



CRIME IMPACT STATEMENT

VARLEY STREET SEND SCHOOL, SAWLEY ROAD, MILES PLATTING
SEND SECONDARY SCHOOL

Greater Manchester Police

designforsecurity

FOR: ISG Ltd.

VERSION A: 08/03/2023

REFERENCE: 2023/0051/CIS/01

Varley Street SEND School, Sawley Road, Miles Platting

URN: 2023/0051/CIS/01

EXECUTIVE SUMMARY

Minor security additions/improvements required

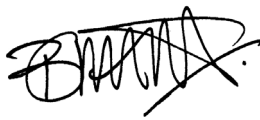
This development has been assessed against the principles of 'Crime Prevention Through Environmental Design' (CPTED), in order to reduce the opportunities for crime and the fear of crime.

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:

- The whole school site should be securely enclosed out-of-hours, with secondary fencelines/gates to secure external teaching/play/habitat spaces and parking areas to the sides and rear of the building during operational hours. Given the limited levels of direct overlooking and passive surveillance in the area, consideration should be given to a particularly robust specification of fencing to prevent damage and scaling.
- Control of access into and around the site/building during operational hours, as well as if the sports hall/facilities are to be available for use by the public outside of school hours.
- Prevention of unauthorised access to the roof of the single-storey building.

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

Contents

1	Visual Audit.....	4
2	Crime Statistics & Analysis.....	5
	2.1 Crime Summary	
	2.2 Non-Domestic Burglary (M/cr Educational Facilities): Risk Analysis	
	2.3 Theft (M/cr Educational Facilities): Risk Analysis	
	2.4 Local Vehicle Crime: Risk Analysis	
	2.5 General Risk Factors	
	2.6 Common Local M.O.s (Modus Operandi)	
3	Layout Appraisal.....	9
	3.1 Proposed Development	
	3.2 Positive Aspects of the Proposal	
	3.3 Point for Further Consideration	
4	Physical Security	11
	4.1 External Doors	
	4.2 Windows & Shutters	
	4.3 Glazing & Building Fabric	
	4.4 Alarm	
	4.5 Access Controls & Internal Security	
	4.6 Boundaries	
	4.7 Car Park	
	4.8 Lighting	
	4.9 CCTV	
	4.10 Landscaping	
5	Management & Maintenance	15
6	Construction	15
7	Useful References	15
	7.1 Secured by Design (SBD)	

Appendix

A	Contact Register.....	16
B	Associated Documents.....	16
C	CIS Version History	16
D	Glossary	17

1 Visual Audit

The site is bounded by Sawley Road to the north-west, Nelson Street to the south-west, James Street to the south-east and Vickers Street to the north-east, in the Miles Platting area of north-east Manchester.

The site is currently vacant and is overgrown with scrub vegetation and mature trees, enclosed with chain link and Palisade fencing to the street frontages.

