10.

FIRE STRATEGY





10.1 Fire Strategy Outline

Extract from Fire Consultant, by Chapmans

The scheme will consist primarily of Guild Living Residents (GLR) who are capable of independent living and egress in the event of fire. GLR apartments have been designed in accordance with BS9991:2015 for typical residential design, operating a 'defend in place' evacuation strategy. The building is provided with increased levels of compartmentation aligning the residential code of practice and all common escape routes will be provided with a natural smoke clearance system to ensure the availability in the event of fire.

Guild Care Suites (GCS) are dedicated areas of the scheme housing occupants who require 24-hour care and are not considered capable of independent escape in the event of fire. GCS have been designed considering the recommendations of the HTM Fire Code 05-02 for care premises. The GCS areas will adopt a progressive horizontal evacuation of occupants to the adjoining fire compartment where full escape from the building can be made; evacuation lifts will be provided to each end compartment to facilitate the evacuation strategy by building management.

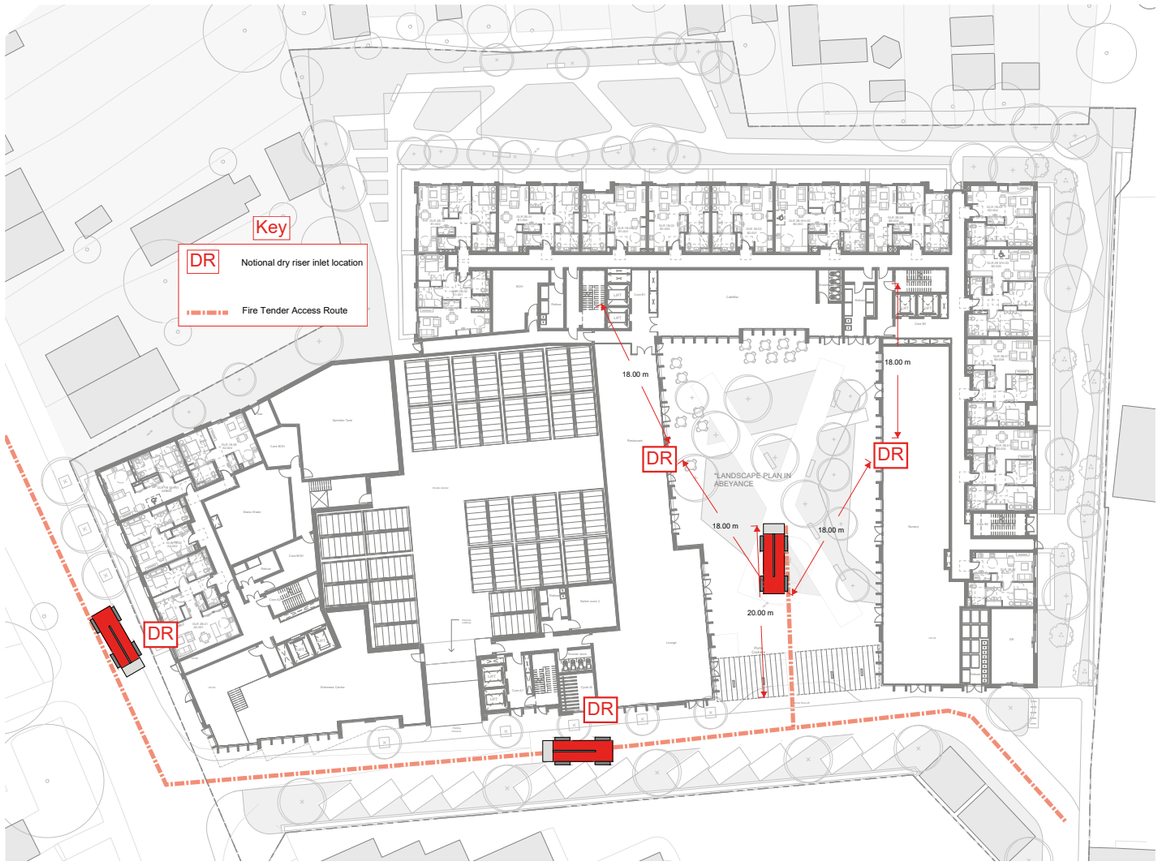
Guild Care Residences (GCR) are occupants which may require assistance from building management in the event of a fire however are not provided with the 24-hour care typical for GCS. GCR require provisions that are above that typically expected under BS9991:2015.

All amenity areas located at the ground floor are open to public and resident use, therefore adopt a simultaneous evacuation on confirmed fire.

The building occupies a floor level greater than 11m in height and therefore will be provided with sprinkler protection to all areas. All residential areas are to be provide with a system in accordance with BS9251:2014; all non-residential areas including the GCS will be provided with a system in accordance with BS EN 12845:2015 to the relevant hazard classification.

Fire service access to the protected stair cores is provided directly for the main access road via the front of the site. The central courtyard and surrounding roadway will allow the fire service tender to reach a point within 18.0m of dry fire main inlets located on the façade of the building. Additionally, based on the top floor level greater than 18.0m, two dedicated fire-fighting shafts, containing a fire-fighting lift, fire main and accessing directly from a ventilated common lobby, will be provided.

All external wall construction, including all specified attachments detailed under Regulation 7, will be non-combustible and achieve a minimum European classification of A2-s1, d0 or A1 throughout.



11.

SUSTAINABILITY





11.1 Sustainability Summary

Chapmans have been appointed by Guild as sustainability consultants, identifying key components of the Energy Strategy and Sustainability Statement for the proposed Guild Living development in Uxbridge in line with CS27 of the Core Strategy.

