

# **APPENDIX C**

### 19-37 Highgate Road \_ Construction Programme

Construction Programme 19-37	1	2	2	4	5	6	7	8	٩	10	11	12	13	14
Highgate Road	-	2	5	•	,	Ŭ	1	0	5	10		12	15	± 1
	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Site Set up - hoardings/fence + site office	S													
Demolition														
Pile matt + Pilings + sheet pilings														
Basement slab														
Gf,1,2,3,4,5,6,7 slabs														
External SFS gf,1,2,3,4,5,6,7 floor														
Windows														
Roof waterproofing														
Brickwork 1,2,3,4,5,6,7 floor														
Fit out and finishes														
External landscaping / rooftops														

Construction Programme 19-37 Highgate Road	15	16	17	18	19	20	21	22	23	24	25
	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
Site Set up - hoardings + site offices etc											
Demolition											
Dig basement area											
Pile matt + Pilings + sheet pilings											
Basement slab											
Gf,1,2,3,4,5,6,7 slabs											
External SFS gf,1,2,3,4,5,6,7 floor											
Windows											
Roof waterproofing											
Brickwork 1,2,3,4,5,6,7 floor											
Fit out and finishes											
External landscaping / rooftops	_										
Completion											



# **APPENDIX D**

### Community liaison guidance: guidance for developers and contractors

We expect you to consult with the local community before submitting your draft Construction Management Plan (CMP) to the Council. If you do not include evidence of the consultation with your submission or we are not satisfied with the level of liaison undertaken, we will not review the CMP.

### A: Before you submit your CMP to the Council

#### 1. Who to consult:

- Neighbouring residents, business, schools and organisations that will be affected by the demolition and construction of the development.
- This should be proportionate to the scale of the development and should include as a starting point:
  - All the properties along the street on which the site is located and those who back onto and front the site.
  - Ward councillors you can <u>find your ward councillor</u> on our website.

#### 2. How to consult:

- Send letters and / or emails allowing at least 14 days to comment on the proposals.
- If you are required to form a Community Working Group please see the CMP pro-forma for further information. [link]

#### 3. What to include in your letter:

- A statement making clear that the consultation is about the CMP.
- A summary of the key details of the construction process and a copy of the CMP, or a link to a website where the CMP is available to view and download.
- The deadline for comments.
- Contact details of who to contact with any questions and where to send comments.

- 4. Incorporating consultation feedback in your submitted CMP:
  - Review all comments received and where possible make changes to the CMP to address the concerns raised.
  - When submitting the CMP to the Council, include a consultation document as an appendix outlining:
    - $\circ$  Who was consulted.
    - o A summary of the comments received.
    - How the CMP has been amended / mitigation measures put in place in response to comments received. Where the CMP has not been amended, an explanation of the reasons for not making changes.

### **B: Ongoing engagement during construction works**

The Council expects ongoing engagement with neighbouring residents, businesses and organisations during the course of the works. Experience demonstrates that this can have a significant effect in reducing the number of complaints received during the construction process.

Ongoing engagement should include but is not limited to:

- Looking forward updates/ newsletters outlining what is taking place on site in the next two weeks (i.e. type of work, the number and size of vehicles) and contact details for any concerns or comments. Ideally these will be sent fortnightly to affected residents, by letter or email, and displayed on notice boards on the hoarding outside the site
- Any revisions to the CMP you should undertake further consultation with residents if it becomes necessary to do so during the course of the development.

Questions – if you have any questions on community liaison pleasecontacttheplanningobligationsteam:planningobligations@camden.gov.uk



# **APPENDIX E**







# **APPENDIX F**



	REV: DETAILS:
	V7         RIGID FLATBED DELIVERY VEHICLE: ACCESS AND EGRESS (CONSTRUCTION WORKS) 08.07.22
	VEHICLE DETAILS:
	VEHICLE: RIGID FLATBED LEGNTH: 10.00m WIDTH: 2.50m NB: VEHICLE PROFILE IS FOR ILLUSTRATIVE PURPOSES ONLY
	FORWARD MOVEMENTS ARE SHOWN IN GREY (design speed for all constrained forward movements - 3mph)
	<b>REVERSE MOVEMENTS ARE SHOWN IN BLUE</b> (design speed for all reverse movements - 2mph)
	TRAFFIC MARSHAL POSITION
	<ul> <li>NOTES:</li> <li>a. Do not scale from this drawing.</li> <li>b. This drawing is to be read and printed in colour.</li> <li>c. This drawing is for illustrative purposes only.</li> <li>d. Road layout and location of street furniture is approximate.</li> <li>e. These Swept Path Analysis drawings are indicative only, it remains the Principal Contractor/Freight Operators responsibility to ensure that vehicles are able to undertake the proposed manoeuvres.</li> </ul>
FIRST FLOOR	South Downs Safety Ltd Contact: Mark Edgar E: mark@nouthdowngagafaty.op.uk
	T: 07545 898 726 W: www.southdownssafety.co.uk
	GM LONDON
	PROJECT: 19-37 HIGHGATE ROAD LONDON NW5 1JY
43 1925	DRAWING TITLE: FLATBED DELIVERY VEHICLE ACCESS AND EGRESS (CONSTRUCTION WORKS)
	DRAWING STATUS: FOR INFORMATION
J. 21, 200	DRAWN: DESIGNED: DATE: SCALE: SIZE:
	ME         08.07.22         1:100         A1           DRAWING NUMBER:         REV:         NG
	V7



	REV:     DETAILS:       V7     ARCTIC PAST SITE (CONSTRUCTION WORKS)       08.07.22
	1.36 3.80 1.80 1.80 1.61 7.80 0.68 0000 1.36
	ARTIC       meters         Tractor Width       : 2.55       Lock to Lock Time       : 6.0         Trailer Width       : 2.55       Steering Angle       : 34.3         Tractor Track       : 2.47       Articulating Angle       : 75.0         Trailer Track       : 2.45
	FORWARD MOVEMENTS ARE SHOWN IN GREY (design speed for all constrained forward movements - 3mph)
	REVERSE MOVEMENTS ARE SHOWN IN BLUE
	(design speed for all reverse movements - 2mph)
	KEY:
	TRAFFIC MARSHAL POSITION
	<ul> <li>NOTES:</li> <li>a. Do not scale from this drawing.</li> <li>b. This drawing is to be read and printed in colour.</li> <li>c. This drawing is for illustrative purposes only.</li> <li>d. Road layout and location of street furniture is approximate.</li> <li>e. These Swept Path Analysis drawings are indicative only, it remains the Principal Contractor/Freight Operators responsibility to ensure that vehicles are able to undertake the proposed manoeuvres.</li> </ul>
FIRST FLOOR	South Downs Safety Ltd South Downs Safety Ltd Contact: Mark Edgar E: mark@southdownssafety.co.uk T: 07545 898 726 W: www.southdownssafety.co.uk
	CLIENT: GM LONDON
	PROJECT: 19-37 HIGHGATE ROAD LONDON NW5 1JY
51 195 * 51 <sup>170</sup>	DRAWING TITLE: ARCTIC PAST SITE (CONSTRUCTION WORKS)
	DRAWING STATUS: FOR INFORMATION
31,956	DRAWN:     DESIGNED:     DATE:     SCALE:     SIZE:       ME     ME     08.07.22     1:100     A1       DRAWING NUMBER:     REV:
	SDS-128 V7



# **APPENDIX G**





# **APPENDIX H**



# 19 - 37 Highgate Road London NW5 1JY

SITE SET UP PLAN 1:200 @ A1 Rev D

 Site Boundary				
Proposed building foorprint				
Proposed extent of scaffold				
 Proposed extent of Hoardings				
1500mm walkway below gantry				
Barriers for Vehicles Pit Lane				
 Gate for deliveries				
 Vehicles gate				



# **APPENDIX J**





# **APPENDIX K**



### 4 EXISTING NOISE ENVIRONMENT

The prevailing noise conditions in the area were determined by a detailed environmental noise survey undertaken over a 7-day period at two measurement locations, between Tuesday 2<sup>th</sup> and Tuesday 9<sup>th</sup> November 2021. Full details of the survey can be found in Appendix A.

Monitoring locations are presented in Figure 4.1 below, results of the survey are presented in Table 4.1.



#### Figure 4.1: Monitoring Locations

Table 4.1: Measured noise levels summary

	Period, metric [dB]								
Location	Day, L <sub>Aeq,16h</sub>	Night, L <sub>Aeq,8h</sub>	Day, L <sub>A90,15min</sub>	Night, L <sub>A90,15min</sub>	Night, L <sub>AFmax</sub> ,5min	Office hours, L <sub>Aeq,8h</sub>			
NM1	67	60	52	35	80	67			
NM2	63	54	50	41	73	n/a			

Note 1: Presented levels are façade values for NM1 and free-field values for NM2

Note 2: L<sub>A90,15</sub> min represents a typical (modal) value from the whole measurement period

Note 3: LAFmax, 5min represents the highest noise event not exceeded more than 10 times during a single night



#### A.1 - Instrumentation

All noise measurements were undertaken by a consultant certified as competent in noise monitoring. All acoustic measurement equipment used during the noise survey conformed to Type 1 specification of British Standard 61672 [8]. A full inventory of this equipment is shown in Table A.1 below. All equipment calibration certificates are available on request.

Equipment	lterre		Serial	Calibration		
ID	Item	Make and Model	Number	Certificate number	Expiry Date	
1 (NM1)	Sound Level Meter	01 dB DUO	10667			
	Preamplifier	Integrated	- 1500295		30/04/2023	
	Microphone	01 dB MCE212	39854			
2 (NM2)	Sound Level Meter	01 dB DUO	10927			
	Preamplifier	Integrated	-	1500966-2	29/09/2023	
	Microphone	GRAS 40CD	136961			
3	Calibrator	Rion NC-74	34304643	1500367-1	24/05/2022	
4	Calibrator	Rion NC-74	34625646	UCRT21/1138	29/01/2022	

#### Table A.1 Inventory of Measurement Equipment

The noise measurement equipment used during the survey was calibrated at the start and end of each measurement, using a Rion NC-74 sound calibrator to generate a calibration level of 94.0 dB at 1 kHz. No significant drift in calibration was found to have occurred.

The calibrators used have themself been calibrated by a UKAS accredited calibration laboratory within the twelve months preceding the measurements.

#### A.2 - Unattended Noise Survey NM1

Measurements were obtained using the 'F' time weighting and A-weighting frequency network. Consecutive 125 ms measurements of  $L_{Aeq,T}$ ,  $L_{Amax,F}$  and  $L_{A90,T}$  noise levels were obtained between 12:15 hrs on Tuesday 2<sup>nd</sup> November and 10:20 hrs on Tuesday 9<sup>th</sup> November 2021.

A microphone fitted with a protective windshield was mounted on a pole attached to a tree, 2 m above ground level and approximately 1.5 metres from the façade of the existing building, on the Highgate Road side. Noise levels monitored at this position were façade levels. The location of the measurement position is identified in Figure 4.1 in the report.

#### A.3 - Unattended Noise Survey MP2

Measurements were obtained using the 'F' time weighting and A-weighting frequency network. Consecutive 125 ms measurements of  $L_{Aeq,T}$ ,  $L_{Amax,F}$  and  $L_{A90,T}$  noise levels were obtained between 13:00 hrs on Tuesday 2<sup>nd</sup> November and 10:35 hrs on Tuesday 9<sup>th</sup> November 2021.

A microphone fitted with a protective windshield was mounted on a pole attached to a tree, approximately 4 m above ground level attached to a site fence, in the south-east corner of the site. Noise levels monitored at this position were free-field levels. The location of the measurement position is identified in Figure 4.1 in the report.



#### A.3 - Weather Conditions

Weather conditions during the survey period were obtained from internet sources <u>www.wunderground.com</u> (weather station at Holloway, ID ILONDO328), which indicated that the weather conditions for the measurement period were mostly dry and with moderate winds, no greater than 5 m/s. It is then considered that weather conditions have not significantly affected the noise survey.

#### Figure A.1: Photograph of Location NM1





Figure A.2: Photograph of Location NM2











#### Figure A.4: Measurement Time History – NM2





# **APPENDIX L**



### **Asbestos Survey For**

GM Developments at 19 Highgate Road London NW5 1JY In accordance with HSG264





### Names and Addresses

#### Client Name:

**GM Developments** 223 Davies Road

London SW6 7RD

Contact: Jack Higgin Phone: 07702 863168 Fax:

#### Instructing Party:

**GM Developments** 223 Davies Road

London SW6 7RD

Contact: Jack Higgin Phone: 07702 863168 Fax:

Site Full Name: Report Author: A.R.C.S. Environmental Limited **19 Highgate Road** Alton London Harrow Road NW5 1JY North Benfleet, Wickford Essex Contact: Phone: Fax: **SS12 9JW** Contact: Darren Keeble Director

A B C S Environmental Limited	Project Number:	ARCS/19HRD
	Survey Date:	15 February 2022
	Printed On:	21 February 2022
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## SECTION ONE

## SURVEY SUMMARY

### **Survey Summary**

1 Acting on instructions from our client, GM Developments, we have carried out a 'Refurbishment / Demolition Survey' to the above premises in order to comply with HSE regulations as stated in L143 and HSG 264, prior to the demolition of the site.

Our qualified surveyor(s) surveyed the premises during a single visit to the site on 15th February 2022.

#### SURVEY OBJECTIVES

The objective of the survey and report is to enable the client, or commissioner of the survey, to confirm the location, extent, type and condition of any asbestos containing materials identified on the premises.

The information included in this report, particularly the Asbestos Register, is intended to enable the safe and effective management, or eventual removal and disposal, of the asbestos materials.

Report Authorised By (Signature):

Report Authorised By (Print):

Darren Keeble

Client Name:	GM Developments	Project Number:	ARCS/19HRD	
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## SECTION THREE

## EXCLUDED AREAS

### **Excluded Areas**

The Following rooms / areas could not be accessed during the survey. Asbestos Containing Materials (ACMs) should be deemed as being present in these areas until proven otherwise.

1 No access was gained to inspect within the electrics due to being live. Presume ACMs present until proven otherwise.

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		Excluded Areas:	Page 1 of 1	



## SECTION TWO

## SURVEY CAVEAT

### **Survey Caveat**

1 The value and usefulness of the survey can be seriously undermined where either the client or the surveyor imposes restrictions on the survey scope or on the techniques/method used by the survey. Information on the location of all ACMs as far as reasonably practicable, is crucial to the risk assessment and development of the management plan. Any restrictions placed on the survey scope will reduce the extent to which ACMs are located an identified, incur delays and consequently make managing asbestos more complex, expensive and potentially less effective.

In management surveys, surveyors should be properly prepared for accessing all reasonably practicable areas in all parts of the building. Potentially difficult areas (including locked rooms etc) should be identified in the planning stage with the duty holder and arrangements made for access (e.g. MEWPs for work at height, rooms unlocked, doors/corridors unblocked etc). In situations where there is no entry on the day of the survey, a revisit should be made when access will be possible. Where there are health and safety risks associated with some activities (e.g. height, control spaces), there should be adequately assessed and arrangements made to control them. Any area not accessed (and where no other information exists) must be presumed to contain asbestos and be managed on that basis.

In refurbishments surveys, the area and scope of the work will need to be agreed between the duty holder and the surveyor. In these surveys and in demolition surveys there should be no restrictions on access unless the site is unsafe (e.g. fire-damaged premised) or access is physically impractical. The level of intrusion will be significantly greater then the management surveys. It will include accessing structural areas, between floor and walls and underground services. Some areas may be difficult to gain entry to and/or may need specialist assistance or equipment. Access arrangements need to be fully discussed in the planning stage and form part of the contact, particular where assistance has to be engaged. Where access has not been possible during refurbishment and demolition process to be progressive in those areas. Any ACMs must be identified and removed at this time. It is now recognised that even with 'complete' access demolition surveys, all ACMs may not be identified and this only becomes apparent during demolition itself. Surveyors need to be competent to do all the relevant work and tasks in the class of survey. They will need some knowledge of construction, be able to carry out the work safely and without risk to health, have the correct equipment to do the work and have the appropriate insurance.

If any restrictions have to be imposed on the scope of extent of the survey, these items must be agreed be both parties and clearly documented. They should be agreed before work starts (e.g. at the preliminary site meeting and walk-through inspection or during discussion and are likely to form part of the contract. If during the survey, the surveyor is unable to access any location or area for any reason, the duty holder must be informed as soon as possible and arrangements made for later access. If access is not possible, then the survey report should clearly identify these areas no accessed. Limitations should be kept to an absolute minimum by ensuring that stag are adequately trained, insured and have the appropriate equipment and tools.

Every effort has been made to identify all asbestos materials so far as was reasonably practical to do so within the scope of the survey and the attached report.

Methods used to carry out the survey were agreed with the client prior to any works being commenced.

Survey techniques used involves trained and experienced surveyors using the combined approach with regard to visual examination and necessary bulk sampling. It is always possible after a survey that asbestos based materials of one sort or another may remain in the property or area covered by that survey, this could be due to various reasons:

- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.

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### **Survey Caveat**

- Materials may be hidden or obscured by other items or cover finishes i.e. Paint, over boarding, disguising etc. Where this is the case then its detection will be impaired.

- Asbestos may well be hidden as part of the structure to a building and not visible until the structure is dismantled at a later date.

- Debris from previous asbestos removal projects may well be present in some areas; general asbestos debris does not form part of this survey however all good intentions are made for its discovery.

- Where an area has been previously stripped of asbestos i.e. plant rooms, ducts etc, and new coverings added, it must be pointed out that asbestos removal techniques have improved steadily over the years since its introduction. Most notably would be the Control of Asbestos Regulations 2012 (L143) laying down certain enforceable guidelines. Asbestos removal prior to this regulation would not be of today's standard and therefore debris may be present below new coverings.

- This survey will detail all areas accessed and all samples taken, where an area is not covered by this survey it will be due to No Access for one reason or any other i.e. working operatives, sensitive location or just simply no access. It may have been necessary for the limits of the surveyor's authority to be confirmed prior to the survey.

- Access for the survey may be restricted for many reasons beyond our control such as height, inconvenience to others, immovable obstacles or confined space. Where electrical equipment is present and presumed in the way of the survey no access will be attempted until proof of its safe state is given.

Our operatives have a duty of care under the Health and Safety at Work act (1974) for both themselves and others.

- In a building where asbestos has been located and it is clear that not all areas have been investigated, any material that is found to be suspicious and not detailed as part of this survey should be treated with caution and sampled accordingly.

- Certain materials contain asbestos to varying degrees and some may be less densely contaminated at certain locations (Artex for example). Where this is the case the sample taken may not be representative of the whole product throughout.

- Where a survey is carried out under the guidance of the owner of the property, or his representative, then the survey will be as per his instructions and guidance at that time.

- A.R.C.S. Environmental Limited cannot accept any liability for loss, injury, damage or penalty issues due to errors or omissions within this report. A.R.C.S. Environmental Limited cannot be held responsible for any damage caused as part of this survey carried out on your behalf. Due to the nature and necessity of sampling for asbestos some damage is unavoidable and will be limited to just that necessary for the taking of the sample.

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## SECTION FOUR

EXECUTIVE SUMMARY

### **Executive Summary**

**General Information:** 

Site Details.

Area	Comments 4	Accessed
Entrance Porch	Canopy boards sampled, solid walls, solid floor.	Yes
Ceiling Voids	Solid ceiling, solid walls, suspended ceiling floor, firebreaker panels sampled.	Yes
Entrance Lobby	SC - solid ceiling, solid walls, lino - screed - solid floor, no ACMs present.	Yes
Corridor 1	SC - solid ceiling, solid walls, lino - screed - solid floor - bitumen to floor sampled.	Yes
Office 1	SC - solid ceiling, solid walls, lino - screed - solid floor - presumed bitumen to floor, door header sampled.	Yes
Disabled WC	SC - solid ceiling, solid walls, lino - screed - solid floor - presumed bitumen to floor.	Yes
Toilets	SC - solid ceiling, solid walls, lino - solid floor - presumed bitumen to floor, presumed door header.	r Yes
Toilet Riser	Solid ceiling, solid walls, solid floor, no ACMs present.	Yes
Office 2	SC - solid ceiling, solid walls, carpet - screed - solid floor - bitumen to floor sampled, presumed door header, sink pads sampled.	Yes
Office 2 Cupboard	Solid ceiling, solid walls, screed - solid floor, no ACMs present.	Yes
Corridor 2	SC - solid ceiling, solid walls, lino - screed - solid floor - presumed floor tiles.	Yes
Cleaner Cupboard	Solid ceiling, solid walls, lino - solid floor - presumed bitumen to floor.	Yes
Office 3	SC - solid ceiling, solid walls, carpet - screed - solid floor - presumed bitumen to floor.	Yes
Office 4	SC - solid ceiling, solid walls, lino - screed - solid floor - presumed bitumen to floor.	Yes
Office 5	SC - solid ceiling, solid walls, carpet - screed - solid floor - presumed bitumen to floor.	Yes
Lounge	SC - solid ceiling, solid walls, lino - solid floor - presumed bitumen to floor.	Yes
Kitchen	SC - solid ceiling, tiled - solid walls, lino - solid floor, no ACMs present.	Yes
Kitchen Store 1	SC - solid ceiling, tiled - solid walls, lino - solid floor, no ACMs present.	Yes
Kitchen Store 2	SC - solid ceiling, tiled - solid walls, lino - solid floor, no ACMs present.	Yes
Kitchen Store 3	SC - solid ceiling, tiled - solid walls, lino - solid floor, no ACMs present.	Yes
Loading Bay	Solid ceiling, solid walls, solid floor, no ACMs present.	Yes

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Store Cupboard 1	Solid ceiling, solid walls, solid floor, no ACMs present.	Yes
Store Cupboard 2	Plasterboard - void - solid ceiling, solid walls, solid floor, no ACMs present.	Yes
Lift Shaft	No access was gained to inspect within this area.	No
Cupboard under Stairs	Solid ceiling, solid walls, solid floor, no ACMs present.	Yes
Laundry Room	Plasterboard - solid ceiling, solid walls, lino & adhesive to solid floor sampled, sink pad sampled.	Yes
First Floor - Stairs to First	Stramit board ceiling, solid walls, lino - solid floor, bitumen to stramit board sampled.	Yes
Staircase Store	Stramit board ceiling, solid walls, solid floor, presumed bitumen to stramit board.	Yes
Landing	SC - stramit board ceiling, solid walls, lino - solid floor, presumed bitumen to stramit board. Wood skylight surrounds.	Yes
Office 1	Stramit board ceiling / Solid ceiling, solid walls, carpet - solid floor, presumed bitumen to stramit board.	Yes
Walkway	Stramit board ceiling, solid walls, floor tiles to solid floor sampled, presumed bitumen to stramit board.	Yes
Office 2	Stramit board ceiling, solid walls, presumed floor tiles to solid floor, presumed bitumen to stramit board.	Yes
Open Area 1	Stramit board ceiling, solid - plasterboard walls, carpet - solid floor, presumed bitumen to stramit board.	Yes
Open Area 2	Stramit board ceiling, solid - plasterboard walls, lino - solid floor, presumed bitumen to stramit board.	Yes
Electric Cupboard	No access was gained to inspect within this area.	No
Open Area 3	Stramit board ceiling, solid - plasterboard walls, lino - solid floor, presumed bitumen to stramit board.	Yes
Open Area 4	Stramit board ceiling, solid - plasterboard walls, lino - solid floor, presumed bitumen to stramit board.	Yes
Corridor 1	SC - stramit board ceiling, solid - plasterboard walls, lino - screed - solid floor - bitumen to floor sampled, presumed bitumen to stramit board.	Yes
Ladies WC	Stramit board ceiling, solid walls, lino - solid floor - presumed bitumen to floor, presumed bitumen to stramit board.	Yes
Showers	Stramit board ceiling, solid walls, lino - solid floor - presumed bitumen to floor, presumed bitumen to stramit board.	Yes
Mens WC	Stramit board ceiling, solid walls, lino - solid floor - presumed bitumen to floor, presumed bitumen to stramit board.	Yes
Fire Exit Staircase	Stramit board ceiling, solid walls, lino - solid floor, presumed bitumen to stramit board.	Yes
Office 3	SC - stramit board ceiling, solid - plasterboard walls, carpet - screed - solid floor, presumed bitumen to stramit board.	Yes
Office 3 Cupboard	Plasterboard - stramit board ceiling, solid walls, lino - solid floor, presumed bitumen to stramit board.	Yes
Staff Room	SC - stramit board ceiling, solid walls, lino - screed - solid floor, presumed bitumen to stramit board, presumed door header.	Yes
Tank Room	Stramit board ceiling, solid walls, solid floor, door board sampled. MMMF lagged water tank.	Yes
External Plant Room	Solid ceiling, solid walls, solid floor, gaskets to trunking joins sampled, pipe gaskets sampled, presumed electrics.	Yes
Lift Machine Room	No access was gained to inspect within this area.	No
External	Pitched & flat roof, solid walls, solid floor, damp course sampled.	Yes

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# SURVEY OBJECTIVES

# **Survey Objectives**

#### 1 A.R.C.S. ENVIRONMENTAL LIMITED - CODE OF PRACTICE

A.R.C.S. Environmental Limited acknowledges the health hazards posed by exposure to asbestos in buildings. We recognise our responsibilities to ensure that whilst carrying out asbestos surveys, our clients, their employees and all those affected by our works, are not put at risk from our work operations.

