Construction Management Plan

pro forma v2.1

Camden

Contents

Revisions & additional material

Please list all iterations here:

Date	Version	Produced by
21/10/2016	1	Contemporary Design Solutions
19/12/2016	2	Contemporary Design Solutions
09/02/2017	3	Contemporary Design Solutions
20/02/2017	4	Contemporary Design Solutions
24/02/2017	5	Contemporary Design Solutions
27/02/2017	6	Contemporary Design Solutions

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 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.**"

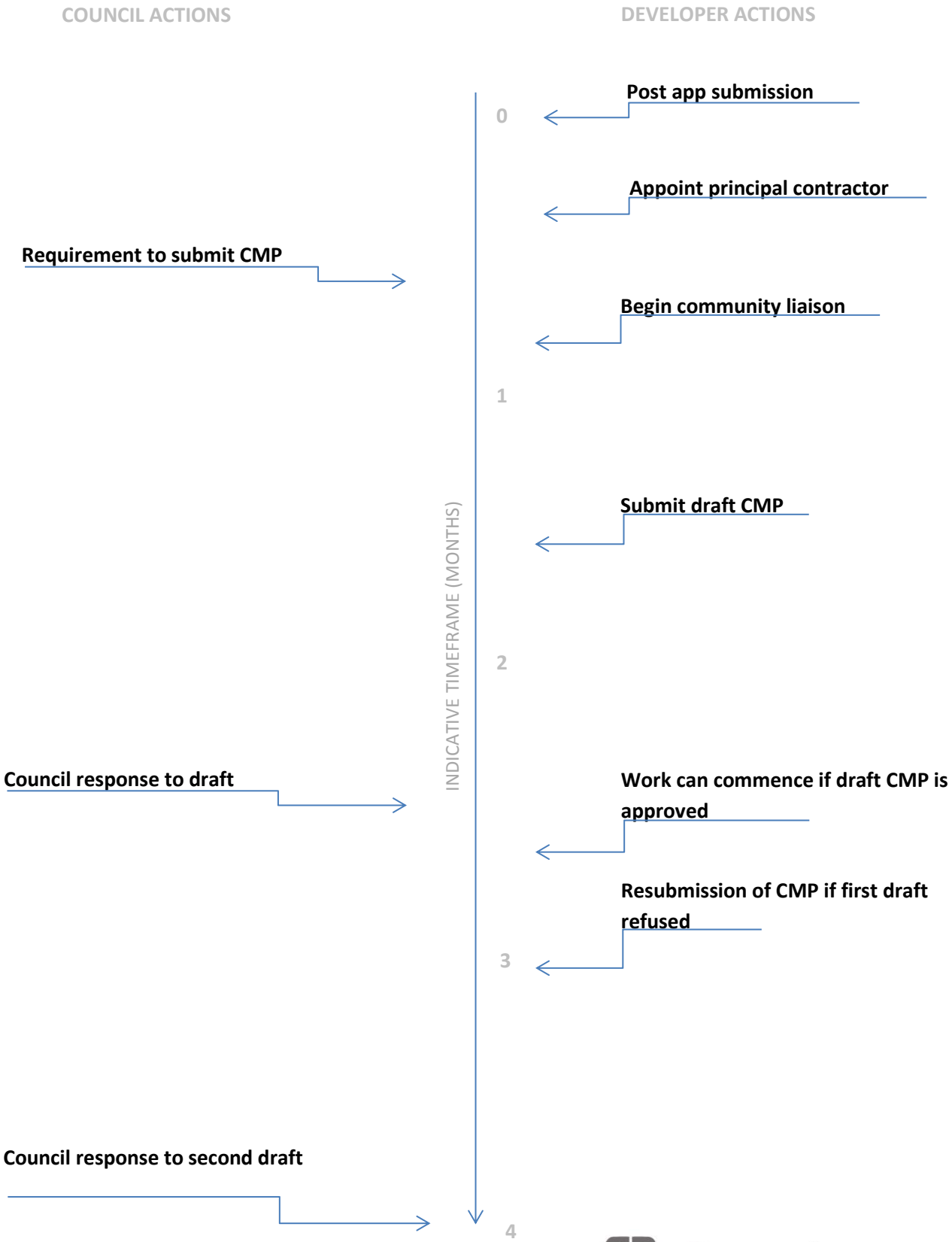
Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. **It is preferable if this document, and all additional documents, are completed electronically 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: ***65-69 Holmes Road, London NW5 3AN***

Planning ref: ***2013/7130/P***

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

Section 106 planning obligation

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

Name: ***Mariano Garcia***

Address: ***46 Great Marlborough Street, London W1F 7JW***

Email: **mariano@codeso.net**

Phone: ***020 7494 9000***

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: ***Simon Hikmet***

Address: ***46 Great Marlborough Street, London W1F 7JW***

Email: ***Simon@hallmarkestates.com***

Phone: ***020 7494 9000***

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: ***Chi Tang***

Address: ***46 Great Marlborough Street, London W1F 7JW***

Email: ***chi@codeso.net***

Phone: ***020 7494 9000***

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: ***Designated Contractors Ltd***

Address: ***46 Great Marlborough Street, London W1F 7JW***

Email: ***projects@codeso.net***

Phone: ***020 7494 9000***

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.