Performance driven sustainability

Since inception, the sustainability strategy has been developed with performance at its heart, providing effective enhancements to the development and it's future occupants, whilst avoiding 'eco-bling' and the 'tick-box' sustainability approach which sustainability assessments have fallen foul of in the past.

Priority themes have been identified which respond to contextually relevant opportunities for the site. Criteria from recognised environmental standards are used to establish benchmarks and targets from which the design team can develop the performance-based strategy.

This strategy does not mean that other opportunity themes have been excluded. In these areas it has been agreed that good practice standards and the local context mean that good levels of sustainability are achieved in general practice and that these levels shall continue to be included.

Energy

The energy strategy for this proposed development focuses on providing spaces that are comfortable throughout the year and designed to mitigate energy consumption and resultant carbon emissions. The design approach for the proposed development follows the GLA energy hierarchy, i.e. 'Be Lean, Clean, Green, Seen'.

This approach places the primary emphasis on mitigating energy use in the first instance via passive and energy efficient design (Be Lean).

The second step is to deliver the required energy as cleanly and efficiently as possible (Be Clean).

Once the energy demand of the development has been reduced as far as practically possible, renewable energy sources are utilised to offset the demand of the development (Be Green).

Throughout the design process measures are implemented to enable the team to monitor energy consumption and remediate excessive consumption to enable the development to operate as intended (Be Seen).

In line with the GLA's Sustainable Design and Construction SPG, Hillingdon Planning Policy and the requirements set out in the forthcoming Draft London Plan (July 2019), the following targets have been considered applicable when developing the design.

• 10% reduction in regulated carbon emissions against Part L1A 2013 Building Regulations minimum performance via passive design & energy efficiency measures (Be Lean) for the domestic uses.

• 15% reduction in regulated carbon emissions against Part L2A 2013 Building Regulations minimum performance via passive design & energy efficiency measures (Be Lean) for non-domestic uses.

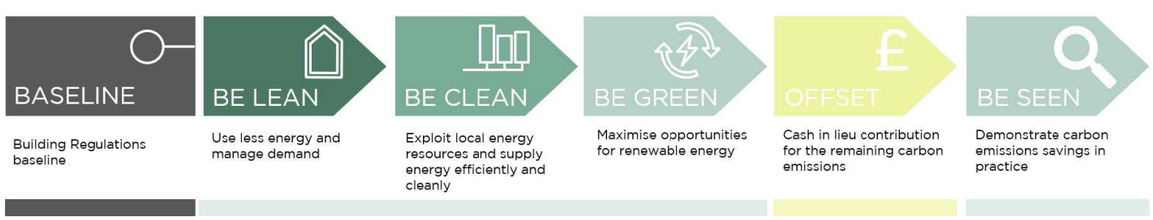
• Maximise renewable energy contribution where possible.

• An on-site reduction of 35% beyond Part L 2013 for the proposed development (total cumulative).

Delivering operational cost efficiency

The decarbonisation of the National Grid means that an all-electric development can provide greater carbon savings than traditional systems providing heat. However, the unit cost disparity between mains gas and grid electricity remains and therefore the efficiency of an electric system plays an important role in delivering operational cost savings.

A simple operational cost estimate comparison of a traditional boiler system and various all-electric system options is provided below demonstrates a potentially significant saving that could be available in operation via a heat pump led ambient loop system – this is based on a typical apartment building.



Be Green

200 PVs totalling approximately 64.5kWp at a 20o inclination are proposed across multiple roofs for the domestic areas to maximise the development's renewable energy generation capability.

Further detail is provided in the submitted Energy Statement.

Estimated design performance

The domestic and non-domestic areas of the proposed development could be expected to achieve a 13% and 15% reduction in regulated carbon emissions for the 'Be Lean' scenario respectively.

A detailed summary of the approach to energy conservation and carbon emissions savings is provided in the Energy Statement provided as part of this planning application.

Energy Statement

The energy strategy for the proposed development targeted demand reduction measures first, giving priority to the optimisation of building fabric to reduce the need for heating, cooling, and artificial lighting. The objective was to have buildings as energy-efficient (i.e. 'lean') as possible without relying on overly complicated systems or technologies to deliver low carbon performance.

The aim was to achieve a low-energy building without relying on carbon offsetting technologies only, committing to the priorities set in the London Plan and the London Borough of Hillingdon's Core Policies.

Low and Zero Carbon technologies

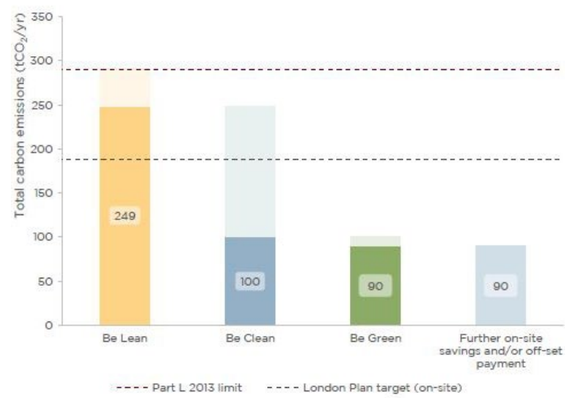
› Photovoltaics

Solar photovoltaic cells (PV) convert sunlight into usable electricity. Due to the relatively low efficiencies of this system, a large area is often required to provide a reasonable quantity of power. PV cells also provide their peak power (referred to as kept) during the summer months and therefore larger installations need to be carefully considered. Paybacks are now within a reasonable range of 11 to 15 years with the available feed-in tariffs. The use of the energy on-site remains a priority to achieve the payback as the rate at which surplus power can be sold to the grid is low. 200 PVs at a 20o inclination across multiple roofs are proposed to maximise the development's renewable energy generation capability – this would provide a 65.4 kWp PV array.

