



CRIME IMPACT STATEMENT

Site South of Hathersage Road, Manchester

Development of Retail, Education and
Research Premises (14,129m²)

for: Bruntwood Science Limited

version A: 21st November 2019

URN: 2019/0840/CIS/01

Greater Manchester Police

designforsecurity

Site South of Hathersage Road, Manchester

2019/0840/CIS/01

EXECUTIVE SUMMARY

Major Design Changes Not Required

This development has been assessed using the principles of 'Crime Prevention Through Environmental Design' in order to identify any opportunities for crime and the fear of crime. In general the proposed scheme has been found acceptable, but further consideration of some aspects is advised, as stated in section 3.3 of this report.

Please note: Greater Manchester Police Design for Security will recommend to the local planning authority that a planning condition is added that reflects the physical security specification listed within Section 4 of this report.



Michael Craig DipLD CMLI

DfS Consultant

Contents

1	Visual Audit.....	4
2	Crime Statistics & Analysis.....	5
	2.1 Crime Summary	
	2.2 Common Use-Specific M.O.s (Modus Operandi)	
	2.3 Risk Factors - Offices	
	2.4 Risk Factors – Retail Premises	
	2.5 Non-Domestic Burglary Offices: Risk Analysis	
	2.6 Theft Offices: Risk Analysis	
	2.7 Non-Domestic Burglary Retail Facilities: Risk Analysis	
	2.8 Theft Retail Facilities: Risk Analysis	
	Non-Domestic Burglary Educational Facility: Risk Analysis	
	2.9 Theft Educational Facility: Risk Analysis	
	2.10 Vehicle Crime: Risk Analysis	
3	Layout Appraisal.....	13
	3.1 Proposed development	
	3.2 Positive Aspects of the Proposal	
	3.3 Further Recommendations to Improve Security	
4	Physical Security	14
	4.1 Doors	
	4.2 Windows	
	4.3 Glazing	
	4.5 Alarms	
	4.6 Access Controls	
	4.7 Boundaries	
	4.8 Landscaping	
	4.9 Lighting	
	4.10 CCTV	
	4.11 Fit Out of Retail / Commercial Units	
	4.12 Other	
5	Management & Maintenance	18
6	Construction	18
7	Useful References	19
	7.1 Secured by Design (SBD)	

Appendix

A	Contact register	20
B	Associated Documents.....	20
C	CIS Version History	20
D	Glossary	21

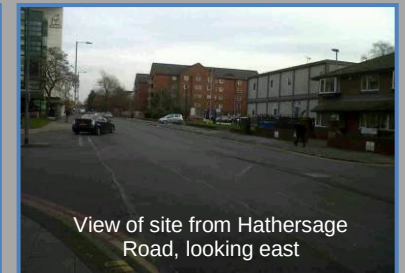
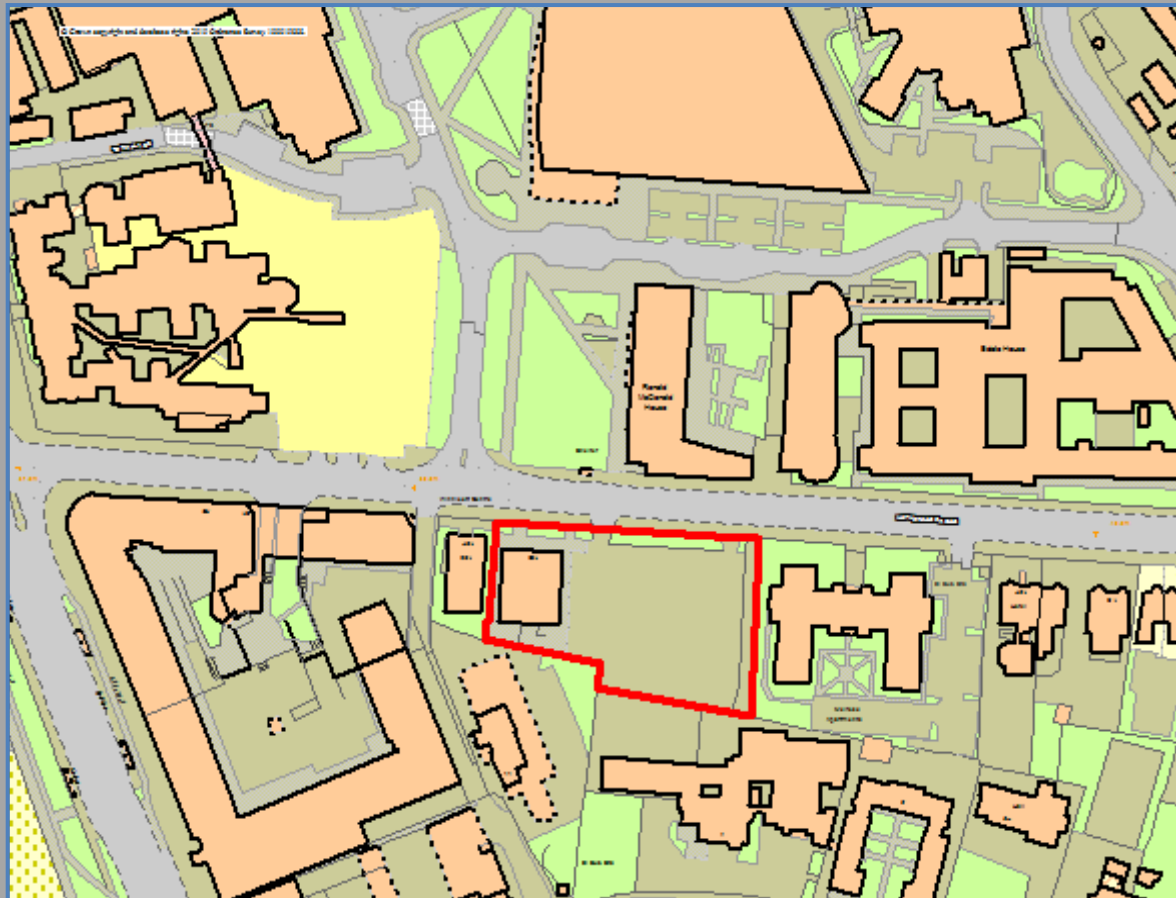
1 Visual Audit

