Construction/ Demolition Management Plan

pro forma



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Revisions & additional material

Please list all iterations here:

| Date | Version | Produced by |
|-----------------|-----------|------------------------|
| 21st April 2022 | Version 3 | South Downs Safety Ltd |

Additional sheets

Please note – the review process will be quicker if these are submitted as Word documents or searchable PDFs.

| Date | Version | Produced by |
|-------------|--|------------------------|
| N/A | Appendix A: Blank | N/A |
| N/A | Appendix B: Blank | N/A |
| N/A | Appendix C: Project Programme | GM Developments |
| N/A | Appendix D: Community Liaison Guidance for | London Borough Of |
| | Developers and Contractors | Camden |
| 00.04.22 | Appendix E: Swept Path Analysis Drawings - V2 | Cauth Dayne Cafaty |
| 08.04.22 | (Demolition) | South Downs Safety |
| 24.04.22 | Appendix F: Swept Path Analysis Drawings – V2 | Carlle Danier Ca Cal |
| 21.04.22 | (Construction) | South Downs Safety |
| 00.04.22 | According C. Citation at Plant MA (Paradition) | Ca. Ha Dan and Ca Call |
| 08.04.22 | Appendix G: Site Layout Plan - V1 (Demolition) | South Downs Safety |
| 21.04.22 | Appendix H: Site Layout Plan – V2 (Construction) | South Downs Safety |
| 16.11.21 | Appendix I: Footway Closure Plan (V1) | South Downs Safety |
| 19.10.21 | Appendix J: Crane Position | LTC |
| 06.12.21 | Appendix K: Noise Survey Details | Anderson Acoustics |
| 21.02.22 | Appendix L: Asbestos Survey | A.R.C.S Environmental |
| 03.03.22 | Appendix M: Neighbourhood Consultation Letter | GM London |
| 21.03.22 | Appendix N: Summary of Consultation | GM London |
| | Correspondence | |
| 06.12.21 | Appendix O: BS5228 Noise Assessment (1st Issue) | ACL |
| November 21 | Appendix P: Dust Management Plan (Rev 1) | Phlorum |



Introduction

The purpose of the **Construction Management Plan (CMP)** is to help developers to minimise construction impacts, and relates to all construction activity both on and off site that impacts on the wider environment.

It is intended to be a live document whereby different stages will be completed and submitted for application as the development progresses.

The completed and signed CMP must address the way in which any impacts associated with the proposed works, and any cumulative impacts of other nearby construction sites, will be mitigated and managed. The level of detail required in a CMP will depend on the scale and nature of development. Further policy guidance is set out in Camden Planning Guidance (CPG) 6: Amenity and (CPG) 8: Planning Obligations.

This CMP follows the best practice guidelines as described in the <u>Construction Logistics and</u> Community Safety (**CLOCS**) Standard and the <u>Guide for Contractors Working in Camden</u>.

Camden charges a <u>fee</u> for the review and ongoing monitoring of CMPs. This is calculated on an individual basis according to the predicted officer time required to manage this process for a given site.

The approved contents of this CMP must be complied with unless otherwise agreed with the Council in writing. The project manager shall work with the Council to review this CMP if problems arise during construction. Any future revised plan must also be approved by the Council and complied with thereafter.

It should be noted that any agreed CMP does not prejudice or override the need to obtain any separate consents or approvals such as road closures or hoarding licences.

If your scheme involves any demolition, you need to make an application to the Council's Building Control Service. Please complete the "<u>Demolition Notice.</u>"

Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. It is preferable if this document, and all additional documents, are completed electronically and submitted as Word files to allow



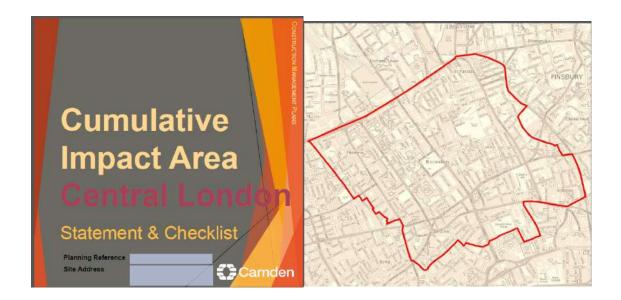
comments to be easily documented. These should be clearly referenced/linked to from the CMP. Please only provide the information requested that is relevant to a particular section.

(Note the term 'vehicles' used in this document refers to all vehicles associated with the implementation of the development, e.g. demolition, site clearance, delivery of plant & materials, construction etc.)

Revisions to this document may take place periodically.

IMPORTANT NOTICE: If your site falls within a Cumulative Impact Area (as of 03/02/2020 to 03/08/2020 there is only one established CIA for the Central London area) you are required to complete the CIA Checklist and circulate as an appendix to the CMP and included as part of any public consultation – a CMP submission will not be accepted until evidence of this has been supplied.

The CIA Checklist can be found at https://www.camden.gov.uk/about-construction-management-plans





Timeframe

COUNCIL ACTIONS

Planning Permission granted Appoint principal contractor Begin community liaison 1 **Submit draft CMP** INDICATIVE TIMEFRAME (MONTHS) Council response to draft Work can commence if draft CMP is approved Resubmission of CMP if first draft required further development Council response to second draft Work can commence if CMP is approved Camden

DEVELOPER ACTIONS

Contact

1. Please provide the full postal address of the site and the planning reference relating to the construction works.

| Site Address: | 19-37 Highgate Road, London NW5 1JY | | | | | | | | |
|------------------------|-------------------------------------|------|-----|----|----------|----|---------|---|----------|
| Planning Reference No: | N/A, | this | CMP | in | intended | to | support | а | planning |
| application. | | | | | | | | | |

2. Please provide contact details for the person responsible for submitting the CMP.

| | · · · · · · · · · · · · · · · · · · · |
|---------------|---------------------------------------|
| Role: | Principal Contractor |
| Company Name: | GM Developments |
| Contact Name: | Garry McHugh |
| Position: | Managing Director |
| Phone: | 07831 209 474 |
| Email: | garry@gmdevelopments.com |

Contact details for the person responsible for preparing the CMP.

| Company Name: | South Downs Safety |
|---------------|-----------------------------|
| Contact Name: | Mark Edgar |
| Position: | Planning Support Consultant |
| Phone: | 07545 898 726 |
| Email: | mark@southdownssafety.co.uk |

3. Please provide full contact details of the site project manager responsible for day-to-day management of the works and dealing with any complaints from local residents and businesses.

| Role: | Principal Contractor |
|---------------|-----------------------------|
| Company Name: | GM Developments |
| Contact Name: | Illya Razinskas |
| Position: | Contracts Manager |
| Tel: | 07456 250 617 |
| Email: | Illya@gmdevelopements.co.uk |



4. Please provide full contact details of the person responsible for community liaison and dealing with any complaints from local residents and businesses if different from question 3. In the case of Community Investment Programme (CIP), please provide contact details of the Camden officer responsible.

| Role: | Principal Contractor |
|---------------|-----------------------------|
| Company Name: | GM Developments |
| Contact Name: | Illya Razinskas |
| Position: | Contracts Manager |
| Tel: | 07456 250 617 |
| Email: | Illya@gmdevelopements.co.uk |

5. Please provide full contact details including the address where the main contractor accepts receipt of legal documents for the person responsible for the implementation of the CMP.

| Role: | Principal Contractor |
|---------------|-----------------------------|
| Company Name: | GM Developments |
| Contact Name: | Illya Razinskas |
| Position: | Contracts Manager |
| Tel: | 07456 250 617 |
| Email: | Illya@gmdevelopements.co.uk |



Site

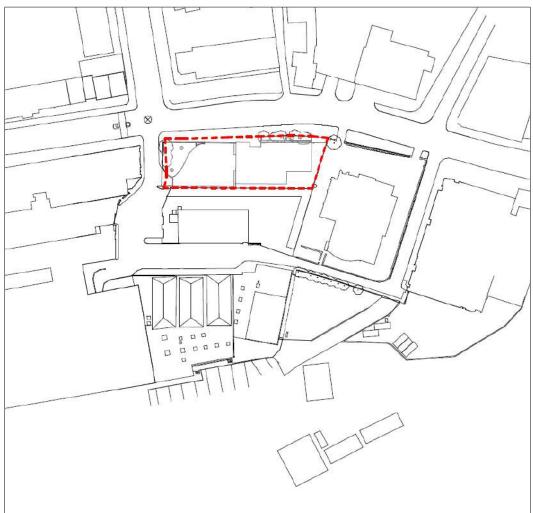
6. Please provide a site location plan and a brief description of the site, surrounding area and development proposals for which the CMP applies.

6.1 SITE LOCATION

The site is located on Highgate Road, Kentish Town in the London Borough of Camden. The site is bounded by industrial and commercial uses westerly, Highgate Road to the north east and the commercial centre of Kentish Town to the south east.

The Highgate Centre plot was originally part of a larger planning application, which included the new Greenwood Centre located to the rear (highlighted in red dashed line on the plan) and was granted planning permission in 2014 (planning application 2013/5947/P). The extant scheme provides 47 residential units of which 5 are affordable. The scheme also includes a commercial unit.

Figure 1: Site Location Plan





6.2 DEVELOPMENT PROPOSALS

- Part 5 part 6, part 7 residential building
- Total GIA of 4934m2
- Total Residential NIA of 3133m2
- 3150mm floor to floor height / 2500mm floor to ceiling height
- 47 Flats
- 4 x 3B5P large family units
- 5 x 1B2P DDA M4(3) assisted living units
- 95m² Commercial Unit
- Private amenity to each unit in line with national standards
- Basement added to scheme for plant space
- Bins and bike storage in line with national standards
- Dedicated plant & substation space at basement / scheme to be self-sufficient without shared Greenwood Centre plants & services
- Energy strategy improved to make more sustainable development
- 7. Please provide a very brief description of the construction works including the size and nature of the development and details of the main issues and challenges (e.g. narrow streets, close proximity to residential dwellings etc).

7.1 BRIEF DESCRIPTION OF WORKS TO BE CARRIED OUT

Excavation of a plant room to lower ground floor. Erection of a part 5, part 6, part 7 residential building and a commercial unit at ground floor. Ground floor landscape works. Reinforced concrete frame with facing brick cladding.

7.2 MAIN ISSUES AND CHALLENGES

- Operational business adjacent to site
- Residential receptors within the vicinity of the site
- The site is adjacent to bus route
- There is a bus stop directly outside of the site
- Fire station opposite site
- Pedestrian crossing adjacent to site access (Greenwood Place)
- 8. Please provide the proposed start and end dates for each phase of construction as well as an overall programme timescale. (A Gantt chart with key tasks, durations and milestones would be ideal).

Please refer to Appendix C: Project Programme



9. Please confirm the standard working hours for the site, noting that the standard working hours for construction sites in Camden are as follows:

- 8.00am to 6pm on Monday to Friday
- 8.00am to 1.00pm on Saturdays
- No working on Sundays or Public Holidays

Table 1: Working Hours

| GENERAL CONSTRUCTION WORKS | | | | |
|--|-------------------------------|--|--|--|
| Monday - Friday | 08:00 - 18:00 | | | |
| Saturday | 08:00 – 13:00 | | | |
| Sunday | Not Permitted | | | |
| Bank Holidays | Not Permitted | | | |
| NOISY WORKS - PILIN | G & EARTHWORKS | | | |
| Monday - Friday | 08:00 – 18:00 | | | |
| Saturday | 08:00 - 13:00 | | | |
| Sunday | Not Permitted | | | |
| Bank Holidays | Not Permitted | | | |
| HIGH IMPACT WORKS - DEMOLITION, CONCRETE BRAKING | | | | |
| Monday - Friday | 09:00 - 12:00 / 14:00 - 17:30 | | | |
| Saturday | Not Permitted | | | |
| Sunday | Not Permitted | | | |
| Bank Holidays | Not Permitted | | | |

The permitted traffic hours for construction vehicle movements will be as detailed below. The permitted contractors traffic hours (restricted hours) will form part of the contract and subcontractors contracts and supply orders.

Table 2: 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 | | |

NB: When vehicles are able to be accommodated on site during the demolition and below ground works activities, they will be permitted to arrive onsite at 08:00 Where this is the case vehicles will then wait with their engines switched off.



Community Liaison

A neighbourhood consultation process must have been undertaken <u>prior to submission of</u> the CMP first draft.

This consultation must relate to construction impacts, and should take place following the granting of planning permission in the lead up to the submission of the CMP. A consultation process <u>specifically relating to construction impacts</u> must take place regardless of any prior consultations relating to planning matters. This consultation must include all of those individuals that stand to be affected by the proposed construction works. These individuals should be provided with a copy of the draft CMP, or a link to an online document. They should be given adequate time with which to respond to the draft CMP, and any subsequent amended drafts. Contact details which include a phone number and email address of the site manager should also be provided.

Significant time savings can be made by running an effective neighbourhood consultation process. This must be undertaken in the spirit of cooperation rather than one that is dictatorial and unsympathetic to the wellbeing of local residents and businesses.

These are most effective when initiated as early as possible and conducted in a manner that involves the local community. Involving locals in the discussion and decision making process helps with their understanding of what is being proposed in terms of the development process. The consultation and discussion process should have already started, with the results incorporated into the CMP first draft submitted to the Council for discussion and sign off. This communication should then be ongoing during the works, with neighbours and any community liaison groups being regularly updated with programmed works and any changes that may occur due to unforeseen circumstances through newsletters, emails and meetings.

Please note that for larger sites, details of a construction working group may be required as a separate S106 obligation. If this is necessary, it will be set out in the S106 Agreement as a separate requirement on the developer.

Cumulative impact

Sites located within high concentrations of construction activity that will attract large numbers of vehicle movements and/or generate significant sustained noise levels should consider establishing contact with other sites in the vicinity in order to manage these impacts.

The Council can advise on this if necessary.



10. Sensitive/affected receptors

Please identify the nearest potential receptors (dwellings, business, etc.) likely to be affected by the activities on site (i.e. noise, vibration, dust, fumes, lighting etc.).

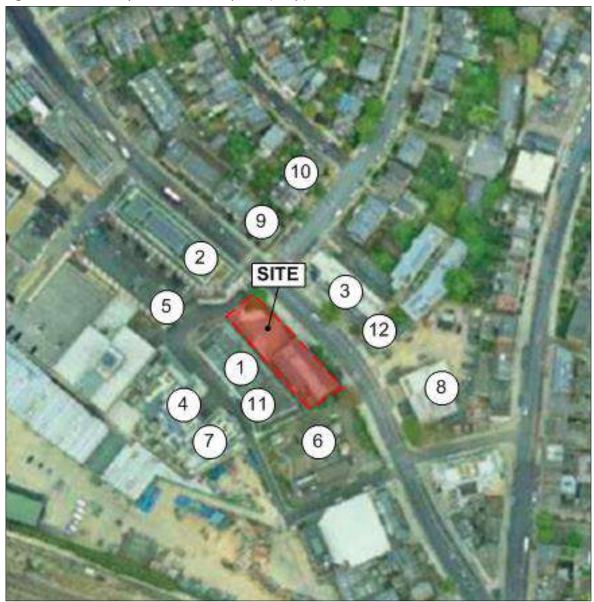
Table 3: Potentially Sensitive Receptors

| SITE ID | ТҮРЕ | NAME | APPROXIMATE DISTANCE FROM SITE |
|---------|-------------------|---|-----------------------------------|
| 1 | Business | AA Self Storage | 10m |
| 2 | Dwelling | Linton House | 30m |
| 3 | Dwelling | Piano Yard | 35m |
| 4 | Community | The Greenwood Centre | 50m |
| 5 | Business | Highgate Business Centre | 50m |
| 6 | Community | St John the Baptist Church | 55m |
| 7 | Community | Health Watch Camden | 60m |
| 8 | Community | Kentish Town Fire Station | 60m |
| 9 | Dwelling | 42 (Elsfield, Flats 1 to 23) 44, 46, 48, 50, 52, 54, 56 Highgate Road | 60-70m |
| 10 | Dwelling | 1, 2, 3, 5, 7 Burghley Road | 70-90m |
| 11 | Business | 19 Greenwood Place (Lensham House) | 40m |
| 12 | Business/Dwelling | 28a & 28b Highgate Road | 35m |

There are no Schools, Pre-Schools, Children's Nurseries, Care Homes, Doctors Surgeries or Dental Surgeries within the immediate vicinity of the site.



Figure 2: Potentially Sensitive Receptors (Map)





11. Consultation

The Council expects meaningful consultation. For large sites, this may mean two or more meetings with local residents prior to submission of the first draft CMP.

Evidence of who was consulted, how the consultation was conducted and a summary of the comments received in response to the consultation should be included. Details of meetings including minutes, lists of attendees etc. should be appended.

In response to the comments received, the CMP should then be amended where appropriate and, where not appropriate, a reason given. The revised CMP should also include a list of all the comments received. Developers are advised to check proposed approaches to consultation with the Council before carrying them out. If your site is on the boundary between boroughs then we would recommend contacting the relevant neighbouring planning authority.

Please provide details of consultation of draft CMP with local residents, businesses, local groups (e.g. residents/tenants and business associations) and Ward Councillors.

11.1 PRE-COMMENCEMENT COMMUNITY LIAISON

Pre-commencement community liaison has been carried out between Thursday the 3rd of March and Friday the 18th of March as set out in the London Borough of Camden "Community Liaison Guidance for Developers and Contractors" and Section 2.1 of the "Guide for Contractors Working in Camden".

Consultation letters setting out the principle of construction and its management have been delivered 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
- I. Councillor Jenny Headlam-Wells Kentish Town Ward, e-mail <u>Jenny.headlam-wells@camden.gov.uk</u>
- m. Councillor Georgia Gould Kentish Town Ward, e-mail georgia.gould@camden.gov.uk

Please refer to:

Appendix M: Neighbourhood Consultation Letter Appendix N: Summary of Consultation Feedback



11.2 POST-COMMENCEMENT COMMUNITY LIAISON

All post-commencement community liaison will be carried out in accordance with the London Borough of Camden "Community Liaison Guidance for Developers and Contractors" and Section 2.1 of the "Guide For Contractors Working In Camden"

The Development Team will continue to engage with all stakeholders throughout the duration of the development.

Please refer to Appendix D: Community Liaison Guidance For Developers And Contractors

12. Construction Working Group

For particularly sensitive/contentious sites, or sites located in areas where there are high levels of construction activity, it may be necessary to set up a construction working group.

If so, please provide details of the group that will be set up, the contact details of the person responsible for community liaison and how this will be advertised to the local community, and how the community will be updated on the upcoming works i.e. in the form of a newsletter/letter drop, or weekly drop in sessions for residents.

The Principal Contractor will implement an ongoing neighbourhood liaison process and a dedicated email address will be created for the purpose of ongoing Neighbourhood Consultation.

13. Schemes

Please provide details of your Considerate Constructors Scheme (CCS) registration. Please note that Camden requires <u>enhanced CCS registration</u> that includes CLOCS monitoring. Please provide a CCS registration number that is specific to the above site.

Contractors will also be required to follow the <u>Guide for Contractors Working in Camden</u>. Please confirm that you have read and understood this, and that you agree to abide by it.

It is confirmed that the Principal Contractor will register this site with the Considerate Constructors Scheme (CCS) and that the Site-Specific CCS ID will be made available to the local authority on request.

Guide for Contractors Working in Camden:

It is confirmed that the Principal Contractor has read and understood the Guide for Contractors Working in Camden.



14. Neighbouring sites

Please provide a plan of existing or anticipated construction sites in the local area and please state how your CMP takes into consideration and mitigates the cumulative impacts of construction in the vicinity of the site. The council can advise on this if necessary.

The Principal Contractor will liaise with contractors completing work on any adjacent sites to, whenever possible, enable the scheduling of deliveries and waste removal vehicles to avoid the presence of more than one construction vehicle on the highway at any one time.

To identify potential sites of interest the following addresses were used when searching the London Borough of Camden planning portal for relevant local sites:

- Highgate Road
- Greenwood Place
- Fortess Walk
- Fortess Road
- Burghley Road
- Carkers Lane
- Lady Somerset Road

Following the search of the planning portal no relevant sites were identified. However, the Principal Contractor will make contact with any relevant sites should they be subsequently identified.



Transport

This section must be completed in conjunction with your principal contractor. If one is not yet assigned, please leave the relevant sections blank until such time when one has been appointed.

Camden is a CLOCS Champion, and is committed to maximising road safety for Vulnerable Road Users (VRUs) as well as minimising negative environmental impacts created by motorised road traffic. As such, all vehicles and their drivers servicing construction sites within the borough are bound by the conditions laid out in the CLOCS Standard.

