



CRIME IMPACT STATEMENT

ARGOSY WAY, MANCHESTER

3 no. TERRACES, COMPRISING OF 13 no. B8 WAREHOUSE UNITS
(TOTTALLING 13,317sqm.)

Greater Manchester Police

designforsecurity

FOR: Avison Young

VERSION B: 09/11/2022

REFERENCE: 2021/0529/CIS/02

Argosy Way, Manchester

URN: 2021/0529/CIS/02

EXECUTIVE SUMMARY

Security additions/improvements required

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:

- It is preferable for the whole site (i.e. including all side/rear facades of the buildings) to be securely enclosed and gated to prevent unauthorised access outside of normal working hours. At the very least, the parking areas/service yards serving each of the units (including the narrow space between Units 2d & 3a) should be enclosed and gated outside of normal working hours - preventing unauthorised access on foot/unauthorised vehicles from getting close to the frontage of the units and the car parks from being mis-used when activity levels are likely to be lower.

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

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.



Bradley Hart MTCP

Design for Security Consultant

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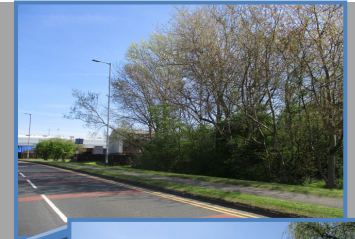
1 Visual Audit

The site is bounded by Avro Way to the south-west, Runger Lane to the north-west, York Drive to the north-east and Viscount Drive to the south-east, just to the east of Junction 6 of the M56. It sits within a primarily commercial/industrial area immediately adjacent to Manchester Airport.

The site itself is currently occupied by Buildings 304, 305 & 311 – including a two storey office building at the junction of Avro Way and Viscount Drive and terraces of commercial/warehouse units along the north-eastern boundary of the site, with entrances and parking areas along their frontages (fronting onto Argosy Drive) and loading bays doors onto a communal service yard area to their rear (off York Drive). Such large, publicly accessible and communal service yards can often be vulnerable to theft and leave the adjacent units vulnerable to unauthorised access, as shutter doors are often left insecure while loading/unloading is taking place and offenders can anonymously access them without being noticed/challenged.

The south-western portion of the site is occupied by a large surface car park, with barriered entrance/exit points off Argosy Drive (which were held open at the time the site visit was undertaken). There are also areas of undulating grassland and mature trees/vegetation along the Avro Way/Runger Lane frontages of the site, which provide screening to the site but also impede surveillance opportunities and do currently impede surveillance opportunities off/from the site.

The site is surrounded by similar business/warehouse units that are linked with the immediately adjacent airport site. To the north-east are large cargo services hangers – beyond which is the airport apron. To the west (on the opposite side of Runger Lane) are 3 no. airport hotels and a large surface car park.



2 Crime Statistics & Analysis

All data below is based on crimes recorded between 1st March 2021 to 28th February 2022.

2.1 Crime Summary

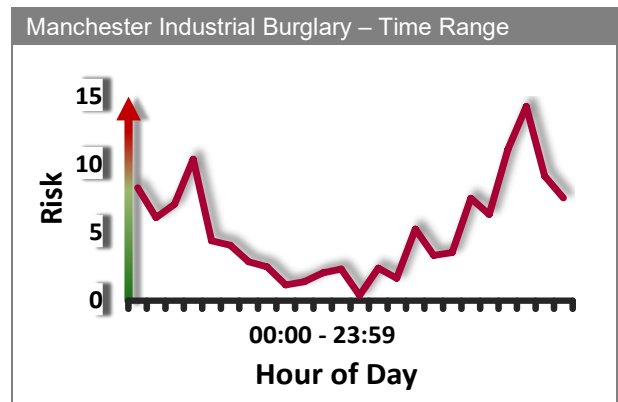
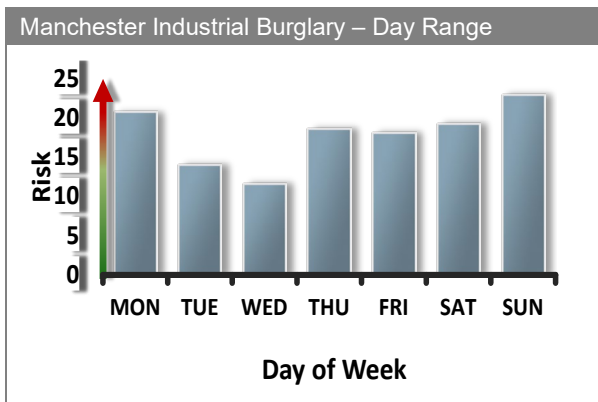
Figure 1: Recorded Crime within 500m of Site