› Air source heat pumps

Air source heat pump systems can efficiently elevate low-grade environmental heat from the air to the level required for space heating and even domestic hot water system (albeit at low efficiency).

Air source heat pumps are proposed for the domestic and non-domestic areas. They are considered particularly suitable for the scheme for the following reasons: - They can provide simultaneously space heating and cooling in a very efficient way; - Heat pumps are relatively quiet in operation and are typically contained within plant spaces without any significant impact on the local environment; - Lower corridor overheating risk due to at near ambient temperature within the pipework; and - Heat pump systems are inherently a renewable source of energy



12.

DAYLIGHT & SUNLIGHT





12.1 Assessment

Daylight & Sunlight

Natural light levels within and surrounding the site are considered with reference to the Building Research Establishment (BRE) publication 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice' (commonly referred to as 'the BRE Guidelines.') The BRE guidelines provide various methodologies and numerical criteria for calculating the potential effect on the existing and proposed light levels received by neighbours of a development site, as well as for calculating the potential light levels within new development. Residential use is generally considered most important, alongside properties and amenity areas that have a reasonable expectation for natural light. As such, only domestic use is under consideration in the assessments.

Daylight and sunlight have been key considerations throughout the design process and Marchese Partners have been proactive in absorbing Avison Young (AY)'s advice into the scheme designs. Mitigation measures have been embedded within the design to minimise the impact to neighbours wherever possible, through the careful orientation and positioning of the proposed massing on the Site – while also maximising the potential light levels within the Proposed Development.

Summary of Results

Daylight & Sunlight – Neighbouring Buildings & Amenity Space

In accordance with the recommendations set out in the BRE Guidelines, AY's analysis has focussed on neighbouring residential receptors that have windows overlooking the Site which could be sensitive to alternations in light due to both proximity and outlook. Commercial properties have been scoped out in accordance with BRE recommendations (see BRE paragraph 2.2.2).

The daylight and sunlight analysis has considered 41 properties in total, namely: Laburnum Court, 9 Harefield Road and nos. 14-20 (evens) Harefield Road to the north/west; nos. 51-13 (odds) Lancaster Road to the north/east; and nos. 2-32 (evens) Wilmar Close to the south/southwest. It also considers the potential effects on overshadowing to a total of 29 amenity spaces neighbouring the Site – namely the rear gardens associated with property at: nos. 14 to 20 (evens) Harefield Road, 13-51 (odds) Lancaster Road and nos. 2 to 12 Wilmar Close.

AY's daylight/sunlight assessment confirms that the vast majority of windows and rooms within the neighbouring properties will satisfy the BRE's initial default values. For overshadowing, all surrounding amenity space tested will satisfy the BRE criteria. This demonstrates that the Proposed Development performs very well in response to the immediate neighbouring context. For a small minority, there will be some more noticeable effects beyond the default guidance levels (particularly Laburnum Court, 14 Harefield Road and 18 Harefield Road); however, It is important to note that the BRE itself acknowledges that its numerical targets are not mandatory, should be applied sensibly, flexibly and with careful consideration of specific local constraints. Where more noticeable impacts have been identified, there are key contextual factors involved to justify the use of alternative targets e.g. less sensitive bedroom use affected; located in very close proximity to the Site boundary or windows below street level; facing uncharacteristically low levels of existing obstruction opposite; effects driven by inherent design constraints, such as very deep single-aspect rooms or projections that blinker the available light. For the reasons set out in AY's report and in view of local, regional and national planning policy context, the potential effect on existing light levels recorded are considered entirely acceptable in this context.

The overshadowing analysis indicates that all neighbouring rear gardens tested will comfortably satisfy the BRE guidelines for its key quantitative test. This illustrates that the scheme is carefully designed to minimise the potential effect on existing overshadowing