This section requires details of the way in which you intend to manage traffic servicing your site, including your road safety obligations with regard to VRU safety. It is your responsibility to ensure that your principal contractor is fully compliant with the terms laid out in the CLOCS Standard. It is your principal contractor's responsibility to ensure that all contractors and sub-contractors attending site are compliant with the terms laid out in the CLOCS Standard.

Checks of the proposed measures will be carried out by CCS monitors as part of your enhanced CCS site registration, and possibly council officers, to ensure compliance. Please refer to the CLOCS Standard when completing this section.

Please contact CLOCS@camden.gov.uk for further advice or guidance on any aspect of this section.

CLOCS Contractual Considerations

15. Name of Principal contractor:

| Name: | GM Developments (Construction Ltd) |
|---------|------------------------------------|
| Address | 223 Dawes Road London, SW6 7RD |
| Phone: | 07831 209474 |
| Email: | garry@gmdevelopments.com |



16. Please submit the proposed method for checking operational, vehicle and driver compliance with the CLOCS Standard throughout the duration of the contract.

It is agreed that the main contractor will comply with the following section of the CLOCS Standard, as detailed below:

16.1 SUPPLY CHAIN COMPLIANCE (3.417)

a. Requirement:

Clients shall ensure contractor and subcontractor compliance with requirements 4.1.1 to 4.3.2

b. Purpose:

To ensure that requirements are being adhered to across the supply chain.

- c. Demonstration:
- The client should ensure that it is a contractual requirement for the contractor to check vehicles entering site and to take the appropriate action under the contract.
- The client should request from the contractor a plan and / or process for complying with the contract.
- The client should also undertake regular audits of the contractor's process and compliance checks. This audit should include random vehicle compliance checks undertaken by the client.
- The client may request that every reporting period the contractor should submit to the client a summary of those checks and details the corrective action taken in the case of non-compliance.
- Clients should factor in a review of collision reports provided by the principal contractor under requirement 4.1.2 Collision Reporting.
- The client should provide a point of contact for principal contractors in order that they
 may direct quires to the relevant person or department.

16.2 CONTRACTS:

FORS Bronze accreditation as a minimum will be a contractual requirement, FORS Silver or Gold operators will be appointed where possible. Where FORS Bronze operators are appointed, written assurance will be sought from contractors that all vehicles over 3.5t are equipped with additional safety equipment (as per CLOCS Standard P13), and that all drivers servicing the site will have undertaken approved additional training (eg. Safe Urban Driving + 1 x e-learning module OR Work Related Road Risk Vulnerable Road User training + on-cycle hazard awareness course + 1 x e-learning module etc.). CLOCS Compliance will be included as a contractual requirement.



16.3 DESKTOP CHECKS:

Desktop checks will be made against the FORS database of trained drivers and accredited companies as outlined in the CLOCS Standard Managing Supplier Compliance guide. These will be carried out as per a risk scale based on that outlined in the CLOCS Managing Supplier Compliance guide.

16.4 SITE CHECKS:

Checks of FORS ID numbers will form part of the periodic checks and will be carried out as per an appropriate risk scale.

Random spot checks will be carried out by site staff on vehicles and drivers servicing the site at a frequency based on the aforementioned risk scale. These will include evidence of further training, license checks, evidence of routing information, and checks of vehicle safety equipment. Results from these checks will be logged and retained, and enforced upon accordingly.

Where the contractors own vehicles and drivers are used the above approach will be modified accordingly.

16.5 ADDITIONAL CHECKS:

Suppliers will be checked against accredited operator's database:

https://www.fors-online.org.uk/cms/whos-on-board/

16.6 FURTHER INFORMATION:

Contact CLOCS@Camden.gov.uk for further advice if necessary.

17. Please confirm that you as the client/developer and your principal contractor have read and understood the CLOCS Standard and included it in your contracts.

I confirm that I have included the requirement to abide by the CLOCS Standard in my contracts to my contractors and suppliers:

We confirm that the above has been/will be carried out and that all contracts will include the requirement to adhere to the 'CLOCS Standard'. CLOCS Compliance will be included as a contractual requirement.

Please contact CLOCS@camden.gov.uk for further advice or guidance on any aspect of this section.



Site Traffic

Sections below shown in blue directly reference the CLOCS Standard requirements. The CLOCS Standard should be read in conjunction with this section.

18. Traffic routing: "Clients shall ensure that a suitable, risk assessed vehicle route to the site is specified and that the route is communicated to all contractors and drivers. Clients shall make contractors and any other service suppliers aware that they are to use these routes at all times unless unavoidable diversions occur." (P19, 3.4.5)

Routes should be carefully considered and risk assessed, taking into account the need to avoid where possible any major cycle routes and trip generators such as schools, offices, stations, public buildings, museums etc.

Consideration should also be given to weight restrictions, low bridges and cumulative impacts of construction (including neighbouring construction sites) on the public highway network. The route(s) to and from the site should be suitable for the size of vehicles that are to be used.

Please show vehicle approach and departure routes between the site and the Transport for London Road Network (TLRN). Please note that routes may differ for articulated and rigid HGVs.

Routes should be shown clearly on a map, with approach and departure routes clearly marked. If this is attached, use the following space to reference its location in the appendices.

Construction vehicles shall follow the site access and egress routes detailed below and shown in Figures 3 and 4.

NB: Links to the local strategic road network (B518 Highgate Road) is shown in blue.



ROUTE A: Demolition.

Site Access: Yellow Arrow

- 1. Head in a north westerly direction on Highgate Road (B518).
- 2. Turn left into Greenwood Place before reversing into site under the supervision of Traffic Marshals.

Site Egress: Green Arrow

- 3. Exit site in a forward gear and turn right into Greenwood Place.
- 4. Continue to the junction with to Highgate Road (B518).
- 5. At the junction with Highgate Road (B518) turn right into Highgate Road (B518) and continue away form site in a south easterly direction.

Please refer to:

Appendix E: Swept Path Analysis Drawing (Demolition)

Figure 3: Site Access and Egress Routes (Route A)





ROUTE B: Construction.

Site Access: Green Arrow

- 1. Head in a north westerly direction on Highgate Road (B518).
- 2. Pull up directly outside the site within the managed setdown area.

Site Egress: Yellow Arrow

3. Exit the managed setdown area and continue away from site in a north westerly direction on Highgate Road (B518).

Please refer to:

Appendix F: Swept Path Analysis Drawing (Construction)

Figure 4: Site Access and Egress Routes (Route B)





A heavy-duty water filled road barrier system will be installed to create the "pit lane" to contain the managed setdown area. The barrier system will delineate and segregate the managed setdown area from the construction site and the highway. To further increase site security and safety optional interlocking anti-climb mesh metal hoarding panels can be installed to increase each barrier section to a height of 2 metres.

Please refer to:

Appendix H: Site Layout Plan (Construction)

Figure 5: Heavy-Duty Water Filled Road Barrier System (With Optional Anti-Climb Mesh Metal Hoarding Panels





b. Please confirm how contractors and delivery companies will be made aware of the route (to and from the site) and of any on-site restrictions, prior to undertaking journeys.

The Principal Contractor will ensure that all sub-contractors, delivery companies and visitors will be advised of and required to adhere to the specifies site access and egress routes and any other restrictions detailed within this CMP.

Details of permitted vehicle routes and delivery/collection hours will be included within all supplier contracts.

19. Control of site traffic, particularly at peak hours: "Clients shall consider other options to plan and control vehicles and reduce peak hour deliveries" (P20, 3.4.6)

Construction vehicle movements should be restricted to the hours of 9.30am to 4.30pm on weekdays and between 8.00am and 1.00pm on Saturdays. If there is a school in the vicinity of the site or on the proposed access and/or egress routes, then deliveries must be restricted to the hours of 9.30am and 3pm on weekdays during term time.

Vehicles may be permitted to arrive at site at 8.00am if they can be accommodated on site. Where this is the case they must then wait with their engines switched off.

A delivery plan should ensure that deliveries arrive at the correct part of site at the correct time. Instructions explaining such a plan should be sent to all suppliers and contractors. Please provide details of the types of vehicles required to service the site and the approximate number of deliveries per day for each vehicle type during the various phases of the project.

For Example:

32t Tipper: 10 deliveries/day during first 4 weeks Skip loader: 2 deliveries/week during first 10 weeks

Artic: plant and tower crane delivery at start of project, 1 delivery/day during main

construction phase project

18t flatbed: 2 deliveries/week for duration of project 3.5t van: 2 deliveries/day for duration of project

Table 4: Estimated start date and duration of works

| ESTIMATED START DATE: | April 2022 |
|------------------------------|-------------------|
| ESTIMATED DURATION OF WORKS: | 88 calendar weeks |



Table 5: Site activities, vehicle types and estimated quantities

| SITE ACTIVITY* | DURATION (WEEKS) | VEHICLE MOVEMENTS PER WEEK | | | | |
|--------------------------------|------------------|------------------------------|--------------------|----------------------------|------------|-------------------------------|
| SHE ACTIVITY | | RIGID DELIVERY LORRIES | CONCRETE WAGONS | SPOIL REMOVAL WAGONS | BOX VAN | TOTAL (AVG) PER WEEK |
| Site set up and demolition | 8 | 1 | 0 | 5 | 0 | 6 |
| Basement excavation and piling | 8 | 0 | 25 | 5 | 0 | 31 |
| Sub-structure | 24 | 4 | 20 | 5 | 0 | 29 |
| Super-structure | 50 | 5 | 5 | 0 | 1 | 11 |
| Fit-out and commissioning | 50 | 10 | 0 | 0 | 1 | 11 |

^{*}SOME CONSTRUCTION ACTIVITIES WILL BE CARRIED OUT CONCURRENTLY AND WE ANTICIPATE THE TOTAL DURATION OF THIS PROJECT TO BE APPROXIMATELY 88 CALENDAR WEEKS.

Table 6: Vehicle dimensions

| VEHICLE DESCRIPTION | LENGTH (M) | WIDTH (M) | DWELL TIME (MINS) |
|-------------------------|------------|-----------|-------------------|
| Rigid Delivery Lorries | 8.00 | 2.40 | 30 |
| Concrete Wagons | 8.70 | 2.40 | 60 |
| Spoil Removal Wagons | 9.50 | 2.50 | 60 |
| Box Van (Luton/Transit) | 6.00 | 2.00 | 40 |

Table 7: Details of abnormal loads

| DESCRIPTION | DURATION (HOURS) | MAX NO OF VEHICLES/DAY | VEHICLE TYPE |
|--------------------------------|---------------------|---------------------------|--------------|
| Site set up and demolition | N/A | N/A | N/A |
| Basement excavation and piling | N/A | N/A | N/A |
| Sub-structure | N/A | N/A | N/A |

The permitted traffic hours for construction vehicle movements will be as detailed below. The permitted contractors traffic hours (restricted hours) will form part of the contract and subcontractors contracts and supply orders.

Table 8: 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 |

NB: When vehicles are able to be accommodated on site during the demolition and below ground works activities, they will be permitted to arrive onsite at 08:00 Where this is the case vehicles will then wait with their engines switched off.



b. Cumulative affects of construction traffic servicing multiple sites should be minimised where possible. Please provide details of other developments in the local area or on the route that might require deliveries coordination between two or more sites. This is particularly relevant for sites in very constrained locations.

The Principal Contractor will liaise with contractors completing work on any adjacent sites to, whenever possible, enable the scheduling of deliveries and waste removal vehicles to avoid the presence of more than one construction vehicle on the highway at any one time.

To identify potential sites of interest the following addresses were used when searching the London Borough of Camden planning portal for relevant local sites:

- Highgate Road
- Greenwood Place
- Fortess Walk
- Fortess Road
- Burghley Road
- Carkers Lane
- Lady Somerset Road

Following the search of the planning portal no relevant sites were identified. However, the Principal Contractor will make contact with any relevant sites should they be subsequently identified

c. Please provide swept path analyses for constrained manoeuvres along the proposed route.

Please refer to:

Appendix E: Swept Path Analysis Drawing (Demolition)
Appendix F: Swept Path Analysis Drawing (Construction)

d. Consideration should be given to the location of any necessary holding areas/waiting points for sites that can only accommodate one vehicle at a time/sites that are expected to receive large numbers of deliveries. Vehicles must not queue or circulate on the public highway. Whilst deliveries should be given set times to arrive, dwell and depart, no undue time pressures should be placed upon the driver at any time.

Please identify the locations of any off-site holding areas or waiting points. This can be a section of single yellow line that will allow the vehicle to wait to phone the site to check that the delivery can be accommodated.

Please refer to question 24 if any parking bay suspensions will be required to provide a holding area.



Holding areas or waiting points will not be required to facilitate this development. All construction vehicles will be received directly into site and will not queue or circulate on the public highway.

The Site Management Team will implement a robust Delivery Management System (DMS), with the primary objective of ensuring that construction vehicles are able to be received directly on arrival.

The main elements of the Delivery Management System will be as follows:

- a. Consideration will be given when placing orders to avoid "part loaded" vehicles and to best coordinate orders to reduce generated construction vehicle road trips
- b. All contractors must inform the Site Management Team about all deliveries a minimum of 48 hours before attending site
- c. All deliveries will be recorded on a delivery chart located within the project office and will be monitored and checked by Site Management Team
- d. The delivery chart will be arranged on an hour-to-hour basis
- e. All drivers will contact the Site Management Team a minimum of half an hour before attending site
- f. In cases of delayed or failed delivery the contractor must inform the Site Management Team as soon as possible to rearrange delivery
- g. Gateman/Traffic Marshals and the Site Management Team will manage and direct all construction vehicle site access and egress movements at all the times
- h. Gateman/Traffic Marshals will wear appropriate high-vis clothing and PPE
- i. Gateman/Traffic Marshals will use appropriate signage to forewarn public of construction vehicle movements
- j. Gateman/Traffic Marshals will use expandable barriers to separate the public from construction vehicle movements, if required
- k. Gateman/Traffic Marshals will have relevant training and appropriate qualifications and/or certification to undertake their daily tasks
- I. Deliveries will only be scheduled and accepted within the permitted delivery hours
- m. When expecting a delivery, and if required, the site will be made ready to accept vehicles directly into site, this includes Traffic Marshals being ready to supervise the construction vehicle manoeuvres into site and to ensure separation of construction vehicles and the public

e. Delivery numbers should be minimised where possible. Please investigate the use of construction material consolidation centres, and/or delivery by water/rail if appropriate.

The Principal Contractor is committed to reducing the quantity of delivery vehicles required to attend site and will do so via the considered and pro-active ordering of materials. By adopting this approach, the use of a construction material consolidation centre is not required. The viability of material delivery to site via water or rail has been assessed, however, due to the site's location these options are not considered feasible.



f. Emissions from engine idling should be minimised where possible. Please provide details of measures that will be taken to reduce delivery vehicle engine idling, both on and off site (this does not apply to concrete mixers).

The robust operation of the Delivery Management System will ensure that all construction vehicles are received directly in to site.

Whilst on site construction vehicle engines will be switched off to avoid idling. The importance of reducing instances of engine idling will be stressed to all sup-contractors, delivery companies and visitors to the site.

20. Site access and egress: "Clients shall ensure that access to and egress from the site is appropriately managed, clearly marked, understood and clear of obstacles." (P18, 3.4.3)

This section is only relevant where vehicles will be entering the site. Where vehicles are to load from the highway, please skip this section and refer to Q23.

Vehicles entering and leaving the site should be carefully managed, using gates that are clearly marked and free from obstacles. Traffic marshals must ensure the safe passage of all traffic on the public highway, in particular pedestrians and cyclists, when vehicles are entering and leaving site, particularly if reversing.

Traffic marshals, or site staff acting as traffic marshals, should hold the relevant qualifications required for directing large vehicles when reversing. Marshals should be equipped with 'STOP – WORKS' signs (not STOP/GO signs) if control of traffic on the public highway is required. Marshals should have radio contact with one another where necessary.

a. Please detail the proposed site access and egress points on a map or diagram. If this is attached, use the following space to reference its location in the appendices.

Two separate site access and egress arrangements are proposed, one during the demolition phase of the development, and one during the construction phase of the development. Please refer to appendices E (Demolition) and F (Construction)

Vehicles will be required to enter site during the demolition phase of the development, during the construction phase of the development construction vehicles will utilise the managed set down area which will be located directly outside of the site on Highgate Road.

Appendices G (Demolition) and H (Construction) show the position of clearly marked, double, inward opening, lockable, vehicle, plant and material site access gates. Pedestrian site access will be controlled using fingerprint entry and will be via a separate pedestrian access and egress point.



During all vehicle manoeuvres suitably qualified and experienced Traffic Marshals will be present to supervise manoeuvres to ensure the safety of road users, vulnerable road users and pedestrians. If required vehicle movements will be stopped to allow for the safe passage of road users and pedestrians.

Figure 6: Pedestrian and Vehicular Site Access Gates

b. Please describe how the access and egress arrangements for construction vehicles in and out of the site will be managed, including the number and location of traffic marshals where applicable. If this is shown in an attached drawing, use the following space to reference its location in the appendices.

Appendices E (Demolition) and F (Construction) show the position of Traffic Marshals (green circles) during construction vehicle site access and egress manoeuvres.

c. Please provide swept path drawings for vehicles accessing/egressing the site if necessary. If these are attached, use the following space to reference their location in the appendices.

Please refer to:

Appendix E: Swept Path Analysis Drawing (Demolition)
Appendix F: Swept Path Analysis Drawing (Construction)

d. Provision of wheel washing facilities should be considered if necessary. If so, please provide details of how this will be managed and any run-off controlled. Please note that wheel washing should only be used where strictly necessary, and that a clean, stable surface for loading should be used where possible.

A wheel washing facility will not be required as it will be ensured that a clean and stable surface will be maintained and will form the designated vehicle turning / loading/unloading area.



21. Vehicle loading and unloading: "Clients shall ensure that vehicles are loaded and unloaded on-site as far as is practicable." (P19, 3.4.4)

This section is only relevant if loading/unloading is due to take place off-site on the public highway. If loading is taking place on site, please skip this section.

a. please provide details of the parking and loading arrangements for construction vehicles with regard to servicing and deliveries associated with the site (e.g. delivery of materials and plant, removal of excavated material). This is required as a scaled site plan, showing all points of access and where materials, skips and plant will be stored, and how vehicles will access and egress the site. If this is attached, use the following space to reference its location in the appendices. Please outline in question 24 if any parking bay suspensions will be required.

Please refer to:

Appendix E: Swept Path Analysis Drawing (Demolition)
Appendix F: Swept Path Analysis Drawing (Construction)

Appendix G: Site Layout Plan (Demolition)
Appendix H: Site Layout Plan (Construction)

b. Where necessary, Traffic Marshalls must ensure the safe passage of pedestrians, cyclists and motor traffic in the street when vehicles are being loaded or unloaded. Please provide detail of the way in which marshals will assist with this process, if this differs from detail provided in Q20 b.

Traffic Marshals will be present whilst construction vehicles undertake all site access and egress manoeuvres.

Please refer to:

Appendix E: Swept Path Analysis Drawing (Demolition)
Appendix F: Swept Path Analysis Drawing (Construction)



Street Works

Full justification must be provided for proposed use of the public highway to facilitate works. Camden expects all options to minimise the impact on the public highway to have been fully considered prior to the submission of any proposal to occupy the highway for vehicle pit lanes, materials unloading/crane pick points, site welfare etc.

Please note that Temporary Traffic Orders (TTOs) and hoarding/scaffolding licenses may be applied for prior to CMP submission but <u>won't</u> be granted until the CMP is signed-off.

Please note that there is a two week period required for the statutory consultation process to take place as part of a TTO.

If the site is on or adjacent to the TLRN, please provide details of preliminary discussions with Transport for London in the relevant sections below.

If the site conflicts with a bus lane or bus stop, please provide details of preliminary discussions with Transport for London in the relevant sections below.

22. Site set-up

Please provide a scaled plan detailing the local highway network layout in the vicinity of the site. This should include details of on-street parking bay locations, cycle lanes, footway extents, relevant street furniture, and proposed site access locations. If these are attached, use the following space to reference their location in the appendices.

Please refer to:

Appendix G: Site Layout Plan (Demolition)
Appendix H: Site Layout Plan (Construction)



23. Parking bay suspensions and temporary traffic orders

Parking bay suspensions should only be requested where absolutely necessary and these are permitted for a maximum of 6 months only. For exclusive access longer than 6 months, you will be required to obtain a Temporary Traffic Order (TTO) for which there is a separate cost.

Please provide details of any proposed parking bay suspensions and/or TTO's which would be required to facilitate the construction - include details of the expected duration in months/weeks. Building materials and equipment must not cause obstructions on the highway as per your CCS obligations unless the requisite permissions are secured.