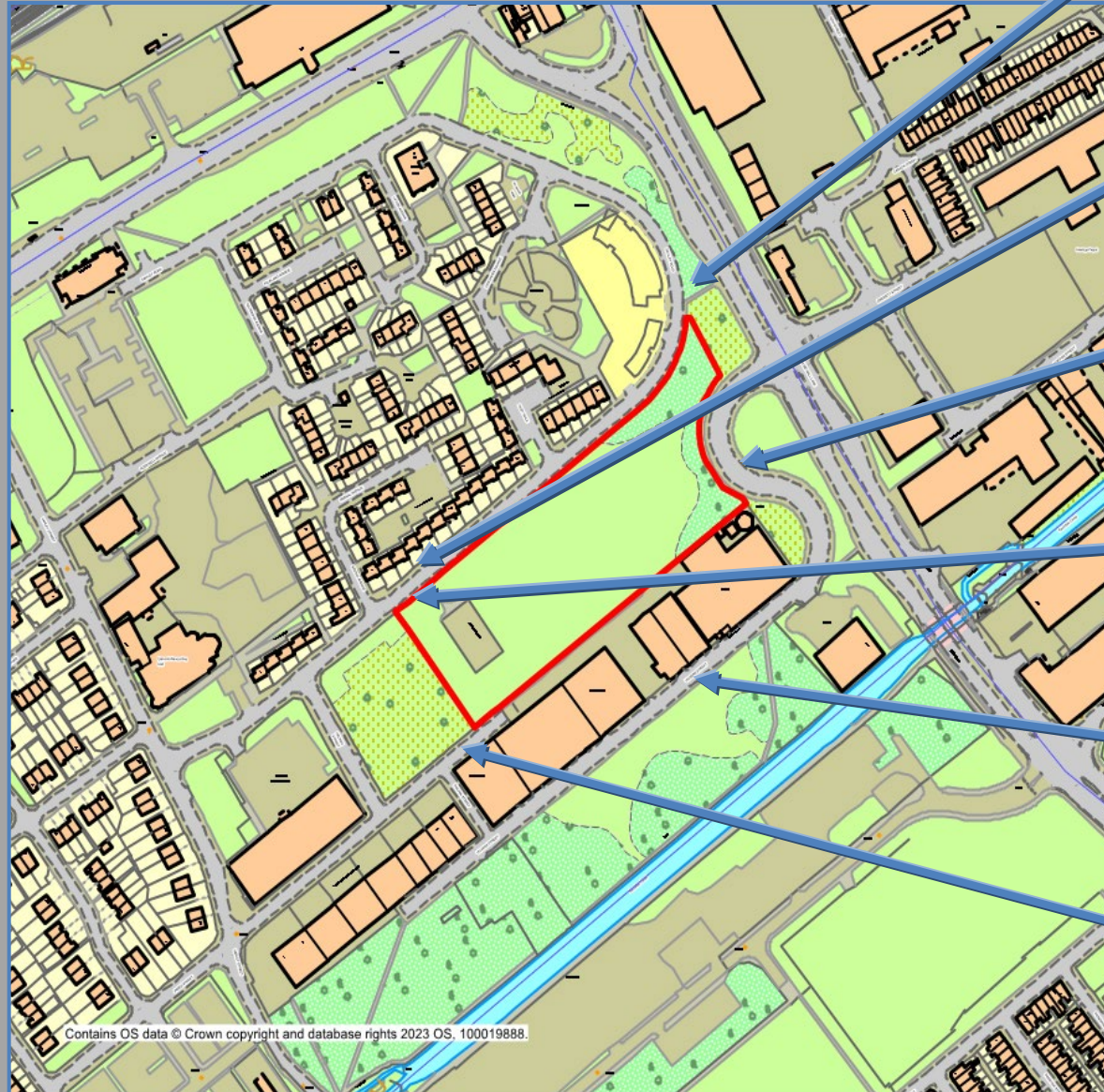
To the immediate west of the site is another vacant plot of overgrown land (enclosed with welded-wire mesh fencing), beyond which is a gated business park occupied by a variety of units.

The land to the south is formed by large industrial buildings with frontages along Vickers Street and James Street – which is partially gated and fitted with an automatic vehicle arm barrier to deter unauthorised access during operational hours. The units themselves are heavily fortified with grilles, shutters, vehicle barriers, barbed wire etc. – indicating that crime and disorder issues are likely to have previously been experienced. Such overt, retro-fitted security measures can be effective, but can also be visually intrusive and can increase the fear of crime.

The surrounding industrial uses are likely to provide limited levels of activity, direct overlooking and passive surveillance over the site and surrounding streets, particularly at night/when they are closed. Hulme Hall Lane (A6010) is a wide, busy route, meaning the eastern end of the site will benefit from more surveillance opportunities.

To the north of the site, on the opposite side of Sawley Road, are mews residential properties backing onto the route (with high walls/fencing along the street frontage) – limiting the direct overlooking they provide over the site.

The residential estate features a Radburn style layout featuring pedestrian routes separated from vehicular movement (often to the rear of dwellings), communal areas of landscaping and communal parking areas remote from the dwellings they serve. This type of layout can result in a lack of definition between public and private space, creating areas which can attract nuisance, anti-social behaviour and criminal damage. The networks of the pedestrian access routes through such estates often make them extremely permeable and also provide easy access/escape routes for criminals to utilise – particularly those which benefit from little/no natural surveillance and are likely to be infrequently used.



2 Crime Statistics & Analysis

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

2.1 Crime Summary

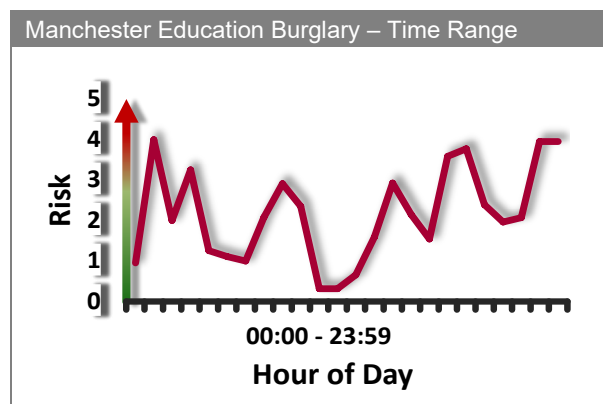
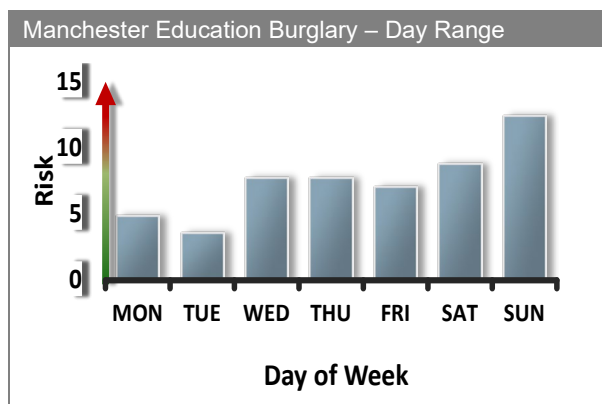
Figure 1: Recorded Crime within 500m of Site

