Construction Management Plan

pro forma v2.1

Camden

Contents

Revisions & additional material

Please list all iterations here:

Date	Version	Produced by
4 July 2016	0.1	SIA
18 July 2016	0.2	SIA
15 August 2016	0.3	SIA

Additional sheets

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

Date	Version	Produced by
July 2016	2956/P01/0 P02/0 P03/0 P04/0 P05/0 programme	Aleck Associates Ltd

Introduction

The purpose of the **Construction Management Plan (CMP)** is to help developers to minimise construction impacts, and relates to both on site activity and the transport arrangements for vehicles servicing the site.

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 kind 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 Transport for London's (TfL's Standard for Construction Logistics and Cyclist Safety (**CLOCS**) scheme) and Camden's Minimum Requirements for Building Construction **(CMRBC)**.

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 in relation to the construction of the development. 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 for 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 "**Demolition Notice.**"

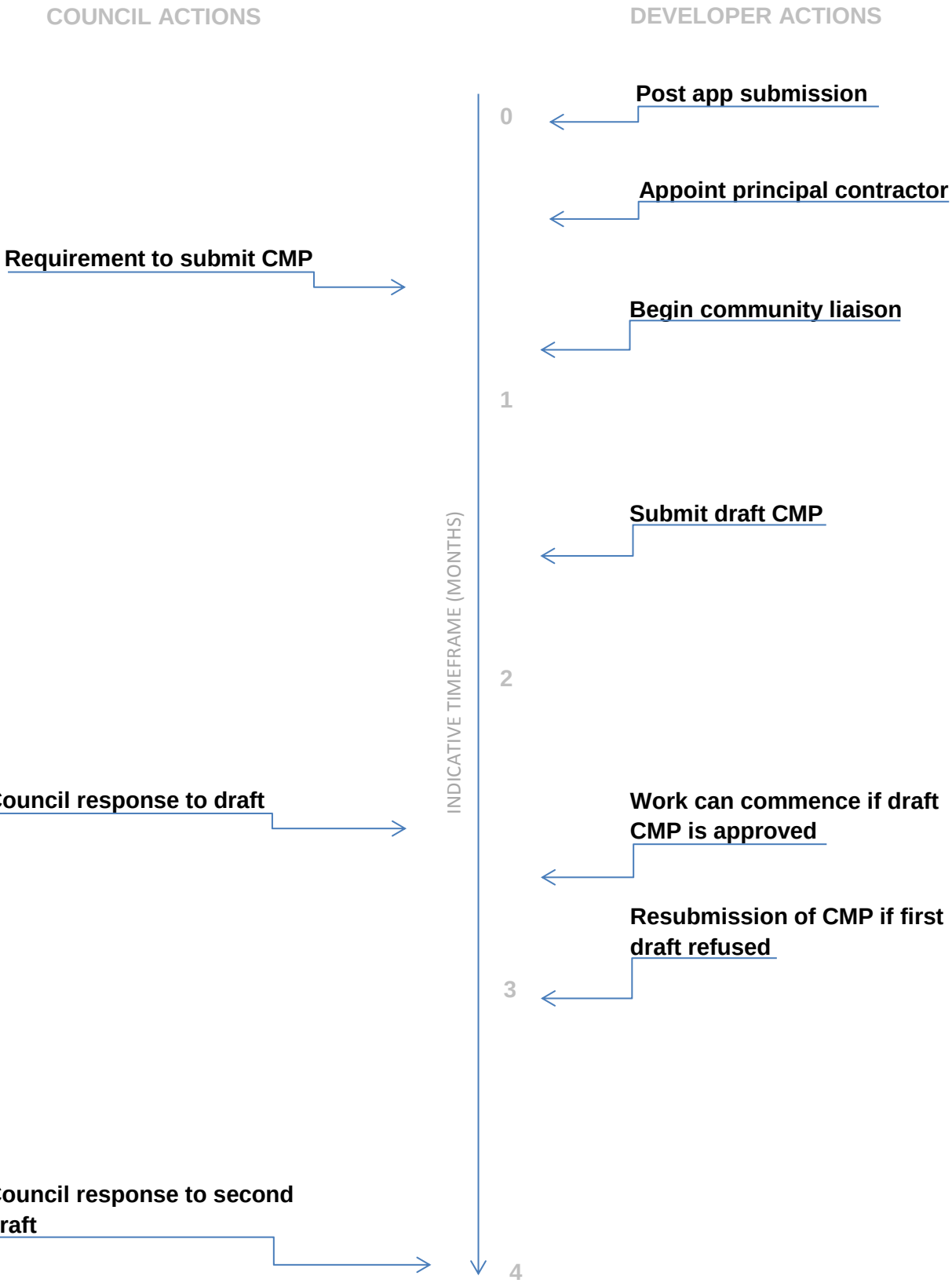
Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. **It is preferable if this document, and all additional documents, are completed electronically and submitted as Word files to allow comments to be easily documented. These should be clearly referenced/linked to from the CMP.**

Please notify that council when you intend to start work on site. Please also notify the council when works are approximately **3 months from completion.**

(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.

Timeframe


COUNCIL ACTIONS
DEVELOPER ACTIONS
Post app submission
0
Appoint principal contractor
Requirement to submit CMP
Begin community liaison
1
Submit draft CMP
INDICATIVE TIMEFRAME (MONTHS)
2
Council response to draft
Work can commence if draft CMP is approved
Resubmission of CMP if first draft refused
3
Council response to second draft
4

Contact

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

Address: 12 Platts Lane London NW3 7NR

Planning ref: TBA

Type of CMP - Section 106 planning obligation/Major sites framework: TBA

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

Name: Haim Maymon

Address: Entire Houze Ltd. Olympia House, Armitage Road, London NW11 8RQ

Email: haim_maymon@hotmail.com

Phone:

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.

Name: Haim Maymon

Address: Entire Houze Ltd. Olympia House, Armitage Road, London NW11 8RQ

Email: haim_maymon@hotmail.com

Phone:

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.

Name: Orly Weinberger

Address: Olympia House, Armitage Road, London NW11 8RQ

Email: orlyweinberger@gmail.com

Phone: 07817541022

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.

Name: Entire Houze Ltd.

Address: Olympia House, Armitage Road, London NW11 8RQ

Email: hello@theentirehouse.com

Phone: 07969 378 509 (Prakash)

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.

The Site is a large single-family semi-detached dwelling with its gardens.
This CMP relates to a proposal to install a basement under the whole of the house including its recently-built rear extension.

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).

The proposal is to excavate a full basement under an extended semi-detached house, with a neighbouring house very close to the unattached side. The road is a side road which is part of the public highway system. The main site management challenge is access for excavation and delivery lorries and the provision of site loading/unloading facilities.

The main quantities involved are approximately:

Muck away: 1328 cu. m. (including bulking), or approx. 90 vehicle movements.

Concrete delivered: 231 cu.m. or approx. 26 to 39 vehicle movements, depending on size of load.

At this point the road, Platts Lane, includes parking bays (zone CA-S(a)). The remainder of the kerbside is yellow-lined. Zone CA-S(a) is restricted between 10.30 and 14.30 hours.

Kerbside loading will be adopted because the site is too small to allow spoil vehicles to load on site. It is proposed to use a gantry over the pavement, (1) to protect the footway and its users, (2) to enable storage of excavated material in a convenient location, (3) to reduce the loading time of each vehicle to reduce noise and nuisance as far as possible.

8. 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.).

No. 10 Platts Lane is the attached house to the right hand side, i.e. it shares a party wall.

No. 14 Platts Lane is the adjoining house on the left hand side, approx. 3m distant.

9. 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 and proposed site access locations.

See drawing no. 2956/P01 attached.

10. 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).

See programme attached.

11. 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

As above.

12. 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.

No new connections are anticipated.

A drainage inspection dated 11 August 2016 (copy attached) will have to be appraised by the services consultant when appointed, but it appears to show that the drain between the site and the public sewer in the highway is in satisfactory condition and does not need replacement or excavation. The water, electricity and gas supplies to the property are already in use and are unlikely to need to be interfered with as part of the works.

Community Liaison

A neighbourhood consultation process must have been undertaken prior to submission of the CMP first draft. This consultation must relate to construction impacts, and should take place following the grant of planning permission in the lead up to the submission of the CMP. A consultation process specifically relating to construction impacts 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 should consider establishing contact with other sites in the vicinity in order to manage traffic routeing and volumes. Developers in the Tottenham Court Road area have done this to great effect.

The Council can advise on this if necessary.

13. 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. Details of meetings including minutes, lists of attendees etc. must be included.

In response to the comments received, the CMP should then be amended where appropriate and, where not appropriate, a reason should be 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.

The immediate neighbours will be contacted under the party wall system.

It is anticipated that the client will initiate consultation with other neighbouring owners by means of letters delivered to the relevant addresses – e.g. 8 and 16 Platts Lane (even side) and 9 to 27 (odd side), taking into account any flat conversions or multiple occupancies, offering to meet and explain the works, the mitigation measures, and who to contact in case of problems.

14. Construction Working Group

Please provide details of community liaison proposals including any Construction Working Group that will be set up, addressing the concerns of the community affected by the works, the way in which the contact details of the person responsible for community liaison 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.

This is a comparatively small development within the curtilage of one dwelling-house. It is anticipated that the most efficient and appropriate liaison during the works will be personal contact. The Client or Project Manager will deal with this until a main contractor has been appointed. Once a main contractor is in place liaison will take place between the site manager and the neighbours.

15. Schemes

Please provide details of any schemes such as the 'Considerate Constructors Scheme', such details should form part of the consultation and be notified to the Council. Contractors will also be required to follow the "Guide for Contractors Working in Camden" also referred to as "Camden's Considerate Contractors Manual".

The Contractor will be encouraged to join a suitable scheme.

16. 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 present site's developer is not planning any other work nearby.

There is a major development of flats under way at 'Kidderpore Green' at the junction between Platts Lane and Finchley Road, about 1000m from the Site. That site's vehicle traffic uses only Finchley Road and would not interact with the Site.

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 the council to ensure compliance. Please refer to the CLOCS Standard when completing this section. Guidance material which details CLOCS requirements can be accessed here, details of the monitoring process are available here.

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

Please refer to the CLOCS Overview and Monitoring Overview documents referenced above which give a breakdown of requirements.

CLOCS Considerations

17. Name of Principal contractor:

Name: Entire Houze Ltd., Olympia House, Armitage Road, London NW11 8RQ

18. Please submit the proposed method for checking operational, vehicle and driver compliance with the CLOCS Standard throughout the duration of the contract (please refer to our CLOCS Overview document in the appendix and CLOCS Standard point 3.4.7).

TBA

19. 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. Please sign-up to join the CLOCS Community to receive up to date information on the standard by expressing an interest online.

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

Signed: O Weinberger

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.

20. 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, public buildings, museums etc. Where appropriate, on routes that use high risk junctions (i.e. those that attract high volumes of cycling traffic) installing Trixi mirrors to aid driver visibility should be considered.

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.

a. Please indicate routes on a drawing or diagram showing the public highway network in the vicinity of the site including details of links to the Transport for London Road Network (TLRN).

Platts Lane is a narrow quiet residential road. Vehicles will be instructed to approach only from the W Heath Rd end, and exit onto Finchley Road, avoiding all other minor roads. The advantage of vehicles going in this direction is that it is downhill, so that vehicle noise will be minimised. It also means that deliveries and collections will take place with the vehicle parked on the left hand side of the road, simplifying traffic manoeuvers.

Deliveries and collections will be organised to avoid vehicles waiting for kerb space.

Vehicles attending the site will be limited to rigid vehicles unless articulated vehicles are required for a specific purpose, in which case there will be warnings to neighbours and prior arrangement with the Council and Police.

Please refer to drawing 2956/P02.