Information regarding parking suspensions can be found here.

The suspension of x3 parking bays within Greenwood Place will be required to facilitate vehicle access to site during the demolition phase, please refer to Appendix G: Site Layout Plan (Demolition).

24. Occupation of the public highway

Please note that use of the public highway for storage, site accommodation or welfare facilities is at the discretion of the Council and is generally not permitted. If you propose such use you must supply full justification, setting out why it is impossible to allocate space on-site. We prefer not to close footways but if this is unavoidable, you should submit a scaled plan of the proposed diversion route showing key dimensions.

a. Please provide justification of proposed occupation of the public highway.

Due to the constrained nature of the worksite there is a requirement to close the footway directly outside of the site (Highgate Road aspect) during the construction phase of the development. This area of footway is required in order to locate the site welfare and accommodation and the plant and material storage areas.

Please refer to Appendix H: Site Layout Plan (Construction).

Due to the footway closure a pedestrian diversion will be implemented, please refer to Appendix I: Footway Closure Plan.



b. Please provide accurate scaled drawings of any highway works necessary to enable construction to take place (e.g. construction of temporary vehicular accesses, removal of street furniture etc). If these are attached, use the following space to reference their location in the appendices.

There will be a requirement to temporarily suspend the bus stop located directly outside of the site on Highgate Road. The associated bus shelter will be closed and adequately protected during the duration of the development.

Please refer to Appendix H: Site Layout Plan (Construction).

25. Motor vehicle and/or cyclist diversions

Where applicable, please supply details of any diversion, disruption or other anticipated use of the public highway during the construction period. Please show locations of diversion signs on drawings or diagrams. If these are attached, use the following space to reference their location in the appendices.

N/A - There is no requirement to implement any road diversions and no road disruption is expected.

A heavy-duty water filled road barrier system will be installed to create the "pit lane" to contain the managed setdown area. The barrier system will delineate and segregate the managed setdown area from the construction site and the highway.

Please refer to:

Appendix H: Site Layout Plan (Construction)



26. Scaffolding, hoarding, and associated pedestrian diversions

Pedestrians safety must be maintained if diversions are put in place. Vulnerable footway users should also be considered. These include wheelchair users, the elderly, those with walking difficulties, young children, those with prams, the blind and partially sighted. Appropriate ramps must be used if cables, hoses, etc. are run across the footway.

Any work above ground floor level may require a covered walkway adjacent to the site. A licence must be obtained for scaffolding and gantries. The adjoining public highway must be kept clean and free from obstructions, and hoarding should not restrict access to adjoining properties, including fire escape routes. Lighting and signage should be used on temporary structures/skips/hoardings etc.

A secure hoarding will generally be required at the site boundary with lockable access.

Please refer to Appendix G: Site Layout Plan (Demolition) and Appendix H: Site Layout Plan (Construction).

a. Where applicable, please provide details of any hoarding and/or scaffolding that intrudes onto the public highway, describing how pedestrian safety will be maintained through the diversion, including any proposed alternative routes. Please provide detailed, scale drawings that show hoarding lines, gantries, crane locations, scaffolding, pedestrian routes, parking bay suspensions, remaining road width for vehicle movements, temporary vehicular accesses, ramps, barriers, signage, lighting etc. If these are attached, use the following space to reference their location in the appendices.

26.1 SITE HOARDING

Hoarding will be installed around the perimeter of the site as required, please refer to Appendix G (Demolition) and Appendix H (Construction) for proposed hoarding position. This hoarding will be installed to ensure the Health & Safety of the public, aid acoustic reduction, and prevent unauthorised access. All hoarding will be installed prior to the commencement of any works onsite. The hoarding will clearly display the contractors contact detail and relevant information regarding the development. All relevant hoarding licences will be obtained (for three elevations including the gated site compound) prior to erection. Hoardings will avoid the colours black (impacts on depression), white (encourages hyperactivity) and vibrant colours (impacts autism).



The site hoarding will:

- Be high enough that it can't easily be scaled (minimum height of 2.4m)
- Be secure enough that it can't be knocked/down or penetrated (solid timber construction painted in pre-agreed colour scheme)
- Control access to the site through secure gates/access points
- Be regularly cleaned, the GLA's best practice guidance states that "Hoardings, fencing, barriers and scaffolding should be regularly cleaned using wet methods, where possible to prevent re-suspension of particulate matter".
- Be maintained by making sure the hoardings are regularly inspected for necessary maintenance work, and modified accordingly if the sites use changes.

As required, the hoarding will feature lockable vehicle and pedestrian site entrances, the work site will be designed to ensure that:

- The pedestrian passage is maintained at all times
- There will be qualified and experienced banksmen present during all vehicle movements
- Vehicular access to adjacent properties is maintained at all times
- Vehicle drivers will remain with their vehicles at all times to ensure that vehicles can be immediately moved to allow access and egress to neighboring properties as required
- A banksman will be present during deliveries and removals to make sure that the vehicle is positioned in accordance with this document
- Emergency Access is maintained at all times
- During vehicle movements, the bankesmen will pay attention to pedestrians, road users, and vulnerable road users, with particular attention being paid to cyclists, pushchair users and the disabled, during these instances all parties will be adequately forewarned of any blockages and trees and street furniture do not become damaged

26.2 FOOTWAY CLOSURE AND PEDESTRIAN DIVERSION

Due to the constrained nature of the worksite there is a requirement to close the footway directly outside of the site (Highgate Road aspect) for the duration of the development. This area of footway is required in order to locate the site welfare and accommodation and the plant and material storage areas and to facilitate vehicular site access.

Due to the footway closure a pedestrian diversion will be implemented, please refer to Appendix I: Footway Closure Plan.

26.3 EXTERNAL LIGHTING

Temporary external lighting will be installed as appropriate to aid site security and facilitate site access and egress. In order to minimise potential distraction to local residents, businesses and road users temporary lighting will be installed in such a way as to keep light spillage/nuisance to a minimum.

The existing lighting column adjacent to the bus shelter will be relocated. Relocation will be agreed with the relevant Highways Authority.



b. Please provide details of any other temporary structures which would overhang/oversail the public highway (e.g. scaffolding, gantries, cranes etc.) If these are attached, use the following space to reference their location in the appendices.

Please refer to Appendix J: Crane Position.

27. Services

Please indicate if any changes to services are proposed to be carried out that would be linked to the site during the works (i.e. connections to public utilities and/or statutory undertakers' plant). Larger developments may require new utility services. If so, a strategy and programme for coordinating the connection of services will be required. If new utility services are required, please confirm which utility companies have been contacted (e.g. Thames Water, National Grid, EDF Energy, BT etc.) You must explore options for the utility companies to share the same excavations and traffic management proposals. Please supply details of your discussions.

New services coming into site will include:

- Electricity
- Water
- Telecoms

The Principal Contractor will liaise with UKPN, Thames Water and BT in order to prepare a robust plan to ensure that site construction works are programmed in such a way as to facilitate "utility" works and to minimise disruption to the local road network whilst these works take place.



Environment

To answer these sections please refer to the relevant sections of Camden's Minimum Requirements for Building Construction (CMRBC).

28. Please list all <u>noisy operations</u> and the construction method used, and provide details of the times that each of these are due to be carried out.

Please refer to:

Appendix C: Project Programme (Rev A).

29. Please confirm when the most recent noise survey was carried out (before any works were carried out) and provide a copy. If a noise survey has not taken place please indicate the date (before any works are being carried out) that the noise survey will be taking place, and agree to provide a copy.

Please refer to Appendix K: Noise Survey Details.

30. Please provide predictions for <u>noise</u> and vibration levels throughout the proposed works.

Please refer to Appendix O: BS5228 Assessment, Section 8.

31. Please provide details describing mitigation measures to be incorporated during the construction/demolition works to prevent noise and vibration disturbances from the activities on the site, including the actions to be taken in cases where these exceed the predicted levels.

Please refer to Appendix O: BS5228 Assessment, Section 7.

32. Please provide evidence that staff have been trained on BS 5228:2009

If required, the suitably qualified and experienced acoustician engaged on the project will train key members of the on-site Management Team and:

- a. Explain how the monitoring system/equipment works
- b. Explain the relevance of the agreed action and trigger levels
- c. Instruct staff regarding the procedures to follow if action and trigger level warnings are received



33. Please provide specific details on how air pollution and dust nuisance arising from dusty activities on site will be prevented. This should be relevant and proportionate to activities due to take place, with focus on both preventative and reactive mitigation measures.

Please refer to Appendix P: Dust Management Plan, Section 6.

34. Please provide details describing how any significant amounts of dirt or dust that may be spread onto the public highway will be prevented and/or cleaned.

A wheel washing facility will not be required as it will be ensured that a clean and stable surface will be maintained and will form the designated vehicle turning / loading/unloading area.

However, in addition, it is also confirmed that appropriate measures will be taken to prevent concrete and other detritus from being washed into the public highway drainage system. We also confirm that the Local Authority will be informed promptly should any such damage to the highway occur.

The depositing of mud/detritus on the highway originating from the site or from any construction vehicle associated with the development is unacceptable.

Under no circumstances will concrete residue or other detritus be washed into the drainage system. Consideration will also be given to protecting the road and pavement surfaces from HGV movements, skips, outriggers and other related plant, materials and equipment.

35. Please provide details describing arrangements for monitoring of <u>noise</u>, vibration and dust levels, including instrumentation, locations of monitors and trigger levels where appropriate.

35.1 NOISE AND VIBRATION

Please refer to Appendix O: BS5228 Assessment, Section 7.3.

35.2 DUST

Please refer to Appendix P: Dust Management Plan, Section 6.11.



36. Please confirm that an Air Quality Assessment and/or Dust Risk Assessment has been undertaken at planning application stage in line with the GLA policy The Control of Dust and Emissions During Demolition and Construction 2014 (SPG) (document access at bottom of webpage), and that the summary dust impact risk level (without mitigation) has been identified. The risk assessment must take account of proximity to all human receptors and sensitive receptors (e.g. schools, care homes etc.), as detailed in the SPG. Please attach the risk assessment and mitigation checklist as an appendix.

Please refer to Appendix P: Dust Management Plan, Section 6.

37. Please confirm that all of the GLA's 'highly recommended' measures from the SPG document relative to the level of dust impact risk identified in question 36 have been addressed by completing the GLA mitigation measures checklist. (See Appendix 7 of the SPG document.)

Please refer to Appendix P: Dust Management Plan, Section 6.

38. Please confirm the number of real-time dust monitors to be used on-site.

Note: real-time dust (PM₁₀) monitoring with MCERTS 'Indicative' monitoring equipment will be required for all sites with a high OR medium dust impact risk level. If the site is a 'high impact' site, 4 real time dust monitors will be required. If the site is a 'medium impact' site', 2 real time dust monitors will be required.

The dust monitoring must be in accordance with the SPG and IAQM guidance, and the proposed dust monitoring regime (including number of monitors, locations, equipment specification, and trigger levels) must be submitted to the Council for approval. Dust monitoring is required for the entire duration of the development and must be in place and operational at least three months prior to the commencement of works on-site. Monthly dust monitoring reports must be provided to the Council detailing activities during each monthly period, dust mitigation measures in place, monitoring data coverage, graphs of measured dust (PM₁₀) concentrations, any exceedances of the trigger levels, and explanation on the causes of any and all exceedances in addition to additional mitigation measures implemented to rectify these.

In accordance with Camden's Clean Air Action Plan, the monthly dust monitoring reports must also be made readily available and accessible online to members of the public soon after publication. Information on how to access the monthly dust monitoring reports should be advertised to the local community (e.g. presented on the site boundaries in full public view).

<u>Inadequate dust monitoring or reporting, or failure to limit trigger level exceedances, will be indicative of poor air quality and dust management and will lead to enforcement action.</u>

Please refer to Appendix P: Dust Management Plan, Section 6.11.



39. Please provide details about how rodents, including rats, will be prevented from spreading out from the site. You are required to provide information about site inspections carried out and present copies of receipts (if work undertaken).

It will be ensured that a reactive contract with a local pest control company will be in place for the duration of the development.

40. Please confirm when an asbestos survey was carried out at the site and include the key findings.

Please refer to Appendix L: Asbestos Survey

41. Complaints often arise from the conduct of builders in an area. Please confirm steps being taken to minimise this e.g. provision of a suitable smoking area, tackling bad language and unnecessary shouting.

The Principal Contractor is registered with the Considerate Constructors Scheme as detailed within Section 13. The Principal Contractor will ensure that all staff adhere to the Code of Considerate Practice whenever on site.

Site specific inductions will focus on not only the on-site construction works but also the surrounding community. Operatives will be advised on how to behave on site and whilst interacting with local residents and members of the public. It will be made clear to all that they will be representing the site and therefore the Principal Contractor whenever traveling to or form site and whilst on site.



42. If you will be using non-road mobile machinery (NRMM) on site with net power between 37kW and 560kW it will be required to meet the standards set out below. The standards are applicable to both variable and constant speed engines and apply for both PM and NOx emissions. See the Mayor of London webpage 'Non-Road Mobile Machinery (NRMM)' for more information, a map of the Central Activity Zone, and for links to the NRMM Register and the NRMM Practical guide (V4): https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/nrmm

Direct link to NRMM Practical Guide (V4):

https://www.london.gov.uk/sites/default/files/nrmm practical guide v4 sept20.pdf

From 1st September 2015

- (i) Major Development Sites NRMM used on the site of any major development will be required to meet Stage IIIA of EU Directive 97/68/EC
- (ii) Any development site within the Central Activity Zone NRMM used on any site within the Central Activity Zone will be required to meet Stage IIIB of EU Directive 97/68/EC

From 1st September 2020

- (iii) Any development site NRMM used on any site within Greater London will be required to meet Stage IIIB of EU Directive 97/68/EC
- **(iv) Any development site within the Central Activity Zone -** NRMM used on any site within the Central Activity Zone will be required to meet Stage IV of EU Directive 97/68/EC

Please provide evidence demonstrating the above requirements will be met by answering the following questions:

- a. Construction time period (mm/yy mm/yy): 04.22 02.24
- b. Is the development within the CAZ? (Y/N): **NO**
- c. Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Y/N): **YES**
- d. Please confirm that all relevant machinery will be registered on the NRMM Register, including the site name under which it has been registered: It is confirmed that the Principal Contractor will comply with this requirement.
- e. Please confirm that an inventory of all NRMM will be kept on site and that all machinery will be regularly serviced and service logs kept on site for inspection: It is confirmed that the Principal Contractor will comply with this requirement.
- f. Please confirm that records will be kept on site which details proof of emission limits, including legible photographs of individual engine plates for all equipment, and that this documentation will be made available to local authority officers as required: It is confirmed that the Principal Contractor will comply with this requirement.



43. Vehicle engine idling (leaving engines running whilst parked or not in traffic) produces avoidable air pollution and can damage the health of drivers and local communities. Camden Council and City of London Corporation lead the London Idling Action Project to educate drivers about the health impacts of air pollution and the importance of switching off engines as a simple action to help protect the health of all Londoners.

Idling Action calls for businesses and fleet operators to take the Engines Off pledge to reduce emissions and improve air quality by asking fleet drivers, employees and subcontractors to avoid idling their engines wherever possible. Free driver training materials are available from the website: https://idlingaction.london/business/

Please provide details about how you will reduce avoidable air pollution from engine idling, including whether your organisation has committed to the Engines Off pledge and the number of staff or subcontractors who have been provided with free training materials.

It is confirmed that instructions will be provided to staff and subcontractors to avoid idling and to turn engines off whilst not is use.

If required, the Principal Contractor will commit to the "Engines Off" pledge and the number of staff and subcontractors that have been provided with free training material.

SYMBOL IS FOR INTERNAL USE



Agreement

The agreed contents of this Construction Management Plan must be complied with unless otherwise agreed in writing by the Council. This may require the CMP to be revised by the Developer and reapproved by the Council. The project manager shall work with the Council to review this Construction Management Plan if problems arise in relation to the construction of the development. Any future revised plan must be approved by the Council in writing and complied with thereafter.

It should be noted that any agreed Construction Management Plan does not prejudice further agreements that may be required such as road closures or hoarding licences.

Signed:



Date: 21st April 2022

Print Name: Garry McHugh

Position: Managing Director

Please submit to: planningobligations@camden.gov.uk

End of form.

V2.7



APPENDIX C

19-37 Highgate Road _ Construction Programme

| Construction Programme 19-37 Highgate Road | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|--|--------|----------|--------|---------|--------|-----------|--------|--------|---------|---------|---------|---------|----------|--------|
| Ingligate Road | 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 |
| | | 7 (p. == | , == | 34.1.22 | 54. 22 | 7 (4.9 == | 30p | 000 22 | 1101 == | 7 00 22 | 54.1.25 | . 65 25 | . 10. 25 | 7.155 |
| | | | | | | | | | | | | | | |
| 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:
 - Who was consulted.
 - 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

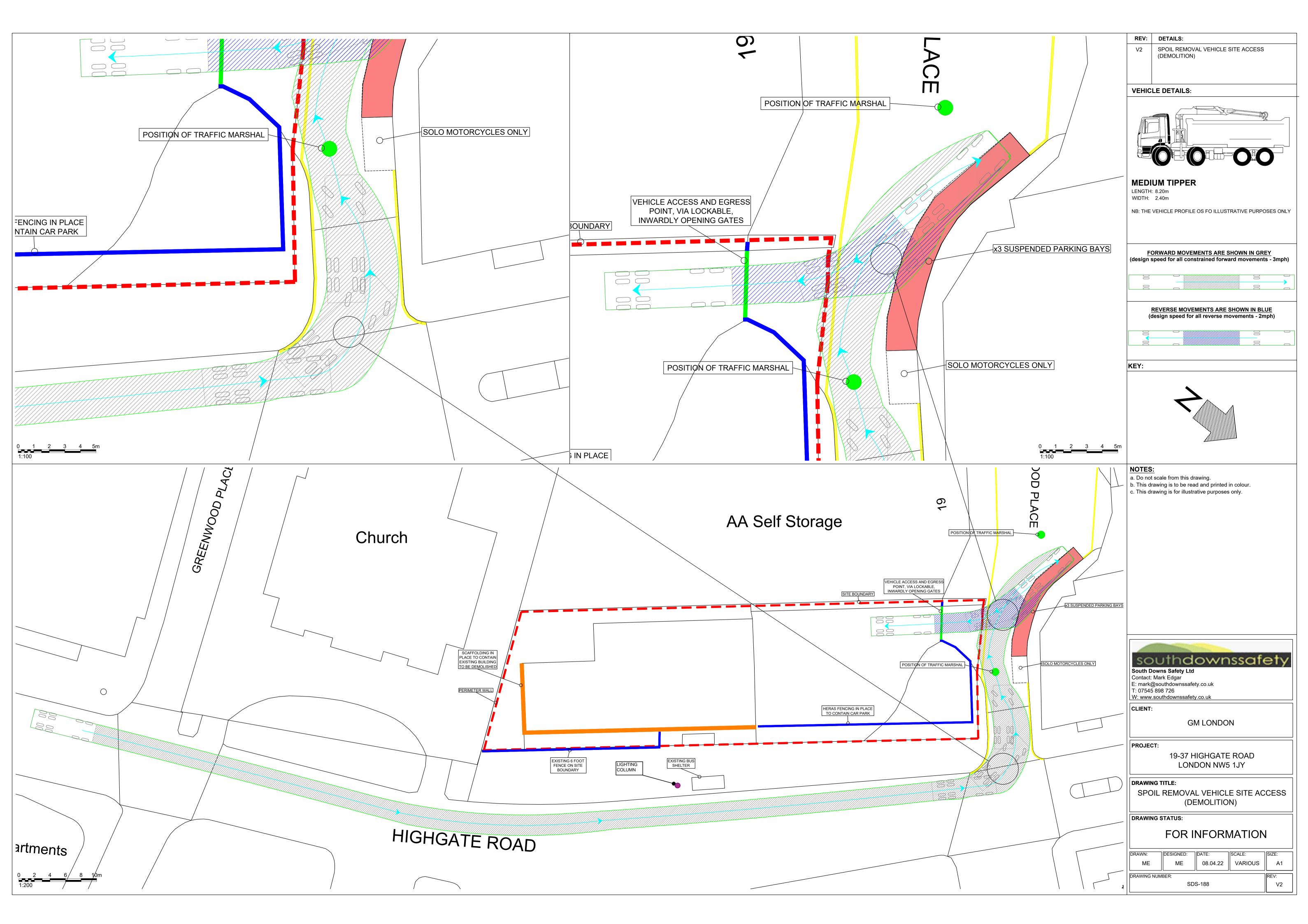
The Council expects ongoing engagement with neighbouring residents, businesses and organisations during the course of the works. Experience demonstrates that this can have a significant effect in reducing the number of complaints received during the construction process.