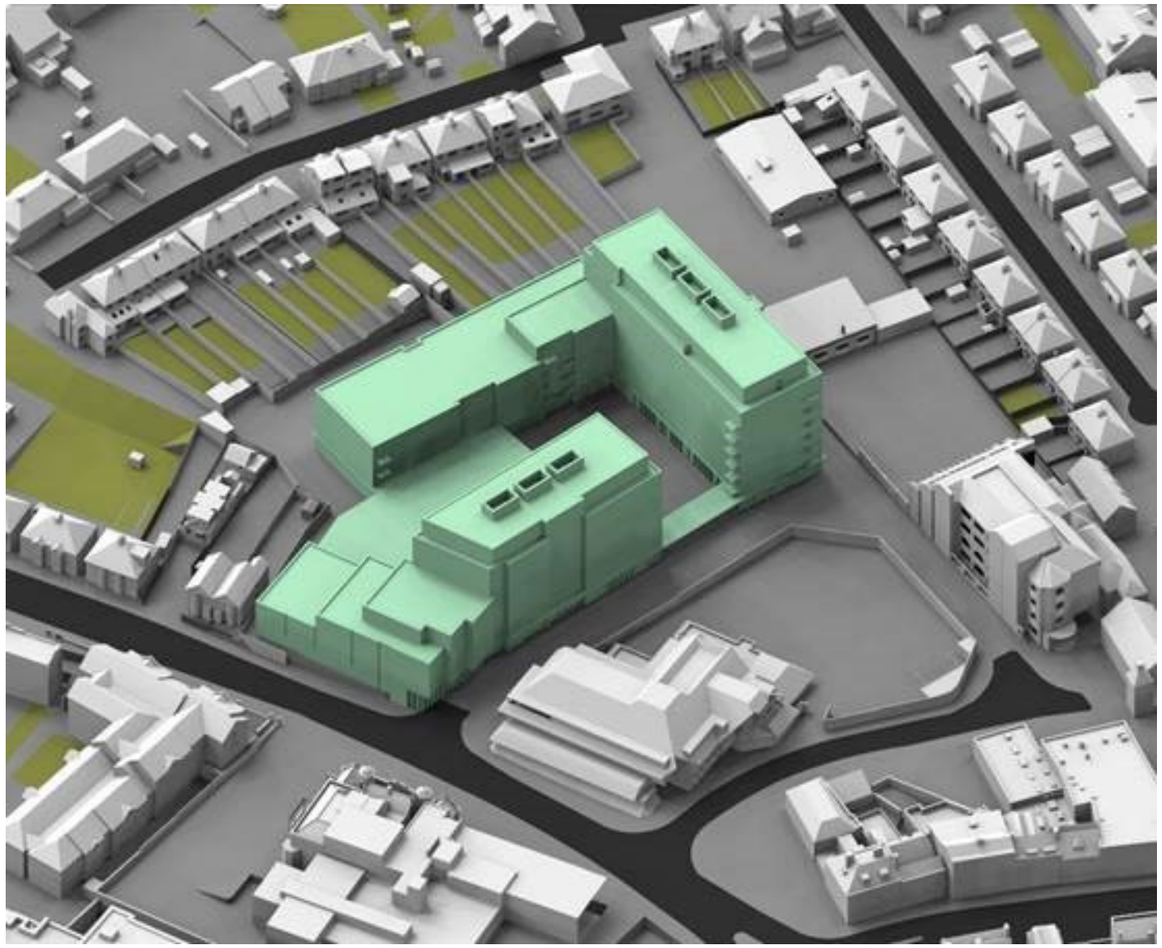
Internal Daylight/Sunlight – Proposed Accommodation & Amenity Space

AY's internal daylight and sunlight analysis has tested all of the habitable rooms within the scheme. The levels of daylight amenity within proposed accommodation will be very good, with virtually all rooms meeting the minimum daylight standards; while a small minority of rooms fall below the sunlight recommendations, which is not unusual. This indicates that the Proposed Development should provide more than reasonable daylight and sunlight amenity for future occupants.

The overshadowing analysis of the two proposed amenity spaces within the Site also indicates that the BRE guidelines will effectively be satisfied: the public plaza comfortably exceeds the guidance levels, while the communal garden is an imperceptible fraction below. New local residents will therefore have access to amenity spaces that receive a good quantum of direct sunlight.

Summary

It is AY's professional opinion that the Proposed Development is acceptable in terms of daylight, sunlight, and overshadowing, despite a small number of isolated transgressions, which are not uncommon when increasing development levels on a site of this nature. Therefore, the Proposed Development is considered entirely consistent with BRE guidance and in line with the relevant planning policy.



13.

TRANSPORT





13.1 Vehicular Access - Site Strategy

Extract from Transport Consultant, by Pell Frischmann

Summary

The access and parking strategy has been developed in accordance with requirements set out in Table 1 of Appendix C in the Hillingdon Local Plan's Development Management Policies. This ensures that safety, pedestrian and vehicular movements, and other considerations are addressed in the proposed design and layout. This strategy has been developed with a specialist transport consultant, Pell Frischmann, who provide further detail in the Transport Assessment submitted as part of this application.

Access and egress to the site is provided via separate entrance and exit points on Harefield Road. Both points of access/egress have been designed in accordance with the guidance provided in the Department for Transport's Manual for Streets.

Within the site, the separate entrance and exit points create a one-way internal route, and an adjacent porte cochère drop off point, where residents can drop off / collect their cars. A valet service is provided to take cars to the covered residents' car park, whilst a number of (disabled access) visitor car parking spaces are available for those who need them. Staff car parking is also provided in limited number, along with a corner delivery bay for deliveries, refuse collection, or other servicing requirements if the porte cochère is in use.

The scheme also promotes sustainable travel in line with DMT5 of the Local Plan Development Management Policies and is addressed in further detail in the Travel Plan submitted as part of this application. Cycle and mobility scooter parking is proposed to alleviate the need for car ownership and being very close to the Town Centre will result in a reduction of car journeys being taken on a day to day basis.

Residential Parking Management and Operation

Residents will drive their cars into the porte cochère (or one of the temporary spaces associated with the valet if the porte cochère was in use) and give a valet the keys; the valet will then drive the car into the residents' car park via the one way road and Warwick Place. Cars will be parked in a covered storage unit on double-stackers, with the valet service allowing them to be double banked (meaning two layers of stackers against each wall).