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

Contractors, subcontractors and suppliers will be asked to sign a document setting out the authorised route.

21. 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 are generally acceptable between 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 between 9.30am and 3pm on weekdays during term time. (Refer to the *Guide for Contractors Working in Camden*).

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**.** Consideration should be given to the location of any necessary holding areas for large sites with high volumes of traffic. Vehicles must not wait 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.

a. Please provide details of the typical sizes of all vehicles and the approximate frequency and times of day when they will need access to the site, for each phase of construction. You should estimate the average daily number of vehicles during each major phase of the work, including their dwell time at the site. High numbers of vehicles per day and/or long dwell times may require vehicle holding procedures.

Over the main muck-away part of the contract up to four spoil lorries a day are anticipated. Loading time should not exceed one hour each.

The structure work in the basement will usually involve up to two concrete deliveries per day, with more on occasion.

b. Please provide details of other developments in the local area or on the route.

Not known, to be advised.

c. Please outline the system that is to be used to ensure that the correct vehicle attends the correct part of site at the correct time.

Does not apply, very small site with only one delivery/collection point.

d. Please identify the locations of any off-site holding areas (an appropriate location outside the borough may need to be identified, particularly if a large number of delivery vehicles are expected) and any measures that will be taken to ensure the prompt admission of vehicles to site in light of time required for any vehicle/driver compliance checks. Please refer to question 24 if any parking bay suspensions will be required for the holding area.

None needed.

e. Please provide details of any other measures designed to reduce the impact of associated traffic (such as the use of construction material consolidation centres).

Not needed because of the small size of the works. The site will be served from commercial suppliers and waste disposal contractors.

22. 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)

Vehicles entering and leaving the site should be carefully managed, using gates that are clearly marked and free from obstacles. Traffic Marshalls must ensure the safe passage of

pedestrians, cyclists and other traffic when vehicles are entering and leaving site, particularly if reversing.

a. Please detail the proposed access and egress routes to and from the site

Most loading and unloading will take place on the highway using the gantry to protect footway users.

b. Please describe how the access and egress arrangements for construction vehicles will be managed.

The access and egress of vehicles onto and off the site will be very limited. The usual arrangement of using a banksman to control traffic will apply. No special arrangements needed.

c. Please provide swept path drawings for any tight manoeuvres on vehicle routes to and from the site including proposed access and egress arrangements at the site boundary (if necessary).

Vehicles will enter and leave the loading bay in the same direction of travel, keeping to the left hand side of the road, and no tight manoeuvring will be required.

Please see drawing no. 2956/P03.

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.

Few vehicles will be driving off the site.

Cleaning materials and hose will be available to clean the highway around the loading gantry, and generally the Site manager's duty will include ensuring that the highway is left clean.

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

If this is not possible, 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 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 loading is to take place off site, please identify where this is due to take place and outline the measures you will take to ensure that loading/unloading is carried out safely. Please outline in question 24 if any parking bay suspensions will be required.

It is not practical for loading and unloading to take place on the site due to the small size of the site and the limited size of the front garden space between the footway and the front of the existing house. One 14m loading/unloading bay will be provided outside the house subject to Council approval.

It is proposed to place a gantry over the pavement to facilitate loading of spoil lorries using a conveyor.

Concrete will be delivered from the same loading/unloading bay into a concrete pump. The delivery pipe will cross the pavement with suitable ramps for wheeled pedestrian footway users.

Other deliveries will be unloaded from the same bay by hand or using a small wheeled vehicle, e,g, a forklift or similar.

The gantry is planned to be in place for approximately the first 14 weeks of the contract period.

Highway interventions

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

- **24. Parking bay suspensions and temporary traffic orders**

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

Please provide details of any proposed parking bay suspensions and TTO's which would be required to facilitate construction. **Building materials and equipment must not cause obstructions on the highway as per your Considerate Contractors obligations unless the requisite permissions are secured.**

Information regarding parking suspensions can be found here.

A ten-metre length of parking bay in front of the property will be suspended for the twelve-month length of the proposed construction contract, so that a dedicated loading/unloading bay can be provided. This will enable the work to take place with minimal disruption to road traffic in Platts Lane.

A Temporary Traffic Order will be applied for accordingly.

Please see drawing no. 2956/P05.

25. Scaled drawings of highway works

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. You must submit a detailed (to-scale) plan showing the impact on the public highway that includes the extent of any hoarding, pedestrian routes, parking bay suspensions and remaining road width for vehicle movements. 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 accurate scaled drawings of any highway works necessary to enable construction to take place (e.g. construction of temporary vehicular accesses).

No highway works are taking place. Please refer to the drawings provided showing the loading gantry, hoardings, traffic management and loading arrangements for the Site.

b. Please provide details of all safety signage, barriers and accessibility measures such as ramps and lighting etc.

Hoardings will be erected around the site to protect the environment and provide security.

The passage under the loading gantry will be provided with lighting during hours of darkness.

When concrete is being pumped into the site, a ramp will be installed over the delivery pipe.

Appropriate safety signage will be provided on the hoarding and gantry.

26. Diversions

Where applicable, please supply details of any diversion, disruption or other anticipated use of the public highway during the construction period (alternatively a plan may be submitted).

No diversions required.

27. VRU and pedestrian diversions, scaffolding and hoarding

Pedestrians and/or cyclist 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 ramping 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. Lighting and signage should be used on temporary structures/skips/hoardings etc.

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

a. Please provide details describing how pedestrian and cyclist safety will be maintained, including any proposed alternative routes (if necessary), and any Traffic Marshall arrangements.

The loading gantry will protect pedestrians and allow free passage along the footway during the works.

Cycle use will not be significantly interfered with by the works.

b. Please provide details of any temporary structures which would overhang the public highway (e.g. scaffolding, gantries, cranes etc.) and details of hoarding requirements or any other occupation of the public highway.

See gantry outline on drawing 2956/P04.

SYMBOL IS FOR INTERNAL USE

Environment

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

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

Operation	**method**	**times**
Excavation	small excavator	08:00 - 16:00 with a one-hour break
Excavation	By hand, with compressor	Normal working hours
Loading spoil	Conveyor	09:00 – 15:00
Breaking concrete	Breaker & Compressor	08:00 – 16:00 with a one-hour break
Pumping concrete	Mobile pump	09:00 – 15:00
Heavy lifts	Mobile crane	09:00 – 15:00

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.

A noise survey dated 4 August 2016 attached.

30. Please provide predictions for noise and vibration levels throughout the proposed works.

Noise generated by the demolition and construction process will be considered and its impact on neighbouring properties mitigated. Suitable mitigation measures to be used include:

• Standard construction hours.

• The use of well-maintained and silenced plant and equipment including compressors, generators and power tools.

• The use of quieter alternative methods or mechanical plant, where reasonably practical.

• Locating plant, equipment, site offices, storage areas and worksites away from neighbouring properties where reasonably practical.

• Machines and equipment, in intermittent use will be shut down or throttled down to a minimum when not in use;

• The use of site hoardings or portable acoustic enclosures/screens where practical.

• Maintaining and operating all vehicles, plant and equipment such that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.

• All temporary site lighting will be faced into the site, and not directed towards any neighbouring properties.

• Machinery exhaust emissions will be kept as low as is practical by using well maintained vehicles and machinery at all times.

• Hoarding will be erected around the site. Along with reducing the visual impact and providing protection for the construction workers and public, this will also act as a barrier for dust and dirt originating from within the site. All HGV's removing spoil from the site will be fully sheeted to minimise the risk of any mud over spilling onto the highway.

• A wheel-washing facility will be provided, as required, for the duration of the construction works to ensure the levels of soil on roadways near the site are minimised. The wheel-washing facilities will be in the form of a hose down point located adjacent to the entrance. As the excavation is being loaded directly from conveyors into a lorry, the wheel washing requirement is minimised, and any overspill will be washed off the highway surface.

• The area around the site including the public highway will be regularly and adequately swept to prevent any accumulation of dust and dirt.

• Burning of materials on site will not be permitted in order to prevent smoke emissions.

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.

The Contractor will be required to have all plant and tools fitted with either silencers or dampers so far as is practical and working methods will be regularly reviewed to ensure that nuisance to adjacent properties and residents is mitigated wherever practical. Should noise levels reach 80dB (A) operatives will be informed of the risks to their hearing and supplied (if requested) with either appropriately attenuated ear defenders or earplugs. Should noise levels reach 85dB (A) or above operatives will be informed of the risks to their hearing and supplied with appropriately attenuated ear defenders or earplugs and instructed to wear them during noisy operations. The contractor is to ensure compliance by carrying out regular active monitoring. The Contractor's Health and Safety advisors will undertake noise surveys during their regular site inspections. However, operatives will be informed that as a general rule, if they need to raise their voice when standing 2 metres away from a noise source, it is too loud and hearing protection must be worn. When buying or hiring plant and tools the Contractor must ensure that the noise and vibration produced by work equipment is considered together with the price when new purchases are made with a view to lowering the risk when equipment is used. The Contractor will be encouraged to purchase equipment that is advanced in technology and equipped with vibration absorbing features. To ensure that operatives are aware of the effects of hand arm vibration they will be provided with adequate information on the hazard and controls and given information in order to reduce the risk. Should it be deemed necessary, the contractor is to undertake noise and hand arm vibration monitoring and, dependant on the results, further control measures will be required. Below are some examples of maximum usage for tools in order to prevent injury and ill health.

Tool	Hand Vibration (m/s^2)	Maximum usage period in 8hrs (Minutes)
2- stroke breaker	10	38
Electric breaker (7kg)	9	46
Rotary/hammer drill (4kg)	10	38
Rotary/hammer drill (9kg)	14	19
Rotary drill	2.5	480
7/9" Grinder	5.5	124

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

The contractor will be instructed to do so and to provide proof.

33. Please provide details on how dust nuisance arising from dusty activities, on site, will be prevented.

The activities to be carried out will not include a significant amount of dusty activities, i.e. activities that may cause dust to rise off the ground and be carried by wind.

The principle construction activities that will generate dust are typically demolition, excavation, foundations and external works. The materials disturbed by excavation activities are inert materials (principally crushed concrete and clay/gravel fill) and therefore the dust generated during their removal and transportation does not represent a hazard to either people or the environment. We will also add shielding to cutting equipment when activities are being carried out that risk generating large volumes of airborne dust. Dust suppression measures will normally take the form of damping down and dust screens. Good site management will be strictly enforced to ensure work areas are kept clean and tidy at all times to prevent the migration of dust throughout the site. We will erect a full site boundary, keeping away from sensitive receptors, and there will be a fully trained Manager on site throughout the construction period. We will be using water as dust suppressant where applicable and muck-away trucks will be covered to prevent wind effects on contents

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.

The site manager will be responsible for ensuring dust is damped and swept up around the delivery area.

35. Please provide details describing arrangements for monitoring of noise, vibration and dust levels.

The Contractor will be instructed to monitor noise levels during phases when noisy activities are taking place to make sure that levels are within specified limits. Noisy work will be covered by a permit-to-work system which will identify the activity, its location and duration, and any applicable control measures necessary to mitigate its affect. Sub-contractors are encouraged to purchase equipment that is advanced in technology and equipped with vibration absorbing features. To ensure that operatives are aware of the effects of hand arm vibration they will be provided with adequate information on the hazard and controls, and given information in order to reduce the risk.

Vibration levels and dust levels will be controlled as described. The proposed works are not likely to give rise to significant levels of dust or vibration in the neighbouring premises. This situation will be kept under review and if dust/vibration could become a problem professional advice will be sought.

36. Please confirm that a Risk Assessment has been undertaken at planning application stage in line with the GLA's Control of Dust and Emissions Supplementary Planning Guidance (SPG), and the risk level that has been identified, with evidence. Please attach the risk assessment as an appendix if not completed at the planning application stage.

