



CRIME IMPACT STATEMENT

Land at Albion Street, Trumpet Street and Great Bridgewater Street

76 Apartments and Office (151sqm)

For: **Arrowsmith Management Ltd**

Greater Manchester Police

Version C: **30/05/22**

design**for**security

Ref: **2021/0658/CIS/01**

Land at Albion Street, Trumpet Street and Great Bridgewater Street

2021/0658/CIS/01

EXECUTIVE SUMMARY

Minor design amendments - Development Supported

This development has been assessed against the principles of 'Crime Prevention Through Environmental Design' (CPTED), in order to reduce the opportunities for crime and the fear of crime.

The layout of the proposed scheme is considered acceptable, as long as the issues discussed in more detail within Section 3.3 of this report are addressed, namely:

- Robust control of access in/and around the buildings.
- Cycle store entrance access/egress.
- Ground floor external material protection against graffiti.

If these issues can be addressed as described within the report and the other physical security measures are incorporated, I would be happy to support the development.

Please note: At the planning application stage, Greater Manchester Police Design for Security will make representations to Manchester Planning to require the inclusion of a condition requiring the completed development to achieve Secured by Design (SBD) accreditation.

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1 Visual Audit

The development site is indicated by the red outline on the plan adjacent and is supported with existing site context photographs taken around the site.

The site is located at the busy road junction of Albion St/Lower Mosley St and Breat Bridgewater St; close to the conference facilities at Manchester Central and the Bridgewater Hall and easy walking distance to the city centre.

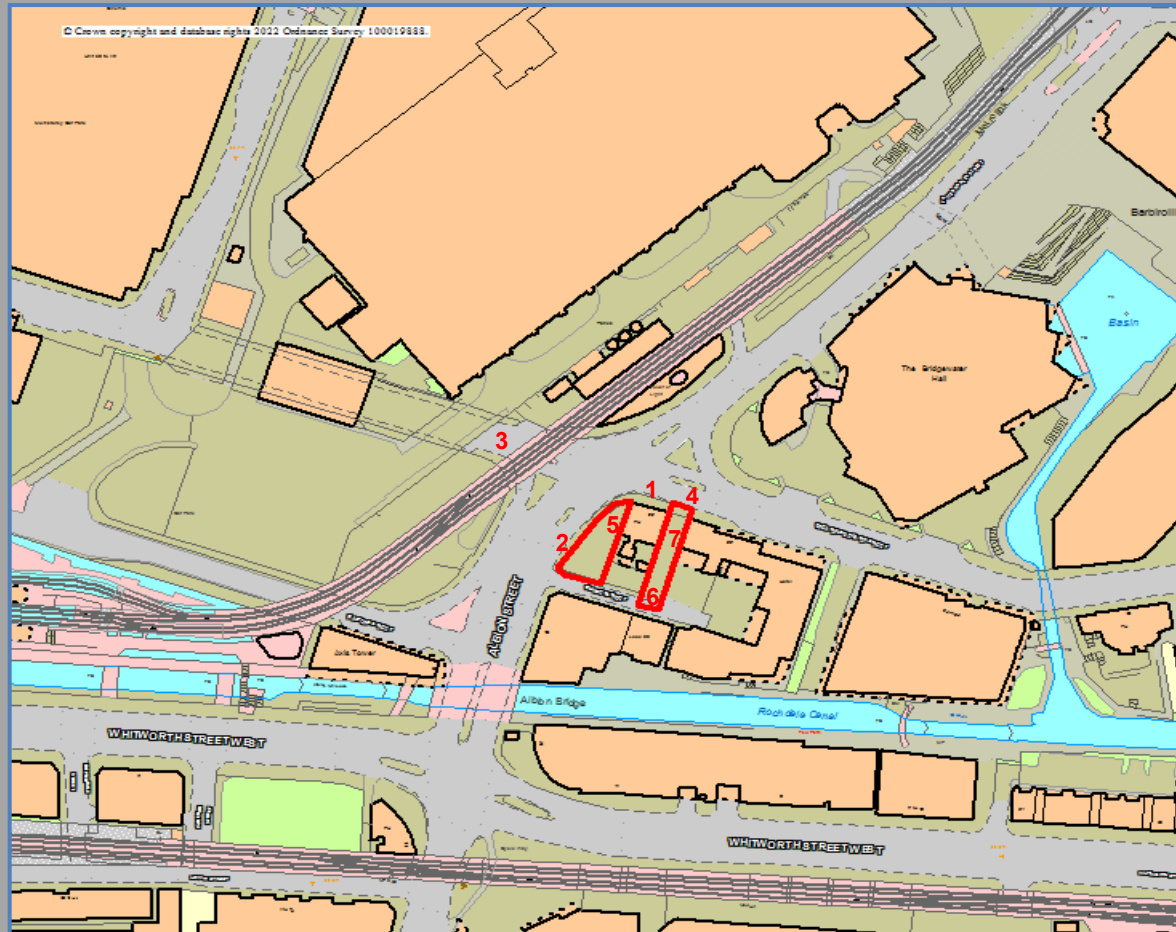
The area contains a mix of development types, comprising residential, commercial, and hotel buildings. A large construction project is taking place on the opposite site of Albion St.

The sites are both currently vacant and used for parking. A section of the boundary perimeter for Site B facing Great Bridgewater St is enclosed with a timber fence. The fencing has not been entirely successful in keeping people out as people can enter via Trumpet St. The site contains self-seeded plants and evidence of rough sleeping and drug taking.

The surrounding main streets experience high volumes of footfall across the day and into the evening with pedestrians commuting for work or entertainment via one of the numerous public transport methods, bus/tram/train.

Deansgate Locks, Bridgewater Hall and the First Street development area are popular cultural and entertainment locations attracting large crowds.

Trumpet St contains evidence of rough sleeping, drug taking, and rear doorways being used as street toilets.



7 – Evidence of rough sleeping and drug use within the site.



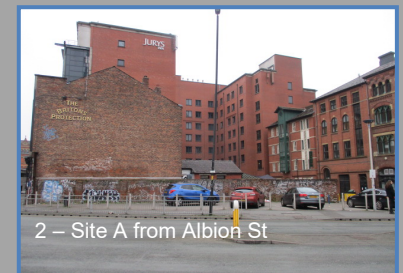
6 – Site B partially used for car parking.