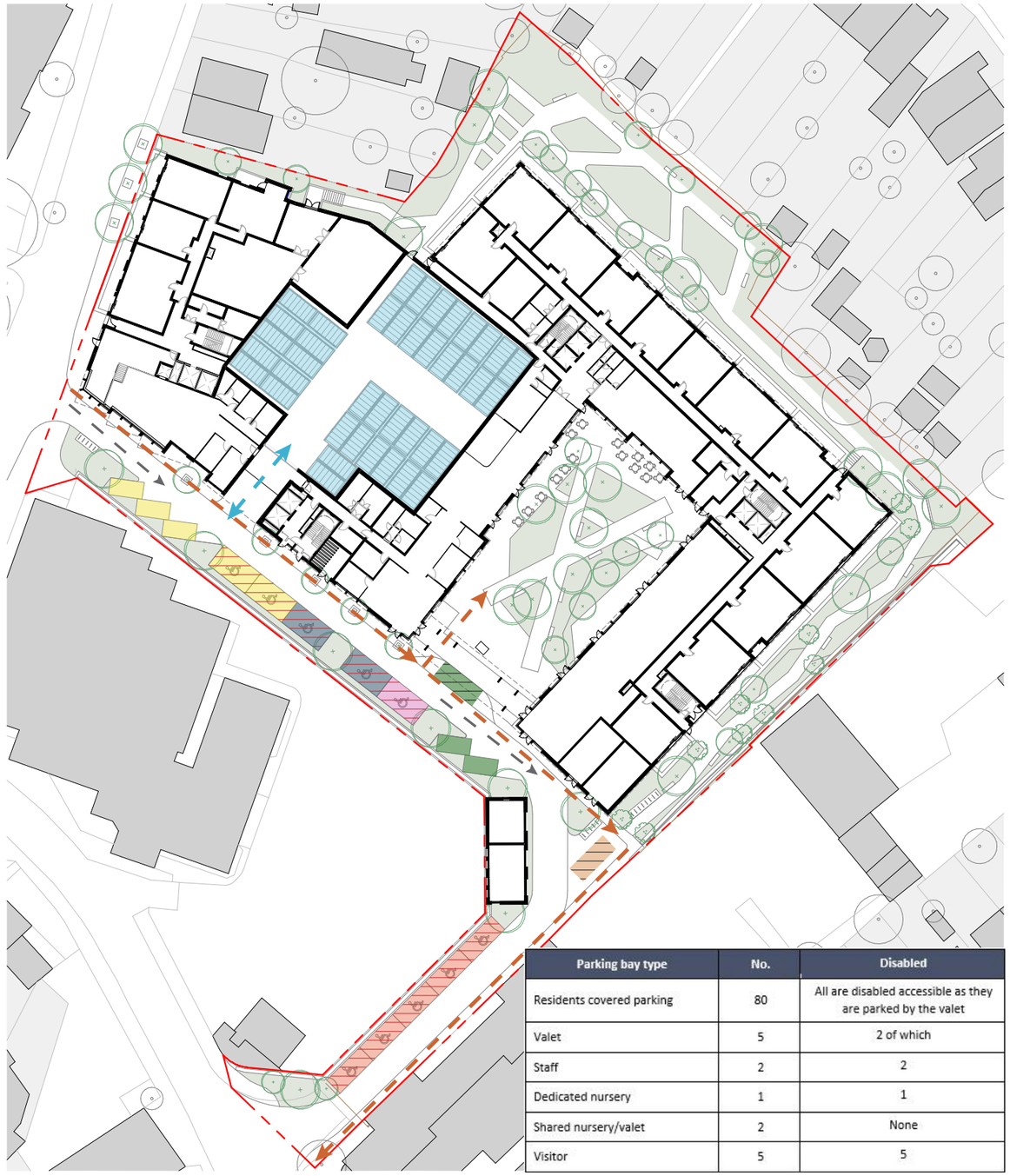
This set-up has a number of benefits: the covered storage allows cars to be kept protected from the elements whilst preventing noise pollution from the operation of the stackers; it allows all 80 spaces to be equipped with passive electric charging provision (of which 20% will be active); and the valet service in effect means that all residents' spaces are accessible for disabled people. The nature of the proposed development means a higher proportion of disabled parking spaces would be required, and this solution means that all 80 spaces are accessible for disabled residents.

As described above, the valet service requires drop off spaces to be provided to store cars for a short amount of time (approximately 5 minutes at peak time) whilst the valets are busy with other vehicles. Therefore, five (plus another two in peak times) of the parking spaces on the south-west side of the access road will be reserved for valets to store cars temporarily. This prevents the access road from being blocked by waiting vehicles.

There will also be five visitor parking spaces on the southwest side of the access road, all of which are accessible bays."

KEY

- Direction of access road
- Residents car park access and egress
- Pedestrian pathway
- Residents covered parking
- Valet parking
- Staff
- Nursery
- Shared nursery-valet spaces
- Shared ambulance-valet drop off/ pick-up
- Shared ambulance - delivery
- Visitor
- Hatch mark for accessible spaces



Parking bay type	No.	Disabled
Residents covered parking	80	All are disabled accessible as they are parked by the valet
Valet	5	2 of which
Staff	2	2
Dedicated nursery	1	1
Shared nursery/valet	2	None
Visitor	5	5

14.

SECURITY





14.1 Security Strategy

Introduction

The aim of the security strategy for the Guild Living Uxbridge extra-care development is to provide appropriate and proportionate security risk mitigation measures that allow users (including care staff, Guild Living care residents, visitors and any public users to feel and be safe/secure.

The development is not aspiring to achieve full “Secured by design certification” but will be designed to “Secured by Design principles”.

A security consultant shall be appointed at RIBA Stage 3 to further develop the security strategy for the scheme, in consultation with the local Metropolitan Police Designing Out Crime Officer (DOCO).

A formal security risk assessment (SRA) shall also be undertaken in order to determine the detailed security requirements across the development. This approach shall provide a robust, auditable methodology to identify the security risks posed to the site or assets and subsequent treatment measures.

This design and access statement has been structured around key headings taken from international best practice for the incorporation of security design into projects, such as Crime Prevention Through Environmental Design (CPTED). It outlines those elements that have been derived from the security as well as the architectural design.

An operational requirements-based approach has been adopted for the identification of the security risk treatments and this will be carried through the design as it develops.

Operational Requirements

The security design for the Guild Living Uxbridge development shall be underpinned by a bespoke security risk assessment (SRA) that includes:

- A review of local context and environment including crime statistics leading to a site-specific threat assessment and identified design basis threats

- An identification of the risks specific to the proposed development, particularly those related to the safeguarding of any vulnerable residents.