The Risk Assessment will be undertaken by the principal designer, XUL Architecture, and supplied when available.

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

The Risk Assessment will be undertaken by the principal designer, XUL Architecture, and appended when complete.

- 38. If the site is a 'High Risk Site', 4 real time dust monitors will be required. If the site is a 'Medium Risk Site', 2 real time dust monitors will be required. The risk assessment must take account of proximity to sensitive receptors (e.g. schools, care homes etc), as detailed in the SPG. Please confirm the location, number and specification of the monitors in line with the SPG and confirm that these will be installed 3 months prior to the commencement of works, and that real time data and quarterly reports will be provided to the Council detailing any exceedances of the threshold and measures that were implemented to address these.

It is not thought that dust monitors will be required.

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 is unlikely that rodents will be particularly endemic on the site. A rodent inspection will be commissioned in due course by the Client and the results will be issued.

The Contractor will be instructed to ensure no food or other edible waste is left or discarded around the site at any time. Any drain connections will be capped permanently or temporarily.

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

A survey was carried out 19 July 2016, report attached.

No existing asbestos was reported on the site.

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 main contractor will be instructed to provide a smoking area within the site. Site personnel will not be permitted to loiter outside the main gate.

The contractor will be instructed to include a suitable statement in the documentation provided to site staff, e.g. 'No personnel shall indulge in fighting, horseplay, tomfoolery or practical jokes including wolf whistling etc.' Any personnel found to be acting in an unacceptable manner will be barred from site permanently.

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.

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): TBA

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):

d) Please provide evidence to demonstrate that all relevant machinery will be registered on the NRMM Register, including the site name under which it has been registered:

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:

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:

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.

Please notify that council when you intend to start work on site. Please also notify the council when works are approximately 3 months from completion.

Signed: ……

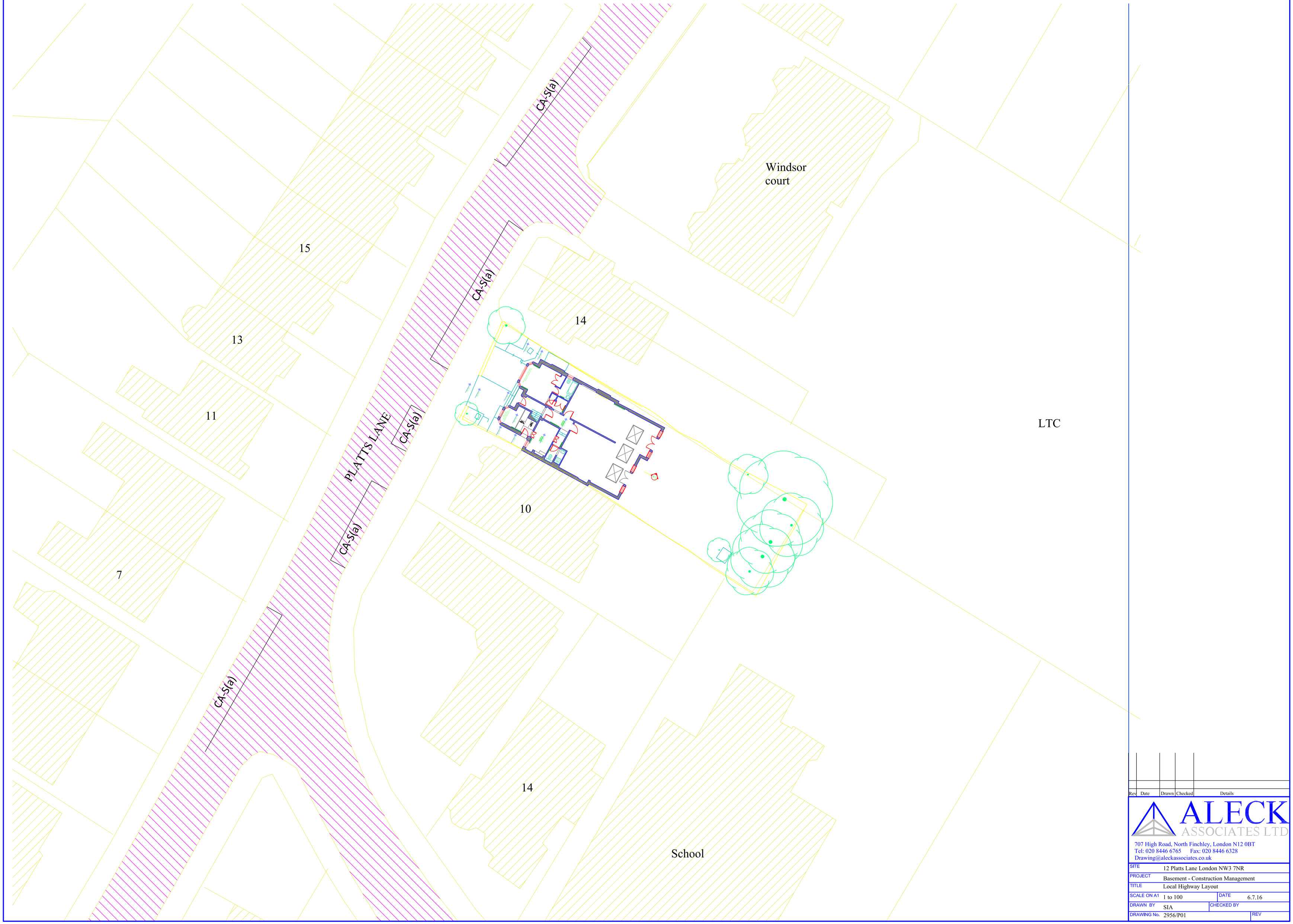
Date: ……..

Print Name: ……..

Position: ……

Please submit to: planningobligations@camden.gov.uk

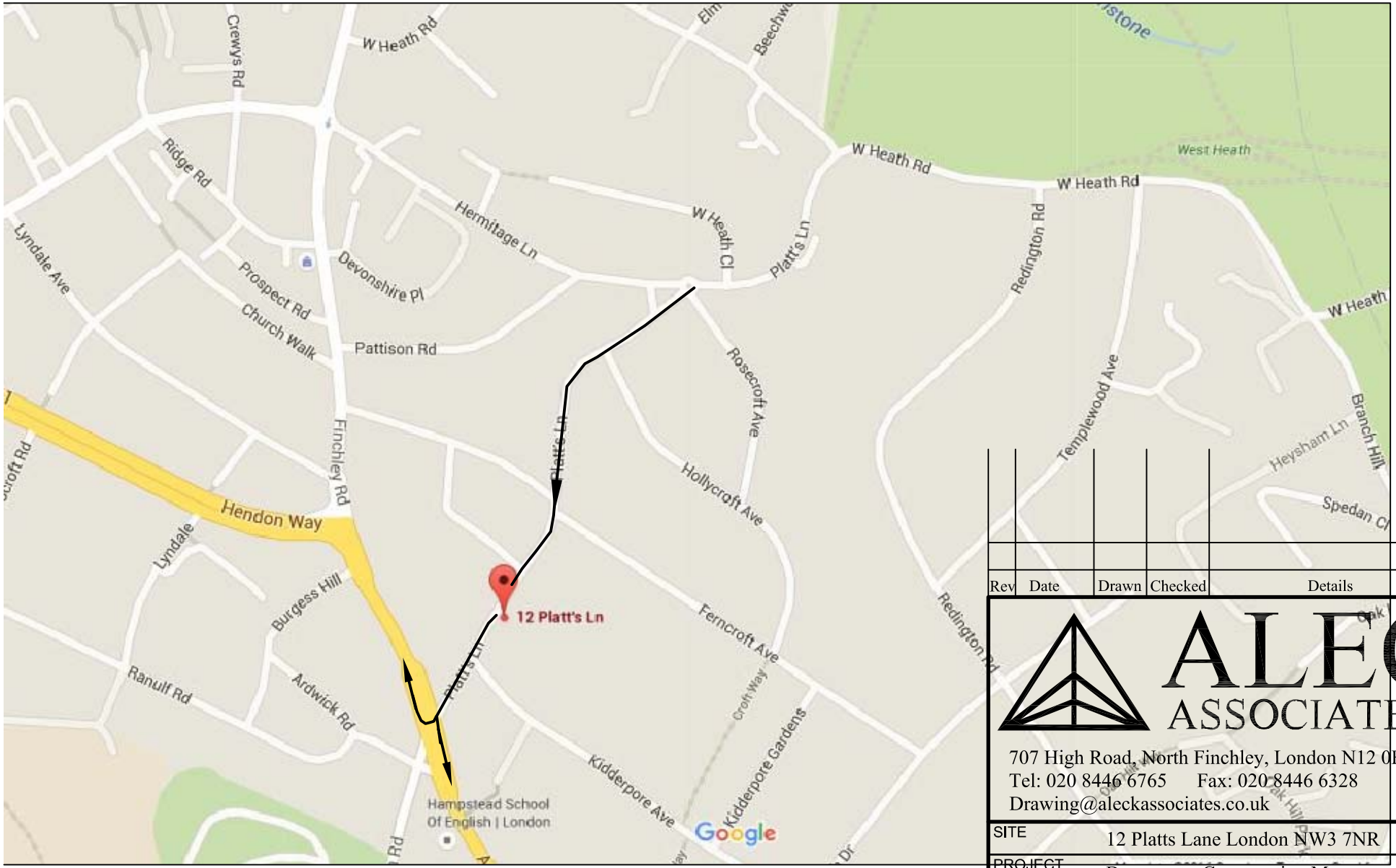
End of form.



Rev	Date	Drawn	Checked	Details

ALECK
ASSOCIATES LTD
707 High Road, North Finchley, London N12 0BT
Tel: 020 8446 6765 Fax: 020 8446 6328
Drawing@aleckassociates.co.uk

