BUILDING CONDITION SURVEY REPORT

OF

CONCORDE CLOSE
HOUNSLOW
TW3 4DG

FOR

HOME GROUP

PREPARED BY:

JOSEPH HANLEY
SENIOR BUILDING SURVEYOR

APPROVED BY:

DAVID HANDFORTH
PARTNER

REVISION REF: v8
DATE: 24TH FEBRUARY 2020

ARCUS APPOINTMENT & QUALITY ASSURANCE

Arcus Consulting LLP is a multi-disciplinary practice of construction and property professionals specialising in the delivery of project management, architectural design, building surveying, quantity surveying, building services engineering, CDM Services and other associated consultancy services. Arcus are registered with and regulated by the Royal Institution of Chartered Surveyors (RICS).

This report outlines the results of the External and Internal Survey of Concorde Close undertaken by Arcus on behalf of Home Group.

The Client's representative for the project is Emma Murgatroyd, Home Group.

The survey was carried out during March 2019; the weather conditions at the time of the survey were cloudy but with no rain.

The report was:

Prepared by: .....

Name: Joseph Hanley BSc (Hons) MSc MRICS MFPWS
Title: Senior Building Surveyor

Approved by: .....

Name: David Handforth
Title: Partner

Revision Ref: v8

Date: 24th February 2020

CONTENTS

APPENDICES

1.0 EXECUTIVE SUMMARY

1.1 Concorde Close comprises 43 flats and maisonettes in 3 linked blocks, located off Lampton Road in Hounslow, London.

1.2 The purpose of the report is to provide details of the condition of Concorde Close as a whole, identify the high priority defects to be addressed within 5 years, and project planned maintenance requirements over the next 30 years.

1.3 The additional remit of this commission is to measure the current buildings against modern standards for size, recommendations to upgrade to thermal/ energy performance, and incorporate the Met Police Security Survey and asbestos survey.

1.4 The general condition of Concorde Close was found to be poor. There were significant damp and condensation problems throughout the blocks, but most acutely to the ground floor flats and those adjoining communal stairs and bin stores.

1.5 Externally the blocks suffer from blocked gullies and significant pooling to roofs, the external walls are in poor condition particularly to parapets and exposed areas, many of the windows do not function properly, approximately a 3rd of the doors need to be replaced for non-compliance with fire regulations, and the M&E services are mostly in need of replacement.

1.6 It should be noted that, in general, it appears that Concorde Close has been proactively maintained and well-intentioned improvement works undertaken throughout. These include re-roofing with insulated system, cavity wall insulation, heat recovery ventilation (HRV) systems installed, new double-glazed windows, new external entrance door sets, new kitchens and bathrooms throughout, new security fencing, etc. However, these extensive efforts have been limited, or even undermined, by the inherent flaws and limitations of the buildings and site constraints.

1.7 In summary, this building is given the overall condition rating of:

C.3.

(C) – The building condition is generally poor. Exhibiting major defects and/or not operating as intended

(3) – Essential work required within 2 years that will prevent serious deterioration of the fabric or services and/or address a medium risk to the health and safety of occupants and/or remedy a less serious breach of legislation.

2.0 BRIEF AND EXPLANATORY NOTES

2.1 The brief is to:

- Survey the property in operational use;
- Identify building defects and remedial action required (within 5 years);
- Condition survey and costed PMP of all building fabric (over 30 years);
- Analyse potential thermal/energy upgrades;
- Analyse existing accommodation in comparison to modern standards for size;
- Incorporate Met Police Security Survey.
- Incorporate latest management type Asbestos Survey

2.2 The attached programme quantifies the repairs/maintenance that have been identified to provide a future forecast of potential works for the next 30 years.

2.3 Internal redecorations have been allowed for within the 30-year programme. Although these may be considered cyclical, usually being carried out every 7-8 years further decoration will be governed by need and by internal budgeting and policy. Deleterious materials have not been tested nor have any contaminants been tested for.

2.4 References within this report to Blocks 1, 2 and 3 correspond to the below diagram:

2.5 Site photographs in Appendix A are cross-referenced throughout this report for ease of navigation. Each photograph has a figure number e.g. [F.01]. The approximate locations of these photographs can be found in the diagram in Appendix B.

3.0 ASSESSMENT METHODOLOGY

3.1 On the 30-year programme a Condition Grading has been apportioned to each element. The system runs from A – D with A being good condition and D being poor condition. What follows this is a Priority Grading of 1 – 4 which deems how urgently maintenance or replacement of an element should take place. Full details of the grading systems are described below:

3.2 *Existing condition grading*
Grade A (1) – Good. Performing as intended and operating efficiently.
Grade B (2) – Satisfactory. Performing as intended but exhibiting minor deterioration.
Grade C (3) – Poor. Exhibiting major defects and/or not operating as intended.
Grade D (4) – Bad. Life expired and/or serious imminent failure.

3.3 *Priority grading*
Priority 1 (4) – Urgent work that will prevent immediate closure of premises and/or address an immediate high risk to the health and safety of occupants and/or remedy a serious breach of legislation.
Priority 2 (3) – Essential work required within 2 years that will prevent serious deterioration of the fabric or services and/or address a medium risk to the health and safety of occupants and/or remedy a less serious breach of legislation.
Priority 3 (2) – Desirable work required within 3-5 years that will prevent deterioration of the fabric & services and/or address a low risk to the health and safety of occupants and/or remedy a minor breach of legislation.
Priority 4 (1) – Long term work required outside the 5-year planning period that will prevent deterioration of the fabric or service.

3.4 A risk rating has been calculated dependent on the condition and priority grading for a particular element. The score is a simple multiplication of the numbers above in brackets. A higher risk rating number means a higher risk.

3.5 Any costs included in the Planned Maintenance Programme (Appendix F) are based on industry rates that reflect the location of the site and average preliminaries with no account taken of inflation.

3.6 The Planned Maintenance Programme has been formulated on the basis of ‘like for like’ repairs/replacements.

4.0 PROPERTY DETAILS

Concorde Close (Flats 1-43), Hounslow TW3 4DG.

4.1 Concorde Close is a purpose-built 3-storey residential development comprising 43 flats and maisonettes split over 3 blocks, built in the 1970's. The blocks are linked by walkways at first floor level and have semi-covered stairways at the ends of the blocks to provide access. There are communal bin stores and service cupboards on ground level and separate flat roof garage blocks.

4.2 The external walls are brick cavity type with white uPVC shiplap panelling to areas of the front elevations. The roofs are all flat roofs with built-up felt to the main roofs, the smaller single storey roofs and the garage block roofs. The walkways are concrete decks with asphalt covering and a coloured and textured wearing course. The perimeter of the walkways is protected with a balustrading comprising tubular steel uprights and handrail, with metal/composite infill panels.

4.3 The windows are uPVC double glazed units and the flat entrance doors are composite type with two small vision panels. The main roof to block one also has a barrel type roof light constructed in plastic panelling. The bin store doors are painted metal and the communal stair/corridor doors are timber with vision panels.

4.4 There are separate garage blocks to the North East and South East of the site. These are single sized, constructed in brick with up-and-over doors and a flat felt roof.

4.5 During the course of the site surveys, access was not possible to some areas including bin stores and some service cupboards. Allowances have been made based on the surrounding areas where appropriate. A total of 8 flats were accessed, out of 43, representing an approximate 19% sample size. Of these, one flat from the ground and upper floor of each block was accessed, including both single storey and two-storey units, giving an accurate representation of condition.

5.0 SUMMARY OF CONDITION

5.1 Common Building Fabric

5.1.1 Roof (Main Roofs):

5.1.1.1 Note: No access was available and so the condition reporting for the roofs is based on high quality aerial photographs. These photographs allow close visual inspection of the roofs and are an excellent way to carry out detailed survey whilst mitigating health and safety risks.

5.1.1.2 The main roofs to the blocks are flat roofs with parapet upstands. The covering is a multi-layer bitumen felt (hereafter just “felt”) system. The felt is dressed up and over the parapets and terminated with a perimeter trim. Abutments are formed by dressing the felt up the wall and terminating with a plastic trim and sealant above.

5.1.1.3 All 3 blocks appear to have some retrospective insulation installed as the rainwater gullies are located in sumps. However, without physical access this cannot be certain. There are further rainwater sumps/channels set within the main roof to Block 1 and around the vaulted roof light. This is due to the spans and falls required. The other features are ventilation pipework penetrations throughout all blocks and aerial cabling clipped together and loose fixed to surface.

5.1.1.4 All main roofs are suffering from extensive ponding of surface water [F.01]. The insulation (or other sub-structure such as firrings) have not been designed and installed correctly – to create sufficient and consistent falls into the rainwater gullies. The worst areas are to Block 1 east side main roof and Block 1 east side 2 storey section. There are also consistent issues with rainwater not reaching the dropped gullies. This is due to a lack of adequate fall in the areas immediately around the gully sump perimeter, possibly exacerbated by the layering of the felt at this perimeter [F.02].

5.1.1.5 The sumps and gullies themselves are in need of maintenance as many of them are clearly blocked by sludge and debris [F.05], with at least 4 gullies also having footballs blocking the openings [F.04]. The worst blockages are to the channels around the rooflight on Block 1 [F.03]. Here the blockage is total and has left the entire channel completely flooded.

5.1.1.6 The vaulted rooflight to Block 1 is formed in poly panels with plastic channelling and timber perimeter upstand. The timber is saturated due to the above-mentioned blockages and the poly panelling has many areas of damage and clear holes through [F.08]. This should at least be sealed temporarily to prevent immediate rainwater ingress but requires full replacement.

5.1.1.7 Generally, the felt is in good condition throughout and appears to be fully bonded and watertight. The above-mentioned defects need to be rectified, however, or the weathertightness of the felt will be compromised by the areas of water ingress and damage to the felt itself through vegetation growth and freeze-thaw action of the standing water. The perimeter trim, whilst satisfactory, does not provide any protection to the brickwork below as there is no overhang or drip function.

5.1.2 **Roof (Single Storey Flat Roofs):**

5.1.2.1 The single storey extensions to the ground floor flats are largely the same construction as the main roofs – flat, felt covering, same upstands and perimeter details, sumps and gullies. The defects are likewise the same but made worse by their lower locations allowing much more debris (mostly from trees) to collect on the felt and block up the gullies. This continued saturation of the felt, and collection of silt and debris, has allowed moss and other vegetation to grow [F.06 & 07]. This will continue to grow and cause problems if rooted plants start to grow.

5.1.3 **Roof (Miscellaneous):**

5.1.3.1 The Block 1 internal staircase roof is constructed in felt, with all the same detailing as the main and single storey roofs. The condition of this element is also similar, having clear areas of ponding, blockage to the gully and vegetation growth.

5.1.3.2 To the east side of Block 1 there is a rough concrete slab acting as a flat roof to the bin store below [F.10]. This does not have any drainage or flashing detail at all and is saturated. The impact is that the adjoining walls and room below are saturated. The concrete itself is also suffering from freeze-thaw action as the water is allowed to collect and remain on the slab.

5.1.3.3 The Block 2 bin shoot roof is also a concrete slab but is sloping from a parapet with coping stone down to the flat roof/walkway that provides access to the bin shoot. This concrete is in good condition as the rainwater drains from it. However, there are no abutment flashing or drip details to the perimeters allowing these areas to take in water/staining.

5.1.3.4 Above this area (Block 2) is the roof to the stairwell. This is a mono pitch construction in poly panels set in plastic or aluminium channels [F.09]. The sides and top are sealed with lead flashings that have slipped in places but look to be in reasonable condition. The panels show signs of damage and have moss growing at the junctions with the channels. The rainwater is collected in uPVC guttering and downpipe which is evidently collecting debris and is partially blocked. It is unclear whether there is direct rainwater ingress, but the structure certainly needs closer inspection and maintenance, particularly to the rainwater goods and junctions of the panels.

5.1.3.5 A ground floor flat in Block 3 has constructed their own conservatory privately in the last 5 years. This is in good condition.

5.1.3.6 All 1st floor flats accessed externally from the walkways have canopy roofs constructed in what appears to be GRP with light grey topcoat and stepped to look like tiling. These all show signs of staining from rainwater washing off the above dirty brickwork/parapets and bird guano, but otherwise look to be in good condition.

5.1.4 **Private Balconies:**

5.1.4.1 All rear elevation 2nd floor flats (to all 3 blocks) have got small balconies constructed in (presumably reinforced) concrete slabs with cantilevered concrete beams under set at approximately 4 metre centres [F.11]. The external perimeters of the balconies are enclosed by steel railings with one top and bottom rail and vertical sections at c90mm centres. The posts are set at c1200mm centres and are bolted into the concrete slabs on base plates. The top and bottom rails are set into the brickwork are sealed with mortar. All metalwork is painted green.

5.1.4.2 The concrete has no decoration or other protective coating, has no drainage detail or drip cut into the underside and the junction with the wall does not have any upstand or flashing. This has led to the concrete showing significant signs of saturation, vegetation growth and staining. The rainwater water clearly picks up the dirt, debris and salts of the concrete and washes the matter onto the brickwork below leading to large areas of unsightly brickwork and stained windows. The lack of drainage is also causing the nearby areas of external wall to become saturated causing further efflorescence and creating a wet thermal bridge to the flats below.