- A defined security strategy that mitigates the identified risks whilst maintaining and supporting the Guild Living brand and offering.

The security risk assessment shall identify appropriate security risk treatments, defined in terms of operational requirements. High level operational requirements are outlined below:

- Provide a zoned approach to the development; this should clearly define different security zones and forms the basis for a layered security solution based on access permissions.

- Provide surveillance; a surveillance plan should be developed including both natural and electronic surveillance measures.

- Provide controls to vehicular access and movement.

- Provide controls to pedestrian access and circulation vertically and horizontally throughout the building; this should address, but not be limited to: plot boundary, publicly accessible areas, car parks, refuse areas, amenity spaces, building access points, reception areas, residential areas, back of house areas, plant rooms and delivery areas.

- Provide physical security measures to deter and delay unauthorised access, as well as reinforce ownership and activity; this shall include, but not be limited to: site boundary treatment, access points (doors, windows, gates), physical security measures to protect attractive or expensive assets such as cycle stores, securing of personal deliveries.

- Provide communications to support security and operations of the development; this shall include, but not be limited to: provision of audio visual communications as well as panic alarms.

- Provide suitable lighting to support surveillance and reduce potential risks within secluded areas.

- Provide the ability to detect unauthorised intrusion into the building or restricted areas.

- Provide operational security management including the required infrastructure for the security systems as well as the operational policies and procedures to support their efficient operation. This shall include, but not be limited to: space required for network equipment (such as network video recorders, access control door controllers, servers), identified locations for interrogation of security systems (during and post-incident) and management of systems (issuing of access control tokens for residents, visitors, contractors), sufficient space and consideration of deliveries (operational and personal).

Secured By Design

Whilst Secured by Design is a not a specific planning condition, the principles of Secured By Design will be followed in the design development.

Access and Connectivity

A layered approach to security will be adopted for the Guild Living Uxbridge development, creating a series of security zones. This will be enforced through a mixture of electronic access control, mechanical access control (key locks), operational control or through clear delineation of areas.

The building will be fully owner operated with 24hr management onsite with concierge, with the commercial elements staying under building management.

Vehicular access throughout the site will be limited and controlled. Access to the visitor parking areas and entry porch should be controlled operationally. Vehicle access onto the site public realm area shall be restricted. The management of postal deliveries has also been considered and the intention is for all deliveries to be directed to a designated post room within reception. Therefore, no deliveries and/or mail is to be delivered directly to residents’ apartments.

14.2 Security Strategy

Structure and Spatial Arrangements

The security zoning has been applied to the current architectural designs and this will provide the basis for further design development. Where security zones abut an adjacent zone greater than one factor higher (e.g. public abuts semi-private) then this provides an additional focus for security measures.

The following have been considered in relation to the spatial arrangements:

- Public or communal spaces benefiting from natural surveillance by maintaining clear sight-lines.

- Reduction in the number of secluded spaces.

- Spaces have a clear and identifiable function/use.

- Location and access of refuse stores – accessible from public spaces.

- A secure core and horizontal compartmentalisation within the building is to be developed to control the movement of the different care residents between areas.

Surveillance

Surveillance requirements will be achieved through a balance of natural and active surveillance (video surveillance systems- VSS). The optimisation of natural surveillance - where space is naturally overlooked by users and occupiers – has the increased benefit of reducing the need for active measures whilst remaining an excellent deterrent to crime within that space. This is particularly applicable to the site public realm in the centre of the development.

Active surveillance will reinforce the natural surveillance as well as provide mitigation for those vulnerable areas identified within the SRA that are less able to benefit from natural surveillance, such as within stair cores, lift lobbies and within the car park.

As part of the surveillance design there will also be integration and coordination with lighting design in order to support both active systems and natural surveillance. Lighting design will be appropriate for CCTV specification and facial recognition.

Physical Protection

Physical protection of assets within the development will be as identified through the SRA and in accordance with Secured by Design (SBD) principles. Enhancements to public realm will integrate physical security requirements with landscape design and will include crime prevention measures such as those to reduce the likelihood of anti-social behaviour (e.g. rough sleeping).

Design of physical protection will be proportionate to the identified security risks and aligned to the principles of defence in depth.

All residential apartments shall include physical security in alignment with Part Q of building regulations.

PAS 24 doors will be specified to every residential unit front door. All ground floor doors (excluding concierge will be PAS 24 compliant). All terrace/balcony doors above 1st floor will be secure, as there is no potential to climb up cantilevered balconies and multipoint locking mechanism to front doors will be provided.

Ownership and Activity

The development has been designed such that there are clear areas of ownership and intended activity of spaces. Areas such as the site public realm, restaurant, welfare and amenity spaces and care suites provide a clear understanding of what the space is to be used for.

Adaptability

Safety and security of a development is enhanced where there is adaptability within the space to manage changes in security needs. The flexibility in access permissions afforded by the proposed electronic access control system provides opportunity to enhance or reduce security posture dependent upon any future potential needs. This particularly relevant for access to the site public realm.

Operational Management

The security design allows for the development to be operationally managed on a day to day basis. Control PCs for the security systems will exist within designated spaces such as receptions and/or comms rooms to enable occasional management requirements such as new card issue or interrogation of video surveillance systems.

The management of postal deliveries has also been considered. In order to maintain commercial security, the intent is that any deliveries will be directed to the reception desks/a designated post room.

Secured By Design

Whilst Secured by Design is a not a specific planning condition, the principles of Secured By Design will be followed in the design development.