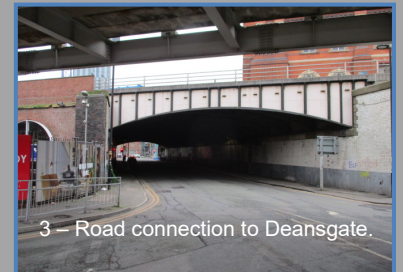
5 – Graffiti within site A.



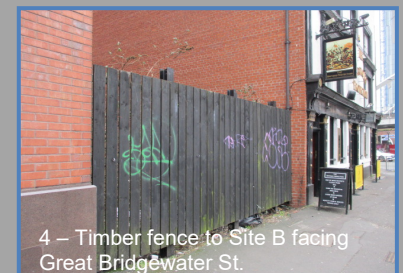
1 – Existing sites either side of the Britons Protection pub.



2 – Site A from Albion St



3 – Road connection to Deansgate.



4 – Timber fence to Site B facing Great Bridgewater St.

2 Crime Statistics & Analysis

All data below is based on crimes recorded between 1st January 2021 to 31st December 2021.

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
32	48	178	1020	913	82	22	329	38	111

- 2.1.1 Over the last 12 months, the crime count has been high within the vicinity of the development, reflecting the site's location in the city centre. The most frequently occurring offences have been less serious wounding, theft and vehicle crime, which are typical of those experienced in city centres, where there is often a concentration of retail, commercial and licensed premises, leading to a concentration of crime and disorder issues.
- 2.1.2 Less serious woundings have taken place throughout the local area, particularly to the north and west of the proposed site, around Quay Street and Oxford Road, which has a high volume of bars, and retail facilities located along it, as well as around Deansgate/ Castlefield Metrolink stop, again bars and nightclubs are located within the locks at this location. Offences have mostly occurred over the weekend period (Friday – Sunday) during the late evening and early hours of the morning when most premises in the area are closing. Assaults and public order offences have been the highest recorded less serious woundings in the local area, with offences often taking place between known associates, with alcohol often being a factor.
- 2.1.3 Thefts have taken place throughout the area, with hotspots occurring to the North and west of the proposed site, around Quay Street and Watson Street junction, as well as Deansgate Metrolink stop. Both areas have a high volume of footfall due to public transport links, retail outlets and bars / restaurants. Offenders have mostly used pick pocketing techniques and distraction methods in order to obtain personal belongings, mostly mobile phones, bags and purses / wallets. Offenders have also targeted insecure items (mostly mobile phones) left on or under tables in bars and restaurants.
- 2.1.4 Vehicle crime in the local area has mostly taken place in private car parks and vehicles using on street parking facilities. Theft from a motor vehicle has been the highest recorded vehicle crime with offenders using implements and objects in order to smash glazing and access the interior

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

- 2.2.1 **Apartments:** Offenders have gained access to apartments by climbing onto low-level balconies and attacked patio doors

Possible Solution – There should be no balconies that would be accessible from the street or other publicly accessible areas. Care should be taken to ensure that there are no features of the building or any nearby hard/soft landscaping features that would form climbing aids up to upper floor windows or balconies. Any such accessible balconies should include security-certified windows/doors, with laminated glazing.

- 2.2.2 **Offices:** Organised burglars targeting expensive I.T. equipment.

Possible Solution - Secure store rooms, where such items can be kept, should be incorporated into the design of the building. These rooms should have solid blockwork walls or be reinforced with expanded metal mesh and certified door sets (to BS PAS 24). Valuable items should not be easy to remove, and should be uniquely identified using an appropriate property marking system. Portable equipment should not be positioned in communal areas where there may be regular visitor access. Effective access controls within the building should assist in restricting entry of visitors and potential intruders.

- 2.2.3 Offenders have targeted doors when they have been left insecure

Possible Solution - All individual cluster flats/apartments should also be secured with a security-certified entrance door-set (see appendix 2), to ensure that any offender who may have gained access to the building (e.g. by tailgating, posing as a legitimate visitor etc.) cannot gain further access without drawing

the attention of other residents. Doors off internal corridors should not be located in deep recesses, where an offender could operate without fear of detection.

2.2.4 Doors have been forced open using bodily pressure and tools

Possible Solution - All external doors should be certified to recognised security standards (see section 4.1), which are independently proven to reduce the risk of forced entry and thus increase the chances of detection. A robust access control system should be in place to allow residents to vet visitors to the building before allowing them access. The main communal entrance should be located in a highly visible position and should be well-lit to deter offenders from trying to gain unauthorised access. Lighting to the front and rear of properties can also deter and reveal potential intruders, as well as reduce the fear of crime.

2.2.5 Windows have been prised open by offenders or the glazing in them smashed

Possible Solution - All ground floor/accessible windows should be certified to recognised security standards (see Section 4.2), with key operated locks and opening restrictors. All ground floor/accessible glazing should also include a laminated pane, which forms a much more robust barrier against shattering penetration (see Section 4.3). Any glazed panels in or around doors should be small and set well-away from locking points. Windows to accessible elevations should be protected by some defensible space, to define them as entirely separate from the street and protect them from attack and nuisance/anti-social behaviour.

