# Construction Management Plan

pro forma

**DRAFT** 

Redevelopment of Garages at the rear of New End Square

London

NW3 1LS



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# Revision & Additional Material

#### Please list all iterations here:

04/02/2020	01	Kamala Foster
04/03/2020	02	Kamala Foster

#### **Additional sheets**

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

Date	Version	Produced by



# Introduction

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

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

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

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

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

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

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

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

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



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

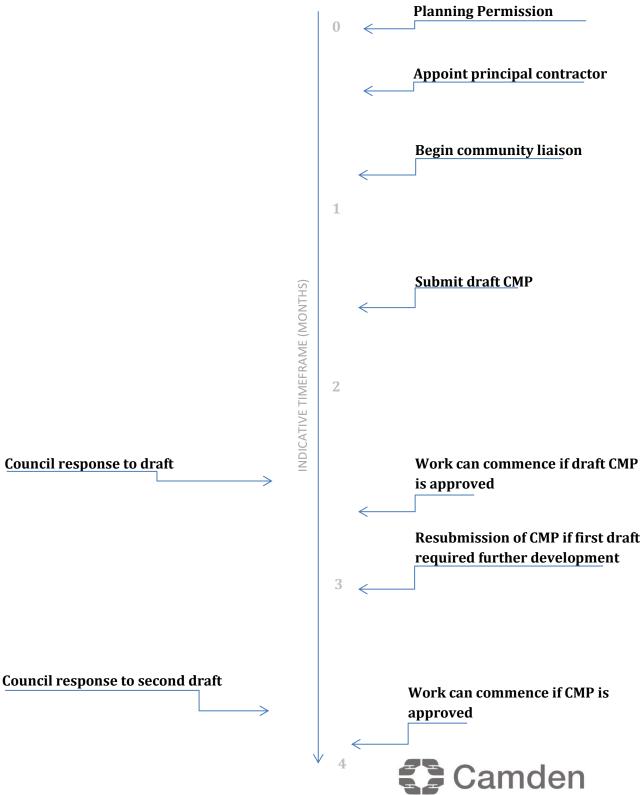
Revisions to this document may take place periodically.



# **Timeframe**

**COUNCIL ACTIONS** 

**DEVELOPER ACTIONS** 



# **Contact**

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

Address: Garages to the rear of 26 New End Square London NW3 1LS

Planning reference number to which the CMP applies: 2016/0849/P

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

Name: Kamala Foster

Address: 180 Bowes Road, London, N11 2JG

Email: Info@cpmukltd.co.uk

Phone: 07792193310

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.

Contact Name: Ilan Kahlani

Company Name: LLev Construction Limited

Address: 247 Gray's Inn Road, London, WC1X 8QZ

Email: ilan@llevconstruction.com

Phone: 07867533213



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.

Contact Name: Rama Ragupathy

Company Name: Construction Project Management (UK) Ltd.

Address: 180 Bowes Road, London, N11 2JG

Email: info@cpmukltd.co.uk

Phone: 07792193310

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.

Contact Name: Ilan Kahlani

Company Name: LLev Construction Limited

Address: 247 Gray's Inn Road, London, WC1X 8QZ

Email: ilan@llevconstruction.com

Phone: 07867533213



# 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 existing site consists of 6 brick framed council garages with a variety of different 'up-and-over' garage doors, flat roofs covered with roofing felt and a forecourt of concrete hardstanding.

The project located at the corner of New End and Flask Walk in Hampstead consists of the demolition of existing garages to create a space for a 2- bedroom family residence. The proposed scheme utilises the slope of the descending footpath of Flask Walk to create a compact 3-storey house, including a newly excavated basement and an integrated garage. The site sits within the current residential aspect of New End and the terraced housing of Flask Walk Cottages. The proposed façade and building height are designed to blend the new house into the current residential landscape. New End Primary School is located to the west of the site and will require additional restriction with relation to deliveries and noise considerations and awareness of pedestrian movement. The remaining local area is primarily residential, with the only non-residential local interests being the Burgh House and Hampstead Museum, the Livingstone Studios all on New End Square. Directly opposite the site entrance is the Trehearne Madelaine & Harpal Brar; pashmina, cashmere and textile specialist. We will be liaising directly with her to ensure her needs for client access are maintained.

The development proposal is for the demolition of six existing garages and the erection of a three story, two bedroom single dwelling.



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 development consists of demolishing the existing garages, excavating a new basement, and building the new house. The site is constrained by neighbouring buildings and gardens.

The Flask Walk Cottages party line wall is likely to require propping during the basement excavation. Similarly, the garden areas to the side and rear of 26 New End Square will require a measure of propping or other retention methodology. From consulting an arboriculturist, the tree protections will be installed in place before any works commence or materials and machinery are brought onto site. The protective fencing, as shown in Appendix G will always be clearly marked using a warning sign during the construction processes. The hardstanding CFZ will be left intact and protected. The CFZ will be protected as requested by the arboriculturist. We intent to place a light structure site office on a raised timber to ensure permeability and existing hardstanding is not being disturbed. We will co-ordinate with tree consultant and sent our proposal to them for approval.

The sloping nature of the site means a progressive build of the house itself will be required, ensuring that the floor slabs and walls are built sequentially to ensure that stable ground conditions are maintained, and ground and storm water conditions are managed.

During the Pre-Construction and Site Establishment phases, the construction team will mobilise, acquire all necessary approvals and licences to undertake the works. Any required adjacent building monitoring will also be installed at this stage.

Once on site, the team will upgrade the current hoarding and install secure gates. Secure on-site storage and facilities for workers will be established. The start of works to the building will begin with asbestos removal (if required) and soft strip followed by structural demolition of the garages. In order to maintain stable ground and provide access to the site, the current concrete ground slab will be retained as much as possible until construction of the house requires its removal.