All surveys carried out by A.R.C.S. Environmental Limited., will follow the recognised HSE Guidance notes: `Asbestos: The Survey Guide (HSG264)

The new Guidance note describes the following two types of survey:

Management Survey

A management survey is the standard survey. Its purpose is to locate as far as reasonably practicable, the presence and extent of any suspect ACMs in the building which could be damaged or disturbed during normal occupancy, including foreseeable maintenance and installation, and to assess their condition.

Management surveys will often involve minor intrusive work and some disturbance. The extent of intrusion will vary between premises and depend on what is reasonably practicable for the individual properties, i.e. it will depend on factors such as the type of building, the nature of construction, accessibility etc. A management survey should include an assessment of the condition of the various ACMs and their ability to release fibres into the air if they are disturbed in some guide to the priority for managing ACMs as it will identify the materials which will most readily release airborne if they are disturbed.

The survey will usually involve sampling and analysis to confirm the presence absence of ACMs. However a management survey can also involve presuming the presence or absence of asbestos. A management survey can be completed using a combination of sampling ACMs and presuming ACMs or, indeed, just presuming. Any materials presumed to contain asbestos must also have their condition assessed (i.e. a material assessment).

By presuming the presence of asbestos, the need for sampling and analysis can be deferred until a later time (e.g. before any work is carried out). However the approach has implications for the management arrangements. The duty holder bears potential additional costs of management doe some non-ACMs. Any work carried out on 'presumed' materials would need to involve appropriate contractors and work methods in compliance with CAR 2012 irrespective of whether the material was actually an ACM or not. Alternatively, before any work starts, sampling and analysis can be undertaken to confirm or refute the presence of asbestos. The results will determine the work methods and contractors to be used. The 'presumption' approach has several disadvantages: it is less rigorous, it can lead to constant obstructions and delays before work can start, and it is more difficult to control, see A comprehensive guide to managing asbestos in premises.

waste. Default presumptions may be suitable in some instances, e.g. 'small' or simple premises, as part of a client's management arrangements.

Surveyors should always endeavour to positively identify ACMs. A sufficient number of samples should be taken to confirm the location and extent of ACMs. It is legitimate to reduce sample numbers where materials can be strongly presumed to be ACMs. However the default presumption option should be avoided where possible, as it can make managing asbestos more difficult for the duty holder. Default presumption should only be used in circumstances where it is requested by the client and/or where access genuinely be obtained.

When sampling is carried out as part of a management survey, samples from each type of suspect ACM should be collected and analysed. If the material sampled is found to contain asbestos, other similar materials used in

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## **Survey Objectives**

the same way in the building can be strongly presumed to contain asbestos. Less homogeneous materials (e.g. different surfaces/coating, evidence of repair etc) will require a greater number of samples. The sample number should be sufficient to establish whether asbestos is present or not in the particular material. Sampling may take place simultaneously with the survey, or as in the case of some larger surveys, can be carried out later as a separate exercise.

All areas should be accessed and inspect as far as is reasonably practicable. Areas should include under floor coverings, above false ceilings, and inside risers, service ducts, lift shafts etc. Surveying may also involve some minor intrusive work, such as accessing behind fascia and other surfaces or superficial materials. The extent of intrusion will depend on the degree of disturbance that is or will be necessary for foreseeable maintenance and should come prepared to access such areas (i.e. with the correct equipment etc).

Management surveys are only likely to involve the use of simple tools such as screwdrivers and chisels. Any areas not accessed must be presumed to contain asbestos. The areas not accessed and presumed to contain clearly stated in the survey report will have to be managed on this basis, i.e. maintenance or other disturbance work should not be carried out in these areas until further checks are made.

Management surveys should cover routine and simple maintenance work. However it has be recognised that where 'more extensive' maintenance or repair work is involved, there may not be sufficient information in the management survey and a localised refurbishment survey will be needed. A refurbishment survey will be required for all work that disturbs the fabric of the building in areas where the management survey has not been intrusive. The decision on the need for a refurbishment survey should be made be the duty holder (probably with help for others).

#### Refurbishment / Demolition Survey

A refurbishment and demolition survey is needed before any refurbishment or demolition work is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the area where the refurbishment work will take place or in the whole building if demolition is planned. The survey will be fully intrusive destructive inspection, as necessary, to gain access to all areas, including those that may be difficult to reach. A refurbishment and demolition survey may also be required in other circumstances, e.g. when more intrusive maintenance and repair work will be carried out or for plant removal or dismantling.

There is a specific requirement in CAR 2012 (regulation 7) for all ACMs to be removed as far as reasonably practicable before major refurbishment or final demolition. Removing ACMs is also appropriate in other similar refurbishment situations which involve structural or layout changed to buildings (eg removal of partitions, walls, units etc). Under CDM, the survey information should be used to help in the tendering process for removal of ACMs from the building before work starts. The survey report should be supplied by the client to designers and addressed. In this type of survey, where the asbestos risks can be removed (rather then to 'manage' it), the survey does not normally assess additional asbestos, other than to indicate areas of damage or where may not take place for some time, the ACMs condition will be assessed and the materials managed.

Refurbishment and demolition surveys are intended to locate all the asbestos in the building (or the relevant part), as far as reasonably practicable. It is a disruptive and fully intrusive survey which may need to penetrate all parts of the building structure. Aggressive inspection techniques will be needed to lift carpets and tiles, break through walls, ceilings, cladding and partitions, and open up floors. In these situations, controls should be put in place to prevent the spread of debris, which may include asbestos. Refurbishment and demolition surveys should only be conducted in unoccupied areas to minimise the risks to public or employees on the premises. Ideally, the building should be in service and all furnishings removed. For minor refurbishments, this would only apply to the room involved or even part should be effective isolation of the survey area (e.g. full floor to ceiling partition), and 'surveyed' area must be shown to be fit for reoccupation before people move back in. This will require a thorough visual inspection and, if appropriate (eg where there has been significant destruction),

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## **Survey Objectives**

reassurance air sampling with disturbance. Under no circumstances should staff remain in rooms or areas of buildings when intrusive sampling is performed.

There may be some circumstances where the building is sill 'occupied' (ie in use) at the time a 'demolition' survey is carried out. For example in the educational sector, refurbishment/demolition surveys may be conducted in school or colleges during one closure period (e.g. holidays) and the work not undertaken until the next holiday period. Also, a demolition survey maybe conducted to establish the economic future or viability of a building(s). The survey results would determine the outcome. In such situations, the 'survey' will need extremely careful managing with personnel and equipment/furnishings begin decanted and protected (as necessary), while the survey progresses through he building. Again there should be effective isolation of the survey areas and the 'surveyed' area must be shown to be fit for reoccupation before personnel reoccupy.

The exception is refurbishment and demolition surveys where information on the condition of the asbestos is usually not required (see paragraph 52), as the ACM will be removed soon after the survey. However, in circumstances where the removal will not take place for some time after the survey (eg more than three months), the ACMs will have to be managed during this period. In this situation, the condition of the ACMs should also be determined and remedial action taken as appropriate (see paragraphs 124 and 130).

Under the Control of Asbestos Regulations 2012 (L143), a written Risk Assessment based on the results of the sampling analysis will still need to be carried out by any Asbestos Removal Contractors, regardless of whether the asbestos removal is licensed work.

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# SURVEY TECHNIQUES

# **Survey Techniques**

- 1 Photographs were taken at all of the sample locations (unless otherwise stated).
- 2 All Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particle or fibre is immersed in a liquid having a refractive index near to that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication HSG 248).

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# **Survey Techniques**

3 For each positive sample of inspection, a Risk Assessment will be compiled. A point's score (weighting) is allocated on the basis of the examination of a number of parameters.

This system is based on the materials assessment algorithm as described in 'Asbestos: The Survey Guide (HSG264).

Material Description:

1 - Asbestos-reinforced composites (plastics, resins, mastics, roofing, felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement, etc.)

2 - Asbestos insulating Board, mill boards, other low density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt

3 - Thermal insulation (e.g. pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing

Material Condition

0 - Good Condition: No Visible Damage

1 - Low Damage: a few scratches or surface marks; broken edges on boards, tiles etc.

2 - Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres

3 - High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris

#### Surface Treatment

0 - Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles.

1 - Enclosed sprays and lagging, AIB (with exposed face painted or encapsulated), asbestos cement sheets etc.

- 2 Unsealed AIB, or encapsulated lagging and sprays.
- 3 Unsealed lagging and sprays

#### Asbestos Type

1 - Chrysotile

- 2 Amphibole asbestos excluding Crocidolite
- 3 Crocidolite

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### **Survey Techniques**

Risk bands

Risk band A: 10 points or more High risk material requiring urgent attention:

The potential hazard arising from this category warrants urgent action. Immediate plans should be made for the removal of the asbestos containing material. If delay of removal is likely to occur the asbestos should be sealed / encapsulated and approved warning labels (a labels) positioned to prevent accidental damage to the material.

Risk band B: 7 - 9 points

Medium risk material requiring near term attention:

This category indicates that deterioration in any of the contributory factors may result in fibre release. Therefore all asbestos should be removed on a programmed basis within a specified time scale - normally 12 months. The condition of the asbestos material should be regularly monitored and, where necessary, sealed / re-encapsulated until removal takes place. Approved warning labels (a labels) should be positioned to prevent accidental damage to the material.

Risk band C: 5 - 6 points Low risk material requiring regular inspection:

This category indicates the need for regular monitoring. Although the current risk of fibre release is low, this material may suffer deterioration through age / accidental damage. It is recommended that asbestos in this category is visually inspected on a six monthly basis to ascertain any change in condition. Where such a change occurs, re-prioritisation to risk band B will be necessary. Approved warning labels (a labels) should be positioned to prevent accidental damage to the material.

Risk band D: 1 - 4 points

Minor risk material requiring annual inspection:

This category indicates low priority. Visual inspections should be made on an annual basis to ascertain any change in condition. Where such a change occurs, re-prioritisation to risk band C or B will be necessary. Approved warning labels (a labels) should be positioned to prevent accidental damage to the material.

Risk band E: 0 points

No asbestos detected in sample:

No action necessary

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# SURVEY NOTES

# **Survey Notes**

- 1 No air monitoring was carried out whilst the survey was undertaken and therefore care was taken not to cause disturbance of fibre or contamination of clean surfaces.
- 2 The diagrams in the report are not to scale and are illustrative only to indicate approximate locations. The descriptions used are for location identification purposes
- 3 All the recommendations described in this report are based upon assumptions made after consideration of the type of material, condition of the material, its location, analysis result and type of use the area is thought to be subjected to. However, statutory authorities or others, could require amendments based on local knowledge, change in legislation, change in use or indeed, other conditions of criteria.

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# SECTION EIGHT

# **BULK CERTIFICATE**





#### **CERTIFICATE FOR IDENTIFICATION OF ASBESTOS FIBRES**

STANDARD PREMIUM EMERGENCY

Client:	A.R.C.S. ENVIRONMENTAL LIMITED			
Address:	ALTON HARROW ROAD NORTH BENFLEET WICKFORD ESSEX, SS12 9JW	Analysis Report No.	SCO/22/3442	
Attention:	MR A MCEWEN	Report Date.	15/02/22	
Site Address:	19 HIGHGATE ROAD LONDON NW5 1JY	Site Ref No.	N/A	
Date sample taken:	15/02/22	Page No:	1 Of 2	2
Date sample received:	15/02/22	No. of Samples:	15	
Date of Analysis:	15/02/22	Obtained:	DELIVERED	

Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Scopes Asbestos Analysis "in house" method of transmitted/polarised light microscopy and centre stop dispersion staining, based on HSE's HSG248. If samples have been DELIVERED the site address and actual sample location is as given by the client at the time of delivery. Scopes Asbestos Analysis Services Limited are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Scopes Asbestos Analysis Services Limited cannot be held responsible for the interpretation of the results shown. Results relate only to the items tested.

SCOPES SAMPLE No.	CLIENT SAMPLE No.	Sample Location	Fibre Type Detected
1	19HR/DW/G/001/1	ENTRANCE PORCH – CANOPY BOARDS	NADIS
2	19HR/DW/G/002/2	GROUND FLOOR - CEILING VOIDS - SUPALUX FIRE BREAKER	NADIS
3	19HR/DW/G/002/3	GROUND FLOOR - CEILING VOIDS - INSULATING BOARD FIRE BREAKER	AMOSITE/CHRYSOTILE
4	19HR/DW/G/004/4	CORRIDOR 1 – BITUMEN	CHRYSOTILE
5	19HR/DW/G/005/5	OFFICE 1 – SUPALUX DOOR HEADER	NADIS
6	19HR/DW/G/009/6	OFFICE 2 – SINK PADS	CHRYSOTILE
7	19HR/DW/G/026/7	LAUNDRY ROOM - LINO AND ADHESIVE	NADIS
8	19HR/DW/G/026/8	LAUNDRY ROOM - SINK PAD	NADIS
9	19HR/DW/1 <sup>st</sup> /027/9	STAIRS TO FIRST FLOOR – BITUMEN TO STRAMMIT BOARDS	CHRYSOTILE
10	19HR/DW/1 <sup>st</sup> /031/10	WALKWAY – GREEN FLOOR TILES	NADIS
KEY: NADIS – No Asbestos Detected in Sample			

Note: All samples will be retained for a minimum of six months.

Note: This Certificate for Identification of Asbestos Fibres shall not be reproduced except in full without the written approval of the Laboratory.

Note: All Analysis is performed in House on the registered premises (below).

Note: Where an 'A' appears at the end of the analysis report number this means an amendment has been made to the original report. Information that			
has been amended will be marked with an *			
		24	

Analysed by:	S GIDDINGS	Authorised signatory:	Chaupe Gallows
		Print name:	C.BOLTON – ADMINISTRATION MANAGER
		BULK 001-VER 7 10-	June-20-QCM





#### **CERTIFICATE FOR IDENTIFICATION OF ASBESTOS FIBRES**

STANDARD PREMIUM EMERGENCY

Client:	A.R.C.S. ENVIRONMENTAL LIMITED				
Address:	ALTON HARROW ROAD NORTH BENFLEET WICKFORD ESSEX, SS12 9JW	Analysis Report No.	SC	0/22/34	42
Attention:	MR A MCEWEN	Report Date.	1	15/02/22	
Site Address:	19 HIGHGATE ROAD LONDON NW5 1JY	Site Ref No.		N/A	
Date sample taken:	15/02/22	Page No:	2	Of	2
Date sample received:	15/02/22	No. of Samples:		15	
Date of Analysis:	15/02/22	Obtained:	D	ELIVERE	D

Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using Scopes Asbestos Analysis "in house" method of transmitted/polarised light microscopy and centre stop dispersion staining, based on HSE's HSG248. If samples have been DELIVERED the site address and actual sample location is as given by the client at the time of delivery. Scopes Asbestos Analysis Services Limited are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances Scopes Asbestos Analysis Services Limited cannot be held responsible for the interpretation of the results shown. Results relate only to the items tested.

SCOPES SAMPLE No.	CLIENT SAMPLE No.	Sample Location	Fibre Type Detected
11	19HR/DW/1 <sup>st</sup> /038/11	CORRIDOR 1 – BITUMEN TO FLOOR	CHRYSOTILE
12	19HR/DW/1 <sup>st</sup> /046/12	TANK ROOM – DOOR BOARD	NADIS
13	19HR/DW/EX/047/13	PLANT ROOM – ROPE GASKETS	CHRYSOTILE
14	19HR/DW/EX/047/14	PLANT ROOM – PIPE GASKETS	NADIS
15	19HR/DW/EX/049/15	EXTERNAL – DAMP COURSE	CHRYSOTILE
KEY: NAD	IS – No Asbestos Detected i	n Sample	
Note: All samp Note: This Cer	les will be retained for a mir tificate for Identification of A	nimum of six months. Asbestos Fibres shall not be reproduced except in full without the written approval	of the Laboratory.

Note: All Analysis is performed in House on the registered premises (below). Note: Where an 'A' appears at the end of the analysis report number this means an amendment has been made to the original report. Information that has been amended will be marked with an \*

Analysed by:	S GIDDINGS	Authorised signatory:	Claube Gullbur
		Print name:	C.BOLTON – ADMINISTRATION MANAGER
		BULK 001-VER 7 10-	-June-20-QCM

# SECTION NINE

# SURVEY DRAWINGS





# SECTION TEN

# **ASBESTOS REGISTER**

Asbesto	s Registe	3r						Site Na	me: 19 High	ıgate Road		
								Project Num	ber: ARCS	19HRD		
Location	Product type	and name	Extent	Accessibility	Condition	Surface treatment	Asbestos Type	Sample	Sample Manual	aterial Priorit Risk Risk Score Scon	y Total Score	L
Not Applicable, First floor, Stairs to First Floor	Resins	Bitumen to Stramit Boards	Approx: 13m <sup>2</sup>	Easy Accessibility	Good condition	Resins	Chrysotile	Identified	19HR/D W/1/02 7/9	7	N/A	l
Not Applicable, First floor, Corridor 1	Resins	Bitumen to Floor	Approx: 8m²	Easy Accessibility	Good condition	Resins	Chrysotile	Identified	19HR/D W/1/03 8/11	7	N/A	I
Not Applicable, External, Plant room	Gaskets	Gaskets to Trunking Joins	Approx: 6 Linear Metres	Easy Accessibility	Good condition	Composite asbestos materials	Chrysotile	Identified	19HR/D W/EX/0 47/13	n	N/A	I
Not Applicable, External, External	Resins	Damp Course	Approx: 80 Linear Metres	Easy Accessibility	Good condition	Composite asbestos materials	Chrysotile	Identified	19HR/D W/EX/0 49/15	2	N/A	I
Not Applicable, Ground floor, Ceiling void	Asbestos Insulating Board	Firebreaker Panels	Approx: 1m²	Easy Accessibility	Good condition	AIB painted or encapsulated	Amosite & Chrysotile	Identified	19HR/D W/G/00 2/3	വ	N/A	
Not Applicable, Ground floor, Corridor 1	Resins	Bitumen to Floor	Approx: 14m²	Easy Accessibility	Good condition	Resins	Chrysotile	Identified	19HR/D W/G/00 4/4	7	N/A	[
Not Applicable, Ground floor, Office 2	Resins	Sink Pad	Approx: 3 No.	Easy Accessibility	Good condition	Composite asbestos materials	Chrysotile	Identified	19HR/D W/G/00 9/6	2	N/A	
Not Applicable, First floor, Corridor 1	Resins	Bitumen to Stramit Boards	Approx: 8m²	Easy Accessibility	Good condition	Resins	Chrysotile	Strongly Presumed as previous sample	AS 19HR/D W/1/02 7/9 - Corridor	2	N/A	
												1

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MATERIAL SCORES ABOVE 10 HAVE HIGH POTENTIAL TO RELEASE FIBRES Printed: 21/02/2022 By: A.R.C.S. Environmental Limited. Using Multibase Software.

	ond	sibility C	Accessibility
I condition Resins	0	cessibility Good	im <sup>2</sup> Easy Accessibility Good
d condition Resins	8	cessibility Good	8m² Easy Accessibility Good
condition Resins	8	cessibility Good	0m <sup>2</sup> Easy Accessibility Good
condition Resins	8	cessibility Good (	4m <sup>2</sup> Easy Accessibility Good o
condition Resins	8	cessibility Good	.m <sup>2</sup> Easy Accessibility Good
condition Resins	8	cessibility Good	4m <sup>2</sup> Easy Accessibility Good
condition Resins	8	cessibility Good	0m <sup>2</sup> Easy Accessibility Good

		ority Total isk Score ore	N/A	N/A	NA	N/A	N/A	N/A
ighgate Road	S/19HRD	Material Pri Risk R Score So	0	7	2	2	2	7
me: 19 Hi	ber: ARC	Sample I no	AS 19HR/D W/1/02 7/9 - Office 3 Cupboa	AS 19HR/D W/1/02 7/9 - Open Area 1	AS 19HR/D W/1/02 7/9 - Open Area 2	AS 19HR/D W/1/02 7/9 - Open Area 3	AS 19HR/D W/1/02 7/9 - Open Area 4	AS 19HR/D W/1/02 7/9 - Shower s
Site Na	Project Num	Sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample
		Asbestos Type	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile
		Surface treatment	Resins	Resins	Resins	Resins	Resins	Resins
		Condition	Good condition	Good condition	Good condition	Good condition	Good condition	Good condition
		Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility
		Extent	Approx: 1m <sup>2</sup>	Approx: 65m²	Approx: 28m²	Approx: 28m²	Approx: 48m²	Approx: 9m²
er		e and name	Bitumen to Stramit Boards	Bitumen to Stramit Boards	Bitumen to Stramit Boards	Bitumen to Stramit Boards	Bitumen to Stramit Boards	Bitumen to Stramit Boards
s Registe		Product type	Resins	Resins	Resins	Resins	Resins	Resins
Asbesto:		Location	Not Applicable, First floor, Office 3 Cupboard	Not Applicable, First floor, Open Area 1	Not Applicable, First floor, Open Area 2	Not Applicable, First floor, Open Area 3	Not Applicable, First floor, Open Area 4	Not Applicable, First floor, Showers

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MATERIAL SCORES ABOVE 10 HAVE HIGH POTENTIAL TO RELEASE FIBRES Printed: 21/02/2022 By: A.R.C.S. Environmental Limited. Using Multibase Software.

