6.0 Site access & servicing

6.1 Residential & commercial pedestrian access

The residential users of the building have a single double doored level access entrance towards the centre of the Yeading Lane frontage for all residents and residential visitors.

The former entrance to the north end of the building will be re-purposed as a fire escape only.

A door at the rear of the entrance space corridor provides access to the yard, residential refuse store, and also the residential cycle parking which is enclosed for security. Furthermore the same rear door allows access to the two blue badge car parking spaces which are recessed within the building footprint. New lighting will provide illumination of the parking bays and passage to the rear core entrance.

New aluminium framed shop fronts will provide level access to the commercial space by means of glazed door sets.

Most of the existing rear doors to access the BOH areas of the commercial units will remain in place and refurbished or made good as necessary

Key

- Residential entrance
- Commercial entrance
- Vehicular entrance
- Residential fire escape route

Ground floor plan

6.2 Vehicular access & deliveries

In general terms the primary vehicle access to the site remains the same from Willow Tree Lane. Whilst this is undoubtedly useful, it is not the most convenient access, being over 100m from the Willow Tree Lane to the rear of the applicant property along a poorly managed service yard.

Therefore, we see a positive benefit of re-establishing vehicular access from Yeading Lane via the passage which is currently closed off between #266 & #262-264.

This new access will be used by the blue badge parking holders,smaller delivery vehicles for #266-278, residential and commercial user cyclists.
In addition, this access could be utilised by emergency vehicles although this is not absolutely necessary. Similarly, refuse vehicles could adopt this as a point of egress to create a nose in nose out loop from Willow Tree Lane onto Yeading Lane.

Loading & deliveries

Small scale deliveries will now be from Yeading Lane to service the commercial units or for residential deliveries of larger items i.e. White goods/ furniture etc. Because there is no parking restrictions on the Yeading Lane feeder road we expect online retailer deliveries etc will stop outside the residential entrance or as nearby as they practically can.

Key

- Residential entrance
- Commercial entrance
- Vehicular direction of travel
- Residential fire escape route

Ground floor plan

YEADING LANE

6.3 Car & cycle parking

Car Parking

We are proposing two blue badge car parking spaces for disabled used which meets the 10% required by the London Plan. Both of these spaces will be equipped with EV charging points.

Yeading Lane and the surrounding streets have adequate additional parking capacity for residential, visitor, and commercial parking. Please see the accompanying Transport Statement for further information. At present Yeading Lane has single yellow line parking restriction on the street side adjacent to the buildings. This restriction is largely ignored as vehicles are parked anywhere on the road, verge, or pavement.

Cycle parking

The main area for residential cycle parking is to the stands to accommodate residential visitors and commercial employees. We are also proposing to add 3 Sheffield stands on Yeading Lane for the use of the general public.

Key

1. Residential cycle parking
2. Commercial employee & residential visitor cycle parking
3. Public cycle parking
4. Blue badge car parking

EV charging points

No parking restrictions

Ground floor plan

YEADING LANE

6.4 Refuse strategy

There are two types of refuse to be collected from the property, residential and commercial.

Residential

The residential refuse hold is located to the rear of the residential core and is accessed directly from the yard. At collection times the bins will be moved to a holding area where the refuse lorry can pull up and empty the bins. The bins will be returned to the hold by the building management.