The demolition of the existing garages for any existing hard surfaces that require breaking up will be removed by hand with the use of a pneumatic hammer. A mechanical digger will not be used, to ensure that no damage is caused to the roots to be ripped out of the ground in error. At the basement excavation phase of the works will then commence, including installation of any required retention/propping systems required for the party wall to Flask Walk Cottages and the garden to the rear of 26 New End Square. The basement excavation will require secant piling or similar earth retention system to its full extent and seepage of water. Due to the nature of secant piling, any roots that might grow into the excavated area will have been cut off by the installation of the piled wall. The soil will then be excavated to the upper level of the site, still within the hoarding line will be bagged or/and removed by smaller vehicle to an approved waste transfer station. During the dig all the operative will be informed during induction if any archaeological or visually seen any toxic material to stop work and inform the site manager. The work will only resume once the CA have fully investigated this matter and have obtained clearance from the local/approving authority.

Once excavation is complete, the basement water-proof concrete box will be poured and the slabs at ground floor will be created, including the garage slab. The garage slab will create a stable vehicle delivery spot, and this will be utilised during the construction of the higher southern element of the house structure. Only when this is complete will the northern section of the structure be built. At all-time the delivery to site is by smaller vehicles, allowing deliveries to be managed within the garage space and stored at the basement

The envelope of the building will follow the superstructure sequencing. Once the building achieves water tightness, the installation of the residential fit-out will begin. Key issues are:

- Basement retention and excavation and ensuring the integrity of the Flask Walk Cottages and gardens to 26 New End Square
- Maintaining an on-site vehicle hard standing for as long as possible during the project
- Managing vehicle access and egress through the one-way system of New End Square and New End
- Minimising disturbance to residences around the site
- Managing the interface with New End Primary School, both from a pedestrian perspective and with regards to peak vehicle times for the school



8. Please provide the proposed start and end dates for each phase of construction as well as an overall programme timescale. (A Gantt chart with key tasks, durations and milestones would be ideal).

Only limited information is available at present so a full programme has yet to be developed. However, we have set out below some time scales for demolition and construction phases. We can provide more detail in the coming weeks.

#### Site set up

- Enabling works prior to substructure works - 2 weeks

#### Substructure

- Piling 3 weeks
- Demolition -2 weeks
- Reduce level- 4 weeks
- Slab construction- 1 weeks
- Wall construction- 4 weeks

#### Superstructure

- Floor sound external envelope 9 weeks
- Roof structure- 3 weeks
- Roof covering- 2 weeks

#### Internal

- Internal works and finishing to the facades and external works- 22 weeks

TOTAL - 52 weeks Grant

- 9. Please confirm the standard working hours for the site, noting that the standard working hours for construction sites in Camden are as follows:
  - 8.00am to 6pm on Monday to Friday
  - 8.00am to 1.00pm on Saturdays
  - No working on Sundays or Public Holidays



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

Enabling work – 2 weeks



# **Community Liaison**

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

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

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

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

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

#### **Cumulative impact**

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

The Council can advise on this if necessary.



#### 10. Sensitive/affected receptors

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

The primary receptors would be the immediately adjacent residential buildings along New End, Flask Walk and New End Square.

New End Primary School and New End Nurseries are located to the west of the site and will require additional restriction with relation to deliveries and noise considerations and awareness of pedestrian movement

#### 11. Consultation

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

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

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

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



Formal letters addressing the project and the Construction Management Plan (CMP) were sent out to local residents and the ward councillors (Appendix H) on the 5<sup>th</sup> February 2020.

The letter offered a link where the residents could download the CMP or alternatively sent directly to them should they request. The letter also provided the contact number and the email address of the office for consultation.

We have now allowed 14 days for comments to be received from the residents we posted the letters to (Appendix I). We have summarised the comments received from the residents outlining their concerns and then replied accordingly via email. The residents have also contacted via phone addressing the concerns of which some of the amendments were made in the CMP.

All the comments received were addressed and a meeting with the residents, contractor and the liaising officer is being held on  $11^{th}$  March 2020 to discuss the strategy moving forwards. The place of meeting is still to be decided, however we will send out another letter confirming the meeting location, for those than can attend.

#### 12. Construction Working Group

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

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



The Contractor will provide community relations personnel, who will be focused on engaging with the local community. The Contractor will ensure that occupiers of nearby properties and local residents, will be informed in advance of works taking place, including the estimated duration.

We are aware of a construction site nearby and we intend to meet the Site Manager/Project Manager every fortnightly to mitigate any inconvenience arising to the local community

The Contractor will inform local businesses and residents such as Trehearne Madelaine & Harpal Brar, Burgh House & Hampstead Museum, New End Primary School, New End Nurseries, and other neighbouring properties likely to be affected by such activities at least 14 days prior to undertaking the works, as well as applying for the appropriate permits and licenses, e.g. road closures for delivery or abnormal deliveries to the site.

The Contractor's project manager together with the nominated person (Rama Ragupathy) will agree with these neighbours a schedule of regular review meetings. Sufficient time prior to activities will be allowed for the neighbours' reasonable concerns to be addressed. Where required and reasonable, requested ad-hoc meetings with these neighbours will be attended by the Contractor's project manager and the nominated person.

In the case of work required in response to an emergency, Camden Council, and all neighbours will be advised as soon as reasonably practicable that emergency work is taking place.

Potentially affected occupiers will also be notified of the 'hotline' number, which will operate during working hours.

The site manager/liaison will be responsible for all communications with local community and resident and residents' groups. We would seek to take advice from the local community regarding the best way to maintain communications and post activities and movements in advance. We are happy to provide a web link for local residents to view the up-coming activities, newsletters and periodic letter drops. Special measures can be put in place for residents who rely on ambulance and other specific transport needs if required.

#### 13. Schemes

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

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



Llev Construction Ltd is in the process in registering with Considerate Constructors Scheme (CCS and will forward the documentation soon and will comply to the Camden council's requirements which include CLOCS and guide for Contractor's working in Camden.