Accessibility   Condition   Surface treatment   Accessibility   Condition   Real Real Real Real Real Real Real Real	ter						Site Na	ame: 19 High	ngate Road	
Accessibility   Condition   Surface treatment   Accessibility   Sample   Sample   Sample   Rate in a condition   Rate in a cond							Project Num	nber: ARCS/	(19HRD	
Easy Accessibility Good condition Resins Chrysotile Storgly Sift <th< th=""><th>Exte</th><th>ant</th><th>Accessibility</th><th>Condition</th><th>Surface treatment</th><th>Asbestos Type</th><th>Sample</th><th>Sample Ma no</th><th>aterial Prio Risk Ris Score Sco</th><th>ity Tota sk Scor ire</th></th<>	Exte	ant	Accessibility	Condition	Surface treatment	Asbestos Type	Sample	Sample Ma no	aterial Prio Risk Ris Score Sco	ity Tota sk Scor ire
Easy Accessibility Good condition Resinse Torregine (a)	Approx: 2	20m <sup>2</sup>	Easy Accessibility	Good condition	Resins	Chrysottile	Strongly Presumed as previous sample	AS 19HR/D W/1/02 7/9 - Staff Room	N	Ž
Easy Accessibility Good condition Resimed Strongly AS 2 NA   Easy Accessibility Good condition Resins 7/9.0 Sample 7/9.0 Na Na   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 NA   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 NA   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 NA   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 NA   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 NA   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 NA   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 NA   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2	Approx: 4	32 12	Easy Accessibility	Good condition	Resins	Chrysotile	Strongly Presumed as previous sample	AS 19HR/D W/1/02 7/9 - Staircas e Store	2	Ž
Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Easy Accessibility Good condition Resins Strongly AS 2 N/A   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Fasy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Fasy Accessibility Good condition Resins Chrysotile Strongly AS 2	Approx: 3n	2	Easy Accessibility	Good condition	Resins	Chrysotile	Strongly Presumed as previous sample	AS 19HR/D W/1/02 7/9 - Y	7	Ž
Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Presumed 19HR/D as previous W/1/03 as previous W/1/03   Resumple 8/11 - Mens W/1/03 as previous W/1/03   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Fast Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A   Fast Accessibility Good condition Resins Strongly AS 2 N/A   Fast Accessibility Good condition Resins Strongly AS 2 N/A   Fast Accessibility Good condition Resins Strongly AS 2 N/A   Fast Accessibility Good condition Resins Strongly AS 2 N/A   Fast Accessibility Strongly Strongly Strongly Strongly <t< td=""><td>Approx: 18r</td><td>72</td><td>Easy Accessibility</td><td>Good condition</td><td>Resins</td><td>Chrysotile</td><td>Strongly Presumed as previous sample</td><td>AS 19HR/D W/1/03 8/11 - Ladies WC</td><td>7</td><td>Ž</td></t<>	Approx: 18r	72	Easy Accessibility	Good condition	Resins	Chrysotile	Strongly Presumed as previous sample	AS 19HR/D W/1/03 8/11 - Ladies WC	7	Ž
Easy Accessibility Good condition Resins Chrysotile Strongly AS 2 N/A Presumed 19HR/D as previous W/1/03 sample 8/11 - Shower s	Approx: 14	a B	Easy Accessibility	Good condition	Resins	Chrysotile	Strongly Presumed as previous sample	AS 19HR/D W/1/03 8/11 - Mens WC	0	Ž
	Approx: 9r	2	Easy Accessibility	Good condition	Resins	Chrysotile	Strongly Presumed as previous sample	AS 19HR/D W/1/03 8/11 - Shower s	0	Ž

Asbestos register: Page 4 of 6

MATERIAL SCORES ABOVE 10 HAVE HIGH POTENTIAL TO RELEASE FIBRES Printed: 21/02/2022 By: A.R.C.S. Environmental Limited. Using Multibase Software.

T

	Total Score	N/A	NA	NA	NA	NA	NA	NA
Q	Priority Risk Score							
S/19HF	Material Risk Score	2	N	N	Ν	N	2	N
ber: ARC	Sample no	AS 19HR/D W/G/00 4/4 - Cleaner Cupboa rd	AS 19HR/D W/G/00 4/4 - Corridor 2	AS 19HR/D W/G/00 4/4 - Disable d WC	AS 19HR/D W/G/00 4/4 - Lounge	AS 19HR/D W/G/00 4/4 - Office 1	AS 19HR/D W/G/00 4/4 - Office 2	AS 19HR/D W/G/00 4/4 - Office 3
Project Num	Sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample
	Asbestos Type	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile
	Surface treatment	Resins	Resins	Resins	Resins	Resins	Resins	Resins
	Condition	Good condition	Good condition	Good condition	Good condition	Good condition	Good condition	Good condition
	Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility
	Extent	Approx: 5m²	Approx: 9m²	Approx: 8m²	Approx: 92m <sup>2</sup>	Approx: 24m²	Approx: 15m²	Approx: 12m <sup>2</sup>
	e and name	Bitumen to Floor	Bitumen to Floor	Bitumen to Floor	Bitumen to Floor	Bitumen to Floor	Bitumen to Floor	Bitumen to Floor
	Product type	Resins	Resins	Resins	Resins	Resins	Resins	Resins
	Location	Not Applicable, Bround floor, Cleaners cupboard	Not Applicable, Sround floor, Corridor 2	Not Applicable, Sround floor, Disabled WC	Not Applicable, Sround floor, Lounge	Not Applicable, Sround floor, Office 1	Not Applicable, Bround floor, Office 2	Not Applicable, 5round floor, Office 3

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19 Highgate Road	
Site Name:	

	Total Score	N/A	N/A	N/A	N/A
	Priority Risk Score				
S/19HRD	/laterial Risk Score	77	5	2	4
ber: ARCS	Sample N no	AS 19HR/D W/G/00 4/4 - Office 4	AS 19HR/D W/G/00 4/4 - Office 5	AS 19HR/D W/G/00 4/4 - Toilets	Electric s
Project Num	Sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Strongly Presumed as previous sample	Presumed
	Asbestos Type	Chrysotile	Chrysotile	Chrysotile	Chrysotile
	Surface treatment	Resins	Resins	Resins	Enclosed sprays and lagging
	Condition	Good condition	Good condition	Good condition	Good condition
	Accessibility	Easy Accessibility	Easy Accessibility	Easy Accessibility	Difficult Accessibility
	Extent	Approx: 15m²	Approx: 35m²	Approx: 8m <sup>2</sup>	N/A
	e and name	Bitumen to Floor	Bitumen to Floor	Bitumen to Floor	Electrics
	Product type	Resins	Resins	Resins	Ropes and woven textiles
	Location	Not Applicable, Ground floor, Office 4	Not Applicable, Ground floor, Office 5	Not Applicable, Ground floor, Toilets	Not Applicable, External, Plant room

# SECTION ELEVEN

MATERIAL ASSESSMENT (PHOTO)

Site Address: 19 H	Highgate Road, London, NW5 1JY	C	lient Name:	GM Dev	elopments
		Р	roject Number:	ARCS	/19HRD
Location ID:	81958	Survey Type:		RDS	
Location Ref:	19HR/DW/G/001/1	Product Type:		NADIS	
Product:	Canopy Board	Damage:		NADIS	
Area:	Not Applicable	Treatment:		NADIS	
Floor:	Ground floor	Asbestos Type	:	NADIS	
Room:	Entrance Porch	Identification:		Identified	
Surveyor Name:	D. Watson & D. Parsley	Quantity:			
Drawing Ref:		Accessibility:			
Asbestos ?	No				
Date:	21 February 2022		Materia	al Risk Score:	0
Next Inspection:	Not Applicable		Materia	al Risk Band:	NADIS
			Priority	Risk Score:	N/A
Action:		No Action R	equired		

Material Comments:



Site Address: 19 Highgate Road, London, NW5 1JY		Clie	ent Name:	GM Developments	
		Pro	ject Number:	ARCS	/19HRD
Location ID:	81959	Survey Type:		RDS	
Location Ref:	19HR/DW/G/002/2	Product Type:		NADIS	
Product:	Firebreaker Panels	Damage:		NADIS	
Area:	Not Applicable	Treatment:		NADIS	
Floor:	Ground floor	Asbestos Type:		NADIS	
Room:	Ceiling void	Identification:		Identified	
Surveyor Name	e: D. Watson & D. Parsley	Quantity:			
Drawing Ref:		Accessibility:			
Asbestos ?	No				
Date:	21 February 2022	]	Materia	al Risk Score:	0
Next Inspectior	n: Not Applicable	]	Materia	al Risk Band:	NADIS
			Priority	Risk Score:	N/A
Action:		No Action Rec	quired		
Material					



Site Address: 19 High	ngate Road, London, NW5 1JY	Clier	nt Name:	GM Deve	elopments
		Proje	ect Number:	ARCS	/19HRD
Location ID:	81960	Survey Type:		RDS	
Location Ref:	19HR/DW/G/002/3	Product Type:	Asb	estos Insulating B	Board
Product:	Firebreaker Panels	Damage:		Good condition	
Area:	Not Applicable	Treatment:	AIB p	painted or encaps	ulated
Floor:	Ground floor	Asbestos Type:	Ą	Amosite & Chrysot	ile
Room:	Ceiling void	Identification:		Identified	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 1m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibility	у
Asbestos ?	Yes				
Date:	21 February 2022		Materia	I Risk Score:	5
Next Inspection:	23 August 2022		Materia	I Risk Band:	Low Risk
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Material Comments:



Site Address: 19	Highgate Road, London, NW5 1JY	Clie	ent Name:	GM Developments	
		Pro	ject Number:	ARCS	S/19HRD
Location ID:	81961	Survey Type:		RDS	
Location Ref:	19HR/DW/G/004/4	Product Type:		Resins	
Product:	Bitumen to Floor	Damage:		Good condition	
Area:	Not Applicable	Treatment:		Resins	
Floor:	Ground floor	Asbestos Type:		Chrysotile	
Room:	Corridor 1	Identification:		Identified	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 14m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibili	ty
Asbestos ?	Yes				
Date:	21 February 2022		Materia	al Risk Score:	2
Next Inspection:	21 February 2023		Materia	al Risk Band:	Very Low Risk
			Priority	Risk Score:	N/A
Action:	R	emoval Prior To Refurbis	hment/Demolition		

Material Comments:



Site Address: 19 H	ighgate Road, London, NW5 1JY	CI	ient Name:	GM Developments
		Pr	oject Number:	ARCS/19HRD
Location ID:	81962	Survey Type:		RDS
Location Ref:	AS 19HR/DW/G/004/4 - Office 1	Product Type:		Resins
Product:	Bitumen to Floor	Damage:		Good condition
Area:	Not Applicable	Treatment:		Resins
Floor:	Ground floor	Asbestos Type	:	Chrysotile
Room:	Office 1	Identification:	Strongly I	Presumed as previous sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 24m <sup>2</sup>
Drawing Ref:		Accessibility:		Easy Accessibility
Asbestos ?	Yes			
Date:	21 February 2022		Materia	al Risk Score: 2
Next Inspection:	21 February 2023		Materia	al Risk Band: Very Low Risk
			Priority	Risk Score: N/A
Action:	R	emoval Prior To Refurbi	shment/Demolition	
Material				



Site Address: 191	Highgate Road, London, NW5 1JY		Client Name:	GM Developments
		I	Project Numb	er: ARCS/19HRD
Location ID:	81963	Survey Type:		RDS
Location Ref:	AS 19HR/DW/G/004/4 - Disabled WC	Product Type	:	Resins
Product:	Bitumen to Floor	Damage:		Good condition
Area:	Not Applicable	Treatment:		Resins
Floor:	Ground floor	Asbestos Typ	be:	Chrysotile
Room:	Disabled WC	Identification:	Stro	ongly Presumed as previous sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 8m <sup>2</sup>
Drawing Ref:		Accessibility:		Easy Accessibility
Asbestos ?	Yes			
Date:	21 February 2022		M	aterial Risk Score: 2
Next Inspection:	21 February 2023		М	aterial Risk Band: Very Low Risk
			P	iority Risk Score: N/A
Action:	Ren	moval Prior To Refu	rbishment/Demo	lition
Material				



Site Address: 19 H	ighgate Road, London, NW5 1JY	C	lient Name:	GM Dev	velopments
		Р	roject Number:	ARC	S/19HRD
Location ID:	81964	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/G/004/4 - Toilets	Product Type:		Resins	
Product:	Bitumen to Floor	Damage:		Good conditior	ı
Area:	Not Applicable	Treatment:		Resins	
Floor:	Ground floor	Asbestos Type	:	Chrysotile	
Room:	Toilets	Identification:	Strongly F	Presumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 8m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibil	ity
Asbestos ?	Yes				
Date:	21 February 2022		Materia	al Risk Score:	2
Next Inspection:	21 February 2023		Materia	al Risk Band:	Very Low Risk
Action:		emoval Prior To Returb	Ishment/Demolition		

Material Comments:



Site Address: 19 Hi	ghgate Road, London, NW5 1JY	Cli	ent Name:	GM Developments
		Pro	oject Number:	ARCS/19HRD
Location ID:	81965	Survey Type:		RDS
Location Ref:	AS 19HR/DW/G/004/4 - Office 2	Product Type:		Resins
Product:	Bitumen to Floor	Damage:		Good condition
Area:	Not Applicable	Treatment:		Resins
Floor:	Ground floor	Asbestos Type:		Chrysotile
Room:	Office 2	Identification:	Strongly	Presumed as previous sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 15m <sup>2</sup>
Drawing Ref:		Accessibility:		Easy Accessibility
Asbestos ?	Yes			
Date:	21 February 2022		Materia	al Risk Score: 2
Next Inspection:	21 February 2023		Materia	al Risk Band: Very Low Risk
			Priority	/ Risk Score: N/A
Action:	Re	emoval Prior To Refurbis	shment/Demolition	
Material				



Site Address: 19 Highgate Road, London, NW5 1JY		Client Name:		GM Dev	GM Developments	
		Р	roject Number	: ARCS	S/19HRD	
Location ID:	81966	Survey Type:		RDS		
Location Ref:	AS 19HR/DW/G/004/4 - Corridor 2	Product Type:		Resins		
Product:	Bitumen to Floor	Damage:		Good condition	۱	
Area:	Not Applicable	Treatment:		Resins		
Floor:	Ground floor	Asbestos Type	e:	Chrysotile		
Room:	Corridor 2	Identification:	Strong	ly Presumed as prev	vious sample	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 9m <sup>2</sup>		
Drawing Ref:		Accessibility:		Easy Accessibili	ity	
Asbestos ?	Yes	_				
Date:	21 February 2022	$\neg$	Mate	erial Risk Score:	2	
Next Inspection:	21 February 2023		Mate	erial Risk Band:	Very Low Risk	
			Prio	rity Risk Score:	N/A	
Action:	Re	moval Prior To Refur	bishment/Demolition	วท		
Material			The R I I			



Site Address: 19	Address: 19 Highgate Road, London, NW5 1JY		Client Name:	GM Dev	GM Developments	
			Project Number		S/19HRD	
Location ID:	81967	Survey Type	:	RDS		
Location Ref:	AS 19HR/DW/G/004/4 - Cleaner Cupboard	Product Type	э:	Resins		
Product:	Bitumen to Floor	Damage:		Good conditior	١	
Area:	Not Applicable	Treatment:		Resins		
Floor:	Ground floor	Asbestos Ty	pe:	Chrysotile		
Room:	Cleaners cupboard	Identification	: Strong	gly Presumed as prev	vious sample	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 5m <sup>2</sup>		
Drawing Ref:		Accessibility	:	Easy Accessibil	ity	
Asbestos ?	Yes	]				
Date:	21 February 2022		Mat	erial Risk Score:	2	
Next Inspection:	21 February 2023		Mat	erial Risk Band:	Very Low Risk	
			Prio	rity Risk Score:	N/A	
Action:	Rem	oval Prior To Refu	urbishment/Demoliti	on		
Material						



Site Address: 19 Hi	ighgate Road, London, NW5 1JY	C	lient Name:	GM De	velopments
		Р	roject Number:	ARC	S/19HRD
Location ID:	81968	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/G/004/4 - Office 3	Product Type:		Resins	
Product:	Bitumen to Floor	Damage:		Good condition	ו
Area:	Not Applicable	Treatment:		Resins	
Floor:	Ground floor	Asbestos Type	e:	Chrysotile	
Room:	Office 3	Identification:	Strongly	Presumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 12m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibil	ity
Asbestos ?	Yes				
Date:	21 February 2022		Materia	al Risk Score:	2
Next Inspection:	21 February 2023		Materia	al Risk Band:	Very Low Risk
			Priority	Risk Score:	N/A
Action:	Re	emoval Prior To Refurb	ishment/Demolition		
Material					


Site Address: 19	Highgate Road, London, NW5 1JY	Clie	ent Name: GM Developments		velopments	
		Pro	)ject Number: [	ARCS	S/19HRD	
Location ID:	81969	Survey Type:		RDS		
Location Ref:	AS 19HR/DW/G/004/4 - Office 4	Product Type:		Resins		
Product:	Bitumen to Floor	Damage:		Good condition	I	
Area:	Not Applicable	Treatment:		Resins		
Floor:	Ground floor	Asbestos Type:		Chrysotile		
Room:	Office 4	Identification:	Strongly	Presumed as prev	ious sample	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 15m <sup>2</sup>		
Drawing Ref:		Accessibility:		Easy Accessibili	ty	
Asbestos ?	Yes	]				
Date:	21 February 2022		Materi	al Risk Score:	2	
Next Inspection:	21 February 2023		Materi	ial Risk Band:	Very Low Risk	
			Priorit	y Risk Score:	N/A	
Action:	Rem	oval Prior To Refurbis	hment/Demolition			
Action: Removal Prior 10 Refutbishment/Demolition						
Material Comments:						



Site Address: 191	Highgate Road London NW5 1.IV		Client Name:	GM Dev	velopments
			Project Numb	er: ARCS	S/19HRD
Location ID:	81970	Survey Typ	e:	RDS	
Location Ref:	AS 19HR/DW/G/004/4 - Office 5	Product Typ	be:	Resins	
Product:	Bitumen to Floor	Damage:		Good condition	1
Area:	Not Applicable	Treatment:		Resins	
Floor:	Ground floor	Asbestos T	ype:	Chrysotile	
Room:	Office 5	Identificatio	n: Stro	ongly Presumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 35m <sup>2</sup>	
Drawing Ref:		Accessibilit	y:	Easy Accessibili	ty
Asbestos ?	Yes				
Date:	21 February 2022		M	aterial Risk Score:	2
Next Inspection:	21 February 2023		M	aterial Risk Band:	Very Low Risk
			Pr	iority Risk Score:	N/A
Action:	Re	moval Prior To Re	furbishment/Demo	lition	
Material Comments:					



Site Address: 19 Hi	ghgate Road, London, NW5 1JY	Clie	nt Name:	GM Dev	velopments
		Proj	ject Number:	ARCS	S/19HRD
Location ID:	81971	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/G/004/4 - Lounge	Product Type:		Resins	
Product:	Bitumen to Floor	Damage:		Good condition	1
Area:	Not Applicable	Treatment:		Resins	
Floor:	Ground floor	Asbestos Type:		Chrysotile	
Room:	Lounge	Identification:	Strongly P	resumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 92m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibili	ity
Asbestos ?	Yes				
Date:	21 February 2022	$\neg$	Materia	I Risk Score:	2
Next Inspection:	21 February 2023		Materia	al Risk Band:	Very Low Risk
			Priority	Risk Score:	N/A
Action:	Re	moval Prior To Refurbish	nment/Demolition		
Material Comments:	CHARLE BAR	and the second second	50 20 A	1	



Site Address: 19 Hig	hgate Road. London. NW5 1JY	Clie	nt Name:	GM Deve	lopments
	.g	Proj	ect Number:	ARCS/	19HRD
Location ID:	81972	Survey Type:		RDS	
Location Ref:	19HR/DW/G/005/5	Product Type:		NADIS	
Product:	Door Header	Damage:		NADIS	
Area:	Not Applicable	Treatment:		NADIS	
Floor:	Ground floor	Asbestos Type:		NADIS	
Room:	Office 1	Identification:		Identified	
Surveyor Name:	D. Watson & D. Parsley	Quantity:			
Drawing Ref:		Accessibility:			
Asbestos ?	No			<b>_</b>	
Date:	21 February 2022		Material	Risk Score:	0
Next Inspection:	Not Applicable		Material	Risk Band:	NADIS
Action:		No Action Requ	lired		



