

Upper Brook Street Masterplan Williams / Alliance UBS Limited Crime Impact Statement



CRIME IMPACT STATEMENT

Upper Brook Street, Manchester

Student Accommodation & Life Sciences Building
(Office/Labs)

FOR: HawkinsBrown

VERSION DRAFT: 21st June 2023

REFERENCE: 2023/0120/CIS/02

Greater Manchester Police

designforsecurity

Upper Brook Street

2023/0120/CIS/02

EXECUTIVE SUMMARY

Recommendations made

This development has been assessed against the principles of 'Crime Prevention Through Environmental Design' (CPTED - <http://designforsecurity.org/about/crime-prevention-through-environmental-design/>), in order to reduce the opportunities for crime and the fear of crime. The proposed uses are appropriate for this area and have the potential to benefit the wider area, replacing the existing vacant buildings and introducing active frontages to Kincardine Road making it a more pleasant and safer route for pedestrians, particularly at night.

The following areas have been identified a potential concern, or where security can be enhanced, and these should be addressed (see section 3.3 for more details).

- Vehicular access to the public realm and pedestrian routes should be restricted with the use of bollards, planters, mature trees, or other vehicular mitigation.
- The design of the landscaping should be planned to ensure clear visibility and be illuminated to a high standard to promote legitimate usage and deter criminality/antisocial behaviour.
- Access control and physical security of the buildings should be carefully considered. A comprehensive CCTV system should be provided.

In addition to these, there are a number of recommendations made in section 3.3 of this report which would enhance the security of the development, and it is highly recommended that these are considered. It is also recommended that the development is built to Secured by Design standards.

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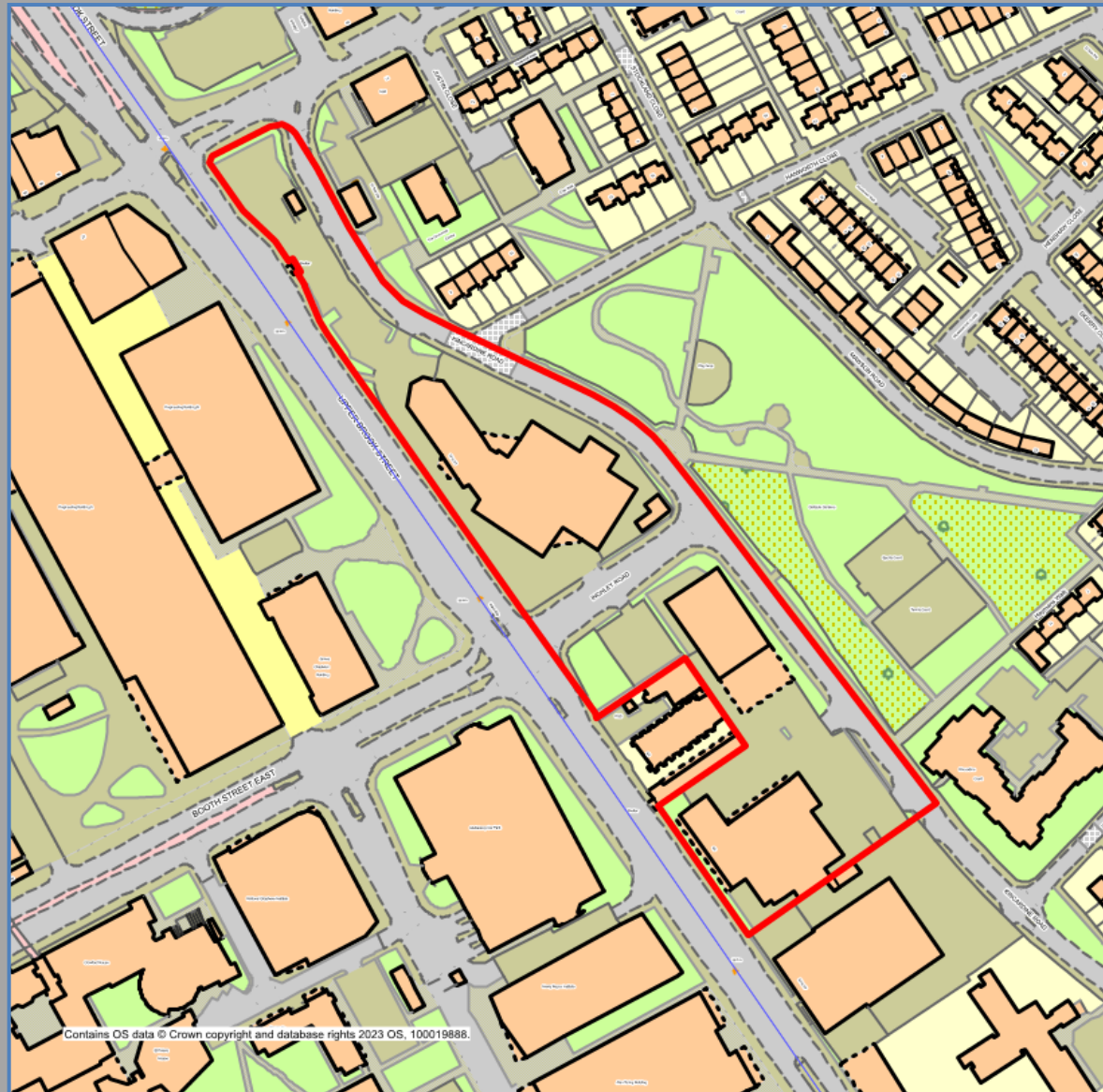
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1 Visual Audit

The proposed development site can be seen on the adjacent map, edged in red. The site is located in the city centre of Manchester, close to the universities and the MRI.

The site is loosely rectangular, and the site boundaries are largely defined by Grosvenor Street to the North, Kincardine Road to the East, to the South by SIP Upper Brook Street car park (closed), and to the West by Upper Brook Street. The existing building Hello Student Accommodation The Chapel bounds the site on three sides and this building is outside of the scope of the development. Inchley Road which connects Upper Brook Street and Kincardine Road.

The local area is a mix of uses with residential uses to the East of the site and commercial/University buildings/uses to the West.



2 Crime Statistics & Analysis

All data below is based on crimes recorded between 1st June 2022 to 31st May 2023.