	Public. Accessible to everyone at all times with no ability to impose control measures. Typical spaces: Public realm
	Semi-public Space that is easily accessible to the general public. Typically, restricted outside of normal hours. Typical spaces: Site public realm, welcome lobby, restaurant.
	Semi-private Amenity. Predominantly for the use of a limited, authorised population. Usually employs an electronic or procedural access control measure. Typical spaces: Amenity spaces
	Semi-private – All levels of care. Predominantly for the use of a limited, authorised population within the low level of care residential complex. Usually employs an electronic or procedural access control measure. Typical spaces: Ground floor lift lobbies and lifts.
	Semi-private Low Care. Predominantly for the use of a limited, authorised population within the low level of care residential complex. Usually employs an electronic or procedural access control measure. Typical spaces: Residential circulation, lift lobbies, lifts.
	Semi-private Medium Care. Predominantly for the use of a limited, authorised population within the medium level care residential complex. Usually employs an electronic or procedural access control measure.
	Typical spaces: Residential circulation, lift lobbies, lifts.
	Semi-private High Care. Predominantly for the use of a limited, authorised population within the high level of care residential complex. Usually employs an electronic or procedural access control measure. Typical spaces: Residential circulation, lift lobbies, lifts.
	Private. Private areas with limited access to authorised individuals and guests. Guests usually escorted. Typical spaces: Residential apartments
	Private – BOH, FM. Private areas with limited access to authorised individuals and contractors. Contractors usually escorted. Typical spaces: BOH circulation, waste rooms, staff welfare, changing room and toilets.
	Restricted. Contain critical or sensitive assets or reserved for a very exclusive user group. Visitors may be allowed but would always be escorted. Typical spaces: Deliveries, managers office, plant room.

15.

LIGHTING





15.1 Lighting Strategy Overview

Lighting design brief

To create engaging spaces, which encourage people to connect with each other and the community, while respecting the wildlife and dark periods. Reduce energy consumption by using lighting control, while ensuring to meet the needs of this particular group of society, where they also feel safe at night.

Lighting design principles

1. The landscape lighting design responds to the surrounding areas as much as fulfilling the needs of the occupants.
2. When the design responds to a particular group of society, the key is to make sure the lighting is tailored to meet their needs without excluding others.
3. Lighting has a key role in way-finding and creating visual hierarchy for better orientation.
4. Lighting compliments the space, creating beautiful surroundings and allowing for relaxing and therapeutic activities after dark.
5. Multiple layers of light and control supports a variety of exciting activities and events.
6. Prevent light pollution and considerate lighting for plants and animals.
7. A good lighting design takes into account energy efficiency and maintenance for the people who run the facilities.

Lighting design proposal

Lighting primary pedestrian and vehicular routes will follow the guidelines provided by CIBSE. Façade lighting will be incorporated to illuminate the pathways. Multi purpose lamp posts would provide functional lighting for vehicular access and parking, while uplights at trees would enhance the landscape throughout this journey.

The heart of the Guild Living development is the plaza, a destination for both residents and local community. Illuminating the entrance canopy would invite people to use and enjoy this space. A multiple layer of light, such as façade lighting and canopy lighting, will provide a functional and flexible place for both users.

The private back garden, podium garden and terraces create an engaging journey for residents around the development. The low level lighting, such as bollards, sculpture lighting, spike lights at planters and low level furniture lighting, would enhance this journey and provide functional light levels for safety measures.

Different colour temperatures are suggested to distinguish between public and private places. 2700K is warmer, for hidden, private and intimate spaces: plaza, back garden, podium garden and terraces. 3000K is slightly cooler, for brighter, functional and public spaces: canopy entrance at plaza, vehicular and pedestrian routes.

Lighting Control

Vehicular and pedestrian routes:

- Astronomical clock and light sensor to switch on the scene when it is getting dark.
- Dimming all lighting to minimum after 12am in order to minimise light spills in bedrooms.

Back garden:

- Astronomical clock and light sensor to switch on the scene when it is getting dark.
- Switching off or dimming all lighting to minimum after 12am in order to avoid light spills in bedrooms and let nature to rest during these dark periods.
- Light switches to entrance/exit doors to switch on lights after 12am if someone wants to use these spaces. This is also an indication for staff that someone is outside. All lights can be turned off again if the absence detector is not sensing anyone after 20 minutes.

Plaza:

- Astronomical clock and light sensor to switch on the first lighting scene when it is getting dark.
- Different lighting scenes can be controlled from the central management system in order to suit different activities and events happening in this area.
- Dimming all lighting to minimum after 12am in order to minimise light spills in bedrooms.

Podium garden and terraces:

- Astronomical clock and light sensor to switch on the scene when it is getting dark.
- Switching off or dimming all lighting to minimum after 12am in order to avoid light spills in bedrooms and let nature to rest during these dark periods.
- Light switches to entrance/exit doors to switch on lights after 12am if someone wants to use these spaces. This is also an indication for staff that someone is outside. All lights can be turned off again if the absence detector is not sensing anyone after 20 minutes.