Domestic Burglary	Non-Domestic Burglary	Criminal Damage	Less Serious Wounding	Theft	Robbery	Serious Wounding	Theft from Motor Vehicle	Theft of Motor Vehicle	Bicycle Theft
<5	<5	5	15	14	<5	<5	<5	<5	<5

- 2.1.1 The general volume of crime within the local area is low. However, the study area does include road infrastructure, large areas of open space, the airport apron and commercial/industrial areas – all of which lower the density of development within the locale, meaning they typically attract fewer crime and disorder incidents. The most prevalent types of crime have been less serious wounding, theft and criminal damage, which have occurred primarily at the businesses surrounding the site and the hotels to the west.
- 2.1.2 As this Crime Impact Statement relates to proposed warehouse units with ancillary offices, more detailed analysis below will look at use-specific burglary and theft.

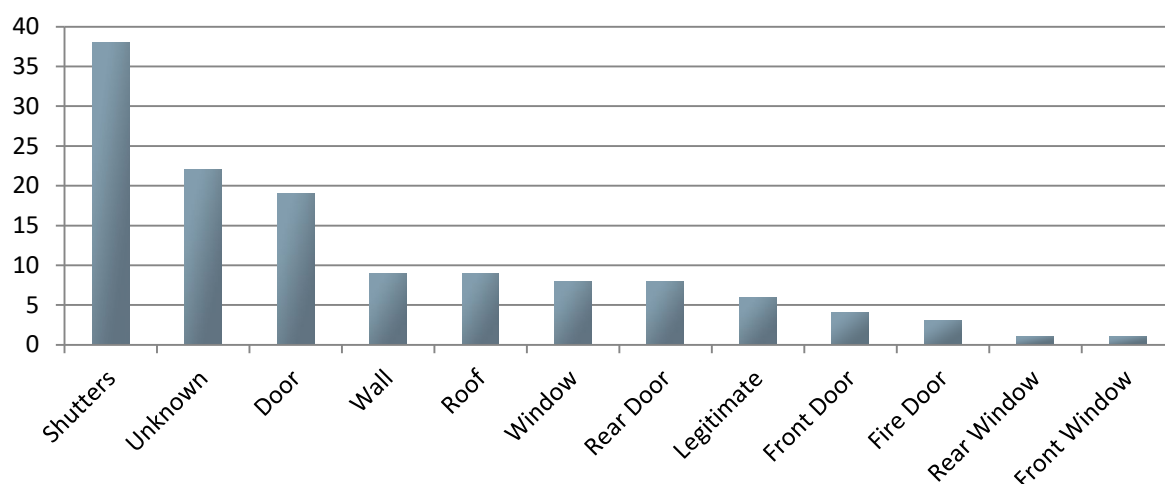
2.2 Non-Domestic Burglary (Manchester Industrial): Risk Analysis

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



- 2.2.1 **Day Range:** During the week, the risk of burglary at Manchester industrial premises peaks on Sunday/Monday.
- 2.2.2 **Time Range:** During the day, the risk peaks late at night and during the early hours of the morning. Offenders often target such commercial premises at these times when it is dark, industrial areas/streets are typically quiet, units are usually closed or operate with fewer staff and offenders perceive a lower risk of being observed or detected.

Manchester Industrial Burglary – Point of Entry

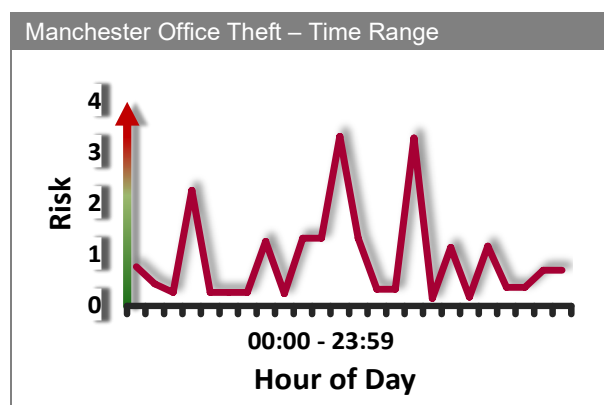
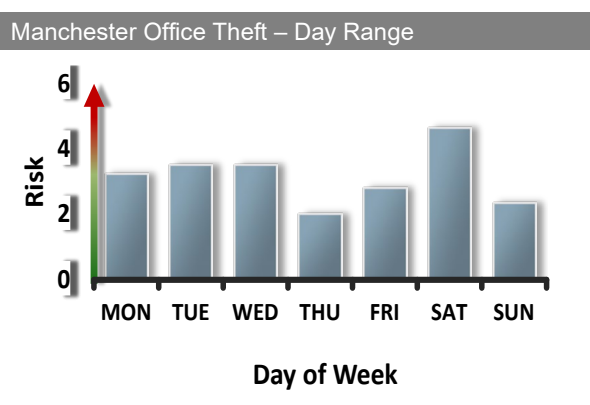