Crime Summary

Figure 1: Recorded Crime within 500m of Site

Domestic Burglary	Non-Domestic Burglary	Criminal Damage	Less Serious Wounding	Theft	Robbery	Serious Wounding	Theft from Motor Vehicle	Theft of Motor Vehicle	Bicycle Theft
17	41	54	296	121	35	<5	46	17	88

- 2.1.1 The volume of crime in the local area is high, with less serious wounding, theft and criminal damage having been the most prevalent types of crime occurring. These types of crime are typical of those experienced in or within close proximity of district, town, or city centres, and because the site is close to University and Hospital campuses with a high concentration of student accommodation in the surrounding area. Students tend to be more vulnerable to crime due to a number of factors including their age, lifestyle, income, tenure, employment status, occupancy and accommodation type.
- 2.1.2 Less serious woundings have taken place throughout the local area, particularly at locations along Oxford Road to the west and in the residential neighbourhoods to the east. Assaults, public order offences and harassment have been the highest recorded less serious wounding offences occurring in the area, with domestic disputes and incidents between known associates most commonly reported.
- 2.1.3 Thefts have also taken place to the west of the site, mainly in the licenced premises, restaurants and retail premises situated along Oxford Road. Offenders have primarily used pickpocketing and distraction methods in order to obtain items stored on the person, as well as targeting insecure bags and mobile phones. There have also been cases of offenders targeting parcels left unattended in communal areas.
- 2.1.4 The majority of criminal damage offences have involved vehicles, with other instances of damage to properties and acts of vandalism by spray paint also occurring. Offenders have used objects to smash the glazing in the windows of vehicles or dwellings and have also used sharp implements in order to scratch paint work and cut tyres.

2.2 Common Use-Specific M.O.s (Modus Operandi)

- 2.2.1 Forcing open secure doors using bodily pressure and implements in order to gain access to apartments
Possible Solution - All apartment entrance doorsets should be certified to a burglary resistant standard (i.e. BS PAS 24).
- 2.2.2 Entering apartment buildings by means of insecure doors/ tailgating residents and gaining access to communal areas.
Possible Solution - There should be access controlled secure doorsets restricting access to the circulation core of the building to reduce the possibility of would-be offenders from tailgating residents and visitors into the building.
- 2.2.3 Posing as a legitimate customer and gaining access to staff only areas by means of tailgating staff and exploitation of insecure doors.
Possible Solution – Any staff-only areas should operate on an access control system with access restricted to authorised personnel.
- 2.2.4 Exploitation of insecure windows and doors to gain access into communal areas and apartments
Possible Solution – All ground floor communal doors should be fitted with door closers and lock automatically, to prevent these doors from being left open and insecure. Any publicly accessible apartment entrance doors should be fitted with a split-spindle, or fixed external handle, to prevent them from being opened from the outside when unlocked. Any accessible windows should be restricted in opening to prevent them from being fully opened if left insecure.
- 2.2.5 Entering premises as legitimate customer and tailgating staff/ exploiting insecure doors to access staff only areas.

Possible Solution – Personnel gates or turnstiles should restrict access from the office foyer into the circulation core of the building. Any external doors should operate on an access control system.

2.2.6 Forcing open shutters using implements and bodily force to gain access.

Possible Solution – Any shutters should be certified to a recognised security standard (i.e. LPS 1175 SR2). Shutters certified to a burglary resistant standard are able to withstand prolonged, opportunist, attacks by criminals.

2.3 Risk Factors - Residential

The typical security risks for a development of this nature are:

- Domestic burglary
- Theft from gardens, sheds or garages
- Criminal damage to dwellings and vehicles
- Theft of, or from, vehicles
- Bogus callers and distraction burglary
- Anti-social behaviour
- Neighbour disputes
- Theft and criminal damage during the construction period
- Unauthorised access to private spaces
- Poor maintenance of access control systems
- Risk factor

2.4 Risk Factors - Offices

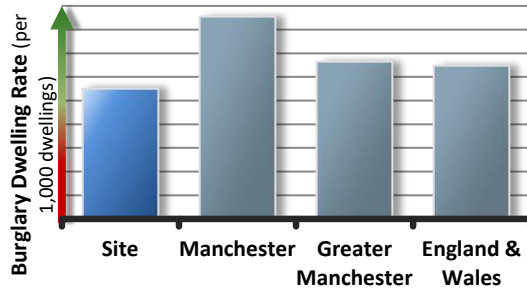
The typical security risks for a development of this nature are:

- Burglary
- Violence towards staff
- Theft of personal belongings at work
- Criminal damage to property and vehicles
- Unauthorised access to buildings / private space
- Arson
- Cycle theft

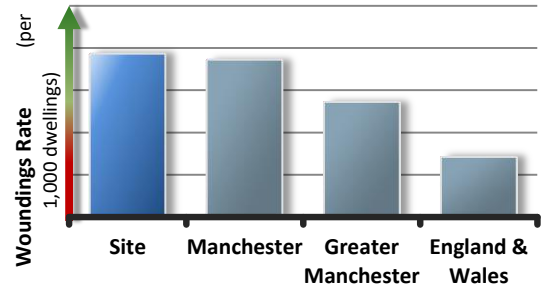
2.5 Crime Rate Comparison

The rates below relate to crime committed within 500m of the site. England & Wales data was last recorded for January – December 2017.

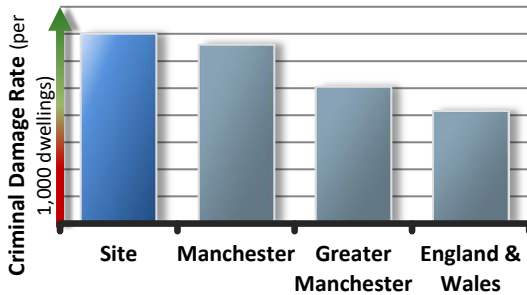
Comparison of Burglary Dwelling Rates at Site (Km), Manchester, and Greater Manchester



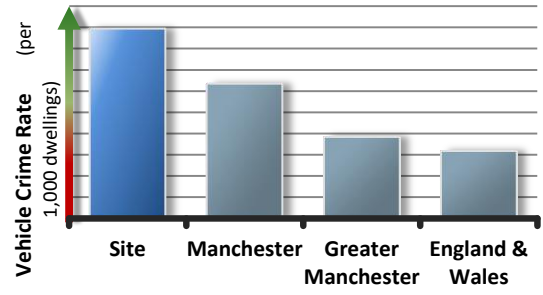
Comparison of Wounding Rates at Site (Km), Manchester, and Greater Manchester



Comparison of Criminal Damage Rates at Site (Km), Manchester, and Greater Manchester