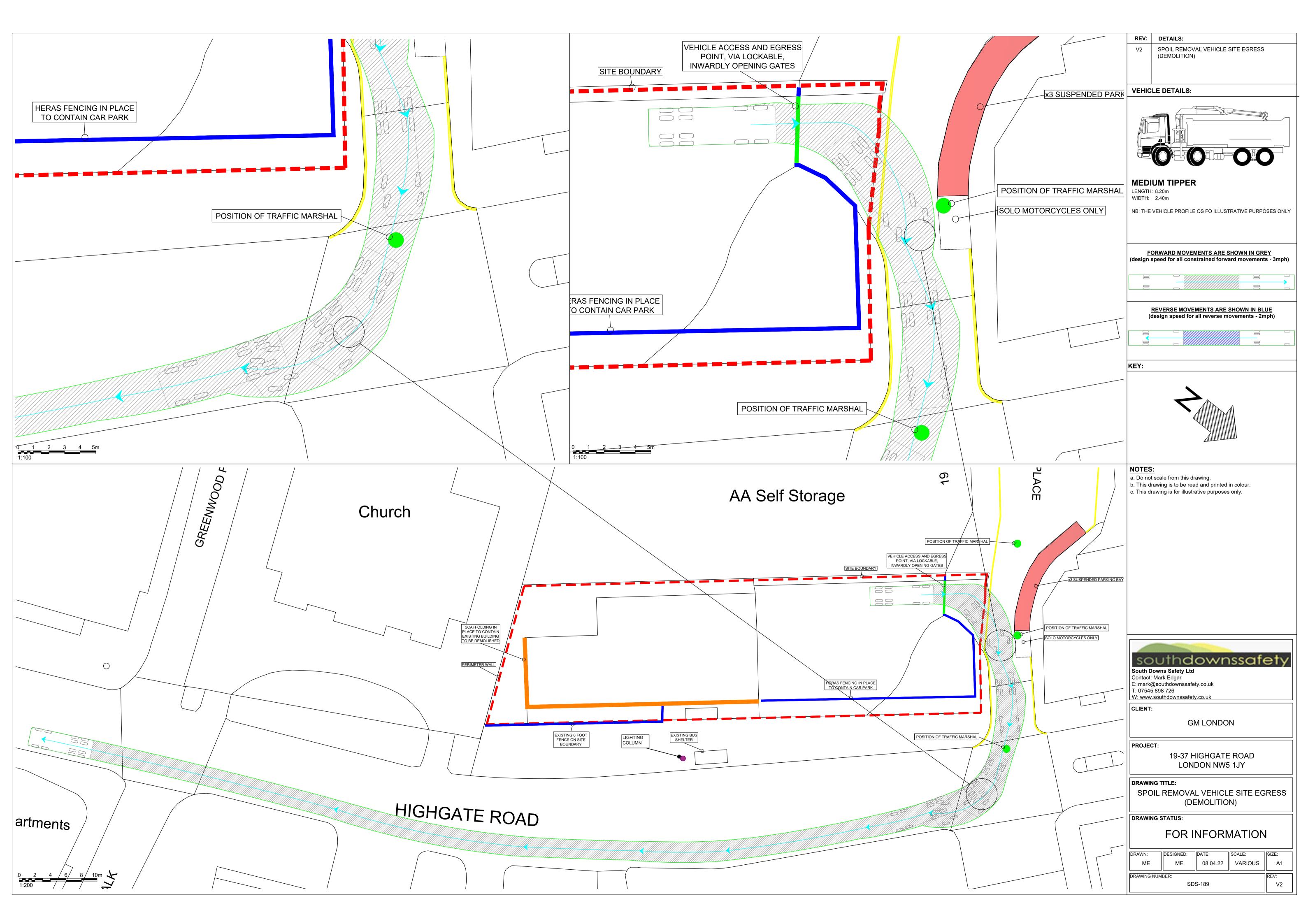
Ongoing engagement should include but is not limited to:

- 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 please contact the planning obligations team: planningobligations@camden.gov.uk.

APPENDIX E

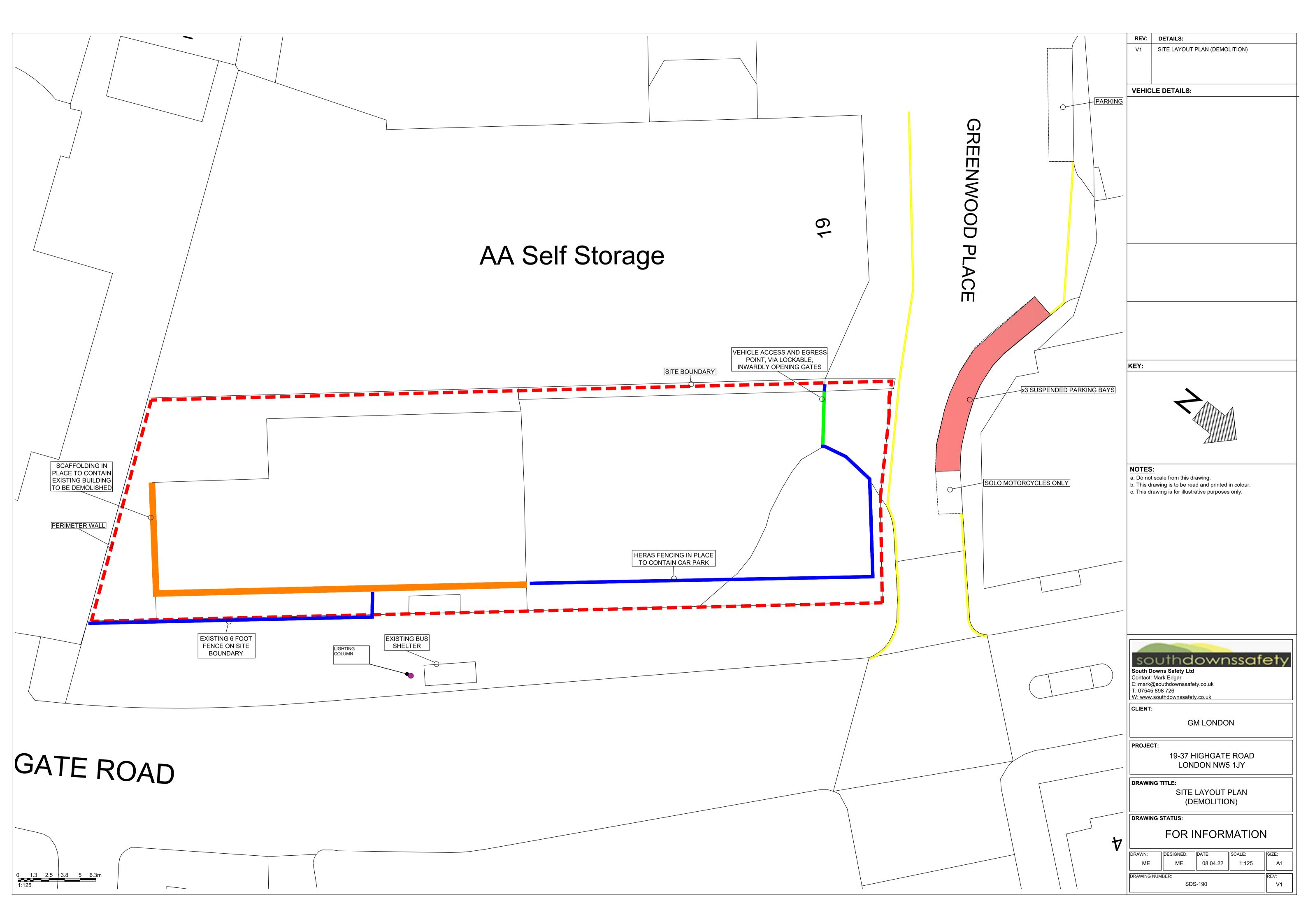




APPENDIX F

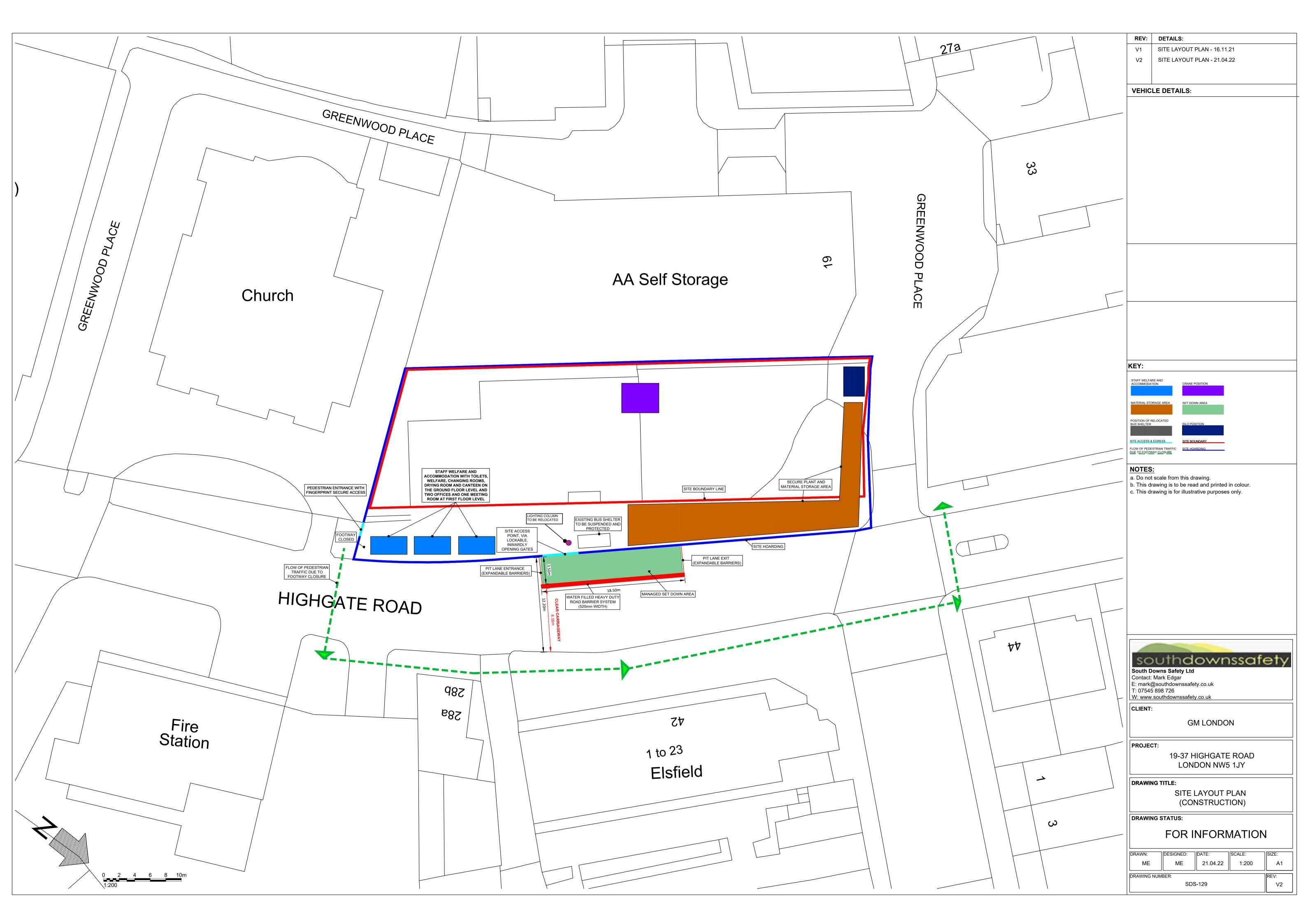


APPENDIX G



southdownssafety

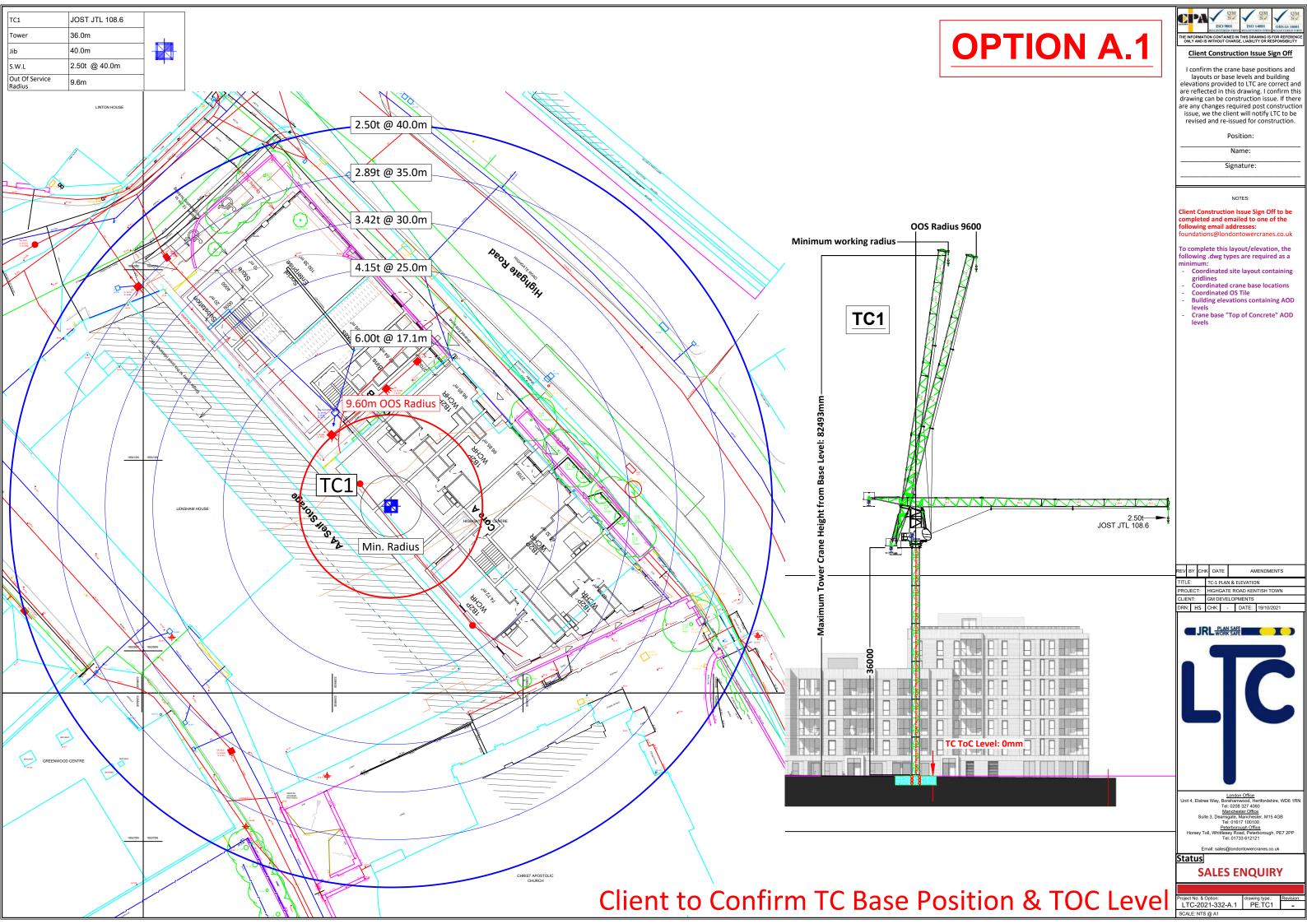
APPENDIX H



APPENDIX I



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 2th and Tuesday 9th 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 _{Aeq,16h} | Night, L _{Aeq,8h} | Day, L _{A90,15min} | Night, L _{A90,15min} | Night, L _{AFmax,5min} | Office hours, L _{Aeq,8h} | | | | |
| 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_{A90,15} 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.

Table A.1 Inventory of Measurement Equipment

| Equipment | | | Serial | Calibration | | | |
|-----------|----------------------|----------------|----------|-----------------------|-------------|--|--|
| ID | Item | Make and Model | Number | Certificate number | Expiry Date | | |
| | Sound Level Meter | 01 dB DUO | 10667 | | | | |
| 1 (NM1) | Preamplifier | Integrated | - | 1500295-1 | 30/04/2023 | | |
| | Microphone | 01 dB MCE212 | 39854 | | | | |
| | Sound Level Meter | 01 dB DUO | 10927 | | 29/09/2023 | | |
| 2 (NM2) | Preamplifier | Integrated | - | 1500966-2 | | | |
| | 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 | | |

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 2nd November and 10:20 hrs on Tuesday 9th 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

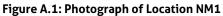
Measurements were obtained using the 'F' time weighting and A-weighting frequency network. Consecutive 125 ms measurements of $L_{Aeq,T}$, $L_{Amax,F}$ and $L_{A90,T}$ noise levels were obtained between 13:00 hrs on Tuesday 2^{nd} November and 10:35 hrs on Tuesday 9^{th} November 2021.

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 www.wunderground.com (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.





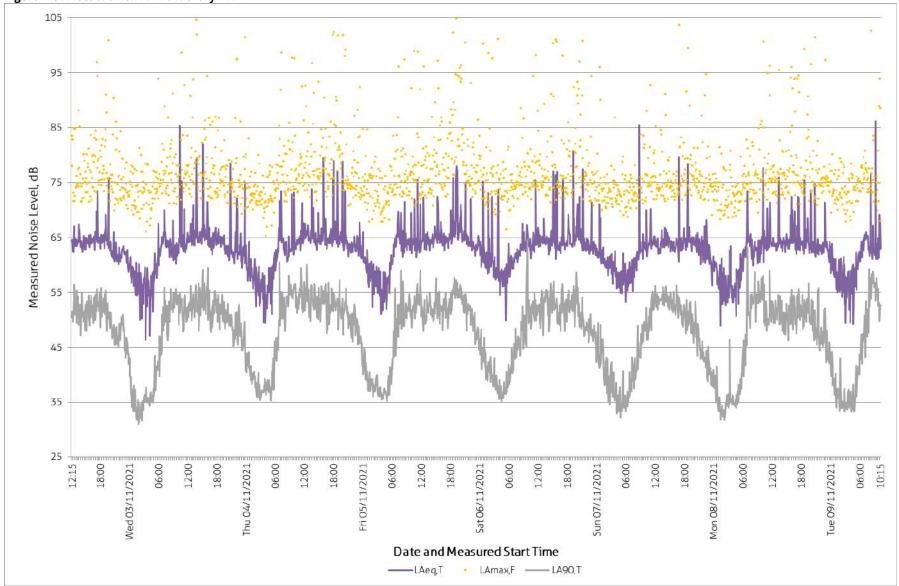






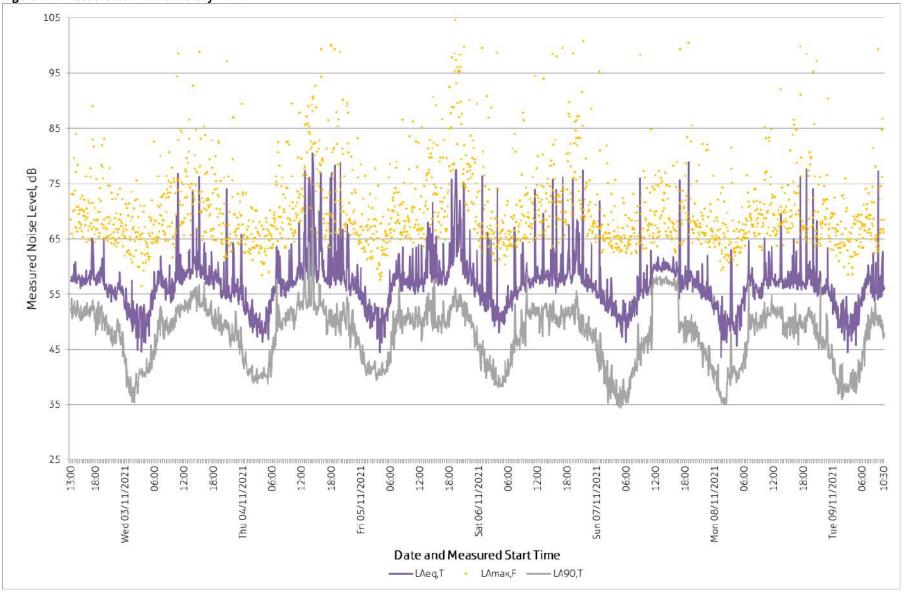












APPENDIX L

A.R.C.S. Environmental Limited



Asbestos Survey For

GM Developments

at

19 Highgate Road London NW5 1JY

In accordance with HSG264



Project Number: ARCS/19HRD

Printed: 21/02/2022 By: A.R.C.S. Environmental Limited. Using Multibase software.