5.1.4.3 The metal railings look to be in good condition. There is little evidence of any significant corrosion and the decorations are largely satisfactory. There are, however, areas where redecoration needs to be undertaken soon.

5.1.5 **External Walls:**

5.1.5.1 The walls are constructed in traditional cavity construction with facing brickwork to the front face. The cavity depth is unknown but, judging by one exposed area, and given the age of the building, it is likely the cavity is somewhere between 75-100mm wide. The cavities would have been constructed with no insulation. However, it is evident that a retrospective cavity wall insulation (CWI) system has been installed at some point since. There are mortar repairs where the gun was inserted at regular intervals and the insulation is visible from a defective area of brickwork to Block 1. The CWI is of the blown fibre type and therefore is susceptible to a number of inherent weaknesses, namely: imperfect coverage, settlement through gravity, and problems with thermal bridging and water ingress incurred if it gets wet.

5.1.5.2 There have been many and various penetrations into the external walls over the years that have left damage to the brickwork. These appear to have been from satellite/aerial installations and the like that have been subsequently removed. These leave the cavity vulnerable to rainwater penetration and further damage from freeze-thaw action.

5.1.5.3 There have also been further modifications that have caused significant damage to the walls. The north-west corner of Block 1 has had industrial looking flues installed to 2 no. flats. These, coupled with the number of poorly installed condensate pipes, have caused severe staining to the brickwork and has further damaged nearby windows and sills [F.18]. The acidic residue has also accelerated the oxidisation of the copper gas supply pipework. Adjacent this area, there is also a small amount of graffiti [F.19]. Which, although not visible from the road and of no physical threat to the building fabric, should be removed to prevent attracting further graffiti.

5.1.5.4 The most significant damage and defect to the external walls are to the parapets. All parapets to all blocks, and at every height, show evidence of significant defect [F.13]. Many areas have been cleaned up and repointed and some have even been rebuilt [F.12]. However, these remedial works have not resolved the defects and all areas suffer from significant freeze-thaw action, delaminating and spalling of brickwork, mortar joints have “popped”, and there is significant efflorescence staining to the faces [F.14]. It is evident that water is freely penetrating the brickwork and mortar joints and is most likely entering the cavity too.

5.1.5.5 To the sloping parapets of the 1st floor walkway, adjacent the left-hand stairwell of Block 1, the brick-on-edge coping has been rebuilt – presumably due to previous rainwater penetration – however, the work carried out has not resolved the underlying issues [F.15]. This has led to significant cracking and gaps to appear, allowing rainwater to enter the cavity and causing the brick coping to be loose and in danger of falling on the pedestrian path below. This needs to be addressed immediately.

5.1.5.6 To the other side of the stairway door opening, the brick coping is missing completely, exposing the cavity to the elements [F.16]. This looks to have been this way for some time as the exposed mortar joints look weathered and have moss growing to the surface. This should also be addressed immediately.

5.1.5.7 It was noted that several flats have had air bricks installed, such as a flat in Block 1 [F.20]. No access was achieved to this flat, or the others with air bricks, however, if they have HRVS (heat recovery ventilation systems) as the other flats, then the air bricks should not be installed as the two ventilation types are incompatible.

5.1.5.8 There is a small hole to an external wall on the Block 1 1st floor walkway [F.21]. This hole was previously drilled for the installation of the CWI system and then filled with mortar. However, the mortar is missing, and insulation is freely pouring out of the hole. This should be filled with repair mortar again (along with all other holes to the blocks).

5.1.5.9 Efflorescence and other staining is prevalent throughout the entire site, particularly in exposed or unheated elements such as external stairwell parapets, gable ends, and roof parapets. This shows that these areas are getting saturated regularly and aren’t able to vent off moisture sufficiently through the mortar joints as designed. This also shows that the sources of moisture are not being contained. For example: the brick-on-edge coping with no projection, drips, or DPC. These are being exacerbated by the poor coping details but will persist indefinitely now that the brick faces have been weathered to such an extent as they will continue to absorb too much moisture. The brickwork is also “greening” in many places due to the amount of vegetation in the area and the inadequate land drainage to the site (this may be due to the sub-soil type in the area).

5.1.5.10 In addition to the damage mentioned previously, all 3 blocks have clearly had a previous penetration removed and the holes bricked up. This is evident to the ground floor flats just above the single storey extensions. These repairs have variously failed leaving the cavities of the walls exposed to wind driven rain.

5.1.5.11 There are further areas of ad hoc defect and damage such as paint staining and leaky condensate pipes to Block 2 [F.17], areas where signage has previously been removed but the adhesive has been left (to Blocks 1 and 3), and aesthetic inconsistencies where areas of cleaned, repointed brickwork directly adjoins weathered and dirty areas.

5.1.5.12 It should also be noted that there are no weep holes to window and door openings, signifying no cavity trays or means of draining moisture from cavities. This is a concern, particularly as the cavities are so regularly and variously exposed to rainwater ingress.

5.1.5.13 The planters to front of Block 3 are suffering from significant frost action with many areas showing signs of rebuilding and/or repointing. These will require continued maintenance for their duration as they inherently will always be exposed, unprotected and saturated.

5.1.5.14 An area free from defect, however, is the uPVC cladding, which is generally in good condition. In need of cleaning and sealant to many places but otherwise ok. It is also important to note that none of the blocks appear to show much evidence of structural movement.

5.1.6 Walkways (1st Floor):

5.1.6.1 The 1st floor walkways are concrete with a type of asphalt covering and red textured wearing layer to provide one homogenous surface. The wearing layer is dressed up the abutment walls by approx. 150mm and sealed with a large mortar fillet. The abutment detail is continued down intermediate steps and stops short of internal stairwells and external steps down to ground level. Intermediate steps are formed in concrete with contrasting banding for visual identification. The perimeter of the walkways have a small parapet detail and are completely enclosed by a profile metal capping – either aluminium or galv. steel. The balustrading is tubular steel with textured composite infill panels.

5.1.6.2 The walkways appear to be watertight but there are several defects that need to be addressed. Firstly, the falls of the walkway are not adequate leaving areas of ponding [F.25]. This is made worse by the faulty installation of some gullies that are not set low enough leaving a lip around the gully that rainwater cannot drain over [F.22]. These need to be taken up and reinstalled.

5.1.6.3 The walkway surface is very worn leaving areas of discolouration, staining and lack of tactile texture – particularly to Block 3 [F.23]. The mortar fillets at the abutment detail with the walls are cracked in several areas allowing water to penetrate behind the asphalt and into the walls [F.24]. If water does get behind the asphalt through this junction, the worn surface or through the rainwater gullies, expansion of the water vapour on hot days would quickly cause significant problems with blistering, currently not evident.

5.1.6.4 The handrails, infill panels and capping are in reasonable condition. The junctions of the capping should be inspected more closely, and new sealant installed where necessary to prevent rainwater penetrating the structure behind.

5.1.6.5 The underside of the walkways are showing signs of saturation in places and have varying levels of deterioration. These need repairs and redecorations throughout to bring them up to good condition and prevent further degradation.

5.1.7 **Communal Stairs and Covered Areas:**

5.1.7.1 The flats to the north west of Block 1 are accessed through an internal stair and lobby. The walls are facing brickwork and the ground floor to the stair lobby is concrete paviours continuous with that outside. The stairs and landings are vinyl tiles with aluminium stair nosings. The handrails are painted steel and the ceilings/underboarding appear to be plasterboard, but some areas could be coated/painted concrete. The vinyl flooring tiles are well worn with damage to the edges and corners throughout, particularly to the treads and risers. There are sections of high foot traffic areas that have been replaced with a slightly different colour tile over the years. The handrails are in fair condition and just need regular decorations. The ceilings are in mixed-to-poor condition with various areas of pealing decorations and cracking.

5.1.7.2 The corridors off these stairs are carpeted with brown carpet tiles that are well worn and slightly soiled but are in serviceable condition. The ceilings to the ground and first floors are cracked and the decorations are also pealing [F.27]. The top floor corridor has the vaulted plastic rooflight above (condition mentioned previously). This needs repair/replacements as there is obvious rainwater ingress into these corridors.

5.1.7.3 Note: Home Group maintain asbestos records for the site, updated with regular Asbestos Surveys. The latest management survey has been incorporated into this report in Appendix C. The vinyl floor tiles and nosings to the stairs are confirmed to not contain asbestos, likewise the ceilings and soffits to the communal stairs.

5.1.7.4 The external stairs to the east of Block 1, at first floor level, and the set leading to the ground level, are constructed in concrete and are not covered in any way. Likewise, the stair set between Blocks 1 and 2. These are in reasonable condition but provide not abutment detailing or waterproofing allowing water to penetrate the surrounding walls. The painted metal handrails are satisfactory but will require redecoration.

5.1.7.5 No access was achieved to the bin stores. The under-croft area adjacent the bin stores and under a flat presents a fire risk identified in section 5.4 of the report below.

5.1.7.6 The internal stairwell to Block 2 (south side) is constructed in the same materials as the internal stairwell to Block 1. However, the condition here is significantly worse due to the increased number of residents that use this stair and its more exposed nature. The defects are exacerbated by the inadequate drainage to the walkways and bin shoot access meaning the stairs suffer from ponding of rainwater. The vinyl flooring tiles and stair nosings are in very poor condition with large sections broken or missing [F.26]. This area needs to be made watertight and works carried out to the damaged flooring urgently.

5.1.8 **Garage Blocks:**

5.1.8.1 The garage blocks are all of the same construction and condition throughout the site. The walls are brick with 325mm piers separating the up-and-over type doors and half brick thick walls to the rear and sides. The floors are solid concrete slabs ramped off to external ground level. The front fascia board is painted timber and is broken every 3 or 4 garages to provide a rainwater hopper and downpipe to serve the flat roofs above. The flat roofs are mostly felt with some areas of asphalt with stone chippings.

5.1.8.2 There are significant problems with the garage roofs [F.28-30]. The falls and drainage are completely inadequate allowing water to pond to almost all extents. The low height and close proximity to trees have led to significant debris and vegetation growth throughout. This has further blocked the inadequate drainage and has put excessive load and stress on the roof covering. The fascia boards are saturated due to the water ingress and have cracked significantly due to the water expanding and contracting the wood along with freeze-thaw action. The walls are also showing signs of saturation with large areas of staining and efflorescence.

5.1.9 **Externals:**

5.1.9.1 The perimeter of site has a variety of boundary treatments. Starting from the north west corner of the site and going clockwise: the boundary is a brick wall with decorative railing above for the first 20 metres, then timber fencing with timber posts, in fair condition, continues until the garage blocks in the north east corner. Timber fencing starts again the other side of the garage block – this area is heavily damaged and is overgrown with large creeping vegetation. Timber fencing in reasonable condition continues down the east side of Block 2 up to the garage blocks in the south east corner. From this corner, the boundary is a chain link fence with barbed wire to the overhanging section, supported on pc concrete posts. This extends along the back gardens to Block 3 up to the south west corner. The westerly perimeter becomes concrete post and panel type, in good condition, until the timber panel and concrete post fencing begins. This continues all the way round to the main road and is in mixed condition with some areas of rotten timber and other panels replaced with new. The internal fencing and gates for each block are all new timber type in excellent condition.

5.1.9.2 The ground cover is in reasonable condition to the front of the blocks but becomes more damaged beyond the undercrofts of Block 1 and 2. The road and pavements are constructed in bitumous macadam (tarmac) and are neatly lined. The roads beyond the undercrofts are severely potholed and collect rainwater in many areas. The “tarmac” to access paths and to serve ground floor flats show signs of various modification for service routes previously and have moss and other vegetation growing through them. However, they do not present trip hazards. The areas of inset stones to the perimeter of the blocks also has vegetation growing through them but are non-functional.

5.1.9.3 The soft landscaping is poor throughout the entire scheme. The ground is either saturated or does not have the correct sub-soil to allow rainwater to drain away leaving all areas of grass very mossy and full of weeds.

5.2 Internal Condition of Flats (from sample)

5.2.1 This survey gained access to eight properties. Of those, all were occupied with the exception of Flat 27 which was void.

5.2.2 **Block 1 (1st Floor) – 2-Bedroom Flat:**
- Flat was severely overcrowded with 6 adult/adolescent residents.
- Condensation problems throughout property, particularly acute in bedrooms [F.34].
- Living Room window broken. Cannot be safely opened or unit may fall.
- No gap to bottom of bathroom door to allow supply of air for extract ventilation.
- Front door not a fire door but installed in protected corridor. Door binds and requires adjustment. Door also cannot be operated quietly, the loud mechanism wakes neighbours.
- HRV system is very noisy and so isn't used regularly and never through the night.
- HRV system supplies cold air to hall and bedrooms (extracts in kitchen and bathroom) which is not helping the condensation problems in the bedrooms.
- Kitchen Install – good condition. Approx. 5 years old.
- Bathroom Install – good condition. Approx. 5 years old.