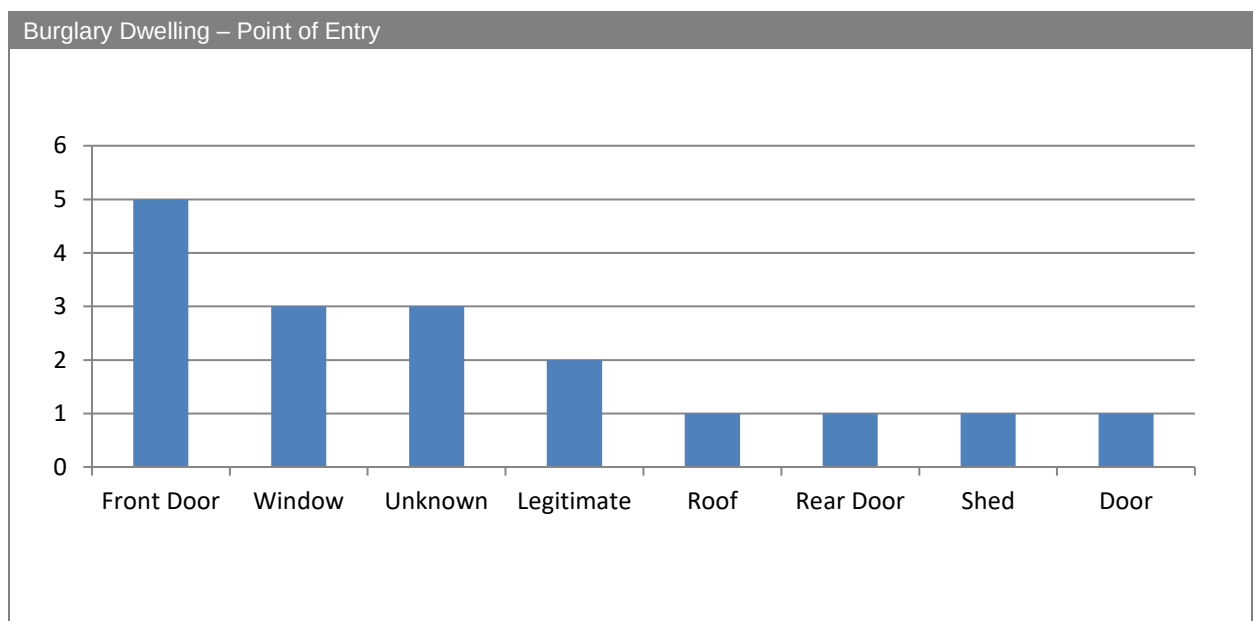
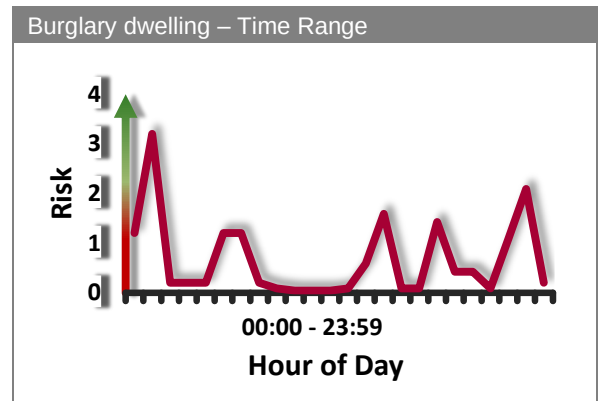
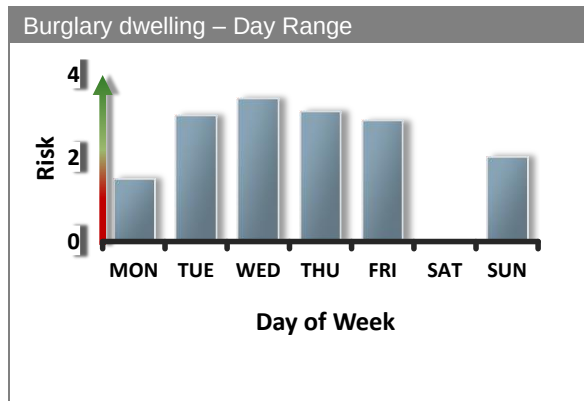
Comparison of Vehicle Crime Rates at Site (Km), Manchester, and Greater Manchester



- 2.5.1 The rate of domestic burglaries per 1000 dwellings is **35% lower** than Manchester as a whole, **17% lower** than Greater Manchester and **15% lower** than England & Wales.
- 2.5.2 The rate of woundings per 1000 dwellings is **4% higher** than Manchester as a whole, **42% higher** than Greater Manchester and **171% higher** than England & Wales.
- 2.5.3 The rate of incidents of criminal damage per 1000 dwellings is **6% higher** than Manchester as a whole, **39% higher** than Greater Manchester and **69% higher** than England & Wales.
- 2.5.4 The rate of incidents of vehicle crime per 1000 dwellings is **41% higher** than Manchester as a whole, **132% higher** than Greater Manchester and **182% higher** than England & Wales.

2.6 Domestic Burglary: Risk Analysis

The data below relates to domestic burglaries committed within 500m of the site.



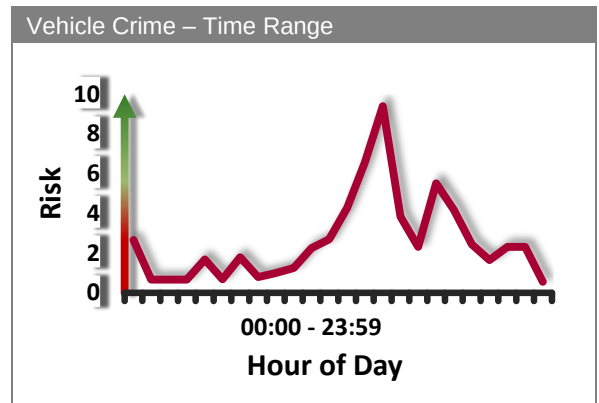
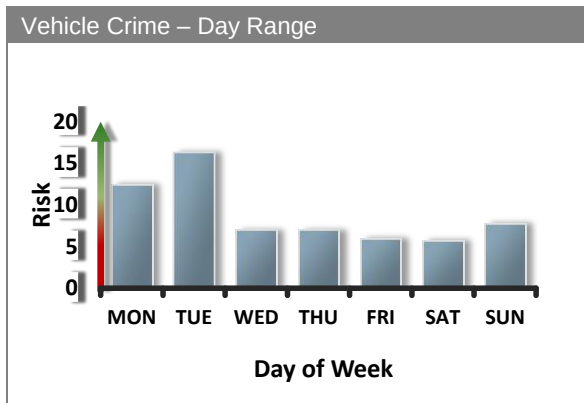
2.6.1 **Day/Time Range:** The risk of domestic burglary peaks on a Wednesday in the early hours of the morning (01:00-03:00). Offenders are likely to target properties this time when it is dark and there is less footfall in the area, giving offenders the perception that they are less likely to be caught or identified.