#### 14. Neighbouring sites

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

A construction activity is taking place at 12-10 New End, Hampstead. The construction activities taking place at the proposed site shall take into consideration of the material deliveries and movement of traffic to minimise the effects of the construction taking place in the vicinity. The site manager of the proposed site shall be meeting every two weeks with regards to big deliveries, the site manager of the ongoing construction will be contacted and worked together to ensure that no congestion happens due to the construction activities.

The site will also keep into account the nursery and the schools around the area to ensure safe construction and deliveries to be restricted between 9:30am-2:30pm hours.

# **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 subcontractors attending site are compliant with the terms laid out in the CLOCS Standard.



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

Please contact <a href="CLOCS@camden.gov.uk">CLOCS@camden.gov.uk</a> for further advice or guidance on any aspect of this section.

#### **OPERATIONS**

Ш	Quality operation: accreditation via an approved fleet management audit scheme e.g.
	Fleet Operator Recognition Scheme (FORS) or equivalent.
	Collision reporting and analysis: of any collision involving injury to persons, vehicles or
	property, ideally including use of the CLOCS Manager collision reporting tool.
	Traffic routing: any route specified by the client is adhered to unless otherwise specified.

#### i. **VEHICLES**:

- Warning signage: warning cyclists of the dangers of passing the vehicle on the inside
   Side under-run protection
- Blind spot minimisation: front, side and rear blind-spots completely eliminated or minimised as far as is practical and possible
- Vehicle manoeuvring warnings: enhanced audible means to warn other road users of a vehicle's left hand turn or other manoeuvres

#### ii. DRIVERS:

- Training and development: approved progressive training and continued progressive training especially around vulnerable road users (including for drivers excluded from Certificate of Professional Competence requirements)
- Driver licensing: regular checks and monitoring of driver endorsements and that drivers hold the correct licence for the correct vehicle

#### STANDARD FOR CONSTRUCTION CLIENTS

- Construction logistics/management plan: is in place and fully complied with as per this
  document.
- Suitability of site for vehicles fitted with safety equipment: that the site is suitably prepared for vehicles fitted with safety equipment to drive across.
- Site access and egress: should be carefully managed, signposted, understood and be clear of obstacles.
- Vehicle loading and unloading: vehicles should be loaded and unloaded on-site as far as is practicable.
- Traffic routing: should be carefully considered, risk assessed and communicated to all contractors and drivers.
- Control of site traffic, particularly at peak hours: other options should be considered to plan and control traffic, to reduce traffic at peak hours.
- Supply chain compliance: contractors and sub-contractors throughout the supply chain should comply with requirements 3.1.1 to 3.3.2. of the "Guide For Contractors Working in Camden]: February 2008"

These requirements will be incorporated into the contract wording when appointing contractors to ensure compliance.

#### **CLOCS Contractual Considerations**



#### 15. Name of Principal contractor:

Llev Construction Ltd

Ilan Kahlani

16. 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 and Q18 example response).

Llev Construction Ltd will be very organized in the deliveries and will order full loads of material whenever possible to reduce congestion. These deliveries will be timed to arrive between 9.30a.m and 2.30 pm to avoid busy periods on local roads.

We will request our sub-contractor and suppliers to meet CLOCS standard as listed below:

- Inform the future development of the WRRR Standard and supplementary guidance through the CLOCS working groups.
- Improving vehicle safety by fitting appropriate safety equipment.
- Investigating blind spots of the vehicle, reducing reliance on mirrors and using retrofit safety technology.
- Reducing the work related risk on the road, reporting any incident it might occur.
- Encouraging wider adoption of best practice across the construction logistics industry through taking best in class examples, developing a common national standard and embedding a new cultural norm.
- 17. Please confirm that you as the client/developer and your principal contractor have read and understood the CLOCS Standard and included it in your contracts.

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

We confirm that the Client, Principal Contractor and the Liaison Officer have read and understood the CLOCS standard. The CLOCS standard will be included in all the contracts to be made for the construction activities to take place.

Please contact <a href="CLOCS@camden.gov.uk">CLOCS@camden.gov.uk</a> for further advice or guidance on any aspect of this section.



#### **Site Traffic**

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

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

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

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

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

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

Transport routes has been identified in Appendix A. The Appendix A shall be made aware of the routes to all the suppliers and contractors.

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

Transport restrictions and advice including CLOCS will form part of all contractor and sub-contractor contract details. This will also be included as part of all labour and materials orders issued via the Principal Contractor's head office.

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

Construction vehicle movements should be restricted to the hours of 9.30am to 4.30pm on weekdays and between 8.00am and 1.00pm on Saturdays. If there is a school in the vicinity of the site or on the proposed access and/or egress routes, then deliveries must be restricted to the hours of 9.30am and 2:30 pm on weekdays during term time.



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

A delivery plan should ensure that deliveries arrive at the correct part of site at the correct time. Instructions explaining such a plan should be sent to all suppliers and contractors.

Please provide details of the types of vehicles required to service the site and the approximate number of deliveries per day for each vehicle type during the various phases of the project.



Llev Construction Ltd will adhere to the time specified above, in Appendix A, we have identified the routes to be used for the site delivery and the time constraints will be specified in Llev Construction Ltd.'s purchase order. All the transport company will be informed of the site route constrain. We will inform them that they will need to be very careful and all vehicles should be maximum of 2.25 m wheelbase.

#### Demolition and dismantling of existing building, 2 weeks.

#### The demolition is only six garages

- A small box van, 4-5-metre-long vehicle, 6 number over the period
- Mini Skip lorries, 4 number over the period
- This complies with the requirement of 2.3m wheelbase for the turning of vehicles. The Van/trucks will be size of the acoda delivery Van/truck which frequent this area.