Site Address:	Sessinent (Filolo) Sorrea by: 1     Bighgate Road, London, NW5 1JY	USCRED by: Location ID Client Na		GM Dev	elopments
		Proje	ect Number:	ARCS	/19HRD
Location ID:	81973	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/G/005/5 - Toilets	Product Type:		NADIS	
Product:	Door Header	Damage:		NADIS	
Area:	Not Applicable	Treatment:		NADIS	
Floor:	Ground floor	Asbestos Type:		NADIS	
Room:	Toilets	Identification:	Strongly P	resumed as previ	ous sample
Surveyor Name	D. Watson & D. Parsley	Quantity:			
Drawing Ref:		Accessibility:			
Asbestos ?	No	_			
Date:	21 February 2022		Materia	I Risk Score:	0
Next Inspection	1: Not Applicable		Materia	I Risk Band:	NADIS
-			Priority	Risk Score:	N/A
Action:		No Action Requ	ired		
Material Comments:					



Site Address: 19 Hi	ighgate Road, London, NW5 1JY	C	lient Name:	GM Dev	velopments
		Р	roject Number	: ARCS	S/19HRD
Location ID:	81974	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/G/005/5 - Office 2	Product Type:		NADIS	
Product:	Door Header	Damage:		NADIS	
Area:	Not Applicable	Treatment:		NADIS	
Floor:	Ground floor	Asbestos Type	e:	NADIS	
Room:	Office 2	Identification:	Strong	gly Presumed as prev	rious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:			
Drawing Ref:		Accessibility:			
Asbestos ?	No				
Date:	21 February 2022		Mate	erial Risk Score:	0
Next Inspection:	Not Applicable		Mate	erial Risk Band:	NADIS
			Prio	rity Risk Score:	N/A
Action:		No Action R	equired		



Site Address: 19 Higheste Road London NW5 1 IX	: Location ID	Client Name:	GM Developments
		Project Numbe	ARCS/19HRD
Location ID: 81975	Survey Typ	e:	RDS
Location Ref: AS 19HR/DW/G/005/5 - First Floor Staff Room	m Product Ty	pe:	NADIS
Product: Door Header	Damage:		NADIS
Area: Not Applicable	Treatment:		NADIS
Floor: First floor	Asbestos T	уре:	NADIS
Room: Staff Room	Identificatio	n: Stron	gly Presumed as previous sample
Surveyor Name: D. Watson & D. Parsley	Quantity:		
Drawing Ref:	Accessibilit	y:	
Asbestos ? No			
Date: 21 February 2022		Mat	erial Risk Score: 0
Next Inspection: Not Applicable	]	Mat	erial Risk Band: NADIS
		Pric	rity Risk Score: N/A
Action:	No Actio	on Required	

Material Comments:

Material Assessment:Page 18 of 50

Site Address:	19 Highgate Road, London, NW5 1JY	C	lient Name:	GM Dev	velopments
		Р	roject Number:	ARCS	S/19HRD
Location ID:	81976	Survey Type:		RDS	
Location Ref:	19HR/DW/G/009/6	Product Type:		Resins	
Product:	Sink Pad	Damage:		Good condition	)
Area:	Not Applicable	Treatment:	Com	posite asbestos n	naterials
Floor:	Ground floor	Asbestos Type	):	Chrysotile	
Room:	Office 2	Identification:		Identified	
Surveyor Name	e: D. Watson & D. Parsley	Quantity:		Approx: 3 No.	
Drawing Ref:		Accessibility:		Easy Accessibili	ty
Asbestos ?	Yes				
Date:	21 February 2022		Materi	al Risk Score:	2
Next Inspection	1: 21 February 2023		Materi	al Risk Band:	Very Low Risk
			Priority	/ Risk Score:	N/A
Action:	Rer	moval Prior To Refurb	ishment/Demolition		



Site Address: 19 Hi	ighgate Road London NW/5 1.IV	Client	Name:	GM Devel	opments
		Projec	ct Number:	ARCS/1	9HRD
Location ID:	81977	Survey Type:		RDS	
Location Ref:	19HR/DW/G/026/7	Product Type:		NADIS	
Product:	Lino & Adhesive	Damage:		NADIS	
Area:	Not Applicable	Treatment:		NADIS	
Floor:	Ground floor	Asbestos Type:		NADIS	
Room:	Laundry room	Identification:		Identified	
Surveyor Name:	D. Watson & D. Parsley	Quantity:			
Drawing Ref:		Accessibility:			
Asbestos ?	No				
Date:	21 February 2022		Material I	Risk Score:	0
Next Inspection:	Not Applicable		Material I	Risk Band:	NADIS
·			Priority R	isk Score:	N/A
Action:		No Action Require	ed		
Material Comments:					



Site Address:	19 Highgate Road, London, NW5 1JY	Clie	Client Name:		GM Developments	
		Pro	ject Number:	ARCS	/19HRD	
Location ID:	81978	Survey Type:		RDS		
Location Ref:	19HR/DW/G/026/8	Product Type:		NADIS		
Product:	Sink Pad	Damage:		NADIS		
Area:	Not Applicable	Treatment:		NADIS		
Floor:	Ground floor	Asbestos Type:		NADIS		
Room:	Laundry room	Identification:		Identified		
Surveyor Name	e: D. Watson & D. Parsley	Quantity:				
Drawing Ref:		Accessibility:				
Asbestos ?	No		Matarial	Diele Commu		
Date:	21 February 2022		Material	RISK Score:		
Next Inspection	n: Not Applicable		Materia	RISK Band:	NADIS	
			Phoney	RISK SCOLE.	IN/A	
Action:		No Action Rec	luired			



Site Address:	19 Highgate Road. London. NW5 1JY	CI	ent Name:	GM Developments
		Pr	oject Number:	ARCS/19HRD
Location ID:	81979	Survey Type:		RDS
Location Ref:	19HR/DW/1/027/9	Product Type:		Resins
Product:	Bitumen to Stramit Boards	Damage:		Good condition
Area:	Not Applicable	Treatment:		Resins
Floor:	First floor	Asbestos Type		Chrysotile
Room:	Stairs to First Floor	Identification:		Identified
Surveyor Name	D. Watson & D. Parsley	Quantity:		Approx: 13m <sup>2</sup>
Drawing Ref:		Accessibility:		Easy Accessibility
Asbestos ?	Yes			
Date:	21 February 2022		Materia	al Risk Score: 2
Next Inspection	21 February 2023		Materia	al Risk Band: Very Low Risl
			Priority	/ Risk Score: N/A
Action:	R	emoval Prior To Refurbi	shment/Demolition	
Material		and .	W.	



Site Address: 191	Highgate Road, London, NW5 1JY		Client Nam	e:	GM Dev	velopments
			Project Nur	nber:	ARCS	S/19HRD
Location ID:	81980	Survey Type	):		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Staircase Store	Product Typ	e:		Resins	
Product:	Bitumen to Stramit Boards	Damage:			Good condition	I
Area:	Not Applicable	Treatment:			Resins	
Floor:	First floor	Asbestos Ty	vpe:		Chrysotile	
Room:	Staircase Store	Identification	n: s	Strongly Pro	esumed as prev	ious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:			Approx: 4m <sup>2</sup>	
Drawing Ref:		Accessibility	:	E	Easy Accessibili	ty
Asbestos ?	Yes		Г			
Date:	21 February 2022			Material	Risk Score:	2
Next Inspection:	21 February 2023			Material	Risk Band:	Very Low Risk
				Priority F	Risk Score:	N/A
Action:	Rem	noval Prior To Ref	urbishment/Dei	molition		
Material						



Site Address: 191	Highgate Road, London, NW5 1JY	C	lient Name:	GM Dev	velopments
		P	roject Number:	ARC	S/19HRD
Location ID:	81981	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Landing	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good conditior	 າ
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type	:	Chrysotile	
Room:	Landing	Identification:	Strongly	Presumed as prev	<i>v</i> ious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 10m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibil	ity
Asbestos ?	Yes	7			
Date:	21 February 2022	7	Materia	al Risk Score:	2
Next Inspection:	21 February 2023	7	Materi	al Risk Band:	Very Low Risk
			Priority	/ Risk Score:	N/A
Action:	Rer	moval Prior To Refurb	ishment/Demolition		
Material Comments:					



Site Address: 19	Highgate Road, London, NW5 1JY	C	lient Name:	GM Dev	elopments
		Р	roject Number: [	ARCS	5/19HRD
Location ID:	81982	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Office 1	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good condition	
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type	e:	Chrysotile	
Room:	Office 1	Identification:	Strongly	Presumed as prev	ious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 4m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibilit	ty
Asbestos ?	Yes				
Date:	21 February 2022		Materi	al Risk Score:	
Next Inspection:	21 February 2023		Mater	al Risk Band:	Very Low Risk
			Priorit	y Risk Score:	N/A
Action:	Re	moval Prior To Refurb	ishment/Demolition		
Material Comments:					





Site Address: 19 Highgate Road, London, NW5 1JY			Client Name	: GM D	GM Developments	
			Project Num	ber: ARC	CS/19HRD	
Location ID:	81983	Survey Type	:	RDS		
Location Ref:	AS 19HR/DW/1/027/9 - Walkway	Product Typ	e:	Resins		
Product:	Bitumen to Stramit Boards	Damage:		Good condition	on	
Area:	Not Applicable	Treatment:		Resins		
Floor:	First floor	Asbestos Ty	pe:	Chrysotile		
Room:	Walkway	 Identificatior	n: St	rongly Presumed as pre	evious sample	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 3m	2	
Drawing Ref:		Accessibility	:	Easy Accessib	pility	
Asbestos ?	Yes					
Date:	21 February 2022		Ν	Aaterial Risk Score	: 2	
Next Inspection:	21 February 2023		Ν	Aaterial Risk Band:	Very Low Risk	
			F	Priority Risk Score:	N/A	
Action:	Re	moval Prior To Ref	urbishment/Dem	olition		
Material Comments:						

<b>Material As</b>	ssessment (Photo) Sorted by:	Location ID	-		
Site Address:	19 Highgate Road, London, NW5 1JY	C	lient Name:	GM Developments	
		Р	roject Number: [	ARC	S/19HRD
Location ID:	81984	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Office 2	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good condition	n
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type	e:	Chrysotile	
Room:	Office 2	Identification:	Strongly	Presumed as prev	vious sample
Surveyor Name	D. Watson & D. Parsley	Quantity:		Approx: 24m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibil	ity
Asbestos ?	Yes	]			
Date:	21 February 2022	]	Materi	al Risk Score:	2
Next Inspection	21 February 2023		Mater	ial Risk Band:	Very Low Risk
			Priorit	y Risk Score:	N/A
Action:	Rem	oval Prior To Refurt	ishment/Demolition		
Material Comments:					



Site Address: 191	Highgate Road, London, NW5 1JY	Clier	nt Name:	GM Dev	velopments
		Proje	ect Number:	ARCS	S/19HRD
Location ID:	81985	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Open Area 1	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good conditior	1
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type:		Chrysotile	
Room:	Open Area 1	Identification:	Strongly I	Presumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 65m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibil	ty
Asbestos ?	Yes				
Date:	21 February 2022		Materia	al Risk Score:	2
Next Inspection:	21 February 2023		Materia	al Risk Band:	Very Low Risk
L			Priority	/ Risk Score:	N/A
Action:	Rer	moval Prior To Refurbish	ment/Demolition		



Site Address: 19 H	lighgate Road, London, NW5 1JY	C	lient Name:	GM Developments
		P	roject Number:	ARCS/19HRD
Location ID:	81986	Survey Type:		RDS
Location Ref:	AS 19HR/DW/1/027/9 - Open Area 2	Product Type:		Resins
Product:	Bitumen to Stramit Boards	Damage:		Good condition
Area:	Not Applicable	Treatment:		Resins
Floor:	First floor	Asbestos Type	:	Chrysotile
Room:	Open Area 2	Identification:	Strongly	Presumed as previous sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 28m <sup>2</sup>
Drawing Ref:		Accessibility:		Easy Accessibility
Asbestos ?	Yes			
Date:	21 February 2022		Materi	al Risk Score: 2
Next Inspection:	21 February 2023	]	Materi	al Risk Band: Very Low Risk
			Priority	/ Risk Score: N/A
Action:	Rer	moval Prior To Refurb	ishment/Demolition	
			Q.	
Material Comments:				



Site Address: 19 Highgate Road, London, NW5 1JY		C	lient Name:	GM Developments	
		P	roject Number:	ARCS/19HRD	
Location ID:	81987	Survey Type:		RDS	
Location Ref: [	AS 19HR/DW/1/027/9 - Open Area 3	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good condition	
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type	:	Chrysotile	
Room:	Open Area 3	Identification:	Strongly	Presumed as previous sample	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 28m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibility	
Asbestos ?	Yes				
Date:	21 February 2022		Materia	al Risk Score: 2	
Next Inspection:	21 February 2023		Materi	al Risk Band: Very Low Risk	
_					



Site Address: 19 Highgate Road, London, NW5 1JY		C	lient Name:	GM Developments	
		Р	roject Number:	ARC	S/19HRD
Location ID:	81988	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Open Area 4	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good conditior	1
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type	e:	Chrysotile	
Room:	Open Area 4	Identification:	Strongly	Presumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 48m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibil	ity
Asbestos ?	Yes				
Date:	21 February 2022		Materi	ial Risk Score:	2
Next Inspection:	21 February 2023		Mater	ial Risk Band:	Very Low Risk
_			Priorit	y Risk Score:	N/A
Action:	Rer	moval Prior To Refurt	pishment/Demolition		
Matarial					



Material Ass	Sessment (Photo) Sorted by	r: Location ID Clie	ent Name:	GM Dev	elopments
Site Address: <sup>19</sup>	Highgate Road, London, NW5 1JY	Pro	iect Number:	ARCS	/19HRD
Location ID:	81990	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Corridor 1	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:	Good condition		
Area:	Not Applicable	Treatment:	Resins		
Floor:	First floor	Asbestos Type:	Chrysotile		
Room:	Corridor 1	Identification:	Strongly Presumed as previous sample		
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 8m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibilit	ÿ
Asbestos ?	Yes				
Date:	21 February 2022		Materia	al Risk Score:	2
Next Inspection:	21 February 2023	]	Materia	al Risk Band:	Very Low Risk
			Priority	Risk Score:	N/A
Action:	Ren	noval Prior To Refurbis	hment/Demolition		





Site Address: 19 H	lighgate Road, London, NW5 1JY	(	Client Name:	GM Developments
		F	Project Number:	ARCS/19HRD
Location ID:	81991	Survey Type:		RDS
Location Ref:	AS 19HR/DW/1/027/9 - Ladies WC	Product Type		Resins
Product:	Bitumen to Stramit Boards	Damage:		Good condition
Area:	Not Applicable	Treatment:		Resins
Floor:	First floor	Asbestos Typ	e:	Chrysotile
Room:	Ladies WC	Identification:	Strongly	Presumed as previous sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 18m <sup>2</sup>
Drawing Ref:		Accessibility:		Easy Accessibility
Asbestos ?	Yes			
Date:	21 February 2022		Mater	ial Risk Score: 2
Next Inspection:	21 February 2023		Mater	ial Risk Band: Very Low Risk
			Priorit	y Risk Score: N/A
Action:	Rei	moval Prior To Refur	bishment/Demolition	
Material				



Site Address: 19 Hi	ighgate Road, London, NW5 1JY	CI	ient Name:	GM Dev	velopments
		Pr	oject Number:	ARC	S/19HRD
Location ID:	81992	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Showers	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good conditior	1
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type	:	Chrysotile	
Room:	Showers	Identification:	Strongly	Presumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 9m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibil	ity
Asbestos ?	Yes				
Date:	21 February 2022		Materi	al Risk Score:	2
Next Inspection:	21 February 2023		Materi	al Risk Band:	Very Low Risk
			Priority	/ Risk Score:	N/A
Action:	Re	emoval Prior To Refurbi	shment/Demolition		
Material Comments:					



Site Address: 19 Hi	ighgate Road, London, NW5 1JY		Client Name:	GM De	velopments
	g, g., , ,		Project Number	r: ARC	S/19HRD
Location ID:	81993	Survey Type	9:	RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Mens WC	Product Typ	e:	Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good condition	า
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Ty	/pe:	Chrysotile	
Room:	Mens WC	 Identification	n: Strong	gly Presumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 14m <sup>2</sup>	
Drawing Ref:		Accessibility	/:	Easy Accessibil	ity
Asbestos ?	Yes				
Date:	21 February 2022		Mat	erial Risk Score:	2
Next Inspection:	21 February 2023		Mat	erial Risk Band:	Very Low Risk
			Pric	rity Risk Score:	N/A
Action:	Re	moval Prior To Ref	urbishment/Demoliti	on	
Material					



Site Address: 19	Highgate Road, London, NW5 1JY	C	lient Name:	GM De	velopments
		Р	roject Number:	ARC	S/19HRD
Location ID:	81994	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Fire Exit Staircase	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good condition	n
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type	e:	Chrysotile	
Room:	Fire Exit Staircase	Identification:	Strongl	y Presumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 9m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibil	lity
Asbestos ?	Yes	]			
Date:	21 February 2022	]	Mate	rial Risk Score:	2
Next Inspection:	21 February 2023		Mate	rial Risk Band:	Very Low Risk
			Prior	ity Risk Score:	N/A
Action:	Rem	oval Prior To Refurb	ishment/Demolitio	n	
				1	



Project Number: ARCS/19HRD  Location ID: 1995 Survey Type: RDS Location Ref: AS 19HR/DW/1/027/9 - Office 3 Product Type: Resins  Product: Bitumen to Stramt Boards Damage: Good condition Area: Not Applicable Treatment: Resins Floor: First floor Asbestos Type: Chrysolie Room: Office 3 Identification: Strongly Presumed as previous sample Surveyor Name: D. Watson & D. Parsley Quantity: Approx. 20m <sup>2</sup> Drawing Ref: Accessibility: Easy Accessibility Asbestos ? Yes Date: 21 February 2022 Next Inspection: 21 February 2023 Action: Removal Prior To Refurbishment/Demolition	Site Address: 1	9 Highgate Road, London, NW5 1JY	by: Location ID	Client Name:	GM Developments
Location ID: 81996 Survey Type: RDS Location Ref: AS 19HR/DW/1/027/9 - Office 3 Product Type: Resins Product: Bitumen to Stramit Boards Damage: Good condition Area: Not Applicable Treatment: Resins Floor: First floor Asbestos Type: Chrysotile Room: Office 3 Identification: Strongly Presumed as previous sample Surveyor Name: D. Watson & D. Parsley Quantity: Approx: 20m <sup>2</sup> Drawing Ref: Accessibility: Easy Accessibility Asbestos ? Yes Date: 21 February 2022 Next Inspection: 21 February 2023 Action: Removal Prior To Refurbishment/Demolition Action: Removal Prior To Refurbishment/Demolition				Project Number:	ARCS/19HRD
Location Ref:       AS 19HR/DW/1/027/9 - Office 3       Product Type:       Resins         Product:       Bitumen to Stramit Boards       Damage:       Good condition         Area:       Not Applicable       Treatment:       Resins         Floor:       First floor       Asbestos Type:       Chrysotile         Room:       Office 3       Identification:       Strongly Presumed as previous sample         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 20m <sup>2</sup> Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Score:       N/A         Action:       Removal Prior To Relurbishment/Demolition       N/A	Location ID:	81995	Survey Type:		RDS
Product:       Bitumen to Stramit Boards       Damage:       Good condition         Area:       Not Applicable       Treatment:       Resins         Floor:       First floor       Asbestos Type:       Chrysolile         Room:       Office 3       Identification:       Strongly Presumed as previous sample         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 20n <sup>2</sup> Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Priority Risk Score:       1       N/A         Action:       Removal Prior To Refurbishment/Demolition	Location Ref:	AS 19HR/DW/1/027/9 - Office 3	Product Type	:	Resins
Area:       Not Applicable       Treatment:       Resins         Floor:       First floor       Asbestos Type:       Chrysotile         Room:       Office 3       Identification:       Strongly Presumed as previous sample         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 20m <sup>2</sup> Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Priority Risk Score:       1       N/A         Action:       Removal Prior To Returbishment/Demolition       N/A	Product:	Bitumen to Stramit Boards	Damage:		Good condition
Floor:       First floor       Asbestos Type:       Chrysotile         Room:       Office 3       Identification:       Strongly Presumed as previous sample         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 20m <sup>2</sup> Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Priority Risk Score:       1       Priority Risk Score:       N/A         Action:       Removal Prior To Refurbishment/Demolition       Kentonicion	Area:	Not Applicable	Treatment:		Resins
Room:       Office 3       Identification:       Strongly Presumed as previous sample         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 20m <sup>2</sup> Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Priority Risk Score:       N/A         Action:       Removal Prior To Refurbishment/Demolition	Floor:	First floor	Asbestos Ty	be:	Chrysotile
Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 20m <sup>2</sup> Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Next Inspection:       21 February 2023       N/A         Action:       Removal Prior To Refurbishment/Demolition	Room:	Office 3	Identification	Strongly	Presumed as previous sample
Drawing Ref: Accessibility: Easy Accessibility Asbestos? Yes Date: 21 February 2022 Next Inspection: 21 February 2023 Action: Removal Prior To Refurbishment/Demolition	Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 20m <sup>2</sup>
Asbestos ?       Yes         Date:       21 February 2022         Next Inspection:       21 February 2023         Action:       Removal Prior To Refurbishment/Demolition	Drawing Ref:		Accessibility:		Easy Accessibility
Date:       21 February 2022         Next Inspection:       21 February 2023         Material Risk Band:       Very Low Risk         Priority Risk Score:       N/A         Action:       Removal Prior To Refurbishment/Demolition	Asbestos ?	Yes			
Next Inspection:       21 February 2023       Material Risk Band: Priority Risk Score:       N/A         Action:       Removal Prior To Refurbishment/Demolition	Date:	21 February 2022		Mater	ial Risk Score: 2
Action: Removal Prior To Refurbishment/Demolition	Next Inspection:	21 February 2023		Mater	ial Risk Band: Very Low Risk
Action: Removal Prior To Refurbishment/Demolition				Priorit	y Risk Score: N/A
	Action:	Re	moval Prior To Refu	rbishment/Demolition	 I



