makinarchitecture
URBAN ARCHITECTS & DESIGNERS

NBS Specification

for external envelope conservation work at

Adelphi Square
Piccadilly Manchester



To be read in conjunction with drawings

Client:
Eastern Green Ltd

Ref: PJB4878/25209

Date: 17 April 2008

ACOUSTIC CONSULTANTS

Heloise Wood
Makin Architecture
3rd Floor
Amazon house
Brazil Street
Manchester
M1 3PJ

Dear Heloise

Adelphi Square, Dale Street - Manchester - Planning noise issues associated with proposed mechanical plant

Thank you for forwarding me the mechanical scheme proposals for the above development. I have reviewed the information and carried out an assessment of the noise from the plant in order to comply with the Local Planning Authority's requirements. This is as set out below.

Manchester City Council environmental health department have advised that the standard they normally apply for such developments is:-

0. NSE4 (previously NSE1) Before the development commences a scheme for acoustically insulating the proposed residential accommodation against noise from traffic shall be submitted to and approved in writing by the City Council as local planning authority.

0. NSE6 The acoustic report will also include impact of any ancillary plant/equipment operating in connection with the development and what, if any, additional treatment is needed to prevent noise nuisance to residents of the building, especially any plant running during the night.

The scheme for insulating against traffic noise has already been addressed in our technical letter PJB3948 of 10 January, 2006. In that document, the following comments were made about plant noise.

Ventilation Noise Associated With The Commercial Component Of The Development

The commercial and retail units at ground and basement level of the development do not, as yet, have end users contracted to occupy the premises. Therefore, it is not possible to state with any certainty what activities will occur within these units and what their servicing requirements will be. Even so, it is probable that at least some of the units will require mechanical ventilation or cooling, entailing external mechanical equipment which will generate noise. Although it is not possible to put specific limits on the equipment at this stage, it is possible to specify the environmental noise limit that this equipment should achieve at nearby residences to prevent undue disturbance for residents.

Analysis of the measurement data shown in [PJB3948] indicates that a typical daytime (working hours) background noise level in this vicinity is La90 55dB. During the evening, typical background La90 levels are 51-52dB until approximately midnight and at night (until 3.00am) a

HEAD OFFICE: t. +44 (0)1767 318871 f. +44 (0)1767 317704
27-29 High Street
Biggleswade
Beds. SG18 0JE
United Kingdom

WIGAN OFFICE: t. +44 (0)1257 473242 f. +44 (0)1257 473243
The Standish Centre
Cross Street, Standis
Wigan. WN6 0HQ
United Kingdom

WEB:
www.spectrumacoustic.com
Spectrum Acoustic Consultants Ltd
Registered in England No. 2378475

typical background La90 is 48dB.

Provided the noise levels from all mechanical plant associated with this development are kept at or below the background levels outside residences in the proximity of this equipment, residents will be protected from disturbance from this source. Where the noise contains any disturbing characteristics such as tones or impacts, this should be reduced to at least 5 dB below these background levels to ensure a suitable standard of amenity is provided. A summary of recommended plant noise limits is shown in the following table.

Time period	Plant noise limit for 'anonymous' plant noise	Plant noise limits for noise having characteristics that attract attention
08:00-18:00	55	50
18:00-0:00	51	46
0:00-03:00	48	43

Table 1: Noise limit at nearby residences for sum of all development-related plant operating together (Laeq dB)

These noise targets are still considered appropriate for this development.

The mechanical scheme proposals have now been established to a greater extent, therefore, a more complete assessment of plant noise can be carried out.

Mechanical Scheme Proposals

Condensers: The office buildings are to be provided with natural cross flow ventilation and comfort cooling / heating via ceiling mounted cassette units. These have corresponding external condenser / heat pump units. There are to be 12 of these units on the roof of Office Unit M (fronting Back Piccadilly) and 4 units on the flat roof above Office Unit H, adjacent to residential flat 14. These units are inverter controlled which means that the speed of the fan on the unit is continuously variable, depending upon the heat load on the system. It is typically only at the hottest part of the day during summer that the units would operate at their maximum rated capacity. Noise from fans is highly dependent upon fan speed and a halving of fan speed results in a reduction of fan noise of at least 10 dB. At this stage, final selections of the condensers have not been made, however a typical unit would be a Mitsubishi PUHY-EP750. The manufacturer's noise level data for this unit is shown in Attachment 1.