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

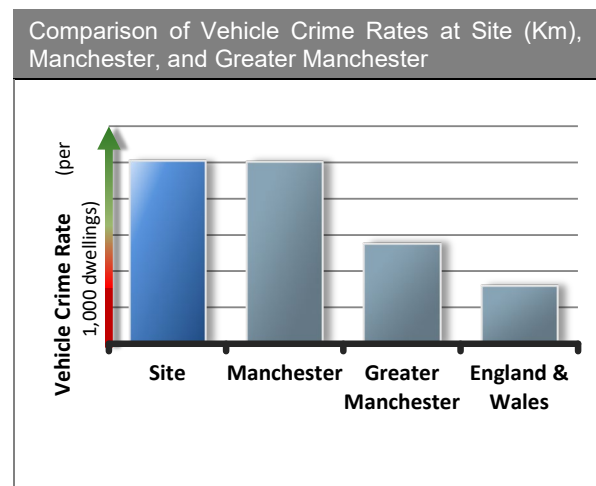
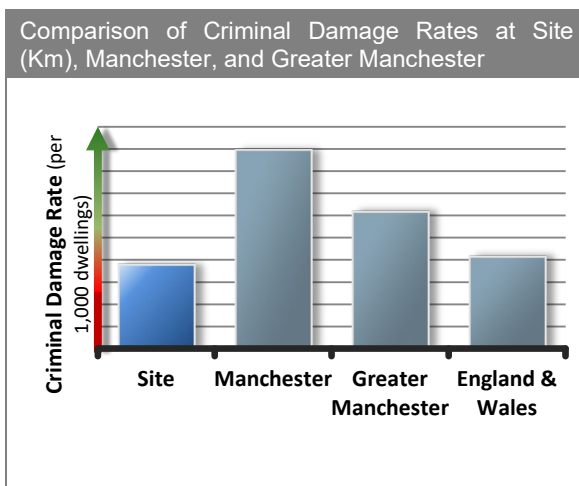
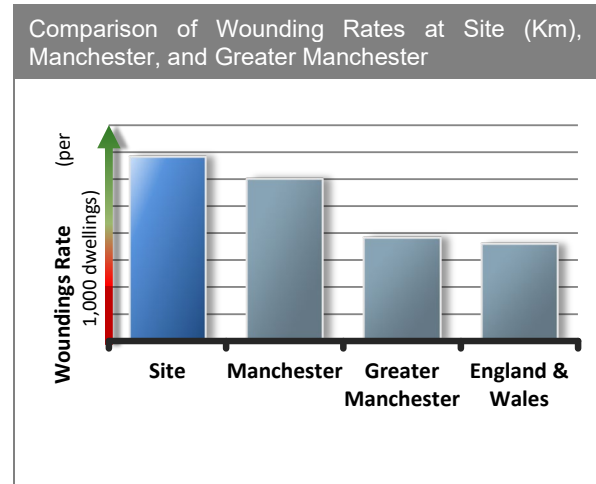
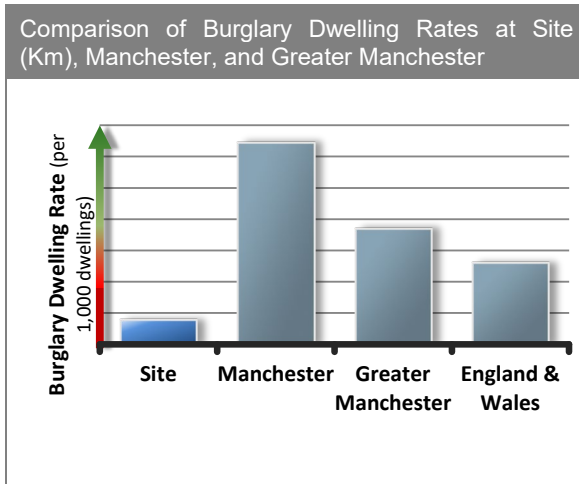
2.4 Risk Factors - Offices

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 Comparing crime rates in the neighbourhood around the site to those in Manchester and Greater Manchester

The rates below relates to crime committed within 500m of the site. England & Wales data was last recorded for January – December 2020.



- 2.5.1 The rate of domestic burglaries per 1000 dwellings is **88% lower** than Manchester as a whole, **79% lower** than Greater Manchester and **70% lower** than England & Wales.
- 2.5.2 The rate of woundings per 1000 dwellings is **14% higher** than Manchester as a whole, **78% higher** than Greater Manchester and **91% higher** than England & Wales.
- 2.5.3 The rate of incidents of criminal damage per 1000 dwelling is **58% lower** than Manchester as a whole, **39% lower** than Greater Manchester and **9% lower** than England & Wales.
- 2.5.4 The rate of incidents of vehicle crime per 1000 dwellings is **1% higher** than Manchester as a whole, **82% higher** than Greater Manchester and **218% higher** than England & Wales.

2.6 Domestic Burglary: Risk Analysis

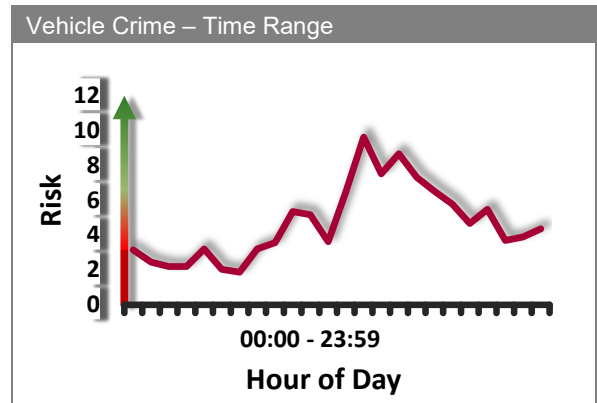
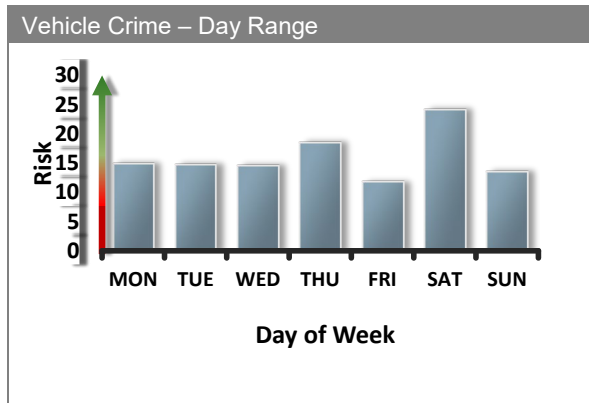
The data below relates to domestic burglaries committed within 500m of the site.



- 2.6.1 **Day/Time Range:** The risk of domestic burglary in the local area peaks on a Monday and Tuesday during the evening (4pm - 7pm) and early hours of the morning (3am - 5am). Offenders often target properties during the day when residents are likely to be away from the property, attending work / socialising, leaving the property unoccupied, giving offenders the perception that they are less likely to be caught or identified. Offenders also target properties in the early hours of the morning when it is often dark with less footfall in the area.
- 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 to the property.
 - Exploitation of insecure windows and doors.
 - Smashed glazing in windows and doors using implements.
 - Posing as a legitimate visitor / resident and entering communal areas of apartment buildings (car parks, mail rooms, bike storage and corridors).