5.2.3 **Block 1 (Ground Floor) – 2-Bedroom Flat:**
- Condensation problems throughout property, particularly to both bedrooms and bathroom.
- Living Room window is broken and does not close or lock fully. Security risk as ground floor.
- Front door binds and the lock requires adjustment [F.35].
- Bathroom door does not have external thumb turn to lock which is dangerous as there is a child in the property who could lock themselves in.
- The property suffers with a persistent and widespread ant infestation through the floor that has resisted all treatment so far. Further destructive investigation required to seal all points of entry.
- HRV system does function but extraction is poor and not sufficiently adequate to help prevent condensation forming to external perimeter.
- There is no heating to the property at all. The storage heaters have been removed leaving just a towel rail and a plug-in fan heater.
- Kitchen Install – fair condition. Approx. 10 years old.
- Bathroom Install – good condition. Approx. 2 years old.

5.2.4 **Block 1 (Ground Floor) – 2-Bedroom Flat:**
- Severe condensation problems throughout property, particularly to east side which adjoins bin store and external stairs.
- Rainwater ingress through bulkhead in back bedroom located in rear extension [F.36]. This roof is completely blocked and has significant debris and vegetation growth.
- HRV system does not work.

- Storage heaters controlled by single programmer that does not work. Overrun (boost) feature does not work. Storage heater to back bedroom does not work.
- Windows to back bedroom and living room both broken and do not open/close fully.
- Kitchen Install – fair condition. Approx. 10 years old.
- Bathroom Install – poor condition (due to condensation) [F.37]. Approx. 5 years old.

5.2.5 **Block 2 (Ground Floor) – 2-Bedroom Flat:**

- Hallway walls and floor were saturated. This is a serious and very severe problem. This requires further investigation and water sample testing to determine the source [F.38 & 39].
- Tenant commented that the flat has been “damp” for 38 years.
- Rainwater ingress to front of living room. A dropped ceiling has been installed to cover over the problem [F.40]. This is not satisfactory.
- 2 no. windows do not open/close or lock properly.
- Storage heaters do not work overnight, only the overrun (boost) function works.
- Kitchen Install – good condition. Approx. 7 years old.
- Bathroom Install – good condition. Approx. 7 years old.

5.2.6 **Block 2 (1st Floor) – 2-Bedroom Flat:**

- Flat was void and in very poor condition.
- Severe condensation throughout property causing corrosion, peeling paintwork, mould growth, and rotting of timberwork [F.41].
- Flooring tiles exposed and badly damaged.
- No M&E systems could be tested as all isolated.
- Kitchen Install – fair condition (but in need of deep clean). Approx. 7 years old.
- Bathroom Install – good condition (but in need of deep clean). Approx. 7 years old.
- All timberwork, plastered surfaces, flooring, ceilings and decorative finishes need to be replaced before the property can be let.

5.2.7 **Block 2 (1st Floor) – 2-Bedroom Maisonette:**

- Condensation is very bad to bathroom.
- Bathroom extract fan does not work [F.42].
- Smoke head missing from hall.
- Storage heaters do not have working programmer or overrun (boost) function.
- Kitchen Install – fair condition. Approx. 7 years old.
- Bathroom Install – fair condition. Approx. 7 years old.

5.2.8 **Block 3 (Ground Floor) – 2-Bedroom Flat:**

- Tenants have carried out extensive improvement works internally and constructed conservatory to rear elevation. The works have been carried out to a very high standard and as such the property is generally in excellent condition.
- The tenant reported that the HRV system is approx. 3 years old but continually breaks down.
- The immersion heater element also keeps burning out every 6 months or so.

- There are problems with the wiring due to its age, possibly “something to do with neutrals”.
- Several of the windows are faulty and have gaps in the seals.
- Kitchen Install – excellent condition. Approx. 3 years old.
- Bathroom Install – excellent condition. Approx. 3 years old.

5.2.9 **Block 3 (1st Floor) – 2-Bedroom Maisonette:**

- Condensation is very bad to bathroom.
- Bathroom extract fan does not work.
- Bathroom has recently had pipe leaks to both WC and WHB. Wall still saturated [F.43]. Unclear whether problem historic or persistent.
- Heated towel rail to bathroom does not work.
- Bedroom windows do not open/close properly.
- Storage heaters controlled by single programmer that does not work. Overrun (boost) feature does not work. No HRV system.
- Kitchen Install – fair condition. Approx. 7 years old.
- Bathroom Install – fair condition. Approx. 7 years old.

5.2.10 **General Observations:**

- Ground floor flats were in much worse condition than those on the upper floors.
- Storage heaters were consistently faulty. No means of programming and the boost functions often not working,
- HRV systems are not fit for purpose. They are too noisy and so residents are turning them off. Many others do not work at all or work inefficiently.
- Windows were often broken or would not operate fully.
- Front doors were all noisy to operate and are not suitable for internal areas as they are not fire rated door sets.
- Most tenants were not aware of how to control the boost function of the storage heaters or how to use the immersion tank during the day if the hot water runs out.
- Condensation is prevalent throughout the entire scheme. The air temperatures within the flats was generally quite warm (aided by the storage heaters) and so the condensation must be caused by excessive moisture content in the air and the external components being too cold. The retrospective cavity wall insulation is either insufficient or has been compromised by water ingress into the cavity,
- Asbestos insulated boards and flooring tiles within flats have been identified in the attached asbestos survey (found in Appendix C). These are in varying condition and require both maintenance works in the short term and ongoing management as long as they are present.
- The individual issues particular to each flat require detailed examination and recommendations for remedial works. This report has only sought to comment on the overall condition based on a given sample.

5.3 Mechanical and Electrical Services

5.3.1 **Electrics:**

The electric meters are located externally adjacent the flat entrance doors. The meters are of a pre-pay type with a further split into economy7 metering inside the flats. The wiring is assumed to be existing and so is approximately 45 years old. This should be renewed in the next 5-10 years as a safety precaution and to meet the needs of modern living. From the sample properties inspected it appears some of the consumer units have been upgraded to dual RCD units with individual MCB protection.

5.3.2 **Lighting:**

Lighting is all ceiling mounted units within flats. There are a variety of fluorescent tubes, compact fluorescent lights, incandescent and halogen bulbs. There are some LED fittings, but a large-scale replacement should be undertaken to upgrade the fittings to low energy LED type. Externally there are wall mounted and bulkhead security lights at regular intervals around the blocks. Emergency lighting was provided to some but not all communal areas with many fittings missing bulbs. This system needs to be renewed and full coverage provided.

5.3.3 **TV and Telecoms:**

All flats have a BT socket for telecoms, but it is unknown whether there is a terrestrial aerial provision to all flats. Many flats have had a satellite tv dish installed at high level. As previously mentioned, this has led to a mess of current and redundant fixtures across the blocks and large quantity of cabling tangled across the roofs and walls. The previous fixtures have largely not been repaired or made good.

5.3.4 **Gas:**

The flats are served by mains gas that is metered in the kitchen base unit and serves the gas hobs only. The isolation valves look to be in good working order. There are no natural gas sensors to the kitchen or CO detectors.

5.3.5 **Ventilation / HRVS:**

The flats either have extract ventilation to kitchens and bathrooms or have HRV systems installed. It is clear that the HRV systems are not performing adequately as the condensation problems persist throughout. The supply air from the system should be approximately 80-90% of the room temperature (excluding any further heat gain from the duct work within the flat) however, it was notably much cooler. Some units were not working at all and others were noisy and/or ineffective. [F.31]

5.3.6 **Heating:**

Heating is through electric storage heaters and either heated towel rails or fan heaters to the bathrooms. Many of these were not functioning correctly. Some units were not working at all, others couldn't be boosted for daytime use and none of them had working programmers/controls. Previous obsolete programmers and thermostats were left on the walls and this is creating confusion for some residents who do not understand how to control the heating [F.32 & 33].

5.3.7 **Hot Water:**
The hot water is through electric immersion elements in vented cylinders in the kitchen or bathroom cupboards. The hot water is pressurised by a cold-water tank located directly above. Many residents complained that there was no boost function if the hot water ran out and it is unclear whether this is the case or if training is required to use the available functions.

5.3.8 **Mains Water:**
Good pressure was seen to all flats. Meter locations unknown.

5.3.9 **Drainage:**
Foul water drainage is through soil ventilated pipes that vent through the main flat roof. No leaks were noted or reported.

5.3.10 **Smoke/Fire:**
Mains powered, battery back-up units are installed to all flats with additional heat detectors to kitchens. It was noted that one tenant had covered one smoke detector due to regular triggering when cooking and the hall smoke head in another flat was missing and in need of replacement. It is recommended that tenants are advised regarding the importance of not covering the units and to contact Home Group if any problems or bleeping occurs to their units.

5.3.11 **CCTV:**
A computer and monitor were discovered in the landlord's electrical cupboard to the south side of Block 2. It is unclear whether this is operational or redundant. No security cameras were noted on the inspection other than to the north west corner of Block 1, which was assumed to be a private installation by one of the flats.

5.4 General Fire Safety Comments

5.4.1 The comments included here are general comments regarding fire safety recorded as part of the building survey. It should be noted that the surveyor is a Chartered Building Surveyor, not a qualified fire risk assessor. These comments should be seen as advisory and supplementary to the annual fire risk assessment (FRA) for the site which Home Group are required to commission, and action the findings of, as part of their legal obligations.

5.4.2 The storage bins and recycling to the undercroft to Block 1 is inadequate. There is various unwanted refuse and furniture dumped here that present a fire risk. This should be removed, and alternative arrangements made if current waste storage is inadequate.

5.4.3 Rubbish has been left outside some flats presents a fire risk. This should be removed, and the areas kept clear in the future.

5.4.4 The undercroft to Block 1 ceiling/soffit is damaged and needs to provide a minimum of 1-hour fire protection.

5.4.5 Entrance doors to a number of flats in the 3-storey section of Block 1 are located in dead end corridors and all doors are not fire resisting. The doors to all 12 flats should be upgraded to FD30S self-closing fire doors.

5.4.6 The current fire routine notice sited on the notice board is confusing and the procedure is unclear. Rationalise the fire routine notice to show clear information.

5.4.7 Emergency lighting is currently inadequate. The site should be surveyed to establish compliance with BS5266 Pt 1. Any shortfalls should be addressed.

6.0 MET POLICE SECURITY SURVEY

6.1 A comprehensive Security Survey has been carried out by the Metropolitan Police Service (which can be found in Appendix D).

7.0 SUMMARY OF IMMEDIATE CONCERN (NEXT 5 YEARS)

7.1 Roofs:

- Unblock all gullies and channels. Clear roofs of all debris.
- Replace roof light to Block 1 with new unit. Ensure sufficient upstand and detailing.
- Replace poly roof to Block 2 with new. Ensure flashings are refitted where loose.
- Bin shoot roofs (Blocks 1 and 2) to have waterproof covering, flashings and trims to prevent surrounding walls and rooms below from getting saturated.
- Clean and repair all rainwater goods.

7.2 Private Balconies:

- Balconies to have waterproof covering, flashings and trims to prevent surrounding walls and rooms below from getting saturated.
- Railings to be redecorated.

7.3 Walls:

- Identify all redundant fittings in wall and remove (e.g. satellite dishes and wiring).
- Make good to all damaged brickwork where these and previous fittings removed.
- Resolve condensate pipe and extract vent problems to Blocks 1 and 2, and clean and make good brickwork.
- Remove graffiti to Block 1 (only advisory as not detrimental to building fabric).
- Parapets and walls with no heated perimeter – all to be inspected and extensive repairs carried out (refacing and replacing brickwork, replacing copings on new DPCs, repointing, etc).
- Efflorescence, greening, paint staining, adhesive and dirty brickwork to be cleaned entire.
- Defective parapet and open cavity to the 1st floor walkway, adjacent the left-hand stairwell of Block 1. These to be rebuilt including ancon fixings and DPCs.
- Air bricks to be removed and replaced with matching brickwork where installed incongruously with HRV system.
- uPVC cladding to be cleaned and sealant renewed where necessary.
- Carry out thermographic survey to identify condition, performance and defects with the cavity wall insulation.

7.4 Walkways:

- Renew details around gullies to ensure rainwater drains freely into gullies without lip.
- Wearing course to be re-decorated or overlaid with liquid applied system where discoloration and loss of tactile texture has occurred.
- Mortar fillet to upstand detail to be renewed full perimeter.
- Watertight bund/threshold required to door with covered stairwell that serves Blocks 2 and 3. Water is penetrating into the stairwell and ponding on the landing.
- Metal capping to be inspected and sealant renewed where necessary.
- Repairs and redecorations to underside of walkways.

7.5 Communal Stairs and Covered Areas:

- Vinyl flooring tiles and stair nosings to be replaced entire as significantly damaged.
- Ceilings, soffits and underboarding to stairs to be made good and decorated.

7.6 Garage Blocks:

- To be re-roofed to adequate falls.
- New fascia boards and rainwater hoppers (inc. flashings).
- Existing rainwater goods to be inspected and repaired/replaced as necessary.

7.7 Flats:

- Full inspection of windows and doors. Mechanisms to be adjusted/replaced as necessary.
- Full inspection and report of HRV systems. Test noise, thermal exchange efficiency, extract and supply volumes, and provide comments on adequacy of units for purpose.
- Inspection of heating and hot water controls to confirm whether programmer, thermostat and boost functions work correctly.
- Carry out maintenance works (i.e. repairs, redecorations and localised removals) to asbestos containing materials to ensure they are in all in good condition.
- Carry out inspections/works as identified to individual sample properties. Details above.