Domestic Burglary	Non-Domestic Burglary	Criminal Damage	Less Serious Wounding	Theft	Robbery	Serious Wounding	Theft from Motor Vehicle	Theft of Motor Vehicle	Bicycle Theft
19	5	38	154	18	7	7	23	11	<5

- 2.1.1 The general volume of recorded crime in the local area is approximately average for Manchester, with the most prevalent types of crime being less serious wounding and, to a lesser extent criminal damage and vehicle crime (see Section 2.4).
- 2.1.2 Recorded less serious wounding offences have occurred throughout the local area, with particular concentrations to the north and north-east (around/off Sawley Road/Oldham Road/Canada Street), to the east and north-east (around/off Oldham Road/Berkshire Road) and to the south of the site (around/off Varley Street/Iron Street). Offences have primarily occurred within residential properties or on streets, particularly verbal and physical assaults (including incidents of domestic violence).
- 2.1.3 As this CIS relates to a proposed school, the more detailed analysis below will focus on use-specific burglary and theft, as well as local vehicle crime.

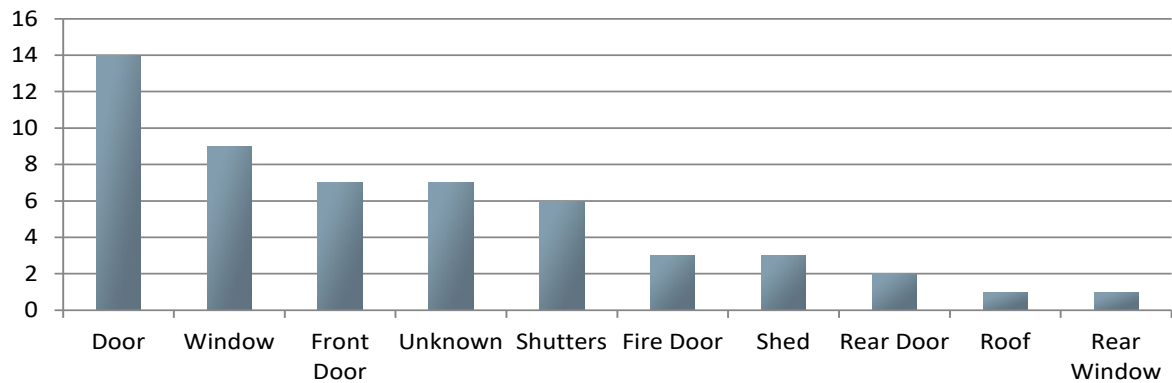
2.2 Non-Domestic Burglary (M/cr Educational Facilities): Risk Analysis

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



- 2.2.1 **Day Range:** During the week, the risk of burglary at Manchester educational premises peaks on Sunday, when many are likely to be closed.
- 2.2.2 **Time Range:** The risk of burglary fluctuates throughout the day, peaking late at night and during the early hours of the morning. The opportunities for burglary often rise in the afternoon (at breaks and at the end of the school day), when large numbers of students are entering/leaving buildings, staff presence is likely to be lower and parents/carers enter school sites – providing anonymity to offenders. Offenders often target educational buildings at night when they are closed, it is dark, streets are typically quieter than during the day and they perceive a lower risk of being detected.

Manchester Education Burglary – Point of Entry



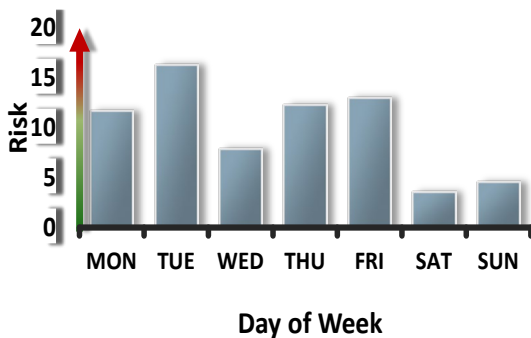
2.2.3 **Point of Entry:** At Manchester educational facilities, the following entry points and MO's have been utilised most frequently by offenders:

- Offenders have forced open doors using bodily pressure and implements/tools, smashed glazed panels within doors or targeted them when left insecure by staff.
- Windows have also been targeted, with offenders prised them open, removing the beading/glazing or smashing the glazing to gain unauthorised access.
- Where the point of entry is unknown, this is likely to have been when offenders have gained access to insecure rooms/areas unnoticed, before targeting school equipment.
- Shutters have been prised open with bodily pressure/implements to gain access to doors/windows behind them.