2.2.3 **Point of Entry:** At Manchester industrial premises, the following entry points and MOs have been utilised most frequently:

- Forcing open secure shutters using bodily pressure and implements (particularly metal bars and vehicles) in order to gain access.
- In a number of cases, the point of entry was 'unknown'. This is likely to have been where offenders have posed as legitimate customers, visitors or employees before gaining access to back-of-house/staff areas and stealing property unnoticed.
- Doors have been forced open using tools/implements or when they have been left insecure by members of staff.
- Glazing within doors and windows has been smashed to gain entry.
- Offenders have penetrated through walls and roofs to gain unauthorised access.

2.3 Theft (Manchester Industrial): Risk Analysis

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

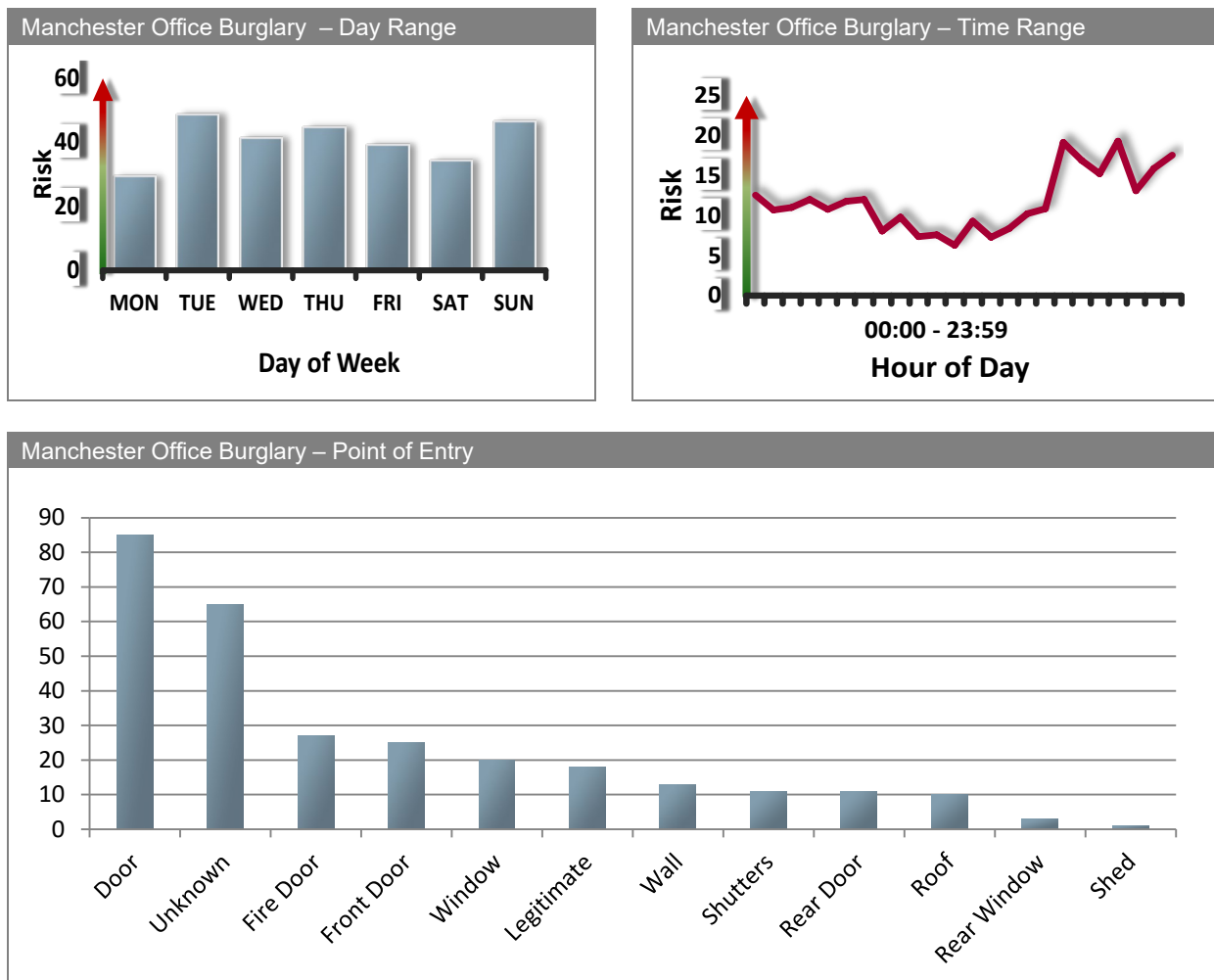


2.3.1 **Day Range:** During the week, the risk of theft from industrial units in Manchester peaks on Saturday.