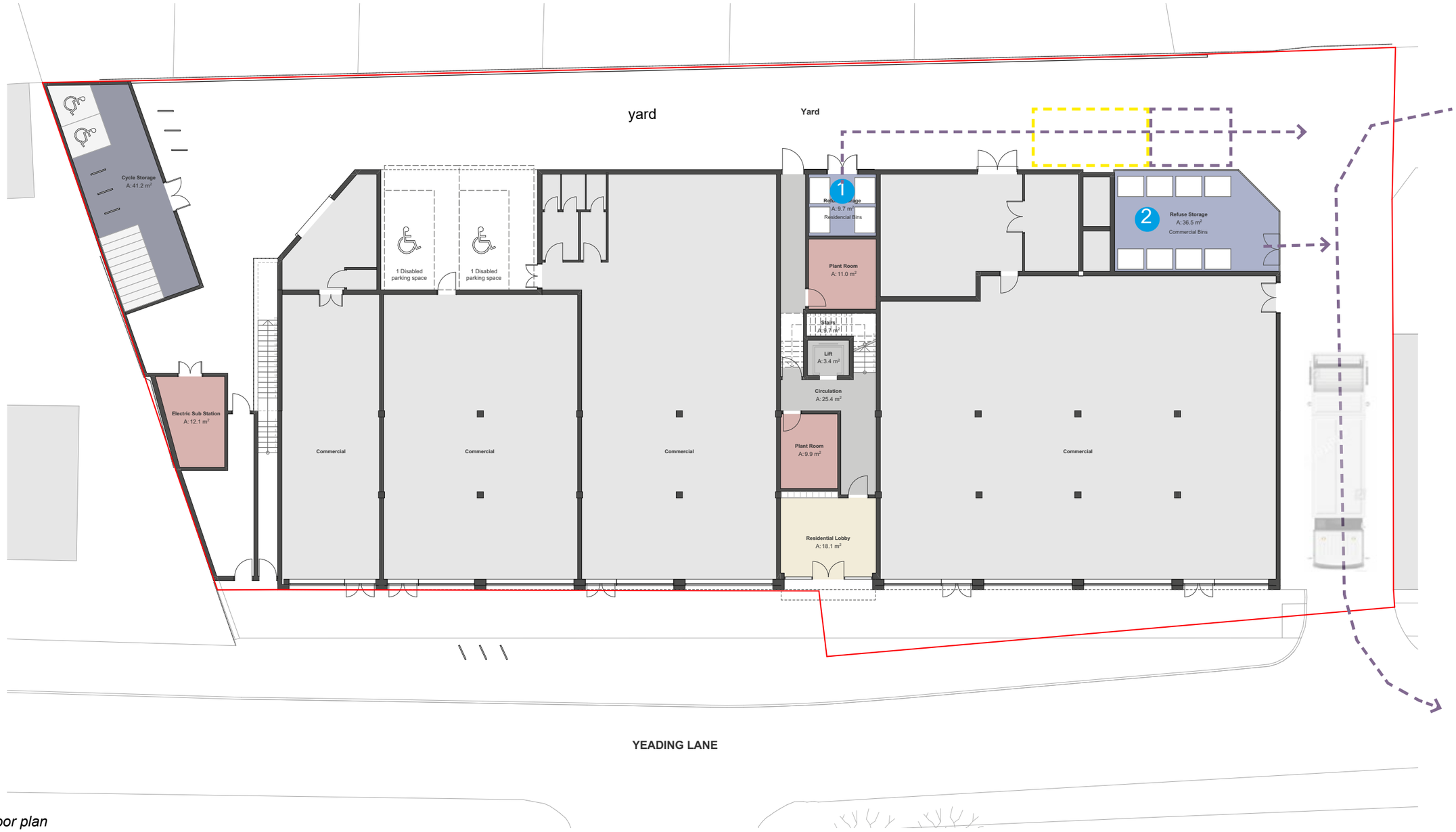
Commercial

At present there are various wheelie bins scattered around the rear and sides of the property. We are proposing to collect these together in a fenced coral to tidy the area and make management of refuse more straightforward. The collection point location is similar to the residential refuse and should be convenient for refuse vehicles to access.

Key

1. Residential refuse hold
2. Commercial refuse hold

Holding area for residential bin collection



Ground floor plan

6.5 Secured by Design

Secured by Design:

As this application is to provide 14 new residential units the design team will contact the local DOCO to review the scheme during the detailed design of the project. This will most likely be in response to discharging a planning condition relative to Secured by Design

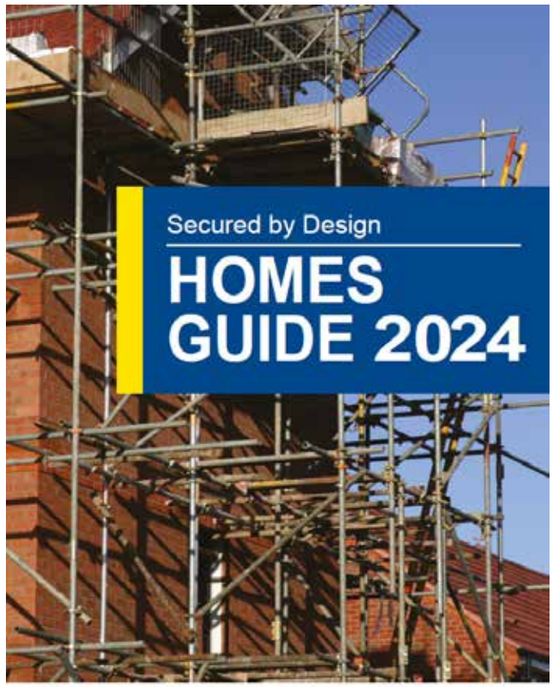
Does to the commercial and residential nature of the project we will follow the guidance set out in:

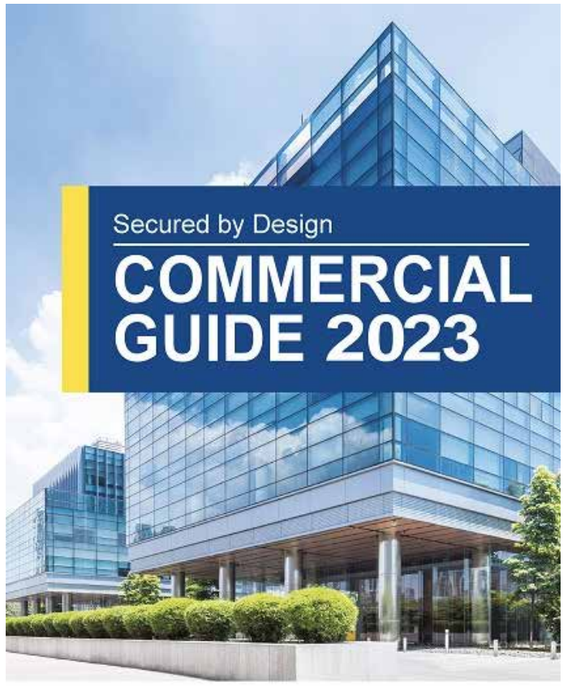
Secured by Design Homes Guide 2024
Secured by Design Commercial Guide 2023

In general terms, we are intending to achieve the physical security requirements of Secured by Design by incorporating the use of tested and accredited products.

The design of the building will follow the following SBD general guidance for Homes 2024.

- The main entrance door leading to the residential core will form a secure line, and meet the minimum of PAS24:2022 or alternative SBD Standard.
- A secondary secure door is provided to form an air lock lobby.
- Communal doors will be self closing and self locking where applicable.
- The first door will have fob control with audio/ visual and a minimum of audio at the internal dwelling entrance door.
- The first door will have fob control with audio/ visual and a minimum of audio at the internal dwelling entrance door.
- Individual flat entrance doors will meet PAS24:2022 or alternative SBD Standard.
- All other external doors will meet PAS24:2022 or alternative SBD Standard. This includes the refuse and cycle stores.
- Accessible windows, patio doors, including climbable balconies or rooflights will meet PAS24:2022 or alternative SBD Standard especially where the existing rear fire escape meets the first floor.
- Mail delivery will occur in the secure entrance lobby with suitably robust boxes accredited to TS009.
- Audio/visual access systems will be operated from inside the dwelling only.
- Refuse hold access will meet PAS24:2022 and will provide fob in/fob out access control back to the core of the building.





7.0 Environmental strategy

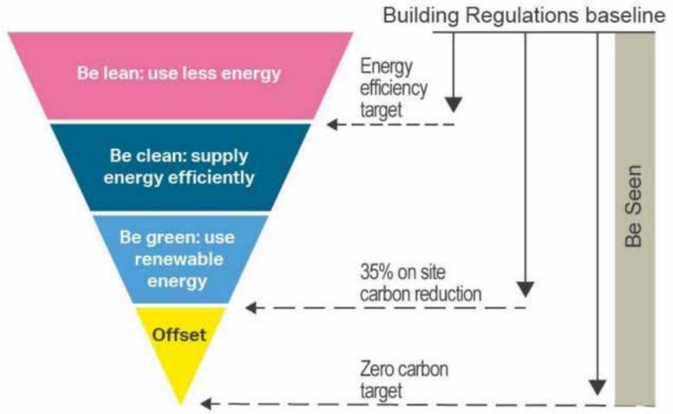
7.1 Energy

This development has been designed to satisfy the Current London Plan policy and to achieve a minimum 35% reduction in CO2 emissions compared with Part L 2021 Building Regulations, and also to satisfy zero carbon policy by providing a carbon offset payment for the remaining regulated carbon dioxide emissions, to 100%.

Energy Strategy Hierarchy

Our design approach follows the London Plan energy hierarchy, as below:

Figure 1: *The London Plan energy hierarchy*



Fabric First Approach

As per London Plan policy the scheme has been designed to meet the requirement for an enhanced fabric performance and achieve a minimum 10%/15% reduction in regulated CO2 onsite through energy efficient design measures.