2.6.2 **Point of Entry:** In the local area the following entry points and MO's have been utilised most frequently:

- Forcing open secure windows and doors using bodily pressure and implements in order to gain access.
- Smashed glazing in windows and doors.
- In cases where the entry point has been recorded as "unknown" it is likely that offenders have exploited insecure windows/doors.
- Posing as a legitimate resident and gaining entry the apartment building, accessing post rooms and communal areas

2.7 Vehicle Crime: Risk Analysis

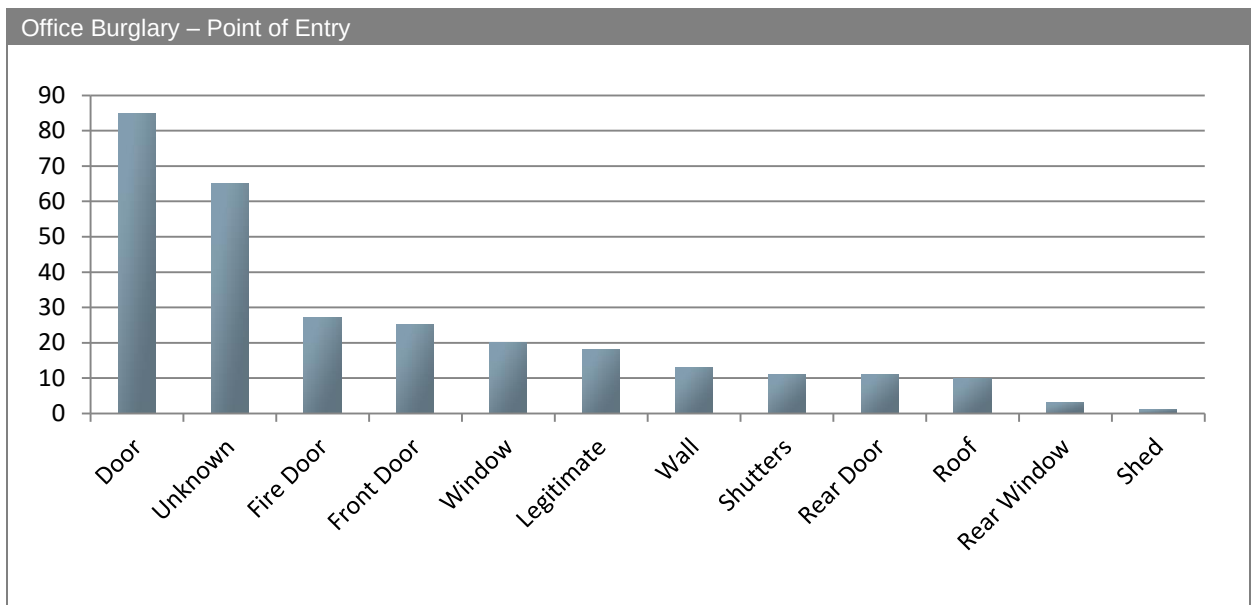
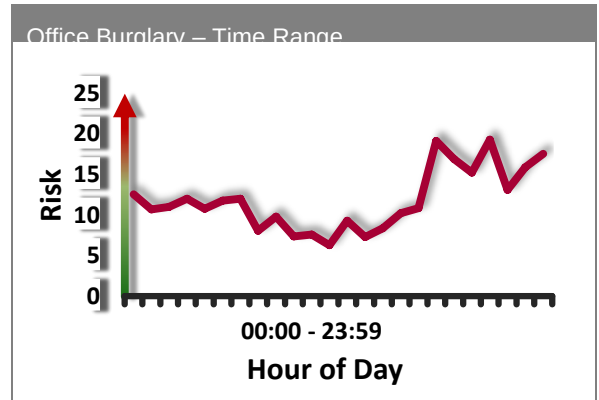
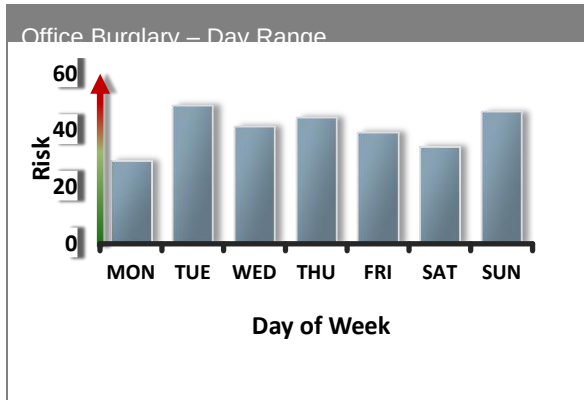
The data below relates to vehicle crime committed within 500m of the site.



- 2.7.1 **Day/Time Range:** The risk of vehicle crime peaks on a Tuesday in the afternoon (13:00-15:00). Offenders often target vehicles at this time during the working week when vehicles tend to be left unattended and out of sight of the owner for long periods of time.

2.8 Burglary Risk Analysis – Offices

The data below relates to non-domestic burglary offences within / against offices, recorded in the Manchester area during 2018 - 2019.



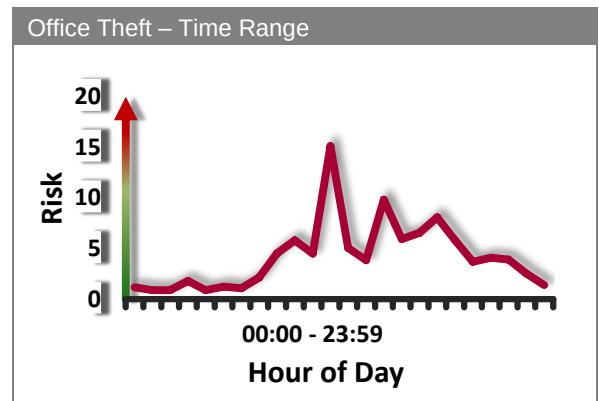
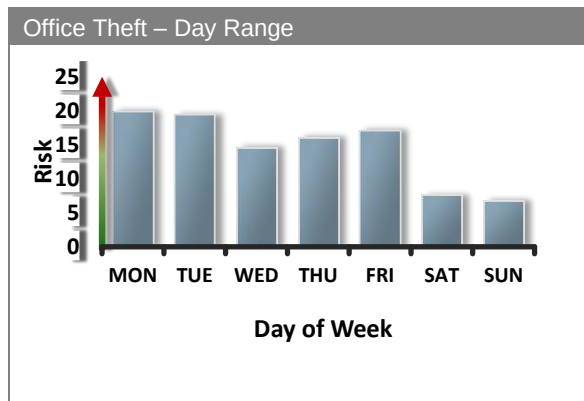
2.8.10 **Day / Time Range:** During the week, the risk of burglary at office premises in Manchester peaks on Tuesday and Sunday. During the day, the risk of burglary rises at night / into the early hours of the morning. Such premises are often targeted at these times when they are closed and unoccupied, meaning offenders can attempt to gain unauthorised access without fear of being disturbed or identified.

2.8.11 **Point of Entry:** In the local area, the following entry points have been utilised most frequently:

- Secure doors have been forced open using body pressure, implements and tools. Many burglaries committed in Manchester office buildings do not appear to be opportunistic, with offenders often bringing equipment with them that can be used to force open doors and cut locks.
- A large proportion of burglaries have been committed through 'unknown' points of entry, which are likely to have been where offenders (posing as legitimate customers, visitors, or employees) have gained unauthorised access to staff only areas (i.e. through insecure doors, tailgating etc.) to steal property.
- Glazing within windows and doors has been smashed to gain unauthorised access.
- Shutters have been prised open to target doors and windows behind them.

2.9 Theft Offices: Risk Analysis

The data below relates to thefts within / against offices, recorded in the Manchester area during 2018 - 2019.