7.8 M&E Services:

- Ensure all flats at least have electrical safety inspection and RCD protection.
- Remove all redundant electrical fixtures and fittings including thermostats, programmers, redundant smoke heads, etc. (important but not detrimental to safety or building fabric)
- Replace all light fittings with low energy LED fittings (important but not detrimental to safety or building fabric).

7.9 Fire Safety Actions:

- Undertake all actions highlighted in Fire Safety section above (section 5.4).

8.0 POTENTIAL THERMAL / ENERGY UPGRADES

8.1 Building Fabric:

8.1.1 Roofs – It is assumed that there is already a certain amount of insulation to the roofs due to the gullies being inset in sumps. An increase in depth to this insulation would improve the performance but not to a large degree. The existing parapet heights appear to be sufficient for the current level of insulation but would require increasing in height if the depth of insulation was to be increased, along with replacement/modification of all flashings, SVP pipework, aerials/dishes, rooflights, channels and gullies.

8.1.2 Walls – The existing cavity walls have had retrospective cavity wall insulation installed to all flats. It is fair to assume that that this insulation is no longer performing as intended. This type of system does not provide full coverage, would have settled leaving areas without insulation at all and will have been affected by water penetration in places creating direct cold bridges. A thermographic survey of the block would identify the above-mentioned defects, but the remedial works required thereafter would be difficult to undertake without substantial work and disruption.

8.1.3.1 Walls – The alternatives to cavity wall insulation are to 1. Internally insulate (dry-line), 2. Externally insulate (EWI), or 3. Replace the building fabric itself.

8.1.3.2 Internal systems would reduce the floor area of each property, require full replacement of services, kitchen, bathrooms, etc. and require a temporary decampment of tenants. This would also remove any thermal mass and, without careful vapour control, could lead to interstitial condensation problems.

8.1.3.3 EWI would provide the most effective insulation and cause the least disruption to residents. However, it is not without its problems. On a complicated scheme such as Concorde Close, it would be impossible to get full coverage as the depth of the insulation would impact on openings, external stairs, etc. This would lead to performance differentials across the buildings and cause condensation to focus on the least insulated areas. It would also be undermined by the cold bridging of walkways, balconies and other existing abutments.

8.1.3.4 Replacement of the building fabric is really only a hypothetical option as the cost and disturbance would clearly be unproportionate to the potential improvement. In this case, the building would be better being demolished and rebuilt to a new design.

8.1.4 Floors – The thermal improvement of the ground floor slab would reduce drafts, cold bridging and improve the thermal comfort of the 18 ground floor flats but would not significantly reduce energy consumption (if at all due to the storage heating system). It would also require significant disruptive works to break out all floors and replace. The tenants would need to be moved out temporarily and all services, bathrooms, kitchens, flooring, etc. replaced.

8.1.5 Window and Doors – The windows and doors are all relatively new (within the last 10 years) double glazed units. There are more efficient units available, but their premature replacement would be counterproductive from both a financial and sustainability point of view.

8.2 Non-Fabric Upgrades:

8.2.1.1 Heating / Hot Water – The current storage heater and immersion water tank system makes the most of the Economy 7 tariffs but are inefficient from an energy saving perspective as they use energy and give off heat when it is not required. There are several alternatives that could be considered to provide better efficiency and, crucially, better control:

8.2.1.2 - Gas combi boilers – energy efficient but give off CO2 at source. Old technology.
- Heat pumps (most likely air source) – very efficient. Low temperature may not suit retro install.
- Hybrids (boiler and ASHP combined) – excellent efficiency and control. Expensive.
- Electric heating (new storage heaters) – more efficient than existing units and better control.
- Solar water – could be used in conjunction with other technologies to pre-heat water.
- District heating/hw – installing a plant room and centralised heating system with distribution pipework could provide extremely efficient heating and hot water. Opportunities to combine with renewable technologies such as biomass. Could be difficult to retrofit.

8.2.2 Lighting – An obvious area for energy saving would be to replace all light fittings and fixtures with new low energy LED technologies. Could be combined with dimmers and PIR sensors as appropriate to maximise efficiency.

8.2.3 Domestic Electrics – Install energy efficient appliances to reduce running costs and energy consumption. A survey of existing appliances could be undertaken, and incentive schemes offered to tenants for upgrading appliances based on energy saving and pay back periods.

8.2.4 Energy Generation – On site energy generation could be considered, in particular solar PV panels due to the large flat roof area and south-east England location. This would not save energy consumption in itself but could offset the carbon emissions of continued electric usage. The technologies could also be used in conjunction with battery storage or pre-heating or to power other efficient technologies such as heat pumps for maximum efficiency.

8.2.5 Ventilation – The existing HRV systems are not performing. These units can be extremely effective if installed and maintained properly. Further investigation is required to determine why they are so ineffective. Pressure testing and draft sealing could also be undertaken to a sample of properties to find out where the flats are losing air tightness. Draft sealant and strips can then be retrofitted to the problem areas.

8.2.6 Water Saving – Water outlets such as sinks, basins, baths, toilets and showers could be audited to discover real-world water usage. More efficient outlets could be used to reduce water consumption such as dual flush, low water usage cisterns and aerated taps. A rainwater or grey water system could also be introduced to reduce the amount of mains water usage.

8.2.7 Education, Training & Support – Many residents did not know how to operate the existing technologies (such as boost functions or programmers). Furthermore, others were making poor choices leading to excessive condensation. The residents could be educated in low humidity and energy efficient living practices (including smart meters), trained in the existing technologies and provided with ongoing support through a helpline or follow up home visits.

9.0 COMPARISON OF FLAT SIZES TO MODERN STANDARDS

9.1 There are no definitive national minimum size standards in the UK for housing. The Building Regulations set out key dimensions and requirements of certain elements, for example: width of door openings, width and pitch of stairs/ramps, openable areas of windows, etc. However, the sizes of dwellings and the rooms therein are devolved to local planning policy. By far the most common standard adopted by LPAs are the "Technical housing standards – nationally described space standard" DCLG 2015. These are incorporated in the London plan and have been taken up widely by LPAs across the country.

9.2 This comparison study will be based on the above-mentioned space standards. It is important to note that non-compliance with this standard is irrelevant as the standard is only for new development. Clause 2 of the standards states: "The requirements of this standard for bedrooms, storage and internal areas are relevant only in determining compliance with this standard in new dwellings and have no other statutory meaning or use."

9.3 Table below from "Technical housing standards – nationally described space standard" Department for Communities and Local Government, 2015

Table 1 - Minimum gross internal floor areas and storage (m^2)

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) *			1.0
	2p	50	58		1.5
2b	3p	61	70		2.0
	4p	70	79		

9.4 Full analysis found in Appendix E.

9.5 Findings:

9.5.1 Three flats are bedsits and as such are inappropriate for modern living. The national standards require 1 bedroom as a minimum. This analysis has been based on the living room acting as the bedroom. These flats were found to have sufficient storage and bedroom size, but the overall GIA was over 6 SQM too small for a 1 bedroom – 1 person flat. The same flats were over 17 SQM too small for a 1 bedroom – 2 person flat.

9.5.2 The 2-bedroom single storey flats (26 no.) are too small in GIA to be either 3 or 4 person flats. On average they are 3.3 SQM short of 3 person size and 12.3 SQM short of 4 person size. None of the main bedrooms are of adequate size in comparison with the standards and only 4 no. second bedrooms are of adequate size for use as a 1 person bedroom. Generally speaking, the built-in storage provision was good with 18 of the 26 flats comfortably exceeding the required square meterage in the standards.

9.5.3 All 14 of the 2-bedroom 2-storey maisonettes were fully compliant with the standards to provide 2 bedroom – 3 person accommodation (over 2 storeys). In particular, the bedroom sizes, in both area and minimum widths, comfortably exceeded the requirements. However, it is assumed that these maisonettes are not intended for just 3 persons.

9.5.4 The 2-bedroom 2-storey maisonettes were not large enough to comply with the standards to provide 2 bedroom – 4 person accommodation (over 2 storeys). The overall GIA of these maisonettes was on average 5.6 SQM too small and the second bedrooms were on average 1.35 SQM too small for 2 persons. However, internal modifications could provide 2 fully compliant bedrooms as the main bedrooms are sufficiently above the standards to be reduced to increase the sizes of the second bedrooms. Therefore, it could be seen that the only shortfall to modern standards is the 1.35 SQM of GIA, which is negligible.

9.6 Summary:

9.6.1 The bedsit accommodation (3 no.) is inappropriate for modern living and falls a long way short of the standards.

9.6.2 The single storey 2-bedroom flats (26 no.) fall short of the standards. They are close to compliance as 3 person units but full a long way short of 4 person size.

9.6.3 The 2-bedroom maisonettes (14 no.) are a good size. They fully comply as 3 person units but only just fall short of being 4 person units, in accordance with the standards.

10.0 EXCLUSIONS AND LIMITATIONS

10.1 The surveys carried out in compilation of this report have been visual only.

10.2 No fixed obstructions, floor, ceiling or walls, etc., have been opened up.

10.3 No testing of materials, equipment or mechanical and electrical services has been undertaken.

10.4 No access was available to the roofs and so the report is based on high quality aerial photographs, commissioned as part of this report.

10.5 The surveyors have endeavoured to access as many areas as possible to create a comprehensive assessment of the building's condition. However, some areas were not accessed. The no access areas are the bin stores and other landlord's accommodation between Blocks 1 and 2, and between Blocks 2 and 3.

10.6 A sample of 8 flats were accessed as part of this survey (listed above in condition report). This represents approximately 19%. Of the sample, a ground floor and upper floor flat in each of the blocks was inspected and so a good representative range of accommodation types and conditions was achieved. However, it is worth noting that the sample may not be fully indicative of the conditions and defects of other flats.

Joseph Hanley BSc (Hons) MSc MRICS MFPWS
Senior Building Surveyor
For Arcus Consulting LLP
Date: 24th February 2020

APPENDIX A
PHOTOGRAPHS OF VARIOUS SITE DEFECTS

▲ F.01 Severe ponding to main roofs

▲ F.02 Poor detailing preventing water from draining into gully

▲ F.03 Gullies and channels completely blocked

▲ F.04 Blocked gullies and a mess of cabling to all main roofs

▲ F.05 Blocked gullies

▲ F.06 Low level roofs worse affected

▲ F.07 Vegetation and debris to low roofs

▲ F.08 Rooflight damaged

▲ F.09 Poly roof above stairs to be replaced

▲ F.10 Bare concrete roof to bin shoot allowing rainwater penetration

▲ F.11 Balconies saturated and allowing water to penetrate and stain walls

▲ F.12 Some parapets rebuilt due to severity of damage

▲ F.13 Parapets in poor condition

▲ F.14 Exposed areas worse affected. Severe efflorescence shown here.

▲ F.15 Parapet dangerously loose

▲ F.16 Coping missing exposing cavity

▲ F.17 Condensate pipe staining

▲ F.18 Severe staining to Block 1

▲ F.19 Graffiti to Block 1

▲ F.20 Air bricks to flat with HRVS

▲ F.21 Cavity wall insulation coming from wall where mortar has “popped”

▲ F.22 Poor detailing to walkway gully not allowing water to drain

▲ F.23 Walkway covering discolouring and losing tactile texture

▲ F.24 Mortar fillet cracked

▲ F.25 Inadequate falls and poor detailing allowing rainwater to pond dangerously on landing above stairs.

▲ F.26 Flooring tiles in very poor condition

▲ F.27 Stair soffits and ceilings requiring decorations

▲ F.28 Garage block roofs saturated, not draining and allowing vegetation to grow

▲ F.29 Garage block roofs saturated, not draining and allowing vegetation to grow

▲ F.30 Garage block roofs saturated, not draining and allowing vegetation to grow

▲ F.31 HRV systems poor performance

▲ F.32 Redundant fittings left

▲ F.33 Redundant fittings left

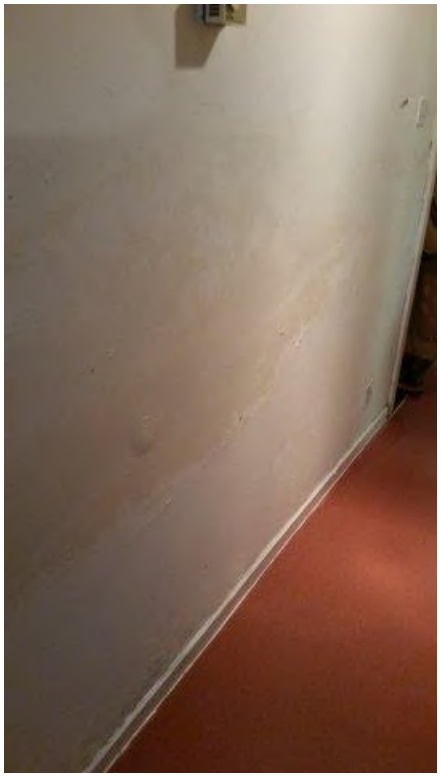
▲ F.34 Condensation prevalent throughout