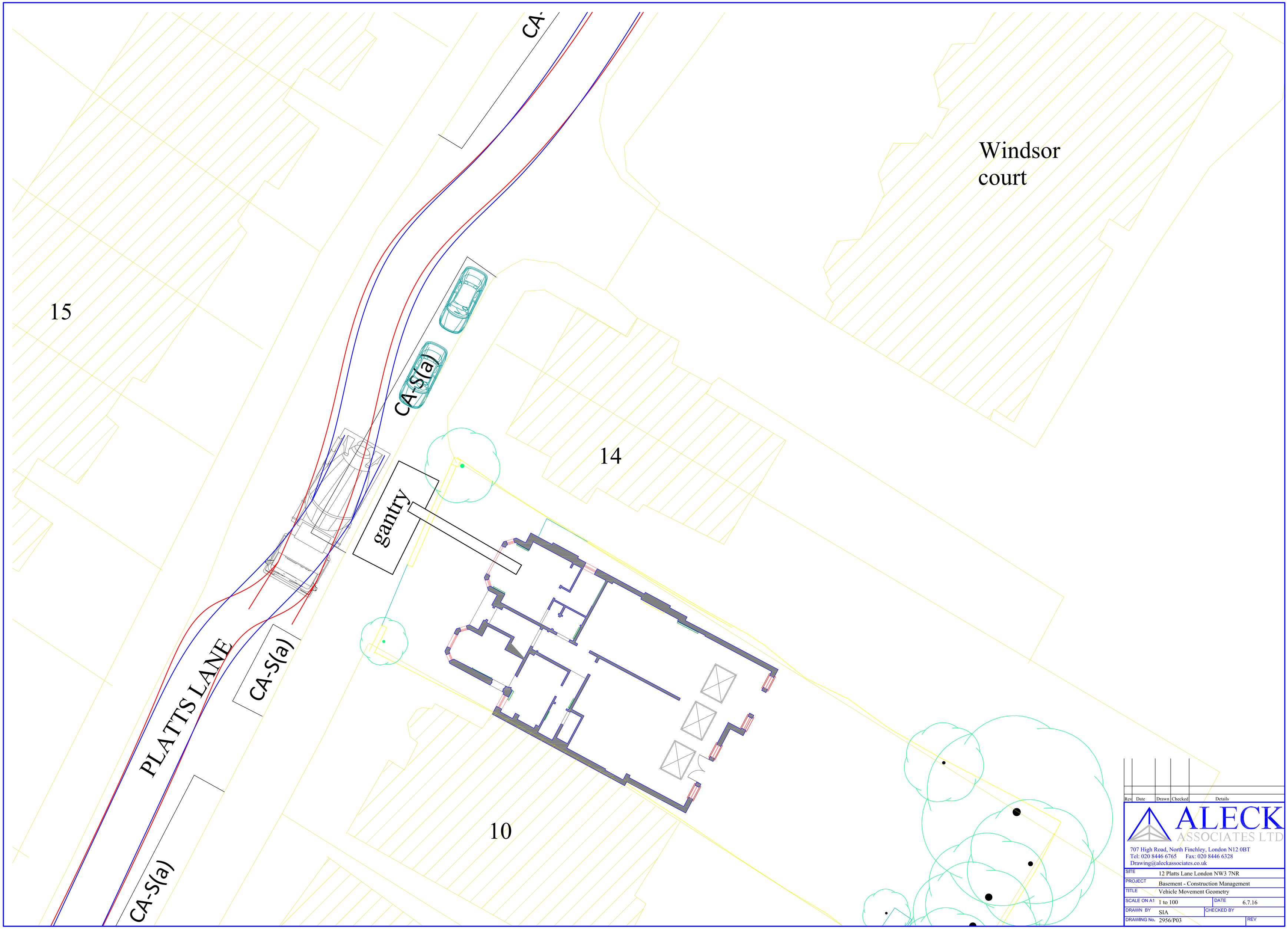
SITE	12 Platts Lane London NW3 7NR		
PROJECT	Basement - Construction Management		
TITLE	Local Highway Layout		
SCALE ON A1	1 to 100	DATE	6.7.16
DRAWN BY	SIA	CHECKED BY	
DRAWING No.	2956/P01		REV



Rev	Date	Drawn	Checked	Details

ALECK
ASSOCIATES LTD
707 High Road, North Finchley, London N12 0BT
Tel: 020 8446 6765 Fax: 020 8446 6328
Drawing@aleckassociates.co.uk

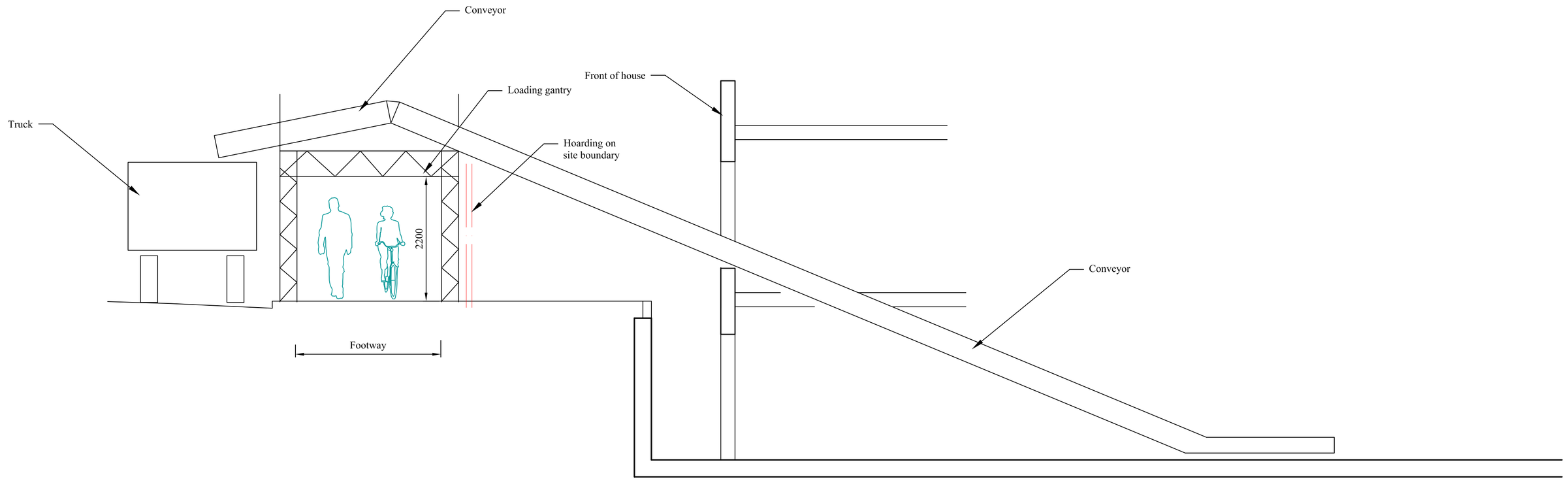
SITE	12 Platts Lane London NW3 7NR
PROJECT	Basement - Construction Management
TITLE	Public Highway Network
SCALE ON A4	1 to 100
DATE	6.7.16
DRAWN BY	SIA
CHECKED BY	
DRAWING No.	2956/P02
REV	

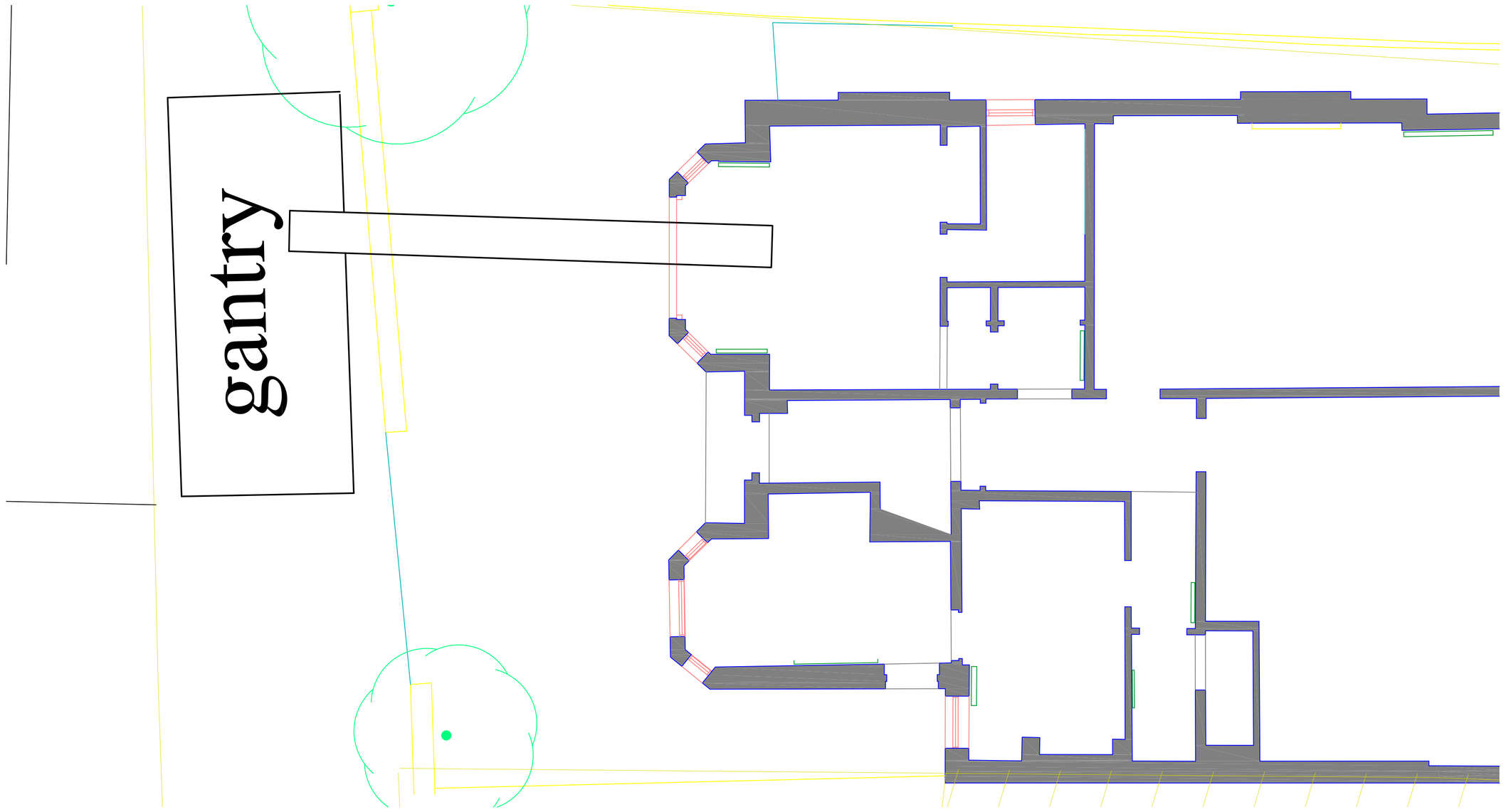


Rev	Date	Drawn	Checked	Details

ALECK
ASSOCIATES LTD
707 High Road, North Finchley, London N12 0BT
Tel: 020 8446 6765 Fax: 020 8446 6328
Drawing@aleckassociates.co.uk

SITE	12 Platts Lane London NW3 7NR		
PROJECT	Basement - Construction Management		
TITLE	Vehicle Movement Geometry		
SCALE ON A1	1 to 100	DATE	6.7.16
DRAWN BY	SIA	CHECKED BY	
DRAWING No.	2956/P03		REV





Rev	Date	Drawn	Checked	Details

ALECK
ASSOCIATES LTD
707 High Road, North Finchley, London N12 0BT
Tel: 020 8446 6765 Fax: 020 8446 6328
Drawing@aleckassociates.co.uk

SITE	12 Platts Lane London NW3 7NR		
PROJECT	Basement - Construction Management		
TITLE	Loading gantry schematic		
SCALE ON A1	1 to 50	DATE	6.7.16
DRAWN BY	SIA	CHECKED BY	
DRAWING No.	2956/P04		REV

15

13

14

10

PROPOSED SUSPENSION
OF PARKING BAY

CA-S(a)

10m

PLATTS LANE

CA-S(a)

CA-S(a)

Rev	Date	Drawn	Checked	Details

ALECK
ASSOCIATES LTD
707 High Road, North Finchley, London N12 0BT
Tel: 020 8446 6765 Fax: 020 8446 6328
Drawing@aleckassociates.co.uk

SITE	12 Platts Lane London NW3 7NR		
PROJECT	Basement - Construction Management		
TITLE	Local Highway Layout		
SCALE ON A1	1 to 100	DATE	6.7.16
DRAWN BY	SIA	CHECKED BY	
DRAWING No.	2956/P01	REV	

Asbestos Management Survey with part Refurbishment/Demolition

Property address:

12 Platts Lane

London

NW3 7NR

0800 Asbestos Ltd

Unit 7

Innovation Centre

Avenue H

Stoneleigh Park

Kenilworth

Warwickshire

CV8 2LG

Tel: 02476 996 304

info@0800asbestos.co.uk

www.0800asbestos.co.uk

Company Reg No: 09515378

Report Number: **J010980**

Contents:

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APPENDICES - Survey Results

1.0 Executive summary:

Asbestos containing materials have been identified during the Management Survey and the specific areas are categorized below in order according to the initial Material Risk Assessment made by 0800 Asbestos Ltd.

HIGH RISK MATERIALS - SCORES 10+

Asbestos in poor condition, or asbestos debris/contamination has been identified within the following areas listed in the table below. It is recommended that risk assessment (s) are undertaken to ensure that Regulation 4, Regulation 10, Regulation 11, and Regulation 16 of the Control of Asbestos Regulations 2012 are complied with.