2.7 Vehicle Crime: Risk Analysis

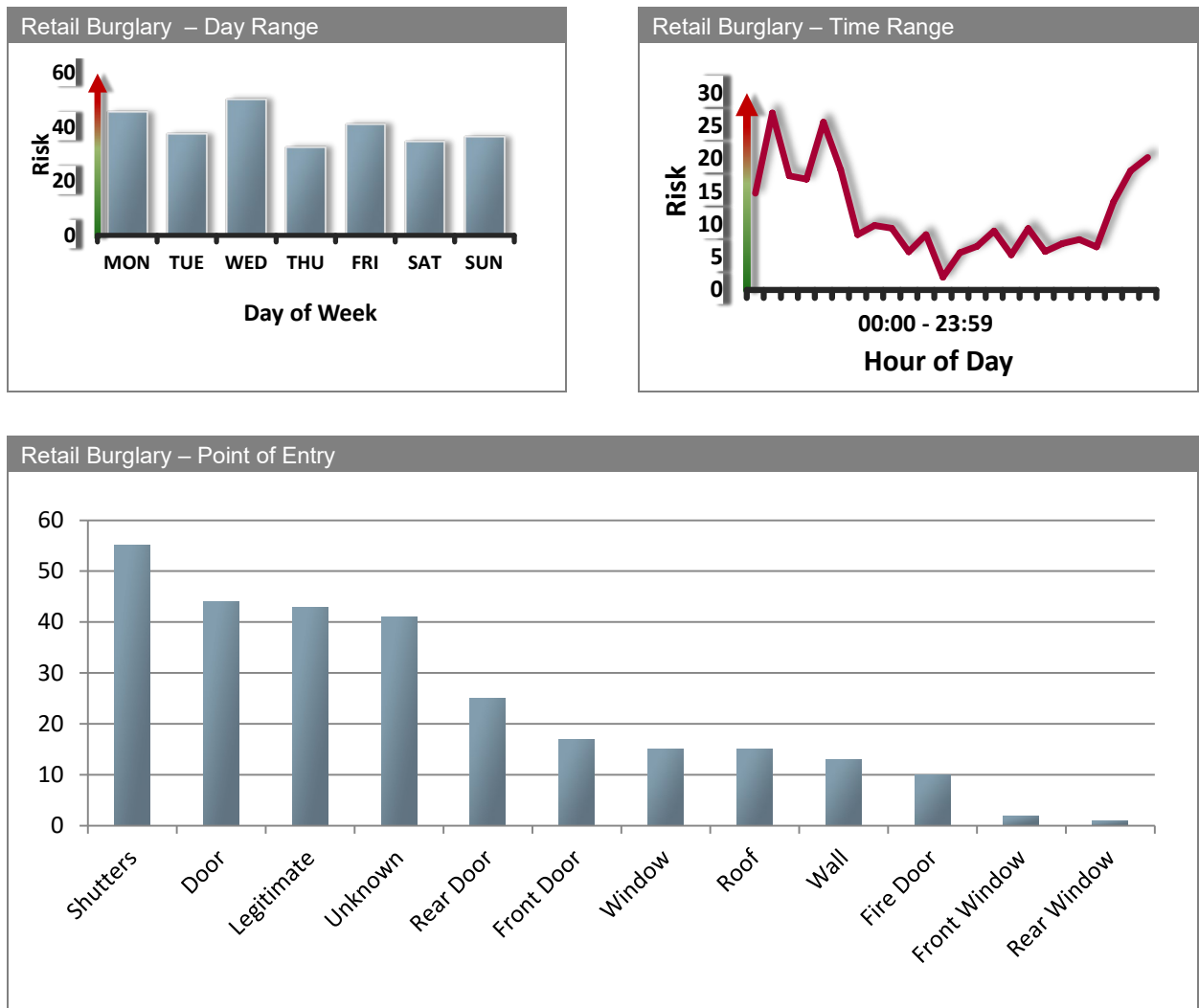
The data below relates to vehicle crime committed within 500m of the site.



- 2.7.1 **Day/Time Range:** The risk of vehicle crime in the local area peaks on a Thursday and Saturday during the afternoon and into the evening (4pm – 11:59pm), peaking between 1pm and 3pm. Offenders have mostly targeted vehicles using private car parking and on street parking facilities. Vehicles are often left unsupervised for long periods of time in areas where footfall is reduced, creating perceived low risk opportunities for offenders.

2.8 Non-Domestic Burglary Retail Facilities: Risk Analysis

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



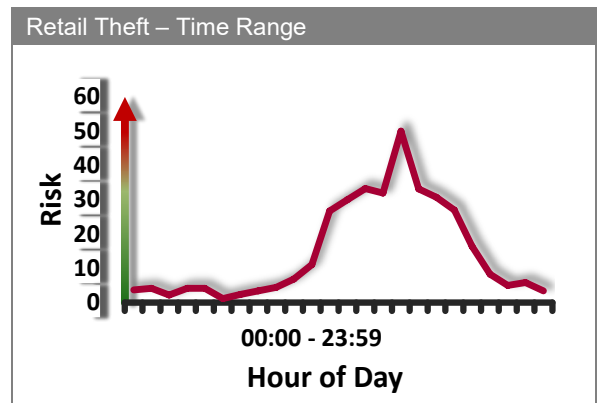
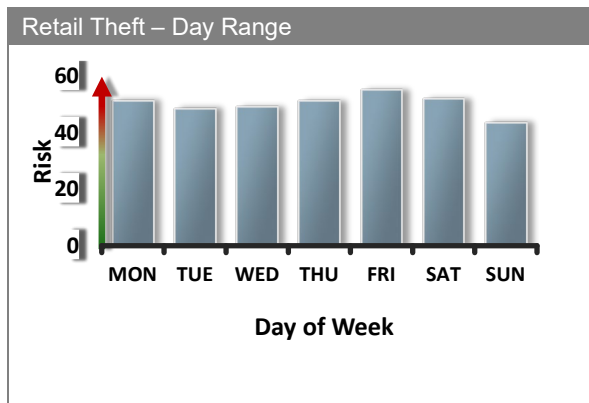
2.8.1 **Day / Time Range:** The risk of burglary at retail premises in Manchester is consistently high throughout the week, peaking on a Wednesday. During the day the risk of burglary at retail premises increases in the early hours of the morning (12am – 6am). Burglaries at commercial premises frequently take place during the night, when they are closed and the streets are quiet. Offenders perceive the risk of being witnessed or apprehended at its lowest.