A.R.C.S. Environmental Limited

Names and Addresses

<u>Client Name:</u> <u>Instructing Party:</u>

GM Developments GM Developments

223 Davies Road 223 Davies Road

London London SW6 7RD SW6 7RD

Contact: Jack Higgin Contact: Jack Higgin

Phone: 07702 863168 Fax: Phone: 07702 863168 Fax:

<u>Site Full Name:</u> <u>Report Author:</u>

19 Highgate Road A.R.C.S. Environmental Limited

London

NW5 1JY Harrow Road

North Benfleet, Wickford

Contact: Essex

Fax:

Phone:

Contact: Darren Keeble

Director

SS12 9JW

A.R.C.S. Environmental Limited

Project Number: ARCS/19HRD
Survey Date: 15 February 2022
Printed On: 21 February 2022
Page: Page 1 of 1

A.R.C.S. Environmental Limited

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| SECTION 6 | Survey Techniques |
| SECTION 7 | Survey Notes |
| SECTION 8 | Bulk Certificate |
| SECTION 9 | Survey Drawings |
| SECTION 10 | Asbestos Register |
| SECTION 11 | Material Assessment (Photo) |



SECTION ONE

SURVEY SUMMARY

Survey Summary

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 |
|---------------|-----------------------------------|-----------------|------------------|
| | | Survey Date: | 15 February 2022 |
| Site Address: | 19 Highgate Road, London, NW5 1JY | Printed On: | 21 February 2022 |
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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.

| Client Name: | GM Developments | Project Number: | ARCS/19HRD |
|---------------|-----------------------------------|-----------------|------------------|
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| | | Excluded Areas: | Page 1 of 1 |



SECTION TWO

SURVEY CAVEAT

Survey Caveat

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 surveys, there areas must be clearly located on plans and in the text of the report to allow the 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.

| Client Name: | GM Developments | Project Number: | ARCS/19HRD |
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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.

| Client Name: | GM Developments | Project Number: | ARCS/19HRD |
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| | | Survey Date: | 15 February 2022 |
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| | | Survey Caveat: | Page 2 of 2 |



SECTION FOUR

EXECUTIVE SUMMARY

Executive Summary

General Information:

Site Details.

| Area | Comments | 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 doo header. | or 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 |

| Client Name: | GM Developments | Project Number: | ARCS/19HRD |
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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 |

| Client Name: | GM Developments | Project Number: | ARCS/19HRD |
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SECTION FIVE

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. 'Default' presumptions may also lead to unnecessary removal of non-ACMs and their disposal as asbestos 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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SECTION SIX

SURVEY TECHNIQUES

Survey Techniques

- 1 Photographs were taken at all of the sample locations (unless otherwise stated).
- 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

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

| Client Name: | GM Developments | Project Number: | ARCS/19HRD | |
|---------------|-----------------------------------|-------------------|------------------|--|
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| | | Survey Technique: | Page 2 of 3 | |



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 / reencapsulated 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 Technique: | Page 3 of 3 | |



SECTION SEVEN

SURVEY NOTES

Survey Notes

- 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
- 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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|---------------|-----------------------------------|--------------------|------------------|
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| | | Survey Objectives: | Page 1 of 1 |

Printed: 21/02/2022 By: A.R.C.S. Environmental Limited. Using Multibase software.



SECTION EIGHT

BULK CERTIFICATE



8

9

19HR/DW/G/026/8

19HR/DW/1ST/027/9



CERTIFICATE FOR IDENTIFICATION OF ASBESTOS FIBRES

| STANDARD | |
|-----------|--|
| PREMIUM | |
| EMERGENCY | |

NADIS

CHRYSOTILE

| | | LITILIX | JLINCI | |
|---|--|--|--|--|
| A.R.C.S. ENVIRONMENTAL LIMITED | | | | |
| ALTON HARROW ROAD NORTH BENFLEET WICKFORD ESSEX, SS12 9JW | Analysis Report No. | SC | 0/22/34 | 142 |
| MR A MCEWEN | Report Date. | 1 | 15/02/22 | 2 |
| 19 HIGHGATE ROAD LONDON NW5 1JY | Site Ref No. | | N/A | |
| 15/02/22 | Page No: | 1 | Of | 2 |
| 15/02/22 | No. of Samples: | | 15 | |
| 15/02/22 | Obtained: | DI | ELIVERE | D |
| | ALTON HARROW ROAD NORTH BENFLEET WICKFORD ESSEX, SS12 9JW MR A MCEWEN 19 HIGHGATE ROAD LONDON NW5 1JY 15/02/22 | A.R.C.S. ENVIRONMENTAL LIMITED ALTON HARROW ROAD NORTH BENFLEET WICKFORD ESSEX, SS12 9JW MR A MCEWEN 19 HIGHGATE ROAD LONDON NW5 1JY 15/02/22 Page No: 15/02/22 No. of Samples: | A.R.C.S. ENVIRONMENTAL LIMITED ALTON HARROW ROAD NORTH BENFLEET WICKFORD ESSEX, SS12 9JW MR A MCEWEN 19 HIGHGATE ROAD LONDON NW5 1JY 15/02/22 Page No: 1 15/02/22 No. of Samples: | ALTON HARROW ROAD NORTH BENFLEET WICKFORD ESSEX, SS12 9JW MR A MCEWEN 19 HIGHGATE ROAD LONDON NW5 1JY 15/02/22 Page No: 1 Of 15/02/22 No. of Samples: 15 |

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 CLIENT Sample Location Fibre Type Detected SAMPLE No. SAMPLE No. 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 **CHRYSOTILE** 19HR/DW/G/004/4 CORRIDOR 1 - BITUMEN 19HR/DW/G/005/5 NADIS 5 OFFICE 1 - SUPALUX DOOR HEADER 6 19HR/DW/G/009/6 OFFICE 2 - SINK PADS CHRYSOTILE 7 19HR/DW/G/026/7 LAUNDRY ROOM - LINO AND ADHESIVE **NADIS**

LAUNDRY ROOM - SINK PAD

STAIRS TO FIRST FLOOR - BITUMEN TO STRAMMIT BOARDS

| 10 | 19HR/DW/1 ST /031/10 | WALKWAY – GREEN FLOOR TILES | | | | | |
|---|--|-----------------------------|--|--|--|--|--|
| KEY: NADIS – No Asbestos Detected in Sample | | | | | | | |
| Note: This Cert Note: All Analy Note: Where a | 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 * | | | | | | |
| Analysed by: | Analysed by: S GIDDINGS Authorised signatory: | | | | | | |
| | 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 | CO/22/34 | 142 |
| Attention: | MR A MCEWEN | Report Date. | | 15/02/2 | 2 |
| 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 | ED |
| | | | | | |

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.

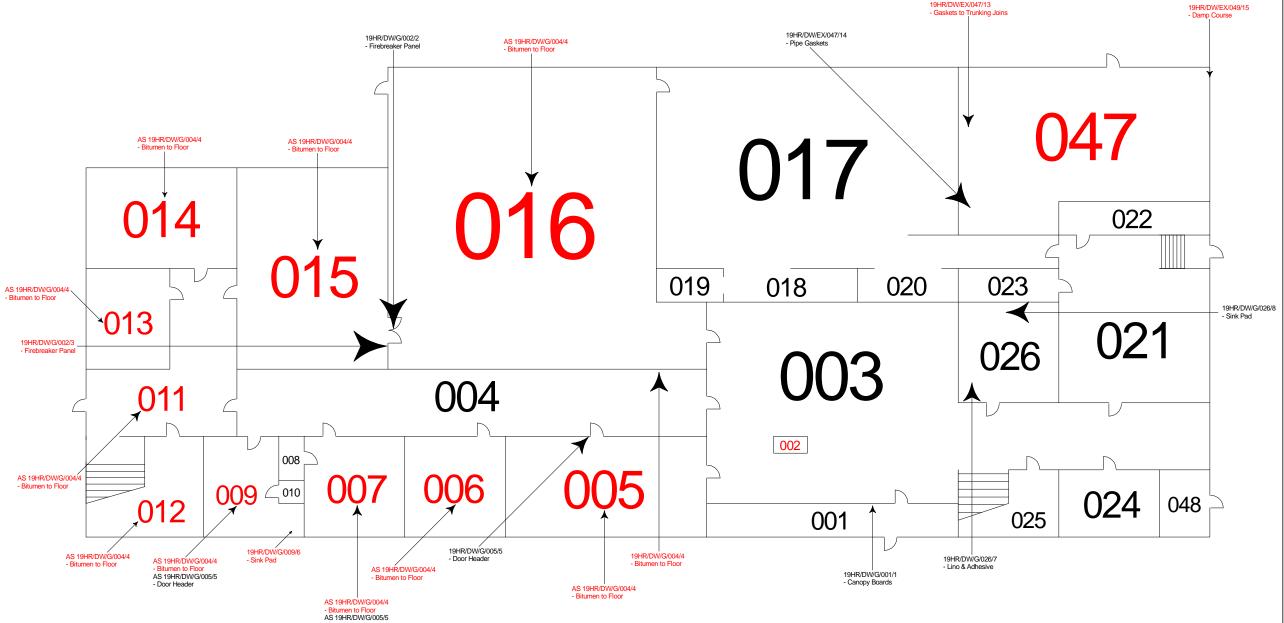
| SCOPES SAMPLE No. | | | Fibre Type Detected |
|----------------------|---------------------------------|-------------------------------|---------------------|
| 11 | 19HR/DW/1 ST /038/11 | CORRIDOR 1 – BITUMEN TO FLOOR | CHRYSOTILE |
| 12 | 19HR/DW/1 ST /046/12 | TANK ROOM – DOOR BOARD | NADIS |
| 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 |
| | | | |
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| | | | |
| | | | |

| | S – No Asbestos Detected ir | · | | | | | |
|---|---|--|---|-------------|--|--|--|
| Note: This Cert Note: All Analy Note: Where a | sis is performed in House or n `A' appears at the end of t | sbestos Fibres shall not be repro the registered premises (below) he analysis report number this m | duced except in full without the written approval). leans an amendment has been made to the origin | , | | | |
| nas been amer | ided will be marked with an | | A S M | | | | |
| Analysed by: | Analysed by: S GIDDINGS Authorised signatory: | | | | | | |
| ,,,,,, | | Print name: | C.BOLTON – ADMINISTRAT | ION MANAGER | | | |
| BULK 001-VER 7 10-June-20-QCM | | | | | | | |
| | | | | | | | |

SECTION NINE

SURVEY DRAWINGS

19 Highgate Road, London: Ground Floor Plan



KEY

Black numbers indicate areas where no Asbestos Containing Materials were observed at the time of the survey.

Orange numbers indicate areas where Asbestos Containing Materials were presumed to be present.

Red numbers indicate areas where Asbestos Containing Materials have been identified by independent laboratory analysis.

Black sample references indicate where samples were taken and proven to comprise non-Asbestos Containing Materials.

Red sample references indicate where samples were taken and proven to comprise Asbestos Containing Materials.

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Dwg No. 19HR/DW/G/1 Drawn on Feb 22

A.R.C.S. Environmental Ltd

Alton House Harrow Road North Benfleet Wickford Essex

SS12 9JW Tel: 01268 725477 Fax: 01268 725460

Email: enquiries@arcsenvironmental.co.uk

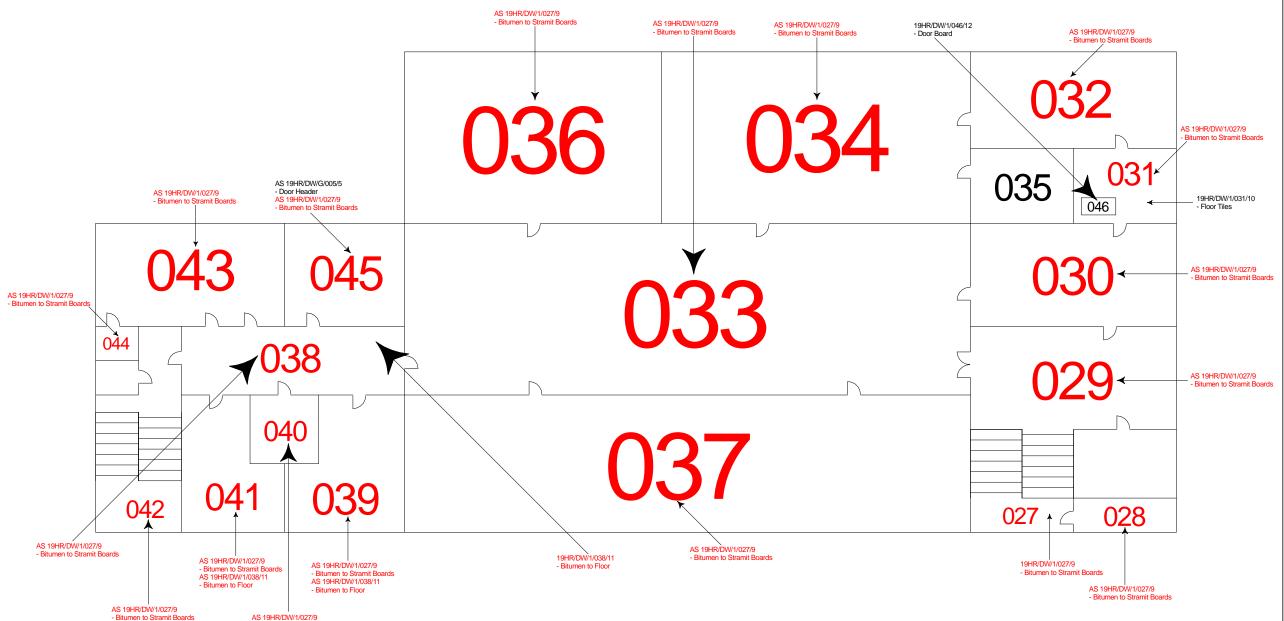
19 Highgate Road London NW5 1JY

> Drawn By: Ben Eldridge

Date of Survey February 2022

Surveyor: David Watson, David Parsley

19 Highgate Road, London: First Floor Plan



KEY

Black numbers indicate areas where no Asbestos Containing Materials were observed at the time of the survey.

Orange numbers indicate areas where Asbestos Containing Materials were presumed to be present.

Red numbers indicate areas where Asbestos Containing Materials have been identified by independent laboratory analysis.

Black sample references indicate where samples were taken and proven to comprise non-Asbestos Containing Materials.

Red sample references indicate where samples were taken and proven to comprise Asbestos Containing Materials.

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Email: enquiries@arcsenvironmental.co.uk

19 Highgate Road London NW5 1JY

> Drawn By: Ben Eldridge

Date of Survey February 2022

Surveyor: David Watson, David Parsley

SECTION TEN

ASBESTOS REGISTER

Site Name: 19 Highgate Road

Project Number: ARCS/19HRD

Total Score ΑX Α Ϋ́ N/A Α× Priority Risk Score Sample Material Score Risk 0 က N 2 N 19HR/D W/1/02 7/9 19HR/D W/EX/0 47/13 19HR/D W/EX/0 49/15 19HR/D W/G/00 2/3 19HR/D W/1/03 8/11 2 Identified Identified Identified Sample Identified Identified AIB painted or encapsulated Amosite & Chrysotile Asbestos Type Chrysotile Chrysotile Chrysotile Chrysotile Composite asbestos materials Composite asbestos Surface treatment materials Resins Resins Good condition Good condition Good condition Good condition Good condition Condition Easy Accessibility Easy Accessibility Gaskets to Approx: 6 Linear Easy Accessibility Trunking Joins Metres Easy Accessibility Easy Accessibility Accessibility Approx: 13m² Approx: 80 Linear Metres Approx: 8m² Approx: 1m² Extent Bitumen to Stramit Boards Damp Course Firebreaker Panels Bitumen to Floor Product type and name Asbestos Insulating Board Saskets Resins Resins Resins Applicable, Ground floor, Stairs to First Applicable, First floor, Not Applicable, External, Plant room Applicable, External, Applicable, Location Corridor 1 First floor External Floor Not Not Š

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| ۴ | 1 | |

Asbestos register:Page I of 6

Α×

0

Identified

Chrysotile

Resins

Good condition

Easy Accessibility

Approx: 14m²

Bitumen to Floor

Resins

Ground floor,

Applicable, Corridor 1

Š

Ceiling void

19HR/D W/G/00 4/4

N/A

N

Identified

Chrysotile

Composite asbestos materials

Good condition

Approx: 3 No. Easy Accessibility

Sink Pad

Resins

Ground floor,

Office 2

Applicable,

Not

19HR/D W/G/00 9/6

Α×

0

AS 19HR/D W/1/02 7/9 -Corridor

Strongly Presumed as previous sample

Chrysotile

Resins

Good condition

Easy Accessibility

Approx: 8m²

Bitumen to Stramit Boards

Resins

Applicable, First floor, Corridor 1

Site Name: 19 Highgate Road

| Total Score | ₹/Z | Z/Z | ₹ Z | Z/A | ₹ Z | Ϋ́Z | N/A |
|---------------------------|--|---|---|---|--|--|--|
| Priority Risk Score | | | | | | | |
| Material Risk Score | 2 | 2 | 2 | 8 | 7 | 2 | 2 |
| Sample N no | AS 19HR/D W/1/02 7/9 - Fire Exit Staircas e | AS 19HR/D W/1/02 7/9 - Ladies WC | AS 19HR/D W/1/02 7/9 - Landing | AS 19HR/D W/1/02 7/9 - Mens WC | AS 19HR/D W/1/02 7/9 - Office 1 | AS 19HR/D W/1/02 7/9 - Office 2 | AS 19HR/D W/1/02 7/9 - Office 3 |
| 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: 9m² | Approx: 18m² | Approx: 10m² | Approx: 14m² | Approx: 4m² | Approx: 24m² | Approx: 20m² |
| Product type 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 | Bitumen to Stramit Boards |
| Product typ | Resins | Resins | Resins | Resins | Resins | Resins | Resins |
| Location | Not Applicable, First floor, Fire Exit Staircase | Not Applicable, First floor, Ladies WC | Not Applicable, First floor, Landing | Not Applicable, First floor, Mens WC | Not Applicable, First floor, Office 1 | Not Applicable, First floor, Office 2 | Not Applicable, First floor, Office 3 |



Site Name: 19 Highgate Road

| Total Score | ₹/2 | ₹/Z | N/A | ₹/Z | ₹/Z | N/A |
|---------------------------|--|---|---|---|---|--|
| Priority Risk Score | | | | | | |
| Material Risk Score | N | 2 | 8 | 0 | 0 | 2 |
| Sample M | AS 19HR/D W/1/02 7/9 - Office 3 Cupboa rd | 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 |
| 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: 1m² | Approx: 65m² | Approx: 28m² | Approx: 28m² | Approx: 48m² | Approx: 9m² |
| Product type 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 |
| Product typ | Resins | Resins | Resins | Resins | Resins | Resins |
| 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 |



Site Name: 19 Highgate Road

| Location | Product typ | Product type and name | Extent | Accessibility | Condition | Surface treatment | Asbestos Type | Sample | Sample N no | Material Risk Score | Priority Risk Score | Total Score |
|--|-------------|------------------------------|--------------|--------------------|----------------|-------------------|---------------|---|--|---------------------------|---------------------------|----------------|
| Not Applicable, First floor, Staff Room | Resins | Bitumen to Stramit Boards | Approx: 20m² | Easy Accessibility | Good condition | Resins | Chrysotile | Strongly Presumed as previous sample | AS 19HR/D W/1/02 7/9 - Staff Room | 7 | | ¥ X |
| Not Applicable, First floor, Staircase Store | Resins | Bitumen to Stramit Boards | Approx: 4m² | Easy Accessibility | Good condition | Resins | Chrysotile | Strongly Presumed as previous sample | AS 19HR/D W/1/02 7/9 - Staircas e Store | 7 | | ₹ Z |
| Not Applicable, First floor, Walkway | Resins | Bitumen to Stramit Boards | Approx: 3m² | Easy Accessibility | Good condition | Resins | Chrysotile | Strongly Presumed as previous sample | AS 19HR/D W/1/02 7/9 - Walkwa y | 2 | | Z/S |
| Not Applicable, First floor, Ladies WC | Resins | Bitumen to Floor | Approx: 18m² | Easy Accessibility | Good condition | Resins | Chrysotile | Strongly Presumed as previous sample | AS 19HR/D W/1/03 8/11 - Ladies WC | 7 | | Z/A |
| Not Applicable, First floor, Mens WC | Resins | Bitumen to Floor | Approx: 14m² | Easy Accessibility | Good condition | Resins | Chrysotile | Strongly Presumed as previous sample | AS 19HR/D W/1/03 8/11 - Mens WC | 2 | | Z/S |
| Not Applicable, First floor, Showers | Resins | Bitumen to Floor | Approx: 9m² | Easy Accessibility | Good condition | Resins | Chrysotile | Strongly Presumed as previous sample | AS 19HR/D W/1/03 8/11 - Shower s | 2 | | ₹/Z |