Site Address: 19 Highgate Road, London, NW5 1JY			Client Name:		GM Developments	
			Project Nur	mber:	ARCS	S/19HRD
Location ID:	81996	Survey Type:	:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Office 3 Cupboard	Product Type	e:		Resins	
Product:	Bitumen to Stramit Boards	Damage:			Good condition	1
Area:	Not Applicable	Treatment:			Resins	
Floor:	First floor	Asbestos Typ	pe:		Chrysotile	
Room:	Office 3 Cupboard	   Identification:	:	Strongly P	resumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:			Approx: 1m <sup>2</sup>	
Drawing Ref:		Accessibility:			Easy Accessibili	ty
Asbestos ?	Yes	]				_
Date:	21 February 2022	]		Materia	I Risk Score:	2
Next Inspection:	21 February 2023	]		Materia	I Risk Band:	Very Low Risk
-		1		Priority	Risk Score:	N/A
Action:	Rem	oval Prior To Refu	Irbishment/De	molition		
Material Comments:						



Site Address: 19 H	ighgate Road, London, NW5 1JY	Clie	ent Name:	GM Dev	velopments
		Pro	ject Number:	ARC	S/19HRD
Location ID:	81997	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/027/9 - Staff Room	Product Type:		Resins	
Product:	Bitumen to Stramit Boards	Damage:		Good condition	1
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type:		Chrysotile	
Room:	Staff Room	Identification:	Strongly P	resumed as prev	vious sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 20m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibil	ity
Asbestos ?	Yes				
Date:	21 February 2022		Material	Risk Score:	2
Next Inspection:	21 February 2023		Materia	Risk Band:	Very Low Risk
			Priority	Risk Score:	N/A
Action:	Rei	moval Prior To Refurbisl	nment/Demolition		
Material		K MA			Y N



	Prial ASSESSMENT (PNOTO) Sorted by: Location ID		Client Name:	GM Developments		
Sile Address.			Project Number: ARCS/19HRD			
Location ID:	81998	Survey Type	):	RDS		
Location Ref:	19HR/DW/1/031/10	Product Typ	e:	NADIS		
Product:	Floor tile	Damage:		NADIS		
Area:	Not Applicable	Treatment:		NADIS		
Floor:	First floor	Asbestos Ty	vpe:	NADIS		
Room:	Walkway	dentification	n:	Identified		
Surveyor Name	D. Watson & D. Parsley	Quantity:				
Drawing Ref:		Accessibility	:			
Asbestos ?	No	]			]	
Date:	21 February 2022	]	Mate	rial Risk Score:	0	
Next Inspection	Not Applicable		Mate	rial Risk Band:	NADIS	
			Prior	ity Risk Score:	N/A	
Action:		No Action	Required			
Motorial		KEI				
Material Comments:						

Site Address: 19 H	lighgate Road, London, NW5 1JY	C	ient Name:	GM Developments
		P	oject Number:	ARCS/19HRD
Location ID:	81999	Survey Type:		RDS
Location Ref:	AS 19HR/DW/1/031/10 - Office 2	Product Type:		NADIS
Product:	Floor tile	Damage:		NADIS
Area:	Not Applicable	Treatment:		NADIS
Floor:	First floor	Asbestos Type	:	NADIS
Room:	Office 2	Identification:	Strongly	Presumed as previous sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		
Drawing Ref:		Accessibility:		
Asbestos ?	No			
Date:	21 February 2022		Materi	al Risk Score: 0
Next Inspection:	Not Applicable		Materi	al Risk Band: NADIS
			Priority	/ Risk Score: N/A
Action:		No Action Re	equired	



Site Address: 19 High	hgate Road, London, NW5 1JY	Clier	nt Name:	GM Dev	elopments
		Proj	ect Number:	ARCS	/19HRD
Location ID:	82000	Survey Type:		RDS	
Location Ref:	19HR/DW/1/038/11	Product Type:		Resins	
Product:	Bitumen to Floor	Damage:		Good condition	
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type:		Chrysotile	
Room:	Corridor 1	Identification:		Identified	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 8m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibilit	у
Asbestos ?	Yes				
Date:	21 February 2022		Material	Risk Score:	2
Next Inspection:	21 February 2023		Material	Risk Band:	Very Low Risk
			Priority I	Risk Score:	N/A
Action:	I	Removal Prior To Refurbish	ment/Demolition		
Material					



Site Address: 19 Highgate Road, London, NW5 1JY		Clie	nt Name:	GM Developments	
		Pro	iect Number:	ARCS/19HRD	
Location ID:	82001	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/038/11 - Ladies WC	Product Type:		Resins	
Product:	Bitumen to Floor	Damage:		Good condition	
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type:		Chrysotile	
Room:	Ladies WC	Identification:	Strongly P	resumed as previous sample	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 18m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibility	
Asbestos ?	Yes				
Date:	21 February 2022		Material	Risk Score: 2	
Next Inspection:	21 February 2023		Material Priority	Risk Score: N/A	
Action:	Rer	moval Prior To Refurbish	ment/Demolition		



Site Address: 19 H	ighgate Road, London, NW5 1JY	Clien	nt Name:	GM Deve	elopments
		Proje	ect Number:	ARCS	19HRD
Location ID:	82002	Survey Type:		RDS	
Location Ref:	AS 19HR/DW/1/038/11 - Showers	Product Type:		Resins	
Product:	Bitumen to Floor	Damage:		Good condition	
Area:	Not Applicable	Treatment:		Resins	
Floor:	First floor	Asbestos Type:		Chrysotile	
Room:	Showers	Identification:	Strongly P	resumed as previo	ous sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 9m <sup>2</sup>	
Drawing Ref:		Accessibility:		Easy Accessibility	/
Asbestos ?	Yes				
Date:	21 February 2022		Materia	Risk Score:	2
Next Inspection:	21 February 2023		Materia	Risk Band:	Very Low Risk
			Priority	RISK Score:	N/A
Action:	Re	moval Prior To Refurbishn	nent/Demolition		
			i la		



Site Address: 191	lighgate Road. London. NW5 1JY		Client Name:	GM Developments
			Project Number:	ARCS/19HRD
Location ID:	82003	Survey Type	:	RDS
Location Ref:	AS 19HR/DW/1/038/11 - Mens WC	Product Type	ə:	Resins
Product:	Bitumen to Floor	Damage:		Good condition
Area:	Not Applicable	Treatment:		Resins
Floor:	First floor	Asbestos Ty	pe:	Chrysotile
Room:	Mens WC	Identification	: Strongly	Presumed as previous sample
Surveyor Name:	D. Watson & D. Parsley	Quantity:		Approx: 14m <sup>2</sup>
Drawing Ref:		Accessibility		Easy Accessibility
Asbestos ?	Yes			
Date:	21 February 2022		Mater	rial Risk Score: 2
Next Inspection:	21 February 2023		Mater	rial Risk Band: Very Low Risk
			Priori	ty Risk Score: N/A
Action:	Rer	moval Prior To Ref	urbishment/Demolitior	)
Material				



Site Address: 19 H	lighgate Road, London, NW5 1JY	Clie	nt Name:	GM Developments
		Proj	ect Number:	ARCS/19HRD
Location ID:	82004	Survey Type:		RDS
Location Ref:	19HR/DW/1/046/12	Product Type:		NADIS
Product:	Door Boards	Damage:		NADIS
Area:	Not Applicable	Treatment:		NADIS
Floor:	First floor	Asbestos Type:		NADIS
Room:	Tank room	Identification:		Identified
Surveyor Name:	D. Watson & D. Parsley	Quantity:		
Drawing Ref:		Accessibility:		
Asbestos ?	No			
Date:	21 February 2022		Material	Risk Score: 0
Next Inspection:	Not Applicable		Material	Risk Band: NADIS
			Priority I	Risk Score: N/A
Action:		No Action Requ	iired	
Material				



Site Address: 19	Highgate Road, London, NW5 1JY	CI	ient Name:	GM Developments
		Pr	oject Number:	ARCS/19HRD
Location ID:	82005	Survey Type:		RDS
Location Ref:	19HR/DW/EX/047/13	Product Type:		Gaskets
Product:	Gaskets to Trunking Joins	Damage:		Good condition
Area:	Not Applicable	Treatment:	Com	nposite asbestos materials
Floor:	External	Asbestos Type	:	Chrysotile
Room:	Plant room	Identification:		Identified
Surveyor Name:	D. Watson & D. Parsley	Quantity:	A	Approx: 6 Linear Metres
Drawing Ref:		Accessibility:		Easy Accessibility
Asbestos ?	Yes			
Date:	21 February 2022		Materi	al Risk Score: 3
Next Inspection:	21 February 2023		Priority	al Risk Band: Very Low Risk y Risk Score: N/A
Action:	Rer	moval Prior To Refurbi	shment/Demolition	
Material				


# **A.R.C.S. Environmental Limited**

Site Address: 1	9 Highgate Road, London, NW5 1JY	Clier	nt Name:	GM Deve	elopments
		Proj	ect Number:	ARCS	/19HRD
Location ID:	82006	Survey Type:		RDS	
Location Ref:	19HR/DW/EX/047/14	Product Type:		NADIS	
Product:	Pipe Gasket	] Damage:		NADIS	
Area:	Not Applicable	Treatment:	NADIS		
Floor:	External	Asbestos Type:		NADIS	
Room:	Plant room	Identification:		Identified	
Surveyor Name	D. Watson & D. Parsley	Quantity:			
Drawing Ref:		Accessibility:			
Asbestos ?	No				
Date:	21 February 2022	]	Materia	al Risk Score:	0
Next Inspection:	Not Applicable	]	Materia	al Risk Band:	NADIS
		J	Priority	Risk Score:	N/A
Action:		No Action Requ	ired		
Material					

# **A.R.C.S. Environmental Limited**

Location ID:       82007       Survey Type:       RDS         Location Ref:       19HR/DW/EX/049/15       Product Type:       Resins         Product:       Damp Course       Damage:       Good condition         Area:       Not Applicable       Treatment:       Composite asbestos materials         Floor:       External       Asbestos Type:       Chrysotle         Room:       External       Identification:       Identified         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx. 80 Linear Metres         Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Nate:       21 February 2022       Material Risk Score:       N/A         Action:       Removal Prior To Returbistment/Demolition       N/A         Action:       Removal Prior To Returbistment/Demolition       Image: N/A	Site Address: 19 Highgate Road, London, NW5 1JY		Clie	nt Name:	GM Developments	
Location ID: 22007 Survey Type: RDS Location Ref: 19HR/DW/EX049/15 Product Type: Resins Product: Damp Course Damage: Good condition Area: Not Applicable Treatment: Composite asbestos materials Floor: External Asbestos Type: Chrysotile Room: External Identification: Identified Surveyor Name: D. Watson & D. Parsley Quantity: Approx. 80 Linear Metres Drawing Ref: Accessibility: Easy Accessibility Asbestos ? Yes Date: 21 February 2022 Next Inspection: 21 February 2023 Action: Removal Prior To Refurbishment/Demolition Action: Removal Prior To Refurbishment/Demolition			Proj	ject Number:	ARCS/19HRD	
Location Ref:       19HR/DW/EX/048/15       Product Type:       Resins         Product:       Damp Course       Damage:       Good condition         Area:       Not Applicable       Treatment:       Composite asbestos materials         Floor:       External       Asbestos Type:       Chrysoille         Room:       External       Identification:       Identified         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 80 Linear Metres         Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Next Inspection:       21 February 2023       N/A         Action:       Removal Prior To Refurbishment/Demolition         Action:       Removal Prior To Refurbishment/Demolition         Very Low Risk       Priority Risk Score:       N/A	Location ID:	82007	Survey Type:		RDS	
Product:       Damp Course       Damage:       Good condition         Area:       Not Applicable       Treatment:       Composite asbestos materials         Floor:       External       Asbestos Type:       Chrysolile         Room:       External       Identification:       Identified         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 80 Linear Metres         Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Prointy Risk Score:       N/A         Action:       Removal Prior To Refurbishment/Demolition	Location Ref:	19HR/DW/EX/049/15	Product Type:		Resins	
Area:       Not Applicable       Treatment:       Composite asbestos materials         Floor:       External       Asbestos Type:       Chrysotile         Room:       External       Identification:       Identified         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 80 Linear Metres         Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Priority Risk Score:       17 February 2023       Nta       Accessibility         Action:       Removal Prior To Returbishment/Demolition       Nta         Action:       Removal Prior To Returbishment/Demolition       Nta	Product:	Damp Course	Damage:		Good condition	
Floor:       External       Asbestos Type:       Chrysotile         Room:       External       Identification:       Identified         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 80 Linear Metres         Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Priority Risk Score:       1/4       Material Risk Score:       N/A         Action:       Removal Prior To Refurbishment/Demolition       N/A	Area:	Not Applicable	Treatment:	Com	posite asbestos materials	
Room:       External       Identification:       Identified         Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 80 Linear Metres         Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Next Inspection:       21 February 2023       N/A         Action:       Removal Prior To Refurbishment/Demolition	Floor:	External	Asbestos Type:		Chrysotile	
Surveyor Name:       D. Watson & D. Parsley       Quantity:       Approx: 80 Linear Metres         Drawing Ref:       Accessibility:       Easy Accessibility         Asbestos ?       Yes       Material Risk Score:       2         Date:       21 February 2022       Material Risk Band:       Very Low Risk         Next Inspection:       21 February 2023       Material Risk Score:       N/A         Action:       Removal Prior To Refurbishment/Demolition	Room:	External	Identification:		Identified	
Drawing Ref: Accessibility: Easy Accessibility Asbestos ? Yes Date: 21 February 2022 Next Inspection: 21 February 2023 Action: Removal Prior To Refurbishment/Demolition Action: Removal Prior To Refurbishment/Demolition	Surveyor Name:	D. Watson & D. Parsley	Quantity:	Ар	prox: 80 Linear Metres	
Asbestos ?       Yes         Date:       21 February 2022         Next Inspection:       21 February 2023         Material Risk Band:       Very Low Risk         Priority Risk Score:       N/A	Drawing Ref:		Accessibility:		Easy Accessibility	
Date:       21 February 2022         Next Inspection:       21 February 2023         Action:       Removal Prior To Refurbishment/Demolition	Asbestos ?	Yes				
Next Inspection:       21 February 2023       Material Risk Band:       Very Low Risk         Priority Risk Score:       N/A    Action:  Removal Prior To Refurbishment/Demolition	Date:	21 February 2022		Materia	al Risk Score: 2	
Action: Removal Prior To Refurbishment/Demolition	Next Inspection:	21 February 2023		Priority	Risk Score: N/A	
	Action:	Re	moval Prior To Refurbish	ment/Demolition		

Comments:



# **A.R.C.S. Environmental Limited**

Site Address: 19 Hig	ghgate Road, London, NW5 1JY	Clie	ent Name:	GM Dev	velopments
		Pro	ject Number:	ARCS	S/19HRD
Location ID:	82008	Survey Type:		RDS	
Location Ref:	Electrics	Product Type:	Ro	opes and woven te	extiles
Product:	Electrics	Damage:		Good condition	1
Area:	Not Applicable	Treatment:	Enc	losed sprays and	lagging
Floor:	External	Asbestos Type:		Chrysotile	
Room:	Plant room	Identification:		Presumed	
Surveyor Name:	D. Watson & D. Parsley	Quantity:		N/A	
Drawing Ref:		Accessibility:		Difficult Accessib	ility
Asbestos ?	Yes				
Date:	21 February 2022		Materia	al Risk Score:	4
Next Inspection:	21 February 2023		Materia	al Risk Band:	Very Low Risk
			Priority	/ Risk Score:	N/A
Action:		Apply Warning I	Labels		
	<section-header></section-header>				

Material Comments: No access was gained to inspect within the electrics due to being live. Presume ACMs present until proven otherwise.







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# **APPENDIX M**

3<sup>rd</sup> March 2022



# NEIGHBORHOOD CONSULTATION LETTER CONSTRUCTION MANAGEMENT PLAN (CMP)

Reference: Re-development - 19-37 Highgate Road, London NW5 1JY Planning reference: 2013/5947/P Date: 3<sup>rd</sup> March 2022

Dear Resident,

This consultation letter is to inform local residents of the proposed redevelopment of 19-37 Highgate Road, London NW5 1JY.

This letter will be distributed to:

- A. 19 Highgate Road NW5 St John the Baptist Church
- B. 20 Highgate Road NW5 Kentish Town Fire Station
- C. 39-51 Highgate Road NW5 Linton House / The Maple Building
- D. 42 Highgate Road NW5 Elsfield (Flats 1 to 23)
- E. 44, 46, 48, 50, 52, 54, 56 Highgate Road NW5
- F. 1, 2, 3, 5, 7 Burghley Road NW5
- G. 19 Greenwood Place NW5 Lensham House
- H. 28a & 28b Highgate Road NW5
- I. 33 Greenwood Place NW5 The Highgate Business Centre
- J. 37 Greenwood Place NW5 Greenwood Centre
- K. Councillor Meric Apak Kentish Town Ward, e-mail meric.apak@camden.gov.uk
- L. Councillor Jenny Headlam-Wells Kentish Town Ward, e-mail Jenny.headlam-wells@camden.gov.uk
- M. Councillor Georgia Gould Kentish Town Ward, e-mail georgia.gould@camden.gov.uk

Local people can provide valuable advice on how best to carry out a development. In line with the London Borough of Camden's Community Liaison Guidance, the project team intend to implement a clear communication strategy, which will be maintained throughout the duration of the project.

This letter includes relevant operational and logistical information regarding the proposed development. A draft Construction Management Plan (CMP) has been submitted to the London Borough of Camden in support of the planning application for the proposed works. A copy of the draft CMP is



available on request. Following the consultation period all received comments will be reviewed and where possible changes will be made to the CMP to address the concerns raised.

It is our intention to cause minimal disruption to local residents and other local interests during these works and all site set up arrangements and working procedures are planned with this in mind.

The following information will allow local people to gain an understanding of the proposed methodologies involved with this development.

#### 1. DETAILS OF THE CONSTRUCTION PROJECT

Demolition of the existing building on site followed by erection of a part 5, part 7, residential building comprising new high-quality flats. At ground floor the project comprises communal entrances to the flats and a small commercial unit. Landscape work carried out throughout the ground floor to improve the street frontage.

#### 2. DETAILS OF THE PROPOSED COMMENCEMENT DATE AND DURATION OF WORKS

Proposed Commencement Date	April 2022
Duration of works	80 Weeks

#### 3. DETAILS OF WORKING HOURS

GENERAL CONSTRUCTION WORKS		
Monday - Friday	08:00 - 18:00	
Saturday	08:00 - 13:00	
Sunday	Not Permitted	
Bank Holiday	Not Permitted	
NOISY WORKS – PILINGS AND EARTHWORKS		
Monday - Friday	08:00 – 18:00	
Saturday	08:00 - 13:00	
Sunday	Not Permitted	
Bank Holiday	Not Permitted	
HIGH IMPACT WORKS – DEMOLITION, CONCRETE BREA	KING	
Monday - Friday	09:00 - 12:00 / 14:00 - 18:30	
Saturday	Not Permitted	
Sunday	Not Permitted	
Bank Holiday	Not Permitted	

#### 4. RESTRICTED HOURS FOR DELIVERIES AND COLLECTIONS

Restricted Hours Deliveries/Collections (Outside Term Time):	Monday-Friday - 09:30-16:30
Restricted Hours Deliveries/Collections (During Term Time):	Monday-Friday - 09:30-15:00
Restricted Hours Deliveries/Collections:	Saturdays - 08:00-13:00
Prohibited Hours Deliveries/Collections:	Sundays & Bank Holidays



#### 5. DETAILS OF THE PROPOSED CONSTRUCTION VEHICLE ACCESS AND EGRESS ROUTE:

#### Site Access: Green Arrow

- 1. Head in a south easterly direction on Highgate Road (B518)
- 2. Turn right and enter site via the site access gates

#### Site Egress: Yellow Arrow

- 3. Exit site in a forward gear and turn right onto Highgate Road (B518)
- 4. Continue away from site on Highgate Road (B518) in a south easterly direction





On entering and exiting site suitably qualified and experienced banksmen will oversee all vehicle manoeuvres to ensure that:

• Construction vehicle drivers are aware of the presence of road users, cyclists and pedestrians and that road users, cyclists and pedestrians are aware of construction vehicle movements

• Any parked vehicles, street furniture, trees and private property are protected from potential damage caused by construction vehicle movements

• Access to neighbouring properties and refuse collection/emergency vehicles are not obstructed

#### 6. CONTACT DETAILS OF THE CONTRACTOR CARRYING OUT THE WORKS:

ORGANIZATION	GM Developments
CONTACT NAME	Garry McHugh
TELEPHONE	020 8879 7878
EMAIL	gmlondon@gmlondon.com

#### 7. COMMENTS:

You are invited to contribute to the development of the Construction Management Plan as the project moves forward. Following the consultation period all received comments will be reviewed and where possible changes will be made to the CMP to address the concerns raised.

A final issue of the Construction Traffic Management Plan will then be submitted to the London Borough of Camden.

Please provide comments by Friday 18<sup>th</sup> March 2022. Please contact GM London if you would like to discuss any issues in relation to the proposed development, please title all emails 'Highgate-CMP Feedback'.

Email: gmlondon@gmlondon.com

Or you can call us on 020 8879 7878

Best Wishes,

Garry McHugh, GM London

GM London, 223 - 229 Dawes Road, London, SW6 7RD
T: 020 8879 7878 E: info@gmlondon.com
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# **APPENDIX N**

21st March 2022



# CONSTRUCTION MANAGEMENT PLAN (CMP) SUMMARY OF CORRESPONDENCE

Reference: Re-development - 19-37 Highgate Road, London NW5 1JY Planning reference: 2013/5947/P Date: 21<sup>st</sup> March 2022

#### 1.

Correspondent 1: Stirk Law on behalf of owners of flats in the Maple Building Date: 08.03.2022 Summary: No comments regarding CMP. Double checking which planning permission the CMP related to GML Correspondence: Responded on 8/3/22. Followed up for feedback on 17/3/22

#### 2.

Correspondent 2: Tom Burgess, resident of 39-51 Highgate Road Date: 03.03.2022 Summary: No comments regarding CMP. Double checking which planning permission the CMP related to GML Correspondence: Responded on 3/3/22. Followed up for feedback on 17/3/22

3.