Building	Floor	Room	Item	Material	Risk assessment Score	Recommendations
There were no results found.						

MEDIUM RISK MATERIALS - SCORES 7-9

Asbestos containing materials, which are unsealed or damaged, have been identified within the following areas listed in the table below. It is recommended that remedial work to seal or remove these materials is undertaken as a priority and that air monitoring is carried out within adjacent areas in order to assess airborne fibre levels.

Building	Floor	Room	Item	Material	Risk assessment Score	Recommendations
There were no results found.						

1.0 Executive summary:

LOW RISK MATERIALS - SCORES 1-6

Asbestos Containing Materials have been identified which are in good condition, A management policy and plan need to be implemented to manage these materials safely. The materials require labelling and the condition of these materials re-inspected at 6 monthly intervals.

Building	Floor	Room	Item	Material	Risk assessment Score	Recommendations
There were no results found.						

1.0 Executive summary:

PRESUMED ASBESTOS/NO ACCESS AREA

Asbestos Containing Materials have been presumed as being present to the following areas where access could not be gained. A management policy and plan needs to identify that these areas require inspection once access can be provided. These areas require re-inspection for accessibility at 6 monthly intervals.

Building	Floor	Room/Area	Recommendation
There were no results found.			

Building Notes:

Internal notes: Basement area only
External notes: Basement area only

2.0 Contract Review:

Name and address of site:	12 Platts Lane, London		
Name and address of client:	Ms O Weinberger, 12 Platts Lane, London		
Client contact:	Orly Weinberger		
Type of survey:	Management Survey with part Refurbishment/Demolition (MA only)		
Date of survey:	19 Jul 2016		
Report Revision Number:	2		
TEAMS internal job number:	J010980		
Lead surveyor[s]:	Dayle Warsop	Signature:	
Technically reviewed by:	Nick Boardman	Signature:	
Report issue date:	20 Jul 2016		

3.0 Introduction/Objectives:

0800 Asbestos Ltd Ltd received an order of confirmation to undertake a Management with part Refurbishment/Demolition Survey from Ms O Weinberger. This order has been accepted on the basis of the original quotation and our terms and conditions of business.

The order relates to a Management with part Refurbishment/Demolition Survey of:

12 Platts Lane
London
NW3 7NR

The survey was carried out by Dayle Warsop.

The Type of survey selected / requested by the client was a Management with part Refurbishment/Demolition Survey.

The reason for selecting this survey is to enable the client to manage the risks from retained asbestos in their premises and provide information for contractors undertaking work in the targeted refurbishment areas.

This survey was carried out in accordance with documented in house procedures, which are based on the HSE Guidance document HSG 264.

3.1 Purpose of Survey

The purpose of this Management with part Refurbishment/Demolition Survey is to help the duty holder manage asbestos in these premises. It provides sufficient information for an asbestos register to be generated in accordance with HSG 264 so that the duty holder can carry out a risk assessment and prepare a suitable management plan in accordance with regulation of the Control of Asbestos Regulations 2012 (CAR 2012).

The refurbishment element of the survey is to locate, prior to refurbishment works being undertaken, all ACM's within the fabric of the building within the following areas:
[LIST OR AS MARKED ON PLAN NUMBER, revision **]

3.2 Aim of Survey

The aim of the survey was to;

1. Locate and record the location, extent, and product type as far as reasonably practicable of known or presumed ACM's.
2. Inspect and record information on the accessibility, condition and surface treatment of know or presumed ACM's
3. Determine and record the asbestos type based on sampling or by making a presumption based on product type and appearance
4. Locate all ACM's within the fabric of the buildiing to the targeted refurbishment areas.

3.0 Introduction/Objectives(Cont): - Type of Survey

3.3 Type of Survey – Management with part Refurbishment/Demolition Survey

This management element of the survey is required for the normal occupation and use of the building to ensure continued management of any ACM's in situ, and is the standard survey type.

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

All areas have been accessed as far as is reasonably practicable. Any areas that it was not possible to access have been presumed to contain asbestos and documented within this report.

Management surveys will involve minor intrusive work and some disturbance. The extent of the intrusion will vary between premises and depend on what is reasonably practicable for individual properties eg type of building, nature of construction, etc.

This management survey includes a material assessment of the identified or presumed ACM's which relates to their condition and their potential to release fibres. This material assessment will provide the duty holder with an initial guide to the priority for managing ACM's as it will identify those ACM's which will most readily release fibres if they are disturbed.

The purpose of the refurbishment element of this survey is to help the duty holder identify asbestos in these areas prior to major refurbishment. Provides sufficient information to help the tendering process for removal works prior to any works starting, however it is strongly recommended that any asbestos removal should be undertaken against a detailed specification. We further recommend that the appointed removal contractor should attend site themselves to confirm the quantities and location of asbestos to be removed prior to costings.

Refurbishment surveys are intended to locate all asbestos within the the scope of this refurbishment survey.

It is disruptive and fully intrusive involving destructive inspection techniques that penetrate the building structure extensively. This involves breaking into floors, through walls, into wall voids, ceiling, cladding, boxings as necessary in order to gain access to all areas include the inner fabric of the building.

This survey involved sampling and analysis to confirm the presence or absence of asbestos, however presumptions may also have been used within this report to presume the presence of ACM's.

4.0 Desk Top Review and Survey Planning:

Details of information requested from the Duty Holder by 0800 Asbestos Ltd in order to carry out a desk top review and plan the survey in accordance with HSG 264 were recorded on our pre-survey questionnaire, along with details of all the information that were provided by Orly Weinberger on behalf of the client.

The Information provided was assessed during the desktop review and a survey plan, and risk assessment was produced for the survey of:

12 Platts Lane
London
NW3 7NR

The 'Asbestos Management Survey with part Refurbishment/Demolition' was carried out to domestic, Lounge, Dinning room, Kitchen, Dirt pile 1, Dirt pile 2, External walls, Trench (rear elevation).

The following areas were excluded from the 'Asbestos Management Survey with part Refurbishment/Demolition': None.

Where information was provided regarding the presence of known or presumed asbestos materials then this has been validated during the course of the survey, and recorded within this report.

Detailed drawing were not provided by the client at the time of the survey.

5.0 Survey Method

5.1 This survey has been undertaken in accordance with HSG264 and 0800 Asbestos Ltd in house procedures.

5.2 Clients of 0800 Asbestos Ltd that have signed our terms and conditions are deemed to have agreed, and accepted, our surveying approach, our sampling strategy, and our standard planning, surveying and reporting format unless they have made specific requests to the contrary.

5.3 The information provided by the client or their representative are recorded in the planning document and has been used to define the scope of the survey.

5.4 Photographs of suspected ACM's will be taken at the time of the survey unless the client expressly requests otherwise. Sampling points and suspected ACM's will not be identified with labels unless the client expressly requests otherwise.

5.5 All fibrous materials and item will be included in the survey unless, in the surveyors professional opinion, these items can be excluded (eg. Wood, wallpaper, man-made mineral fibre). Samples of all thermoplastic floor coverings will be taken unless, in the surveyors professional opinion, such items can be excluded. All textured coatings and novel bituminous will be sampled.

5.6 Areas that could not be accessed were presumed to have ACM's present until proven otherwise. Each area requiring further inspection is documented within the Executive summary (Inaccessible areas). Inaccessible areas are also shown on the plan drawings (Appendix 5)

5.7 Materials that could not be accessed and in the surveyors opinion can be dismissed will be presumed to be ACM unless proven otherwise. Materials that are not sampled but, in the surveyors opinion, have a similar appearance, location and function as a previously sampled material will be strongly presumed to be similar to the sampled material.

5.8 The quantity of samples taken may have been minimised by using 'strongly presumed' as defined above. Materials that are 'strongly presumed' to be similar to a material that has already been sampled will be recorded in the comments section of the survey and referenced against the original sampled material.

5.9 Our surveyor has made every attempt to avoid causing damage during the management surveys whilst attempting to identify possible ACM's. Minor repairs will be made and any areas accessed will be left in a safe condition.

5.10 Intrusive damage that is required to gain access to an area/location that is within the scope of the survey has been agreed with the client or the clients representative. Any remedial action will be put in place before such action is attempted. If remedial action cannot be arranged, no attempt to access the area will be made and the reasons recorded. The area/locationwill be presumed to have ACM's present until proven otherwise.

5.11 Non fibrous materials and item known not to contain asbestos (eg Breeze block, plaster, plasterboard plastics and non textured paints) will be excluded from the survey unless the surveyor suspects that these materials have been contaminated with asbestos from other sources or specifically requested by the client.

5.12 Older electrical equipment, which cannot be shown to contain ACM's, has been presumed to have ACM's present unless, in the surveyors professional opinion, such items can be excluded.

6.0 Exclusions and Caveats:

6.1 For safety reasons it is not possible to inspect internal areas of plant and machinery.

Access to internal wall linings and general cavities was restricted to avoid excessive damage to surface finishes.

Where areas have been designated as 'no access' or ‘restricted access’, unless further inspection/sampling proves otherwise, the presumption has been made that these structures/areas contain asbestos materials.

During the course of the survey it may not have been possible to access all areas of the site. Details of areas requiring further access are identified within the Data Sheets of this report. In accordance with HSG 264, asbestos is presumed to be present within these areas and should be treated accordingly until further inspection and analysis of building fabric and services proves otherwise.

It is recommended that further intrusive inspection and sampling be carried out where site refurbishment, maintenance, or similar may disturb Asbestos Containing Materials that have remained inaccessible during this survey, this should be a refurbishment/demolition survey as described in HSG 264.

Residual asbestos material may be present beneath re-lagged services and cannot be detected unless the re-lagging is systematically removed. Caution should therefore be taken when working on such materials for the potential presence of asbestos residue.

Textured Coatings such as “Artex” may contain a trace quantity of Chrysotile asbestos. Due to this low asbestos content, applications of this product may be non-homogenous and may elicit both positive and negative samples. Where both positive and negative samples are obtained the client should presume that the textured coating contains Chrysotile throughout even though a non-detected result has been obtained.

This report does not include investigations into land contamination associated with asbestos or any other contaminant.

7.0 Sampling and Analysis:

7.1 The object of bulk sampling is to identify the nature and extent of any visible ACM.

7.2 Bulk sampling is undertaken inline with the recognised safe procedures in order to cause minimal possible nuisance and potential risk to health of the building occupants and visitors. Bulk samples are taken in accordance with documented in house procedures, following guidelines detailed in HSG264 'The Survey Guide' and HSG248 'The Analyst Guide'. The quantity of samples taken will be minimised by using 'strongly presumed'. Materials that are 'strongly presumed 'to be similar to a material that has already been sampled will be recorded in the comments section of the survey record and referenced against the original sampled material.

7.3 Bulk samples are returned to the appointed bulk analysis laboratory with the appropriate sample / report reference number. Where appropriate; a label will be left on site adjacent to the sample location.

7.4 The label will indicate the sample number and the date taken. This label can be used along with the report for cross reference purposes.

7.5 Bulk sample analysis is carried out in accordance with HSE document HSG 248 'The Analysts Guide' and 0800 Asbestos Ltd documented in-house methods. Samples are examined under a low magnification stereomicroscope and the fibres teased apart. The fibres are then mounted in liquids of known refractive indices and examined under high magnification using polarised light and dispersion staining in accordance with HSG 248 'The Analysts Guide'.

7.6 The bulk sample description and analysis results can be found in Appendix 4 of this report – The analysis certificate.