▲ F.35 Problems with doors and locks common

▲ F.36 Water ingress through ventilation ducting

▲ F.37 Severe condensation to many bathrooms

▲ F.38 Leaking pipework



▲ F.39 Internal walls saturated throughout with no obvious cause

▲ F.40 Bulkhead installed to cover over problems with walkways above

▲ F.41 Void Flat in very poor condition

▲ F.42 Bathroom leaks and condensation

▲ F.43 More bathroom leaks and condensation

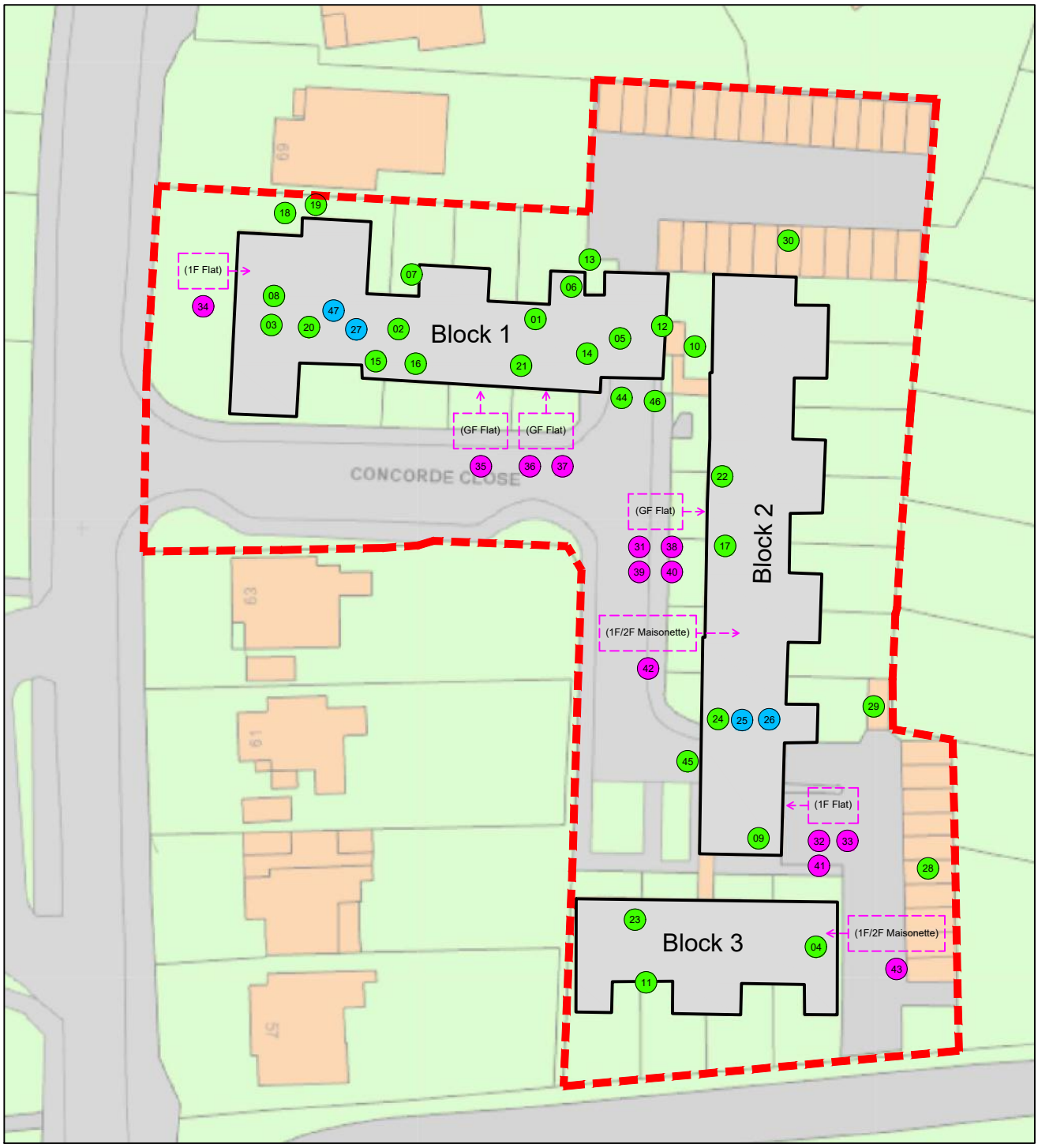
▲ F.44 Fire risk from furniture dumped under overhang soffit

▲ F.45 Fire risk as undercroft ceilings/soffits in poor condition and not fire rated

▲ F.46 Noticeboard showing confusing and incorrect information

▲ F.47 Non fire doors used internally

APPENDIX B
REPORT PHOTOGRAPH LOCATION PLAN



Report Photograph Locations

Note: Locations are approximate and are only to be used as a guide in conjunction with Appendix A of the main report.

Key

- 01 - External Photographs
- 01 - Internal Communal Area Photographs
- 01 - Internal Flat Photographs

APPENDIX C
ASBESTOS MANAGEMENT SURVEY

FRANKHAM RMS

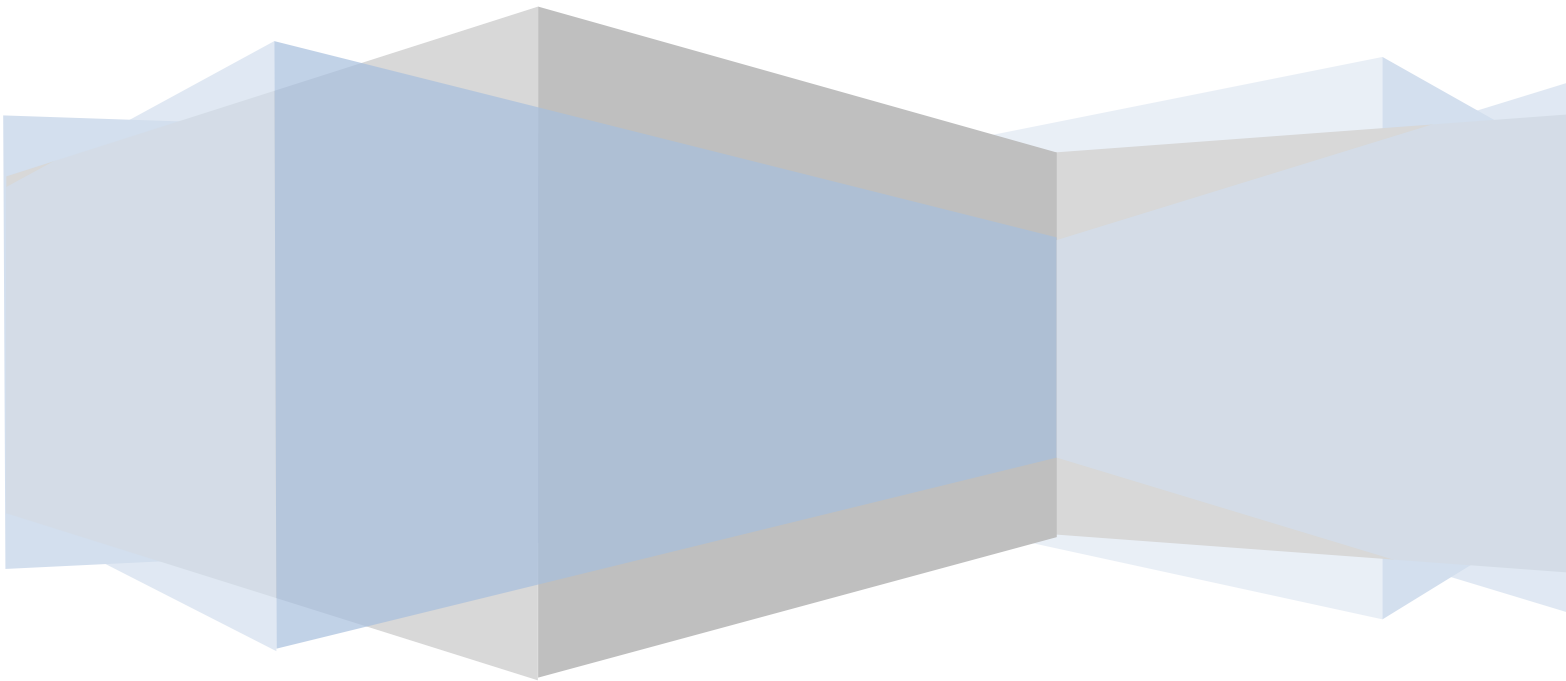
Asbestos Management Review

For the management of asbestos-containing materials at Concorde Close, Hounslow

Prepared for

Home Group Ltd

07/08/2019



CONTENTS **PAGE NO.**

1.0 Introduction

Concorde Close is a multi-block estate in Hounslow. The property comprises 4 blocks, linked by raised walkways. The accommodation comprises 43 units, being both single and two-storey flats (maisonettes), with communal areas.

The owners of the estate (Home Group) have requested this review, as part of feasibility study prior to undertaking one of the four following scenarios:

1. No refurbishment (i.e. continued management of asbestos only)
2. Refurbishment (i.e. may include some asbestos removal to facilitate)
3. Part redevelopment, part refurb (i.e. may include some asbestos removal to facilitate)
4. Full redevelopment (i.e. complete removal of all asbestos items prior to works)

It should be noted that none of the above scenarios are yet confirmed; they are only at discussion stage so far.

As each of the above scenarios would likely disturb any asbestos items that are present, it was decided that a refurbishment asbestos surveys should be undertaken as follows:

- Provide an asbestos refurbishment report to the communal areas, garage blocks and six void flats (20, 22, 27, 34, 36 & 42). (Report Ref J01505)

Once the above was completed, the results could be used to provide details and removal costs for items not only in the areas inspected, but items likely to be identified in areas not yet inspected (i.e. remaining flats not inspected). Therefore, the costs in section 6 are shown as anticipated costs (shown as per flat) for all flats including those not inspected.

2.0 Uses of Asbestos

What is asbestos?

Asbestos is a term used for a number of naturally occurring minerals which have crystallised to form long thin fibres and fibre bundles. The fibres have high tensile strength, and chemical, electrical and heat resistance, and were widely used for these properties; either raw (e.g. asbestos textiles and insulation packings), or more often, combined with other materials (fireproofing, insulations, boards, asbestos cement sheets etc.). There are six regulated types of asbestos, the three main types being – chrysotile, amosite and crocidolite, which were widely imported and used in the UK. These are also referred to as white, brown and blue asbestos respectively. The other three types of regulated asbestos are fibrous actinolite, fibrous tremolite and fibrous anthophyllite, although these were less commonly used.

Effects of damaged materials

Although asbestos is a hazardous material, it can only pose a risk to health if the asbestos fibres become airborne and then inhaled. ACMs only release fibres into the air when they are disturbed. If you therefore maintain all your ACMs in good condition, they cannot release fibres and put the health of your workers or others at risk. ACMs are disturbed:

- during any direct action on them, e.g. drilling, boring, cutting, breaking, smashing, etc.;
- during their removal;
- during the demolition of buildings containing them;
- through minimal, but repeated damage, e.g. an unprotected asbestos insulating board panel on the back of a door which is continually being accidentally knocked or scraped;
- when damaged asbestos, e.g. damaged pipe insulation or sprayed asbestos on beams/columns, is subject to mechanical vibration and/or strong air currents;
- During any other action that causes the ACM to be disturbed.

Some ACMs are more vulnerable to damage and therefore more likely to release fibres than others. If ACMs are not disturbed they are unlikely to release airborne fibres and pose a risk to health.

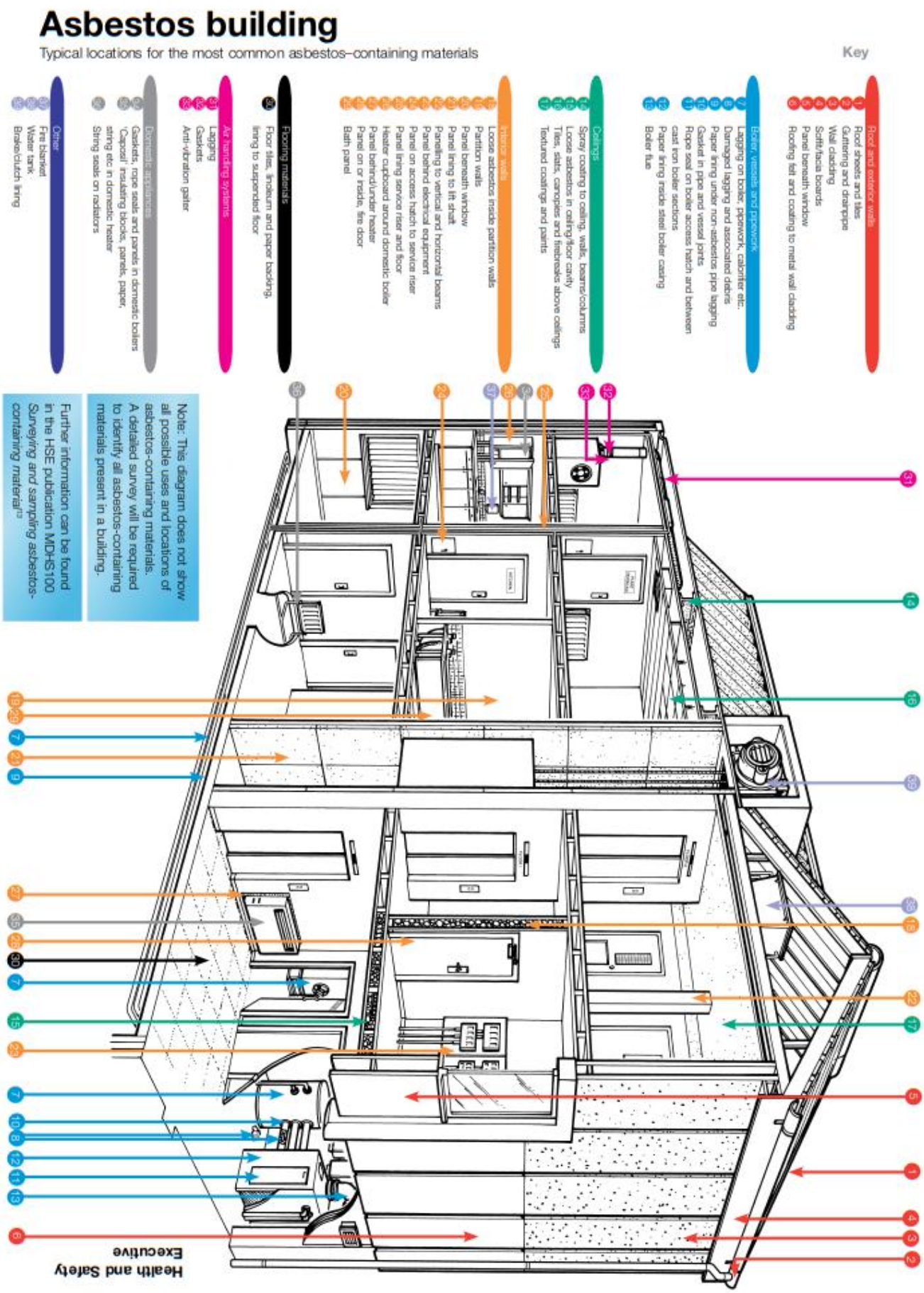
Where in premises can asbestos be found and what does it look like?