Clearly, the maximum rated capacity noise level would not occur in the general course of events. Even so, this noise level has been used in the calculation of the plant noise levels to provide a robust assessment.

Car Park Ventilation: Fresh air enters the car park via a vertical metal grille located in the courtyard of the development. A centrally located, ceiling-mounted induction fan assists cross flow within the car park to extract fans located in the southern corner of the car park. The extract fan consists of 2 axial flow fans which discharge through a wall louvre in the Back Piccadilly façade of Office Unit M.

The car park equipment supplier provides the following information about the operation of this equipment.

Basic System Operation

Fresh air will be drawn into the car park via the natural opening to the garden area ramp and moved continually by use of a low profile induction fan towards the main extract point at the

opposite end of the car park where contaminated air will be drawn out / extracted by the two main fans mounted in parallel. Throughout all sequences of operation the induction fan will operate and guide fumes to the main extract point at a performance level comparable to the system optimum requirement.

The 2 main extract fans intended are each inverter driven and our control panel would be set so that under idle conditions one fan would run at low speed just providing a slight dilution effect to the car park on the basis of day to day ventilation. Should the facility close at night or at any other time then the system can via a time clock in our control panel be effectively put to sleep for the period of inactivity.

The performance of a single fan at low speed would be the equivalent of 3 ac/h within the car park.

Should at anytime the CO pollution level be recorded at 30ppm a single fan would operate at low speed maintaining 3 ac/h within the car park. To assist with the dilution effect the induction fans would also operate at low speed

Upon registering a CO pollution level of 50ppm the 2nd extract fan would operate at low speed providing 6 ac/h within the car park. The induction fans would continue to operate at low speed assisting with the dilution effect.

Under a fire condition both main fans would switch to high speed providing 12 ac/h well above the basic minimal requirements of current building regulations B & F.

The manufacturer's noise data for the fans is:

Induction Fan 69-51 dBA@3m/45°

Main Extract Fans 74 dBA @ 3m High Speed, 44dBA @ 3 m low speed

Again, the fan speed for these units is inverter controlled. The highest speed is rated for smoke spill during a fire (i.e. an emergency situation) and fans would not operate at this noise level except, for example, during a fire. The supplier's information is that, under highest CO pollution levels, the two extract fans and induction fans would operate at half their rated volumes. This would result in the following noise levels:

Induction Fans – Sound Power Level (Lw) 76 dBA
Main Extract Fans – Sound Power Level (Lw) 81 dBA per unit

WC Extracts: WC's serving offices have small wall-mounted extract fans at various locations around the façade of the buildings. A typical sound power level of 63dBA per unit for these is assumed, based on previous experience of similar devices.

Roof level extracts for Potential A3 units E and F: Commercial units E & F at ground floor level in Dale Street do not, as yet, have end users contracted to occupy the premises. Therefore, it is not possible to state with any certainty what activities will occur within these units and what their servicing requirements will be. However, a typical requirement of an A3 use is kitchen / customer area air extraction, which is most often discharged at roof level. Therefore, a Sound Power Level of 78 dBA per unit is assumed at roof level of the development for these requirements. It would then be for the end user to size their equipment to ensure that this noise level was not exceeded.

Emergency Generator: This unit is to be located in a ground floor plant room in office Unit M facing Back Piccadilly. The room will have a louvred wall to provide cooling / combustion air. The mechanical consultants have advised that the noise level of this unit would be 88 dBA. As

HEAD OFFICE:
27-29 High Street
Biggleswade
Beds. SG18 0JE
United Kingdom
t. +44 (0)1767 318871
f. +44 (0)1767 317704

WIGAN OFFICE:
The Standish Centre
Cross Street, Standis
Wigan. WN6 0HQ
United Kingdom
t. +44 (0)1257 473242
f. +44 (0)1257 473243

WEB:
www.spectrumacoustic.com
Spectrum Acoustic Consultants Ltd
Registered in England No. 2378475

the name suggests, this unit would only operate under emergency situations or for monthly daytime operational checks. Therefore, it is not appropriate to apply the same operational noise target for this equipment as for continuously operating equipment. It is usual to allow a 10 dB uplift in allowable noise levels in these circumstances.