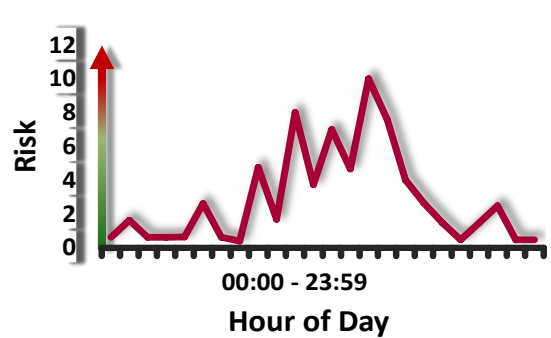
2.3 Theft (M/cr Educational Facilities): Risk Analysis

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

Manchester Educational Theft – Day Range



Manchester Educational Theft – Time Range

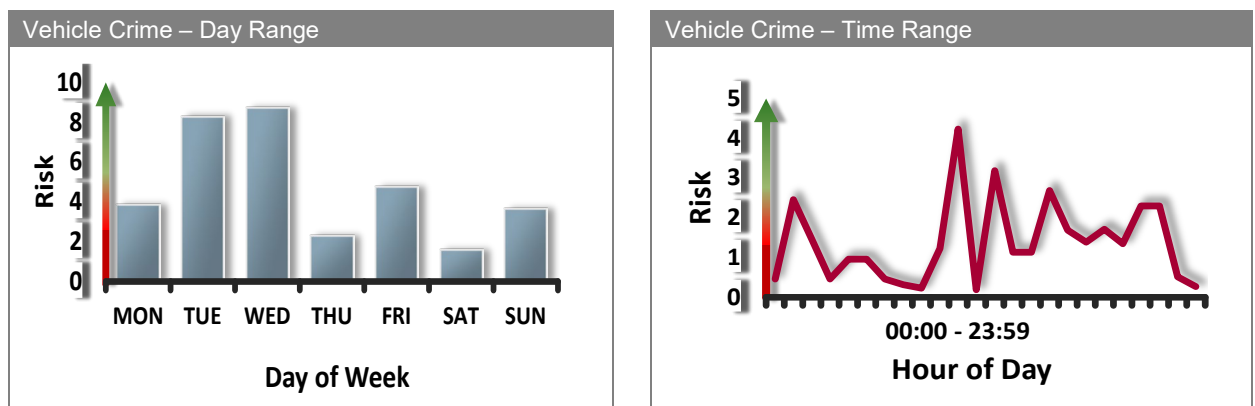


2.3.1 **Day Range:** The risk of theft at educational facilities in Manchester is greatest on Tuesday and is generally lower over the weekend than during the working week. The risk of crime is likely to be low at the weekend, when the majority of schools/colleges are closed or are used for limited periods by organisations/groups.

2.3.2 **Time Range:** The majority of thefts are concentrated during the school day, with offences frequently taking place during breaks, when pupils and teachers leave personal property in unlocked rooms, where they are accessible and vulnerable to theft. Mobile phones, bags and laptops are the most routinely stolen items.

2.4 Local Vehicle Crime: Risk Analysis

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



2.4.1 **Day/Time Range:** During the week, the risk of vehicle crime in the local area peaks on Tuesday and Wednesday. During the day, the risk peaks around midday. Vehicles are often more at risk when parked on street or in open communal parking areas (rather than when parked in-curtilage or in secure parking facilities) – where they are accessible to offenders and can be remote from their owners.

2.4.2 Offenders have smashed glazing to steal items from within vehicles, as well as the vehicles themselves. They have also stolen vehicle registration plates and car parts, as well as caused damage to vehicle bodywork.