The site, shown red on plan, lies on the southern edge of the main MRI hospital campus. The wider neighbourhood includes various health-related and educational establishments. There are a number of large blocks of student flats nearby. Students and their accommodation tend to be more vulnerable to crime due to a range of factors including their age, lifestyle, income, employment status, occupancy and accommodation type.

The western boundary adjoins the Winnicott Centre health facility, where there is a significant drop in ground level. Other boundaries adjoin residential properties, including substantial apartment blocks, mainly providing student accommodation. A track down east side of site provides occasional service access to neighbouring premises. Retail units near the site on Hathersage Road and Oxford Road include shops selling alcohol. The site is also close to "curry mile" which attracts large numbers of visitors to the area especially in the evenings.

Hathersage Road forms the northern boundary of the site, and this is a very busy road which incorporates the principal vehicular access points to the MRI campus, with one entrance located directly opposite the site. This area is frequently congested.

The site is currently occupied by a staff car park and temporary medical facility which will be relocated elsewhere. There is very high demand for car parking in the vicinity during the daytime, with hospital facilities at capacity.



2 Crime Statistics & Analysis

All data below is based on crimes recorded between 1st July 2018 to 30th June 2019.

2.1 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
96	34	99	381	171	55	17	86	20	93

2.1.1 Over the last 12 months, the volume of recorded crime in this neighbourhood has been high, particularly crimes involving violence, burglary, vehicle crime and theft. The Wilmslow Road / Oxford Road corridor, with its concentration of commercial uses, including licensed premises, university and hospital campuses, and car parks, together with high footfall throughout the day and night are all contributory reasons for the high volume of crime.

2.1.2 Less serious wounding, theft and vehicle crime are the highest reported in the local area, with the majority taking place around areas with a high volume of student and hospital accommodation.

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

2.2.1 Secure windows and doors have been forced open using body pressure, implements and tools to gain access to the building.

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. Security-certified doors are the best long-term measure to address this risk and can be obtained to suit virtually all operational requirements. Avoid locating openings in concealed areas where a concerted attack from an offender is unlikely to be witnessed. All external doors should be covered by alarms and monitored CCTV.

2.2.2 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 posing as legitimate customers, visitors or employees have gained unauthorised access to staff-only areas to steal property.

Possible Solution - There should be a robust access control system in place to ensure that visitors to the buildings are vetted and / or met and escorted before being allowed further access into the building. All individual rooms should be capable of being secured when unoccupied and there should be a secure area for staff to store their belongings while at work.

2.2.4 Glazing within windows and doors has been smashed to gain unauthorised access.

Possible Solution - All ground floor or otherwise accessible glazing should include a laminated pane, which forms a much more robust barrier against shattering and penetration. Where possible, the size of any glazed elements within or directly adjacent to doors should be reduced and set well away from locking points. Windows in secluded locations may require additional protection from criminal damage, such as shutters or grilles.

2.2.5 Shutters have been prised open to target doors / windows behind them.

Possible Solution - All shutters should be certified to a recognised burglary-resistant standard (i.e. LPS 1175 SR 2). Shutters certified to this standard can resist most attempts by offenders to gain access with the use of force. In high risk situations, shutters rated to a higher standard of resistance should be installed, and retractable bollards can be used to protect section overhead doors and shutters.

-
- 2.2.6 Entering premises and removing personal items (mostly mobile phones and bags) belonging to customers (cafes).

Possible Solution - Consideration should be given to tables and chairs designed to facilitate secure storage of belongings or adapted with 'Chelsea Clips' to reduce the opportunities to steal bags / coats. The internal layout of the premises can also increase surveillance opportunities and help deter offenders. It should be generally uncluttered, allowing clear views of all spaces and avoiding any pinch points or areas of concealment. The precise arrangement of internal furnishings should aid circulation and aim to achieve a balance between intimacy and visibility.