2.3.2 **Time Range:** During the day, the risk peaks during the late morning/afternoon. There are two common occurrences of theft – the theft of personal property within buildings (e.g. cash, bags, wallets/purses etc.) and the theft of tools, materials and plant stolen from service yards.

2.4 Non-Domestic Burglary (Manchester Offices): Risk Analysis

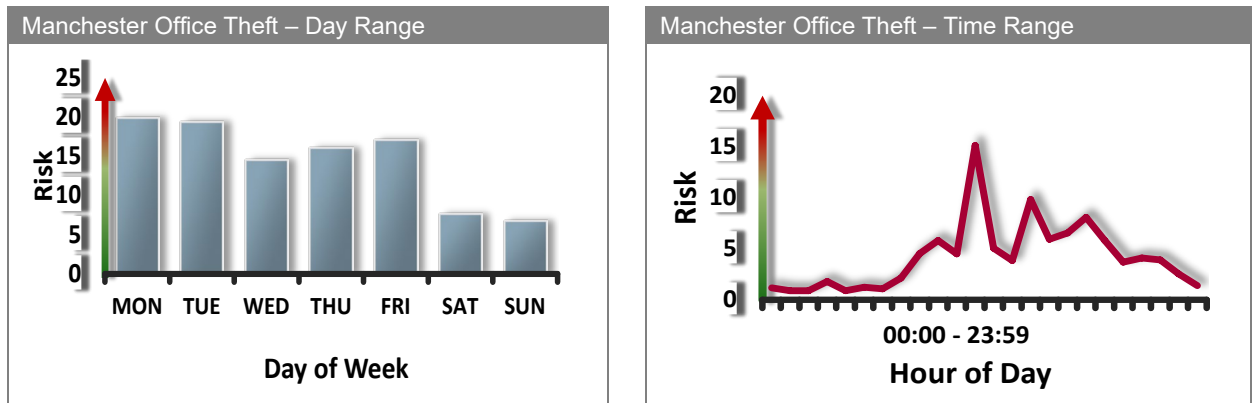
The data below relates to non-domestic burglary offences within/against offices, recorded in the Manchester area 2018-2019.



- 2.4.1 **Day Range:** During the week, the risk of burglary at office premises in Manchester is greatest on Tuesday, Thursday and Sunday.
- 2.4.2 **Time Range:** During the day, the risk of burglary at Manchester office premises rises into the evening/late at night. 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.
- 2.4.3 **Point of Entry:** The majority of burglaries at offices in Manchester have been committed through doors. Burglaries against office buildings in this area do not appear to be opportunistic, with offenders often bringing tools with them that can be used to force open doors and cut locks. Offenders have also smashed glazed panels in doors and windows to gain entry. A large proportion of burglaries have been committed through 'unknown' and 'legitimate' 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.

2.5 Theft (Manchester Offices): Risk Analysis

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



- 2.5.1 **Day Range:** During the week, the risk of theft at Manchester offices is greatest on Monday and Tuesday and is generally lower over the weekend (when many are shut).
- 2.5.2 **Time Range:** 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.

2.6 General Risk Factors

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

- Burglary
- Robbery to business
- Theft of personal belongings at work
- Criminal damage to property and vehicles
- Unauthorised access to buildings/private space
- Arson
- Cycle theft
- Employee theft
- Theft of/from parked vehicles
- Theft and criminal damage during the construction period

2.7 Common Local/Use Specific M.O.s (Modus Operandi)

2.7.1 Having looked at the crime data for the site/surrounding area and the proposed land use, the most frequent M.O's (modus operandi) used by offenders when targeting Manchester industrial and offices premises are listed below, along with suggested measures to reduce the risk of them being utilised at the proposed development:

- **Manchester Industrial:** Forcing open secure shutters using bodily pressure and implements (particularly metal bars and vehicles) in order to gain access.

Possible Solution - Roller shutters can appear secure in that they are difficult to penetrate, however physical security products are only as strong as their weakest component. A security-certified shutter (see Sections 4.1/4.2) has an independently proven level of resistance, and ensures that all aspects of the shutter (locks, rails, laths etc.) have been scrutinised by professionals. If external shutters are used, the shutter boxes and guides should be built into the fabric of the building to deter tampering/attack. Avoid locating shutters in concealed areas where a concerted attack from an offender is unlikely to be witnessed. Ensure that parked vehicles and stored materials do not obscure sight lines.

- **Manchester Industrial & Offices:** In a number of cases, the point of entry was 'unknown'. This is likely to have been where offenders have posed as legitimate customers, visitors or employees before gaining access to back-of-house/staff areas and stealing property unnoticed.