Key to Analysis Results:

Chrysotile - White Asbestos

Amosite - Brown Asbestos

Crocidolite - Blue Asbestos

Tremolite - Rare Asbestos

Actinolite - Rare Asbestos

Anthophyllite - Rare Asbestos

8.0 Survey Results - Interpretation:

Survey Results

8.1 The results of the survey inspections and sampling undertaken are recorded on the enclosed Survey Data Sheets (appendix 2), Asbestos Register (appendix 1) and Non-Asbestos Material Register (appendix 3).Where asbestos containing material have been identified or presumed to be present then a Material Assessment Algorithm has been calculated as detailed in HSG 264 and reproduced in the table below:

8.2 Within the survey data sheets the individual scores in brackets, for each sample variable, are added together to form the final material risk assessment algorithm score.

8.0 Survey Results - Interpretation (cont):

Material Risk Assessment Algorithm

Product type [or debris from product]

Score	Examples of scores
1	Asbestos reinforced composites [plastics, resins, mastics, roofing felts, vinyl floor tiles, semi- rigid paint, decorative finishes and asbestos cement etc]
2	Asbestos insulating board, mill boards, other low-density boards, textiles, gaskets, ropes and woven materials and asbestos paper.
3	Thermal insulation [e.g. pipe and boiler lagging], sprayed asbestos, loose asbestos, asbestos mattresses and packing.

Extent of damage/deterioration

Score	Examples of scores
0	Good condition: no visible damage
1	Low damage: a few scratches or surface marks, broken edges on boards or tiles, etc.
2	Moderate damage: significant breakage of materials or several small areas where material has been damaged exposing fibrous edges.
3	High damage or deterioration of materials, sprays and thermal insulation. Visible asbestos contamination by debris or residues.

Surface treatment

Score	Examples of scores
0	Composite materials containing asbestos, reinforced plastics, resins, vinyl tiles
1	Enclosed sprays or insulation, AIB [with exposed face encapsulated], cement sheets, etc.
2	Unsealed AIB, encapsulated insulation and sprays.
3	Unsealed insulation and sprays.

Asbestos Type

Score	Examples of scores
1	Chrysotile
2	Amphibole asbestos (excluding Crocidolite)
3	Crocidolite

Material Risk Assessment Score

Risk Category	Risk	Score Range	Fibre release potential
A	HIGH	10 and above	High risk with a high potential to release fibres if disturbed
B	MEDIUM	Between 7 and 9	Medium risk with a medium potential to release fibres if disturbed
C	LOW	Between 5 and 6	Low risk with and having low potential to release fibres if disturbed
D	VERY LOW	4 and below	Very low risk with and having very low potential to release fibres if disturbed

9.0 Recommendations:

9.1 To comply with and ensure that the requirements of section 2 & 3 of the Health and Safety at Work Act (as amended) 1974, the Management of Health and Safety at Work Regulations 1999, the Control of Asbestos Regulations 2012 and the Control of Substances Hazardous to Health 2002 are met, the following recommendations should be implemented:

9.2 Undertake suitable and sufficient Risk Assessments of identified asbestos containing materials against normal occupation and maintenance operations, in compliance with Regulations 3 of the Management of Health & Safety at Work Regulations 1999 and Regulation 6 of the Control of Asbestos Regulations 2012.

9.3 The findings of the survey be brought to the attention of those persons who are likely to come in contact with asbestos, in compliance with Section 2 and 3 of the Health and Safety at Work Act (as amended) 1974 and Regulation 10 of the Control of Asbestos Regulations 2012.

9.4 Implement an Asbestos Management Policy, Plan and review process in compliance Regulation 4 of the Control of Asbestos Regulations 2012.

9.5 Instigate regular inspections, to record and update details of retained asbestos containing materials.

9.6 Review the arrangement under the management plan in accordance with regulation 4of the CAR 2012.

9.7 During the course of the survey it may not have been possible to access all areas of the site. Details of areas requiring further access are identified within the Data Sheets of this report. In accordance with HSG 264, asbestos has been presumed to be present within these areas and should be treated accordingly until further inspection and analysis of building fabric and services proves otherwise.

9.8 Where asbestos debris or asbestos in poor condition has been found it is recommended that access is restricted and or controlled to these areas in accordance with Regulation 11 and Regulation 16 of the Control of Asbestos Regulations 2012.

9.9 If we have identified asbestos materials in poor condition, it is recommended that air monitoring is carried out within a number of areas where asbestos materials have been identified in order to assess airborne fibre levels within adjacent occupied areas in relation to the clearance indicator, as documented by HSG 248 the Analyst Guide.

9.10 All identified asbestos to be appropriately identified and subject to risk assessment, management, and re-inspection.

9.11 Site specific recommendations in respect to the location and condition of asbestos materials identified during the course of this inspection are detailed in the Survey Data Sheets and Asbestos register. In considering the management of asbestos materials identified to date, these recommendations should be taken into consideration.

9.12 In accordance with the Control of Asbestos Regulations 2012 the removal of ACM's fall into one of the three categories below:

Licensed Asbestos Removal
Is defined as any work, which is undertaken on a friable asbestos product or which is likely to exceed the control limit of 0.1f/cm3. A licensed asbestos removal contractor must undertake this work and a 14-day notice must be given to the HSE prior to the commencement of the work.

Notifiable Non Licensed Works
If work on an ACM causes the deterioration of the matrix material in which the asbestos fibres are firmly linked, then these works are Notifiable Non Licensed Work (NNLW). Work of this type does not require an asbestos removal licence, but the company undertaking the work must have the following:
-Notification of the work to the relevant enforcing authority prior to the work commencing.
-Medical examinations to assess each worker's state of health to be carried out, before any possible – exposure to asbestos. Then re-examinations every three years.
-Insurance for working with asbestos containing materials.
-A register of work to be kept by the employer for each employee exposed to asbestos.

Non Notifiable Non Licensed work
-Non-Licensed Works Is defined as any work, which involves short, non-continuous maintenance activities, during which only nonfriable materials are removed. It can also involve the removal of non-friable materials for refurbishment purposes. However, work of this type is only applicable where the matrix material in which the asbestos fibres are firmly linked remains intact.
-If a non-licensed contractor is appointed to undertake the removal works on the above materials, the following points must be adhered to:
-All operatives undertaking work on the material must have asbestos awareness training and practical asbestos training.

9.13 It is recommended that further intrusive investigations and sampling be carried out in accordance with HSG.264, where any major refurbishment, maintenance, installation or similar activity may expose asbestos materials that have remained inaccessible during the survey. This should be as a refurbishment/demolition survey as documented in HSG264.

9.14 The findings of this report should not be solely relied upon in obtaining costs for proposed asbestos abatement work. Any proposed abatement/removal of the asbestos should be undertaken against a detailed specification.

Appendix 1 - Asbestos Register

Building	Floor	Location /Room	S,P,SP,AS Sample No	Product Type	Condition	Surface Treatment	Asbestos Type	Quantity	Accessibility	Material Score	Recommendation	Additional Comments
There were no results found.												

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Appendix 2 – Survey Data Sheets

Service Type	**Management Survey with part Refurbishment/Demolition**		
Report Revision Number	**2**	**Surveyors**	**Dayle Warsop**
TEAMS Job Number	**J010980**	**Survey Date**	**19 Jul 2016**
Site Address:	**12 Platts Lane London NW3 7NR**	**Bulk Analysis Laboratory**	
		Sample Analysis Date	**N/A**

Survey Data Sheets

Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
19 Jul 2016	Dayle Warsop	Management Survey with part Refurbishment/Demolition	Ground Floor	No asbestos detected
Building	**Room**	**Item**	**Quantity**	
domestic	Lounge G01	No suspect asbestos containing materials visually identified floor and floor void	0	
Sample No (S,SP,P,As)	**Product Type**	**Surface Treatment**	**Condition**	**Accessibility**
Visual (P)	N/A	N/A	N/A	N/A
Material Risk Score				
N/A				
Recommended action	No further action required			
Surveyor comments	N/A			

Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
19 Jul 2016	Dayle Warsop	Management Survey with part Refurbishment/Demolition	Ground Floor	No asbestos detected
Building	**Room**	**Item**	**Quantity**	
domestic	Dinning room G02	No suspect asbestos containing materials visually identified floor and floor void	0	
Sample No (S,SP,P,As)	**Product Type**	**Surface Treatment**	**Condition**	**Accessibility**
Visual (P)	N/A	N/A	N/A	N/A
Material Risk Score				
N/A				
Recommended action	No further action required			
Surveyor comments	N/A			

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)

Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
19 Jul 2016	Dayle Warsop	Management Survey with part Refurbishment/Demolition	Ground Floor	No asbestos detected
Building	**Room**	**Item**	**Quantity**	
domestic	Kitchen G03	No suspect asbestos containing materials visually identified floor and floor void	0	
Sample No (S,SP,P,As)	**Product Type**	**Surface Treatment**	**Condition**	**Accessibility**
Visual (P)	N/A	N/A	N/A	N/A
Material Risk Score				
N/A				
Recommended action	No further action required			
Surveyor comments	N/A			

Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
19 Jul 2016	Dayle Warsop	Management Survey with part Refurbishment/Demolition	External	No asbestos detected
Building	**Room**	**Item**	**Quantity**	
domestic	Dirt pile 1 E01	No suspect asbestos containing materials visually identified throughout	0	
Sample No (S,SP,P,As)	**Product Type**	**Surface Treatment**	**Condition**	**Accessibility**
Visual (P)	N/A	N/A	N/A	N/A
Material Risk Score				
N/A				
Recommended action	No further action required			
Surveyor comments	N/A			

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)

Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
19 Jul 2016	Dayle Warsop	Management Survey with part Refurbishment/Demolition	External	No asbestos detected
Building	**Room**	**Item**	**Quantity**	
domestic	Dirt pile 2 E02	No suspect asbestos containing materials visually identified throughout	0	
Sample No (S,SP,P,As)	**Product Type**	**Surface Treatment**	**Condition**	**Accessibility**
Visual (P)	N/A	N/A	N/A	N/A
Material Risk Score				
N/A				
Recommended action	No further action required			
Surveyor comments	N/A			

Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
19 Jul 2016	Dayle Warsop	Management Survey with part Refurbishment/Demolition	External	No asbestos detected
Building	**Room**	**Item**	**Quantity**	
domestic	External walls E03	No suspect asbestos containing materials visually identified throughout surrounding soil.	0	
Sample No (S,SP,P,As)	**Product Type**	**Surface Treatment**	**Condition**	**Accessibility**
Visual (P)	N/A	N/A	N/A	N/A
Material Risk Score				
N/A				
Recommended action	No further action required			
Surveyor comments	N/A			

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)

Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
19 Jul 2016	Dayle Warsop	Management Survey with part Refurbishment/Demolition	External	No asbestos detected
Building	**Room**	**Item**	**Quantity**	
domestic	Trench (rear elevation) E04	No suspect asbestos containing materials visually identified throughout surrounding soil.	0	
Sample No (S,SP,P,As)	**Product Type**	**Surface Treatment**	**Condition**	**Accessibility**
Visual (P)	N/A	N/A	N/A	N/A
Material Risk Score				
N/A				
Recommended action	No further action required			
Surveyor comments	N/A			

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Appendix 3 - Areas Surveyed

Building	Floor	Room No:	Room Type	Item
domestic	External	E01	Dirt pile 1	Bricks and soil only
domestic	External	E02	Dirt pile 2	Bricks and soil only
domestic	External	E03	External walls	Bricks. Modern Damp proof course.Plastic and metal rainwater goods. Soil.
domestic	External	E04	Trench (rear elevation)	Bricks. Modern Damp proof course.Plastic and metal rainwater goods. Soil.
domestic	Ground Floor	G01	Lounge	Lathe/ plaster and plasterboard ceiling. Brick/ plaster and timber walls. Timber floor boards with timber and carpet covering. Timber doors
domestic	Ground Floor	G02	Dinning room	Lathe/ plaster and plasterboard ceiling. Brick/ plaster and timber walls. Timber floor boards with timber covering. Timber doors
domestic	Ground Floor	G03	Kitchen	Lathe/ plaster and plasterboard ceiling. Brick/ plaster and timber walls. Timber floor boards with timber covering. Timber doors. Modern sink pads.

