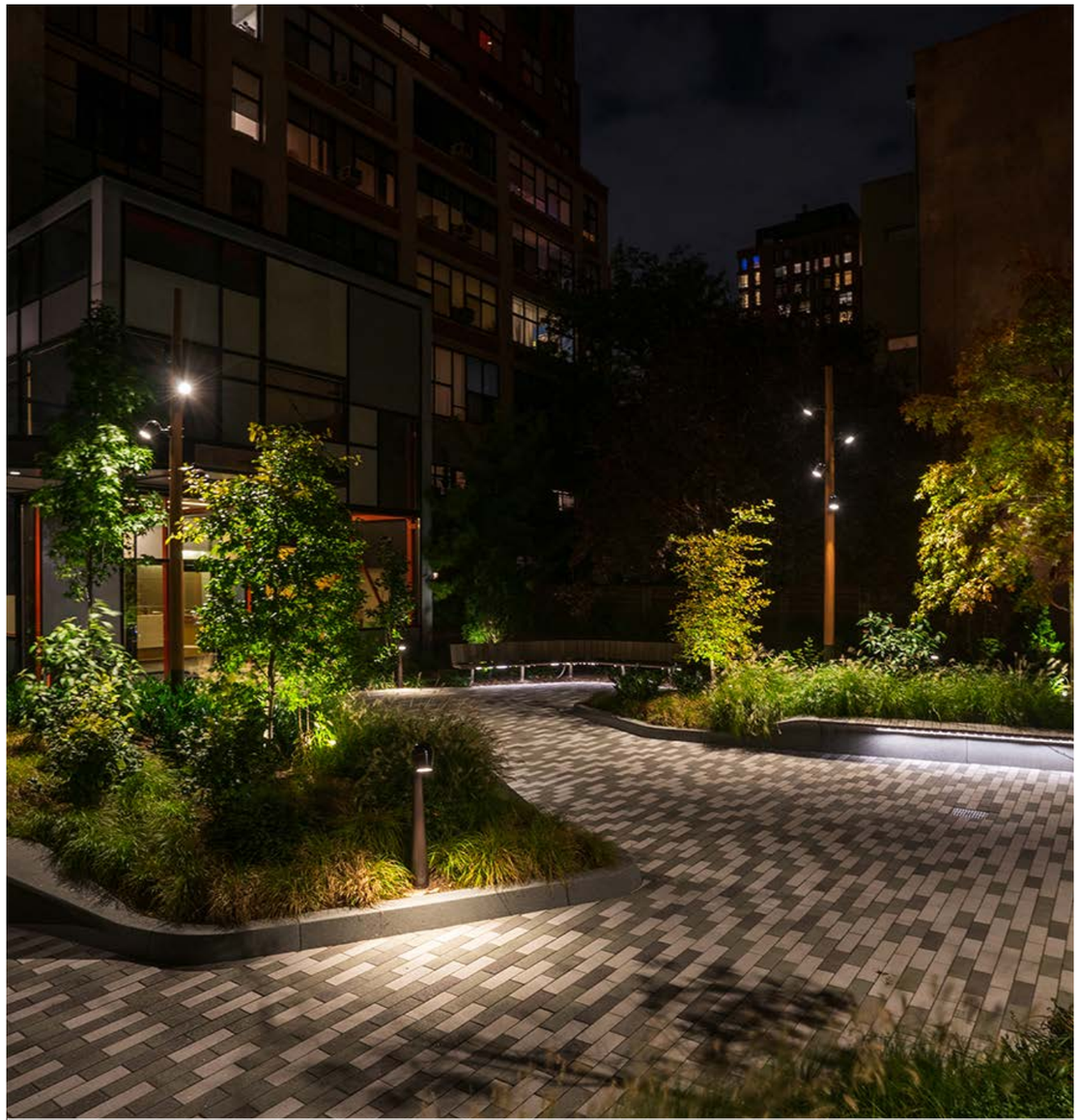
- avoiding the use of uplighting;

- careful balance of illuminated vertical surface to create pockets of interest and focus attention away from the private patios;

- concentrating amenity lighting in the active spaces.

The freestanding pergola structure in the centre of the gardens provides a great opportunity to highlight the character of the space and create a feature focal point.