Possible Solution – There should be robust access control systems in place to ensure that callers to units are vetted and/or met and escorted before being allowed access into them (see Section 4.1/4.5). All individual rooms/areas should be capable of being secured when unoccupied and there should be secure areas for staff to store their belongings while at work. All staff should understand and accept the need for security measures and should be trained to be vigilant and to report any suspicious behaviour.

- **Manchester Industrial & Offices:** Doors have been forced open using tools/implements or when they have been left insecure by members of staff.

Possible Solution - Although the location of doors should be considered (ideally placed where they can be readily observed, so that potential criminals would be more easily detected), it is inevitable that some will be located where they will benefit from lower levels of natural surveillance. 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. Good use of perimeter boundaries, lighting and CCTV (see Sections 4.6, 4.8 & 4.9) can also deter criminals by preventing access to vulnerable areas and increasing the chances of them being seen by security personnel or passers-by.

- **Manchester Industrial & Offices:** Glazing within doors and windows has been smashed to gain entry.

Possible Solution – All ground floor/accessible glazing (including in and around doors) should include a laminated pane (see Section 4.3), which forms a much more robust barrier against shattering and penetration. The strength of the laminated glass should be relative to the strength of the door or window system in which it is fitted. Where possible, the size of any glazed elements within/directly adjacent to doors should be reduced and set well away from locking points. Windows that are particularly vulnerable should be secured with security-certified shutters out-of-hours (see Section 4.2).

- **Manchester Industrial & Offices:** Offenders have penetrated through walls and roofs to gain unauthorised access.

Possible Solution - Ideally, single storey building elements should be avoided. If they are absolutely necessary, care should be taken in their design to ensure that roof areas or upper floor windows are not accessible, for example, with the use of high-level/overhanging eaves, high balustrades etc. There should be no features of the building or any nearby hard/soft landscaping features that would facilitate climbing. Any 'accessible' skylights should incorporate at least one pane of laminated glazing and should be secured with internally fixed grilles/bars to prevent unauthorised access. The construction of the roof itself and all external walls should also be robust enough to withstand penetration (see Section 4.3).

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- **Manchester Industrial:** Theft of externally stored materials, tools and plant equipment

Possible Solution - The integrity of the boundary treatments should be evaluated and regularly checked for defects. Inappropriately parked vehicles/trailers and other externally stored items can obscure the spread of lighting and CCTV coverage, creating potential areas of intense shadowing and blind spots. It is recommended that this is considered in the external arrangement, and 'no store/park' areas specifically identified to avoid inadvertently blocking surveillance. Storage/parking areas close to boundaries should also be avoided as they may mask any damage to perimeter fencing (see Section 4.11).

3 Layout Appraisal

3.1 Proposed Development

- 3.1.1 The proposal is to redevelop the site in phases to provide 3 no. terraces of B8 warehouse units (totalling 13 no. units), with associated parking, serving and landscaping.
- 3.1.2 Terrace 1 (including 6 no. units) will be located along the south-western boundary of the site and Terraces 2 & 3 (including 4 & 3 no. units respectively) will be located along the north-eastern boundary. The units will front towards a central access road (Argosy Drive, accessed off Viscount Drive) serving hard surface parking areas and service areas in front of each unit. Each unit will feature ground floor entrance reception areas, large warehouse spaces (served by level access/dock level shutter doors) and open plan offices and staff facilities at first floor level.

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 development will provide additional activity and natural surveillance/overlooking to the area when the units are operational.
- 3.2.2 The footprint of the buildings is simple, with no recesses that could provide cover for covert criminal activity and external façades that should provide little opportunity to scale the structures.
- 3.2.3 The proposed car parking/servicing areas are to be located directly in front of the units and will be overlooked, to some degree, from within the units themselves.
- 3.2.4 All terraces will front towards the access road and each other, maximising surveillance opportunities.
- 3.2.5 The aviation-related nature of many of the surrounding commercial units is likely to mean that some will operate on a 24/7 basis – increasing the levels of activity and surveillance in the area at all times of the day and night (and making offenders more wary of being observed/detected).
- 3.2.6 The proposed development provides the opportunity to include security features built into the design/construction of the scheme. Security measures carefully incorporated into the design/specification of the development can ensure the building is reasonably secure, without visibly announcing that the design was concerned about crime.