Appendix 4 – Analysis Certificates

No samples were taken during the course of this survey.

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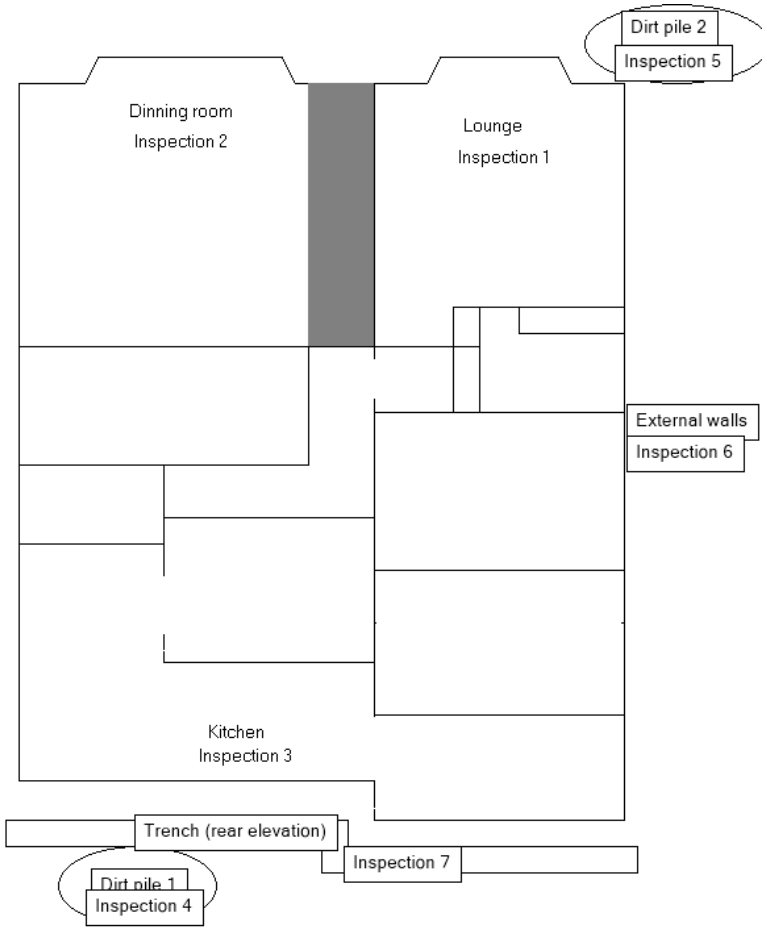
Appendix 5 – Plans

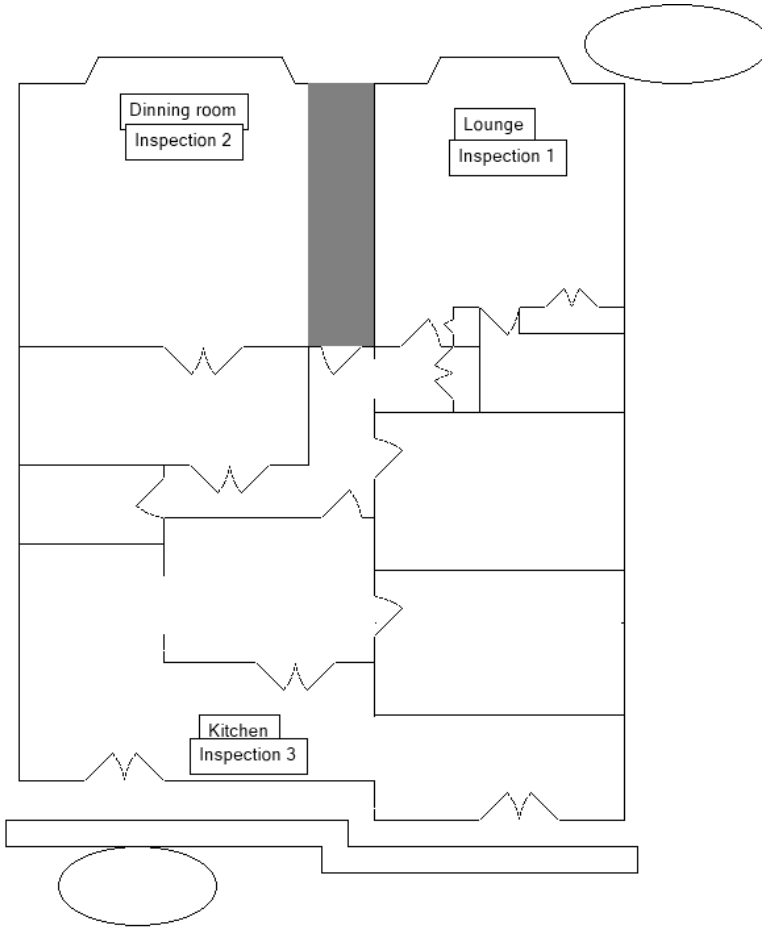


Plan Key:

Positive or Strongly Presumed Asbestos in area / room

No Access within or to area / room

Client: Ms O Weinberger
Site: 12 Platts Lane
Floor: External
UPRN No: N/A



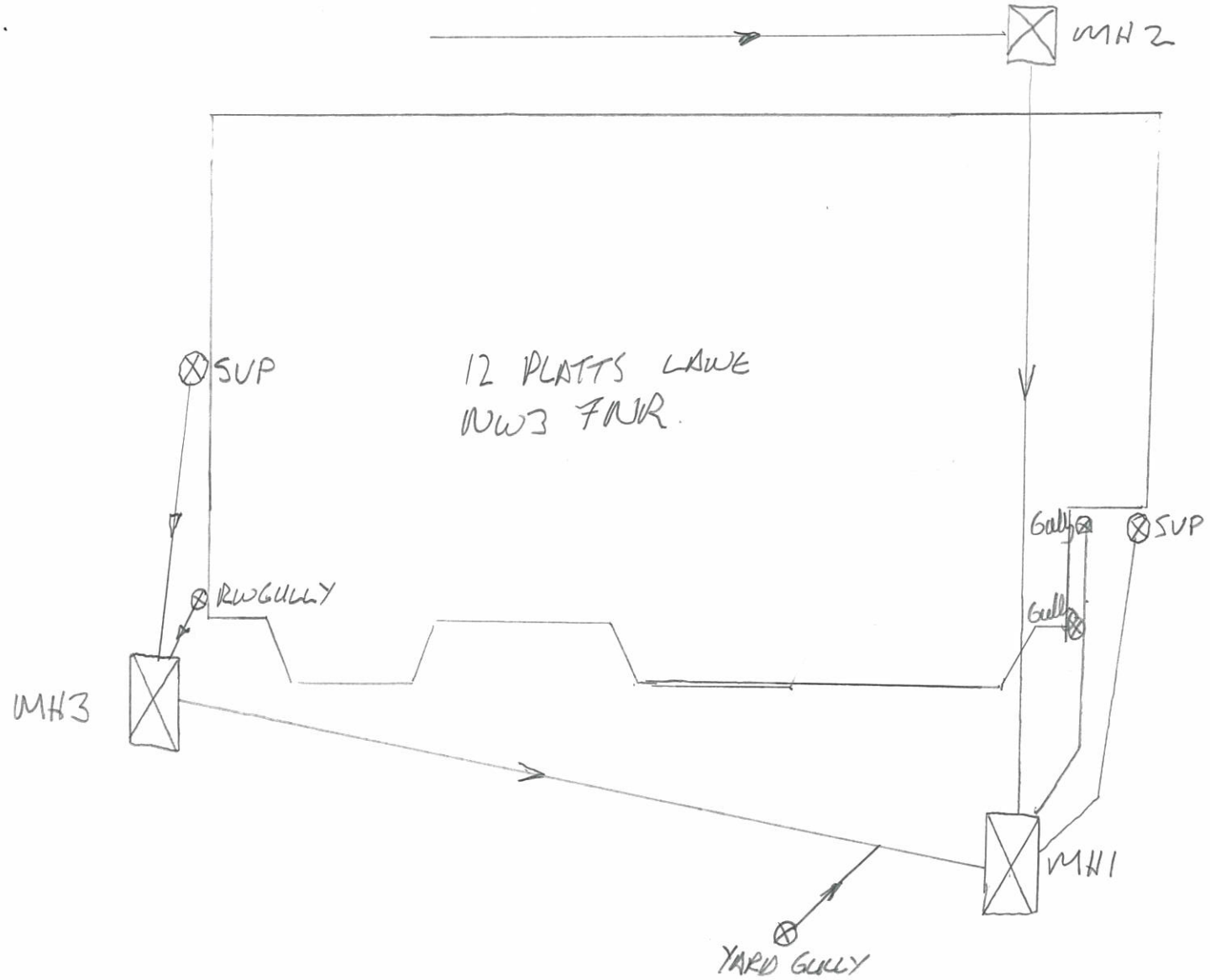
Plan Key:

Positive or Strongly Presumed Asbestos in area / room

No Access within or to area / room

Client: Ms O Weinberger
Site: 12 Platts Lane
Floor: Ground Floor
UPRN No: N/A

PLAN SKETCH



NOT TO SCALE.

PRE-CONSTRUCTION AMBIENT NOISE SURVEY
12 PLATTS LANE, LONDON

REC REFERENCE: AC102181R0

REPORT PREPARED FOR: HOZE INVESTMENT

DATE: 4TH AUGUST 2016

National Consultancy, Locally Delivered

A CONCEPT LIFE SCIENCES COMPANY

Issue/revision	Issue 1	Revision 1	Revision 2	Revision 3
Remarks	Draft, for comment			
Date	04/08/2016			
Prepared by	Dr. Nicholas Haigh			
Signature				
Position	Senior Acoustic Consultant			
Checked by	Lee Faulkner			
Signature				
Position	Senior Acoustic Consultant			
Verified by	John Goodwin			
Signature				
Position	Associate Director			
Project number	AC102181-1r0			

EXECUTIVE SUMMARY

Resource and Environmental Consultants Ltd has been commissioned by Hoze Investment to undertake a pre-construction ambient noise survey prior to the commencement of building works at 12 Platts Lane, London NW3 7NR.

Noise Survey

An ambient noise survey has been completed at the rear of the property, considered representative of the ambient noise environment to which other nearby residential receptors are exposed. Noise levels are presented.

Such noise levels are suitable for use as a baseline in a subsequent noise impact assessment such as using the ABC method of BS 5228-1:2009+A1:2014 and provide a threshold level above which a potentially significant effect is indicated.

TABLE OF CONTENTS

1. INTRODUCTION

Resource and Environmental Consultants (REC) Limited was commissioned by Hoze Investment to undertake a Pre-Construction Ambient Noise Survey prior to undertaking building works at 12 Platts Lane, London NW3 7NR, to be referred to hereafter as 'the Site'.

This assessment has been undertaken to meet the requirements of Camden Council.

All acronyms used within this report are defined in the Glossary presented in Appendix II.

1.1 Site Location & Proposed Development

The Site currently comprises a house which has been converted into flats, with a rear garden. The Site lies on a residential street. There are currently substantial building works with associated noise-generating plant approximately 100 metres to the SSW, also on Platts Lane.

The key source of noise impacting upon the Site is plant associated with the above-mentioned building site.

The site location is shown in Figure 1 of Appendix III.

1.2 Limitations

The limitations of this report are presented in Appendix I.

1.3 Confidentiality

REC has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from REC; a charge may be levied against such approval.

2. ASSESSMENT CRITERIA

2.1 Local National Planning Practice Guidance

Noise needs to be considered when new developments may create additional noise and when new developments would be sensitive to the prevailing acoustic environment. When preparing local or neighbourhood plans, or taking decisions about new development, there may also be opportunities to consider improvements to the acoustic environment.