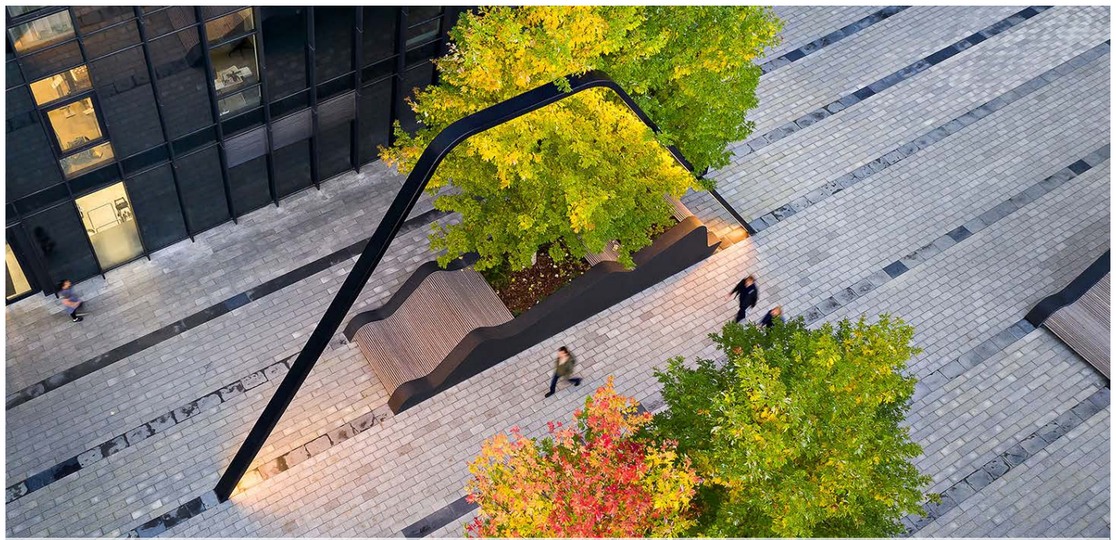
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Shielded low level lighting to the circulation paths would help guide the occupants along creating a picturesque experience while reducing upward spill into residential elevations. Locating the luminaires near the planters and selecting an optical distribution to suit would help highlight panting and landscape features.



Higher ambient levels would be targeted in the community space under the freestanding structure. A visual hierarchy can be created to highlight particular zones of interest.