KEY

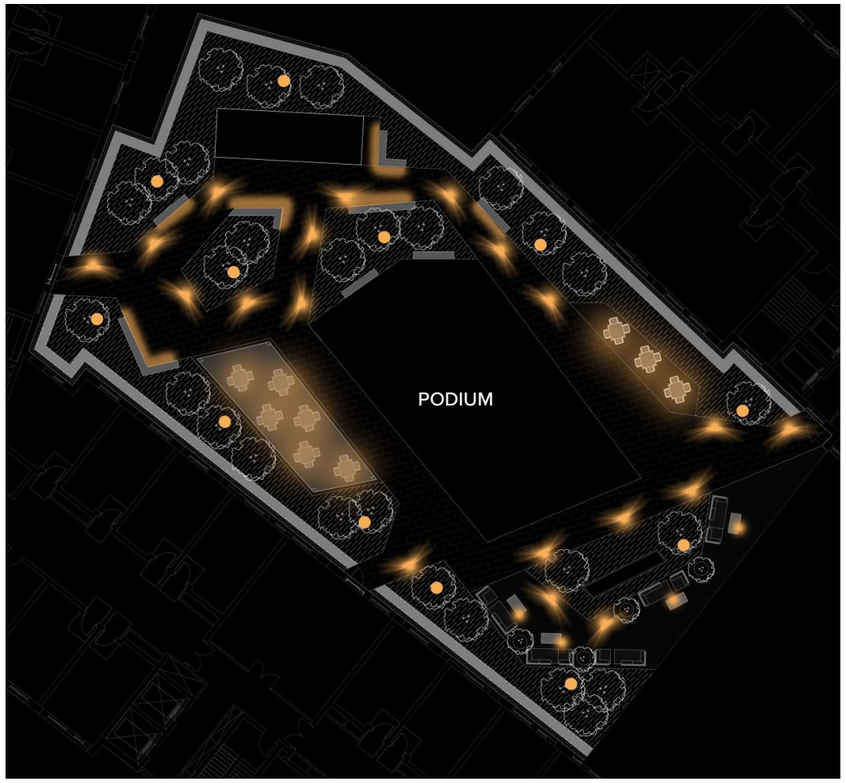
primary and secondary pedestrian route recommended illuminance level 15 lux

vehicular route recommended illuminance level 30 lux

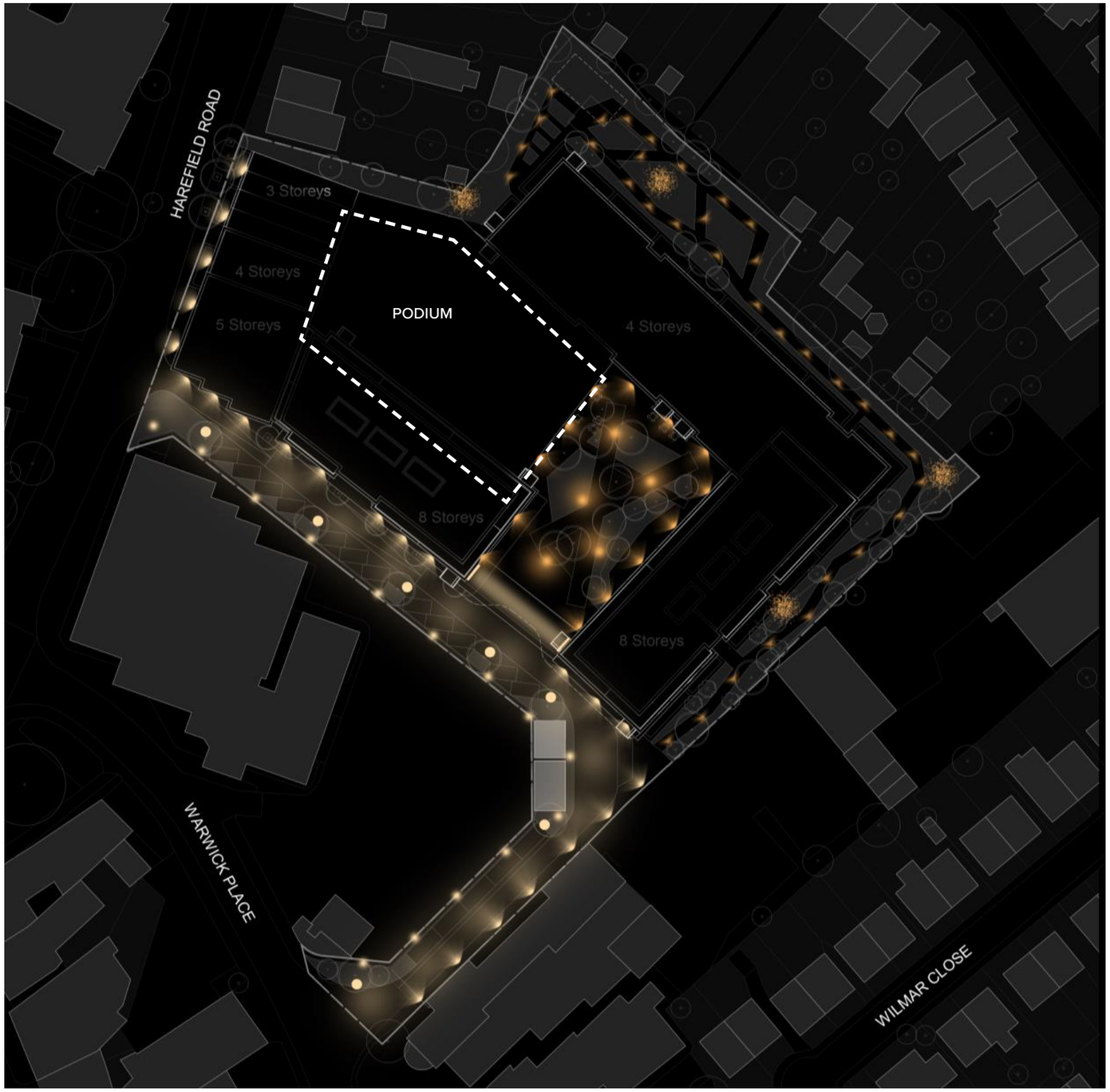
plaza recommended illuminance level 100 lux



15.2 Glow Plan



Podium Glow Plan



Ground floor Glow Plan

16.

TOWNSCAPE & HERITAGE