Day / Time Range: During the week, the risk of theft at Manchester offices is greatest during the working week, when the opportunities to offend are greater, and is significantly lower at the weekend, when many offices premises are closed or operate on reduced opening hours / staffing levels. During the day, the risk of theft is concentrated during normal working hours – peaking around midday. During these times, many office workers will take their lunch breaks, leaving unattended property at desks or in insecure areas. Thefts can also often happen at the end of the working day, when members of staff are finishing work and premises is likely to be less secure, such as while cleaning operations are carried out.

3 Layout Appraisal

3.1 Proposed development

- 3.1.1 Full planning permission for the demolition of existing buildings and erection of three ground floor + 12/14/41 storey buildings to be used for Purpose Built Student Accommodation (Use Sui Generis), comprising 1,100 bedrooms in total and 506sqm of ground floor ancillary uses (café/ commercial and convenience store - Use Classes E (a)/(b)/(c)), three buildings comprising ground floor + 5/7/9 storeys for Science and Innovation uses (Use Class E (g)(i) & (ii)) and 834sq.m ground floor community uses (retail/café and medical facility (Use Classes E (a/b) and (e) and the provision of new public realm, two new public squares, new access and parking, and associated works to be on Phase Two of the Upper Brook Street Masterplan.
- 3.1.2 **Purpose Built Student Accommodation (PBSA)** - The proposed buildings will provide 1,100 student bedrooms (55% studios and 45% clusters in buildings A1 and A2 and 100% clusters in building A3 with circa 20% affordable), student amenities, commercial/ community spaces and supporting ancillary areas. The proposed PBSA scheme is arranged in three building blocks with buildings A1 and A2 linked on the ground floor to form spaces for student amenities and building A3 is separated by the proposed public square. The buildings step down in height in a north-south direction comprising ground +41/14/12.
- 3.1.3 **Life Sciences** - The proposed buildings will provide approximately 46,643sq.m of combined laboratory and office space along with a ground floor publicly accessible café and medical facility. The buildings will also house conference space alongside secure cycle store and cycle changing. The massing is split into three buildings surrounding the proposed public square and retaining Grade II* listed 'Former Unitarian Chapel' and the buildings will range from 5 to 9 storeys in height.

3.2 Positive Aspects of the Proposals

The following proposed features would make a positive contribution to the prevention of crime and fear of crime.

-
- 3.2.1 The site is made up of a number of currently vacant sites. Typically, vacant sites can generate criminal and antisocial behaviour such as flytipping, criminal damage, graffiti, loitering, trespassing, and alcohol/drug consumption. The redevelopment of the site will generate legitimate activity during the day and in the evening, which can deter criminals, or those antisocially minded, from targeting the site and operating in the area.
 - 3.2.2 The buildings have active frontages to both Upper Brook Street and Kincardine Road, allowing for natural surveillance opportunities to the benefit of the wider area. The gym at the ground floor of building A1 will provide an active frontage to Grosvenor Street.
 - 3.2.3 The footprints of the proposed buildings do not contain any areas of concern, such as deeply recessed areas or projecting features, which could conceal an offender from view or generate antisocial behaviour.
 - 3.2.4 The root terraces and amenity space of the PBSA buildings will be restricted to residents.
 - 3.2.5 The seating area and public realm between buildings A2 & A3 will be well overlooked by the ground floor commercial units and upper floor bedrooms/amenity space.
 - 3.2.6 The main entrances to the buildings are all taken from highly visible locations on Upper Brook Street, Kincardine Road, and the public realm between the buildings. This will allow high levels of passive surveillance from those passing by in vehicles and on foot, which could potentially deter offenders.
 - 3.2.7 The spaces between the buildings, offering routes from Upper Brook Street and Kincardine Road will be well overlooked. The routes are linear, allowing for good sightlines and for passive surveillance of these spaces from Upper Brook Street and Kincardine Road.
 - 3.2.8 The public realm and landscaped areas within the development can easily be seen from within the buildings and the surrounding areas, allowing for high levels of natural surveillance. The highly visibility of these spaces can deter offenders, or those antisocially minded, from targeting these spaces if they believe they could easily be seen.
 - 3.2.9 The mix of uses will generate activity in the area, both during the day and at night, which can deter criminals from operating in the area.
 - 3.2.10 There will be a large bicycle store within both PBSA buildings – within the basement of A1/A2 and on the ground floor of A3. The bicycle store for both buildings will be taken from prominent locations on Upper Brook Street, where they can easily be viewed from the public highway/footway.
 - 3.2.11 The main communal entrances into the PSBA buildings are overlooked by the reception desks, allowing staff to vet those entering the building. There is a secondary doorset between the ground floor reception/amenity space and the circulation core of the building, which can reduce the potential for tailgating.
 - 3.2.12 The post/parcel rooms of the PBSA buildings will be located in secure locations to the rear of the reception areas.
 - 3.2.13 All bedrooms are located at first floor and above, reducing the potential for noise disturbance from those passing by, particularly at night and the early hours of the morning.
 - 3.2.14 Each Life Sciences building will have a large cycle store which will be accessed from a highly visible location.
 - 3.2.15 Speed gates will restrict access from the lobby areas of the Life Sciences buildings into the circulation areas of the building, restricting access to genuine users.
 - 3.2.16 The Life Sciences buildings will front on to the newly created public square area, allowing for high levels of natural surveillance to this space.
 - 3.2.17 The area to the rear of the Hello Student Accommodation (The Chapel) and building B2 will be restricted which will reduce the potential for misuse.

3.3 Changes Needed and Recommendations

The following points have been identified for further consideration and would need to be addressed for Design for Security to support the proposed scheme.

Purpose Build Student Accommodation (PBSA)

- 3.3.1 External communal access doors must be compliant with and certified to BS PAS 24, STS202, or LPS 1175 SR2, including a lock capable of being operated via an electronic access control system. The

communal entrance doors should be self-closing and secured with a multi-point electronic lock operating with an electronic access control system, these features should be permitted under the scope of the certification.

3.3.2 All cluster and studio unit entrance doorsets must also be compliant with and certified to BS PAS 24, SPS 201 or LPS 1175 SR2.

3.3.3 All internal doors/frames to individual student bedrooms within cluster units should be of robust construction (FD30 or higher), with hinge-bolts and a lock certified to BS 8621 or PAS 8621, to allow each student to secure their own bedroom/possessions. Bedroom doors should have a door viewer and chain).

3.3.4 Unrestricted access throughout the development should not be granted to postal workers. Instead, they should be limited to accessing only the designated post boxes/post rooms. Alternatively, mail and parcels can be directly delivered to the concierge, eliminating the need for postal workers to have access beyond the lobby.

3.3.5 Access control systems should be utilised for entry into cycle stores, requiring residents to use their key card or fob for access. Access to the cycle stores should be limited to genuine users rather than granting access to all residents of the building or block. The cycle stands should be designed to enable the secure locking of both wheels and the frame, such as using Sheffield stands or similar alternatives. While two-tier systems are allowed, it is essential to ensure that both the wheels and the frame can be securely locked.



3.3.6 To discourage criminals from targeting parked bicycles, it is essential to provide illumination for bicycle stands located in the landscaped areas.