Redevelopment of the existing Magnet showroom at 65-69 Holmes Road, Camden. A site location plan is included at Appendix A.

Development proposals are for the erection of a part seven, part three storey building above two basement levels to provide student accommodation comprising 273 units (337 rooms and 439 bed spaces), with ancillary facilities (sui generis), warehouse (Class B8) at basement and ground floor levels and coffee shop (Class A1) at ground floor level following the demolition of existing B8 buildings.'

Residential units are located to the north and east of the site on Holmes Road, as well as to the south of the site on Cathcart Street. The College Français Bilingue de Londres which has approximately 700 primary and secondary pupils is located adjacent to the site on the southwestern side of Cathcart Street with access points from both Cathcart Street and Willes Road. A primary school is also located on Holmes Road to the west of Raglan Street and a LBC depot is located to the north of Holmes Road.

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).

Construction will involve the erection of a part seven, part three storey building above two basement levels to provide student accommodation, a B8 warehouse, ancillary facilities and a coffee shop following the demolition of the existing warehouse. A broad overview of what construction will involve is provided below:

- ***Piling and excavation***
- ***Creating basement and ground floor concrete slabs***
- ***Steel framing***
- ***POD / Room installation***
- ***Cladding & services***
- ***Internal & final finishes***

The main issues and challenges are:

- ***Close proximity to the College Français Bilingue de Londres School***
- ***St Patrick's Primary School located along the construction vehicle route***
- ***Close proximity to residential properties***
- ***Access route to and from the site including areas to turn vehicles around***
- ***Surrounding residential roads with double parking narrowing the road width***
- ***Constrained site in terms of available space***

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.).

The nearest potential receptors likely to be affected by activities on site are shown on the plan included at Appendix A, and include:

- ***College Français Bilingue de Londres (87 Holmes Road)***
- ***Residential properties on Azania Mews***
- ***Residential properties on Cathcart Street***
- ***LB of Camden Depot***
- ***St Patrick's Primary School***

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.

Refer to plan included at Appendix B.

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).

The proposed start date for construction is 27th of February 2017, with the construction anticipated to take approximately 20 months. Please see the Gantt chart included at Appendix C of this CMP for further detail regarding the start and end dates for each phase of construction.

Main Construction Phases:

- ***Demolition: 03-01-2017 to 17-02-2017;***
- ***Excavation / Sheet Pilling: 27-02-2017 to 05-05-2017;***
- ***Concrete / Steel Structure: 31-03-2017 to 07-08-2017;***
- ***POD Installation / Internal Areas: 07-08-2017 to13-04-2018;***
- ***External Cladding Installation: 13-04-2018 to 31-07-2018;***
- ***External Landscape Works: 31-07-2018 to 05-09-2018;***
- ***Full Handover: 05-09-2018***

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

The hours of work are proposed to be:

- Monday to Friday 08:00-18:00
- Saturday 08:00-13:00
- No work is to be carried out on Sundays or Bank Holidays unless it is necessary. If Sunday or Bank Holiday working is required, a license will be obtained from LBC in advance.

If any work is required to take place outside of these hours, this will be discussed and agreed with LB of Camden in advance and the local neighbourhood will be notified.

In order to minimise the impact of the construction on the surrounding highway network, the delivery of construction materials and removal of excavation materials will be limited to between the hours of 09:30-15:00 Monday to Friday and 08:00-13:00 on Saturdays during school term time.

During school holidays, it is proposed that construction vehicle movements take place between 09:30-16:30 Monday to Friday with deliveries permitted to take place between 08:00-18:00 during certain phases/tasks e.g. concrete pours.

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.

The site works will be using existing connections and services that were used by the original Magnet building.

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.

A public consultation and meeting with local representatives of the working group was undertaken on 12/12/2016. The meeting minutes are appended at Appendix D. A subsequent meeting is proposed for 27th of February 2017 (date to be confirmed).

Outside of the Working Group general consultation has taken place in the form of newsletters posted to local residents (Holmes Road, Cathcart Street and Willes Road) to inform about road closures arrangements, demolition application and presentation meeting.