The building specification has been defined including high performing fabric U values, good thermal bridging details and improved building air permeability to achieve the required 10% target for the residential units and 15% for the non-domestic units, as per the London Plan requirements.

Efficient Heating Strategy

The developments sustainable design standards are integral to the proposal, these include supplying heating and domestic hot water via communal Air Source Heat Pumps to the residential properties.
This provides all the dwellings within the application a central, energy efficient form of heat delivery. The London Heat Map has been checked and there are not opportunities for connections to any existing or planned heat networks, however the communal nature of the heating enables the possibility to design in future connections if required.

Individual VRF ASHP systems will be proposed for the commercial shell & core units, however provision for future connection to a potential side wide network can be allowed for.

Renewables

In addition to the above and to align with the requirements of the London Plan the scheme will maximise the use of photovoltaic panels (PVs) on the available roof space, after accounting for space required for other plant.

A summary of the proposed specifications can be found below:

Element	Value (Resi/Com)
External Walls (U-value)	0.16 W/m²K
Roof (U-value)	0.10 W/m²K
Floors (U-value)	0.10 W/m²K
Windows (Including Frame) (U-value)	1.2 W/m²K
Glazing total solar transmission (G-value)	45%
Air tightness	3.0/ 5.0 m³/h.m² @ 50Pa

Services	Proposal (Resi/Com)
Space Heating	Communal ASHPs / Individual VRF Split ASHP
Hot Water	Plate Heat Exchangers / Instantaneous Electric Hot Water
Space Cooling	None / Individual VRF Split ASHP
Ventilation	Efficient MVHR System / Efficient MVHR System
Renewables	PV will be maximised as per the available roof space

The above specification is designed to provide the required minimum 35% over Part L 2021.

Overheating Analysis

An overheating analysis will be carried out on IES 3d thermal modelling, in order to ensure that there are no significant overheating risks and that the development complies with CIBSE TM59: 2017 “Design Methodology for the Assessment of Overheating risk in Homes” which is directly associated with CIBSE TM52: 2013 ‘’The limits of thermal comfort: avoiding overheating in European buildings’’.

This analysis will also take into account Part O of the building regulations. This will include any potential limitations to window openings due to noise, air quality and safety concerns.

In line with the cooling hierarchy natural means of ventilation will be practised where possible with active cooling only used as a last resort. A sample of dwellings will be modelled with the following considerations:

- With large glazing areas
- On the topmost floor
- Having less shading
- Having large, sun-facing windows
- Having a single aspect, or
- Having limited opening windows

At least one corridor will be included in the assessment if the corridors contain community heating distribution pipework.

Be Seen

As part of the “Be Seen” process, a Whole Life-cycle Carbon (WLC) analysis will be carried out. The main goals of WLC analysis are:

- Calculate the whole life carbon emissions including operational carbon emissions
- Identify the construction materials with higher embodied carbon and try to minimise their impact on the overall carbon footprint
- Inform and engage the design team to allow for decision-making throughout the design and construction process to optimise the design and reduce carbon emissions.

7.2 Sustainability

Our objective with this project is to create a low carbon design which is minimises its carbon footprint throughout the life cycle of the project.

Passive and renewable design features will be incorporated to create a low carbon design which promotes and improves biodiversity relative to the current situation.

Sustainable features proposed for this project can be summarised as follows:

- Retention of approximately 70% of the existing building fabric & structure.
- Introduction of PV panels on the residential portion of the building to provide a source of renewable energy.
- Utilising the flat roofs to provide extensive green roofs and contributing to the biodiversity net gain.
- Composite timber decking used on terraces and balconies. This is a fully recycled and recyclable material which is self healing and fire resistant.
- Resin bonded rubber playground is porous and manufactured from recycled vehicle tyres
- Secure cycle storage for all residents, commercial users and visitors to promote a sustainable form of transport.
- Use of air source heat pumps to reduce energy use in terms of heating and cooling
- Relay the surface of the yard with coloured porous tarmac to reduce the surge on the drainage system

In addition to the above the scheme will incorporate:

- High performance glazing
- Energy efficient lighting and controls within dwellings and communal areas
- Low flush capacity WC's and water efficient taps
- Sustainable drainage systems incorporating permeable paving and blue roofs.
- Additional ventilation and cooling capacity provided by an MHVR units within dwellings to prevent overheating.

Roof mounted PV panels

Resin bonded rubber playground

Extensive green roofs

Sustainable composite decking

Secure cycle storage

Porous coloured asphalt

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