3.3.7 A robust access control system should be in place to regulate entry and movement within the building. It is important to have two access controlled doors separating the public area from the circulation core. In a development of this scale, it is highly recommended to either install an access controlled door on each floor, limiting access to residents of that specific floor, or configure the lifts to only allow residents to access the floor where their apartment is located (in conjunction with the access control system).

3.3.8 Access control measures should be implemented to limit entry into the amenity spaces solely to residents and authorised visitors. It is essential that the access control system in these areas is capable of thorough auditing, allowing access logs to be reviewed in the case of incidents or instances of damage.

3.3.9 The buildings should be covered with a comprehensive CCTV system covering the main entrances, elevations of the buildings, external doors, cycle store doors, and associated amenity space.

3.3.10 Where the building overhangs the space below there should be a high level of illumination to deter congregation.

Life Sciences/Offices

3.3.11 The reception should be staffed during standard office hours (i.e. 8am-6pm) to allow visitors to be vetted before being permitted access into the building. In cases where the main reception is unstaffed, a video/audio intercom should be installed at the main entrance, enabling staff members to verify and authorise visitors. Outside of normal working hours, the main entrance doors should be secured using an access control entry system, which allows only staff members to enter.

3.3.12 An auditable access control system should be implemented to regulate entry and movement within the office building. Entry into the circulation core of the building should only be allowed for authorised personnel and genuine visitors, using speed gates to limit access to the elevators and stairs, or employing an access control system to operate the lifts.

3.3.13 To enhance natural surveillance and minimise the risk of antisocial behaviour, crime, and fear of crime, proper lighting should be employed to illuminate both the building exteriors and any external spaces. Additionally, it is essential to illuminate the building overhangs to discourage gatherings.

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- 3.3.14 Access into the proposed bicycle store should operate on an access control system, with access restricted to genuine users. Cycle stands should be Sheffield style, or similar, allowing both wheels and the frame to be locked.
 - 3.3.15 The building should be covered by a monitored intruder alarm with response (see section 4.4 for more details). Individual offices should have the infrastructure for tenants to install an intruder alarm system.
 - 3.3.16 A comprehensive CCTV system should be installed to monitor all external doors and elevations, the reception area, circulation cores, all plant/back-of-house functions, and the cycle store. Individual offices and ground floor/basement commercial units should have the infrastructure so that any tenants can easily install a CCTV system if required.

Commercial Units

- 3.3.17 The proposed commercial units should have the infrastructure for the easily installation of an alarm, CCTV system, and access control, to allow a future tenant to install these during the fitout of these units.
- 3.3.18 The opening hours of the units should be in keeping with similar users as the local area and reflect the residential nature of the buildings on the upper floors (PBSA) and in the surrounding area.
- 3.3.19 Any external seating areas should be closed at a reasonable time (i.e. 10pm) to prevent excessive noise pollution in the area. Any external furniture should be capable of being removed and storing inside the premises to prevent loitering/congregation when the buildings are closed.

Landscaping/external spaces

- 3.3.20 There should be illumination to any areas where the building overhangs the public realm below, to deter loitering/congregation in these areas which might be protected from the elements.
- 3.3.21 The public space should be illuminated to a high standard and in accordance with BS 5489 – which should be considered as a minimum standard. A variety of lighting sources should be used to illuminate the environment rather than reliance on one type of lighting which can often lead to pooling/shadowing.
- 3.3.22 The landscaped spaces and pedestrian routes should be covered by the CCTV system, which can be monitored by staff to alert them to any misuse of these spaces so they can be managed accordingly to foster safe environment for residents and pedestrians. The lighting scheme should allow the CCTV system to operate effectively, and the landscaping of this area should not impede coverage. Any seating areas within the landscaped area must be covered by CCTV as these areas are most likely to generate antisocial behaviour (i.e. congregation, or alcohol/drug consumption).
- 3.3.23 Vegetation in the proposed public space should be well maintained in order to facilitate the sight lines through the route. Low planting should not exceed 1000mm in height, and tree canopies should fall no lower than 2400mm from the ground. This is in order to allow people to see their surroundings better, make a rational choice of routes and eliminate hiding places.
- 3.3.24 Hard landscaping in the public space should be carefully considered so that these areas do not become concealed from view.
- 3.3.25 The seating areas located in the public realm have the potential to attract antisocial behaviour during night-time. To promote natural surveillance and discourage misuse, it is crucial to ensure these areas are illuminated to a high standard. It is also essential to have CCTV coverage of these spaces to enable staff to monitor and promptly respond to any incidents.
- 3.3.26 Bollards, large planters, trees, or similar, should prevent a vehicle from being able to access the route between the buildings.

4 Physical Security (PBSA)

In addition to the layout issues highlighted in section 3, the following checklist (sections 4-7) forms the physical security requirements for this scheme to achieve Secured by Design accreditation if required.

4.1 Doors



External communal access doors must be compliant with and certified to BS PAS 24, STS201, or LPS 1175 SR2, including a lock capable of being operated via an electronic access control system. The communal entrance doors should be self-closing and secured with a multi-point electronic lock and capable of being operated via an electronic access control system, these features should be permitted

under the scope of the certification. Access into the build should be controlled by a video entry phone system (with the picture viewable on the phone unit, rather than on a television set) so that residents can vet visitors before allowing them access into the building. There should be no unrestricted trade access into the building.

- ☐ Where secure postal lobbies are to be created, the secondary communal door must be to the same specification as the outer door - certified to BS PAS 24, STS201, or LPS 1175 SR2, including a lock capable of being operated via an electronic access control system.
- ☐ All cluster and studio unit entrance doorsets must also be compliant with and certified to BS PAS 24, SPS 201 or LPS 1175 SR2.
- ☐ All internal doors/frames to individual student bedrooms within cluster units should be of robust construction (FD30 or higher), with hinge-bolts and a lock certified to BS 8621 or PAS 8621, to allow each student to secure their own bedroom/possessions. Bedroom doors should have a door viewer and chain).
- ☐ Construction of internal walls surrounding internal apartment entrance doors (600mm either side of the door set) should incorporate a resilient layer to reduce the risk of anyone breaking through the wall to access the locking mechanism. The resilient layer should be timber (minimum thickness of 9mm) or expanded metal.
- ☐ External escape-only doors (as with external doors in general) should be certified to BS PAS 24, or LPS 1175 SR2. It is crucial that the door ironmongery is permitted for use on these doors under the security certification of the product.

4.2 Windows

- ☐ Ground floor and easily accessible windows must be compliant with and certified to BS PAS 24.
- ☐ Ground floor and easily accessible opening lights (escape requirements permitting) must be key-lockable and have fixed/lockable opening restrictors (not releasable from the outside) limited to 100mm.