2.5 General Risk Factors

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

- Burglary
- Criminal damage to property and vehicles
- Unauthorised access to buildings and non-public areas
- Anti-social behaviour/loitering groups (particularly out-of-hours)
- Internal theft
- Theft of staff/pupil belongings
- Cycle theft
- Bullying
- Staff, pupil and parent safety
- Acts of criminal damage during the construction period

2.6 Common Local M.O.s (Modus Operandi)

2.6.1 Having looked at the use-specific crime data, the most frequent M.O.s used by offenders when targeting Manchester educational premises are listed below, along with suggested measures to reduce the risk of them being utilised at the proposed development:

- **M/cr Educational Facilities:** Offenders have forced open doors using bodily pressure and implements/tools, smashed glazed panels within doors or targeted them when left insecure by staff

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. Good use of perimeter boundaries, lighting and CCTV (see Sections 4.6, 4.8 and 4.9) can also deter criminals by preventing access to vulnerable areas and increasing the chances of them being seen by staff, users or passers-by.

- **M/cr Educational Facilities:** Windows have also been targeted, with offenders prised them open, removing the beading/glazing or smashing the glazing to gain unauthorised access

Possible Solution - All windows should be certified to recognised security standards (see Section 4.2), which are independently proven to reduce the risk of forced entry and thus increase the chances of detection. All ground floor/accessible glazing should also include a laminated pane, which forms a much more robust barrier against shattering and penetration (see Section 4.3). Where possible, the size of any glazed elements within/directly adjacent to doors should be reduced and set well away from locking points. In vulnerable locations, shutters, external bars or perforated protective panels may be necessary to provide extra protection.

- **M/cr Educational Facilities:** Offenders have gained access to insecure rooms/areas unnoticed, before targeting school equipment

Possible Solution – There should be robust access control systems in place to ensure that visitors to the building are vetted and/or met and escorted before being allowed access to all areas. All visitors should report to reception for vetting before gaining further access into the school. Reception staff should be given flexibility over permitting access into the building at different times of the day. Effective access controls within the buildings should assist in restricting entry to vulnerable areas.

- **M/cr Educational Facilities:** Shutters have been forced upwards to gain unauthorised access or to access doors/windows behind them

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 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.

- **M/cr Educational Facilities:** Theft of insecure property belonging to students and staff

Possible Solution - All individual rooms should be capable of being secured when unoccupied and there should be secure areas for staff to store their belongings while at work. Staff-only areas/rooms should not be accessible to students. Students should also be encouraged to keep items of value with them or store them securely in lockers.

3 Layout Appraisal

3.1 Proposed Development

- 3.1.1 The proposal is to erect a new single-storey 150-place Special Educational Needs and Disabilities (SEND) secondary school with associated parking, facilities and landscaping.
- 3.1.2 The proposed school will front towards Sawley Road, with a parent and taxi/minibus drop-off route along the frontage of the building (with an 'in' and 'out' configuration), parking for approx. 68 no. vehicles and 15 no. minibuses to the west of the building, play areas/outdoor teaching spaces to the south of the building (including a hard surface play court) and habitat areas to the east of the building.
- 3.1.3 The building itself will feature a main entrance (with adjacent staff and admin facilities), a separate pupil entrance, a main hall and drama studio with adjacent kitchen and dining facilities, SEND facilities and a library, shared teaching spaces and 2 no. teaching wings - with clusters of classrooms with access to outdoor teaching spaces/play areas.

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 bring a vacant building back into use and provide additional activity, overlooking and surveillance to the area during the school day.
- 3.2.2 The location of the proposed building will benefit from some overlooking/passive surveillance from Sawley Road and Hulme Hall Lane.
- 3.2.3 The proposed school will be located within a secure perimeter fenceline, preventing unauthorised access to external play areas/staff parking areas during the school day and the whole site at night/when the school is closed.
- 3.2.4 The footprint/design of the building has been kept simple, with no deep recesses within the building line, where partially hidden windows/doors could be vulnerable to attack unseen.
- 3.2.5 The proposed staff car park will be capable of being securely gated, with spaces laid out in rows and few obstacles to views across it - protecting the parked vehicles and aiding surveillance opportunities.
- 3.2.6 The location of the main entrance to the site and the building provides a clear and direct route for visitors and for parents/guardians dropping off/collecting their children. There will be a staffed office adjacent to the proposed entrance lobby, providing surveillance over everyone entering/leaving the building.
- 3.2.7 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. 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 Point 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 benefits from limited levels of direct overlooking and passive surveillance. The residential properties on the opposite side of Sawley Road back onto the route/the site itself and the industrial units to the south provide little overlooking (particularly at night). It is therefore essential that the whole perimeter of the site is enclosed within a secure perimeter fenceline, to a minimum height of 2400mm, in order to prevent unauthorised access to the parking areas, the building and the landscape/play areas at night or when the school is closed. Given the limited levels of direct overlooking and passive surveillance around the site, consideration should be given to a particularly robust specification of fencing to prevent damage and scaling. Secondary fencelines/gates should also be incorporated within the site to allow public access to the drop-off route and the main entrance of the school during the day, but prevent unauthorised access to staff parking areas and external pupil teaching/play/habitat areas - ensuring that the main entrance reception cannot be bypassed (see Section 4.6 for more information). Care should be taken to ensure any changes in ground levels do not inadvertently leave gaps underneath fencing panels or aid scaling. Care should also be taken to ensure that any existing adjacent trees do not form a climbing aid over the boundaries - low branches should be pruned or removed where possible to prevent scaling.