Correspondent 3: Elizabeth Bloor, resident of 44c Highgate Road Date: 04.03.2022 & 07.03.2022 Summary: No comments regarding CMP. Objected to the overall development GML Correspondence: Advised that the scheme was consented and extant, and that the purpose of the exercise was to get comments/feedback on the Construction Management Plan

#### 4.

Correspondent 4: Tania Glyde, resident of 46 Highgate Road Date: 08.03.2022 & 18.03.2022 Summary: Requested a copy of the draft CMP. Questioned whether works needed to happen on a Saturday GML Correspondence: NA

5.

Correspondent 5: Gill Mautner, resident of 46 Highgate Road Date: 18.03.2022 Summary: No comments regarding CMP. Objected to the overall development GML Correspondence: NA

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6.
Correspondent 6: Richard Terry, resident of Linton House
Date: 11.03.2022 & 18.03.2022
Summary:
Requested a copy of the draft CMP
Questions on the CMP
You commit to working hours of 8.00 to 18.00. Can you confirm you will be making no noise - no bangs or crashes, no loud beeping - until 8.00 each day?
You list several activities where predicted noise & vibration levels will exceed the criteria. Is there no way these noise levels can be reduced to meet the criteria?

Is it necessary to close the footpath along the length of the site? We use it several times a day. Hundreds of people are using it at peak times. Your dashed green line asks us to cross to the road twice, once outside Linton House, the other outside The Forum. There is no safe crossing outside The Forum.

Is it necessary to close a lane of the main highway - effectively the bus lane - to create your set down area. Not only do we lose a bus stop, we lose the bus lane.

Your description of the project does not explain the extent of the substructure works. Are you building a basement floor? If so, how many heavy loads of earth will you be removing from the site?

**GML Correspondence:** 

Draft CMP sent Responded as below: 'Yes we can confirm this

Please see the attached report by our acoustic consultants which sets out measures to minimise the impacts on neighbouring properties. All works will be acoustically monitored and mitigation will be put in place if the specified noise / vibration levels are exceeded

This is currently proposed as a means of ensuring the safety of all pedestrians. We will discuss this in more detail with Camden council as we are keen to minimise disruption to neighbours whilst also ensuring safety. If the pavement was to be closed then we intend to install a temporary crossing at the Forum end of the site to ensure there is a safe crossing point.

We do not intend to close a lane, only the bus stop as this will facilitate deliveries. The traffic movements to and from the bus stop for deliveries will be reduced compared to bus movements, and we have been advised by TFL that there is another bus stop in close proximity.

As per planning permission 2013/5947/P there is no basement at the site, although this is currently under review to understand whether a small element of basement will be required to accommodate plant'



7.

**Correspondent 7:** Mr Millar, resident of Linton House, via Stirk Law (as per line 5) **Date:** 15.03.2022

Summary:

Comments relating to working hours:

Working hours

The letter states the contractors may carry out noisy and high impact work at the following times;

Mon – Fri 8am – 6pm and Saturday 8am – 1pm.

My wife and I work from home some of the time and the inconvenience will be immeasurable.

We do not want the noisy and high impact work to be carried out at weekends at all.

On weekdays, we simply have to have some time during the day when we know this work won't be carried out so we can plan on-line meetings etc.

Furthermore, it should not be allowed until 6pm, as that is outside normal work time.

The noisy and high impact work will cause us greatest inconvenience and should be stopped earlier that 6pm. **GML Correspondence:** NA

Best Wishes,

Garry McHugh, GM London

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# **APPENDIX O**



# **BS5228** Assessment

19-37 Highgate Road Camden, London

Reference: 9368/JL

## 19-37 Highgate Road Camden, London



2

#### **Client:**

South Downs Safety Ltd 113 Holmes Avenue Hove East Sussex BN3 7LF

Document Control				
Version:	<b>Revision Description:</b>	Date:	Author:	<b>Reviewed by:</b>
1.0	1 <sup>st</sup> Issue	06/12/21	Jonas Lopez	Blake Lucas

The report has been prepared in good faith, with all reasonable skill and care, based on information provided or available at the time of its preparation and within the scope of work agreement with the Client. We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above. The report is provided for the sole use of the named Client and is confidential to them and their professional advisors. No responsibility is accepted to other parties.

The report limits itself to addressing solely on the noise or vibration aspects as included in this report. We provide advice only in relation to noise, vibration and acoustics. It is recommended that appropriate expert advice is sought on all the ramifications (e.g. CDM, structural, condensation, fire, legal, etc.) associated with any proposals in this report or as advised and concerning the appointment. It should be noted that noise predictions are based on the current information as we understand it and on the performances noted in this report. Any modification to these parameters can alter the predicted level. All predictions are in any event subject to a degree of tolerance of normally plus or minus three decibels. If this tolerance is not acceptable, then it would be necessary to consider further measures.



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# 1. Introduction

Acoustic Consultants Limited have appointed to undertake the construction noise and vibration assessment for the development works at 19-37 Highgate Road, Camden, London.

This report provides noise and vibration limits for the development. Provides a BS5228 assessment of noise and also provides measures to control the impact of noise and vibration, including a monitoring strategy.

The author of this report is an Associate Member of the Institute of Acoustics (AMIOA) with a recognised acoustic qualification and over four years of experience within the field of noise and acoustics. The report and calculations have been checked and approved by a Full Member of the Institute of Acoustics (MIOA) with over 14 years of experience within the field of noise and acoustics.



# 2. The Site and Development

19-37 Highgate Road, Camden, London is located between Highgate Road and Greenwood Place. The existing buildings will be demolished, and a new Centre for Independent Living and a Mixed-used development comprising residential units and social spaces will be constructed.

The site location is provided in the figure below.



Figure 1: Site Location Plan



# 3. Assessment Criteria

## 3.1. London Borough of Camden

The London Borough of Camden, provides guidance for construction activities, however there are no noise/vibration limits set and they refer you to BS5228.

## 3.2. British Standard 5228-1 - Noise

British Standard 5228-1:2009+A1:2014 entitled "Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1: Noise" provides guidance on the methods that can be used to predict and measure noise from construction activities and how to assess the impact on those exposed to it.

Annex E provides different methods of determining the significance of noise effects due to construction works. Annex E states:

"A pragmatic approach needs to be taken when assessing the noise effects of any construction project, i.e. the guidance provided below would generally only apply to projects of significant size, and lesser projects might not need to be assessed or might only require general consideration of noise effects and mitigation. Generally, the local planning authority, or a planning consultant experienced in these matters, will be able to advise as to the extent of the assessment that might be required."

For the construction noise assessment, we have used the ABC method detailed of Annex E of British Standard 5228-1:2009+A1:2014. The ABC method states that for the appropriate period (night, evening/ weekends or day) the measured ambient noise level ( $L_{Aeq(T)}$  without construction noise present) is rounded to the nearest 5 dB. This is then compared with the cumulative  $L_{Aeq(T)}$  of ambient noise and construction noise rounded to the nearest 5 dB.

If the total noise level exceeds the appropriate category value, then a significant effect is deemed to occur.

The example thresholds for significant effects at dwellings are shown below and extracted directly from Annex E of British Standard 5228-1:2009+A1:2014.

Assessment category and threshold value period	Threshold value	, in decibels (dB)	
(L <sub>Aeq</sub> )	Category A <sup>A)</sup>	Category B <sup>B)</sup>	Category C c
Night-time (23.00–07.00)	45	50	55
Evenings and weekends D)	55	60	65
Daytime (07.00-19.00) and Saturdays (07.00-13.00)	65	70	75
is higher than the above values), then a significant effect period increases by more than 3 dB due to construction	t is deemed to occu activity.	ir if the total L <sub>Aeq</sub> no	bise level for the
NOTE 3 Applied to residential receptors only.			
<ul> <li>NOTE 3 Applied to residential receptors only.</li> <li><sup>A)</sup> Category A: threshold values to use when ambient noise these values.</li> </ul>	e levels (when round	led to the nearest 5 o	dB) are less than
<ul> <li>NOTE 3 Applied to residential receptors only.</li> <li><sup>A)</sup> Category A: threshold values to use when ambient noise these values.</li> <li><sup>B)</sup> Category B: threshold values to use when ambient noise as category A values.</li> </ul>	e levels (when round e levels (w <mark>hen round</mark>	led to the nearest 5 o	dB) are less than dB) are the same

Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are higher than category A values.

<sup>D)</sup> 19.00–23.00 weekdays, 13.00–23.00 Saturdays and 07.00–23.00 Sundays.

## 3.3. British Standard 5228-2 - Vibration

British Standard 5228-2:2009+A1:2014 entitled "Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 2: Vibration" provides guidance on the methods that can be used to assess the impact of vibration and how to mitigate it on sensitive receivers.

Annex B provides vibration levels at which adverse effect/comment may occur. These are based on the Peak Particle Velocity (PPV).

### 3.3.1. Human Response to Vibration

Annex B.2 relates to the human response to vibration, Section B.2 states:

"Human beings are known to be very sensitive to vibration, the threshold of perception being typically in the PPV range of 0.14mms<sup>-1</sup> to 0.3mm<sup>-1</sup>. Vibrations above these values can disturb, startle. Cause annoyance or interfere with work activities. At higher levels can be described as unpleasant or even painful. In residential accommodation, vibrations can promote anxiety lest some structural mishap might occur. Guidance on the effects on physical health of vibration at sustained high levels is given in BS 6841, although such levels are unlikely to be encountered as a result of construction and demolition activities.

BS 6472 sets down vibration levels at which minimal adverse comment is likely to be provoked from the occupants of the premises being subjected to vibration. It is not concerned with short-term health hazards or working efficiency. It points out that human response to vibration varies quantitively according to the direction in which it is perceived. Thus, generally, vertical vibrations are more perceptible than horizontal vibrations, although at very low frequencies this tendency is reversed.



A kindred problem is that vibrations can cause structure-borne noise which can be an additional irritant to occupants of the buildings. Loose fittings are prone to rattle and movement.

BS 6472, as stated, provides guidance on human response to vibration in buildings. Whilst the assessment of the response to vibration in BS 6472 is based on the VDV and weighted acceleration, for construction it is considered more appropriate to provide guidance in terms of the PPV, since this parameter is likely to be more routinely measured based upon the more usual concern over potential building damage. Furthermore, since many of the empirical vibration predictors yield a result in terms of PPV, it is necessary to understand what the consequences might be of any predicted levels in terms of human perception and disturbance. Some guidance is given in Table B.1."

Table B1 of the standard is provided below:

Vibration level <sup>A), B), C)</sup>	Effect		
0.14 mm·s <sup>-1</sup>	Vibration might be just perceptible in the most sensitive situations for most vibration frequences associated with construction. At lower frequencies, people are less sensitive to vibration.		
0.3 mm·s <sup>−1</sup>	Vibration might be just perceptible in residential environments.		
1.0 mm·s <sup>-1</sup>	It is likely that vibration of this level in residential environments will cause complaint, but can be tolerated if prior warning and explanation has been given t residents.		
10 mm·s⁻¹	Vibration is likely to be intolerable for any more than a very brief exposure to this level 🔄 in most building environments 街.		
A <sub>1</sub>			
A) The magnitudes of t entry into the recipi	he values presented apply to a measurement position that is representative of the point of ent.		
<sup>B)</sup> A transfer function measurements are a	which relates an external level to an internal level) needs to be applied if only external vailable.		
<ul> <li>Single or infrequent The values are provi measured or expect might be appropriar adverse comment. Ø</li> </ul>	occurrences of these levels do not necessarily correspond to the stated effect in every case. ded to give an initial indication of potential effects, and where these values are routinely ed then an assessment in accordance with BS 6472-1 or -2, and/or other available guidance, te to determine whether the time varying exposure is likely to give rise to any degree of		

### 3.3.2. Structural Damage

Annex B.3 relates to the structural response of a building to vibration. The relevant extracts of B.3 are below:

"The response of a building to groundborne vibration is affected by the type of foundation, underlying ground conditions, the building construction and the state of repair of the building.

*BS 7385 provides guidance on vibration measurement, data analysis and reporting as well as building classification and guide values for building damage. Extracts are provided below.* 



The damage threshold criteria presented in BS 7385-2 are based upon systematic studies using a carefully controlled vibration source in the vicinity of buildings. Strains imposed in a building by ground motion will tend to be greater if lower frequencies predominate. The relative displacements associated with cracking will be reached at higher vibration magnitudes with higher frequency dependent threshold levels which are judged to give a minimal risk of vibration-induced damage.

The dominant frequency to use for the assessment is that associated with the greatest amplitude. If the building vibration is multi-frequency in nature, the frequencies should be determined from an amplitude-frequency plot, with each significant peak being examined in turn.

Limits for transient vibration, above which cosmetic damage could occur, are given numerically in Table B.2 and graphically in Figure B.1 in terms of the component PPV. In the lower frequency region where strains associated with a given vibration velocity magnitude are higher, the guide values for the building types corresponding to line 2 are reduced. Below a frequency of 4 Hz where a high displacement is associated with a relatively low component PPV a maximum displacement of 0.6mm (zero to peak) should be used."

Table B.2 and Figure B.1 of the standard are provided below:

Table B.2 Transient vibration guide values for cosmetic damage

Line (see Figure B.1)	Type of building	Peak component particle velocity in frequency range of predominant pulse		
		4 Hz to 15 Hz	15 Hz and above	
1	Reinforced or framed structures	50 mm/s at 4 Hz and	50 mm/s at 4 Hz and	
	Industrial and heavy commercial buildings	above	above	
2	Unreinforced or light framed structures	15 mm/s at 4 Hz increasing to 20 mm/s	20 mm/s at 15 Hz increasing to 50 mm/s	
Residential or light commercial at 15 Hz buildings	at 15 Hz	at 40 Hz and above		
NOTE 1 Value	s referred to are at the base of the build	ding.		

Figure B.1 Transient vibration guide values for cosmetic damage



The standard states that minor damage is possible at vibration levels which are greater than twice those given in Table B.2, and major damage at values greater than 4 times the tabulated values.



# 4. Construction Limits

## 4.1. Noise Limits

A baseline survey was completed by others from 2<sup>nd</sup> November until 9<sup>th</sup> November 2021 at 19-37 Highgate Road, Camden, London, which is representative of the noise climate experienced on site.

Measurements were undertaken at two locations representative of the front and rear of the site. The equipment located at the front was installed 2m above ground at 1.5m from the existing façade, and the equipment at the back was located 4m above ground in free-field conditions. These are shown in the figure below.



Figure 2: Noise Survey Locations

The equipment used for the survey is shown below:

Table 1: Equipment and Calibration Status

Equipment Description / Manufacturer / Type	Serial Number	Date of Calibration	Calibration Certification Number
SLM 01dB Duo	10667	30/04/2021	1500295-1
SLM 01dB Duo	10927	29/09/2021	1500966-2

Weather conditions during the survey were dry and sunny during installation, favourable conditions throughout the survey with gentle and sporadic rainfall and average wind speeds below 0.5 m/s every day.



The measurement results of such survey are as follows:



Chart 1: Measured noise levels at Front Location



Chart 2: Measured noise levels at Rear Location



Location	Measured Noise Levels at 19-37 Highgate Road Measured Noise Levels L <sub>Aeq (T)</sub> dB				
	Daytime (07:00 – 23:00)	Evening (19:00 — 23:00)	Night-time (23:00 – 07:00)		
Front	64	64	59		
Rear	57	56	52		

In order to assess the construction noise, Annex E of British Standard 5228-1:2009+A1:2014 provides different methods of determining the significance of noise effects due to construction works. Based on the survey the site falls into Category B of BS5228, and the following noise limits should be applied for normal operations at the nearest receivers.

Table 3: Summary of Noise Limits at Dwellings

Location	Construction Noise Limits LAeq (T) dB				
	Daytime Evening Night				
All Receivers	70	60	50		

These limits are the level over the working day (08:00-18:00 hours Monday to Friday, 08:00-13:00 hours on Saturdays) for the "daytime" and are applied at the nearest sensitive receivers.

It should be noted construction activities may occasionally result in these limits being exceeded, where this is expected the client and contractor should notify the residents that there may be an occasional increase in noise levels.

## 4.2. Vibration Limits

All vibration limits should be based on Annex B of British Standard 5228-2:2009+A1:2014 entitled "Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 2: Vibration". We would advise vibration is controlled to a peak particle velocity (PPV) of:

• 5mm/s within the residential and commercial properties in the area.

In some cases, a higher limit may be required, if this is the case it is advised the neighbours are warned vibration may be higher than acceptable. Any higher limits should be below 15mm/s to avoid damage occurring.

# 5. Construction Method

We have been provided with the following information about the plant equipment to be used for each of the construction phases

## 5.1. Method of Work

The client has advised the method of work is as follows:

- 1) Hoarding Erection/Site Set Up
- 2) Demolition
- 3) Basement digging
- 4) Pile matt and Piling Installation
- 5) Cast Basement Slab
- 6) Other Floors Slabs
- 7) External SFS Floors
- 8) Windows Installation
- 9) Roof Waterproofing
- 10) 1<sup>st</sup> to 7<sup>th</sup> Floors Brickwork
- 11) Fit Out and Finishes
- 12) External Landscaping and Rooftops
- 13) Completion

## 5.2. Equipment

The above has been broken down into four main phases, these are site set-up & demolition, groundworks & piling, superstructure and fit out works. The equipment used for each phase is provided below:

## 5.2.1. Site Set-up & Demolition

Demolition equipment with operational times is as follows:

Plant	Quantity	Hours of Use	% In Use
3t digger	1	3	30
14t digger	1	3	30
8t digger	1	5	50
Air compressor	1	5	50
Hammer Drill	1	1	10
Multi tool	2	1	10
Sledgehammer	2	0.5	5
Angle Grinder	1	0.5	5
Concrete Saw	1	1	10
Jackhammer	1	2	20

Table 4: Site Set-up & Demolition



Plant	Quantity	Hours of Use	% In Use
Hilti TE1000	1	2	20
Hilti TE700AVR	1	2	20
Hilti TE800AVR	1	2	20

## 5.2.2. Groundworks & Piling

Groundworks & Piling equipment with operational times is as follows:

Table 5: Groundworks & Piling

Plant	Quantity	Hours of Use	% In Use
3t digger	1	5	50
14t digger	1	7	70
8t digger	1	5	50
Air compressor	1	5	50
Piling rig	1	9	90
Concrete pump	2	6	60
Skill Saw	1	1	10

## 5.2.3. Superstructure

**-** . .

Superstructure equipment with operational times is as follows:

Table 6: Superstructure			
Plant	Quantity	Hours of Use	% In Use
3t digger	1	7	70
8t digger	1	7	70
Air compressor	1	7	70
Skill Saw	1	1	10
Concrete pump	1	8	80
Angle Grinder	1	0.5	5
Hand Tools Fixing supports	1	1	10

### 5.2.4. Fit Out

Fit out equipment with operational times is as follows:

Table 7: Fit Out

Plant	Quantity	Hours of Use	% In Use
Skill Saw	2	1	10
Hand Tools	2	1	10
Mitre saw	1	1	10
Jigsaw	2	1	10

# 6. Proposed Plant & Operational Noise Levels

From the supplied information from the client the following plant will be used. The tables below also provide the operational noise levels from our own survey work, BS5228 or manufacturers data. The tables also include the expected operating times as provided by the client:

Diant	Demolition				
Fialle	dB L <sub>wA</sub>	Source of Noise Data	% On Time Per Day	Quantity	
3t digger	98	Table C.2, 7 of BS5228	30	1	
14t digger	106	Table C.2, 3 of BS5228	30	1	
8t digger	104	Table C.2, 5 of BS5228	50	1	
Air compressor	98	Manufacturer Data	50	1	
Hammer Drill	85	In house data	10	1	
Multi tool	85	In house data	10	2	
Sledgehammer	110	Table D7, 80 of BS5228	5	2	
Angle Grinder	111	Table C.4, 93 of BS5228	5	1	
Concrete Saw	118	Table C.5, 36 of BS5228	10	1	
Jackhammer	95	In house data	20	1	
Hilti TE1000	95	In house data	20	1	
Hilti TE700AVR	95	In house data	20	1	
Hilti TE800AVR	95	In house data	20	1	

#### Table 8: Site Set-up & Demolition

#### Table 9: Groundworks & Piling

Plant	Groundworks & Piling				
Fiant	dB L <sub>wA</sub>	Source of Noise Data	% On Time Per Day	Quantity	
3t digger	98	Table C.2, 7 of BS5228	50	1	
14t digger	106	Table C.2, 3 of BS5228	70	1	
8t digger	104	Table C.2, 5 of BS5228	50	1	
Air compressor	98	Manufacturer Data	50	1	
Piling rig	107	Table C3, 17 of BS5228	90	1	
Concrete pump	109	Table C.3, 25 of BS5228	60	2	
Skill Saw	108	In house data	10	1	



#### Table 10: Superstructure

Diant	Superstructure				
Plant	dB L <sub>wA</sub>	Source of Noise Data	% On Time Per Day	Quantity	
3t digger	98	Table C.2, 7 of BS5228	70	1	
8t digger	104	Table C.2, 5 of BS5228	70	1	
Air compressor	98	Manufacturer Data	70	1	
Skill Saw	108	In house data	10	1	
Concrete pump	109	Table C.3, 25 of BS5228	80	1	
Angle Grinder	111	Table C.4, 93 of BS5228	5	1	
Hand Tools Fixing supports	118	Table C.4, 92 of BS5228	10	1	

#### Table 11: Fit out

Diant	Fit out				
Plant	dB L <sub>wA</sub>	Source of Noise Data	% On Time Per Day	Quantity	
Skill Saw	108	In house data	10	2	
Hand Tools Fixing supports	118	Table C.4, 92 of BS5228	10	2	
Mitre saw	106	BS5228, Table D7, Row 78	10	1	
Jigsaw	93	In house data	10	2	

# 7. Noise & Vibration Control Measures

# 7.1. Community Liaison

Communication with the local residents and businesses is important and will ensure any concerns about the adverse impacts due to construction are reduced.

The Main Contractor should ensure that a site notice board is clearly visible, this will ensure that local residents and business have a main point of contact for any complaints or questions.

## 7.2. Best Practical Means

It is advised Best Practical Means is employed throughout the construction process to reduce the likelihood of noise and vibration complaints. All contractors and subcontractors should be made aware of the working practices implemented to reduce complaints. This should be informed at all site inductions.