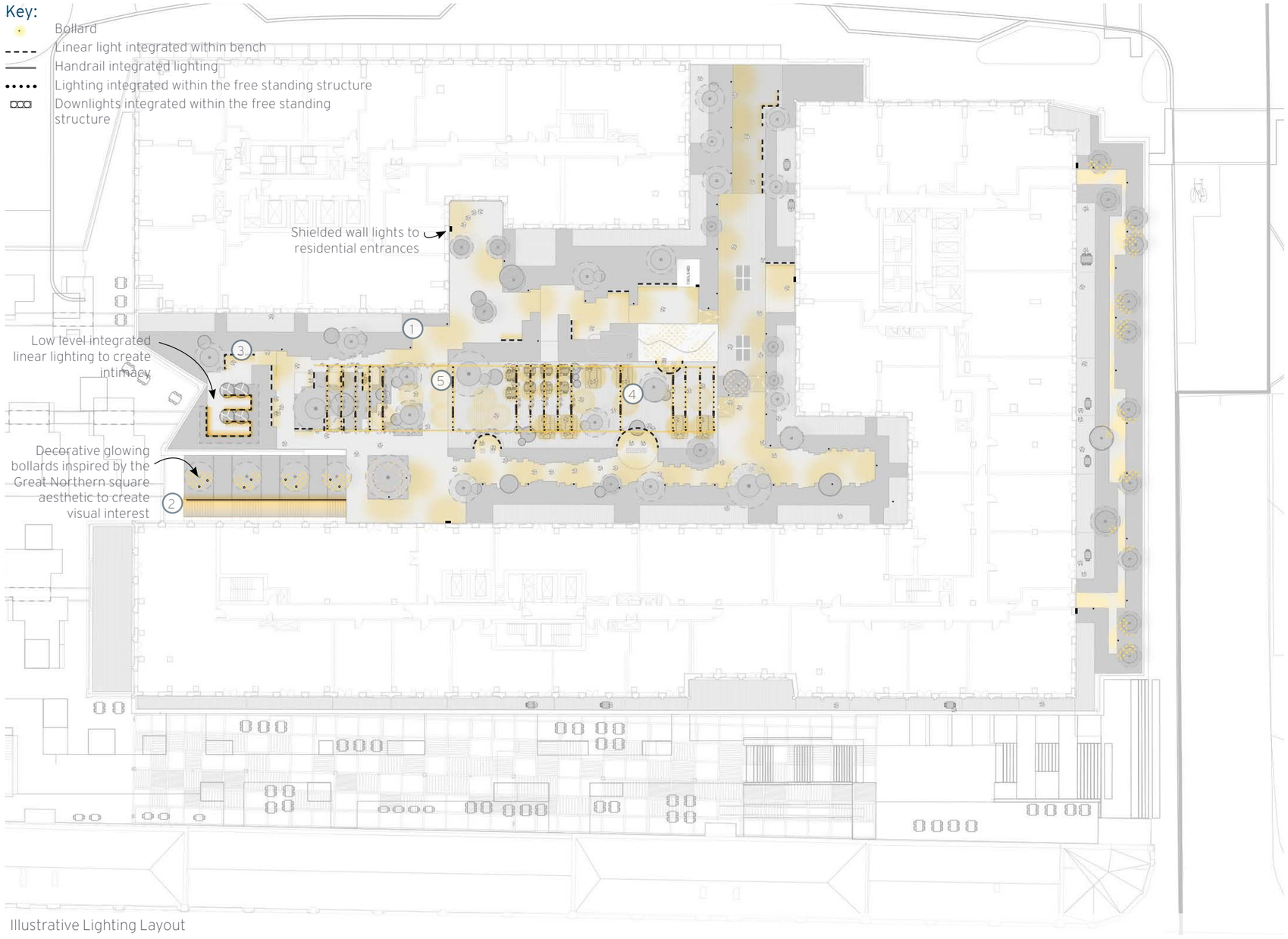


Integrating lighting into the pergola would help conceal the light sources reducing upward glow and would further reinforce the sculptural properties of the structure.

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1. Podium Gardens and Terrace

1.3 Illustrative Lighting Layout and Product Palette



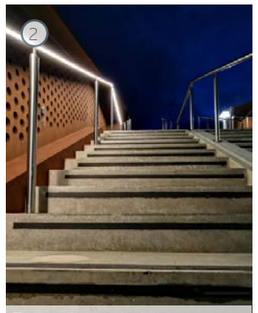
Illustrative Lighting Layout

1



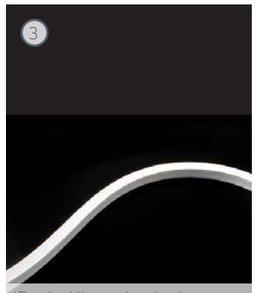
Shielded low level bollard helping the navigation of the private garden.

2



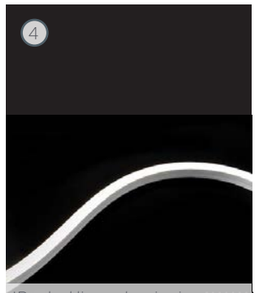
The staircase is lit through integrated handrail lighting

3



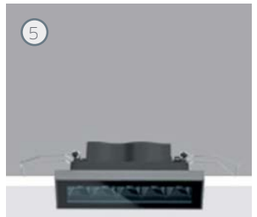
IP rated linear luminaire integrated within the benches for a soft glow on the pavement.

4



IP rated linear luminaire integrated within the pergola structure to create a soft and warm glow.