Boundary treatment should ideally be positioned on hard standing ground. Where this is not possible, ground conditions should be reviewed as extra measures may be required to create a secure boundary.

- 3.3.2 It is appreciated that the sheer number of pupils arriving/leaving at peak times will mean that it may be impractical for them all to use the main entrance of the building. The proposed pupil entrance should be opened and supervised at peak times in the morning and in the afternoon only, after/before which all visitors, parents/carers, pupils and staff should use the main entrance. The reception/general office adjacent to the main entrance should be staffed at all times when the building is in use, with a high/wide desk allowing staff to have full surveillance of everyone entering and exiting the building. All visitors should report to reception for vetting before gaining further access into the school. The entrance lobby should work as an 'air lock' during the day, with internal doors controlled by reception staff (see Sections 4.1/4.5).
- 3.3.3 Accessible roofs of school buildings have often been exploited by criminals across Greater Manchester to gain unauthorised access, particularly where there are single-storey elements, where eaves are lower or where buildings are publicly accessible out-of-hours – making access easier. The eaves of the single-storey building should be as high as possible, in order to discourage unauthorised access to the roof. The design of the eaves should also discourage climbing e.g. with rounded/overhanging eaves, high balustrades etc. and there should be no other features of the building or nearby hard/soft landscaping features that may provide climbing aids onto the roof. The construction of any 'accessible' roof areas should also be robust enough to withstand penetration (see Section 4.3 for more information). If problems are experienced with offenders gaining access to roof areas, consideration could be given to the installation of anti-climb measures such as Razor Spike (please see www.insight-security.com/razor-spike-anti-climb-spikes for more information) - although it is obviously preferable for the design of the building to deter access without the need for the installation of such overt security measures. Any rooflights or high level windows accessible from single-storey roof areas should be to the same physical security standards as those at ground floor level.
- 3.3.4 The building itself should be capable of being 'zoned', to prevent access to all other areas if a portion of it is to be used outside of normal hours (e.g. use of the sports hall in the evenings/at weekends). If it is intended that the sports hall/facilities are to be available for use by the public outside of school hours, it should not be possible for anyone to gain access to the internal/external sports facilities without reporting to a dedicated staffed reception first. This should also help to ensure that all members of the public have cleared the site before it is locked up. Sports facilities often suffer high levels of theft – particularly of unattended property within changing rooms. Typically, thefts occur when customers leave items in unsecured lockers/changing rooms whilst taking part in activities, returning to find their property missing. To mitigate the risk of theft, secure lockers should be provided in all changing areas for customers to store their possessions whilst taking part in activities. It is also highly recommended that the changing rooms themselves are capable of being secured when they are unoccupied but contain personal belongings of users (see Section 4.5).
- 3.3.5 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

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

4.1 External Doors

- ☐ All external doors (both single and double leaf) must be compliant with and certified to BS PAS 24, STS 202 or LPS 1175 SR2.
- ☐ External escape-only doors (as with external doors in general) should be certified to BS PAS 24, STS 202 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 main entrance to the school should be security-certified to one of the above standards, including a multi-point electronic lock system permitted as part of the certification, capable of being operated remotely by reception staff. The internal doors off the entrance lobby should also be capable of being remotely secured/released by reception staff, to ensure all visitors to the building are vetted before being allowed further access into the school (see Section 4.5 below). The proposed pupil entrance should only be utilised at peak times in the morning and in the afternoon only and should be supervised/controlled by teaching or office staff at all times when operational.

4.2 Windows & Shutters

- ☐ All windows and rooflights should be compliant with and certified to BS PAS 24 where possible. 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.
- ☐ All ground floor/potentially accessible opening lights (escape requirements permitting) should be lockable, and have fixed/lockable opening restrictors (not releasable from the outside) limited to 100mm.
- ☐ If any shutters are to be installed, they should be tested and certified to LPS 1175 SR2 (or SR1 if perforated laths are required) and installed in accordance with manufacturer's instructions. Ideally, shutter-boxes and guides should be built into the fabric of the building – where they would be less vulnerable to attack and less visually intrusive.