2.3 Risk Factors - Offices

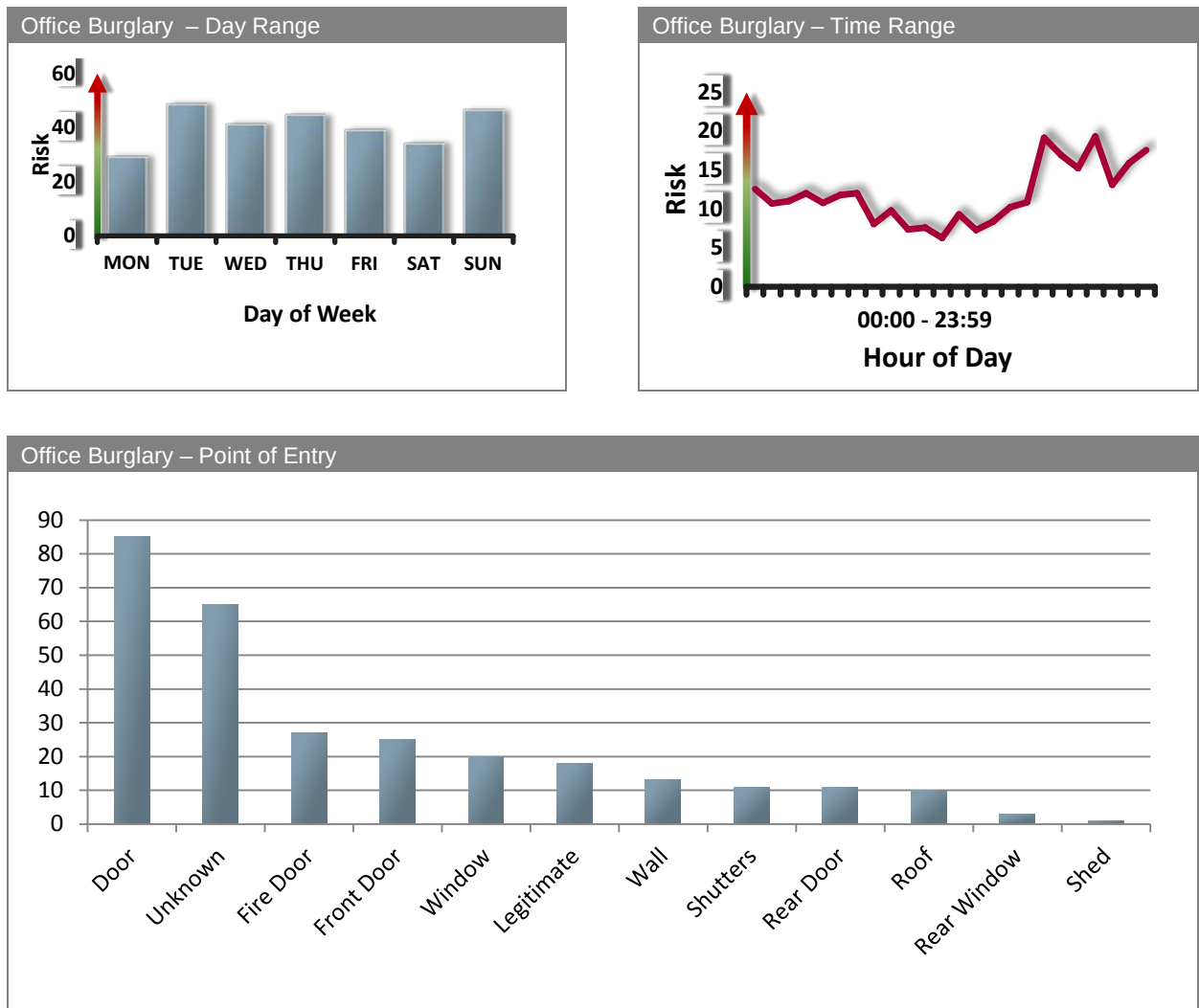
- Burglary
- Violence towards staff
- Theft of personal belongings at work
- Criminal damage to property and vehicles
- Unauthorised access to buildings / private space
- Arson
- Cycle theft

2.4 Risk Factors – Retail Premises

- Commercial burglary
- Cash robbery
- Unauthorised access to private spaces/Tailgating
- Shoplifting
- Employee theft
- Theft of customer / staff property
- Criminal damage to property

2.5 Non-Domestic Burglary Offices: Risk Analysis

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



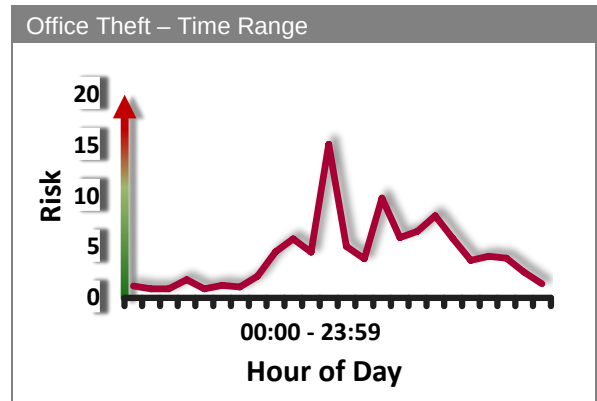
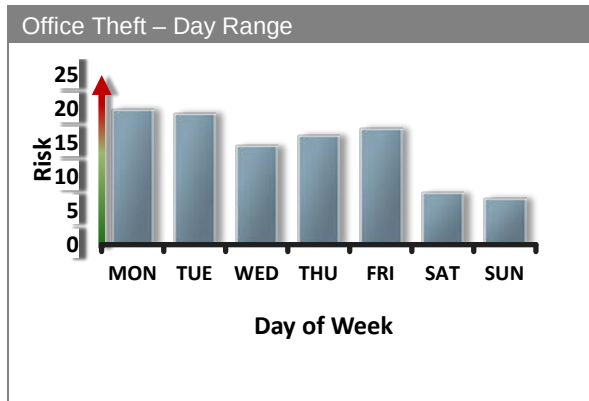
2.5.1 **Day / Time Range:** During the week, the risk of burglary at office premises in Manchester peaks on Tuesday and Sunday. During the day, the risk of burglary rises at night / into the early hours of the morning. Such premises are often targeted at these times when they are closed and unoccupied,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

2.5.2 **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.