The proposals with regard to general noise and vibration mitigation would be in accordance with BPM as specified in BS 5228-1:2009 and would comprise of the following, where possible:

- a) Investigate the cause of complaint
- b) Investigate as to whether the agreed limits have been exceeded
- c) Provide a response regarding the complaint

It is advised Best Practical Means is employed throughout the construction process to reduce the likelihood of noise and vibration complaints. All contractors and subcontractors should be made aware of the working practices implemented to reduce complaints. This should be informed at all site inductions. The proposals with regard to general noise and vibration mitigation would be in accordance with BPM as specified in BS 5228-1:2009 and would comprise of the following, where necessary and possible:

- Good communication with the adjacent residents is required, especially during periods of high noise and vibration.
- Switching off engines where vehicles are standing for a significant period of time.
- Fitting of acoustic enclosures to supress noisy equipment when required. This can achieve up to 15dB reduction for plant.
- Operating plant at low speeds and incorporating automatic low speed idling
- Selecting electrically driven equipment in preference to internal combustion power, hydraulic power in preference to pneumatic and wheeled in lieu of tracked plant
- Properly maintaining all plant (greased, blown silencers replaced, saws kept sharpened, teeth set and blades flat, worn bearings replaced, etc.)



- Noise and vibration real time monitoring is installed during the duration of the disruptive works. The monitoring system should have instant alerts when the agreed limits are exceeded.
- Reducing working hours to avoid disruption when an alert is received, this could be a 50% reduction if required.

## 7.3. Monitoring

To mitigate and monitor the effects of the demolition and construction stage environmental noise and vibration monitoring will be completed on the site.

We would advise monitoring is completed in at least 2 positions, 1 noise and 1 vibration. These are as follows:

- Vibration fixed to the façade of the adjoining dwelling.
- Noise at the site boundary to the adjoining dwelling within the rear garden.

#### **NOISE MONITORING:**

- a. Sound Pressure Levels will be measured using appropriate and fully calibrated equipment. The equipment will be set up as noted above before works commence.
- b. The equipment will have a web interface to issue alerts to ourselves, the main contractor and any representative if the noise limits are close to being exceeded.
- c. These alerts would be checked off site and we would advise the main contractor and representative of any exceedances in the noted limits. The limits would have a lower level threshold (amber) and high level (red) based on the criteria noted in this report.
- d. If any exceedances occur the main contractor will be alerted and should mitigate to a minimum.
- e. Weekly reports will be issued by ourselves to the main contractor and any representatives.

### **VIBRATION:**

- a. Vibration monitoring will be measured using appropriate and fully calibrated equipment. The equipment will be set up as noted above before works commence.
- b. The equipment will have a web interface to issue alerts to ourselves, the main contractor and any representative if the vibration limits are close to being exceeded.
- c. These alerts would be checked off site and we would advise the main contractor and representative of any exceedances in the noted limits. The limits would have a lower level threshold (amber) and high level (red) based on the criteria noted in this report.



- d. If any exceedances occur the main contractor will be alerted and should mitigate to a minimum.
- e. Weekly reports will be issued by ourselves to the main contractor and any representatives.

All monitoring should be installed, checked and reported by a suitably qualified acoustician with at least TechIOA membership. It is also advised monitoring is completed by a UKAS or ANC accredited acoustic consultancy.

# 8. Construction Noise Predictions

Predictions have been completed using the standard formulas for noise predictions and the operational times and quantities noted above. The assessment considers each phase of work, as noted above. It is understood there will a 2.4m high hoarding around the site which is estimated to provide a barrier attenuation of 10dB. The nearest dwelling will be 8m from the site.

# 8.1. Site Set-up & Demolition

The predictions are as follows:

Plant Type and Operation	L <sub>wA</sub>	Time Correction	Quantity Correction	Distance Correction	Barrier Correction	dB L <sub>Aeq(10hr)</sub>
3t digger	98	-5	0	-26	-10	57
14t digger	106	-5	0	-26	-10	65
8t digger	104	-3	0	-26	-10	65
Air compressor	98	-3	0	-26	-10	59
Hammer Drill	85	-10	0	-26	-10	39
Multi tool	85	-10	3	-26	-10	42
Sledgehammer	110	-13	3	-26	-10	64
Angle Grinder	111	-13	0	-26	-10	62
Concrete Saw	118	-10	0	-26	-10	72
Jackhammer	95	-7	0	-26	-10	52
Hilti TE1000	95	-7	0	-26	-10	52
Hilti TE700AVR	95	-7	0	-26	-10	52
Hilti TE800AVR	95	-7	0	-26	-10	52
Cumulative Level dB L <sub>Aeq(10hr)</sub>						74

Table 12: Site Set-Up & Demolition Noise Predictions

# 8.2. Groundworks & Piling

The predictions are as follows:

	Table 13:	Groundworks 8	& Piling	Noise	Predictions
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Plant Type and Operation	LwA	Time Correction	Quantity Correction	Distance Correction	Barrier Correction	dB L <sub>Aeq(10hr)</sub>	
3t digger	98	-3	0	-26	-10	59	
14t digger	106	-2	0	-26	-10	68	
8t digger	104	-3	0	-26	-10	65	
Air compressor	98	-3	0	-26	-10	59	
Piling rig         107         0         0         -26         -10							
Concrete pump	109	-2	3	-26	-10	74	
Skill Saw	108	-10	0	-26	-10	62	
Cumulative Level dB L <sub>Aeq(10hr)</sub>							



## 8.3. Superstructure

The predictions are as follows:

Plant Type and Operation	Lwa	Time Correction	Quantity Correction	Distance Correction	Barrier Correction	dB LAeq(10hr)
3t digger	98	-2	0	-26	-10	60
8t digger	104	-2	0	-26	-10	66
Air compressor	98	-2	0	-26	-10	60
Skill Saw	108	-10	0	-26	-10	62
Concrete pump	109	-1	0	-26	-10	72
Angle Grinder	111	-13	0	-26	-10	62
Hand Tools Fixing supports	118	-10	0	-26	-10	72
Cumulative Level dB LAeq(10hr)						

Table 14: Superstructure Noise Predictions

## 8.4. **Fit Out**

The predictions are as follows:

|--|

Plant Type and Operation	LwA	Time Correction	Quantity Correction	Distance Correction	Barrier Correction	dB LAeq(10hr)	
Skill Saw         108         -10         3         -26         -10							
Hand Tools         118         -10         3         -26         -10							
Mitre saw         106         -10         0         -26         -10							
Jigsaw	93	-10	3	-26	-10	50	
Cumulative Level dB LAeq(10hr)						75	

## 8.5. Summary of Predictions

The following table summarises the precited level per phase:

Phase	Predicted Level LAeq(10hr)	Exceedance over Criteria
Site Set-Up & Demolition	74	+4
Groundworks & Piling	77	+7
Superstructure	76	+6
Fit Out	75	+5

As can be seen from the table above, all the phases are predicted to be above the 70 dB  $L_{Aeq(10hr)}$  limit. However, it should be noted that this is considered a worst case prediction, and we would expect normally the levels would fall below this limit. The contractor will follow BPM throughout and will be alerted to any exceedances as required via the real time monitoring. We would advise mitigation measures to be implemented if an alert is received on 2 consecutive days (noise) or 3 times in one hour (vibration).

# 9. Summary and Conclusions

Acoustic Consultants Limited were appointed to undertake the construction noise and vibration assessment for the development works at 19-37 Highgate Road, Camden, London.

This report provides noise and vibration limits for the development. Provides a BS5228 assessment of noise and also provides measures to control the impact of noise and vibration, including a monitoring strategy.

It is considered that with suitable monitoring during the disruptive phases of work and BPM followed, the impacts on the receivers in the area can be controlled and reduced to a minimum where necessary.



# 10. Appendix 1 – Glossary of Acoustic Terminology

*A-weighted sound pressure pA* – value of overall sound pressure, measured in pascals (Pa), after the electrical signal derived from a microphone has been passed through an A-weighting network

*A-weighted sound pressure level,*  $L_{pA}$  - quantity of A-weighted sound pressure given by the following formula in decibels (dBA)

 $L_{pA} = 10 \log_{10} (p_A/p_0)^2$ 

where:

 $p_A$  is the A-weighted sound pressure in pascals (Pa);  $p_0$  is the reference sound pressure (20  $\mu$ Pa)

*Background sound level,*  $L_{A90,T}$  – A-weighted sound pressure level that is exceeded by the residual sound assessment location for 90% of a given time interval, T, measured using weighting F and quoted to the nearest whole number of decibels

Break-in - noise transmission into a structure from outside.

*Decibel (dB)* – The decibel is the unit used to quantify sound pressure levels. The human ear has an approximately logarithmic response to acoustic pressure over a very large dynamic range (typically 20 micro-Pascals to 100 Pascals). Therefore, a logarithmic scale is used to describe sound pressure levels and also sound intensity and power levels. The logarithms are taken to base 10. Hence an increase of 10 dB in sound pressure level is equivalent to an increase by a factor of 10 in the sound pressure level (measured in Pascals). Subjectively, this increase would correspond to a doubling of the perceived loudness of sound.

*Equivalent continuous A-weighted sound pressure level,*  $L_{Aeq,T}$  – value of the A-weighted sound pressure level in decibels of continuous steady sound that, within a specified time interval, T = t2 – t1, has the same mean-squared sound pressure as a sound that varies with time, and is given by the following equation:

 $L_{AeqT} = 10 lg_{10} \left\{ (1/T) \int_{T}^{T} [p_A(t)^2/p_0^2] dt \right\}$ (1) where:  $p_0 \quad \text{is the reference sound pressure (20 \ \mu\text{Pa}); and} \\ p_A(t) \quad \text{is the instantaneous A-weighted sound pressure (Pa) at time t} \\ NOTE The equivalent continuous A-weighted sound pressure level is quoted to the nearest whole number of decibels.}$ 

*Facade level* – sound pressure level 1 m in front of the façade. Facade level measurements of  $L_{pA}$  are typically 1 dB to 3 dB higher than corresponding free-field measurements because of the reflection from the facade.


*Free-field level* – sound pressure level away from reflecting surfaces. Measurements made 1.2 m to 1.5 m above the ground and at least 3.5 m away from other reflecting surfaces are usually regarded as free-field. To minimize the effect of reflections the measuring position has to be at least 3.5 m to the side of the reflecting surface (i.e. not 3.5 m from the reflecting surface in the direction of the source).

*Octave and Third Octave Bands* – The human ear is sensitive to sound over a range of frequencies between approximately 20 Hz to 20 kHz and is generally more sensitive to medium and high frequencies than to low frequencies within the range. There are many methods of describing the frequency content of a noise. The most common methods split the frequency range into defined bands, in which the mid-frequency is used as the band descriptor and in the case of octave bands is double that of the band lower. For example, two adjacent octave bands are 250 Hz and 500 Hz. Third octave bands provide a fine resolution by dividing each octave band into three bands. For example, third octave bands would be 160 Hz, 250 Hz, 315 Hz for the same 250 Hz octave band.

*Sound pressure level* – Sound pressure level is stated on many of the charts. It is the amplitude of the acoustic pressure fluctuations in a sound wave, fundamentally measured in Pascals (Pa), typically from 20 micro-Pascals to 100 Pascals, but commonly simplified onto the decibel scale.

Sound reduction index, R – laboratory measure of the sound insulating properties of a material or building element in a stated frequency band.

*Specific sound level,*  $L_s = L_{Aeq,Tr}$  – equivalent continuous A-weighted sound pressure level produced by the specific sound source at the assessment location over a given reference time interval, T<sub>r</sub>.

*Structure-borne noise* – audible noise caused by the vibration of elements of a structure, the source of which is within a building or structure with common elements

*Rating level, L*<sub>*Ar,Tr</sub> – Specific sound level plus any adjustment for the characteristic features of the sound.*</sub>

*Reverberation Time,* T - The reverberation time is defined as the time taken for a noise level in an enclosed space to decay by 60 dB from a steady level, once the noise source has stopped. It is measured in seconds. Often a 60 dB decay cannot be measured so the reverberation time is measured over a lesser range and corrected back to the time for a 60 dB drop assuming a constant decay rate. Common parameters are T20 (time taken for a 20 dB decay multiplied by three) and T30 (time taken for a 30 dB decay multiplied by two).

*Vibration Dose Value, VDV* – measure of the total vibration experienced over a specified period of time.



*Estimated Vibration Dose Value, eVDV* – estimation of the total vibration experienced over a specified period of time. This is usually based on the number of events and shortened measurement data.

Weighted sound reduction index,  $R_w$  – Single-number quantity which characterizes the airborne sound insulating properties of a material or building element over a range of frequencies. The weighted sound reduction index is used to characterize the insulation of a material or product that has been measured in a laboratory (see BS EN ISO 717-1).



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# **APPENDIX P**





### **Dust Management Plan**

19 – 37 Highgate Road, London November 2021

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### **Dust Management Plan**

### 19 – 37 Highgate Road, London (NW5 1JY)

### November 2021

### South Downs Safety Limited

113 Holmes Avenue Hove East Sussex BN3 7LF

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## **1. Introduction**

### Background

1.1 Phlorum Limited have been commissioned by South Downs Safety Limited on behalf of GM London to produce a Dust Management Plan (DMP) for the proposed redevelopment of 19 – 37 Highgate Road, Kentish Town, London (NW5 1JY). The proposed development is located within the administrative boundary of the London Borough of Camden (LBC). The National Grid Reference for the centre of the site is 528865, 185420. A site location plan has been included in Figure 1.

### Site and Surrounding Area

- 1.2 The proposals comprise the demolition of the existing Highgate Centre and subsequent construction of a new 7-storey building with a Gross Internal Area (GIA) of 4,474m<sup>2</sup>. The proposals will provide 47 flats and 100m<sup>2</sup> of commercial floorspace along with cycle and refuse storage facilities. Land use in the vicinity of the site comprises primarily commercial and industrial uses, with residential uses located to the north and east.
- 1.3 The main pollution sources in the vicinity of the site are from vehicles travelling on the local road network, particularly the adjacent B518 Highgate Road. There are no known major sources of dust in the vicinity of the site.
- 1.4 The development site lies within the borough-wide Camden Air Quality Management Area (AQMA), declared by LBC in 2002 due to exceedances of the short-term Air Quality Standard (AQS) for particulate matter (PM<sub>10</sub>) and the long-term AQS for nitrogen dioxide (NO<sub>2</sub>).

#### Scope

1.5 The DMP was primarily required following Condition 33 of LBC's decision notice (2014) for the proposal (application ref: 2013/5947/P), which states the following:

"Prior to the demolition of the existing buildings a Construction Management Plan (CMP) (including provision for Air Quality Monitoring on the site) for; a) the residential building and; b) the Community Centre [...]".

1.6 To this end, the DMP includes a construction Dust Risk Assessment, which assigns an overall risk level for dust impacts from the site. This risk level can be used to determine the type of monitoring and number of monitors appropriate during the construction programme.



1.7 This DMP also sets out various measures to manage for and mitigate against dust emissions from on-site demolition and construction in line with the requirements of LBC's updated *Construction / Demolition Management Plan*<sup>1</sup>.

<sup>1</sup> London Borough of Camden. Construction / Demolition Management Plan pro forma.



## 2. Assessment Methodology

2.1 This Dust Management Plan (DMP) follows UK, London and LBC policies, guidance, and best practice methodologies to assess, manage and mitigate for dust emissions from development sites.

### Guidance

- 2.2 This DMP has been produced in accordance with the Camden Planning Guidance on air quality<sup>2</sup>.
- 2.3 Defra's Local Air Quality Management Technical Guidance (LAQM.TG(16)<sup>3</sup> and London Local Air Quality Management Technical Guidance (LLAQM.TG(19)<sup>4</sup> were followed in carrying out the assessment.
- 2.4 Guidance published by the Institute of Air Quality Management (IAQM) on the *Assessment of Dust from Demolition and Construction*<sup>5</sup> was used in assessing the construction phase of the proposed development.
- 2.5 The Greater London Authority (GLA) Supplementary Planning Guidance on *The Control of Dust and Emissions During Construction and Demolition*<sup>6</sup> has also been referred to, which is considered best practice guidance for the UK. The GLA guidance details a number of mitigation measures that should be adopted to minimise adverse impacts from dusts and fine particles.
- 2.6 Guidance on Non-Road Mobile Machinery (NRMM)<sup>7</sup> was followed with regard to emissions mitigation and procedures regarding NRMM on construction and demolition sites in London.

### Baseline Assessment

2.7 The baseline air quality conditions in the vicinity of the site are established through the compilation and review of appropriately sourced background concentration estimates and local monitoring data.

<sup>2</sup> London Borough of Camden. (2021). Camden Planning Guidance: Air quality.

<sup>3</sup> Defra. 2018. Part IV of the Environment Act 1995, Environment (Northern Ireland) Order 2002 Part III, Local Air Quality Management, Technical Guidance LAQM. TG(16). London: Defra.

<sup>4</sup> Defra. 2018. Part IV of the Environment Act 1995, Environment (Northern Ireland) Order 2002 Part III ,London Local Air Quality Management, Technical Guidance LLAQM.TG(19). London.

<sup>5</sup> IAQM. (2014). Guidance on the assessment of dust from demolition and construction.

<sup>6</sup> Greater London Authority. (2014). The Control of Dust and Emissions During Construction and Demolition.

<sup>7</sup> Greater London Authority. (2021). <u>https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/nrmm</u>

2.8 The baseline conditions are compared against the UK Air Quality Standards<sup>8</sup> (UKAQS) pollutants to ensure local air quality conditions are within compliance, these are displayed in Table 2.1 below.

Pollutant	Averaging Period	Air quality standard (AQS) (µg.m <sup>-3</sup> )	Air quality objective
Nitrogen dioxide	1-hour	200	200 µg.m <sup>-3</sup> not to be exceeded more than 18 times a year
(NO <sub>2</sub> )	Annual	40	40 µg.m <sup>-3</sup>
Particulate Matter	24-hour	50	50 µg.m <sup>-3</sup> not to be exceeded more than 35 times a year
(PM <sub>10</sub> )	Annual	40	40 µg.m⁻³
Particulate Matter (PM <sub>2.5</sub> )	Annual	25	25 µg.m <sup>-3</sup>

#### Table 2.1: UK Air Quality Standards.

- 2.9 Defra provides estimated background concentrations of the UKAQS pollutants at the UK Air Information Resource (UK-AIR) website<sup>9</sup>. These estimates are produced using detailed modelling tools and are presented as concentrations at central 1km<sup>2</sup> National Grid square locations across the UK. At the time of writing, the most recent background maps were from August 2020 and based on monitoring data from 2018.
- 2.10 Being background concentrations, the UK-AIR data are intended to represent a homogenous mixture of all emissions sources within the general area of a particular grid square location.

### Construction Phase Assessment

2.11 The construction phase of the proposed redevelopment will involve a number of activities that could potentially produce polluting emissions to air. Predominantly, these will be emissions of dust. However, they could also include releases of odours and/or more harmful gases and particles.

<sup>8</sup> Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Volumes 1 and 2) July 2007. 9 Defra: UK-AIR. <u>www.uk-air.defra.gov.uk</u>



2.12 The IAQM's guidance<sup>5</sup> which assesses the impacts of construction on human and ecological receptors has been followed in carrying out this air quality assessment. The guidance suggests that where a receptor is located within 350m (50m for statutory ecological receptors) of a site boundary and/or 50m of a route used by construction vehicles, up to 500m from the site entrance, a dust assessment should be undertaken.

#### Sensitive receptors

- 2.13 High sensitivity receptors are considered particularly sensitive when located within 20m of a works area. Figure 2 shows receptors that could be sensitive to dust that are located within 350m of the boundaries of the site. A Wind Rose for the closest meteorological measurement site situated at London City Airport for the year 2019 is included in Figure 3.
- 2.14 The Multi Agency Geographic Information for the Countryside (MAGIC) website<sup>10</sup>, which incorporates Natural England's interactive maps, was reviewed to identified statutory ecological sensitive receptors within 50m of the site, or within 50m of roads expected to be used, up to 500m from the site.

#### **Construction Significance**

- 2.15 The IAQM guidance suggests that Demolition, Earthworks, Construction and Trackout should all be assessed individually to determine the overall significance of the construction phase.
- 2.16 In the IAQM dust guidance, the first step in assessing the risk of impacts is to define the potential dust emission magnitude. This can be considered '*Negligible*', '*Small*', '*Medium*' or '*Large*' for each of the construction stages. Whilst the IAQM provides examples of criteria that may be used to assess these magnitudes, the vast number of potential variables mean that every site is different and therefore professional judgement must be applied by what the IAQM refer to as a "technically competent assessor". The construction phase assessment therefore relies on the experience of the appraiser.
- 2.17 As such, attempts to define precisely what constitutes a *Negligible*, *Small*, *Medium* or *Large* dust emission magnitude should be treated with caution. Factors such as the scale of the work, both in terms of size and time, the construction materials and the plant to be used must be considered.
- 2.18 The second step is to define the sensitivity of the area around the construction site. As stated in the IAQM guidance:

*"the sensitivity of the area takes into account a number of factors:* 

<sup>10</sup> Natural England and MAGIC partnership organisations. Multi Agency Geographic Information for the Countryside. http://www.magic.gov.uk/ [Accessed 29<sup>th</sup> July 2021].



- the specific sensitivities of receptors in the area;
- the proximity and number of those receptors;
- in the case of PM<sub>10</sub>, the local background concentrations; and
- site-specific factors, such as whether there are natural shelters, such as trees, to reduce the risk of wind-blown dust."
- 2.19 Based on these factors, the area is categorised as being of '*Low*', '*Medium*' or '*High*' sensitivity.
- 2.20 When dust emission magnitudes for each stage and the sensitivity of the area have been defined, the risk of dust impacts can be determined. The IAQM provides a risk of impacts matrix for each construction stage. The overall significance for the construction phase can then be judged from the stages assessed. Again, this is subject to professional judgement.



## 3. Baseline Assessment

3.1 This chapter is intended to establish prevailing air quality conditions in the vicinity of the development site, with a particular focus on those pollutants relevant to dust soiling (i.e., PM<sub>10</sub> and PM<sub>2.5</sub>).

### UK-AIR Background Pollution

3.2 The UK-AIR predicted background pollution concentrations for PM<sub>10</sub> and PM<sub>2.5</sub> for 2018 to 2023 are presented in Table 3.1. These data were taken from the central grid square location closest to the development site (i.e. National Grid Reference: 528500, 185500).