4.3 Glazing & Building Fabric

- ☐ All glazing (to doors, windows and rooflights) 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.
- ☐ There should be a block work wall (or material of similar strength e.g. welded-steel mesh) behind any cladding to the building, to a minimum height of 2000mm from ground level, to ensure that the fabric of the building itself is not vulnerable to attack.
- ☐ There should be no features of the building (such as louvered features that could be used as a ladder, projecting window cills/reveals or brickwork features, canopies below the level of the single storey eaves, 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 onto the roof. Any louvres to the building should be robustly constructed and fixed, to ensure they cannot be easily removed, and designed to ensure that they cannot be used as a climbing aid to reach roof areas. Security-certified louvred doorsets are also available if required to plant areas (search for certified products at <https://www.securedbydesign.com/member-companies/accredited-product-search>).
- ☐ The construction of any potentially accessible areas of roof should also be carefully considered to prevent criminal intrusion. Certificated lightweight roof systems are available to LPS 1175 SR1 or STS 202 BR1. Alternatively, expanded metal or welded mesh should be incorporated between the skins of double-skinned roof coverings or within the roof space. Any rooflights/high-level windows should be to the same specification as those at ground floor level and should incorporate laminated glazing/polycarbonate and ideally internally fixed security bars/grilles.

- ☐ Ideally, any sheltered areas/canopies should be designed-out or reduced as much as possible to avoid the creation of hiding places or congregation points that can often become a focal point for crime and anti-social behaviour. If not, they should be secured with shutters out-of-hours.

4.4 Alarm

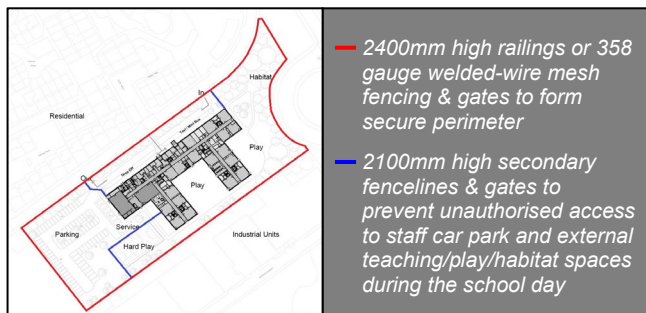
- ☐ A monitored alarm system should be installed to cover the proposed school building, linked to contacts on all external doors and PIR detectors to all accessible windows with windows, with a signal terminating at a recognized Alarm Receiving Centre (ARC) or security control room.

4.5 Access Controls & Internal Security

- ☐ Access control systems should be operable by staff key-cards/fobs and not numeric key pads (which can be easily observed/shared and are rarely changed). The following doors should operate on access control:
 - The vehicular gate/s to the car park, with no automatic egress (i.e. access control both 'in' and 'out'), and any pedestrian gates/entrances off the car park for staff use (operated by staff key-fob and by an intercom linked to the staff office);
 - The main external entrance doorset and the internal doorset off the entrance lobby (controlled remotely by office staff);
 - The pupil entrance if it is to be controlled remotely by office staff at peak times, rather than being supervised in person;
 - Any other external doors for the use of staff-only;
 - Any internal doors needed to provide internal zoning and restrict access to parts of the building not in use (e.g. during evenings/weekends); and
 - Any doors to obvious risk areas (e.g. staff-only areas, IT suites, kitchens, service/plant areas etc.).
- ☐ All internal doors/frames to classrooms, offices, meeting rooms, staff rooms, changing rooms, stores and plant rooms should be solid core (minimum 44mm thick), with 3 hinges and a deadlock, so that the rooms can be secured when unoccupied.
- ☐ Any cash office should have solid masonry walls, no adjacent false/suspended ceilings and a certified doorset to BS PAS 24 or LPS 1175 SR2.
- ☐ Electric locking systems should be fully auditable (i.e. allows the retention of data, such as who accessed where and when), to allow for a better investigation into any incidents. Key-cards/fobs should be capable of being easily and quickly activated/disabled to ensure that mis-use is prevented.

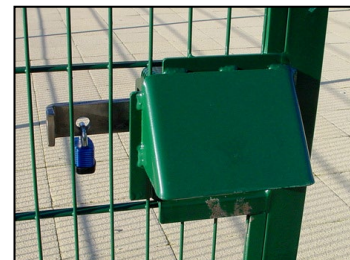
4.6 Boundaries

- ☐ The whole school site should be enclosed with railings or rigid-panel, 358 gauge welded-wire mesh fencing and pedestrian/vehicular gates to a minimum height of 2400mm, which has small apertures to deter scaling and cutting (please see <https://www.securedbydesign.com/member-companies/accredited-product-search> for a list of Police approved perimeter security suppliers).
- ☐ During the school day, the vehicular and pedestrian gates providing access to/egress from the drop-off lay-by and the main/pupil entrances to the building frontage could remain open. Secondary fencelines and gates (2100mm high) should then be incorporated within the site to prevent unauthorised access to the staff car park and the external teaching/play/habitat areas during operational hours (see opposite for illustration).