4.3 Glazing & Building Fabric

- ☐ Glazing to a height of 2400mm (or if otherwise accessible) must incorporate at least one pane of glass with a 1.5mm PVB interlayer (e.g. 7.5mm laminated glass), or a glass rated as P4A under EN 356. The remaining pane in a double-glazed unit may be toughened glass.
- ☐ Any curtain walling panels should include laminated glazing and should be securely fixed directly to the floor slabs where possible, rather than to perimeter columns.
- ☐ There should be a block work wall or material of similar strength (e.g. welded-steel mesh) behind or within any new cladding/insulated panels to the building, to a minimum height of 2000mm from ground level, to ensure that the fabric of the building itself is not vulnerable to attack.

4.4 Alarms

- ☐ If an alarm is installed, then it should comply with either:
 - BS EN 50131 and PD 6662 for wired systems
 - BS 6799 for wireless systems
- ☐ If an alarm is not to be provided, there should be a 13amp, non-switched fuse spur to allow future residents to connect an alarm.

4.5 Access Control

- ☐ Access control systems should be operable by swipe card or fob, and not numeric keypads. The following areas/doors should operate on access control:
 - Communal entrances
 - Communal areas
 - Bicycle stores

- Circulation cores
- Amenity space
- Staff only areas
- Parcel rooms

4.6 Bicycle Parking Areas

- ☐ Doors into the cycle parking area(s) must be certified to BS PAS 24, STS202, or LPS 1175 SR2, including a lock capable of being operated via an electronic access control system, with access restricted to registered residents (i.e. genuine bicycle owners).
- ☐ Cycle stands should either be U-profile or Sheffield style stands. If rack storage is used it should be possible for both wheels and the frame to be secured.

4.7 Landscaping

- ☐ There should be no hard landscaping that could inadvertently create seating or loitering spots (except within secure designated or otherwise-controlled areas). These features can encourage anti-social behaviour and raise the fear of crime.
- ☐ It is essential that good sightlines are maintained throughout the development to allow residents and visitors to actively survey the area for potential threats. Low level planting should not be in excess of 1000mm in height and tree crowns should fall no less than 2400mm to aid sightlines and natural surveillance.

4.8 Lighting

- ☐ External lighting must be provided to pedestrian routes within the development in accordance with BS 5489. Lighting should be taken from a variety of sources and levels (i.e. columns, up lighting) to provide a greater level of coverage and avoid shadows/pooling.
- ☐ Fittings should produce 'white' light, as opposed to yellow/orange light. Metal halide (or bulbs with a comparable output) should be used, as these offer superior colour rendition over alternatives such as high- and low-pressure sodium bulbs.
- ☐ Dusk 'til dawn lights, operated by photoelectric cell/daylight sensor, should be installed to all external doors.
- ☐ Elevations of the building should be illuminated.

4.9 CCTV

- ☐ Any CCTV system that may be used within this proposal will require certain specifications and intelligent placement of cameras to compliment the design of the development. Designers should consider the following points when planning a CCTV strategy:
- ☐ CCTV systems (and lighting that support them) require regular cleaning and maintenance to remain effective.
- ☐ Where necessary cameras that are vulnerable to damage should be protected from attack either by relocation to a higher level and using a bigger lens to achieve the view required or through the fitting of a vandal resistant housing.
- ☐ With regards to the retention of footage, the police prefer quality over quantity. The overall retention period should be dictated by what the system is designed to achieve, though it would be better to have good quality images over a 14-day period than poor ones over a 30-day period.
- ☐ Procedures for recovery of recordings are recommended to be established (e.g. trained staff / the CCTV system instruction manual to be readily available). This is to ensure that the images produced will be of an acceptable standard that will allow for identification of an individual which will stand up to scrutiny in court.

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- ☐ **Acceptable Standard** - this generally requires a resolution of 720x576 pixels at a real time frame rate of 25 frames per second. (N.B. Both the camera and DVR must be capable of this – if the camera will only send low resolution images, then it does not matter how high the resolution of the recording unit is).
 - ☐ **Identification** – One of three levels of field of view. To identify an individual, the image must capture no less than 120% of the field of view (at least from the top of the individuals head to their knees). The remaining two levels of field of view are 'Overview' and 'Recognition', which whilst effective for observational purposes, are less likely to result in the identification of a person/offender.
 - ☐ The intelligent placement of cameras helps to provide clear facial identification of individuals.
 - ☐ Any public open space or amenity areas not under the ownership of residents should be subject to an effective maintenance contract. This should ensure that all damage is rectified in a timely manner, and that any such space will not be detrimental to its surroundings.

5 Physical Security (Life Sciences)

The following checklist forms the physical security requirements for this scheme to achieve Secured by Design accreditation.

5.1 Doors

- ☐ External doorsets including the main entrance pass door, cycle access door, bin store doors and escape doors should be compliant with, and certified to, BS PAS 24 or LPS 1175 SR2. All of these doors should be self-closing and self-locking.
- ☐ The revolving entrance doors should be tested and certified to LPS 1175 SR2.
- ☐ Entrance doors to individual office suites should be compliant with and certified to BS PAS 24 or LPS 1175 SR2.

5.2 Windows & Shutters

- ☐ Where feasible, any ground level, opening windows should be certificated to LPS1175 or BS PAS 24, fitted with opening restrictors and with key operated locks.
- ☐ Curtain walling panels should include laminated glazing (see below) and should be securely fixed directly to the floor slabs where possible, rather than to perimeter columns.
- ☐ Any security shutters or grilles must be tested and certified to LPS 1175 SR2 (or SR1 if perforated laths are required).

5.3 Glazing & Building Fabric

- ☐ All accessible glazing (i.e. below a height of 2000mm from external ground level) must incorporate an internal pane of glass with a 1.5mm PVB interlayer (e.g. 7.5mm laminated glass), or a glass rated as P4A under EN 356. The remaining external pane in a double-glazed unit may be toughened glass.
- ☐ Any curtain walling panels should include laminated glazing and should be securely fixed directly to the floor slabs where possible, rather than to perimeter columns.
- ☐ Any louvres at ground floor level to plant areas/refuge stores should be robustly constructed and fixed, to ensure they cannot be easily removed or damaged. Security-certified louvred doorsets are also available if required (see <https://www.securedbydesign.com/member-companies/accredited-product-search> for SBD approved suppliers).

5.4 Bicycle Parking

- ☐ Doors into the cycle parking area(s) must be certified to BS PAS 24, STS202, or LPS 1175 SR2, including a lock capable of being operated via an electronic access control system, with access restricted to registered residents (i.e. genuine bicycle owners).
- ☐ Cycle stands should either be U-profile or Sheffield style stands. If rack storage is used it should be possible for both wheels and the frame to be secured.

5.5 Alarms

- ☐ A monitored intruder alarm system should be installed. Alarms should have contacts on all external doors or shutters, and PIR in rooms with windows. The alarm should include a signal terminating at the security control room/patrol team. The alarms should have two secure signalling paths (one being GSM radio back-up), so that if either signalling path is tampered with by an intruder, or is faulty, the other continues to monitor for any further alarms and transmits them as 'confirmed activations' – extra confirmation that an intruder is on the premises and that the alarm isn't false.
- ☐ Individual office suites/floors should also consider having an intruder alarm should the buildings be open, but some office remain closed. As a minimum individual offices or floorplates should have the infrastructure so that an alarm can be installed by future tenants.