Pollutant	Predicted background concentration (µg.m <sup>-3</sup> )				m <sup>-3</sup> )	Averaging	Air quality standard	
i onatant	2018	2019	2020	2021	2022	2023	Period	concentration (µg.m <sup>-3</sup> )
PM <sub>10</sub>	18.6	18.1	17.6	17.3	17.1	16.9	annual mean	40
PM <sub>2.5</sub>	12.1	11.8	11.5	11.4	11.2	11.1	annual mean	25

## Table 3.1: 2018 to 2023 background concentrations at the development site.

- 3.3 The data in Table 3.1 show that annual mean background concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> in the vicinity of the application site between 2018 and 2023 were predicted to be well below their respective AQSs. The data show that in 2021, PM<sub>10</sub> and PM<sub>2.5</sub> concentrations were predicted to be below their AQSs by 56.8% and 54.4%, respectively.
- 3.4 The UK-AIR data also show that background PM<sub>10</sub> concentrations in the vicinity of the site between 2018 and 2023 were predicted to be below 24µg.m<sup>-3</sup>.
- 3.5 Particulate matter concentrations were predicted to decline each year. These reductions are principally due to the forecast effect of the roll out of cleaner vehicles, but also due to the implementation and subsequent expansion of the London Ultra Low Emission Zone (ULEZ) along with local, London-based, national, and international efforts to reduce emissions across all sectors.



### Local Sources of Monitoring Data

- 3.6 Air quality monitoring is considered an appropriate source of data for the purposes of describing baseline air quality. At the time of writing, the most recent air quality Annual Status Report (ASR)<sup>11</sup> released by LBC included local pollutant monitoring data from 2020.
- 3.7 LBC undertook automatic (continuous) monitoring of PM<sub>10</sub> at four sites across the borough in 2020. The most recent available PM<sub>10</sub> monitoring data from these monitors are included in Table 3.2 below.

Monitor	Type	Distance from	$PM_{10}$ annual mean concentration (µg.m <sup>-3</sup> )			
Monitor	туре	site (km)	2017	2018	2019	2020
KGX	UB/I	2.3	-	15.0	15.0	13.0
CD1	К	2.4	20.0	21.0	19.0	16.0
CD9	R	3.0	20.0	21.0	22.0	18.0
BLO	UB	3.6	19.0	17.0	18.0	16.0

#### Table 3.2: PM<sub>10</sub> Monitoring data from LBC automatic monitors.

Note: "UB" = Urban Background; "I" = Industrial; "K" = Kerbside; "R" = Roadside.

- 3.8 The data in Table 4.3 show that there were no recorded exceedances of the 40µg.m<sup>-3</sup> long-term AQS at any of the automatic monitoring stations throughout the 2017 to 2020 monitoring period.
- 3.9 Decreases in annual mean PM<sub>10</sub> concentrations were observed at all automatic monitors in 2020 relative to 2019, this is likely due to the impacts of COVID-19 on vehicular travel and industry.
- 3.10 The closest automatic monitoring station to the site is KGX, is situated on Coopers Lane, west of Kings Cross Station. In 2019, this urban background monitor recorded an annual mean PM<sub>10</sub> concentration of 15.0µg.m<sup>-3</sup>, which is below the 40µg.m<sup>-3</sup> AQS by 62.5%.
- 3.11 Monitoring station CD1 is set in a kerbside setting, adjacent to Finchley Road, at Swiss Cottage. An annual mean PM<sub>10</sub> concentration below the 40µg.m<sup>-3</sup> AQS by 52.5% was recorded in 2019, despite this monitoring station being located adjacent to the busy A41 Finchley Road.

<sup>11</sup> London Borough of Camden. (2021). London Borough of Camden Air Quality Annual Status Report for 2020.



3.12 Given that this monitor, which is set adjacent to the A41 Finchley Road, with the B511 College Crescent also nearby, recorded an annual mean PM<sub>10</sub> concentration well below 24µg.m<sup>-3</sup> in both 2019 and 2020, it is likely that PM<sub>10</sub> concentrations in the vicinity of the site, which is situated adjacent to the B518 Highgate Road would also be below 24µg.m<sup>-3</sup>.



## 4. Non-Road Mobile Machinery

4.1 The Mayor of London has introduced new standards for machinery used on construction and demolition sites to combat a major source of pollution in London. Non-Road Mobile Machinery (NRMM), particularly from the construction sector, is a significant contributor to London's air pollution. The NRMM Low Emission Zone (LEZ) uses the Mayor and London Borough's planning powers to control emissions from NRMM used on construction sites.

### Construction Traffic Emissions

4.2 Combustion exhaust gases from diesel-powered plant and construction vehicles accessing the site will also be released. However, the volumes and periods over which these releases will occur are unlikely to result in any significant peaks in local air pollution concentrations and therefore this has been scoped out of the assessment.

### Operating Vehicles / Machinery and Sustainable Travel

4.3 It must be ensured that all NRMM comply with London's current and future NRMM policy. The current London Policy for NRMM<sup>12</sup> states the following:

"From 1<sup>st</sup> September 2020 NRMM on all sites within Greater London is required to meet emission Stage IIB as a minimum; and NRMM on all sites within either the Central Activities Zone (CAZ) or Opportunity Areas (OAs) are required to meet emissions Stage IV as a minimum."

- 4.4 Although southern sections of LBC are located within the NRMM Central Activity Zone (CAZ) and have been designated Opportunity Areas (OAs), the development site is not located within these areas. Instead, the site is located centrally within the borough and is therefore bound by the emission requirements of the current London policy for Greater London.
- 4.5 Therefore, any NRMM operating on site during the construction of the proposed development should meet Stage IIIB of EU Directive 97/68/EC as a minimum. Furthermore, all constant speed engines such as those typically found in generators will be required to meet Stage V.

<sup>12</sup> Greater London Authority (2020). Non-Road Mobile Machinery Practical Guide. [Accessed 09/11/2021]. https://www.london.gov.uk/sites/default/files/nrmm\_practical\_guide\_v4\_sept20.pdf



### London Ultra Low Emission Zone

- 4.6 The London Ultra Low Emission Zone (ULEZ) expanded on 25<sup>th</sup> October 2021 to create a single larger zone bounded by the North and South Circular Roads. The site is now situated within the boundary of the expanded ULEZ. Vehicles which do not comply with the ULEZ emission standards but which to drive inside the zone must pay a daily charge of £12.50.
- 4.7 Furthermore, all vehicle engines should be switched off when stationary to prevent idling emissions.
- 4.8 Efforts should be made to avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where possible.



## **5. Construction Dust Risk Assessment**

- 5.1 The construction phase of the proposed development will involve a number of activities that could produce polluting emissions to air. Predominantly, these will be emissions of dust.
- 5.2 The estimates for the dust emission magnitude for demolition, earthworks, construction and trackout below are based on the professional experience of Phlorum's consultants, information provided by the client and Google Earth imagery.

### Dust Emission Magnitude

#### Demolition

- 5.3 The construction of the proposed development will require some demolition of structures under 10m in height above ground level.
- 5.4 Where the total volume of buildings to be demolished is below 20,000m<sup>3</sup>, the potential dust emission magnitude for demolition can be categorised as *Small* with reference to the IAQM guidance. Just 2,841m<sup>3</sup> of building volume will need to be demolished on site, falling comfortably within the IAQM's *Small* dust emission magnitude category.
- 5.5 There will be no use of mobile crushing equipment on site during the demolition phase.
- 5.6 Therefore, based on the volume and height of buildings to be demolished, the overall dust emission magnitude for the demolition phase is considered to be *Small* with reference to the IAQM guidance.

#### Earthworks

- 5.7 The total area of the application site is approximately 1,235m<sup>2</sup>, which falls into the IAQM's *Small* dust emission magnitude category.
- 5.8 It is anticipated that less than 20,000 tonnes of earth will need to be moved on site and that this will be carried out by less than 5 heavy earth moving vehicles.
- 5.9 There will be no formation of bunds on site.
- 5.10 Therefore, with reference to the IAQM guidance, the potential dust emission magnitude for the earthworks stage can be considered to be *Small*.



#### Construction

- 5.11 During construction, activities that have the potential to cause emissions of dust may include concrete batching, sandblasting and piling. Localised use of cement powder and general handling of construction materials also have the potential to generate dust emissions, as does the effect of wind-blow from stockpiles of friable materials. Piling may be required on site during construction and materials and methods expected to be used during construction include a reinforced concrete structure with facing brickwork.
- 5.12 The total volume of the buildings to be constructed is expected to be less than 25,000m<sup>3</sup>, which can be classified as *Small* with reference to the IAQM guidance. Therefore, with reference to the IAQM guidance, the overall potential dust emission magnitude for construction can be defined as *Small*.

#### Trackout

- 5.13 Construction traffic, when travelling over soiled road surfaces, has the potential to generate dust emissions and to also add soil to the local road network. During dry weather, soiled roads can lead to dust being emitted due to physical and turbulent effects of vehicles. There will be no use of unpaved road surfaces by vehicles accessing the site during the construction programme.
- 5.14 It is anticipated that less than 10 HDVs will visit the site per day, falling into the IAQM's *Small* dust emission magnitude category.
- 5.15 Considering the above, and with reference to the IAQM guidance, the potential dust emission magnitude for the trackout phase can be defined as *Small*.

#### **Emission Magnitude Summary**

5.16 A summary of the dust emission magnitude as a result of the activities of Demolition, Earthworks, Construction and Trackout as specified in the IAQM guidance, and discussed above, are listed in Table 5.1 below. Overall, the dust emission magnitude is considered to be *Small*.

## Table 5.1: Dust emission magnitudes for the construction phases based on IAQM guidance.

Activity	Dust Emission Magnitude
Demolition	Small
Earthworks	Small
Construction	Small
Trackout	Small



### Sensitivity of the Area

- 5.17 Having established the potential dust emission magnitudes for each phase above, the sensitivity of the area must be considered to establish the significance of effects. The effect of dust emissions depends on the sensitivity of each receptor.
- 5.18 High sensitivity human receptors include residential dwellings, schools, hospitals, and care homes, but can include locations such as car showrooms when considering the impacts of dust soiling.
- 5.19 Medium sensitivity receptors include areas where people would not reasonably be expected to be present for extended periods of time (e.g., places of work or parks).
- 5.20 The impacts of dust emissions from the sources discussed above have the potential to cause annoyance to human receptors living in the local area. Within distances of 20m of the site boundary there is a high risk of dust impacts, regardless of the prevailing wind direction. Up to 100m from the construction site, there may still be a high risk, particularly if the receptor is downwind of the dust source.
- 5.21 With the exponential decline in dust with distance from dust generating activities, it is considered that for receptors more than 350m from the site boundary, the risk is negligible. Furthermore, the risks at over 100m only have the potential to be significant in certain weather conditions, e.g., downwind of the source during dry periods.
- 5.22 The approximate number of high sensitivity human receptors in the vicinity of the site is detailed in Table 5.2 below and shown in Figure 2.

0	or the development site.						
Distance to site (m)	Number of Medium Sensitivity Receptors	Number of High Sensitivity Receptors	Receptor Details				
<20	2	0	Christ Apostolic Church; Union Insurance Services				
<50	10	11	3H Partners; Residential				
<100	>50	>200	Local businesses; Residential				
<350	>200	>2000*	Local businesses; Bright Horizons Highgate Day Nursery and Preschool; The Spanish Nursery; Elanor Palmer Primary School; Rainbow Nursery				

## Table 5.2: Approximate number of High Sensitivity Receptors within 350mof the development site.

\*Includes the approximate number of receptors at local institutions.

5.23 Figure 3 displays the wind rose for London City Airport (2019). It shows that the likely prevailing wind directions at the application site are from the south-west, with additional, frequent but lesser winds from the north-east.



- 5.24 As summarised in Table 5.2, there are several medium sensitivity and high sensitivity receptors within 20m and 50m of the development site. Therefore, with reference to the IAQM guidance, the sensitivity of the area to dust soiling impacts can be defined as *Medium*.
- 5.25 UK-AIR predicted annual mean concentrations of PM<sub>10</sub> in the vicinity of the development site are well below 24µg.m<sup>-3</sup>. Furthermore, LBC's automatic pollutant monitoring network shows that recorded PM<sub>10</sub> concentrations across the borough did not exceed 24µg.m<sup>-3</sup> in 2019 and 2020, even where monitors were set in roadside locations adjacent to major roads. Therefore, the sensitivity of the area to human health impacts can be defined as *Low* with reference to the IAQM guidance.
- 5.26 Review of the MAGIC website<sup>10</sup>, which incorporates Natural England's interactive maps, has identified no statutory ecological sensitive receptors within 50m of the site, or within 50m of roads expected to be used, up to 500m from the site.
- 5.27 The closest statutory ecological receptor is the Belsize Wood Local Nature Reserve (LNR), located approximately 1.3km west of the site. The closest highly sensitive statutory ecological receptor is the Hampstead Heath Woods Site of Special Scientific Interest (SSSI), situated 2.1km north-west of the site. Therefore, based on distance alone, the construction phase of the proposed development can be assumed to have a *Negligible* Impact on designated ecological sites.
- 5.28 Having established the potential dust emission magnitudes and sensitivity of the area, the risk of impacts can be determined in accordance with the IAQM guidance. These are summarised in Table 5.3 below.

<u>Ctore</u>	Dust Impact Risk				
Stage	Nuisance Dust	PM <sub>10</sub>	Ecology		
Demolition	Low Risk	Negligible	Negligible		
Earthworks	Low Risk	Negligible	Negligible		
Construction	Low Risk	Negligible	Negligible		
Trackout	Negligible	Negligible	Negligible		

## Table 5.3: Summary of Dust Impact Risk by Construction Stage based on<br/>the IAQM's dust guidance.

- 5.29 Overall, the construction phase of the proposed development is considered to present a *Low Risk* for nuisance dust soiling effects, *Negligible Risk* for PM<sub>10</sub> health effects and *Negligible Risk* for ecology, in the absence of mitigation.
- 5.30 Furthermore, with the incorporation of measures set out within this DMP, there should be no significant residual effects.



### Site Specific Mitigation

- 5.31 The GLA guidance<sup>6</sup> suggests a number of mitigation measures that should be adopted in order to minimise impacts from dusts and fine particles. Appropriate measures that could be included during construction of the proposed redevelopment include:
  - ideally cutting, grinding and sawing should not be conducted on-site and pre-fabricated material and modules should be brought in where possible;
  - where such work must take place, water suppression should be used to reduce the amount of dust generated;
  - skips, chutes and conveyors should be completely covered and, if necessary, enclosed to ensure that dust does not escape;
  - no burning of any materials should be permitted on site;
  - any excess material should be reused or recycled on-site in accordance with appropriate legislation;
  - developers should produce a waste or recycling plan;
  - following earthworks, exposed areas and soil stockpiles should be revegetated to stabilise surfaces, or otherwise covered with hessian or mulches;
  - stockpiles should be stored in enclosed or bunded containers or silos and kept damp where necessary;
  - hard surfaces should be used for haul routes where possible;
  - haul routes should be swept/washed regularly;
  - vehicle wheels should be washed on leaving the site;
  - all vehicles carrying dusty materials should be securely covered; and
  - delivery areas, stockpiles and particularly dusty items of construction plant should be kept as far away from neighbouring properties as possible.
- 5.32 In addition, the IAQM lists recommended mitigation measures for *Low*, *Medium*, and *High* dust impact risks. The highly recommended mitigation measures for *Low* Risk sites along with recommended mitigation measures for *Low Risk* sites have been integrated into the DMP.
- 5.33 Where dust generation cannot be avoided in areas close to neighbouring properties, additional mitigation measures should be put in place, such as: windbreaks, portable water misters, and/or time/weather condition limits on the operation of some items of plant or the carrying out of activities that are likely to generate a particularly significant amount of dust.



### Residual Effects

5.34 After the implementation of the mitigation measures listed above and integrated into this Dust Management Plan, the significance of each phase of the construction programme will be reduced and the residual significance of impact for the construction phase is expected to be *Negligible*.



## 6. Dust Management Plan

6.1 This Dust Management Plan (DMP) is provided for a *Low Risk* site to manage and mitigate for nuisance dust as determined by the Construction Dust Risk Assessment undertaken in Section 5 of this report.

### General Site Measures

- 6.2 Site management practices including the control of dust emissions are key components of this DMP.
- 6.3 It is very important to ensure that a stakeholder communications plan is developed and implemented, so that those sensitive to the impacts are notified and consulted before work commences on site. This gives the local community an easy and effective mechanism for informing the developer of their concerns.

#### Site information and responsibility for the DMP

- Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager.
- Display the head or regional office contact information.
- All staff will receive an induction before being permitted to work on site. This induction includes a section on environmental issues and the need to abide by the control measures detailed in this management plan to minimise dust generating activities from the site.
- The site manager is responsible for the operation of the DMP, and all site operatives will be trained, and required, to take necessary mitigation action.
- The site manager will also be required to take preventative action to avoid dust generation by suitable location of rain guns and misters, clearing any spillages of materials, maintaining water suppression equipment, repair of defective water suppression equipment, ensuring roads are clean and in good condition and by washing machinery to keep all plant clean and dust or mud free.
- Additionally, any contractors working on site will be made aware of the provisions of DMP and be required to comply with relevant provisions as appropriate to any work they are undertaking on site.



### General Dust Control

- All personnel on site shall be considerate of the local residents and not produce any unnecessary dust when arriving and leaving the site.
- All dust and air quality complaints are to be recorded in a site diary to identify cause(s), to take appropriate measures to reduce emissions in a timely manner, and to record the measures taken.
- A complaints register of all actions taken regarding any complaint will be maintained and this will be reviewed by the Project Manager.
- 6.4 The main principles for preventing dust emissions at the site are by avoidance of dust, then containment of dusty processes and suppression of dust (i.e. by spraying).
- 6.5 The management of dust within the development site is undertaken by:

#### Avoidance:

- Wetting down of demolition materials in dry or windy conditions (if appropriate);
- Site entrance to be maintained as hard standing material;
- Access and egress routes on-site to be restricted to designated areas of site to reduce dust resuspension;
- Road sweeping of main entrance and access routes as appropriate to conditions; and
- All loads of dusty products sheeted before leaving site.
- Dust generating or emission generating plant used on site will be operated appropriately and not be left unattended for extended periods of time or beyond agreed hours of operation.

#### Containment:

- Plan site layout so that machinery and dust causing activities are located away from receptors, as far as possible.
- Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.
- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.
- Avoid site runoff of water or mud.
- Keep site fencing, barriers and scaffolding clean using wet methods.



- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on site cover as described below.
- Cover, seed, or fence stockpiles to prevent wind whipping.

#### Suppression:

- Provision and use of mobile water misters and spray systems provided in strategic positions on processing area and stockpiles as appropriate to conditions; and
- Provision and use of mobile water spray systems at site entrance to dampen down transport dust emissions as appropriate to conditions.
- Re-vegetate earthworks and exposed areas to stabilise surfaces as soon as practicable. Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil.

#### Other:

- Closing down various or all operations during severe wind events are considered in extreme events; and,
- Operator procedures i.e. good housekeeping to keep clean and tidy site.

### Site Activities

#### Storage

- 6.6 Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- 6.7 Specific weather conditions can 'dry out' the surface of the stockpiles and in windy conditions dust can be generated from the surface of the stockpiles. Portable water misters will be used to dampen surfaces of the materials to supress dust.
- 6.8 All stockpiles are to be regularly monitored, recorded and assessed as part of the site manager's weekly inspections and appropriate action taken such as reducing stockpiles if necessary, where the size of storage is giving rise to dust generation and nuisance with recording of any such actions.

#### **Operations (Demolition and Construction)**

- 6.9 Key mitigation measures shall include:
  - Avoid explosive blasting, using appropriate manual or mechanical alternatives.



- Bag and remove any biological debris or damp down such material before demolition.
- Avoid bonfires and burning of waste materials.
- The contractor shall ensure that no smoke or fume emissions exceed approved occupational exposure limits.
- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
- Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
- Ensure water suppression is used during demolition operations.
- Use enclosed chutes and conveyors and covered skips.
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on equipment wherever appropriate.
- Ensure equipment is readily available on site to clean and dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- Avoid scabbling (roughening of concrete surfaces) if possible.

#### Non-Road Mobile Machinery

6.10 All NRMM operating on site should comply with the GLA's current policy for NRMM at the time of operation. Therefore, any NRMM operating on site during the construction of the proposed development, prior to 1<sup>st</sup> January 2025 should meet Stage IIIB of EU Directive 97/68/EC as a minimum and all constant speed engines such as those typically found in generators will be required to meet Stage V.

### Site Management & Monitoring

6.11 The developer and contractor are to actively monitor the site to ensure the control of dust and emissions. Dry and windy conditions increase the likelihood of dust and emissions being produced and dispersed, so additional site monitoring should take place during this time.



- 6.12 All demolition and construction sites should be monitored for the generation of air pollution. It is essential to monitor for dust generation. Including PM<sub>10</sub>. Monitoring can vary from visual assessments for *Low Risk* sites to the installation of real-time automatic monitors for PM<sub>10</sub> for Medium to High Risk sites.
- 6.13 As the Construction Dust Risk Assessment determined the site as being *Low Risk*, dust control measure will be implemented in line with the GLA's *The Control of Dust and Emissions During Demolition and Construction* SPG<sup>6</sup>:
  - Record and respond to all dust and air quality pollutant emission complaints. These records should be kept in a complaints log that can be made available to the local authority, if requested.
  - The log will also contain details of the various operations that take place each day. The site manager will ensure dust management measures are undertaken as appropriate to the sites operations and current weather conditions.
  - Record any exceptional incidents that cause dust and/or air emissions either on or off-site, and the action taken to resolve the situation in the log book.
  - Regular visual site inspections will be carried out to monitor compliance with air quality and dust control procedures. The inspection results should be recorded, and an inspection log made available to the local authority when asked.
  - Increase the frequency of inspections by site manager when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions. In certain adverse weather conditions visual monitoring will be more intensive.
  - If airborne dust is seen, over and above small clouds in the immediate area of activity which are not escaping out of the site boundaries, the site manager will investigate the incident and ensure additional/alternative mitigation measures are employed, which may include checks on processing and transport plans. Additional measures may include cleaning and increased damping haul roads and hard surfaces as and when necessary or imposing further speed limits.



Figures & Appendices



### Figure 1: Site Location Plan



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### Figure 2: Construction Phase



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### Figure 3: Wind Rose for London City Airport (2019)






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