Asbestos has been incorporated into many materials over the last century. A drawing of a building showing many of the uses to which ACMs have been put is shown in Figure 1. This diagram does not show all the possible uses for ACMs. 34 The commercial use of asbestos in the UK began around the end of the nineteenth century and increased gradually until World War II. Immediately after World War II, large quantities of asbestos were used, particularly for new 'systembuilt' buildings in the 1950s, 1960s and early 1970s. ACMs were also routinely used in the refurbishment of older buildings.

Asbestos has been the subject of gradual voluntary and formal bans since 1969, for example:

- the use of blue asbestos stopped almost completely in about 1970;
- the installation of sprayed coatings decreased gradually from 1970 to 1980 and was the subject of a legal ban from 1985;
- the installation of asbestos insulating board decreased sharply after 1980 and stopped completely in 1985;
- the use of asbestos paints and varnishes stopped in about 1988;
- the installation of asbestos-containing decorative plasters was legally banned in 1992;
- The installation of asbestos cement was prohibited in 1999.

Please see below figure 1 outlining the common locations of asbestos, as detailed in HSG227 (Guide to managing asbestos in premises 2002)


Asbestos building
Typical locations for the most common asbestos-containing materials
Key
Roof and exterior walls
Roof sheets and tiles
Guttering and drainpipe
Wall cladding
Soffit/facia boards
Panel beneath window
Roofing felt and coating to metal wall cladding
Boiler, vessels and pipework
Lagging on boiler, pipework, calorifier etc.
Damaged lagging and associated debris
Paper lining under non-asbestos pipe lagging
Gasket in pipe and vessel joints
Rope seal on boiler access hatch and between cast iron boiler sections
Paper lining inside steel boiler casing
Boiler flue
Ceilings
Spray coating to ceiling, walls, beams/columns
Loose asbestos in ceiling/floor cavity
Tiles, slabs, canopies and firebreaks above ceilings
Textured coatings and paints
Internal walls
Loose asbestos inside partition walls
Partition walls
Panel beneath window
Panel lining to lift shaft
Panelling to vertical and horizontal beams
Panel behind electrical equipment
Panel on access hatch to service riser
Panel lining service riser and floor
Heater cupboard around domestic boiler
Panel behind/under heater
Panel on or inside, fire door
Bath panel
Flooring materials
Floor tiles, linoleum and paper backing, lining to suspended floor
Air handling systems
Lagging
Gaskets
Anti-vibration gaiter
Domestic appliances
Gaskets, rope seals and panels in domestic boilers
'Caposil' insulating blocks, panels, paper, string etc in domestic heater
String seals on radiators
Other
Fire blanket
Water tank
Brake/clutch lining
Note: This diagram does not show all possible uses and locations of asbestos-containing materials. A detailed survey will be required to identify all asbestos-containing materials present in a building.
Further information can be found in the HSE publication MDHS100 Surveying and sampling asbestos-containing material[1]
Health and Safety Executive

3.0 Asbestos Findings - Summary

Communal Areas

Whilst inspecting the communal areas, no asbestos items were identified. However, it should be noted that although the top layer of bitumen roofing felt, any layers beneath could not be inspected, as this would damage the integrity of the roof.

Garages

During the asbestos survey of the garage blocks, no asbestos items were identified. However, it should be noted that although each garage block was inspected externally, internal access could not be gained, meaning that the internal areas must be presumed to contain asbestos.

Flats

The two areas where asbestos was identified during the flat inspections were as vinyl flooring and AIB boxing to the walls. Between the different flats, the amount of flooring varied covering either some or all rooms. The boxing was identified bedrooms and cupboards, often over-clad with plasterboard. It should be noted that all samples of textured coating (e.g. Artex) proved negative for asbestos content, and require no management controls.

Please note: As only six flats were inspected, it must be presumed that each flat contains asbestos boxing to 1-2 areas and floor tiles throughout, until full inspections can be undertaken.

Notes on asbestos content and inherent risk

Floor tiles

Typically, floor tiles contain approximately 5-25% Chrysotile (white) asbestos. In use, they pose a very low risk, and are very unlikely to release fibres into the surrounding air, even during the removal process. Therefore, unless damaged (and therefore posing a potential slip/trip hazard) they should be left in place. Where removed, the waste should be disposed of correctly as asbestos waste. It should also be noted that the adhesive used for the fixing the tiles often contained asbestos, however this material again had a similar asbestos content, well bonded within the adhesive matrix.

Asbestos Insulating Board (AIB)

AIB typically contains 30-50% Amosite (brown) asbestos. It was supplied in the form of large boards (usually 8' x 4'), which were often cut up on-site into various shapes and sizes for use. This often led to the offcuts being used to 'pack' voids spaces (e.g. gaps around window/ door frames). The material is known to be brittle, and can shatter/delaminate with moderate impacts. It was often used where there was a requirement for insulation or fire protection, and commonly found as boxing around services (e.g. boilers, pipework etc.). If the material is sealed (i.e. with a suitable encapsulant) and in good condition, it poses little risk to occupants, with no fibre release. However, scuffed edges/corners, and unsealed surfaces are often found, and this can lead to fibre release, through a scrubbing action of air/ materials. Therefore, in areas where these materials are liable to impact or grazing through occupation, we often recommend that the materials are either removed or enclosed to avoid contact. Further to the above, as a bare minimum, all AIB material should be encapsulated with a 100% paint seal being maintained.

4.0 Asbestos Remedial Actions - Requirement

Please see below required management actions for the following scenarios:

1. Management (i.e. no refurbishment)

Where no refurbishment is to take place, all of the floor tiles identified can be managed without removal. The only reason to remove these items is either where they become irreparably damaged, or where the flooring is to be replaced.

The AIB boxing will need encapsulation/ enclosing in places, and this should be determined on a case by case basis. Although the items inspected were in good condition, similar items in flats other than those inspected, may require repair, or removal.

2. Part Refurbishment

Again any materials not affected by refurbishment can be left in-situ and managed. Those affected by works should be removal prior to refurbishment.

3. Part Redevelopment

If part redevelopment is undertaken, we anticipate that all items affected by works would be removed. Once the scope is agreed, a programme of removal can be created.

4. Full Redevelopment

If a full redevelopment is undertaken, a full demolition inspection would be required. Following the inspection, all items would require removal prior to demolition.

5.0 Asbestos Remedial Actions – Associated Costs Summary

To conduct this costing exercise, we have referred to the official Home Group schedule of rates for asbestos removal. Please note that for bulk quantities of items, a lower rate may be applicable, via a tendering process, especially when combined with demolition.

Vinyl floor tiles

The standard removal cost for vinyl flooring is £17.00 per square metre, and they can be removed by licenced and/or licenced contractors. In the flats inspected, the area of floor tiles varied between 50-80msq. Therefore we calculate the average cost of floor tile removal per flat to equal £1000.00.

AIB Boxing

As previously stated, the AIB in the flat inspected was in various states of repair. Therefore the cost analysis would have to be completed on a case by case basis. Due

to the nature of the material, it can ONLY be removed by contractors licenced by the HSE. The costs anticipated remedial actions would be as follows:

- Encapsulation - If the item has previously been encapsulated, the process of re-encapsulation will not require a full enclosure. If the material is unsealed, the process of encapsulation requires a full enclosure, and air monitoring. Anticipated costs would be £45.00 per square metre.

- Enclosure (boxing-in) – The standard cost of enclosure is £72.00 per square metre.

- Removal – This process must be conducted using a full enclosure, with a suitable air test carried out post works. We anticipate the removal costs per flat as circa £1500.00.

6.0 Asbestos Remedial Actions – Anticipated Costs (Budget)

Please find below anticipated total costs (including flats not yet inspected for each of the proposed schemes. Costs are shown for anticipated remedial works and also for continued management of remaining asbestos materials, over a 30-year life cycle.

1. Management (i.e. no refurbishment)

Where no refurbishment is to take place, we anticipate that the main items requiring remediation will be the AIB boxing panels. It is unlikely that full removal would be required, and accordingly, we anticipate minimal remedial costs required to bring the materials up to spec, will be circa £200 per flat, and continued management costs of £1200 per flat.

Total costs circa £8500.00 - £10,000.00
Total Management costs circa £54,000.00

2. Part Refurbishment

In the event of part-refurbishment, it is likely that all materials will require removal. Therefore, if full AIB and floor tile removal is undertaken, we anticipate remedial costs circa £1,500.00 - £2500.00 per flat, and continued management costs of £1200 per flat.

Total costs circa £60,000.00 - £100,000.00
Total Management costs circa £54,000.00

3. Part Redevelopment

In the event of part-redevelopment, it is likely that all materials will require removal. Therefore, if full AIB and floor tile removal is undertaken, we anticipate remedial costs circa £1,500.00 - £2500.00 per flat and continued management costs of £1200 per flat.

Total remedial costs circa £60,000.00 - £100,000.00
Total Management costs circa £54,000.00

4. Full Redevelopment

In the event of full redevelopment, all asbestos items will require removal. Therefore, if full AIB and floor tile removal is undertaken, we anticipate remedial costs circa £1,500.00 - £2500.00 per flat, plus a further fee for a full demolition asbestos survey.

Total costs circa £60,000.00 - £100,000.00

Demolition inspection £9500.00 - £11,500.00

Please note: With full redevelopment, there will be no continued management costs.

7.0 Asbestos Remedial Actions – Programme

Where works include for the complete removal of floor tiles, throughout, combined with AIB removal, this would be completed by a three-person team within one day (9am-5pm). Where less work is required, multiple properties will be completed per day.

Once a scope of works is agreed on, detailing which remedial works are required, we can provide a suitable Gantt chart outlining a full programme of remedial work.

8.0 Asbestos Remedial Actions – Further Considerations

Whilst asbestos remedial work is taking place, the following items should be considered:

- Decanting – For all asbestos work where access/egress is blocked by the formation of an enclosure, we recommend decanting occupants for the duration of work. This would be on a daytime basis only, and should not incur separate accommodation costs, except in special circumstances.

- It should be further noted that furniture may need to be moved prior to removal works taking place.

- Provision of services – All asbestos works will require parking for decontamination units, water and a supply of electricity

- HSE Notifications – Dependent upon the nature and duration of work, the project(s) may be notifiable under the CDM regulations 2015 and/or Control of Asbestos Regulations 2012.