Nearest Noise Sensitive Locations

As the mechanical plant associated with the commercial developments is distributed at various positions around the site, it is likely that residential locations will be affected by individual plant items to different extents. It is therefore necessary to carry out noise predictions from the proposed plant at several residential locations. These are:-

0. Outside bedroom of Flat 14, third floor of development
0. Outside bedroom of Flat 11, fourth floor of development
0. 4th floor window of 77-82 Piccadilly (corner of Back Piccadilly & China Lane)

Location A is subject to the noise of 4 condensers in close proximity; Location B overlooks the roof of Office Unit M and 12 condensers; Location C has line of sight view to the car park extract louvre and emergency generator louvre, as well as the 12 condensers on the roof of Office Unit M.

These are as shown in Attachment 2 and are considered the most affected locations.

Noise Assessment and Mitigation Measures

Predictions of plant noise have been carried out taking into account the 'at-source' noise level of the plant (expressed as a sound pressure level at 1m), the distance between the individual plant items & the receptor location and any screening of intervening buildings. Other acoustic effects such as directivity have been ignored, so that the calculated noise levels will usually be an overestimate of likely noise levels. The individual contributions from each of the sources have then been added logarithmically to determine the total sound pressure level of all plant operating together under normal maximum load conditions.

Noise breakout from the car park ventilation inlet grilles has been determined by calculating the reverberant sound pressure level inside the car park (due to fan noise) and calculating the noise breaking out of the grille, expressed an 'at-source' noise level. A similar exercise has been carried out for the generator room.

Initial calculations of the proposed mechanical scheme indicated that the there would be excesses of the indicated noise targets. Therefore a number of noise control recommendations are made in order to comply with the noise targets. These are:

0. An absorptively lined noise barrier between the condensers on the 2nd floor flat roof of office Unit H and Flat Unit 14.
0. An absorptively lined noise barrier between the condensers on the floor flat roof of office Unit M and Flat Unit 14.

These screens should interrupt the line of sight between the plant and the residence. A typical specification of the screens is as follows:

0. Double skin construction of minimum 50mm overall thickness with an outer 1.2mm flat galvanised, or 0.9mm profile galvanised or painted steel sheet. Inner skin to be perforated flat or profile sheet or flattened galvanised expanded steel with an overall minimum open area of 25-30%.

0. The infill to be non-hygroscopic and vermin-proof mineral or glass wool of density no less than 45 kg/m3 bagged in a durable polyester film (melinex or similar) to ensure the absorbent medium remains dry.
0. Internal horizontal supports shall be at no greater than 900mm vertical centres to prevent infill settlement.
0. Channel sections shall be fitted to the top and the sides of screens for containment.
0. The base channel/acoustic screen panel interface should be such as to ensure the panel cannot become waterlogged by standing water.
0. Screens should be designed so as not to affect the performance of the mechanical plant that it is shielding. In particular the treatment shall not restrict the free flow of air either for duty or cooling requirements. The free area requirement for plant is for others to specify and achieve.
0. The method of screen bracing and fixing to the building shall be approved by the structural engineer.

In addition, whilst not necessary to comply with *residential* noise targets, a number of additional noise control recommendations are made to prevent excessive noise at street level and outside office windows which have natural ventilation, as well as restricting reverberant noise levels in the car park to reasonable levels. These are:

0. In line silencers on the discharge side of the 2 car park main extract fans to provide 15 dB overall noise reduction
0. In line silencers on the inlet side of the 2 car park main extract fans to provide 10 dB overall noise reduction
0. Acoustic louvres to the emergency generator room to provide 5 dB insertion loss overall

An example of the general plant noise prediction model taking the above measures into account is shown in Attachment 3.

Following the modifications described above, plant noise levels are predicted as below.