Presentation meeting to be held on College Français Bilingue de Londres for parents and local residents on 21.02.2017.

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.

A working group has been established with the first meeting held on the 12/12/2016 and a subsequent meeting proposed for the 27th of 2017 (date to be confirmed). The meetings will take place at least every three months during the construction phase and meeting minutes will be circulated within 10 days following the meetings.

The purpose of the meetings is to address and mitigate any concerns of the community affected by the works, concentrating on key issues. The contact details for the person responsible for community liaison will be displayed on the site hoarding and the contact details will also be circulated to the working group.

A monthly newsletter will be circulated to the local community throughout the construction period. This would briefly summarise any key achievements from the previous month while also providing looking ahead information on key aspects of the work to be done in the following month.

The composition of the First Meeting of the Working Group was:

London Borough of Camden:
- Shahida Sanessie (Planning Office)
- Meric Apak (Councillor)

IARA Representatives:
- Debby Hyams (Chair, IARA)
- Bridget McConnell (Cathcart Street)
- Jonathan Bradley (Willes Road)
- Judith Leeb (Holmes Road)

CFBL Representatives:
- Tony O'Grady
- Baptiste Mercier

Project Representatives:
- Andrew Bacon (AB / Client's Representative)
- Abby Bennet (AECOM - Transport Consultant)
- Martin Lamont (ML / BBS - Health and Safety Advisor)
- Simon Hikmet (Construction Manager)
- David Dolan (Liaison Officer)
- PJ Connolly (Demolition – Excavation Contractor)
- Chi Tang (CT / Contemporary Design Solutions - Project Architect)
- Mariano Garcia (Contemporary Design Solutions - Architect / Minute Taker)

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 project will be registered with the Considerate Constructors Scheme (CCS). See appendix K.

Contractors and sub-contractors will follow the "Guide for Contractors Working in Camden".

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.

Developments are currently under construction at 41-43 Holmes Road and 45 Holmes Road. Both developments are situated on the construction vehicle access and egress routes. Coordination will therefore be required with the relevant developers/contractors to ensure that construction vehicle movements are coordinated to minimise traffic problems on Holmes Road. For works that commence prior or during the project we will liaise with the Client and their Principal Contractor with regard to traffic management. Refer to layout plan included at Appendix E for location of existing construction sites.

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:

Designed Contractors Limited

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 and Q18 example response).

The following subcontractors involved with majority of construction material deliveries will have:

- J. O'Doherty Haulage Ltd - Demolition & Excavation - has been assessed and has met the GOLD level requirements of the Fleet Operator Recognition Scheme (FORS ID: 000657).The demolition contractor complies with the CLOCS Standard (CLOCS Champion awarded to J. O'Doherty Haulage Ltd. Certificate attached);

- Procon - Mixed concrete delivery - has been assessed and has met the SILVER level requirements of the Fleet Operator Recognition Scheme (FORS ID: 003404).

- Travis Perkins Plc (WFA) - Construction material delivery - has been assessed and has met the GOLD level requirements of the Fleet Operator Recognition Scheme (FORS ID: 000007);

- Atlantic Haulage - Delivery of pods – Following correspondence with the 'Cycle Safety Projects and Contracts Officer', all drivers due to service the site will attend an approved Safe Urban Driver (SUD) course in addition to undertaking the necessary e-learning module, and all vehicles due to service the site will be fitted with a Fresnel lens and audible left turn alert.

Desktop checks

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

Site checks

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

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

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

Collision reporting data will be requested from operators and acted upon when necessary.

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:

We confirm that we will abide by the CLOCS Standard and these will be included in the contracts with our contractors and suppliers.

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).

The A400 Kentish Town Road will form the most suitable link in the strategic road network to accommodate construction vehicles. Primary routes providing connections to the A400 (i.e. A501 Euston Road, A502 Camden High Street, A503 Camden Road and the A1 Holloway Road/Archway Road) will therefore form the main approach routes to the site.

The construction traffic route to and from the site is presented in Appendix F, with the arrows indicating the one-way system in Camden Town.

Vehicles will approach the site on Kentish Town Road from the north or south, turning into Holmes Road. From Holmes Road, there are a number of routing options which have been explored depending on the type of vehicle and phase of construction, as set out below.