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

- Smashed glazing in windows and doors to gain entry to premises.
- Posing as a legitimate customer and tailgating / exploitation insecure doors to gain access to staff only areas.
- Forcing open shutters using bodily force and implements to gain entry.
- Opening secure doors using bodily pressure and implements to gain entry.

2.9 Theft Retail Facilities: Risk Analysis

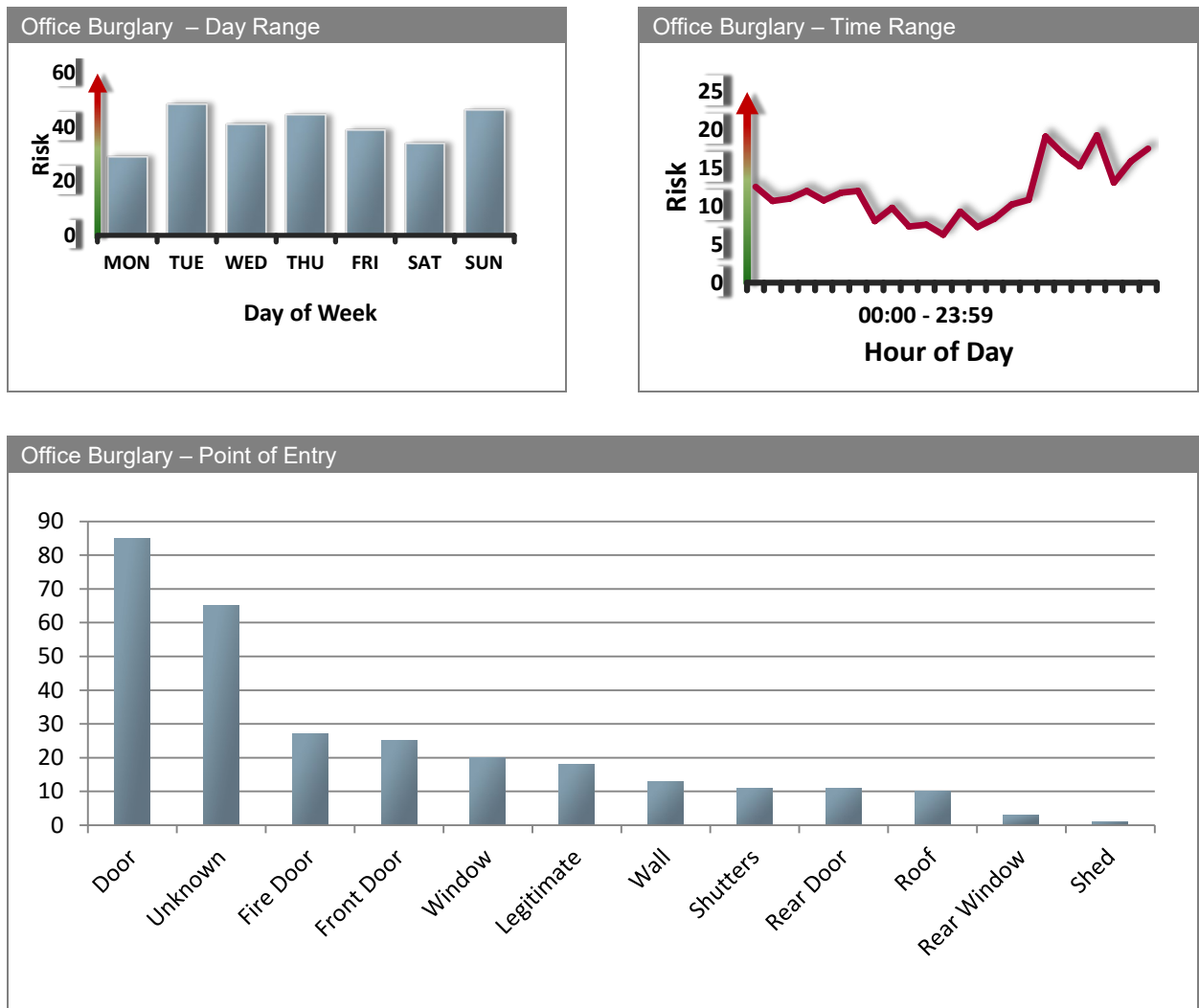
The data below relates to thefts within / against retail facilities, recorded in the Manchester area during 2018 - 2019.



- 2.9.1 **Day / Time Range:** The risk of theft from retail premises in Manchester is consistently high throughout the week, peaking on a Friday and Saturday. During the day the risk of theft at retail premises peaks in the late morning and into the evening (10:30am – 8pm). Small, personal items are being targeted, mostly mobile phones, purses and bags.

2.10 Non-Domestic Burglary Offices: Risk Analysis

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



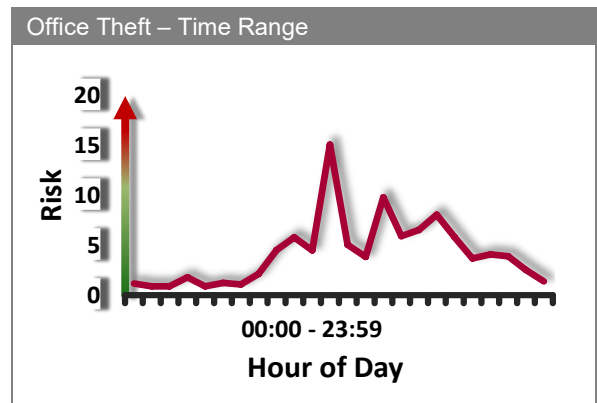
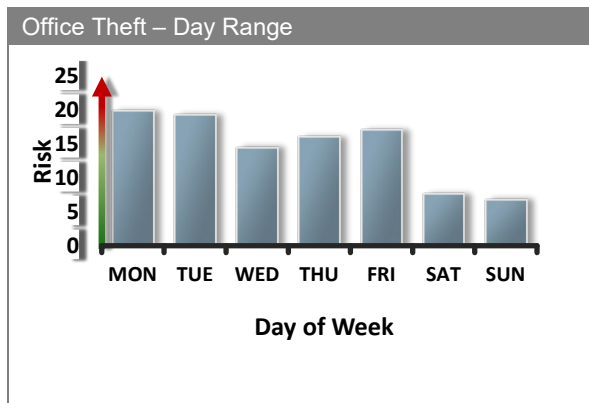
2.10.1 **Day / Time Range:** During the week, the risk of burglary at office premises in Manchester peaks on Tuesday and Sunday. During the day, the risk of burglary rises at night / into the early hours of the morning. Such premises are often targeted at these times when they are closed and unoccupied,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

2.10.2 **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.