2.6 Theft Offices: Risk Analysis

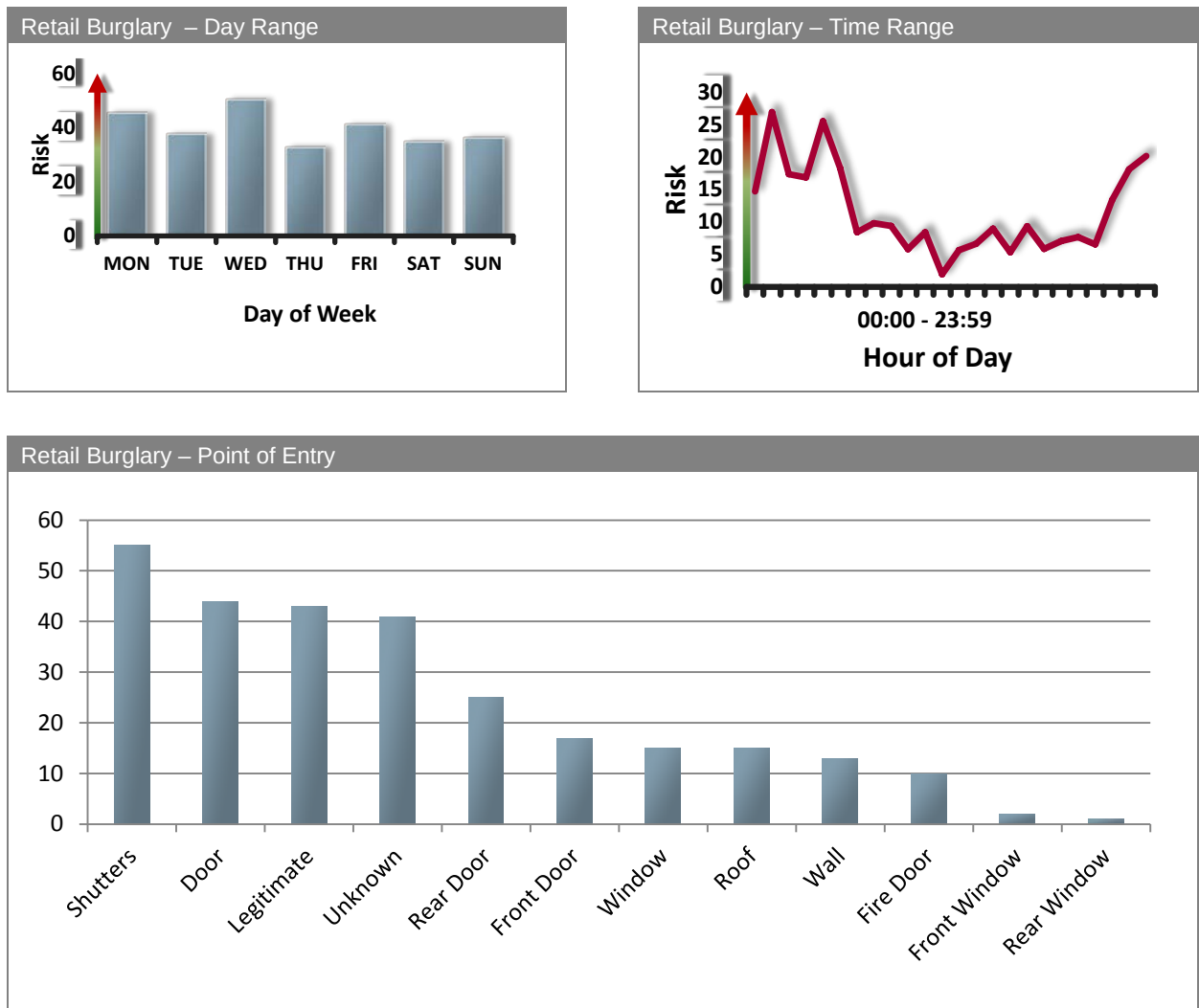
The data below relates to thefts within / against offices, recorded in the Manchester area.



- 2.6.1 **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.

2.7 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.



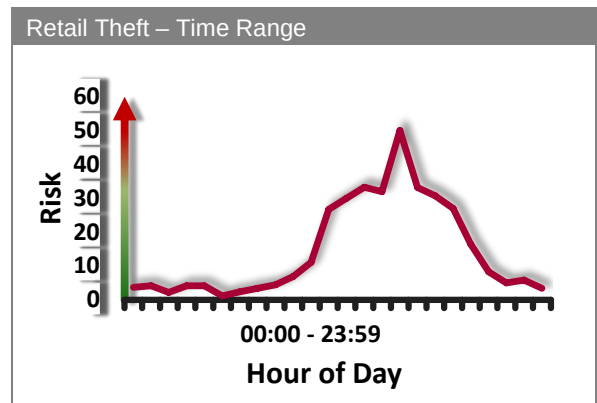
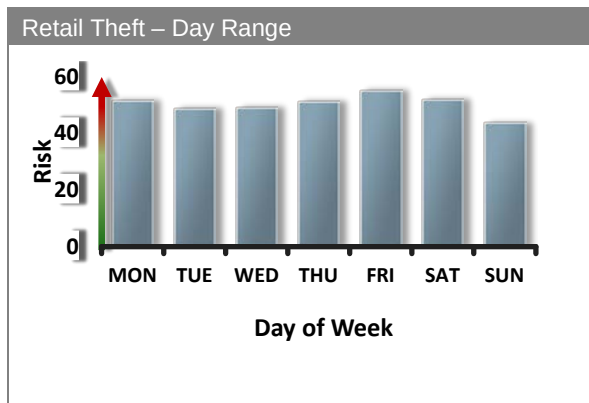
2.7.1 **Day / Time Range:** The risk of burglary at retail premises in Manchester is consistently high throughout the week, peaking on a Wednesday. During the day the risk of burglary at retail premises increases in the early hours of the morning (12am – 6am). Burglaries at commercial premises frequently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

2.7.2 **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.