Site Name: 19 Highgate Road

| Total Score | N/A | N/A | A/A | A/N | N/A | N/A | N/A |
|-------------------------------------|---|---|--|---|---|---|---|
| Priority Risk Score | | | | | | | |
| Aaterial Risk Score | 2 | 0 | 2 | 2 | 2 | 2 | 2 |
| Sample Material no Risk Score | AS 19HR/D W/G/00 4/4 - Cleaner Cupboa rd | AS 19HR/D W/G/00 4/4 - Corridor | 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 |
| 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: 92m² | Approx: 24m² | Approx: 15m² | Approx: 12m² |
| 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 and name | Resins | Resins | Resins | Resins | Resins | Resins | Resins |
| Location | Not Applicable, Ground floor, Cleaners cupboard | Not Applicable, Ground floor, Corridor 2 | Not Applicable, Ground floor, Disabled WC | Not Applicable, Ground floor, Lounge | Not Applicable, Ground floor, Office 1 | Not Applicable, Ground floor, Office 2 | Not Applicable, Ground floor, Office 3 |



| Site Name: | 19 Highgate Road |
|------------|------------------|
| | |

| Total Score | N/A | N/A | N/A | A/A |
|--|---|---|--|---|
| Priority Risk Score | | | | |
| Material Risk Score | 7 | 2 | 2 | 4 |
| Sample Sample Material no Risk Score | AS 19HR/D W/G/00 4/4 - Office 4 | AS 19HR/D W/G/00 4/4 - | AS 19HR/D W/G/00 4/4 - Toilets | Electric s |
| 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 | Endosed 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: 8m² | N/A |
| and name | Bitumen to Floor | Bitumen to Floor | Bitumen to Floor | Electrics |
| Product type and name | 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 Highgate Road, London, NW5 1JY | | Client Name: | nt Name: GM Developments | |
|-----------------------|-----------------------------------|-----------------|----------------|--------------------------|---------|
| | | F | Project Number | ARCS | 5/19HRD |
| 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 Typ | e: | NADIS | |
| Room: | Entrance Porch | Identification: | | Identified | |
| Surveyor Name | e: D. Watson & D. Parsley | Quantity: | | | |
| Drawing Ref: | | Accessibility: | | | |
| Asbestos ? | No | | | | |
| Date: | 21 February 2022 | | | erial Risk Score: | 0 |
| Next Inspection | n: Not Applicable | | | erial Risk Band: | NADIS |
| | | | Prio | rity Risk Score: | N/A |
| Action: | | No Action F | Required | | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | Clie | ent Name: | t Name: GM Development | |
|-----------------------|-----------------------------------|-----------------|---------------|------------------------|--------|
| | | Pro | oject 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 | | | al Risk Score: | 0 |
| Next Inspection | n: Not Applicable | | | al Risk Band: | NADIS |
| | | | Priority | y Risk Score: | N/A |
| Action: | | No Action Rec | quired | | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 19 H | Highgate Road, London, NW5 1JY | | lient Name: | GIVI Dev | elopments |
|-----------------------|--------------------------------|-------------------------|--------------------|-------------------------|-----------|
| | | P | roject Number: | ARCS | /19HRD |
| Location ID: | 81960 | Survey Type: | | RDS | |
| Location Ref: | 19HR/DW/G/002/3 | Product Type: | A | sbestos Insulating E | Board |
| Product: | Firebreaker Panels | Damage: | | Good condition | |
| Area: | Not Applicable | Treatment: | Alf | B painted or encaps | ulated |
| Floor: | Ground floor | Asbestos Type |): | Amosite & Chryso | tile |
| Room: | Ceiling void | Identification: | | Identified | |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | Approx: 1m ² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibilit | у |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 5 |
| Next Inspection: | 23 August 2022 | | | rial Risk Band: | Low Risk |
| _ | | | Priorit | ty Risk Score: | N/A |
| Action: | R | Removal Prior To Refurb | ishment/Demolition | 1 | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 19 | Highgate Road, London, NW5 1JY | Clie | ent Name: | GM Dev | velopments |
|-----------------------|--------------------------------|---------------------------|------------------|------------------|---------------|
| L | | 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 | ı |
| Area: [| Not Applicable | Treatment: | | Resins | |
| Floor: | Ground floor | Asbestos Type: | | Chrysotile | |
| Room: | Corridor 1 | Identification: | | Identified | |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | Approx: 14m² | |
| Drawing Ref: [| | Accessibility: | | Easy Accessibili | ty |
| Asbestos ? | Yes | | Maria | | |
| Date: | 21 February 2022 | | | ial Risk Score: | 2 |
| Next Inspection: | 21 February 2023 | | | ial Risk Band: | Very Low Risk |
| | | | Priorit | y Risk Score: | N/A |
| Action: | R | Removal Prior To Refurbis | hment/Demolition | | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: | 9 Highgate Road, London, NW5 1JY | | lient Name: | GM Developments | |
|-----------------------|----------------------------------|----------------------|--------------------|-------------------------------|--|
| | | P | roject 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 | y Presumed as previous sample | |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 24m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibility | |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: 2 | |
| Next Inspection | 1: 21 February 2023 | | | rial Risk Band: Very Low Risl | |
| | | | Priori | ty Risk Score: N/A | |
| Action: | Remo | oval Prior To Refurb | ishment/Demolition | 1 | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | | Client Name: | GM De | velopments |
|-----------------------|-----------------------------------|---------------------|--------------------|----------------------|---------------|
| | | 1 | Project Number | r: ARC | S/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 | າ |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | Ground floor | Asbestos Typ | oe: | Chrysotile | |
| Room: | Disabled WC | Identification: | Strong | gly Presumed as prev | vious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 8m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibil | ity |
| Asbestos ? | Yes | $\overline{\ \ }$ | | | |
| Date: | 21 February 2022 | $\overline{1}$ | | erial Risk Score: | 2 |
| Next Inspection | 21 February 2023 | | | erial Risk Band: | Very Low Risk |
| | | _ | Prio | ority Risk Score: | N/A |
| Action: | Ren | moval Prior To Refu | rbishment/Demoliti | on | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | | lient Name: | GM Dev | velopments |
|-----------------------|-----------------------------------|----------------------|---------------------|------------------|---------------|
| | | F | roject Number: | ARCS | 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 condition | l |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | Ground floor | Asbestos Typ | э: | Chrysotile | |
| Room: | Toilets | Identification: | Strongly | Presumed as prev | rious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 8m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ty |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 2 |
| Next Inspection | 21 February 2023 | | | rial Risk Band: | Very Low Risk |
| | | _ | Priori | ty Risk Score: | N/A |
| Action: | Ren | noval Prior To Refur | oishment/Demolition | 1 | |
| | | | | | |
| Material Comments: | | | | 1 | 11 |

| Site Address: 1 | 9 Highgate Road, London, NW5 1JY | CI | lient Name: | GM Developments |
|-----------------------|----------------------------------|-----------------------|--------------------|------------------------------|
| | | Pı | roject 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 ² |
| Drawing Ref: | | Accessibility: | | Easy Accessibility |
| Asbestos ? | Yes | | | |
| Date: | 21 February 2022 | | | ial Risk Score: 2 |
| Next Inspection | 21 February 2023 | | | ial Risk Band: Very Low Risk |
| | | | Priorit | y Risk Score: N/A |
| Action: | Rem | moval Prior To Refurb | ishment/Demolition | |
| | | | | |
| Material Comments: | | | | |

| Site Address: 19 | 9 Highgate Road, London, NW5 1JY | | Client Name: | GM Dev | velopments |
|-----------------------|----------------------------------|---------------------|-------------------|----------------------|---------------|
| | | ı | Project Number | TE 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 | 1 |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | Ground floor | Asbestos Typ | e: | Chrysotile | |
| Room: | Corridor 2 | Identification: | Stron | gly Presumed as prev | vious sample |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | Approx: 9m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ity |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | erial Risk Score: | 2 |
| Next Inspection: | 21 February 2023 | | | erial Risk Band: | Very Low Risk |
| | | | Pric | rity Risk Score: | N/A |
| Action: | Re | moval Prior To Refu | bishment/Demoliti | on | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 1 | 9 Highgate Road, London, NW5 1JY | | Client Name | s: G | GM Developments |
|-----------------------|---------------------------------------|-------------------|----------------|--------------------|--------------------|
| L | | | Project Num | ber: | ARCS/19HRD |
| Location ID: | 81967 | Survey Type | e: | RD |)S |
| Location Ref: | AS 19HR/DW/G/004/4 - Cleaner Cupboard | Product Typ | e: | Res | ins |
| Product: | Bitumen to Floor | Damage: | | Good co | ondition |
| Area: | Not Applicable | Treatment: | | Res | ins |
| Floor: | Ground floor | Asbestos Ty | /pe: | Chrys | sotile |
| Room: | Cleaners cupboard | Identification | n: St | trongly Presumed a | as previous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx | c: 5m² |
| Drawing Ref: | | Accessibility | <i>r</i> : | Easy Acc | essibility |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 |] | | Material Risk So | |
| Next Inspection | 21 February 2023 |] | | Material Risk Ba | |
| | | | F | Priority Risk Sco | ore: N/A |
| Action: | Rem | oval Prior To Ref | urbishment/Dem | nolition | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | | Client Name: | GM Developments |
|-----------------------|-----------------------------------|----------------------|--------------------|---------------------------------|
| L | | F | Project Number | : ARCS/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 |
| Area: | Not Applicable | Treatment: | | Resins |
| Floor: | Ground floor | Asbestos Type | e: | Chrysotile |
| Room: | Office 3 | dentification: | Strong | gly Presumed as previous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 12m ² |
| Drawing Ref: | | Accessibility: | | Easy Accessibility |
| Asbestos ? | Yes |] | | |
| Date: | 21 February 2022 |] | | erial Risk Score: 2 |
| Next Inspection | 21 February 2023 |] | | erial Risk Band: Very Low Risk |
| | | , | Prior | rity Risk Score: N/A |
| Action: | Remo | oval Prior To Refurl | bishment/Demolitic | on |
| | | | | |
| Material Comments: | | | | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | С | lient Name: | GM Dev | velopments |
|-----------------------|-----------------------------------|----------------------|--------------------|--------------------------|---------------|
| | | Р | roject 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 | 1 |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | Ground floor | Asbestos Type | e: | Chrysotile | |
| Room: | Office 4 | Identification: | Strongly | / Presumed as prev | vious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 15m ² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ity |
| Asbestos ? | Yes |] | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 2 |
| Next Inspection | 21 February 2023 | | | rial Risk Band: | Very Low Risk |
| | | ' | Priori | ty Risk Score: | N/A |
| Action: | Remo | oval Prior To Refurb | ishment/Demolition | 1 | |
| | | | | | |
| Material Comments: | | 1 | | | |

| Site Address: | 9 Highgate Road, London, NW5 1JY | | lient Name: | GM Developments |
|-----------------------|----------------------------------|-----------------------|--------------------|-------------------------------|
| | | Р | roject Number: | ARCS/19HRD |
| Location ID: | 81970 | Survey Type: | | RDS |
| Location Ref: | AS 19HR/DW/G/004/4 - Office 5 | Product Type: | | Resins |
| Product: | Bitumen to Floor | Damage: | | Good condition |
| Area: | Not Applicable | Treatment: | | Resins |
| Floor: | Ground floor | Asbestos Type | e: | Chrysotile |
| Room: | Office 5 | Identification: | Strongl | y Presumed as previous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 35m ² |
| Drawing Ref: | | Accessibility: | | Easy Accessibility |
| Asbestos ? | Yes | | | |
| Date: | 21 February 2022 | | | rial Risk Score: 2 |
| Next Inspection | 21 February 2023 | | | rial Risk Band: Very Low Risk |
| | | | FIIOII | ty Risk Score: N/A |
| Action: | Ren | noval Prior To Refurb | ishment/Demolition | n |
| | | | | |
| Material Comments: | | | | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | C | Client Name: | GM Dev | velopments |
|-----------------------|-----------------------------------|-----------------------|---------------------|--------------------|---------------|
| | | P | roject 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 | ə: | Chrysotile | |
| Room: | Lounge | Identification: | Strongly | y Presumed as prev | rious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 92m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ity |
| Asbestos ? | Yes | | Mate | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 2 |
| Next Inspection | 21 February 2023 | | | rial Risk Band: | Very Low Risk |
| | | | Priorii | ty Risk Score: | N/A |
| Action: | Ren | moval Prior To Refurb | oishment/Demolition | 1 | |
| | | | | | |
| Material Comments: | | 100 | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | Cli | ent Name: | GM Developments | |
|-----------------------|-----------------------------------|-----------------|-----------------|----------------------|--|
| | | Pro | oject 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 | | | | |
| Date: | 21 February 2022 | | | ial Risk Score: 0 | |
| Next Inspection | Not Applicable | | | ial Risk Band: NADIS | |
| | | | Priorit | y Risk Score: N/A | |
| Action: | | No Action Re | quired | | |
| | | | | | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | Client | t Name: | GIVI DEVE | elopments |
|-----------------|-----------------------------------|-------------------|----------------|-------------------|------------|
| L | | Projec | 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 Pr | resumed as previo | ous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | | |
| Drawing Ref: | | Accessibility: | | | |
| Asbestos ? | No | | * # - t - wied | | |
| Date: | 21 February 2022 | | | Risk Score: | 0 |
| Next Inspection | Not Applicable | | | Risk Band: | NADIS |
| | | | Рпопцу г | Risk Score: | N/A |
| Action: | | No Action Require | red | | |
| | | | | | |
| Material | | | | | |

| Site Address: 19 | 9 Highgate Road, London, NW5 1JY | CI | lient Name: | GM Developments | |
|-----------------------|----------------------------------|-----------------|------------------|-----------------------------|--|
| L | | Pı | roject Number: [| ARCS/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 | : | 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 | | | ial Risk Score: 0 | |
| Next Inspection: | Not Applicable | = | | ial Risk Band: NADIS | |
| | | _ | Priorit | y Risk Score: N/A | |
| Action: | | No Action Re | equired | | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 1 | 9 Highgate Road, London, NW5 1JY | | Client Name: | GM Developments |
|-----------------------|---|----------------|--------------|-----------------------------------|
| | | | Project Numb | er: ARCS/19HRD |
| Location ID: | 81975 | Survey Type | | RDS |
| Location Ref: | AS 19HR/DW/G/005/5 - First Floor Staff Room | Product Type | e : | NADIS |
| Product: | Door Header | Damage: | | NADIS |
| Area: | Not Applicable | Treatment: | | NADIS |
| Floor: | First floor | Asbestos Ty | pe: | NADIS |
| Room: | Staff Room | Identification | Stro | ongly Presumed as previous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | |
| Drawing Ref: | | Accessibility: | | |
| Asbestos ? | No | | | |
| Date: | 21 February 2022 | | | aterial Risk Score: 0 |
| Next Inspection | : Not Applicable | | | aterial Risk Band: NADIS |
| | | | Pr | riority Risk Score: N/A |
| Action: | | No Action | Required | |
| | | | | |
| Material Comments: | | | | de |

| Site Address: | 19 Highgate Road, London, NW5 1JY | CI | ient Name: | GM Dev | velopments |
|-----------------------|-----------------------------------|------------------------|-------------------|--------------------|---------------|
| | | Pr | oject Number: | ARC | S/19HRD |
| Location ID: | 81976 | Survey Type: | | RDS | |
| Location Ref: | 19HR/DW/G/009/6 | Product Type: | | Resins | |
| Product: | Sink Pad | Damage: | | Good condition | 1 |
| Area: | Not Applicable | Treatment: | Cor | mposite asbestos n | naterials |
| Floor: | Ground floor | Asbestos Type | : | Chrysotile | |
| Room: | Office 2 | Identification: | | Identified | |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 3 No. | |
| Drawing Ref: | | Accessibility: | | Easy Accessibil | ity |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | ial Risk Score: | 2 |
| Next Inspection | n: 21 February 2023 | | | ial Risk Band: | Very Low Risk |
| | | _ | Priorit | ty Risk Score: | N/A |
| Action: | Rem | noval Prior To Refurbi | shment/Demolition | 1 | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 19 Hig | ghgate Road, London, NW5 1JY | Client | : Name: | GM Developments | |
|-----------------------|------------------------------|------------------|------------|------------------|--|
| | | Projec | ct Number: | ARCS/19HRD | |
| 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 | | | Risk Score: 0 | |
| Next Inspection: | Not Applicable | | | Risk Band: NADIS | |
| | | | Priority I | Risk Score: N/A | |
| Action: | | No Action Requir | ed | | |
| | | | Asos | | |
| Material Comments: | | | 17 | | |

| _ | ssessment (Photo) Sorted 19 Highgate Road, London, NW5 1JY | l by: Location ID Client | Name: | GM Dev | elopments |
|-----------------|---|--------------------------|------------|-------------|-----------|
| | | Projec | ct 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 | D. Watson & D. Parsley | Quantity: | | | |
| Drawing Ref: | | Accessibility: | | | |
| Asbestos ? | No | | Matarial | Dial- Carre | |
| Date: | 21 February 2022 | | | Risk Score: | 0 |
| Next Inspection | n: Not Applicable | | | Risk Band: | NADIS |
| | | | Phonty | Risk Score: | N/A |
| Action: | | No Action Requir | ed | | |
| | | | | | |