5



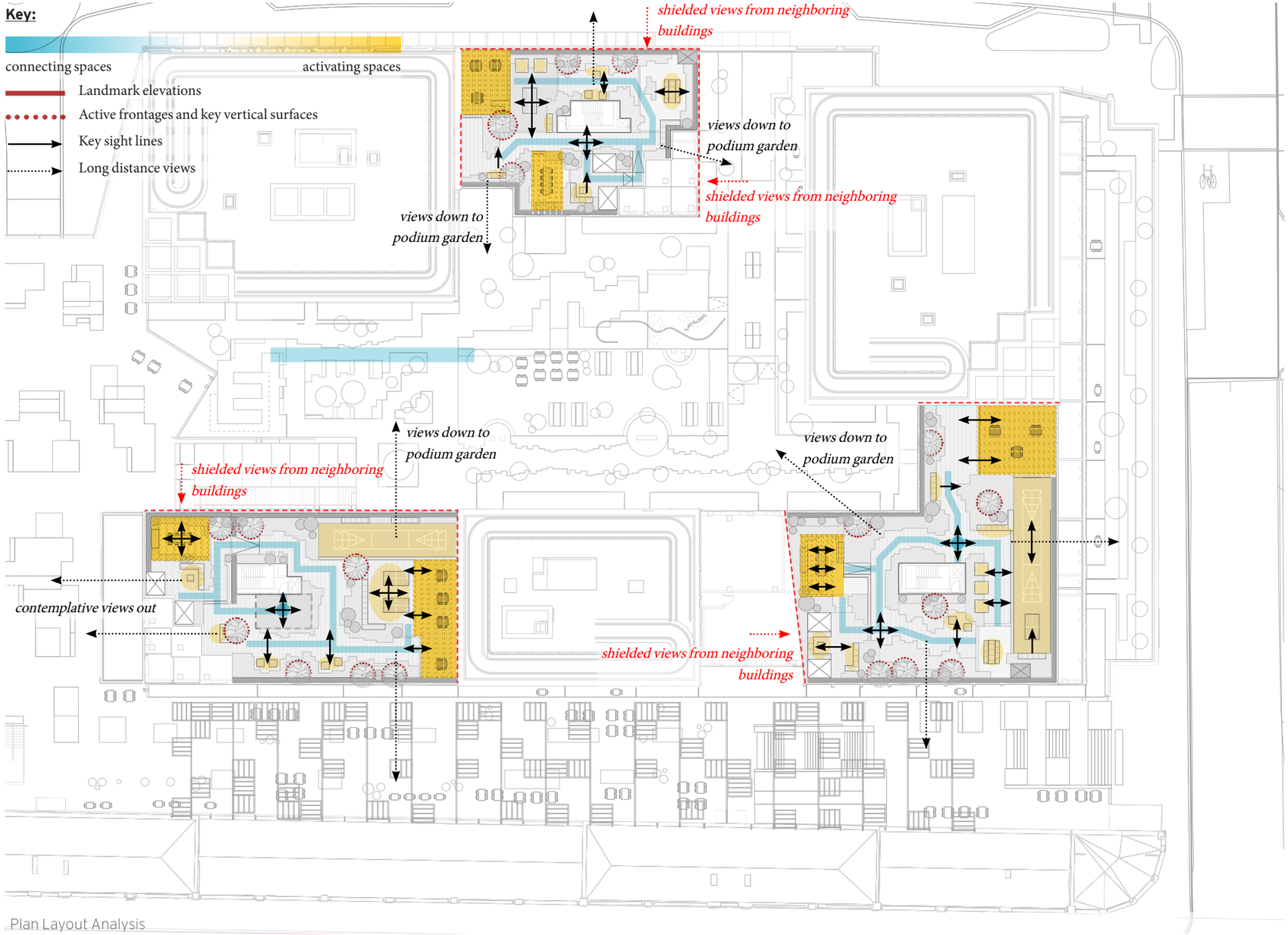
Downlight integrated within the pergola structure for general lighting.

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2. Residents' Terraces

2.1 Analysis and Key Considerations



Plan Layout Analysis

Observations

Lighting to the private terraces will be closely developed with the detailed design of the spaces to allow for a good level of light integration targeting a sophisticated luxurious look and feel.