2.8 Theft Retail Facilities: Risk Analysis

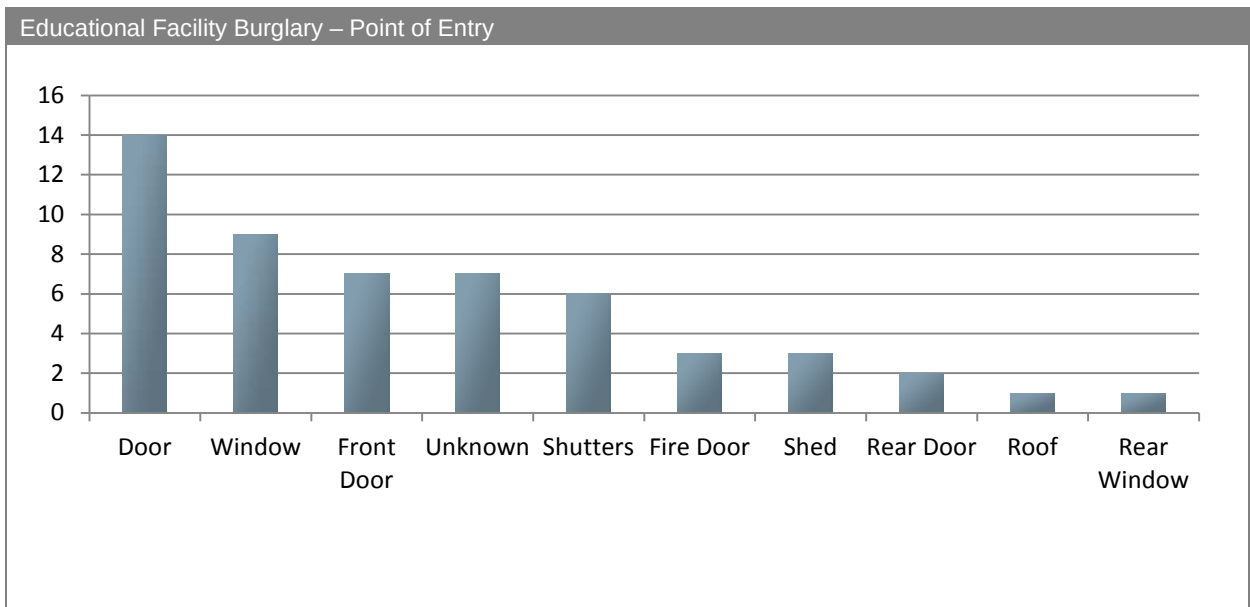
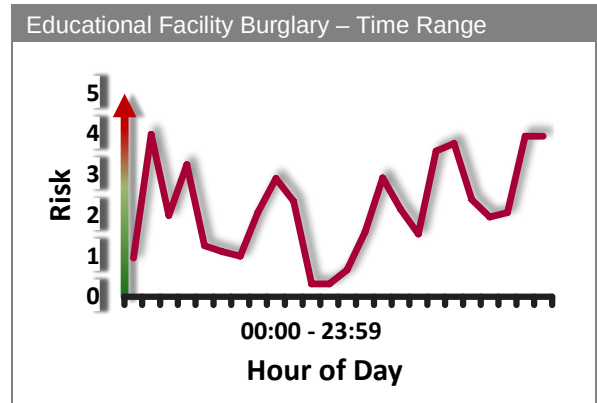
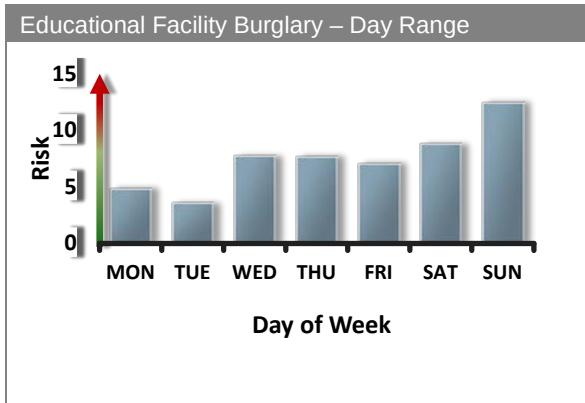
The data below relates to thefts within / against retail facilities, recorded in the Manchester area.



- 2.8.1 **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.

Non-Domestic Burglary Educational Facility: Risk Analysis

The data below relates to non-domestic burglary offences within / against educational facility, recorded in the Manchester area.



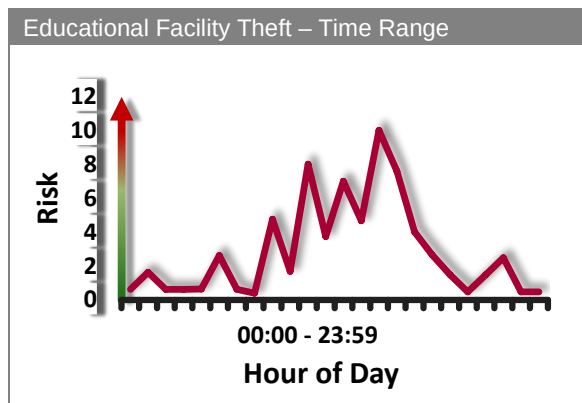
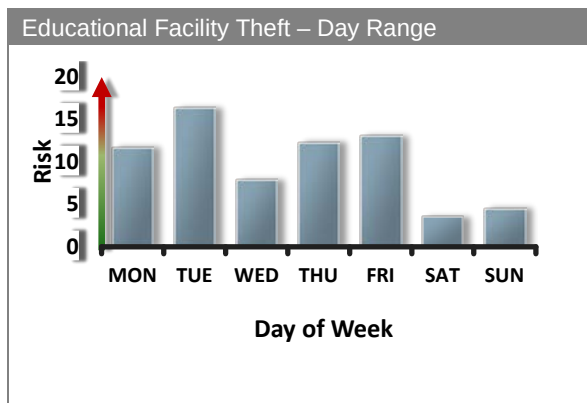
2.8.2 **Day / Time Range:** The risk of burglary at education facilities in the local area peaks on a Thursday, Friday and a Sunday. The risk is relatively high throughout the day, peaking in the late evening and early hours of the morning (9pm – 5am). Offenders target educational facilities during the evening when it is dark, streets are quieter as the risk of being caught/ identified lessens.