9.0 Summary and Conclusions

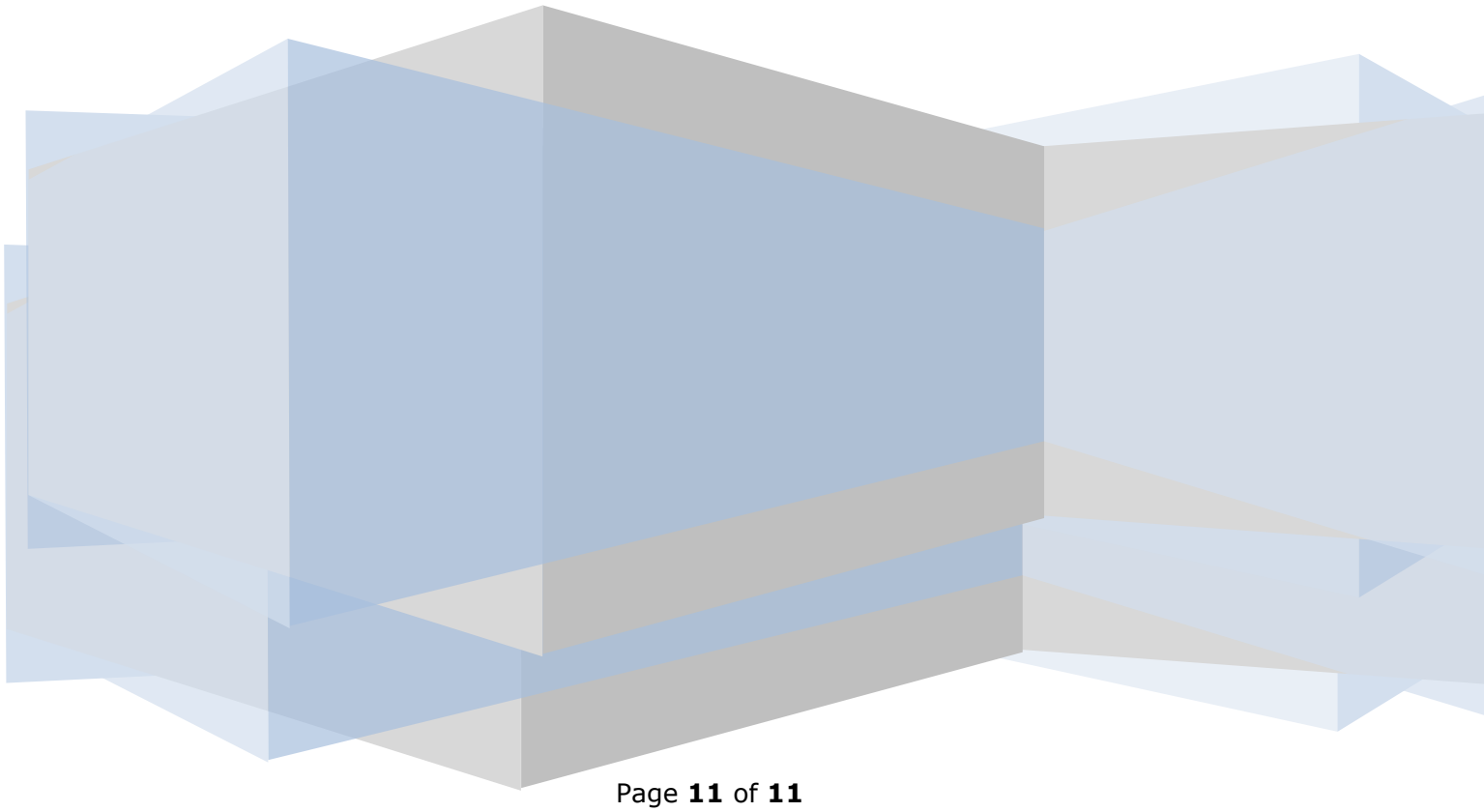
In summary the inspection identified a number of asbestos items, some of which will require remedial actions if disturbed. The level of remedial action required will be based upon the proposed scope of refurbishment/ redevelopment, and we have outlined a proposed course of action based upon each. Until such time as all areas can be accessed, the worst case for each flat has been assessed as floor tiles throughout, with up to 2 areas of AIB boxing. However, it should be noted that although many flat will contain this or less, some additional items may yet be discovered during further inspection, which cannot be anticipated/ costed at this time.

As the future plans for the property are still at the planning/ negotiation stage, we believe we have provided a suitable report to assist with any decision based upon cost. However, should further detail be required, we can assist further upon request.

Contacts

Tim Peters MFAAM CCP
Email: tim.peters@frankham-rms.com / tim.peters@frankham–rms.com
Phone 020 8309 2640 / 07545 929235

John Powell
Email john.powell@frankham-rms.com Phone 020 8309 2746/ 07702 634158



APPENDIX D
MET POLICE SECURITY SURVEY

CONFIDENTIAL

METROPOLITAN POLICE CRIME PREVENTION: SECURITY SURVEY

2rd April 2019

Crime Prevention Design Advisor
Metropolitan Police, Continuous Policing Improvement Command

RE: Concorde Close Hounslow.

Hi Matthew,

Thank you for your time last week in showing Chris and Myself around, as we discussed during the walk-around due to the complete redevelopment of Concorde Close in the near future much of the current crime issues will hopefully be designed out but in the interim there are some simple security improvements you can make in order to reduce crime that shouldn't cost too much.

Crime Risks:

The venue is located in a cull-de-sac close to transport infrastructure and a main road leading into Hounslow, some residents have reported incidents where non- residents have managed to gain access to the rear of the buildings via the open entrance stairwells to inject drugs or to cause anti-social behaviour.

Recommendation 1:

Open access to the frontage

The grass amenity space at the frontage is open with no defensible space or semi -private designation and access can be gained directly off the street. Whilst we were there we saw evidence of drug paraphernalia and garbage strewn in the planting on your property. Our recommendation would be to have this area cleaned up and to install a close boarded wooden fence along your front boundary to prevent easy access this would also be easier to manage and safer for residents. The fencing should not be over 1 metre to maintain the natural surveillance from the main road.

Justification:

Defensible space will mean residents will have a semi-private area that they will be able to take ownership over and this will reduce the chance of non-residents gaining access into this space.

Recommendation 2:

Ground floor window opening restrictors

Many of the ground floor windows are vulnerable particularly if any resident forgets to close their window or in hot weather someone from outside could reach inside and take items or perhaps gain entry.

Justification:

Opening restrictors on every ground floor window will reduce the risk of burglary and trespass and will still allow residents to safely ventilate their flats.

Recommendation 3:

Gated access to each stairwell:

There are several stairwells that allow open and free access into each section of the estate and to the rear of resident's flats these areas are being exploited by individuals for drug use, rough sleeping and other Anti-social behaviour.
We recommend that these access points can be meshed off with either a metal mesh with aluminium surround or expanded metal with an integrated entrance gate operated by a punch code lock.
We recommend that these are fitted with self -closures and latch shut and have a simple thumb turn for fire escape. We advise that if an open mesh is used then the egress thumb turn is protected so that it cannot be manipulated from outside and it is floor to ceiling so cannot be scaled.

The weakness of the punch coded locks is that residents will have to manage the codes for each entrance as if this is compromised then their security will be vulnerable.

Justification:

Robust gates with secure entry will allow for lawful access by Contractors, Emergency Services, Staff and residents but will prevent Anti-Social Behaviour and intruders. Below is an example of some options, as you can see the internal thumb turn is protected so cannot be tampered with from the exterior face.

Recommendation 4:

Access to the bin store:

The bin store has a padlock on each door but these are loose and often left on the ground which means that the bin stores are often left insecure. We suggest a captive padlock system where the padlock is welded with a chain to one on the doors so it can't be removed.

Justification:

To prevent the padlocks going missing and to help prevent access from non-residents into the bin store.

Recommendation 5:

Iffy spaces:

As discussed out on site it would be unreasonable to gate off the undercrofts leading to the rear car parks and garages at the rear. However there are small areas linked to these areas we call iffy spaces which serve no purpose out of sight but are ideal for drug dealing, ASB etc. Close boarded fencing has been implemented in certain areas already but there are some areas which would benefit from them for the time being.

Justification:

It is clear from the visit that drug dealing is an issue within the small estate and there are several areas out of sight ideal for dealing. By using close boarded fencing with punch code access would be ideal to prevent access and reduce opportunities to commit crime and fly tipping such as the below.

There is also a fence which needs replacing by the garages on the left hand side at the rear of the estate.

Conclusion:

I advise that you obtain 3 quotes for any work you may intend to do, please remember whilst none of these measures will guarantee a solution to your current problem they may reduce the risk of crime from occurring. The Crime Prevention advice is free and without the intention of creating a contract. Any work commissioned should comply with relevant Heath and Safety Legislation. You are under no obligation to implement these measures and the Metropolitan Police accepts no legal responsibility for the advice given.

Yours sincerely

Rob and Chris

SW DOCO Team

APPENDIX E
FLAT SIZES ANALYSIS

Existing Accommodation at Concorde Close, Hounslow	Technical Housing Standards 2015

Single Storey Flats (Bedsits)									
Type	Qty	Flats	Bedrooms	GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
A	3	1, 5, 9	1	32.89	1.53	19.25	2.73	-	-

1 Bedroom, 1 Person, 1 Storey					
GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
39.00	1.00	7.50	2.15	-	-

Single Storey Flats (Bedsits)									
Type	Qty	Flats	Bedrooms	GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
A	3	1, 5, 9	1	32.89	1.53	19.25	2.73	-	-

1 Bedroom, 2 Person, 1 Storey					
GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
50.00	1.50	11.50	2.75	-	-

Single Storey Flats									
Type	Qty	Flats	Bedrooms	GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
B	3	2, 6, 10	2	59.07	3.26	9.92	2.58	7.96	2.07
C	3	3, 7, 11	2	56.66	1.03	9.94	2.57	7.96	2.05
D	3	4, 8, 12	2	58.88	4.29	9.96	2.57	7.77	2.01
E	3	13, 14, 15	2	56.72	2.50	10.11	3.17	7.05	2.21
F	1	19	2	59.44	1.88	10.36	3.17	5.70	2.18
G	7	20 - 26	2	56.88	2.57	10.06	3.17	6.95	2.21
H	2	27, 35	2	57.55	3.39	9.48	2.65	7.10	2.02
J	4	36, 37, 38, 39	2	56.44	0.67	10.44	3.18	8.13	2.58

2 Bedrooms, 3 Persons, 1 Storey					
GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
61.00	2.00	11.50	2.75	7.50	2.15
61.00	2.00	11.50	2.75	7.50	2.15
61.00	2.00	11.50	2.75	7.50	2.15
61.00	2.00	11.50	2.75	7.50	2.15
61.00	2.00	11.50	2.75	7.50	2.15
61.00	2.00	11.50	2.75	7.50	2.15
61.00	2.00	11.50	2.75	7.50	2.15
61.00	2.00	11.50	2.75	7.50	2.15

Single Storey Flats									
Type	Qty	Flats	Bedrooms	GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
B	3	2, 6, 10	2	59.07	3.26	9.92	2.58	7.96	2.07
C	3	3, 7, 11	2	56.66	1.03	9.94	2.57	7.96	2.05
D	3	4, 8, 12	2	58.88	4.29	9.96	2.57	7.77	2.01
E	3	13, 14, 15	2	56.72	2.50	10.11	3.17	7.05	2.21
F	1	19	2	59.44	1.88	10.36	3.17	5.70	2.18
G	7	20 - 26	2	56.88	2.57	10.06	3.17	6.95	2.21
H	2	27, 35	2	57.55	3.39	9.48	2.65	7.10	2.02
J	4	36, 37, 38, 39	2	56.44	0.67	10.44	3.18	8.13	2.58

2 Bedrooms, 4 Persons, 1 Storey					
GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
70.00	2.00	11.50	2.75	11.50	2.55
70.00	2.00	11.50	2.75	11.50	2.55
70.00	2.00	11.50	2.75	11.50	2.55
70.00	2.00	11.50	2.75	11.50	2.55
70.00	2.00	11.50	2.75	11.50	2.55
70.00	2.00	11.50	2.75	11.50	2.55
70.00	2.00	11.50	2.75	11.50	2.55
70.00	2.00	11.50	2.75	11.50	2.55

2 Storey Flats									
Type	Qty	Flats	Bedrooms	GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
K	3	16, 17, 18	2	73.60	2.52	13.14	3.19	10.19	3.14
L	7	28 - 34	2	73.59	2.31	12.98	3.18	10.10	3.14
M	4	40, 41, 42, 43	2	72.91	2.42	12.89	3.18	10.15	3.09

2 Bedrooms, 3 Persons, 2 Storeys					
GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
70.00	2.00	11.50	2.75	7.50	2.15
70.00	2.00	11.50	2.75	7.50	2.15
70.00	2.00	11.50	2.75	7.50	2.15

2 Storey Flats									
Type	Qty	Flats	Bedrooms	GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
K	3	16, 17, 18	2	73.60	2.52	13.14	3.19	10.19	3.14
L	7	28 - 34	2	73.59	2.31	12.98	3.18	10.10	3.14
M	4	40, 41, 42, 43	2	72.91	2.42	12.89	3.18	10.15	3.09

2 Bedrooms, 4 Persons, 2 Storeys					
GIA	Storage	Bed 1 Area	Bed 1 Min. Width	Bed 2 Area	Bed 2 Min. Width
79.00	2.00	11.50	2.75	11.50	2.55
79.00	2.00	11.50	2.75	11.50	2.55
79.00	2.00	11.50	2.75	11.50	2.55

APPENDIX F
PLANNED MAINTENANCE PROGRAMME (30 YEAR)