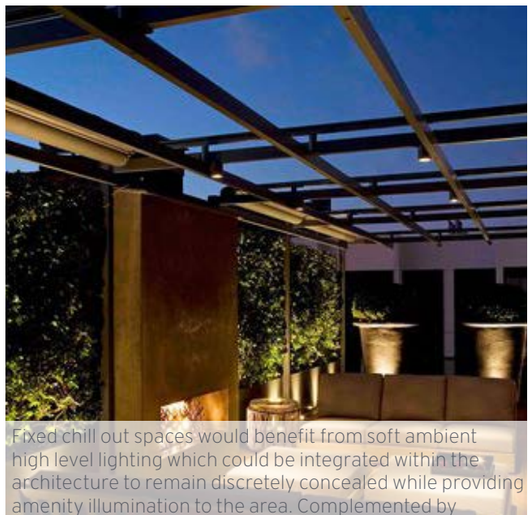
Partially enclosed, open air and circulation spaces will be treated accordingly following considerations for the permanency of expected use and flexibility, marking visual boundaries versus preserving unobstructed vistas of the city and use of decorative elements to supplement the general lighting.

Special attention should be dedicated to help balance exposure and shielding from neighbouring buildings by shifting the visual focus of illuminated surfaces to ensure the occupant's comfort.

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Lighting to open air transitional and informal seating spaces would be kept at low level to allow views out and frame the perimeter of the spaces creating enclosure. Additional moveable decorative lighting can be used to provide soft warm accents to tables.



Fixed chill out spaces would benefit from soft ambient high level lighting which could be integrated within the architecture to remain discretely concealed while providing amenity illumination to the area. Complemented by low level details and carefully selected uplighting to key landscape elements this strategy would create a cosy but functional and flexible light scenario.



The circulation pathways would benefit from spill light from the surrounding amenities. In order to frame the views and aid privacy selected vertical elements could be illuminated which would also aid orientation and way finding.



Highlighting selected feature elements and adding thematic decorative lighting would help express the character and heritage of the site.

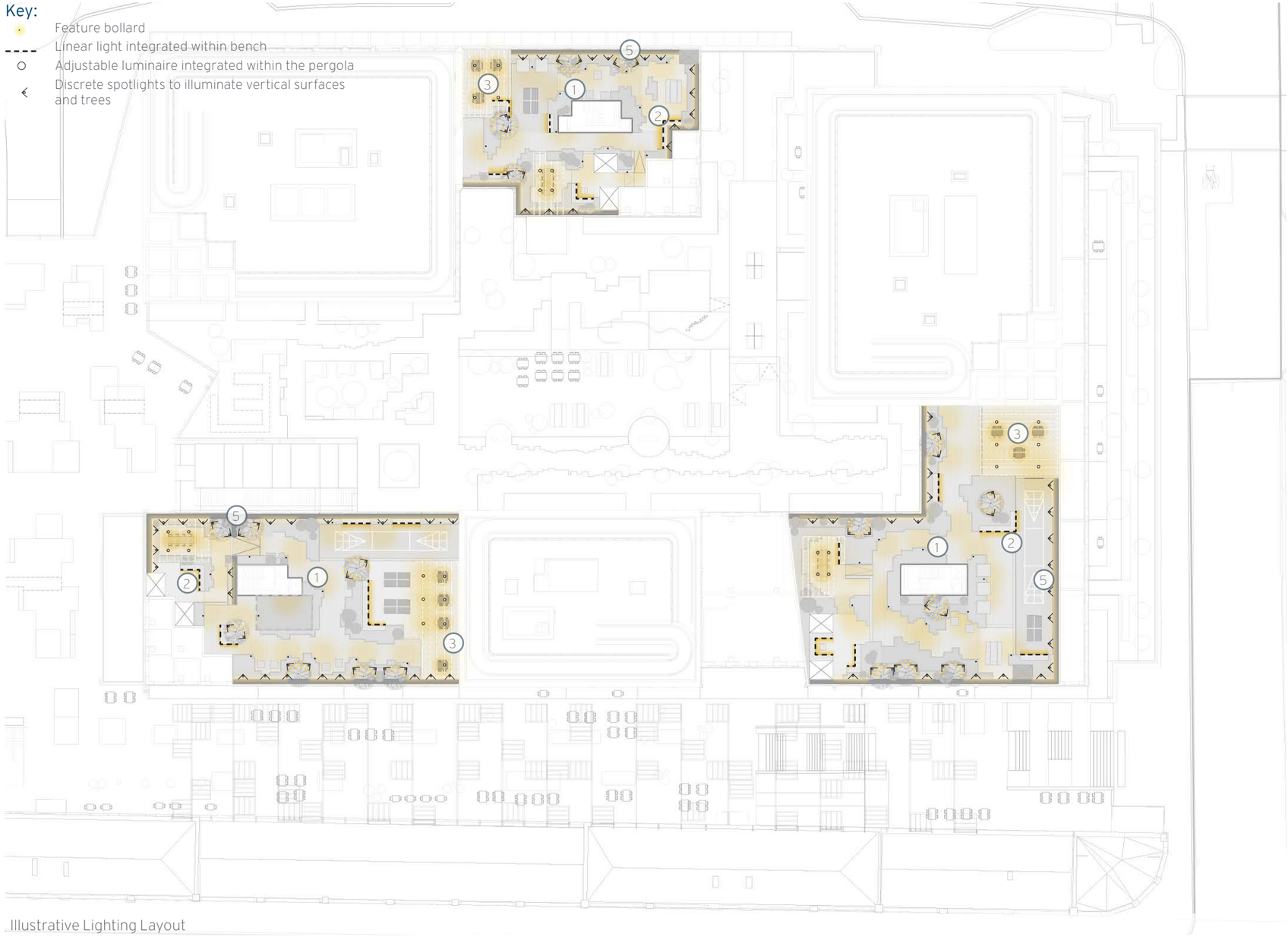
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2. Residents' Terraces