5.6 Access control

- ☐ Access control systems should be operable by swipe card or fob, and not numeric keypads. The following doors should operate on access control:
 - The revolving entrance door and any pass doors.
 - All external doors.
 - Turnstiles/speed gates and/or lifts.
 - Staff only areas.
 - Plant areas and areas restricted to maintenance staff.
 - External cycle access doors, cycle store, and changing rooms.
- ☐ The electric locking system to be used throughout the building should ideally be fully auditable (i.e. allows the retention of data, such as who accessed where and when), to allow for a better investigation into any incidents. Staff key-fobs/cards should be capable of being quickly activated or disabled when required, to ensure they are not misused. Staff should only be allowed access to areas required for their work.
- ☐ Lockers should be provided in the changing rooms for staff to store personal items whilst changing/showering.

5.7 Lighting

- ☐ Dusk-to-dawn lighting, operated by photoelectric cell/daylight sensor, and producing 'white' light, should be installed to all external doors of each building.

5.8 CCTV

- ☐ A CCTV camera system should be installed. Cameras should be capable of monitoring all building elevations - with particular emphasis on external doors (cameras should be able to observe people coming and going), and the entrance lobbies.
- ☐ Recording equipment should be located within a secure room or images may be recorded off-site at a suitable monitoring facility.
- ☐ CCTV monitoring screens should be located at the reception desk and or security office.

6 Physical Security (Commercial Units)

6.1 Doors

- ☐ External doors must be compliant with and certified to BS PAS 24, STS202, or LPS 1175 SR2. Staff should be given flexibility over permitting access into the building at different times of the day and night. The main sliding entrance doors should be capable of being controlled by reception staff if required (e.g. at night) to prevent unauthorised access or nuisance/antisocial behaviour in/around the entrance lobby.
- ☐ Sliding/revolving doors should be tested and certified to LPS 1175 SR2.
- ☐ External escape-only doors (as with external doors in general) should be certified to BS PAS 24, or LPS 1175 SR2. It is crucial that the door ironmongery is permitted for use on these doors under the security certification of the product.
- ☐ All doors/frames to staff areas/stores/offices should be robust/solid core (minimum 44mm thick) and fitted with auditable access controls. Staff should only be allowed access to areas required for their work. Keys/passes should only be carried if required for duties and should be accounted for at all times.

6.2 Windows, Building Fabric & Shutters

- ☐ Ground floor and easily accessible windows must be compliant with and certified to BS PAS 24.
- ☐ Ground floor and easily accessible opening lights (escape requirements permitting) must be key-lockable and have fixed/lockable opening restrictors (not releasable from the outside) limited to 100mm.
- ☐ Any curtain walling panels should include laminated glazing and should be securely fixed directly to the floor slabs where possible, rather than to perimeter columns.
- ☐ Any shutters must be tested and certified to LPS 1175 SR2 and installed in accordance with manufacturer's instructions.

6.3 Glazing

- ☐ Glazing to a height of 2400mm (or if otherwise accessible) must incorporate at least one pane of glass with a 1.5mm PVB interlayer (e.g. 7.5mm laminated glass), or a glass rated as P4A under EN 356. The remaining pane in a double-glazed unit may be toughened glass.

6.4 Alarms

- ☐ The commercial units should have intruder alarms installed or the infrastructure for tenants to easily install an alarm.

6.5 Access Control

- ☐ Access control systems should be operable by swipe card or fob, and not numeric keypads. The following areas/doors should operate on access control:
 - External doors
 - Staff areas

7 Management & Maintenance

- 7.1.1 The upkeep of a development over its lifetime can be crucial to the level of security and safety within. Aspects of a development, which are left to deteriorate, have the potential to attract further crime – a process known as 'the broken window theory'. A maintenance plan should be drawn up to address issues such as:
 - Litter removal
 - Repair to communal areas (lighting, signage, access controls)
 - Trimming and pruning to shrubs and trees
- 7.1.2 Any public open space or amenity areas not under the ownership of residents should be subject to an effective maintenance contract. This should ensure that all damage is rectified in a timely manner, and that any such space will not be detrimental to its surroundings.
- 7.1.3 A comprehensive security regime for the individual commercial units must be prepared and remain in place for the day-to-day running of the site. There should be regular reviews/exercises to ensure that it remains accurate, workable, and up to date. All staff should understand and accept the need for security measures, and it should be made easy for people to raise concerns or report observations. The operating/maintenance plan should focus on issues such as:
 - Opening and closing the building, including staff arrival and departure.
 - Management of deliveries (servicing activities should not require any service doors to remain open unattended for prolonged periods).
 - Details of staff security training.
 - Location and management of any smoking areas.

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- Repairing damaged external and internal fittings, particularly security features e.g. access control systems, alarm systems, CCTV cameras, and lighting.
 - Cleaning and prompt removal of graffiti and litter; and
 - Refuse collection arrangements.
- 7.1.4 All high value equipment within publicly accessible areas (e.g. computers, televisions, tools etc.) should be property marked and securely fixed or stored to deter damage/theft. An accurate record should be maintained which logs all such items.
- 7.1.5 Refuse collection arrangements should not require bins to be left in the street for extended periods/overnight. Servicing activities should not require any service doors to remain open unattended for prolonged periods.
- 7.1.6 Adequate signage should be deployed in all areas not only to direct people throughout the building, but also to deter unauthorised access to staff-only/back-of-house areas.

8 Construction

- 8.1.1 Untidy sites and their surroundings can be littered with debris accessible to vandals who often use loose materials as missiles to commit crime. The client should take measures appropriate to secure their site during construction, and control pedestrian and vehicular access in to and out of the site curtilage. It is also recommended that the contractor on this scheme is a member of the 'Considerate Constructors Scheme', who has committed to be a considerate and good neighbour, as well as clean, respectful, safe, environmentally conscious, responsible and accountable.
- 8.1.2 Site security contractors should be SIA (Security Industry Authority) approved to ensure professional standards are adhered to (please see <http://www.sia.homeoffice.gov.uk/pages/acs-intro.aspx> for more details).

9 Useful References

9.1 Secured by Design (SBD)

- 9.1.1 Secured by Design focuses on crime prevention at the design, layout and construction stages of homes and commercial premises and promotes the use of security standards for a wide range of applications and products. To apply for Secured by Design certification for your development, visit our online application form at: <http://www.designforsecurity.org/secured-by-design/sbd-accreditation/>

A Contact register

Date	Contact With	Summary of Contact
16/03/2023	HawkinsBrown	Meeting
18/04/2023	HawkinsBrown	Meeting
05/06/2023	HawkinsBrown	CIS application received
20/06/2023	HawkinsBrown	Progress update

B CIS Version History

Version	Revisions Made	Date
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