2.11 Theft Offices: Risk Analysis

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



- 2.11.1 **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 This report is prepared in support of an application for full planning permission for the redevelopment of two sites, the first faces onto Albion St. the second site faces onto Great Bridgewater St. Both sites have rear access via Trumpet St and are located in Manchester City Centre. Erection of a 26 storey residential tower for 72 apartments (Use Class C3,) with associated car parking, cycle parking, sub station, servicing, and associated landscaping works. Site B contains a mix of commercial office (151sqm) and 4 apartments.
- 3.1.2 Site B: The commercial office development will provide 151sqm space across 2 floors. Ground floor reception space leading to separate entrances for the residents and office spaces.

3.2 Positive Aspects of the Proposal

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

- 3.2.1 The proposed building will see the redevelopment of a long-standing small surface grade car park (Site A), and an empty site between The Britons Protection pub and Jury's Inn hotel. The redevelopment of the sites will insert buildings which provide greater street level activity. In-turn these uses offer good levels of activity and natural surveillance of the adjacent streets. Cycle storage is located in Site A at 1st floor.
- 3.2.2 The entrance lobby of Site A incorporates a concierge which provides a good view of people entering each building. Entry to the stairs and lifts from the lobby should require access-controlled-operation. All visitors to the residents of the apartments will be required to enter via the concierge. Mailboxes for residents should be located within the lobby area so that regular delivery personnel do not need to be given access to the residential parts of the building.
- 3.2.3 The residential cycle store will be enclosed within the secure area. Ensure that each entrance/exit point is provided with access control to prevent illegitimate access.
- 3.2.4 Cycle stores for residents and workers are provided within the buildings. Entry to the stores must be restricted to genuine cyclists only, on application to the managers of the building. Racks within the enclosures should allow cyclists to lock the frame and both wheels.
- 3.2.5 There are clearly defined, entirely separate entrances into each of the different uses proposed, which reduces the opportunities for confusion and conflict and reduces the opportunities to criminals. The residential blocks and commercial units each have single access/egress points in prominent locations off the public realm, which are capable of being robustly managed to control access.
- 3.2.6 The proposed developments provide the opportunity to include security features built into the design and construction of the building and avoid the need for obtrusive retro-fitted security measures that can increase the fear of crime. Security measures carefully incorporated into the design can ensure the building is reasonably secure, without visibly announcing that the design was concerned about crime
- 3.2.7 The footprint of the building on site B facing onto the public realm is relatively simple and free from deeply recessed concealed areas. The use of external facing materials; glazing, providing good levels of activity.
- 3.2.8 The main entrance will be accessed via an electronic access control fob system for residents and staff. The arrangement of the lobby space for Site A is greeted and controlled via a concierge.
- 3.2.9 Security measures carefully incorporated into the building design can ensure the building is reasonably secure, without visibly announcing that the design was concerned about crime. The proposed development provides the opportunity to include security features built into the design and construction of the building and avoid the need for obtrusive retro-fitted security measures that can increase the fear of crime.

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.

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- 3.3.1 **Design recommendation** - Trumpet Street is a dead-end street providing access for car parking, servicing and fire escape from existing buildings. Should residents be challenged at the point of entry/exit the opportunities to escape to a safe location are extremely limited; only moving the encounter to a location potentially further away from safety and increasing the chances of criminal activity. It is highly recommended that the rear car parking, exit doors are covered by CCTV and incorporate lighting.
- 3.3.2 Residential post/parcel room. Arrangements for the delivery of post should not allow postal delivery staff to have access to internal areas of the residential blocks beyond the first floor Post room. Mail boxes for residents should be located either within a secure lobby area or use a 'through-the-wall' post box arrangement. Further design details of these ancillary spaces are to be developed.
- 3.3.3 The residential stair and lift core will require access control allowing management staff and residents access beyond the entrance lobby to upper floors, in order to create a secure lobby area.
- 3.3.4 To minimise the risk of offender's tail-gating legitimate residents/visitors, the secondary doors into stair/lift cores, should also include access controls.
- 3.3.5 Access control required for management staff and resident use of the rear door on Trumpet street for servicing and bin store access.
- 3.3.6 Staff access to the residential upper floor areas should be strictly limited to building management staff only. Staff members of the commercial unit within Site B should have no access to the upper residential floors.
- 3.3.7 Given the prolific high levels of graffiti within and around the site, it is important that external building and cladding materials at ground floor are sealed, protected and supports the removal of graffiti, a resistant coating applied to enable easy removal of any unauthorised markings.
- 3.3.8 It is essential that all of the physical security measures listed below are incorporated into the scheme. Integrated, risk-commensurate security measures aim to place secure physical barriers or surveillance in the path of the criminal – making crime harder to commit and raising the risk of detection and possible capture, as well as promoting a feeling of safety in residents and visitors.

3.4 Environmental features that can influence crime patterns

- 3.4.1 Features of the physical environment can influence patterns criminal and anti-social behaviour. They affect potential offenders' perceptions about a possible crime site, their evaluations of the circumstances surrounding a potential crime site, and the availability and visibility of one or more witnesses, who might intervene, at or near a site. Offenders may decide whether or not to commit a crime in a location after they determine the following:
- How easy will it be to enter the area?
 - How visible, attractive, or vulnerable do targets appear?
 - What are the chances of being seen?
 - If seen, will the people in the area do something about it?
 - Is there a quick, direct route for leaving the location after the crime is committed?
- 3.4.2 Aspects of the local environment that might help to reduce the risk of crime and disorder on and around the site are as follows:
- the site is located in a neighbourhood where significant developments are planned or under construction, the result of which will be greater levels of activity and footfall on the streets around the site with an increase in passive surveillance from residents and staff of the planned developments. The public realm will improve and street lighting and light spilling from buildings that are likely to be occupied well into the night area; will make the neighbourhood feel safer for pedestrians.
- 3.4.3 There are also some features that might facilitate crime and disorder, and these include:
- the site is located within an area where there is a high volume of recorded crime. Criminals are already attracted to this area and may exploit other criminal opportunities.
 - the absence of regular street activity or passive surveillance for much of the day and night leaves the buildings and vehicles parked on the site, and pedestrians passing through the area, vulnerable to criminal and anti-social activity.