- ☐ The staff car park should be secured with 2100mm high vehicular gate/s (ideally a sliding gate), to prevent unauthorised access. The vehicular gate/s should be operated using a staff key fob/proximity reader system with no automatic egress (i.e. access control both 'in' and 'out'), so that criminals cannot gain access to the area, attack the vehicles or the building and escape. If double vehicular gates are used, they should overlap when closed and should not be capable of being forced open. There should also be an audio or visual intercom system linked to the main entrance office, to allow staff to remotely allow access if/when required (e.g. for visitors, deliveries, refuse collections etc.).

- ☐ Care should be taken to ensure that panels are fixed securely to the posts (preventing tampering/removal) and 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 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.



- ☐ The site boundary treatments should ideally be positioned on hard standing ground. Where this is not possible, ground conditions should be reviewed as extra measures may be required to create a secure boundary. Care should also be taken to ensure there are no trees or any other hard/soft landscaping features 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.
- ☐ 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.

4.7 Car Park

- ☐ The car park should be secured with an automatic vehicular sliding gates as described above, which should not be on an induction loop i.e. should not open automatically (see Sections 4.5/4.6).
- ☐ The proposed car park should be lit to an adequate and uniform level (in accordance with BS 5489 – see below), with no areas of pooling or shadowing.
- ☐ Bays and directional markings should be clearly demarcated, with pedestrian routes/directions clearly signed.
- ☐ Cycle parking areas should be located where they can be overlooked from routinely occupied rooms and should include 'Sheffield' stands, which both wheels and the crossbar can be locked to rather than just the crossbar (wheel slots and butterfly racks are not suitable). For further information, please refer to our cycle storage guidance document: [Downloads – Design For Security](#).
- ☐ Any bin/recycling stores should be secure, lockable and fire resistant enclosures. A strategy should be defined to ensure waste collection can take place whilst retaining a secure development.

4.8 Lighting

- ☐ Lighting to the car park should be in accordance with BS 5489, and display an average lux level of 20 with a uniformity level of no less than 25%.
- ☐ 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. 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.
- ☐ 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 main entrance gate/door and the entrance lobby, all external facades of the building and all vehicle/cycle parking areas.*

4.10 Landscaping

- ☐ In vulnerable locations, such as around entrances, parking 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 people to see their surroundings better 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.
- ☐ There should be no hard landscaping that could inadvertently create seating or loitering spots (except within secure designated or otherwise-controlled areas). These features can encourage anti-social behaviour and raise the fear of crime.

5 Management & Maintenance

- 5.1.1 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 should understand and accept the need for security measures and it should be made easy for people to raise concerns or report observations.
- 5.1.2 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/graffiti removal
 - Repair to communal areas (such as access controls, lighting, signage, CCTV etc.)
 - A weekly physical check of all perimeter fencing to check for evidence of breaches
 - Trimming and pruning to shrubs and trees
- 5.1.3 All high value equipment (e.g. computers, projectors, flat screen monitors/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.
- 5.1.4 Adequate signage should be deployed in all areas not only to direct people throughout the building, but also to deter unauthorised access to staff-only/back-of-house areas.

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
1 st February 2023	JMA Architects	Receipt of CIS instruction form & plans
2 nd February 2023	JMA Architects	Quote issued
2 nd February 2023	JMA Architects	Confirmation of instruction/fee
3 rd to 7 th February 2023	ISG Ltd.	Email correspondence re: invoice details
14 th to 16 th February 2023	ISG Ltd.	Email correspondence re: BREEAM
2 nd to 3 rd March 2023	ISG Ltd.	Email correspondence re: timescales & payment
8 th March 2023	JMA Architects & ISG Ltd.	Email set re: report completion/payment
??	GMP Finance Dept	Confirmation of payment

B Associated Documents

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

Drawing No.	Drawing Title	Date	Rev
VAR-JMA-01-00-DR-A-90001-S1-P04	Location Plan	01/02/23	P04
VAR-JMA-01-00-DR-A-900002-S1-P05	Site Plan	01/02/23	P05
VAR-JMA-01-00-DR-A-900002-S2-P12	Proposed Ground Floor Plan	01/02/23	P12
VAR-JMA-01-RF-DR-A-27001-S2-P03	Proposed Roof Plan	01/02/23	P03
VAR-JMA-01-ZZ-DR-A-00201-S1-P07	Proposed Building Elevations	01/02/23	P07
VAR-JMA-XX-XX-RP-A-0001-P05	Draft D&A Statement	27/01/23	P05

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 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