Concorde Close, Hounslow

No	Location	Room/Area	Element	Description	Condition Rank	Risk Score	Risk Rank	Category	Fault / Defect	Remedial Action	Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total
												2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	
A	**Immediate Priority Works (5 years)**																																									
1	External	Whole site	Flat roofs	Unblocking gullies, channels, removing vegetation, patch repairs to felt, etc	D	12	High Priority	Maintenance	Priority Work	As per description		£6,000.00																															**£6,000.00**
2	External	Block 1	Roof light	Replacement	D	12	High Priority	Maintenance	Priority Work	As per description				£3,500.00																													**£3,500.00**
3	External	Block 2	Poly roof to stiars	Replacement	D	12	High Priority	Maintenance	Priority Work	As per description						£6,250.00																											**£6,250.00**
4	External	Whole site	Concrete bin shoot roofs	Repairs and waterproof covering	D	12	High Priority	Maintenance	Priority Work	As per description				£1,350.00																													**£1,350.00**
5	External	Whole site	Rainwater goods	Clean and repair all rainwater goods	D	12	High Priority	Maintenance	Priority Work	As per description		£500.00																															**£500.00**
6	External	Whole site	Concrete private balconies	Repairs and waterproof covering	D	12	High Priority	Maintenance	Priority Work	As per description						£6,500.00																											**£6,500.00**
7	External	Whole site	Balcony handrails	Decorations	D	12	High Priority	Maintenance	Priority Work	As per description						£2,300.00																											**£2,300.00**
8	External	Whole site	Walls	Remove redundant fittings and make good all holes. Repair condensate and extract pipework and clean brickwork.	D	12	High Priority	Maintenance	Priority Work	As per description		£2,550.00																															**£2,550.00**
9	External	Whole site	Walls	Repairs to brickwork, parapets and copings, inc, brickwork cleaning, Block 1 parapet rebuilding and air brick removal. Clean and seal uPVC cladding.	D	12	High Priority	Maintenance	Priority Work	As per description		£16,200.00																															**£16,200.00**
10	External	Whole site	All blocks	Undertake thermographic survey	D	12	High Priority	Maintenance	Priority Work	As per description				£3,500.00																													**£3,500.00**
11	External	Whole site	Walkways	Reinstall rainwater gullies. Overlay worn areas with liquid applied system. Renew mortar fillets and threshold detail to stairwell door. Inspect and seal metail capping.	D	12	High Priority	Maintenance	Priority Work	As per description				£7,050.00																													**£7,050.00**
12	External	Whole site	Walkway Soffits	Repairs and redecorations to undersides of walkways where water damaged.	D	12	High Priority	Maintenance	Priority Work	As per description				£4,000.00																													**£4,000.00**
13	Internal	Whole site	Stairs	Replace floor tiles and nosings with new vinyl. Repair and redecorate stair soffits and ceilings.	D	12	High Priority	Maintenance	Priority Work	As per description		£5,600.00																															**£5,600.00**
14	External	Garage Blocks	Garage roofs	Re-roofing, new fascias, flashings, and rainwater goods	D	12	High Priority	Maintenance	Priority Work	As per description						£22,000.00																											**£22,000.00**
15	External	Whole site	Access roads and pavements	Isolated patch repairs to hardstandings and some small resurfacing works.	D	12	High Priority	Maintenance	Priority Work	As per description			£8,000.00																													**£8,000.00**
16	Internal	Flats	Asbestos Containing Materials	Maintenace, repairs and redecorations to ACMs to bring them up to standard.	D	12	High Priority	Maintenance	Priority Work	As per description		£2,000.00	£2,000.00	£2,000.00	£2,000.00	£2,000.00																											**£10,000.00**
17	Internal	Flats	Walls, partitions, ceilings	Plastered surfaces - responsive repairs to tenanted properties only.	D	12	High Priority	Maintenance	Priority Work	As per description				£1,500.00																													**£1,500.00**
18	Internal	Flats	Windows and doors	Inspection of all windows and doors. Adjustment/replacement of mechanisms.	D	12	High Priority	Maintenance	Priority Work	As per description				£6,000.00																													**£6,000.00**
19	Internal	Flats	HRV, heating and hot water Systems	Inspection, testing and reporting	D	12	High Priority	Maintenance	Priority Work	As per description				£6,000.00																													**£6,000.00**
20	Internal	Flats	Electrics	Electrical safety inspections and installation of RCD CUs. 20% flats.	D	12	High Priority	Maintenance	Priority Work	As per description				£7,200.00																													**£7,200.00**
21	Internal	Flats (6 no. voids)	Void Refurbishments	Full refurbishment of 6 no. voids, in different states of repair, to remarket. Including all building and services works.	D	12	High Priority	Maintenance	Priority Work	As per description		£25,500.00																													**£25,500.00**
22	External	Whole site	Undercroft soffits	Replacement of soffits with 1 hr fire rated	D	12	High Priority	Maintenance	Priority Work	As per description		£8,000.00																													**£8,000.00**
23	Internal	Block 1	Flat entrance doors	Replace 12 no. doors with fire doors	D	12	High Priority	Maintenance	Priority Work	As per description		£11,400.00																													**£11,400.00**
24	Internal	Communal areas	Emergency lighting	Upgrade lighting for compliance	D	12	High Priority	Maintenance	Priority Work	As per description		£3,000.00																													**£3,000.00**
B	**Planned Preventative Maintenance (30 years)**	**General**																																							
25	External	Whole site	Flat roofs	Roof covering and insulation	C	3	Medium Priority	Maintenance	Periodic works	Replacement											£5,000.00					£110,000.00										£5,000.00					**£120,000.00**
26	External	Block 1	Roof light	Flat roof light	C	3	Medium Priority	Maintenance	Periodic works	Replacement											£500.00									£3,500.00									£500.00		**£4,500.00**
27	External	Block 2	Poly roof to stiars	Mono-pitch plastic	C	3	Medium Priority	Maintenance	Periodic works	Replacement											£500.00									£6,250.00									£500.00		**£7,250.00**
28	External	Whole site	Entrance canopies	GRP canopies	B	2	Low Priority	Maintenance	Periodic works	Replacement							£500.00									£12,000.00										£500.00					**£13,000.00**
29	External	Whole site	Private Balconies	Concrete balconies	C	3	Medium Priority	Maintenance	Periodic works	Repairs and waterproofing											£1,500.00									£6,500.00											**£8,000.00**
30	External	Whole site	Metalwork	Railings, handrails, etc.	B	2	Low Priority	Maintenance	Periodic works	Redecoration								£6,000.00							£6,000.00						£6,000.00								£6,000.00			**£24,000.00**
31	External	Whole site	Walkways	Handrail panels	B	2	Low Priority	Maintenance	Periodic works	Redecoration / Replacement								£6,000.00							£12,000.00						£6,000.00								£6,000.00			**£30,000.00**
32	External	Whole site	Walkways	Walkway wearing surface	C	3	Medium Priority	Maintenance	Periodic works	Replacement					£12,000.00														£5,200.00											£12,000.00			**£29,200.00**
33	External	Whole site	Walls	Remove graffiti	C	3	Medium Priority	Maintenance	Periodic works	Reactive maintenance		£750.00																															**£750.00**
34	External	Whole site	Walls	Brickwork and copings	C	3	Medium Priority	Maintenance	Periodic works	Repairs / repointing		£15,000.00										£15,000.00										£15,000.00								£15,000.00			**£75,000.00**
35	External	Whole site	Walls	uPVC Cladding	B	2	Low Priority	Maintenance	Periodic works	Replacement													£17,000.00																				**£18,200.00**
36	External	Communal areas	Doors	Bin store, bin shoot, stairwell, plant room, and other communal doors	C	3	Medium Priority	Maintenance	Periodic works	Replacement		£18,000.00													£3,600.00						£3,600.00								£18,000.00			**£43,200.00**
37	Internal	Communal areas	Flooring	Internal flooring to stairwells and corridors	C	3	Medium Priority	Maintenance	Periodic works	Replacement		£2,500.00																£7,500.00										£7,500.00					**£17,500.00**
38	Internal	Communal areas	Decorations	Internal and external decorations	C	3	Medium Priority	Maintenance	Periodic works	Cyclical Decorations					£6,500.00											£6,500.00						£6,500.00								£6,500.00			**£26,000.00**
39	External	Whole site	Rainwater goods	Guttering and downpipes	C	3	Medium Priority	Maintenance	Periodic works	Replacement			£500.00			£2,500.00			£500.00					£500.00			£500.00			£500.00			£500.00			£500.00			£500.00		£2,500.00	**£8,500.00**
40	External	Whole site	Planters by Block 3	Brickwork and planter conents	C	3	Medium Priority	Maintenance	Periodic works	Repairs, improvements		£2,500.00														£2,500.00										£2,500.00					**£7,500.00**
41	External	Whole site	Fencing	Timber fencing	A	1	Low Priority	Maintenance	Periodic works	Replacement		£1,200.00											£6,500.00						£1,200.00						£6,500.00					£1,200.00	**£16,600.00**
42	External	Whole site	Access roads and pavements	All hardstandings	B	2	Low Priority	Maintenance	Periodic works	Repairs, improvements													£40,000.00							£8,000.00								£40,000.00			**£88,000.00**
43	External	Whole site	Soft landscaping	All grass, trees and bushes	C	3	Medium Priority	Maintenance	Periodic works	Ongoing maintenance		£3,000.00	£3,000.00	£6,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£6,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00	£6,000.00	£3,000.00	£3,000.00	**£84,000.00**
44	Internal	Landlord Only	Electrical Installation	Landlord Electrical Supply/Installation	C	3	Medium Priority	Maintenance	Periodic works	Replacement		£1,000.00	£1,000.00	£5,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£1,000.00	£5,000.00	£1,000.00	£1,000.00	**£33,000.00**
45	External	Whole site	Communal lighting	Street, communal and emergency lighting	C	3	Medium Priority	Maintenance	Periodic works	Replacement					£6,000.00											£1,200.00					£1,200.00					£6,000.00				£1,200.00		**£15,600.00**
46	External	Garage Blocks	Walls and floor slabs	Brickwork walls and oncrete slabs	C	3	Medium Priority	Maintenance	Periodic works	Repairs / repointing					£6,500.00																											**£6,500.00**
47	External	Garage Blocks	Doors	Up-and-over doors	C	3	Medium Priority	Maintenance	Periodic works	Replacement											£28,000.00																£28,000.00					**£56,000.00**
48	External	Garage Blocks	Roofs	Felt roof, fasia and rainwater goods	C	3	Medium Priority	Maintenance	Periodic works	Repairs / replacement											£5,000.00					£22,000.00										£5,000.00				£22,000.00	**£54,000.00**
C	**Planned Preventative Maintenance (30 years)**	**Flats**																																							
49	External	Flats	Windows	uPVC double glazed windows	B	2	Low Priority	Maintenance	Periodic works	Replacement											£124,000.00					£5,000.00					£5,000.00					£5,000.00				£124,000.00	**£263,000.00**
50	External	Flats	Entrance doors	Fire doors internally, composite doors to external flats	B	2	Low Priority	Maintenance	Periodic works	Reflacement											£40,000.00					£2,000.00					£2,000.00					£2,000.00				£40,000.00	**£86,000.00**
51	Internal	Flats	Walls, partitions, ceilings	Plastered surfaces - repairs to voids and responsive repairs to tenanted properties	C	3	Medium Priority	Maintenance	Repairs to voids as available	Repairs								£1,500.00							£1,500.00						£1,500.00								£1,500.00			**£6,000.00**
52	Internal	Flats	Floors	Concrete slab and suspended timber floors - repairs to voids	C	3	Medium Priority	Maintenance	Repairs to voids as available	Repairs								£1,500.00							£1,500.00						£1,500.00								£1,500.00			**£6,000.00**
53	Internal	Flats	Internal doors	Doors, frames, archtraves, fire strips, hinges, ironmongery and decorations	B	2	Low Priority	Maintenance	Repairs to voids as available	Repairs / Replacement								£1,500.00							£1,500.00						£1,500.00								£1,500.00			**£6,000.00**
54	Internal	Flats	Kitchens	Component replacement	B	2	Low Priority	Maintenance	Periodic works	Replacement											£10,000.00						£75,000.00	£75,000.00								£10,000.00					**£170,000.00**
55	Internal	Flats	Bathrooms	Component replacement	B	2	Low Priority	Maintenance	Periodic works	Replacement											£65,000.00									£65,000.00										£65,000.00	**£195,000.00**
56	Internal	Flats	Asbestos Containing Materials	Inspection, maintenance and removal	C	3	Medium Priority	Maintenance	Periodic works	Repairs / Removal		£5,500.00		£5,500.00		£5,500.00		£4,500.00		£4,500.00			£4,500.00			£4,500.00		£4,500.00		£3,500.00		£3,500.00		£3,500.00		£3,000.00		£3,000.00		£3,000.00	**£54,000.00**
57	Internal	Flats	Electrics	Removal of all redundant electrical controls and fittings.	C	3	Medium Priority	Maintenance	Periodic works	Repairs / Removal		£3,000.00	£3,000.00	£3,000.00	£3,000.00	£3,000.00																											**£15,000.00**
58	Internal	Flats	Electrics - Lighting	Replacement of all light fittings with LED	C	3	Medium Priority	Maintenance	Periodic works	Replacement		£7,310.00	£7,310.00	£7,310.00	£7,310.00	£7,310.00																											**£36,550.00**
59	Internal	Flats	Statutory Compliance	Electrical safety inspections, gas inspection, HRVS servicing, etc.	C	3	Medium Priority	Maintenance	Periodic works	Ongoing maintenance		£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	£8,600.00	**£215,000.00**
											TOTALS	**£80,750**	**£10,000**	**£42,100**	**£2,000**	**£39,050**	**£68,860**	**£39,910**	**£41,910**	**£47,410**	**£310,410**	**£27,600**	**£80,600**	**£16,700**	**£40,800**	**£245,100**	**£117,600**	**£12,600**	**£21,300**	**£19,500**	**£115,950**	**£44,100**	**£24,300**	**£12,600**	**£28,600**	**£68,600**	**£58,600**	**£12,600**	**£79,600**	**£32,300**	**£271,300**	**£2,012,750**