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

- Opening secure doors using bodily pressure and implements to gain access to the premises.
- Exploitation of insecure doors and windows to gain entry to the property.
- Climbing perimeter fencing to gain access to the grounds and approaching secure sheds use implements and bodily pressure to gain access.
- Climb onto roofing and remove tiles to gain entry to the premises.
- Force open shutters using bodily pressure and implements to gain access.
- Smashed glazing in windows and doors to gain entry to the property.
- In cases where the point of entry is unknown, offenders have often posed as legitimate students / visitors and entered restricted areas by means of insecure doors.

2.9 Theft Educational Facility: Risk Analysis

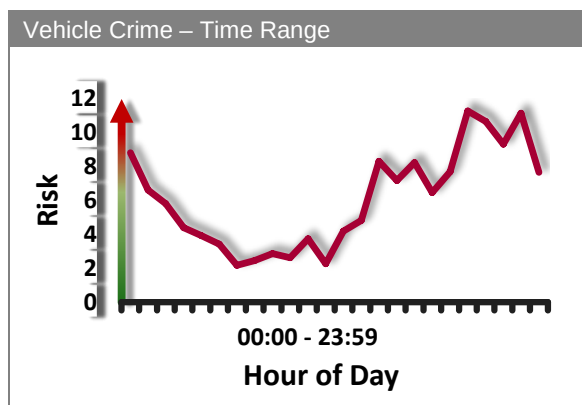
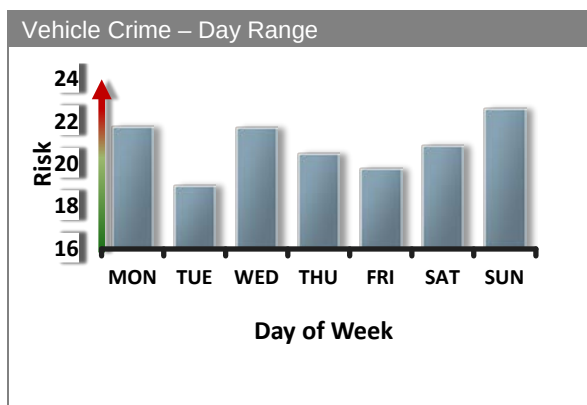
The data below relates to thefts within / against educational facility, recorded in the Manchester area.



- 2.9.1 **Day / Time Range:** The risk of theft at educational facilities peaks on a Tuesday during the morning and into the afternoon (8am – 4pm.) The thefts carried out involve thefts of personal items, mostly mobile phones and bags, as well as equipment owned by the facility, mostly laptops and computing equipment.

2.10 Vehicle Crime: Risk Analysis

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



- 2.10.1 **Day / Time Range:** The risk of vehicle crime in the local area peaks on a Sunday during the afternoon and into the late evening; Offenders have mostly targeted vehicles parked securely in car parks on using on street parking. Vehicles parked in and around the city centre are left for long periods of time, reducing the natural surveillance in the area and creating low risk opportunities for offenders.

3 Layout Appraisal

3.1 Proposed development

- 3.1.1 The proposed development comprises removal of the existing modular buildings and construction of a seven-storey commercial building to accommodate a mix of office, laboratory and research premises, together with provision for café / retail units at ground floor level.
- 3.1.2 There will be an enclosed service yard to the rear of the property, with vehicular access from the lane along the eastern boundary.

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 building footprint at ground floor level is relatively simple and contains no areas of potential concealment. All doors and shutters appear to be flush with the external elevations of the building, removing areas of potential concealment that could otherwise be subject to abuse.
- 3.2.2 Glazed elevations to the principal public elevations will help to enliven the street scene and enhance natural surveillance of and from the building.
- 3.2.3 The main pedestrian entrance to the building is located in a prominent location facing Hathersage Road and is readily apparent on approaching from the street.
- 3.2.4 Separation of functions. The ground floor retail units are kept separate from each other and the office / café / research functions. There should be no shared facilities that could compromise security.
- 3.2.5 Lobby reception area. The arrangement of the lobby area and location of the reception desk will enable staff to monitor people entering and leaving the building.
- 3.2.6 Access controls. The access-control strategy adopted for the development will be capable of confining movement into and through the buildings, thus allowing staff and visitors to only enter parts of the site to which they have legitimate reason to be present. Access permissions should be fully auditable and regularly reviewed (see also item 3.3.1).
- 3.2.7 Subdivision of Floor Space. The upper floor office areas have potential to be subdivided into smaller individual units, and where this occurs, each suite of offices will be capable of separation with their own individual secure entrances and access controls.
- 3.2.8 Sight lines along the lane along the east side of the proposed building will be improved.
- 3.2.9 The service yard to the south of the proposed building will be securely enclosed, with access-controlled gates for entry / exit. Accessible parking spaces will be located within the secure boundary, reducing the risk to vulnerable members of staff & visitors.
- 3.2.10 The design of the buildings includes no large overhangs in secluded places that could provide attractive sheltered gathering places for antisocial groups.
- 3.2.11 Redevelopment of the site provides an opportunity to enhance the access to the adjacent Winnicott Centre by opening up the area and rationalising the landscape features and level changes, removing places of potential concealment and improving natural surveillance along this elevation.
- 3.2.12 The proposed development provides the opportunity to include security features built into the design and construction of the buildings and avoids 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 buildings are reasonably secure, without visibly announcing that the design was concerned about crime.