3.3 Points for Further Consideration

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 The site is bounded by the publicly accessible routes of Avro Way, Runger Lane, York Drive and Viscount Drive – meaning all elevations of the buildings could be accessible to offenders on foot and in vehicles. It is highly recommended that the whole site, including all unit facades and all parking/servicing areas, are enclosed within a 2400mm high robust and secure perimeter fenceline, with an access-controlled vehicular gate off Viscount Drive to prevent unauthorised access outside of normal working hours. This would provide an additional layer of security to the building shells – particularly where side/rear doors that benefit from more limited levels of overlooking/surveillance could be vulnerable to attack unseen (particularly at night). If this is not achievable, at least the parking areas/service yards serving the units should be securely enclosed and gated (with fencelines running between Units 3c & 1h, between Units 1a & 2a and enclosing the narrow space between Units 2d & 3a) to allow them to be secured outside of normal working hours – preventing unauthorised access on foot/unauthorised vehicles from getting close to the frontages of the units and the car parks from being mis-used when activity levels are likely to be lower (see Section 4.6 for more information). However, this option would leave the side/rear facades of the units (including any doors) vulnerable to attack by offenders on foot/in vehicles – please see Sections 4.1 & 4.3 for information relating to secure doors and the building fabric. Care must be taken to ensure that any existing vegetation to be retained along the Avro Way and Runger Lane frontages of the site does not inadvertently create hidden areas from which offenders could attack the side/rear of the units unseen (see Section 4.10).

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- 3.3.2 The control of access into and around the units themselves is also paramount to their security. There should be a reception desk within each entrance lobby (ideally staffed at all times when the unit is operational), which should have full surveillance of everyone entering/leaving the premises. All visitors should report to reception for vetting by staff before gaining access to the rest of the unit. The main entrance doors should be capable of being controlled remotely by reception if required (or by office staff if the reception is not staffed at any point) to prevent unauthorised access. All individual offices, plant areas or rooms housing sensitive/desirable items should be capable of being secured when unoccupied (see Sections 4.1/4.5). Loading bay doors/shutters should not be left insecure and unattended at any time, which would allow offenders to circumnavigate access-controlled entrances and gain access to units without being noticed.
- 3.3.3 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 users.

4 Physical Security

In addition to the layout issues highlighted within Section 3, the following checklist forms the physical security requirements for the scheme to achieve Secured by Design accreditation if required.

4.1 Doors

- ☐ All external doors (single and double leaf) must be compliant with and certified to BS PAS 24, STS 202, or LPS 1175 SR2. It is crucial that the door ironmongery to any escape-only doors is permitted under the security certification of the product. All escape-only doors should be of steel construction, alarmed (audible upon opening) and designed without visible external ironmongery.
- ☐ Access through the main entrance of each unit should be capable of being controlled remotely by reception/office staff, to ensure any visitors are vetted or are greeted/escorted before being allowed access into the unit (see Section 4.5 for more information).
- ☐ Any sectional loading bay doors must be tested and certified to LPS 1175 SR2. If circumstances could prevent this, please consult with Design for Security.
- ☐ Internal doors/frames to any offices, meeting rooms, back-of-house plant/service/stores etc. within the units should be robust/solid-core (minimum 44mm thick) and capable of being secured when unoccupied. Staff should be able to store their belongings in a secure area while at work.

4.2 Windows & Shutters

- ☐ All windows, where possible, should be certificated to BS PAS 24. All other window designs/dimensions should take account of the requirements of the above standards, as certified products can carry dimensional restrictions. Any curtain walling panels should include laminated glazing (see below) and should be securely fixed.
- ☐ Any opening lights (escape requirements permitting) must be lockable and have fixed/lockable opening restrictors (not releasable from the outside) limited to 100mm.
- ☐ Any shutters should be certified to LPS 1175 SR2 (or SR1 if perforated laths are required) and installed in accordance with manufacturer's instructions. Shutters should either be provided internally or, if they are to be externally mounted, shutter boxes and guides built into the fabric of the building (where they would be less visually intrusive and less vulnerable to damage).

4.3 Glazing & Building Fabric

- ☐ All glazing should incorporate an inner pane with a 1.5mm PVB interlayer (e.g. 7.5mm laminated glass), or a glass rated as P4A under EN 356. The remaining outer pane in a double glazed unit may be toughened glass.
- ☐ There should be a block work wall or material of similar strength (e.g. welded-steel mesh or expamet mesh) behind any areas of cladding to the building, to a minimum height of 2000mm from external ground level, to ensure that the building fabric itself is not vulnerable to attack. Internal walls between the units themselves should be similarly robust to prevent unauthorised access from one unit into another.

4.4 Alarms

- ☐ A monitored alarm system should be installed to each unit, 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.

4.5 Access Controls

- ☐ Access control systems should be operable by swipe card or fob, and not numeric key pads (as codes can be easily observed/shared and are rarely changed). The following doors/gates should operate on access control:
 - The vehicular gate/s and any pedestrian gates at the entrance to the site should be controlled on access and egress via staff key-fob/proximity reader (or via an audio/visual access-control system linked to each unit if required) outside of normal working hours (e.g. 6pm-7am).
 - The main entrance doors to each unit (particularly if there is no staffed reception desk during operational hours).
 - Any internal doors providing access to obvious high risk areas (e.g. server rooms, storage areas, staff changing facilities/lockers etc.)
- ☐ The electric locking system to be used throughout the site/units should be fully auditable (i.e. allowing the retention of data, such as who accessed where and when), to allow for a better investigation into any incidents. Staff cards/fobs should be capable of being easily and quickly activated/disabled to ensure that mis-use is prevented. Staff should only be allowed access to areas required for their work and keys/passes should only be carried if required for duties and should be accounted for at all times.