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- the buildings that currently occupy the site and several in the vicinity are of poor quality. All of the buildings on the site have also been secured with unsightly security features, such as steel plate, window grilles and roller shutters; graffiti has also been daubed on several walls. Poor quality and insensitively fortified buildings can have a negative effect on a locality, making passers-by fearful or uncomfortable. Poor environments can also embolden offenders who may sense that a lack of care of the environment means that their actions are less likely to be challenged. Environmental decay can also deter investment in a neighbourhood.
 - the site lacks defensible, leaving walls exposed to the passing public. This is likely to have contributed to the range of security measures installed and the presence of graffiti on exposed walls.

4 Physical Security (Residential)

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 STS202 BR2 or LPS 1175 SR2. 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.

- ☐ Arrangements for residents to admit visitors. Communal entrance and inner lobby / zone doors should be capable of being controlled by means of a video entry phone system (with the picture viewable on a phone unit, rather than on a television set) so that residents can confirm the identity of visitors before allowing them access themselves.
- ☐ Where secure lobbies are to be created, the secondary communal door must be to the same specification as the outer door - certified to BS PAS 24, STS 201 or LPS 1175 SR2, including a lock capable of being operated via an electronic access control system. The post boxes themselves should be of robust construction, with letter box apertures to a maximum size of 260mm x 40mm (incorporating anti-fishing measures). All other deliveries should be made directly to residents via the access-controlled main entrance.
- ☐ Apartment entrance doors must be compliant with and certified to BS PAS 24, STS 201 or LPS 1175 SR2. It is advised that these doors do not have fixed sidelights, and are provided with door viewers instead.
- ☐ Any letterboxes within doors must be located a minimum of 400mm away from internal handle and locking hardware.
- ☐ Doors to storage / meter rooms should have 44mm solid core doors, 3 hinges, with a mortised sash lock to BS3621/8621 to allow the rooms to be secured when not in use.
- ☐ External escape-only doors (as with external doors in general) should be certified to BS PAS 24, STS 201 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.
- ☐ The doors to the cycle store should be compliant with and certified to BS PAS 24 or LPS 1175 SR2, or be steel gates within steel frames. These doors/gates should both be self-closing and lock securely upon closure and be accessible by a programmable fob allowing secure entry and exit.

4.2 Windows

- ☐ 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

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

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 installed, it should be linked to contacts on all external doors, and PIR detectors should cover all ground floor rooms with windows.

4.5 Access Control

- ☐ Access control systems should be operable by swipe card or fob, and not numeric key pads. The following doors should operate on access control:
 - All external doors where regular staff access is required.
 - Doors separating internal zones / lobbies
 - Any internal doors to obvious high risk or controlled areas (e.g. storage / server / locker rooms)

- Cycle store

4.6 Landscaping

- ☐ In vulnerable locations such as entrances, parking areas and footpaths, low planting should not exceed 1000mm in height, and tree canopies should fall no lower than 2m 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. A maintenance agreement should stipulate that these planting dimensions would be adhered to.
- ☐ Loose surface materials in the publicly accessible areas of the scheme should be avoided. Small fragments of ground covering can be used as missiles against people and premises (both to gain entry and to commit criminal damage).
- ☐ Planting must be avoided that will aid climbing over boundary treatments. The security of fences can be compromised if trees or street furniture are placed close by

4.7 Lighting

- ☐ External lighting must be provided to pedestrian routes within the site in accordance with BS 5489.
- ☐ Dusk 'til dawn lights, operated by photoelectric cell/daylight sensor, should be installed to all external doors (manual override is also permissible).
- ☐ 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.

4.8 Other

- ☐ Meter cupboards to apartments should be located to the fronts of properties only or within a secure cupboard / room inside the block but not inside individual apartments. Smart meters are acceptable.
- ☐ Consideration should be given to use of alternatives to lead in construction, and minimise the amount of metal on visible elevations of the buildings. Inspection covers should be capable of securing to reduce potential access to cabling.

5 Physical Security (Non-residential)

5.1 Doors

- ☐ External doors must be compliant with and certified to BS PAS 24, STS02, or LPS 1175 SR2.
- ☐ Sliding doors should be tested and certified to ENV 1627-30 (WK2+). If circumstances could prevent this, please consult with Design for Security.
- ☐ External escape-only doors (as with external doors in general) should be certified to BS PAS 24:2012, 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.
- ☐ Internal doors to storage rooms should be solid core, minimum 44mm thick with a multi-point locking mechanism.
- ☐ Service or sectional overhead doors must be tested and certified to LPS 1175 SR2. If circumstances could prevent this, please consult with Design for Security.

5.2 Shutters

- ☐ Where grilles or shutters are required for additional protection the minimum certification required is:
 - LPS 1175: Issue 7 Security Rating 1
 - STS 202: Issue 3, Burglary Rating 1

5.3 Windows

- ☐ Windows must be compliant with and certified to BS PAS 24 or BS 7950.
- ☐ 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.

5.4 Glazing

- ☐ All glazing up to a height of 2400mm (or if otherwise accessible) should 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.

5.5 Alarms

- ☐ A monitored alarm system should be installed to cover all building on the site, linked to contacts on all external doors/shutters and PIR detectors covering all ground floor areas with windows, with a signal terminating at a recognized Alarm Receiving Centre (ARC) or security control room.

5.6 Access Control

- ☐ Access control systems should be operable by swipe card or fob, and not numeric key pads. The following doors should operate on access control:
 - All external doors where regular staff access is required.
 - Doors separating internal zones / lobbies
 - Any internal doors to obvious high risk or controlled areas (e.g. storage / server / locker rooms)

5.7 Lighting

- ☐ External lighting must be provided to pedestrian routes within the site in accordance with BS 5489.
- ☐ Lighting to vehicle circulation areas, service yards should be in accordance with BS 5489, and display an average lux level of 20 with a uniformity level of no less than 25%. These figures should be evidenced by a lighting layout/lux plan.
- ☐ Dusk 'til dawn lights, operated by photoelectric cell/daylight sensor, should be installed to all external doors.
- ☐ 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.
- ☐ Lighting fixtures must not be positioned to provide climbing aids over boundary treatments. Electrical and architectural layouts should be developed together to avoid this.
- ☐ Internal lighting should be operated by detection devices which will automatically switch lights on with movement activity in each room.