Time of Day		A – Outside Flat 14	B – Outside Flat 11	C – Outside 77 Piccadilly
Day	noise level:	55	51	50
	target	55	55	55
	excess	-	-4	-5
Evening level:	noise	48	51	47
	target	51	51	51
	excess	-3	-	-4
Night	noise level:	44	46	43
	target	48	48	48
	excess	-4	-2	-5

Table 2: Predicted noise levels at nearest affected residences (Laeq dB) and comparison with target

Notes:

. Predicted noise levels rely on noise mitigation measures described above being in place
0. Evening noise levels based on a 5 dB reduction of inverter controlled equipment

HEAD OFFICE:
27-29 High Street
Biggleswade
Beds. SG18 0JE
United Kingdom
t. +44 (0)1767 318871
f. +44 (0)1767 317704

WIGAN OFFICE:
The Standish Centre
Cross Street, Standis
Wigan. WN6 0HQ
United Kingdom
t. +44 (0)1257 473242
f. +44 (0)1257 473243

WEB:
www.spectrumacoustic.com
Spectrum Acoustic Consultants Ltd
Registered in England No. 2378475

0. Night noise levels based on inverter controlled equipment not operating
0. Target relates to the situation where the overall noise level at the residence is not tonal. Whilst this is a realistic assumption, clauses should be inserted in the equipment specification to ensure that non-tonal fans are purchased.

The above analysis shows that the predicted noise level of all the new equipment operating together is at or below the background noise level during the daytime, evening and night periods. Accordingly, the proposed scheme is considered to comply with the Local Planning Authority requirements in respect of noise impact for nearby residences.

If you require further information at this stage, please do not hesitate to contact me.

Yours sincerely,

Phill Banks
Principal Consultant

HEAD OFFICE:
27-29 High Street
Biggleswade
Beds. SG18 0JE
United Kingdom

t. +44 (0)1767 318871
f. +44 (0)1767 317704

WIGAN OFFICE:
The Standish Centre
Cross Street, Standis
Wigan. WN6 0HQ
United Kingdom

t. +44 (0)1257 473242
f. +44 (0)1257 473243

WEB:
www.spectrumacoustic.com
Spectrum Acoustic Consultants Ltd
Registered in England No. 2378475

SECURED BY DESIGN (SBD) APPLICATION CHECKLIST

We strongly advise you to contact the local ALO/CPDA to discuss the development before completing this application checklist or submitting a planning application

This checklist contains only some of the component parts of the requirements of SBD New Homes and therefore **MUST** be read in conjunction with the full SBD New Homes document in order to ensure that your application will comply with SBD. The bracketed numbers refer to some of the clauses and sub clauses in the SBD New Homes document

If you are applying for Secured by Design Section 2 Part Compliance as part of an application under the Code for Sustainable Homes please go to section 2 of this checklist

If you are seeking to market your development using the SBD logo on your sales literature please note that you will have to enter into a pre-build agreement with ACPO CPI, the body that manages SBD. Contact the relevant Development Officer, whose details can be found on the SBD website

Please tick the appropriate boxes to indicate compliance, but note that additional or alternative measures, which are subject to the local crime risks, may be required by the ALO/CPDA. These alternative and additional measures will be notified to you in writing. Please also note that unless you are informed otherwise by the ALO/CPDA in writing you will be expected to achieve all of the requirements as outlined in the SBD New Homes document

SECTION 1: THE DEVELOPMENT – LAYOUT & DESIGN (Planning Issues)

☑ The planning application to which this checklist refers demonstrates adherence to the seven attributes of a sustainable community (2.3)

☑ The Design and Access statement submitted with the planning application to which this checklist refers demonstrates an awareness of the crime and disorder issues in the area of the planning application and informs the planning officer of the measures to be taken to mitigate any identified problems (3)

NOTE A meeting with the local ALO/CPDA will help you complete your Design and Access statement

☑ Vehicle and pedestrian routes are visually open, direct, and well used (4.1)

☑ The development is not compromised by excessive permeability caused by the inclusion of too many routes (5)

☑ The development's footpath network has been designed to minimise the opportunity for crime and disorder (6)

☑ Footpath landscaping minimises the opportunity for crime and disorder (7)