#### **Substructure Works, 14 weeks**

- The mini-pilling rig will be driven in by the tractor and not exceed 3.5t.
- Due to the site constrain due to arboriculturist requirement muck will be bagged and remove of site either by mini skip/ or wait and load van
- Box vans: 4-5 metre-long rigid vehicle to remove spoil, 35 over a 7 weeks period
- Concrete: **4-5** -metre-long rigid vehicle, 22 over a 5-week period through new end square and will use a dumper for the delivery of this concrete to site.
- Flatbed lorry 4-5-metre-long rigid to deliver cut , bends and caged reinforcement 5 over a 5-week period

The site will only be accessed by 3.5t van and smaller vehicles. All loading will take place from on-site/ within the site boundary. Erection of super structure, 14 weeks

Deliveries, panel vans and Box Van/ Transit 4-5-metre-long vehicles, 60 over 14 weeks period

#### Internal works, fit out works, 22 weeks

- Deliveries and trade panel vans, 2 per day
- b. Cumulative effects of construction traffic servicing multiple sites should be minimised where possible. Please provide details of other developments in the local area or on the route that might require deliveries coordination between two or more sites. This is particularly relevant for sites in very constrained locations.

The ongoing construction at 12-10 New End is one of the proposed routes of delivery for the proposed site at Garages to the Rear of 26 New End Square. The deliveries will be coordinated with the nearby ongoing construction based on the biweekly meetings, if any clashes, the deliveries shall be diverted towards E Heath Road from A502; if necessary, the delivery time we be re-organized. The delivery trucks shall then take the Well Road on the left of E Heath Road and taking a right to New End Square or continue to New End (based on the traffic congestion in the vicinity) for delivering the material to site.



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

Please see Appendix B for swept path drawing for small vehicle. The vehicles will be moving in a forward direction towards the site approaching through New End, and then reversing with a Traffic Marshal in place for maneuvering the vehicle and exit the site in forward direction towards New End Square.

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

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

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

We do not expect to have multiple vehicle deliveries / collections. Due to the size of the project and its tight logistics we propose to have one vehicle at a time being called in to provide that days requirements. The roads in the immediate surrounding area are too small to have vehicles waiting to deliver to site. We made a precautionary measure for addressing the issue as we have identified to suspend the two parking bays if necessary.

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

Our current position is for all the bulk deliveries delivered to our approved Builders Merchant as a storing area, and they will then split deliveries on a called off basis to site to help manage vehicle size and movements and to make sure vehicles are not parked up in surrounding roads waiting to be called to site. The deliveries will be small but full load to the delivery vehicle's capacity.

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

Vehicles will be instructed to switch off engines when waiting to unload on to site.



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

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

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

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

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





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

Please see appendix A for the access/ingress arrangement. As the site is small, a traffic marshal and his/her team will see the delivery vehicle in and out of the site. The traffic marshal will ensure safe crossing of the pedestrian and cyclists whilst vehicles are accessing in and out of the site. The site deliveries will happen between 9:30 am and 2:30 pm, taking into consideration the Healthy School Street 'restricted zone' of Camden Council, concerning the New End Primary School.

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

Please see appendix B for the swept path drawings.



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

A clean, stable surface for loading will be used. However, should it be required, the site labourer will be equipped with wheel washing cleaning equipment to clean of vehicles when before they depart the site.

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

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

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

As described in Appendix A, site vehicular traffic will enter the one-way system along New End. Particular care will be taken along New End due to the proximity of Heathside Preparatory School and New End Primary School.

The traffic management team at the site entrance will manage the reversal of site vehicles through the site entrance. Offloading will take place within the site boundary. For every delivery we will have Traffic Marshall and team to organise the delivery and look after pedestrian safety.

Appendix D indicates the site office and storage area. The waste material will be bagged and taken off site by smaller vehicle from the site or wait and load at the parking.

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



As stated above.

#### **Street Works**

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

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

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

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

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

#### 22. Site set-up

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

To be confirmed in consultation with the highways department and to be appended upon approval from highways department.

#### 23. Parking bay suspensions and temporary traffic orders

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

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



Information regarding parking suspensions can be found here.

Initial review of New End and New End Square has identified two potential parking bays that may require suspension. The bays will be suspended will only be requested for suspension if necessary. Refer to Appendix C for identification of the two bays.

#### 24. Occupation of the public highway

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

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

As the road width is very small and one way, as such we do not foresee any sort of closure.

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

We are not anticipating to carrying out the construction of temporary vehicular accesses, or removal of street furniture. Please find appended our swept path on Appendix B.

#### 25. Motor vehicle and/or cyclist diversions

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

It is not anticipated that any diversion or disruption of the public highway will be required, unless installation of associated utilities necessitate.

#### 26. Scaffolding, hoarding, and associated pedestrian diversions

Pedestrians safety must be maintained if diversions are put in place. Vulnerable footway users should also be considered. These include wheelchair users, the elderly, those with walking



difficulties, young children, those with prams, the blind and partially sighted. Appropriate ramps must be used if cables, hoses, etc. are run across the footway.

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

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

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

There will be no structures intruding onto the public highway except for scaffolding, which will be cantilevered at first floor level and bay suspension as shown in Appendix E.

The cantilever scaffold will be erected without causing any intrusions to the on-road traffic or public usage.

Please see Appendix C for the suspensions and the width of the road for vehicular movements.

The hoarding of the site shall be painted, gated and fenced at the boundary along with the site office location as shown on a raised platform so that the roots are not hindered by non-permeable material. Please refer to Appendix D. There will be no skip on site. All waste including muck away will all be bagged and collected by vans due to site constraints.

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

It is anticipated that a section of Flask Walk will require overhang scaffold and together with the New End Square for gantry scaffold as shown in Appendix E.

#### 27. Services



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

Due to the nature and size of the planned works. No major changes are foreseeable at this stage with regards to mains services.

### **Environment**

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

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



#### Noisy works

- 1. Excavator with concrete breaker
- 2. Drilling equipment
- 3. Skill saw Noisy operations will be carried out only between 08:00am until 5:30pm Monday to Friday with no work to take place on Saturdays. No noisy work would be carried out on Sundays and Bank Holidays.