Material Comments:

| Site Address: 1 | 9 Highgate Road, London, NW5 1JY | Clier | nt Name: | GM Dev | relopments |
|-----------------------|----------------------------------|---------------------------|-----------------|------------------|---------------|
| | | Proje | ect Number: | ARCS | S/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 | l |
| 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: 13m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ty |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | al Risk Score: | 2 |
| Next Inspection | 21 February 2023 | | | al Risk Band: | Very Low Risk |
| | | | Priority | / Risk Score: | N/A |
| Action: | Re | moval Prior To Refurbishr | ment/Demolition | | |
| | | | | | |
| Material Comments: | | | | | _ |

| Site Address: 19 | SS: 19 Highgate Road, London, NW5 1JY | | Client Name: | GM Dev | GM Developments | |
|--------------------|---------------------------------------|----------------------|------------------|-----------------------|-----------------|--|
| | | F | Project Numbe | r: ARCS | ARCS/19HRD | |
| Location ID: | 81980 | Survey Type: | | RDS | | |
| Location Ref: | AS 19HR/DW/1/027/9 - Staircase Store | Product Type | | Resins | | |
| Product: | Bitumen to Stramit Boards | Damage: | | Good condition | l | |
| Area: | Not Applicable | Treatment: | | Resins | | |
| Floor: | First floor | Asbestos Typ | e: | Chrysotile | | |
| Room: | Staircase Store | Identification: | Stron | ngly Presumed as prev | rious sample | |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | Approx: 4m² | | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ty | |
| Asbestos ? | Yes | | | | | |
| Date: | 21 February 2022 | | | terial Risk Score: | 2 | |
| Next Inspection: | 21 February 2023 |] | | terial Risk Band: | Very Low Risk | |
| | | | PIIC | ority Risk Score: | N/A | |
| Action: | Rem | noval Prior To Refur | bishment/Demolit | tion | | |
| | | | | | | |
| Material Comments: | | | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | C | lient Name: | GM Developments |
|-----------------------|-----------------------------------|-----------------------|---------------------|------------------------------|
| | | Р | roject Number: | ARCS/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 condition |
| Area: | Not Applicable | Treatment: | | Resins |
| Floor: | First floor | Asbestos Type | e: | Chrysotile |
| Room: | Landing | Identification: | Strongly | Presumed as previous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 10m ² |
| Drawing Ref: | | Accessibility: | | Easy Accessibility |
| Asbestos ? | Yes | | | |
| Date: | 21 February 2022 |] | | rial Risk Score: 2 |
| Next Inspection | 21 February 2023 |] | | rial Risk Band: Very Low Ris |
| | | - | Priorit | ty Risk Score: N/A |
| Action: | Rem | noval Prior To Refurb | oishment/Demolition | 1 |
| | | | | |
| Material Comments: | | | | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | | Client Name: | GM Developments |
|-----------------------|-----------------------------------|-----------------------|-------------------|---------------------------------|
| L | | F | roject Number | ARCS/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: | Strong | gly Presumed as previous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 4m² |
| Drawing Ref: | | Accessibility: | | Easy Accessibility |
| Asbestos ? | Yes | | | |
| Date: | 21 February 2022 | | | erial Risk Score: 2 |
| Next Inspection | 21 February 2023 | | | erial Risk Band: Very Low Ris |
| | | | Prio | rity Risk Score: N/A |
| Action: | Ren | moval Prior To Refurl | oishment/Demoliti | on |
| | | | | |
| Material Comments: | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | C | lient Name: | GM Developments |
|-----------------------|-----------------------------------|-----------------------|--------------------|------------------------------|
| | | P | roject Number: [| ARCS/19HRD |
| Location ID: | 81983 | Survey Type: | | RDS |
| Location Ref: | AS 19HR/DW/1/027/9 - Walkway | Product Type: | | Resins |
| Product: | Bitumen to Stramit Boards | Damage: | | Good condition |
| Area: | Not Applicable | Treatment: | | Resins |
| Floor: | First floor | Asbestos Type | : | Chrysotile |
| Room: | Walkway | Identification: | Strongly | Presumed as previous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 3m² |
| Drawing Ref: | | Accessibility: | | Easy Accessibility |
| Asbestos ? | Yes | | | |
| Date: | 21 February 2022 | | | ial Risk Score: 2 |
| Next Inspection | 21 February 2023 | | | ial Risk Band: Very Low Risk |
| | | | Priorit | y Risk Score: N/A |
| Action: | Ren | moval Prior To Refurb | ishment/Demolition | |
| | | | | |
| Material Comments: | | | | |

| Site Address: | 9 Highgate Road, London, NW5 1JY | | Client Name: | GM Developments |
|-----------------------|----------------------------------|----------------------|---------------------|---------------------------------|
| | | F | Project Number | ARCS/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 |
| Area: | Not Applicable | Treatment: | | Resins |
| Floor: | First floor | Asbestos Typ | e: | Chrysotile |
| Room: | Office 2 | Identification: | Strong | gly Presumed as previous sample |
| Surveyor Name | e: D. Watson & D. Parsley | Quantity: | | Approx: 24m² |
| Drawing Ref: | | Accessibility: | | Easy Accessibility |
| Asbestos ? | Yes | | | |
| Date: | 21 February 2022 | | | erial Risk Score: 2 |
| Next Inspection | n: 21 February 2023 | | | erial Risk Band: Very Low Risk |
| | | | Prio | rity Risk Score: N/A |
| Action: | Rem | noval Prior To Refur | bishment/Demolition | on |
| | | | | |
| Material Comments: | | | | |

| Site Address: 19 | Highgate Road, London, NW5 1JY | | Client Name: | GM Dev | velopments | |
|------------------|----------------------------------|---------------------|---------------------|--------------------|---------------|--|
| | | | Project 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 condition | 1 | |
| Area: | Not Applicable | Treatment: | | Resins | | |
| Floor: | First floor | Asbestos Typ | e: | Chrysotile | | |
| Room: | Open Area 1 | Identification: | Strongly | y Presumed as prev | /ious sample | |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | Approx: 65m² | | |
| Drawing Ref: | | Accessibility: | | Easy Accessibility | | |
| Asbestos ? | Yes | | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 2 | |
| Next Inspection: | 21 February 2023 | | | rial Risk Band: | Very Low Risk | |
| | | | Priori | ty Risk Score: | N/A | |
| Action: | Rer | moval Prior To Refu | bishment/Demolition | า | | |
| | | | | | | |
| Material | | | | | | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | С | lient Name: | GM Dev | elopments |
|-----------------------|-----------------------------------|----------------------|--------------------|-------------------|---|
| | | Р | 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 | dentification: | Strongly | Presumed as previ | ous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 28m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibilit | у |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | ial Risk Score: | 2 |
| Next Inspection | 21 February 2023 | | | ial Risk Band: | Very Low Risk |
| | | | Priorit | y Risk Score: | N/A |
| Action: | Remo | oval Prior To Refurb | ishment/Demolition | | |
| | | | V. | | |
| | | | | | 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A |
| Material Comments: | | | | | |

| Site Address: 1 | 9 Highgate Road, London, NW5 1JY | | Client Name: | GM Dev | velopments |
|-----------------------|----------------------------------|---------------------|---------------------|--------------------|---------------|
| | | · | Project Number: | ARCS | S/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 Typ | e: | Chrysotile | |
| Room: | Open Area 3 | Identification: | Strongly | / Presumed as prev | rious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 28m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ty |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 2 |
| Next Inspection: | 21 February 2023 | | | rial Risk Band: | Very Low Risk |
| | | | Priori | ty Risk Score: | N/A |
| Action: | Rer | moval Prior To Refu | bishment/Demolition | 1 | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 19 H | Highgate Road, London, NW5 1JY | | Client Name: | GM Dev | /elopments | |
|-----------------------|----------------------------------|----------------------|---|--------------------|---------------|--|
| | | | Project Number: | ARCS | ARCS/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 condition | | |
| Area: | Not Applicable | Treatment: | | Resins | | |
| Floor: | First floor | Asbestos Typ | e: | Chrysotile | | |
| Room: | Open Area 4 | Identification: | Strongly | y Presumed as prev | rious sample | |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | Approx: 48m² | | |
| Drawing Ref: | | Accessibility: | | Easy Accessibility | | |
| Asbestos ? | Yes | | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 2 | |
| Next Inspection: | 21 February 2023 | | | rial Risk Band: | Very Low Risk | |
| | | | Priori | ty Risk Score: | N/A | |
| Action: | Ren | moval Prior To Refur | bishment/Demolition | า | | |
| | | | THE REAL PROPERTY OF THE PARTY | | | |
| Material Comments: | | | | | | |

| | Sessment (Photo) Sorted by Highgate Road, London, NW5 1JY | Client Name: | | GM Developments | | | |
|------------------|---|-----------------------|---------------------|------------------------|---------------|--|--|
| | | Р | roject 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 | i | | |
| Area: | Not Applicable | Treatment: | | Resins | | | |
| Floor: | First floor | Asbestos Type | э: | Chrysotile | | | |
| Room: | Corridor 1 | Identification: | Strongly | / Presumed as prev | ious sample | | |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | Approx: 8m² | | | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ty | | |
| Asbestos ? | Yes | | | | | | |
| Date: | 21 February 2022 | | | Material Risk Score: 2 | | | |
| Next Inspection: | 21 February 2023 | | | rial Risk Band: | Very Low Risk | | |
| | | | Priori | ty Risk Score: | N/A | | |
| Action: | Re | moval Prior To Refurb | oishment/Demolition | 1 | | | |
| | | | | | | | |

Material Comments:

| Site Address: 19 H | 9 Highgate Road, London, NW5 1JY | | nt Name: | GM Developments | |
|-----------------------|----------------------------------|--------------------------|-----------------|------------------|---------------|
| | | Proj | ect Number: | ARCS | S/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 Type: | | Chrysotile | |
| Room: | Ladies WC | Identification: | Strongly I | Presumed as prev | ious sample |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | | |
| Drawing Ref: | | Accessibility: | | ty | |
| Asbestos ? | Yes | | | 15:10 | |
| Date: | 21 February 2022 | | | al Risk Score: | 2 |
| Next Inspection: | 21 February 2023 | | | al Risk Band: | Very Low Risk |
| | | | Priority | Risk Score: | N/A |
| Action: | Rer | moval Prior To Refurbish | ment/Demolition | | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 19 | 9 Highgate Road, London, NW5 1JY | | ent Name: | GM Dev | relopments |
|------------------|----------------------------------|-------------------------|------------------|------------------|---------------|
| L | | Pro | oject Number: | ARCS | 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 condition | l |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | First floor | Asbestos Type: | | Chrysotile | |
| Room: | Showers | Identification: | Strongly I | Presumed as prev | ious sample |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | Approx: 9m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ty |
| Asbestos ? | Yes | | Maria | -1 B!-1 O | |
| Date: | 21 February 2022 | | | al Risk Score: | 2 |
| Next Inspection: | 21 February 2023 | | | al Risk Band: | Very Low Risk |
| | | | Priority | Risk Score: | N/A |
| Action: | Re | moval Prior To Refurbis | hment/Demolition | | |
| | | | | | |
| Material | | | Y | | |

| Site Address: 19 | Highgate Road, London, NW5 1JY | Client | Name: | GM Deve | lopments |
|------------------|--------------------------------|-----------------------------|----------------|--------------------|---------------|
| | | Projec | ct Number: | ARCS/ | 19HRD |
| Location ID: | 81993 | Survey Type: | | RDS | |
| Location Ref: [| AS 19HR/DW/1/027/9 - Mens WC | Product Type: | | Resins | |
| Product: [| Bitumen to Stramit Boards | Damage: | | Good condition | |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | First floor | Asbestos Type: | | Chrysotile | |
| Room: [| Mens WC | Identification: | Strongly Pre | esumed as previo | us sample |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | Approx: 14m² | | |
| Drawing Ref: | | Accessibility: | F | Easy Accessibility | |
| Asbestos ? | Yes | | Material | | |
| Date: | 21 February 2022 | | | Risk Score: | 2 |
| Next Inspection: | 21 February 2023 | | | _ | Very Low Risk |
| | | | Priority r | Risk Score: | N/A |
| Action: | Re | emoval Prior To Refurbishme | ent/Demolition | | |
| | | | | | |
| | | | | | |

| Site Address: 1 | 9 Highgate Road, London, NW5 1JY | | Client Name: | | GM Dev | velopments |
|-----------------------|--|-----------------------|---------------|--------------|----------------|---------------|
| | | | Project Num | ber: | ARCS/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: | | Go | ood condition |) |
| Area: | Not Applicable | Treatment: | | | Resins | |
| Floor: | First floor | _ Asbestos Tyr | pe: | | Chrysotile | |
| Room: | Fire Exit Staircase | Identification: | St | rongly Presu | ımed as prev | rious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | F | Approx: 9m² | |
| Drawing Ref: | | Accessibility: | | Eas | sy Accessibili | ty |
| Asbestos ? | Yes | | | | | |
| Date: | 21 February 2022 | | | | sk Score: | 2 |
| Next Inspection | 21 February 2023 |] | | /laterial Ri | | Very Low Risk |
| | | | F | Priority Ris | sk Score: | N/A |
| Action: | Rem | oval Prior To Refu | rbishment/Dem | olition | | |
| | | | | | | |
| Material Comments: | | | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | (| Client Name: | GM Developments |
|-----------------------|-----------------------------------|---------------------|---------------------|---------------------------------|
| | | | Project Number | : ARCS/19HRD |
| Location ID: | 81995 | 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 Typ | e: | Chrysotile |
| Room: | Office 3 | Identification: | Strong | gly Presumed as previous sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 20m² |
| Drawing Ref: | | Accessibility: | | Easy Accessibility |
| Asbestos ? | Yes | | | |
| Date: | 21 February 2022 | | | erial Risk Score: 2 |
| Next Inspection | 21 February 2023 |] | | erial Risk Band: Very Low Risk |
| | | | Prio | rity Risk Score: N/A |
| Action: | Rem | noval Prior To Refu | bishment/Demolition | on |
| | | | | |
| Material Comments: | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | | lient Name: | GM Dev | relopments |
|-----------------------|--|----------------------|--------------------|-------------------------|---------------|
| | | Pi | roject Number: | ARCS | S/19HRD |
| Location ID: | 81996 | Survey Type: | | RDS | |
| Location Ref: | AS 19HR/DW/1/027/9 - Office 3 Cupboard | Product Type: | | Resins | |
| Product: | Bitumen to Stramit Boards | Damage: | | Good condition | ı |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | First floor | Asbestos Type | : | Chrysotile | |
| Room: | Office 3 Cupboard | Identification: | Strongly | y Presumed as prev | ious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 1m ² | |
| Drawing Ref: | | Accessibility: | | ty | |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 2 |
| Next Inspection | 21 February 2023 | | | rial Risk Band: | Very Low Risk |
| | | - | Priori | ty Risk Score: | N/A |
| Action: | Rem | oval Prior To Refurb | ishment/Demolition | 1 | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | | Client Name: | GM Developments |
|-----------------------|---|-----------------|-----------------|------------------------------|
| | | P | Project Number: | ARCS/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 |
| Area: | Not Applicable | Treatment: | | Resins |
| Floor: | First floor | Asbestos Type | e: | Chrysotile |
| Room: | Staff Room | Identification: | Strongly | Presumed as previous sample |
| Surveyor Name | e: D. Watson & D. Parsley | Quantity: | | Approx: 20m² |
| Drawing Ref: | | Accessibility: | | Easy Accessibility |
| Asbestos ? | Yes | | Materia | |
| Date: | 21 February 2022 | | | ial Risk Score: 2 |
| Next Inspection | n: 21 February 2023 | | | ial Risk Band: Very Low Risk |
| | | | Priorit | y Risk Score: N/A |
| Action: | Removal Prior To Refurbishment/Demolition | | | |
| | | | | |
| Material Comments: | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | CI | lient Name: | GM Dev | elopments |
|-----------------------|-----------------------------------|-----------------|----------------|-----------------|-----------|
| | | Pr | roject Number: | ARCS | /19HRD |
| Location ID: | 81998 | Survey Type: | | RDS | |
| Location Ref: | 19HR/DW/1/031/10 | Product Type: | | NADIS | |
| Product: | Floor tile | Damage: | | NADIS | |
| Area: | Not Applicable | Treatment: | | NADIS | |
| Floor: | First floor | Asbestos Type | : | NADIS | |
| Room: | Walkway | Identification: | | Identified | |
| Surveyor Name | e: D. Watson & D. Parsley | Quantity: | | | |
| Drawing Ref: | | Accessibility: | | | |
| Asbestos ? | No | | | | |
| Date: | 21 February 2022 | | | ial Risk Score: | 0 |
| Next Inspection | n: Not Applicable | | | ial Risk Band: | NADIS |
| | | | Priorit | y Risk Score: | N/A |
| Action: | No Action Required | | | | |
| | | | EAR | | |
| Material Comments: | | | | | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | (| Client Name: | GM Dev | /elopments |
|-----------------------|-----------------------------------|-----------------|-----------------|--------------------|--------------|
| | | F | Project Number: | ARCS | S/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 Typ | e: | NADIS | |
| Room: | Office 2 | Identification: | Strongly | y Presumed as prev | rious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | | |
| Drawing Ref: | | Accessibility: | | | |
| Asbestos ? | No | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 0 |
| Next Inspection | Not Applicable | | | rial Risk Band: | NADIS |
| | | | Priori | ty Risk Score: | N/A |
| Action: | No Action Required | | | | |
| | | | | | |
| Material Comments: | | | | Oi de | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | CI | ient Name: | GM Dev | velopments | |
|-----------------------|-----------------------------------|---|---------------|------------------|---------------|--|
| | | Pr | oject Number: | ARCS | S/19HRD | |
| Location ID: | 82000 | Survey Type: | | RDS | | |
| Location Ref: | 19HR/DW/1/038/11 | Product Type: | | Resins | | |
| Product: | Bitumen to Floor | Damage: | | Good condition | 1 | |
| Area: | Not Applicable | Treatment: | | Resins | | |
| Floor: | First floor | Asbestos Type | : | Chrysotile | | |
| Room: | Corridor 1 | Identification: | | Identified | | |
| Surveyor Name | e: D. Watson & D. Parsley | Quantity: | | Approx: 8m² | | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ity | |
| Asbestos ? | Yes | | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 2 | |
| Next Inspection | n: 21 February 2023 |] | | rial Risk Band: | Very Low Risk | |
| | | | Prior | ity Risk Score: | N/A | |
| Action: | Rem | Removal Prior To Refurbishment/Demolition | | | | |
| | | | | | | |
| Material Comments: | | | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | Clie | ent Name: | GIVI Dev | /elopments |
|-----------------------|-----------------------------------|-------------------------|------------------|------------------|---------------|
| | | Pro | ject Number: [| ARCS | S/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 | 1 |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | First floor | Asbestos Type: | | Chrysotile | |
| Room: | Ladies WC | Identification: | Strongly | Presumed as prev | rious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 18m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ity |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | ial Risk Score: | 2 |
| Next Inspection | 21 February 2023 | | | ial Risk Band: | Very Low Risk |
| | | | Priorit | y Risk Score: | N/A |
| Action: | Rer | moval Prior To Refurbis | hment/Demolition | | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | с | lient Name: | GM Dev | /elopments |
|-----------------------|---|-----------------|------------------|------------------|---------------|
| L | | Р | roject Number: [| ARCS | S/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 | 1 |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | First floor | Asbestos Type | e: | Chrysotile | |
| Room: | Showers | Identification: | Strongly | Presumed as prev | rious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 9m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ity |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | ial Risk Score: | 2 |
| Next Inspection | 21 February 2023 | | | ial Risk Band: | Very Low Risk |
| | | | Priorit | y Risk Score: | N/A |
| Action: | Removal Prior To Refurbishment/Demolition | | | | |
| | | | | | |
| Material Comments: | | | | *** | |

| Site Address: 1 | 19 Highgate Road, London, NW5 1JY | | Client Name: | GM De | velopments |
|-----------------------|---|-------------------|----------------|---------------------|---------------|
| | | F | Project Number | : ARC | S/19HRD |
| Location ID: | 82003 | Survey Type: | | RDS | |
| Location Ref: | AS 19HR/DW/1/038/11 - Mens WC | Product Type: | | Resins | |
| Product: | Bitumen to Floor | Damage: | | Good condition | າ |
| Area: | Not Applicable | Treatment: | | Resins | |
| Floor: | First floor | Asbestos Typ | e: | Chrysotile | |
| Room: | Mens WC | Identification: | Strong | ly Presumed as prev | vious sample |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | Approx: 14m² | |
| Drawing Ref: | | Accessibility: | | Easy Accessibil | ity |
| Asbestos ? | Yes | | | | - |
| Date: | 21 February 2022 | | | erial Risk Score: | 2 |
| Next Inspection | 21 February 2023 |] | | erial Risk Band: | Very Low Risk |
| | | _ | Prior | rity Risk Score: | N/A |
| Action: | Removal Prior To Refurbishment/Demolition | | | | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: | 19 Highgate Road, London, NW5 1JY | CI | ient Name: | GM Developments | |
|-----------------------|-----------------------------------|-----------------|---------------|----------------------|--|
| | | Pr | oject 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 | \exists | | | |
| Date: | 21 February 2022 | $\overline{}$ | | ial Risk Score: 0 | |
| Next Inspection | n: Not Applicable | $\overline{}$ | | ial Risk Band: NADIS | |
| | | | Priorit | y Risk Score: N/A | |
| Action: | No Action Required | | | | |
| | | | | | |
| Material Comments: | | | | | |

| Site Address: 19 | Highgate Road, London, NW5 1JY | CI | ient Name: | GIVI Dev | velopments |
|--------------------|---|-----------------|---------------|--------------------|---------------|
| | | Pr | oject Number: | ARCS | S/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 | 1 |
| Area: | Not Applicable | Treatment: | Cor | mposite asbestos m | naterials |
| Floor: | External | Asbestos Type | : | Chrysotile | |
| Room: | Plant room | Identification: | | Identified | |
| Surveyor Name: | D. Watson & D. Parsley | Quantity: | | Approx: 6 Linear M | etres |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ty |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | rial Risk Score: | 3 |
| Next Inspection: | 21 February 2023 | | | rial Risk Band: | Very Low Risk |
| | | | Priori | ty Risk Score: | N/A |
| Action: | Removal Prior To Refurbishment/Demolition | | | | |
| | | | | | |
| Material Comments: | | | | | _ |

| Site Address: | 19 Highgate Road, London, NW5 1JY | | Client Name: | GM Dev | relopments |
|-----------------------|-----------------------------------|-----------------|----------------|-------------------|------------|
| | | I | Project Number | : ARCS | S/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 Typ | e: | NADIS | |
| Room: | Plant room | Identification: | | Identified | |
| Surveyor Name | D. Watson & D. Parsley | Quantity: | | | |
| Drawing Ref: | | Accessibility: | | | |
| Asbestos ? | No | | | | |
| Date: | 21 February 2022 | | | erial Risk Score: | 0 |
| Next Inspection | Not Applicable | | | erial Risk Band: | NADIS |
| | | | Prio | rity Risk Score: | N/A |
| Action: | No Action Required | | | | |
| | | | | | |
| Material Comments: | | | | | |

| _ | SSESSMENT (Photo) Sorted b 19 Highgate Road, London, NW5 1JY | y: Location ID Clie | ent Name: | GM Dev | relopments |
|-----------------|---|-------------------------|------------------|--------------------|---------------|
| | | Pro | ject Number: [| ARCS | S/19HRD |
| 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: | Com | nposite asbestos m | naterials |
| Floor: | External | Asbestos Type: | | Chrysotile | |
| Room: | External | Identification: | | Identified | |
| Surveyor Name | e: D. Watson & D. Parsley | Quantity: | A | pprox: 80 Linear M | etres |
| Drawing Ref: | | Accessibility: | | Easy Accessibili | ty |
| Asbestos ? | Yes | | | | |
| Date: | 21 February 2022 | | | al Risk Score: | 2 |
| Next Inspection | n: 21 February 2023 | | | al Risk Band: | Very Low Risk |
| | | | Priorit | y Risk Score: | N/A |
| Action: | Rei | moval Prior To Refurbis | hment/Demolition | | |
| | | | | | |

Material Comments:

Material Assessment (Photo) Sorted by: Location ID GM Developments Client Name: 19 Highgate Road, London, NW5 1JY Site Address: ARCS/19HRD **Project Number:** 82008 **RDS** Location ID: Survey Type: Electrics Ropes and woven textiles Location Ref: **Product Type:** Electrics Good condition Product: Damage: Enclosed sprays and lagging Not Applicable Area: Treatment: External Chrysotile Floor: Asbestos Type: Room: Plant room Identification: Presumed D. Watson & D. Parsley N/A Surveyor Name: Quantity: Difficult Accessibility **Drawing Ref:** Accessibility: Asbestos? Yes Material Risk Score: 21 February 2022 Date: Material Risk Band: Very Low Risk **Next Inspection:** 21 February 2023 Priority Risk Score: N/A

Action: Apply Warning Labels



Material Comments:

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

APPENDIX M



3rd 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: 3rd 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
- 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, CONCR | ETE BREAKING |
| 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 18th 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



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: 21st 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



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



APPENDIX O



BS5228 Assessment

19-37 Highgate Road Camden, London

Reference: 9368/JL

19-37 Highgate Road Camden, London



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

| Document Control | | | | |
|------------------|------------------------------|----------|-------------|--------------|
| Version: | Revision Description: | Date: | Author: | Reviewed by: |
| 1.0 | 1 st 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.