☑ Footpath seating, design and location avoids the creation of inappropriate loitering places and opportunities for crime and disorder (8)

©ACPO CPI 050407-4

☑ Appropriate lighting has been provided for footpaths (9) DETAIL TBC

☐ N/A Consideration has been given to the delay of a footpath in a phased development (**10**)

☑ Communal areas have been designed and located in such a way as to allow natural surveillance, prevent unauthorised vehicle access, reduce the opportunity for crime and disorder and not immediately abut residential buildings (11.1)

☑ Adequate mechanisms are in place to maintain communal areas (11.2.2)

☑ Boundaries between private and public space is clearly defined (12.1)

☐ N/A Access paths to the sides of dwellings have been securely gated on or as near to the front building line (12.5)

☐ N/A Side and rear boundary fencing is adequate for the crime risk (12.6)

☐ N/A Sub-divisional fencing between gardens is adequate for the crime risk (12.7)

☑ Dwellings are positioned to face each other (13.1) FLATS FACE EACH OTHER

☐ N/A Gable end walls have been avoided or designed to mitigate crime and disorder problems that they might generate (**14**)

☐ N/A Rear access footpaths have been avoided or gated at the entrance to the footpaths (**15**)

☑ Dwelling identification will be clearly displayed (**16**) DETAIL TBC

☑ Aids to climbing have been avoided (**17**)

☑ Car parking arrangements have been designed to minimise crime opportunity (**18**)

☐ N/A Internal courtyard car parking has been avoided or is protected by a gate, the specifications of which will be agreed with the ALO/CPDA (18.3)

☑ Communal parking areas are to be lit to BS 5489 (18.6)

☑ Underground car parking arrangements include the security measures as outlined in clause **19**.

☑ Planting (soft landscaping) arrangements do not impede natural surveillance and do not create hiding places (**20**)

☑ All street lighting for adopted highways, footpaths, private estate roads and car parks complies with BS 5489. (**21**)

TO BE SPECIFIED AT TENDER STAGE

©ACPO CPI 050407-4

☑ Overall uniformity of street lighting and its colour rendering qualities achieve at least the minimum levels required (21.3 – 21.4) TO BE SPECIFIED

☑ A 'Lux Plan' is or will be supplied to the ALO/CPDA (21.5) TO BE SPECIFIED

☑ Light pollution has been minimised (21.6) TO BE SPECIFIED

SECTION 2: PHYSICAL SECURITY (Building Control & Code for Sustainable Homes Issues)

Front door

☑ All doorsets are successfully tested and certificated to BS PAS 24-1:1999. 'Doors of enhanced security' and PAS 23-1:1999 'General performance requirements for door assemblies' (23.1 – 23.3) TO BE SPECIFIED

☑ Locking systems comply with SBD requirements (23.4 - 23.7) TO BE SPECIFIED

☑ Doorsets will be secured to the fabric of the building in accordance with the manufacturer's installation specifications and will not be recessed by more than 600mm (23.8 – 23.9)

☑ Glazed panels, in or adjacent to doors have been glazed with laminated glass and are either part of the manufacturer's range of certificated doorsets or are certificated to BS 7950: 1997 (23.10 – 23.11) TO BE SPECIFIED.

☑ Door chains or limiters fitted (23.13)

☑ Door viewers or a secure viewing panel fitted (23.14)

☑ Letter plates or boxes comply with sub clause 23.16

Doorset manufacturer's details

Company name and address

TO BE CONFIRMED AT LATER STAGE

_____

Name of UKAS Test House _____

☐ Test Report(s) will be sent to the ALO/CPDA
☐ Test Report(s) have been included with the application

Name of UKAS Certification Authority _____

NOTE If the doors (all types of doors being used in this development) are being sourced from a Secured by Design Member Company (go to www.securedbydesign.com) you do not have to supply test house or certification information unless otherwise requested

Side and back door

☑ All external doorsets not designated as the main access/egress route shall meet the same physical standard as 'Front door' (23.2 – 23.12)

Sliding patio doors

☑ Sliding patio doors will comply with the requirements of sub clauses 25.2 – 25.6