4.6 Boundaries

- ☐ Ideally, the site perimeter (including the side/rear facades of all of the buildings) should be securely enclosed by 2400mm high rigid-panel, welded-wire mesh fencing (ideally 358 gauge, with small apertures to deter scaling and cutting) with anti-tamper fixings to secure the panels to posts (please see <https://www.securedbydesign.com/member-companies/accredited-product-search> for a list of Police approved perimeter security suppliers) and gates. If this is not achievable, at the least parking/service areas to the front of the units should be enclosed/secured (including the narrow space between Units 2d & 3a).
- ☐ A 2400mm high automatic sliding vehicular gate is preferred to the site entrance, but if double gates are used they should overlap when closed and should not be capable of being forced open. The gate/s should be operated on access and egress by staff key fob/proximity reader (or via an audio/video access control system linked to each unit if required) outside of normal working hours (e.g. 6pm-7am). A manual gate securing such a large site with multiple users is unlikely to be utilised effectively. Any pedestrian gates should be self-closing/locking and controlled by staff key-fob/proximity reader.
- ☐ Care should be taken to ensure that any level changes do not inadvertently facilitate climbing or leave large gaps underneath the panels/gates. There should be no centrally located horizontal bars to aid climbing and the gates should be located away from other climbing aids, such as low walls, street lights, trees etc. Exposed hinges and large sliding bolt apertures/locking points to any gates should be avoided, or fitted with shrouding/protective plates (see opposite) to avoid the creation of footholds. The gap at the bottom of any gates should be small enough to stop anyone crawling through. If panic mechanisms are required on the inner face of any pedestrian gates for escape purposes, they should not be capable of being reached/operated from the external face of the fencelines/gates.
- ☐ Care should also be taken to ensure there are no trees or any other hard/soft landscaping features (such as lighting columns, street furniture etc.) immediately adjacent and on the publicly accessible side of any secure boundaries that could be used as a climbing aid to scale the fencing. Any such features should be pruned or removed where possible. The site boundary treatment should also be positioned on hard standing ground. Where this is not possible, the ground conditions should be reviewed as extra measures may be required to create a secure boundary.
- ☐ It is highly recommended that condition of any fencing/gates are regularly inspected for signs of damage/attack and are repaired immediately if any incidents are experienced. Where exposed, the perimeter fencing to the service yards may need to be protected on the inner side from potential damage from large vehicles, using crash barriers or rails, to deflect any encroachment and maintain a secure boundary.



4.7 Parking Areas

- ☐ Lighting to all parking areas should be in accordance with BS 5489, with an average lux level 20 and a uniformity level of no less than 25%.
- ☐ The surface of the parking and servicing areas should be even concrete or similar. The integrity of the surface treatment should be maintained to ensure that there is no loose material that can be used to commit crime.
- ☐ Bays and directional markings should be clearly demarcated to avoid confusion or conflict, with pedestrian routes/directions and servicing areas clearly signed.

4.8 Lighting

- ☐ External lighting must be provided to the access road, parking areas and service yards within the site, in accordance with BS 5489.
- ☐ Fittings should produce 'white' light, as opposed to yellow/orange light. LED, 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.
- ☐ Lighting fixtures must not be positioned to provide climbing aids over boundary treatments. Electrical and architectural layouts should be developed together to avoid this.

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.

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: the entrance to the site, all external facades of the buildings, all service/parking areas and the entrance lobbies and loading bays doors of each of the units.

4.10 Landscaping

- ☐ In vulnerable locations such as around site/building street frontages and entrances, parking/servicing areas and footpaths, low planting should not exceed 1000mm in height and tree canopies should fall no lower than 2000mm from the ground. This is in order to allow unimpeded surveillance and eliminate hiding places that could be exploited by offenders. 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.

4.11 Other

- ☐ There should be no features of the buildings (such as projecting window cills/cladding features, exposed rainwater down pipes etc.) or nearby hard/soft landscaping features (such as nearby boundaries, trees, lighting columns, handrails etc.) that may provide climbing aids up to high level windows or onto roof areas.
- ☐ The position of ancillary structures, parked trailers and any external storage areas should be carefully considered in relation to the following:
 - Their potential to block sight lines and create hiding places.
 - Their potential to obscure CCTV and lighting.
 - Their potential to create climbing aids that would assist unauthorised exit/entry over boundary fencing.
 - Their potential to obscure damage to fencelines.