3.3 Further Recommendations to Improve Security

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

- 3.3.1 Access beyond the reception lobby should be controlled so that intruders cannot easily reach restricted parts of the building. Further access to upper floors appears to be regulated by access controls, (e.g. on

lifts) and visitors should be required to report to the reception before being able to access other parts of the building.

- 3.3.2 Evaluation of boundaries. Where the existing perimeter fence / wall is to be retained and will form part of the service yard enclosure, the integrity of the site boundary treatment should be evaluated to ensure that it forms a reliably-secure perimeter. The existing structure appears to be in very poor condition in certain places, and not sufficiently high to discourage unauthorised access – this weakness could be exploited by potential intruders, and these sections should be rebuilt to a minimum height of 2.1m (on the outer side). Particular attention should be given to detailing the junctions of the different styles and heights of boundary treatment to avoid inadvertently creating a step or ladder feature.
- 3.3.3 Visitor cycle parking. All short-stay cycle parking should be located where it does not obstruct circulation but is well overlooked from the adjacent building(s) and by passing pedestrians, and specifically covered by a monitored CCTV system.
- 3.3.4 Protection of retail premises. Ground floor glazed elevations to the retail premises should be protected from ram-raid type attacks by creative use of hard landscape features in the adjacent public realm, or installation of anti-ram bollards / re-enforced stall risers.
- 3.3.5 The development should take into account the security of visitors and staff approaching and leaving the buildings, particularly at quiet times and late at night. The areas outside the premises should be well-illuminated without creating areas of shadow or pooling. A monitored CCTV system covering all elevations of the premises should be included.
- 3.3.6 Car Parking Provision. Levels of vehicle crime in the area around the site are above the average for Greater Manchester, and any provision of vehicle parking for staff and visitors should not put their security at risk. Any arrangements made for off-site parking should utilise nearby car parks which are accredited with the “Park Mark” safer parking award (see www.parkmark.co.uk for details).
- 3.3.7 It is essential that all of the physical security measures listed in section 4 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 users.

4 Physical Security

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

4.1 Doors

- External doors must be compliant with and certified to BS PAS 24, STS02, or LPS 1175 SR2.
- Sliding or revolving 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.
- Garage or sectional overhead doors must be tested and certified to LPS 1175 SR2. If circumstances could prevent this, please consult with Design for Security.
- 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.
- All individual office levels or suites should be fitted with self-closing access-controlled solid-core doors (minimum 44mm thick), operated by staff swipe cards / fobs or by intercoms linked to individual receptions and any rooms within office suites should be capable of being deadlocked when unoccupied. The doors into the emergency escape cores at each level should be fitted with

electromagnetic locks, connected to the fire alarm, so that people at one level cannot access other levels. Once an emergency escape core is accessed, the only means of egress should be at ground floor level.

4.2 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.

4.3 Glazing

- Glazing to a height of 2400mm (or if otherwise accessible) must incorporate at least one pane of glass rated as P4A under EN 356. The remaining pane in a double glazed unit may be toughened glass. It is recommended that glazing to elevations adjoining public areas or evacuation routes should also be laminated.
- 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.

Roller shutters and grilles

- 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
- Security ratings higher than those listed above may be required dependant on:
 - type of risk,
 - level of crime risk,
 - location of building *or*
 - security level of the door or window to be protected.

4.4 Curtain Walling

Glazed curtain walling and window walls

- Secured by Design recognises four distinct types of glazed wall systems. These are:
 - Large glazed units connected by 'spider clamp' system.
 - Glazed units directly retained within a framing system (usually aluminium)
 - Framed windows installed within a separate framing system.
 - Framed windows connected to other framed windows to create a window wall.
- 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.
- Glazed curtain walling must be installed using a secure glazing retention system. The method of retaining glass must include one or more of the following:
 - Security glazing tape
 - Dedicated security sealant or gasket
 - A secure mechanical fixing system (Evidence will be required to prove the system is secure. This may be achieved by utilising the specific glazing retention test within PAS 24:2012 or by indicative test on the retention system to LPS 1175: Issue 7, SR1 or STS 202: Issue 3, BR1)

-
- Framed windows (3 and 4 above) used within the construction of a window wall must be certified to one of the following requirements:
 - BS PAS 24:2016
 - STS 204 Issue 3: 2012
 - LPS 1175 Issue 7:2010 Security Rating 1

4.5 Alarms

- A monitored alarm system should be installed to cover all buildings 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.