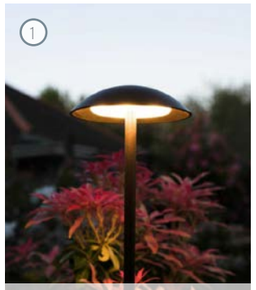
2.3 Illustrative Lighting Layout and Product Palette

Key:

- Feature bollard
- Linear light integrated within bench
- Adjustable luminaire integrated within the pergola
- Discrete spotlights to illuminate vertical surfaces and trees



Illustrative Lighting Layout



Shielded low level bollard with a decorative shape lighting the pavement for a easy navigation of the space



IP rated linear luminaire integrated within the benches for a soft glow on the pavement.



Discrete adjustable spotlights integrated within the pergola structure for general lighting



Additional decorative lighting making the space friendly and welcome



Small uplights and spots with controlled emissions to light up the vertical surface of selected trees and hedges for a sense of intimacy.

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3. Lighting Layers and Control Strategy

Private Garden

There are three main component in the lighting strategy for the private garden. Low level lighting offered by bollards illuminating the pavements, lighting integrated within benches creating a relaxed and cosy environment and high level lighting from the free-standing structure contributing to a dynamic activated space for community activities and meet ups .

The lighting design intends to adjust the intensities of these elements separately, to create a balanced day by day scene as well as special lighting scenarios for events or special occasions.

A digital control system would operate the lighting fixtures through pre-recorded scene settings depending on use.

Presence detection and a curfew based operation with an astronomical time-clock trigger is suggested to reduce the environmental and energy impact of the installation.
After curfew all upward and feature lighting would be switched off or significantly dimmed down.
Necessary local lighting to paths and entrances should remain on at a dimmed level after curfew until presence is detected to ensure the safety and perceived security for the residents.

Special attention will be dedicated to views down from the residential terraces and windows making sure that transitions between dimming levels are gradual to avoid any discomfort during the night.

Residents' Terraces

The Residents' Terraces design is luxurious with a variety of areas and spaces and the lighting design strategy is developed to reflect its variety.

The bollards dedicated to the circulation paths and the lighting integrated within the benches offer a low level lighting effect that makes the space feel warm and pleasant.

Adjustable downlights attached to the pergolas are dedicated to the tables and seating areas underneath, adding accents and pools of light for added contrast and a more dramatic effect. The space can be enriched with the added playfulness of portable decorative lanterns.

The different spaces are defined through lighting with soft framing vertical illumination along their perimeter. Selected trees and hedges are highlighted using discrete uplights installed in the planters.

As in the private garden each of the residents' terraces would be equipped with a digital lighting control system that allows:

- separate adjustment of the different groups of luminaires (per location and function);

- setting up lighting scenes for day-to day and special occasion operation. An astronomical time-clock would trigger day-to-day operation throughout different seasons;

- presence detection to switch off decorative and accent lighting when the terraces are not in use while keeping amenity lighting dimmed down for safety and security.

An additional control plate for staff on the reception could be included for extra manual control.

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