5.8 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.
- ☐ **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. Suitable locations would be: Entrances to site, external areas all around the new building and ancillary facilities, external doors including emergency egresses / hatches, access-controlled doors & cycle parking areas

6 Management & Maintenance

- 6.1.1 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
- 6.1.2 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 Construction

- 7.1.1 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.
- 7.1.2 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).

8 Useful References

8.1 Secured by Design (SBD)

- 8.1.1 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
21/12/21	Zerum	CIS Application
22/12/21	Zerum	CIS Instructed
04/01/22	Client	Invoice issued
25/01/22	DfS	Site visit
26/01/22	DfS	CIS completed
26/01/22	DfS	CIS updated following description comments
30/05/22	DfS	CIS updated following description comments

B Associated Documents

This report is based on the following drawings and supplementary information submitted by the applicant.

Drawing No.	Drawing Title	Date	Rev
L(00)81	Building Elevations - Elevation A	02/12/21	C
L(00)82	Building Elevations - Elevation B	02/12/21	C
L(00)83	Building Elevations - Elevation C	02/12/21	C
L(00)84	Building Elevations - Elevation D	02/12/21	C
LRW-8158-L(00)69	Site A - Proposed Ground Floor Plan	13/12/21	M
LRW-8158-L(00)70	Site A - Proposed First Floor Plan	13/12/21	L
LRW-8158-L(00)72	Site B - Proposed Ground Floor Plan	13/12/21	K
LRW-8158-L(00)73	Site B - Proposed First to Second Floor Plan	13/12/21	J
LRW-8158-L(00)74	Site B - Proposed Typical Floor Plan 3 rd to 6 th	13/12/21	L
LRW-8158-L(00)103	Site A - Proposed Mezzanine Floor Plan	13/12/21	F
LRW-8158-L(00)104	Site A - Proposed Upper Mezzanine Floor Plan	13/12/21	E
LRW-8158-L(00)116	Site A - Proposed Typical Floor Plan (2-5, 10-13, 18-21)	13/12/21	D
LRW-8158-L(00)117	Site A - Proposed Typical Floor Plan (6-9, 14-17, 22-25)	13/12/21	D
LRW-8158-L(00)124	Site A - Proposed Basement Floor Plan	13/12/21	B
LRW-8158-L(00)125	Site B - Proposed Roof Plan	13/12/21	B
LRW-8158-L(00)126	Site A - Proposed Roof Plan	13/12/21	A

PLEASE NOTE - In the event of any subsequent material changes to the scheme, it will be necessary for Design for Security to reassess the comments made within this report.

C CIS Version History

Version	Revisions Made	Date
A		
B	Description updated	26/01/22
C	3.3.2 Description updated	30/05/22

D Glossary

Burglary Resistance Standards

BS PAS 23-1, 1999

General performance requirements for door/window assemblies.

A performance standard for doorsets and windows, which certifies that a particular doorset is fit for purpose. Door products must also have BS PAS 24 certification.

BS PAS 24-1, 2012

General security performance requirements for door/window assemblies.

An attack test standard for doorsets and windows. This is the minimum police requirement for Secured by Design dwellings, and is also applicable to French/double doors, and sliding doors.

ENV 1627-30 (Security Ratings WK1 to WK6)

Windows, doors, shutters - Burglar resistance Requirements and classification

The classification system used in ENV 1627-30 is aimed at the commercial market and is based on five elements:

- a) Resistance of glazing*
- b) Performance of hardware*
- c) Resistance to static loading*
- d) Resistance to dynamic loading*
- e) Burglary resistance by manual intervention*

LPS 1175 (Security Ratings 1 to 6)

Specification for testing and classifying the burglary resistance of building components

This includes doors, shutters, garage doors and grilles typically for commercial premises and higher risk domestic premises and is acceptable to the ABI and the Police. The standard has 6 levels, 6 being the highest, with levels 1 and 2 equivalent in many respects to BS PAS 24 and BS 7950.

STS201 Issue 4: 2012

Enhanced security requirements for doorsets and door assemblies for dwellings to satisfy the requirements of PAS23 and PAS24

STS202 Issue 3: 2011

Requirements for burglary resistance of construction products including hinged, pivoted, folding or sliding doorsets, windows, curtain walling, security grilles, garage doors and shutters.

This specifies a broadly similar range of attack tools and times to those specified at the lower levels of LPS1175.

EN 356, 2000 (Ratings P1A to P8A)

Glass in building. Security glazing. Testing and classification of resistance against manual attack.

A performance standard for manual attacks on glazing. P2A is comparable to the performance of a 6.8mm laminated glass, and P4A to that of a 9.5mm laminated glass.

Commonly Used Acronyms

CIT

Cash in transit (refers to vehicles, personnel and routines).

CPTED

Crime Prevention Through Environmental Design

CRS

Crime Reduction Specialist. Sometimes known as CPO (Crime Prevention Officer)

INPT

Integrated Neighbourhood Policing Team.

PVB/PolyVinyl Butyral (Glazing interlayer)

A commonly used interlayer used in the production of laminated glass.

LPCB (Loss Prevention Certification Board)

A brand of the BRE Global (Building Research Establishment) family. The LPCB work with insurers, Government, police, designers, manufacturers, contractors and end users to develop methods of assessing performance and reliability of security products to ensure their fitness for purpose.

UKAS (United Kingdom Accreditation Service)

The sole national accreditation body recognised by government to assess, against internationally agreed standards, organisations that provide certification, testing, inspections and calibration services.

Useful Websites

Design for Security

www.designforsecurity.org

Secured by Design

www.securedbydesign.com

RIBA Product Selector

www.ribaproductselector.com

LPCB – Red Book Live

www.redbooklive.com

Crime Reduction (Home Office)

www.crimereduction.homeoffice.gov.uk

DAC (Design Against Crime) Solution Centre

www.designagainstcrime.org

Building for Life

www.buildingforlife.org

CLG (Communities and Local Government)

www.communities.gov.uk