4.6 Access Controls

- Access control systems should be operable by swipe card or fob, and not numeric key pads. The following areas / doors should operate on access control:
 - Offices - The side entrance doors to lobbies (out-of-hours and if reception is not staffed).
 - Offices - Access to the lifts and stair cores from reception lobbies.
 - Offices - Doors to each individually let office suites / floors.
 - Cycle store
 - Shower / changing rooms
 - Gates to service yard
 - Plant / service / storage areas including loading bays

4.7 Boundaries

- Secure boundaries should be formed of walls / railings (with no mid-rails that could aid climbing) with a minimum height of 2.1m. Care should be taken to ensure that any boundaries formed by a combination of walls and railings should have railing panels that are fixed flush with the outer skin of the brickwork below, leaving no steps / gaps that would provide a climbing aid.
- The site frontage should be demarcated by low boundaries such as planting and/or railings to an approximate height of 1000mm.
- Any low boundaries that adjoin high boundaries should have transition panels/sections to prevent the low boundary being used as a climbing aid over the higher.

4.8 Landscaping

- 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).

4.9 Lighting

- Internal lighting should be operated by detection devices which will automatically switch lights on with movement activity in each room.
- External lighting must be provided to pedestrian routes within the site in accordance with BS 5489.

- Lighting to service yard / parking areas 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.

4.10 CCTV

- Any CCTV system that may be used within this proposal will require certain specifications and intelligent placement of cameras to complement 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 should include: [Entrances to buildings](#), [entrance lobbies](#), [lift lobbies](#), [external faces of the building](#), [cycle store entrances](#), [service yard](#).

4.11 Fit Out of Retail / Commercial Units

- Design for Security understands that the designers and client may not always know who will be occupying their buildings once complete, and therefore the end-user's requirements. Typical components which are subject to fit-out are:
 - Internal access control
 - Internal doors in to premises
 - Alarm systems
 - ATMs
 - Cash offices
 - External Seating

- The above features can be critical to a secure environment, and we would urge the client to provide would-be tenants with the contact details for Design for Security, who will provide advice on internal security matters so as not to undermine the security of the building shell.

4.12 Other

- Consideration should be given to use of alternatives to lead in construction and concealment / securing of cabling.
- Expenses of blank wall at accessible levels should be faced in a material that is resistant to graffiti, or have a resistant coating applied at the outset (for suitable products see www.securedbydesign.com).
- Metal theft from buildings has been a significant issue in the area. Consideration should be given to use of alternatives to lead in construction of the buildings, and concealment / securing of cabling.

5 Management & Maintenance

- 5.1.1 The designer must ensure that this report is included within the BIM management model so that all parties are aware of the requirements for construction and management.
- 5.1.2 A comprehensive security regime for the management of the development 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 and residents should understand and accept the need for security measures and it should be made easy for people to raise concerns or report observations.
- 5.1.3 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 maintenance plan should be drawn up to address issues such as:
- Litter and graffiti removal to ensure that the site remains in good repair.
 - Regular inspection, service and repair to communal security features (lighting, signage, access controls, CCTV, alarms, fencing & gates)
 - Trimming and pruning to shrubs and trees to ensure that sight lines are maintained and coverage of lighting and CCTV is not impaired.
- 5.1.4 Ensure that the site management is for which the site was designed remains in place, such as 24 hour concierge / security patrols.
- 5.1.5 Information regarding security features (such as specifications of windows / doors and systems performance) should be conveyed to the ultimate owners or managers of the site to ensure that any future replacements continue to provide the same level of security and maintain any security accreditation for the development.

6 Construction

- 6.1.1 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.
- 6.1.2 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).

7 Useful References

7.1 Secured by Design (SBD)

- 7.1.1 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/>

Appendix

A Contact register

Date	Contact With	Summary of Contact
01/10/2019	Deloitte	CIS Instruction received
17/10/2019	Deloitte	Commission confirmed / Fee Agreed
06/11/2019	Deloitte / Sheppard Robson	Meeting with agent & architect
07/11/2019	Sheppard Robson	Additional documents received
15/11/2019	Bruntwood Science Limited	Receipt of payment
20/11/2019	N/A	Site Visit
21/11/2019	Deloitte	CIS version A issued

B Associated Documents

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

Drawing No.	Drawing Title	Date	Rev
6312-SRA-XX-XX-DR-A-00100	Existing Site Plan	19/09/19	P01
185-LYR-XX-ZZ-SWG-L-1001	General Arrangement	01/11/19	3
6312-SRA-XX-00-DR-A-20800	GA Ground Floor Plan	04/11/19	-
6312-SRA-XX-01-DR-A-20801	GA First Floor Plan	04/11/19	-
6312-SRA-XX-02-DR-A-20802	GA Second Floor Plan	04/11/19	-
6312-SRA-XX-03-DR-A-20803	GA Third Floor Plan	04/11/19	-
6312-SRA-XX-04-DR-A-20804	GA Fourth Floor Plan	04/11/19	-
6312-SRA-XX-05-DR-A-20805	GA Fifth Floor Plan	04/11/19	-
6312-SRA-XX-06-DR-A-20806	GA Sixth Floor Plan	04/11/19	-
6312-SRA-XX-07-DR-A-20807	GA Roof Level Plan	04/11/19	-
6312-SRA-XX-R2-DR-A-20808	GA Roof Plan	04/11/19	-
6312-SRA-XX-XX-DR-A-20820	GA North Elevation	04/11/19	-
6312-SRA-XX-XX-DR-A-20821	GA East Elevation	04/11/19	-
6312-SRA-XX-XX-DR-A-20822	GA South Elevation	04/11/19	-
6312-SRA-XX-XX-DR-A-20823	GA West Elevation	04/11/19	-

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		

D Glossary

Burglary Resistance Standards

BS PAS 23-1, 1999

General performance requirements for door / window assemblies.

A performance standard for door-sets and windows, which certifies that a particular door-set 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 door-sets 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 door-sets 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 door-sets, 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