In some circumstances it may, however, be necessary for noisy construction works to be carried out outside these hours; such works may arise from emergency circumstances or the delivery of large plant and equipment where congestion and risks to safety prevent roads being used during working hours. This will be confirmed in advance with the Local Authority. We will also notify the Environmental Health Team in writing if possible, at least two weeks beforehand. Further details as per below:

**Environmental Health Team** 

**Culture and Environment Directorate** 

Town Hall

Argyle Street

London WC1H 8EQ

Phone: 020 7974 2090

Fax: 020 7974 6955

E-mail: env.health@camden.gov.uk

Noise from works within these hours will be kept to a minimum by using well maintained and silenced plant and equipment including compressors, generators and power tools when possible.

1. In order to minimise noise during any particularly heavy breaking out phases, i.e. concrete ground slab, it would be proposed that a 2 hour on/ 2 hour off work sequence is employed for these limited periods. This will ensure that noise disruption is controlled and give quiet periods during the day to adjoining properties, this being a common process for working within London.

The method of construction for each section and its risk assessment will be provided by the contractors to the Principal Contractor to be approved two weeks prior to starting of works.



Llev construction has specified in general, the duration and scope of works as stated below:

#### Site set up

- Enabling works prior to substructure works - 2 weeks

#### Substructure

- Piling 3 weeks
- Demolition -2 weeks
- Reduce level- 4 weeks
- Slab construction- 1 weeks
- Wall construction- 4 weeks

#### Superstructure

- Floor sound external envelope 9 weeks
- Roof structure- 3 weeks
- Roof covering- 2 weeks

#### Internal

- Internal works and finishing to the facades and external works- 22 weeks
- 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.

For this particular project, no noise survey has been carried out. The noise survey will be carried out two weeks prior the commencement of works and submitted to the council, if the council feel it is required for this small scale project.

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

Once the construction method statement is determined the contractor will provide plant equipment list, detailing each piece of major plant equipment to be used. The number of each item of equipment and a daily percentage on time for each item of equipment will be complied in accordance with BS 5228:2014. The mitigation measures have been noted in Appendix F.



31. Please provide details describing mitigation measures to be incorporated during the construction/<u>demolition</u> 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 mitigation measures for noise and vibration are as specified in Appendix F.

Best Practicable Means (as defined in s72 of the Control of Pollution Act 1974) will be used to reduce noise levels at all locations at all times. Generic noise and vibration measures to be used will include:

- Construction equipment will be carefully selected so as to comply with noise limits contained in relevant EC Directives;
- Equipment will be well maintained and will be used in the mode of operation that minimises noise & vibration;
- The site will be hoarded to provide acoustic screening as early as is reasonably practicable during the construction works;
- Equipment will be shut down when not in use;
- Equipment fitted with enclosures shall be operated with such enclosures in place at all times;
- Vehicles shall not wait or queue on the public highway with engines running; § All materials will be handled in a manner that minimises noise;
- Where practicable plant will be left in position at the end of the day; and § The use of reversing alarms will be kept to a practicable minimum. Noise Management on Site Operatives will be made aware (through 'toolbox talks') that noise should be minimised and Best Practicable Means (BPM) be implemented at all times. Works will be checked regularly by site managers to ensure that BPM is being undertaken and where necessary corrective actions implemented. We will also install an equipment to raise alarm if the noise goes beyond the allowed limit of noise level.

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Evidence of the certificate will be on site for sighting.

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



#### Throughout the project the Contractor will ensure the following:

- Where potential dust producing activities are taking place dust screens will be utilised. This will include the demolition, piling and structural works.
- There is no burning of waste materials takes place on site.
- There is an adequate water supply on the site.
- Disposal of run-off water from dust suppression activities is in accordance with the appropriate legal requirements.
- All dust control equipment is maintained in good condition and record maintenance activities.
- Strip insides of buildings before demolition of the structure and envelope.
- Site hoarding, barriers and scaffolding are kept clean.
- The provision of clean hard standings for vehicles. Regular cleaning of hard standings using wet sweeping methods, no dry sweeping of large areas.
- Loading of material into lorries within designated bays/areas.
- If necessary, clean public roads and access routes using wet sweeping methods.
- Vehicles working on site have exhausts positioned such that the risk of re-suspension of ground dust is minimised (exhausts should preferably point upwards), where reasonably practicable.
- All vehicles carrying loose or potentially dusty material to or from the site are fully sheeted.
- Materials with the potential to produce dust are stored away from site boundaries where reasonably practicable.
- Minimise the amount of excavated material held on site.
- Sheet, seal or damp down unavoidable stockpiles of excavated material held on site, where required.
- Avoid double handling of material wherever reasonably practicable.
- Ensure water suppression is used during demolition operations.
- Sheet or otherwise enclose loaded bins and skips.
- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction.
- The engines of all vehicles and plant on site are not left running unnecessarily to prevent exhaust.
- Use low emission vehicles and plant fitted with catalysts, diesel particulate filters or similar devices.
- Use ultra-low sulphur fuels in plant and vehicles.
- That plant will be well maintained, with routine servicing of plant and vehicles. On site servicing and maintenance to be carried out where possible.
- That all project vehicles, including off-road vehicles, hold current MOT certificates where required.
- Carry out site inspections regularly to monitor compliance with dust control procedures set out above and record the results of the inspections, including nil returns, in the log book detailed.



- Increase the frequency of site inspections when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- Record any exceptional incidents causing dust episodes on or off the site and the action taken to resolve the situation in the log book detailed in above.

The Contractor will ensure that dust monitoring will be carried out during potential dust producing activities. The assessment will look at the dust raising potential of construction activities proximity to potential receptors and the duration of construction activities at each location.

Please see as stated below in Appendix F.

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

A clean, stable surface for loading will be used. However, should it be required, the traffic Marshalls will be equipped to clean of vehicles when before they depart site. Please see as stated below in Appendix F.

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

The monitoring of noise, vibration and dust levels are provided in Appendix F.