Communal doorsets

☑ Doorsets will comply with the requirements of sub clauses 26.2 – 26.4
DETAIL TO BE CONFIRMED

☑ Locks or locking mechanisms installed within communal doorsets shall incorporate one or more of the requirements described in sub clauses 26.3.1 – 26.3.3 TO BE SPECIFIED

☑ Door viewers or a secure viewing panel will be fitted to the door in accordance with sub clause 26.4

☑ Letter plates/boxes within buildings comprising more than two dwellings will meet with one of the requirements described in sub clauses 26.6.1 – 26.6.3 TO BE SPECIFIED

☑ Access control systems will comply with the measures described in clauses 26.7 and 26.8, which are dependent upon the number of dwellings accessed from a communal doorset TO BE SPECIFIED

Doorset manufacturer's details

Company name and address

TO BE SPECIFIED

Name of UKAS Test House _____

☐ Test Report(s) will be sent to the ALO/CPDA
☐ Test Report(s) have been included with the application

Name of UKAS Certification Authority _____

Flat entrance doors served off a shared corridor or stairway

☑ Ground floor flat entrance doors will meet the requirements of sub clause 27.1 TO BE SPECIFIED

☑ Flat entrance doors above ground floor will meet the requirements of sub clause 27.2 TO BE SPECIFIED

☑ Locks or locking mechanisms installed within doorsets shall also incorporate one or both of the requirements described in sub clauses 27.3.1 and 27.3.2 TO BE SPECIFIED

☑ Door viewers or a secure viewing panel will be fitted to the door in accordance with sub clause 27.4

☑ All glazing in and adjacent to doors will be installed with a fire rated laminated glass (inner pane) securely fixed in accordance with the manufacturer's specifications (27.5)

Doorset manufacturer's details

Company name and address

TO BE SPECIFIED

Name of UKAS Test House _____

☐ Test Report(s) will be sent to the ALO/CPDA
☐ Test Report(s) have been included with the application

Name of UKAS Certification Authority _____

French windows (Double doorsets)

☑ All external doorsets not designated as the main access/egress route shall meet the same physical standard as 'front door' sub clauses 23.2 – 23.12 (28.2)

☑ All glazing in and adjacent to doors shall be laminated to a minimum thickness of 6.4mm and securely fixed in accordance with the manufacturer's specifications (28.3)

Garages

☐ N/A External pedestrian access doors shall meet the same physical, locking and fixing specification, as 'Front Door', sub clauses 23.2 to 23.12. (29.1)

☐ N/A Vehicle access doorsets will be certified to the Loss Prevention Certification Board standard – LPS 1175 security rating 1 (29.2)

☑ Internal doors connecting the garage to the dwelling, shall meet the same physical, locking and fixing specification as 'Front Door', sub clauses 23.2 to 23.12. (29.3) ACCESS TO BASEMENT PARKING

☑ These doors will also comply with BS 476 part 22 (½ Hour Fire Resistance with automatic closing) (29.3)

Windows

☑ All ground floor and easily accessible windows to be installed will have been successfully tested and certificated to BS 7950: 1997 and assessed to the relevant material standard: (30.1 – 30.4)

Standards Tick all relevant boxes

- ☐ BS 7950
- ☑ BS 4873 (Aluminium)
- ☐ BS 7412 (PVC-U)
- ☑ BS 644 (Timber) or the BWF Timber Window Accreditation Scheme (TWAS).
- ☐ BS 6510 (Steel) or the SWA Steel Window Accreditation Scheme (SWAS)
- ☐ Composite – tick relevant material standard boxes above

Style of window Tick all relevant boxes

- ☐ Tilt/turn
- ☐ Casement
- ☐ Vertical slider
- ☐ Fully reversible
- ☐ Fixed light
- ☐ Horizontal slider

Window manufacturer's details

Company name and address

TO BE SPECIFIED AT LATER STAGE

Name of UKAS Test House _____

- ☐ Test Report(s) will be sent to the ALO/CPDA
- ☐ Test Report(s) have been included with the application

Name of UKAS Certification Authority _____

NOTE If the windows are being sourced from a Secured by Design Member Company (go to www.securedbydesign.com) you do not have to supply test house or certification information as this information would already have been gathered and checked by ACPO CPI