Local planning authorities' plan-making and decision taking should take account of the acoustic environment and in doing so consider:

- Whether or not a significant adverse effect is occurring or likely to occur;
- Whether or not an adverse effect is occurring or likely to occur; and
- Whether or not a good standard of amenity can be achieved.

In line with the Explanatory Note of the Noise Policy Statement for England, this would include identifying whether the overall effect of the noise exposure (including the impact during the construction phase wherever applicable) is, or would be, above or below the significant observed adverse effect level and the lowest observed adverse effect level for the given situation.

The Observed Effect Levels are as follows:

- Significant observed adverse effect level: This is the level of noise exposure above which significant adverse effects on health and quality of life occur;
- Lowest observed adverse effect level: this is the level of noise exposure above which adverse effects on health and quality of life can be detected; and
- No observed effect level: this is the level of noise exposure below which no effect at all on health or quality of life can be detected.

Table 1 summarises the noise exposure hierarchy, based on the likely average response.

Table 1 Noise Exposure Hierarchy

Perception	Examples of Outcomes	Increasing Effect Level	Action
Not Noticeable	No Effect	No Observed Effect	No specific measures required
Noticeable and not intrusive	Noise can be heard but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No specific measures required
		Lowest Observed Adverse Effect Level	

Perception	Examples of Outcomes	Increasing Effect Level	Action
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	Observed Adverse Effect	Mitigate and reduce to a minimum
		Significant Observed Adverse Effect Level	
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory	Unacceptable Adverse Effect	Prevent

The subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected. This will depend on how various factors combine in any particular situation.

These factors include:

- The source and absolute level of the noise together with the time of day it occurs. Some types and level of noise will cause a greater adverse effect at night than if they occurred during the day – this is because people tend to be more sensitive to noise at night as they are trying to sleep. The adverse effect can also be greater simply because there is less background noise at night;
- For non-continuous sources of noise, the number of noise events, and the frequency and pattern of occurrence of the noise; and
- The spectral content of the noise and the general character of the noise. The local topology and topography should also be taken into account along with the existing and, where appropriate, the planned character of the area.

More specific factors to consider when relevant:

- Where applicable, the cumulative impacts of more than one source should be taken into account along with the extent to which the source of noise is intermittent and of limited duration;

- Consideration should also be given to whether adverse internal effects can be completely removed by closing windows and, in the case of new residential development, if the proposed mitigation relies on windows being kept closed most of the time. In both cases a suitable alternative means of ventilation is likely to be necessary. Further information on ventilation can be found in the Building Regulations; and
- If external amenity spaces are an intrinsic part of the overall design, the acoustic environment of those spaces should be considered so that they can be enjoyed as intended.

2.2 Local Authority Guidance and Criteria – Camden Council

REC understands that noise monitoring is required in order to address point no. 29 given within the received Construction Management Plan. It is considered that the most appropriate way of meeting the requirements of this document and the associated 'Camden's Minimum Requirements for Building/Construction/Demolition Sites' is to follow the ABC method contained in Appendix E.3.2 of BS5228-1:2009+A1:2014.

An enquiry ref 20679211 was sent to Camden Council to establish whether this methodology was appropriate. As of report date no reply had been forthcoming.

2.3 British Standard 5228: Noise and Vibration Control on Construction and Open Sites – Part 1:Noise: 2009 (BS 5228-1)

This British Standard sets out techniques required to predict and assess the likely noise effects from construction works, based on detailed information on the type and number of plant being used, their location, and the length of time they are in operation.

The noise prediction method is used to establish likely noise levels in terms of the $L_{Aeq,T}$ over the core working day.

This British Standard also documents a database of information, comprising previously measured sound power levels for a variety of different construction plant undertaking various common activities.

Example criteria are presented for the assessment of the significance of noise effects. Such criteria maybe concerned with fixed noise limits and/or ambient noise level changes. With respect to fixed noise limits, BS 5228-1 presents the following noise limits which are taken as an average over a 10-hour working day:

- 70.0dB(A) in rural, suburban and urban areas away from main road traffic and industrial noise; and,
- 75.0dB(A) in urban areas near main roads and heavy industrial areas.

The ABC methodology, detailed on p.119 of the standard, gives a methodology for calculating the potential significance effect of construction noise based upon the measured change in level and a baseline ambient level. Based upon the ambient noise level, a threshold value for construction noise is derived. If the construction noise level exceeds the appropriate 'category value', a potentially significant effect is indicated. The assessor then needs to consider other project-specific factors, such

as the number of receptors affected and the duration and character of the impact, to determine if there is a significant effect.

3. NOISE SURVEY

3.1 Noise Survey – Ambient pre-construction level

REC has conducted a Noise Survey in order to measure the level of noise present and to which nearby residential receptors are currently exposed, prior to the commencement of building works at the site. The survey was carried out over the following time period:

- Wednesday 27th July 2016 from 12:30 until 13:30.

The following location was chosen for the survey:

- Noise Monitoring Position 1 (NMP1): Located at the back of the rear garden of no. 12 Platts Lane. The microphone was located at a height of 1.5m in free-field conditions. Noise sources audible at this location were noted to be dominated by distant road traffic noise and construction activities on the large site approximately 100 metres to the SSW. Weather Conditions during the Noise Surveys were conducive towards the measurement of environmental noise being overcast and dry with wind speeds below 5.0m/s.

The chosen period constitutes a worst-case assessment as at this time road traffic was not subject to peak or rush-hour flows, and construction on nearby sites was likely to be reduced due to lunch breaks.

A summary of the measured sound pressure levels are presented in Table 2.

Table 2 Summary of Measured Noise Levels

Measurement Position	Measurement Period	Measured Sound Pressure Level, free-field (dB)		
		$L_{Aeq,T}$	$L_{AMax,f}$	$L_{A90,T}$
NMP1	Weekday daytime	51.8	76.7	45.8

The Noise Survey was completed using the following noise measurement equipment:

Table 3 Noise Measurement Equipment

Noise Survey	Equipment Description	Manufacturer & Type No.	Serial No.	Calibration Due Date
NMP1	Sound Level Meter	01dB-Metravib Black Solo	65947	10th September 2016
	Pre-amplifier	01dB-Metravib PRE 21 S	16831	
	Microphone	01dB Metravib MCE212	181856	
	Calibrator	01dB-Metravib CAL-21	34744600	5th November 2016

The Noise Measurement Position is shown on Figure 1.

Based upon the ABC methodology of BS5228-1:2009+A1:2014, the noise levels tabulated below are derived.

Table 4 BS5228-1:2009+A1:2014 ABC method noise levels

Item	Sound Pressure Level, dB(A)
(1) Measured noise level	51.8
(2) Item (1) rounded to 5 dB	50
(3) Daytime threshold value	65
(4) Construction site noise level at which potentially significant effect is indicated	65

The above level is applicable during daytime periods (07:00 to 19:00) and Saturdays (07:00 to 13:00). This level is applicable at nearby residential dwellings.

4. CONCLUSION

Resource and Environmental Consultants Ltd was commissioned by Hoze Investment to undertake a Noise Survey prior to construction works at a site in Platts Lane, London NW3 7NR.

A Noise Survey has been completed in order to provide a baseline for calculating the potential impact of future construction site noise upon the proposed residential development.

Using the ABC methodology of BS5228-1:2009+A1:2014, a construction site noise level at which a potentially significant effect is indicated has been derived. This is applicable at nearby residential dwellings.

APPENDIX I LIMITATIONS

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between REC Limited and the Client as indicated in Section 1.2.

2. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.

3. REC cannot be held responsible for any use of the report or its contents for any purpose other than that for which it was prepared. The copyright in this report and other plans and documents prepared by REC is owned by them and no such plans or documents may be reproduced, published or adapted without written consent. Complete copies of this may, however, be made and distributed by the client as is expected in dealing with matters related to its commission. Should the client pass copies of the report to other parties for information, the whole report should be copied, but no professional liability or warranties shall be extended to other parties by REC in this connection without their explicit written agreement there to by REC.

APPENDIX II GLOSSARY OF ACOUSTICAL TERMINOLOGY

Noise

Noise is defined as unwanted sound. Human ears are able to respond to sound in the frequency range 20 Hz (deep bass) to 20,000 Hz (high treble) and over the audible range of 0 dB (the threshold of perception) to 140 dB (the threshold of pain). The ear does not respond equally to different frequencies of the same magnitude, but is more responsive to mid-frequencies than to lower or higher frequencies. To quantify noise in a manner that approximates the response of the human ear, a weighting mechanism is used. This reduces the importance of lower and higher frequencies, in a similar manner to the human ear.

Furthermore, the perception of noise may be determined by a number of other factors, which may not necessarily be acoustic. In general, the impact of noise depends upon its level, the margin by which it exceeds the background level, its character and its variation over a given period of time. In some cases, the time of day and other acoustic features such as tonality or impulsiveness may be important, as may the disposition of the affected individual. Any assessment of noise should give due consideration to all of these factors when assessing the significance of a noise source.

The most widely used weighting mechanism that best corresponds to the response of the human ear is the 'A'-weighting scale. This is widely used for environmental noise measurement, and the levels are denoted as dB(A) or L_{Aeq}, L_{A90} etc., according to the parameter being measured.

The decibel scale is logarithmic rather than linear, and hence a 3 dB increase in sound level represents a doubling of the sound energy present. Judgement of sound is subjective, but as a general guide a 10 dB(A) increase can be taken to represent a doubling of loudness, whilst an increase in the order of 3 dB(A) is generally regarded as the minimum difference needed to perceive a change under normal listening conditions.

An indication of the range of sound levels commonly found in the environment is given in the following table.

Table A1 Typical Sound Pressure Levels

Sound Pressure Level dB(A)	Location
0	Threshold of hearing
20 - 30	Quiet bedroom at night
30 - 40	Living room during the day
40 - 50	Typical office
50 - 60	Inside a car
60 - 70	Typical high street
70 - 90	Inside factory
100 - 110	Burglar alarm at 1m away
110 - 130	Jet aircraft on take off
140	Threshold of pain

Table A2 Terminology

Descriptor	Explanation
dB (decibel)	The scale on which sound pressure level is expressed. It is defined as 20 times the logarithm of the ratio between the root-mean-square pressure of the sound field and a reference pressure (2x10-5Pa).
dB(A)	A-weighted decibel. This is a measure of the overall level of sound across the audible spectrum with a frequency weighting (i.e. 'A' weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies.
$L_{Aeq, T}$	L_{Aeq} is defined as the notional steady sound level which, over a stated period of time (T), would contain the same amount of acoustical energy as the A - weighted fluctuating sound measured over that period.
L_{Amax}	L_{Amax} is the maximum A - weighted sound pressure level recorded over the period stated. L_{Amax} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the overall L_{eq} noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.
L_{10} & L_{90}	If a non-steady noise is to be described it is necessary to know both its level and the degree of fluctuation. The Ln indices are used for this purpose, and the term refers to the level exceeded for n% of the time. Hence L_{10} is the level exceeded for 10% of the time and as such can be regarded as the 'average maximum level'. Similarly, L_{90} is the 'average minimum level' and is often used to describe the background noise. It is common practice to use the L_{10} index to describe traffic noise.
Free-field Level	A sound field determined at a point away from reflective surfaces other than the ground with no significant contributions due to sound from other reflective surfaces. Generally as measured outside and away from buildings.
Fast	A time weighting used in the root mean square section of a sound level meter with a 125millisecond time constant.
Slow	A time weighting used in the root mean square section of a sound level meter with a 1000millisecond time constant.

APPENDIX III FIGURES

FIGURE 1 – SITE LOCATION AND NOISE MEASUREMENT POSITION