36. Please confirm that a Risk Assessment has been undertaken at planning application stage in line with the GLA policy. The Control of Dust and Emissions During Demolition and Construction 2104 (SPG), that the risk level that has been identified, and that the appropriate measures within the GLA mitigation measures checklist have been applied. Please attach the risk assessment and mitigation checklist as an appendix.



A Risk Assessment in line with GLA's Control of Dust and Emissions Supplementary Planning Guidance (SPG) has been carried out and together with the Site Evaluation Guidelines in the Best Practice Guidance – The Control of Dust and Emissions from construction and demolition it has been determined that the project is Low Risk. Please see Appendix F for Dust Mitigation Measures.

The development site is bounded by residential properties on New End Square, Flask Walk and New End. The potential of air pollution or dust having an effect on properties further afield is extremely low considering the control measures that will be introduced. It is therefore felt that potential for emissions and dust to have an impact on sensitive receptors (Hospitals, schools, day-care facilities, elderly housing etc) is infrequent.

The development is for redevelopment of garages at the rear of New End Square, NW3 1LS and the area taken up by the development is 339sqm.

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

The GLA mitigation measures checklist is addressed to appropriately as mentioned in Appendix F for Dust mitigation.

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 <a href="SPG">SPG</a>. 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.

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39. Please provide details about how rodents, including <u>rats</u>, 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).



A vermin inspection and action plan has not yet been undertaken. This will be included as part of the demolition scope.

A method statement will be issued 28 days prior to demolition detailing the how the destruction and/or dispersion of rodents will be managed. The method statement will outline how the presence of rodents has been determined and how they will be destroyed.

The Contractor will ensure that the site is kept tidy and surplus materials are kept to a minimum on site so as not to create areas for pests to hide. Workers will not leave food debris in or around the site to eliminate food sources for rodents. Office and welfare areas will be kept clean and operated hygienically to minimise risk of rodents. Waste will be stored in pest proof containers and removed regularly. New and existing drainage will be sealed during construction.

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

There is currently no identified asbestos that has been noted. A non-intrusive asbestos survey will be undertaken to confirm prior to demolition.

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 Contractor will provide a suitable smoking area within the site boundary and instructed not to smoke immediately adjacent to the site. As part of the induction the contractors will be advised that bad language, unnecessary shouting, and wolf whistling is unacceptable on this jobsite. These issues will be monitored by the site managers and traffic marshals. Apart from which the site shall comply to CCS.

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: 01/03/2020 28/03/2021.
- b) Is the development within the CAZ? (Y):

Yes

c) Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Y):

Yes

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:

It will be updated when the machinery is hired. We will stipulate all sub contractors and supply chain to complete the register.

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:

Yes

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: We can confirm this information will be

SYMBOL IS FOR INTERNAL USE



# **Agreement**

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

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

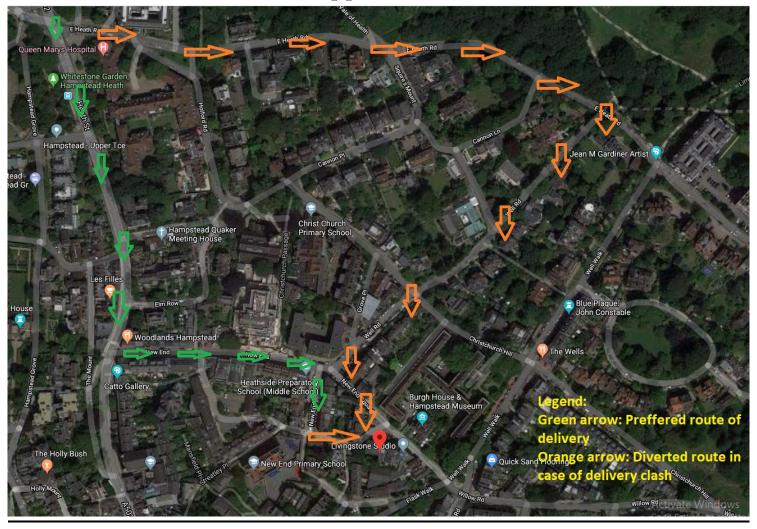
Signed:
Date: 5 03 2020
Print Name: K. V Alagappan
Position: Project Manager. (Director

Please submit to: planningobligations@camden.gov.uk

End of form.