☑ Windows will be secured to the fabric of the building in accordance with the manufacturer's installation specifications (30.5)

☑ All ground floor and easily accessible windows will be glazed with laminated glass (a site specific requirement subject to crime risk as advised by the ALO/CPDA) (30.6)

☑ Laminated glass, meeting the requirements of BS 6206, will be used where safety glazing is required under the Building Regulations or in windows that have been designated as emergency egress routes and for glazing immediately adjacent to emergency egress windows (30.7)

☑ Ground floor windows and those that are easily accessible to entry shall have key operated locks except for those required as emergency egress routes (30.8)

Dwelling security lighting

☑ Lighting will illuminate all external doors, car parking and garage areas and some footpaths leading to dwellings and blocks of flats (31.1)

☑ Low energy lamps are being used (31.2)

☑ Light spill is controlled using suitable photometry (31.3)

☑ External lighting switched using photo electric cell with manual override (31.4)

☑ 24 hour lighting will be provided to communal parts of a block of flats and will include:

Tick all relevant boxes

- ☑ Entrance Hall
- ☑ Lobbies
- ☑ Landings
- ☑ Corridors
- ☑ Stairwells
- ☑ Garaging facilities
- ☑ Entrances to garages

NOTE The ALO/CPDA will notify the applicant in writing if other areas require lighting

Conservatories

☐ N/A Conservatories shall be separated from the main dwelling by a door that meets the relevant SBD requirements (32.1)

Intruder Alarms

☑ A 13amp non switched fused spur, suitable for an alarm system will be installed (33.1) TO BE SPECIFIED

☑ A hard wired alarm system, which complies with BS EN 50131 and PD 6662, is being installed (33.1) TO BE SPECIFIED

☐ A wire free alarm system, which complies with BS 6799 is being installed (33.1) TO BE CONFIRMED AT LATER STAGE

Utilities

☐ Utility cupboards will be located externally as close as possible to front building line and be overlooked (34.1)

☑ Utility meters in multi occupancy developments will be located on the ground floor between access controlled doors (air lock system) so that access can be restricted to the meters (34.1)

☐ This development will have meters located in the dwellings for pre-payment tokens or keys (34.2)

Plans and Documents to accompany each SBD application form:

☑ Location Plan (to scale not less than 1:2500)
☑ Site Layout (to a scale not less than 1:200) including services drawings SERVICE DRAWINGS TO BE SENT AT LATER STAGE
☑ Building elevations
☑ House Plan (for each unit type)
☐ Lux Plan - TO BE SENT LATER
☑ Landscape and boundary details
☐ Door and window test and certification details or name of SBD Member Company supplying of a copy of the SBD member's license TO BE SENT LATER

NOTE A second set of documents may be required (check with the ALO/CPDA).

Further information on the Secured by Design initiative may be found on www.securedbydesign.com

Development Details

Site Location LAND SURROUNDED BY DALE STREET, CHINALANE, BACK PICCADILLY AND PATON STREET. — MANCHESTER

No. of Units 6 X 1 BED APARTMENTS, 9X2BED APTMS, 6 COMMERCIAL UNITS

Name, Address and Contacts Details of:

Architect HELOISE WOOD, NAKIN ARCHITECTURE, 3RD FLOOR AMAZON HOUSE, 38 BRAZIL STREET, M13PJ 01612360051

Developer EASTERN GREEN LTD, 1 ASHLEY ROAD,
ALTRINCHAM, CHESHIRE, WA14 2DT
TEL: 0161 928 7171

Builder HIGHAM CONSTRUCTION
1 ASHLEY ROAD, ALTRINCHAM,
CHESHIRE,
TEL: 0161 239 9919

Housing Association (if applicable) N/A

Local Housing Authority (if applicable) N/A

Planning Officer (Name & Address) DAVID HUGHES
MANCHESTER CITY COUNCIL, 7TH FLOOR, TOWN HALL
MANCHESTER, M60 3NY
TEL: 0161 234 4272

Signature of Applicant

Representing EASTERN GREEN LTD

Date 29th February 2008.