Project Title: Section 61 – 19-37 Highgate Road, Camden, London



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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.

Project Title: Section 61 – 19-37 Highgate Road, Camden, London Report Reference: 9368/JL

Date: 6 December 2021

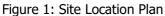
- 4



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.





Project Title: Section 61 – 19-37 Highgate Road, Camden, London



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.

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| Assessment category and threshold value period | Threshold value, in decibels (dB) | | |
|---|-----------------------------------|---------------|------------|
| (L _{Aeq}) | Category A A) | Category B B) | Category 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 |

NOTE 1 A significant effect has been deemed to occur if the total L_{Aeq} noise level, including construction, exceeds the threshold level for the Category appropriate to the ambient noise level.

NOTE 2 If the ambient noise level exceeds the threshold values given in the table (i.e. the ambient noise level is higher than the above values), then a significant effect is deemed to occur if the total L_{Aeq} noise level for the period increases by more than 3 dB due to construction activity.

NOTE 3 Applied to residential receptors only.

- A) Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are less than these values.
- Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are the same as category A values.
- Octegory C: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are higher than category A values.
- ^{D)} 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⁻¹ to 0.3mm⁻¹. 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.

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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 A), B), C) | Effect | | | |
|--|--|--|--|--|
| 0.14 mm·s ⁻¹ | 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 ⁻¹ | Vibration might be just perceptible in residential environments. | | | |
| 1.0 mm·s ⁻¹ | 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 to 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 🐴. | | | |
| Ā ₁ > | | | | |
| A) The magnitudes of t entry into the recipie | he values presented apply to a measurement position that is representative of the point of ent. | | | |
| B) A transfer function (measurements are a | which relates an external level to an internal level) needs to be applied if only external vailable. | | | |
| The values are provide measured or expected | 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, e 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.

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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.

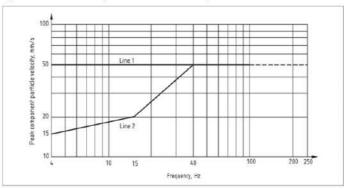
The dominant frequency to use for the assessment is that associated with the greatest amplitude. If the building vibration is multi-frequency in nature, the frequencies should be determined from an amplitude-frequency plot, with each significant peak being examined in turn.

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 Type of building Peak component particle velocity in frequency Figure B.1) range of predominant pulse 4 Hz to 15 Hz Reinforced or framed structure above above Industrial and heavy commercial buildings Unreinforced or light framed 15 mm/s at 4 Hz 20 mm/s at 15 Hz structures increasing to 20 mm/s increasing to 50 mm/s at 15 Hz at 40 Hz and above Residential or light commercial buildings NOTE 1 Values referred to are at the base of the building. NOTE 2 For line 2, at frequencies below 4 Hz, a maximum displacement of 0.6 mm (zero to peak) is not to be

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.

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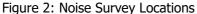


4. Construction Limits

4.1. Noise Limits

A baseline survey was completed by others from 2nd November until 9th 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.





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.

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The measurement results of such survey are as follows:

Chart 1: Measured noise levels at Front Location

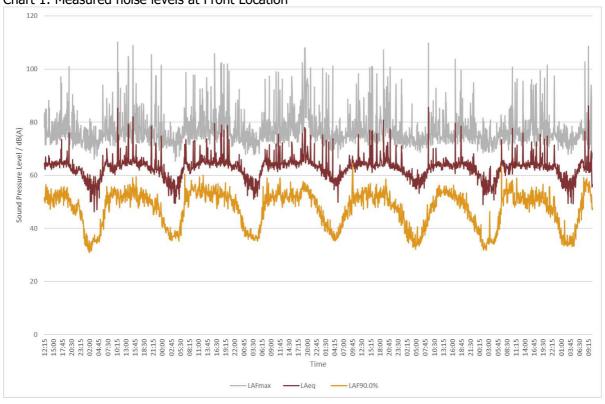
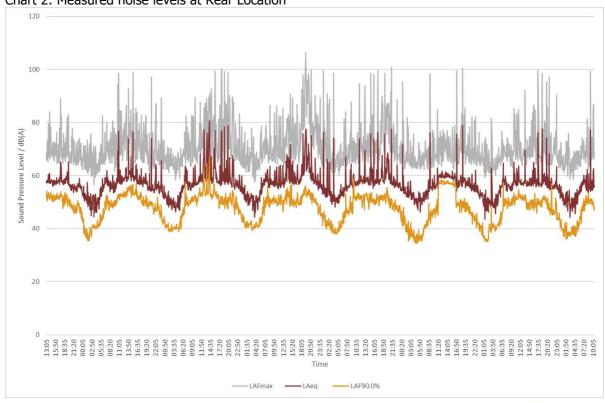


Chart 2: Measured noise levels at Rear Location



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Table 2: Summary of Measured Noise Levels at 19-37 Highgate Road

| Location | Measured Noise Levels L _{Aeq (T)} 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 L _{Aeq (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.

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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) 1st to 7th 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:

Table 4: Site Set-up & Demolition

| 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 |

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| 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 |

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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:

Table 8: Site Set-up & Demolition

| Plant | Demolition | | | | | | |
|----------------|--------------------|-----------------------------|-------------------|----------|--|--|--|
| Platit | dB L _{wA} | 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 9: Groundworks & Piling

| Plant | Groundworks & Piling | | | | | | |
|----------------|----------------------|-----------------------------|-------------------|----------|--|--|--|
| Plant | dB L _{wA} | 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 | | | |

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Table 10: Superstructure

| Plant | Superstructure | | | | | | |
|----------------------------|--------------------|-----------------------------|-------------------|----------|--|--|--|
| Pidiit | dB L _{wA} | 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

| Plant | Fit out | | | | | | |
|----------------------------|--------------------|----------------------------|-------------------|----------|--|--|--|
| Plant | dB L _{wA} | 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 | | | |

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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.)

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- 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.

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- 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.

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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:

Table 12: Site Set-Up & Demolition Noise Predictions

| Plant Type and Operation | L _{wA} | Time Correction | Quantity Correction | Distance Correction | Barrier Correction | dB L _{Aeq(10hr)} | |
|--|-----------------|--------------------|------------------------|------------------------|-----------------------|---------------------------|--|
| 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 _{Aeq(10hr)} | | | | | | | |

8.2. **Groundworks & Piling**

The predictions are as follows:

Table 13: Groundworks & Piling Noise Predictions

| Plant Type and Operation | L _{wA} | Time Correction | Quantity Correction | Distance Correction | Barrier Correction | dB L _{Aeq(10hr)} |
|--|-----------------|--------------------|------------------------|------------------------|-----------------------|---------------------------|
| 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 | 70 |
| Concrete pump | 109 | -2 | 3 | -26 | -10 | 74 |
| Skill Saw | 108 | -10 | 0 | -26 | -10 | 62 |
| Cumulative Level dB L _{Aeq(10hr)} | | | | | | |

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8.3. Superstructure

The predictions are as follows:

Table 14: Superstructure Noise Predictions

| Plant Type and Operation | Lwa | Time Correction | Quantity Correction | Distance Correction | Barrier Correction | dB L _{Aeq(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 L _{Aeq(10hr)} | | | | | | |

8.4. **Fit Out**

The predictions are as follows:

Table 15: Fit Out Noise Predictions

| Plant Type and Operation | Lwa | Time Correction | Quantity Correction | Distance Correction | Barrier Correction | dB L _{Aeq(10hr)} |
|--|-----|--------------------|------------------------|------------------------|-----------------------|---------------------------|
| Skill Saw | 108 | -10 | 3 | -26 | -10 | 65 |
| Hand Tools | 118 | -10 | 3 | -26 | -10 | 75 |
| Mitre saw | 106 | -10 | 0 | -26 | -10 | 60 |
| Jigsaw | 93 | -10 | 3 | -26 | -10 | 50 |
| Cumulative Level dB L _{Aeq(10hr)} | | | | | | |

8.5. **Summary of Predictions**

The following table summarises the precited level per phase:

Table 16: Summary of Construction Noise Predictions

| 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).

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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.

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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 μ 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_{\text{Aeq}J} = 10 | \text{Ig}_{10} \Big\{ (1/T) \int_{t_1}^{t_2} [p_{\text{A}}(t)^2/p_0^2] dt \Big\} where: p_0 \qquad \text{is the reference sound pressure (20 $\mu$Pa); and} p_{\text{A}}(t) \qquad \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.

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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_r .

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, $L_{Ar,Tr}$ – Specific sound level plus any adjustment for the characteristic features of the sound.

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.

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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





Dust Management Plan

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

November 2021

South Downs Safety Limited

113 Holmes Avenue Hove East Sussex BN3 7LF

Document Control:

| Project no. | Project |
|-------------|---|
| 11010.S | 19 – 37 Highgate Road, London (NW5 1JY) |

| Report No. | Ver/rev | Written By: | Checked by: | Authorised by: | Date |
|-----------------|------------|-------------|-------------|----------------|------------|
| 44040.5 | Rev0 Draft | L ACII- | II DesCh | II Day Cit | 12/11/2021 |
| 11010.S Rev1 | Rev1 | J. Mills | H. Parfitt | H. Parfitt | 15/11/2021 |

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- Figure 1: Site Location Plan
- Figure 2: Construction Phase Receptors
- Figure 3: Wind Rose for London City Airport (2019)



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 4,474m². The proposals will provide 47 flats and 100m² 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_{10}) and the long-term AQS for nitrogen dioxide (NO_2).

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.

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| 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 ¹ . |

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¹ 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 quality².
- 2.3 Defra's Local Air Quality Management Technical Guidance (LAQM.TG(16)³ and London Local Air Quality Management Technical Guidance (LLAQM.TG(19)⁴ 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 Construction⁵ 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*⁶ 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)⁷ 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.

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² London Borough of Camden. (2021). Camden Planning Guidance: Air quality.

³ 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.

⁴ 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.

 $^{5\,\}text{IAQM}.$ (2014). Guidance on the assessment of dust from demolition and construction.

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

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



2.8 The baseline conditions are compared against the UK Air Quality Standards⁸ (UKAQS) pollutants to ensure local air quality conditions are within compliance, these are displayed in Table 2.1 below.

Table 2.1: UK Air Quality Standards.

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

- 2.9 Defra provides estimated background concentrations of the UKAQS pollutants at the UK Air Information Resource (UK-AIR) website⁹. These estimates are produced using detailed modelling tools and are presented as concentrations at central 1km² 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.

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⁸ Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Volumes 1 and 2) July 2007.

⁹ Defra: UK-AIR. www.uk-air.defra.gov.uk



2.12 The IAQM's guidance⁵ 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) website¹⁰, 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:

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

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- the specific sensitivities of receptors in the area;
- the proximity and number of those receptors;
- $\overline{\mathbf{v}}$ in the case of PM₁₀, 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.

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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_{10} and $PM_{2.5}$).

UK-AIR Background Pollution

3.2 The UK-AIR predicted background pollution concentrations for PM_{10} and $PM_{2.5}$ 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).

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

| Pollutant | Pre | dicted ba | ckground | concentr | ation (µg. | m ⁻³) | Averaging | Air quality standard |
|-------------------|------|-----------|----------|----------|------------|-------------------|----------------|--|
| rollutalit | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Period | concentration (µg.m ⁻³) |
| PM ₁₀ | 18.6 | 18.1 | 17.6 | 17.3 | 17.1 | 16.9 | annual mean | 40 |
| PM _{2.5} | 12.1 | 11.8 | 11.5 | 11.4 | 11.2 | 11.1 | annual mean | 25 |

- 3.3 The data in Table 3.1 show that annual mean background concentrations of PM_{10} and $PM_{2.5}$ 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_{10} and $PM_{2.5}$ 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_{10} concentrations in the vicinity of the site between 2018 and 2023 were predicted to be below $24\mu g.m^{-3}$.
- 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.

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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)¹¹ released by LBC included local pollutant monitoring data from 2020.
- 3.7 LBC undertook automatic (continuous) monitoring of PM_{10} at four sites across the borough in 2020. The most recent available PM_{10} monitoring data from these monitors are included in Table 3.2 below.

Table 3.2: PM₁₀ Monitoring data from LBC automatic monitors.

| Manitan | Toma | Distance from the application site (km) | PM ₁₀ annual mean concentration (μg.m ⁻³) | | | |
|---------|------|---|--|------|------|------|
| Monitor | Туре | | 2017 | 2018 | 2019 | 2020 |
| KGX | UB/I | 2.3 | - | 15.0 | 15.0 | 13.0 |
| CD1 | K | 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 |

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⁻³ long-term AQS at any of the automatic monitoring stations throughout the 2017 to 2020 monitoring period.
- 3.9 Decreases in annual mean PM_{10} 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_{10} concentration of 15.0 μ g.m⁻³, which is below the 40 μ g.m⁻³ 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 PM₁₀ concentration below the 40µg.m⁻³ AQS by 52.5% was recorded in 2019, despite this monitoring station being located adjacent to the busy A41 Finchley Road.

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

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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_{10} concentration well below $24\mu g.m^{-3}$ in both 2019 and 2020, it is likely that PM_{10} concentrations in the vicinity of the site, which is situated adjacent to the B518 Highgate Road would also be below $24\mu g.m^{-3}$.

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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 NRMM¹² states the following:

"From 1st 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.

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¹² 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 25th 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.

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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 20,000m³, the potential dust emission magnitude for demolition can be categorised as *Small* with reference to the IAQM guidance. Just 2,841m³ 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 1,235m², 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*.

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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 25,000m³, 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 |

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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.

Table 5.2: Approximate number of High Sensitivity Receptors within 350m of 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 |

^{*}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.

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- 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_{10} in the vicinity of the development site are well below $24\mu g.m^{-3}$. Furthermore, LBC's automatic pollutant monitoring network shows that recorded PM_{10} concentrations across the borough did not exceed $24\mu g.m^{-3}$ 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 website¹⁰, 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.

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

| Share | Dust Impact Risk | | | | | |
|--------------|------------------|------------------|------------|--|--|--|
| Stage | Nuisance Dust | PM ₁₀ | Ecology | | | |
| Demolition | Low Risk | Negligible | Negligible | | | |
| Earthworks | Low Risk | Negligible | Negligible | | | |
| Construction | Low Risk | Negligible | Negligible | | | |
| Trackout | Negligible | Negligible | Negligible | | | |

- 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 PM₁₀ 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.

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Site Specific Mitigation

- 5.31 The GLA guidance⁶ 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.

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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*.

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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.

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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.

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- 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.

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- 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 1st 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.

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- 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 PM₁₀. Monitoring can vary from visual assessments for *Low Risk* sites to the installation of real-time automatic monitors for PM₁₀ 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* SPG⁶:
 - 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.

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Figures & Appendices



Figure 1: Site Location Plan



Figure 1: Site Location Plan

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Figure 2: Construction Phase

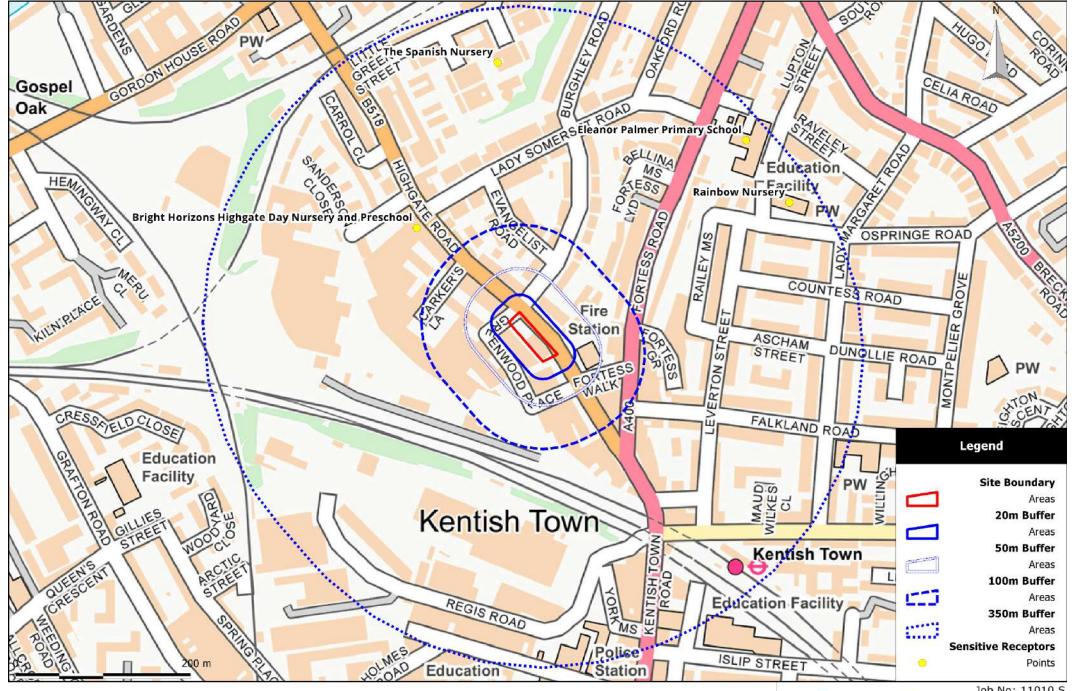


Figure 2: Construction Phase

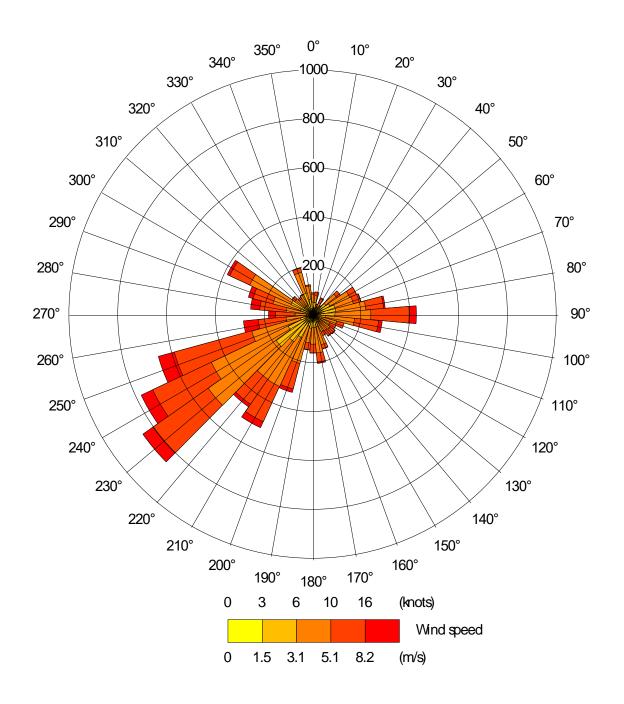
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Figure 3: Wind Rose for London City Airport (2019)







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