# Appendix A





# **APPENDIX B**



# **APPENDIX C**

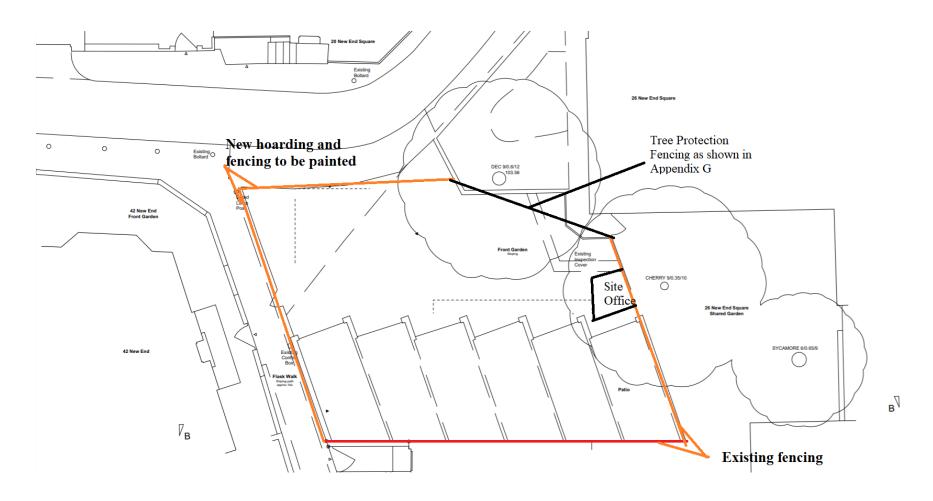






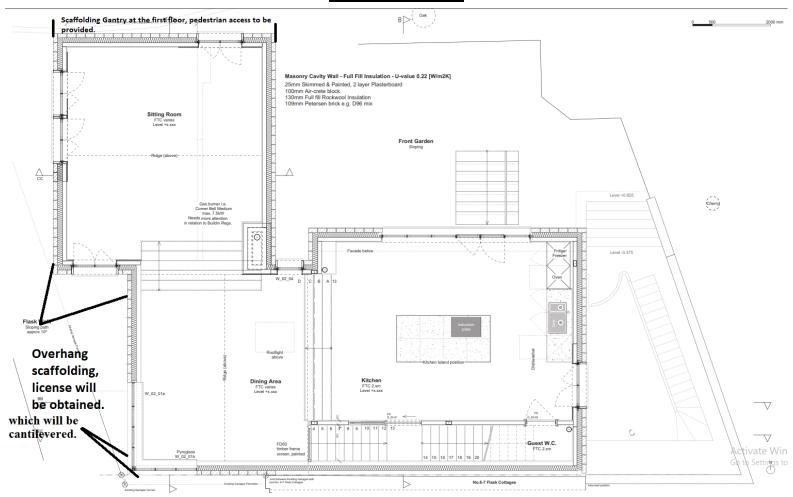


## **APPENDIX D**





## **APPENDIX E**





## **APPENDIX F**

## **Noise and Vibration Mitigating Measures**

During working hours, noise levels should be measured at a free-field position equivalent to one metre from the most affected façade of any occupied dwelling or other buildings which are used for residential purposes. The acceptable/ambient noise levels during the working hours shall be as shown in the table below:

**Table1: Ambient Noise Level during construction** 

Period	Hours	Ambient Noise Level (dB)
Monday to Friday	8:00-18:00	72
Saturday	8:00-13:00	72

The noise impact of the construction phases can be minimised by use of the noise control measures as suggested in Section 8 of BS5228-1:2009. The general principles for control of noise are stated below:

- Appropriate choice of plant and equipment;
- Regular maintenance of the plant and equipment for the good working condition;
- Provision of temporary barriers.

#### Methods of noise reduction:

It will be ensured that all the staff and operatives are briefed on the requirement to minimise the nuisance from site activities.

No equipment shall be operated other than at the manufacturer's rated working levels and the site staff shall not 'rev' the equipment unnecessarily.

Use of rock breakers on site shall be kept to an absolute minimum and only silenced or sound models shall be used.

No plant and equipment shall be left running if not required for immediate use. When it is not practicable, equipment shall be set to idle in the quietest manner to minimise noise emissions.

## **Noise Reduction of Stationary Plant and Tools**

Possible noise reduction measures for tools are as follows:



- Use of hydraulic or electric tools where possible;
- Use of alternative quieter equipment for concrete breaking/cutting;
- Fitting suitably designed sound reduction equipment to reduce noise without impairing efficiency;
- Use of damped tool piece or saw blade;
- Enclose in a suitably designed portable or fixed acoustic enclosure with suitable ventilation (with due regard to the health and safety of operatives).

## **Control of Noise Propagation on Site**

Temporary barriers, such as hoardings or mounds when positioned close to the source or the receiver will assist in the reduction of noise levels experienced at nearest receivers. The degree of protection will be limited to 5-10dB(A) and care must be taken to avoid reflecting noise and increasing the problem elsewhere. If practical, consideration should be given to providing an acoustic screen on the edge of the carriageway before any construction activities take place. Barriers should be:

- A fairly uniform panel, free from holes with no gaps or openings at joints (uneven ground may leave gaps to be filled);
- Stable and robust enough to stand up to site conditions;
- Of a height and width more than enough to completely cut off sight of the source from the receiver, and
- Preferably at right angles to the line of sight of the receiver.



## **Dust Mitigation Measures**

Applicants must complete the table below (extracted from the Mayors 'control of dust and emissions during construction and demolition' SPG).

Applicants should include all 'highly recommended measures' as a minimum.

XX Highly Recommended

X Desirable

# MEASURES RELEVANT FOR DEMOLITION, EARTHWORKS, CONSTRUCTION AND TRACKOUT

	CIRCLE RISK LEVEL IDENTIFIED FOR SITE			TICK TO CONFIRM MITIGATION
MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK	MEASURE WILL BE IMPLEMENTED
Site management				
Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.		XX	xx	1
Develop a Dust Management Plan.		XX	XX	✓
Display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues on the site boundary.	xx	xx	xx	1
Display the head or regional office contact information.	XX	XX	XX	✓
Record and respond to all dust and air quality pollutant emissions complaints.	xx	xx	XX	1
Make a complaints log available to the local authority when asked.	xx	XX	XX	1
Carry out regular site inspections to monitor compliance with air quality and dust control procedures, record inspection results, and make an inspection log available to the local authority when asked.	xx	xx	xx	1
Increase the frequency of site inspections by those accountable	xx	XX	xx	1



for dust and air quality pollutant emissions issues when activities with a high potential to produce dust and emissions and dust are being carried out, and during prolonged dry or windy conditions.				
Record any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, and the action taken to resolve the situation is recorded in the log book.	xx	xx	xx	<b>&gt;</b>
Hold regular liaison meetings with other high risk construction sites within 500m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised.			xx	<
Preparing and maintaining the s	ite			
Plan site layout: machinery and dust causing activities should be located away from receptors.	XX	XX	XX	1
Erect solid screens or barriers around dust activities or the site boundary that are, at least, as high as any stockpiles on site.	xx	xx	xx	<b>&gt;</b>
Fully enclosure site or specific operations where there is a high potential for dust production and the site is active for an extensive period.	х	xx	xx	1
Install green walls, screens or other green infrastructure to minimise the impact of dust and pollution.		х	х	
Avoid site runoff of water or mud.	xx	xx	xx	✓
Keep site fencing, barriers and scaffolding clean using wet methods.	x	xx	xx	✓
Remove materials from site as soon as possible.	х	XX	XX	1
Cover, seed or fence stockpiles to prevent wind whipping.		xx	xx	1
Carry out regular dust soiling checks of buildings within 100m of site boundary and cleaning to be provided if necessary.		х	xx	
Provide showers and ensure a change of shoes and clothes are			x	