Any proposed lighting columns, street furniture, tree/shrub planting etc. within or external to the site perimeter should also be reviewed in relation to the above issues.

- ☐ Any proposed cycle stores should be located where they can be overlooked from routinely occupied rooms. They should include 'Sheffield' style racks, or similar, that allow staff to lock both wheels and the crossbar to a stand, rather than just the crossbar (wheel slots and butterfly racks are not suitable). For further information, please refer to our cycle storage guidance document: <http://designforsecurity.org/all-downloads/>.
- ☐ Any external bin/recycling stores should be a secure, lockable and fire resistant enclosure. A strategy should be defined to ensure waste collection can take place whilst retaining a secure development.
- ☐ Any lockers within staff changing facilities must be robust/secure and all users should be encouraged to use them and not leave belongings unattended in changing areas.
- ☐ The phasing of building works and bringing into use parts of the scheme while others are undeveloped or under construction can significantly affect security. Uncompleted access roads and parking/service areas should be secured until such time as they are completed and surveillance opportunities are maximised from occupied buildings. Care should also be taken to ensure that any hoardings erected around development sites do not create secluded passageways and blind spots, or become targets for criminal damage. It is recommended that while construction work progresses and occupancy levels of completed properties are low, an on-site security presence is maintained.

5 Management & Maintenance

- 5.1.1 A comprehensive security regime for the management of the units must be prepared by the future management company overseeing the site and remain in place for its day-to-day running. 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 units, 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;
 - Repairing damaged external and internal fittings, particularly security features e.g. access control systems, alarm systems, CCTV cameras, lighting etc;
 - Cleaning and prompt removal of graffiti, litter etc; and
 - Refuse collection arrangements.
- 5.1.2 All high value equipment within communal areas (e.g. computers, televisions, tools etc.) should be properly marked and securely fixed or stored to deter damage/theft. An accurate record should be maintained which logs all such items.
- 5.1.3 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.
- 5.1.4 Adequate signage should be deployed in all areas not only to direct people throughout the units, but also to deter unauthorised access to staff-only/back-of-house areas.

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/>

A Contact Register

Date	Contact With	Summary of Contact
14 th to 16 th March 2022	Avison Young	Email correspondence re: 3 no. sites at Manchester Airport
16 th March 2022	Avison Young	Receipt of CIS instruction form & site plan for Argosy Drive
17 th March 2022	Avison Young	Fee quotation issued
24 th March 2022	Avison Young	Confirmation of instruction/fee & receipt of updated site plan
5 th April 2022	Avison Young	Receipt of updated plans
25 th April 2022	Avison Young	Email correspondence re: timescales, invoice & payment
10 th May 2022	Avison Young	Email correspondence re: report completion & payment
12 th May 2022	GMP Finance Dept	Confirmation of payment
12 th May 2022	Avison Young	Version A of CIS report issued
8 th November 2022	Quartz	Revised plans received & request to amended CIS report

B Associated Documents

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

Drawing No.	Drawing Title	Date	Rev
020687-RPS-SI-XX-DR-A-9038	Existing Site Plans (SUPERSEDED)	07/02/22	P01
020687-RPS-SI-XX-DR-A-9039	Masterplan Option 13 (SUPERSEDED)	11/02/22	P01
020687-RPS-SI-XX-DR-A-9022	Masterplan Option 10 (PARTIALLY SUPERSEDED)	17/01/22	P01
020687-RPS-SI-XX-DR-A-0110	Proposed Block Plan (PARTIALLY SUPERSEDED)	15/02/22	P01
020687-RPS-SI-XX-DR-A-5001	Site Layout GA	25/10/22	P02
020687-RPS-SI-XX-DR-A-0121	Proposed Elevations Unit 1	12/04/22	P01
020687-RPS-SI-XX-DR-A-0122	Proposed Building Plan Unit 1 (SUPERSEDED)	12/04/22	P01
020687-RPS-MB-00-DR-A-5020	Ground Floor GA – Overall Layout	25/10/22	P02
020687-RPS-SI-XX-DR-A-0131	Proposed Elevations Unit 2	12/04/22	P01
020687-RPS-SI-XX-DR-A-0132	Proposed Building Plan Unit 2	12/04/22	P01

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	Terrace 1 amended from 8 no. units to 6 no. units	09/11/2022

D Glossary

Burglary Resistance Standards

BS PAS 24

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.

BS EN 1627 (Security Ratings RC1 to RC6)

Windows, doors, shutters - Burglar resistance Requirements and classification

The classification system used in BS EN 1627 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.

STS 201

Enhanced security requirements for doorsets and door assemblies for dwellings to satisfy the requirements of PAS 24

STS 202

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 LPS 1175.

BS EN 356 (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