required before going off-site to reduce transport of dust.				
Agree monitoring locations with the Local Authority.		X	xx	✓
Where possible, commence baseline monitoring at least three months before phase begins.		Х	xx	✓ (not done)
Put in place real-time dust and air quality pollutant monitors across the site and ensure they are checked regularly.		х	xx	<b>√</b>
Operations				
Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	xx	xx	xx	<b>√</b>
Ensure an adequate water supply on the site for effective dust/particulate matter mitigation (using recycled water where possible).	XX	XX	xx	<b>√</b>
Use enclosed chutes, conveyors and covered skips.	xx	xx	xx	1
Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.	xx	xx	xx	1
Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.		XX	xx	1
Waste management				
Reuse and recycle waste to reduce dust from waste materials	XX	XX	XX	✓
Avoid bonfires and burning of waste materials.	XX	XX	XX	✓
Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.  Waste management  Reuse and recycle waste to reduce dust from waste materials  Avoid bonfires and burning of		xx	xx	/



## MEASURES SPECIFIC TO DEMOLITION

MITIGATION MEASURE	LOW RISK (	MEDIUM RISK	HIGH RISK	TICK BELOW WHERE MITIGATION MEASURE WILL BE IMPLEMENTED
Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).	х	х	XX	/
Ensure water suppression is used during demolition operations.	xx	xx	xx	✓
Avoid explosive blasting, using appropriate manual or mechanical alternatives.	XX	XX	XX	✓
Bag and remove any biological debris or damp down such material before demolition.	xx	xx	xx	✓

## MEASURES SPECIFIC TO EARTHWORKS

MITIGATION MEASURE	LOW RISK	MEDIUM	HIGH RISK	TICK BELOW WHERE MITIGATION MEASURE WILL BE IMPLEMENTED
Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces.		x	XX	✓
Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil.		X	xx	<b>√</b>
Only remove secure covers in small areas during work and not all at once.		х	XX	1



## MEASURES SPECIFIC TO CONSTRUCTION

MITIGATION MEASURE	LOW RISK (	MEDIUM RISK	HIGH RISK	TICK BELOW WHERE MITIGATION MEASURE WILL BE IMPLEMENTED
Avoid scabbling (roughening of concrete surfaces) if possible	х	X	XX	1
Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place	x	xx	xx	<b>/</b>
Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.		х	xx	1
For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.		х	х	1

## MEASURES SPECIFIC TO TRACKOUT

MITIGATION MEASURE	LOW RISK (	MEDIUM RISK	HIGH RISK	TICK BELOW WHERE MITIGATION MEASURE WILL BE IMPLEMENTED
Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the site.	х	xx	xx	<b>/</b>
Ensure vehicles entering and leaving sites are securely covered to prevent escape of materials during transport.	x	xx	xx	<b>&gt;</b>
Record all inspections of haul routes and any subsequent action in a site log book.		xx	xx	1
Install hard surfaced haul routes,		XX	XX	<b>✓</b>

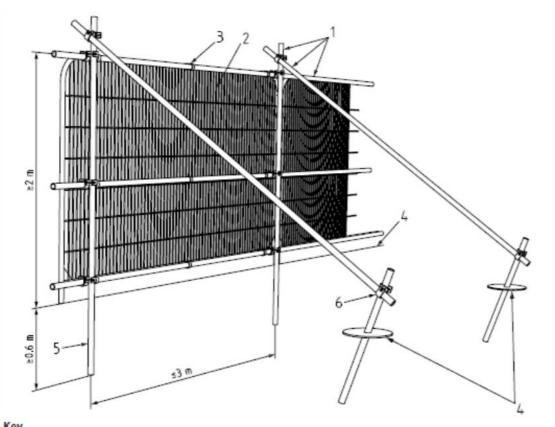


which are regularly damped down with fixed or mobile sprinkler systems and regularly cleaned.				
Inspect haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;		xx	xx	<b>&gt;</b>
Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).	x	xx	xx	N/A
Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.		xx	XX	✓ (jet wash if necessary)
Access gates to be located at least 10m from receptors where possible.		XX	XX	1
Apply dust suppressants to locations where a large volume of vehicles enter and exit the construction site		х	xx	1



## **APPENDIX G**

## TREE PROTECTIVE FENCING

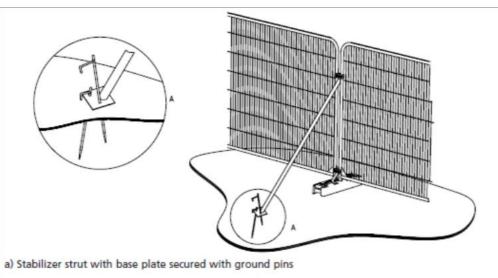


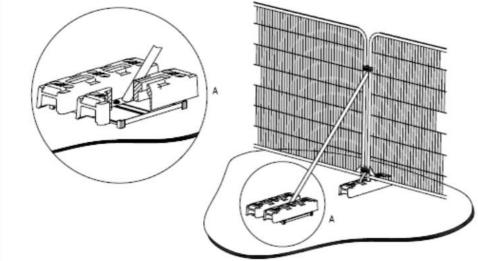
### Key

- Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps



## **ALTERNATIVE TREE PROTECTIVE FENCING**

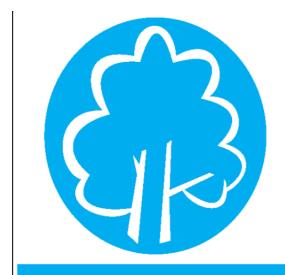




b) Stabilizer strut mounted on block tray



## WARNING SIGNS TO BE INSTALLED IN PLACE



PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.



# TREE PROTECTION AREA KEEP OUT!

(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY
LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY





Existing fence around the Common Oak Tree near the site.