1. ***Vehicles will serve the site and leave heading west on Holmes Road. Vehicles will then turn left onto Willes Road and continue south, turning left onto Prince of Wales Road and then right onto Kentish Town Road (right-turn only at this junction).***

2. ***Vehicles will serve the site and leave heading west on Holmes Road. Under supervision of a minimum of two traffic marshals, the vehicles will turn around in the Willes Road / Spring Place junction before heading back northeast along Holmes Road towards the A400 Kentish Town Road.***

3. ***Vehicles will serve the site and on leaving via the western gate, under the supervision of traffic marshals, will reverse into Cathcart Street, turning right into Holmes Road and continuing east towards Kentish Town Road. No works traffic will access the cobbled part of Cathcart Street.***

4. ***Vehicles will turn left into Cathcart Street from Holmes Road and reverse into the site access on Cathcart Street, under the supervision of traffic marshals. Vehicles will then leave the site from the Cathcart Street access, turning right onto Holmes Road and continuing towards Kentish Town Road.***

It is proposed that Option 3 and/or Option 4 are used wherever possible, when the hoarding and cabins can be located on another area of the site i.e. after the ground floor slab is in place. When this option is not available (i.e. when the hoarding line is located in Cathcart Street), it is proposed that the larger vehicles (i.e. articulated vehicles) will utilise Option 2, under the supervision of a minimum of two banksmen. This option will only be used exceptionally, when the hoarding is located in Cathcart Street. Smaller vehicles such as cars and vans will be able to utilise Option 1 or Option 3.

The proposed development does not directly impact on the Transport for London Route Network (TLRN) e.g. through direct access.

Construction vehicle movements in and out of the site will be supervised by Banksmen and/or traffic marshals.

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.

The contractors site traffic manager will liaise with any planned visitors and delivery drivers to the site, to ensure they are aware of the appropriate routes and restrictions. Routes will be clearly marked on maps which will be issued to all drivers servicing the site, with specific routes marked according to the nature of the delivery/vehicle type, with time restrictions marked on as appropriate. The location of holding area(s) will also be marked.

A delivery booking system will also be put in place to manage delivery and visitor activity. Strict material delivery scheduling will be imposed on the project to ensure that congestion is avoided. Each delivery will be allocated a delivery time period and an allotted area from which to load or unload. This will be suitable for the material being delivered and will adhere to site working hours.

Banksmen will be employed to ensure the efficient and safe movement of vehicles in and out of the site and will be in radio communication with each other.

Deliveries and removals will be carried out in accordance with the Site Manager's requirements.

Further details are provided at Section 4.1 of the CTMP.

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.

The following types of vehicle are expected to serve the site during construction:

- ***Light Vans – used by individual trade contractors, typically during the final fit-out of the development (approximately 7.2m long and 2.2m wide)***
- ***Skip Lorries – for removal of demolition waste (approximately 6.3m long and 2.5m wide)***
- ***Flatbed Truck – for delivery of some construction materials and plant (expected to be a maximum of 9.45m long and 2.4m wide)***
- ***Tipper Bodied Rigid Lorries – for removal of demolition waste and spoil from the site (expected to be a maximum of approximately 10.2m long and 2.5m wide)***
- ***Small Articulated Lorries – for the delivery of some construction materials (maximum 10.7m long and 2.4m meters wide).***
- ***Large Articulated Lorries - for the delivery of some construction materials (maximum 17.2m long and 2.6m wide)***

The hours of work are proposed to be:

- Monday to Friday 08:00-18:00
- Saturday 08:00-13:00
- No work is to be carried out on Sundays or Bank Holidays unless it is necessary. If Sunday or Bank Holiday working is required, a license will be obtained from LBC in advance.

If any work is required to take place outside of these hours, this will be discussed and agreed with LB of Camden in advance and the local neighbourhood will be notified.

In order to minimise the impact of the construction on the surrounding highway network, the delivery of construction materials and removal of excavation materials will be limited to between the hours of 09:30-15:00 Monday to Friday and 08:00-13:00 on Saturdays during school term time.

During school holidays, it is proposed that construction vehicle movements take place between 09:30-16:30 Monday to Friday with deliveries permitted to take place between 08:00-18:00 during certain phases/tasks e.g. concrete pours.

Table 4.1 of the CTMP, which is reproduced at Appendix G, shows the type and weight of vehicles and the number of movements per day for each vehicle type during the different construction phases.

The highest number of vehicle movements is anticipated during soil removal, where there will be approximately 30 two-way movements a day. See Table 4.1 in Appendix G for more detail.

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

Developments are currently under construction at 41-43 Holmes Road and 45 Holmes Road. Both developments are situated on the construction vehicle access and egress routes. Coordination will therefore be required with the relevant developers/contractors to ensure that construction vehicle movements are coordinated to minimise traffic problems on Holmes Road. Refer to layout plan included at Appendix E for location of existing construction sites.

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.

A booking system will be implemented – see attached template. All orders for deliveries will outline the methodology of the booking system.

Before delivery, drivers will call ahead to Traffic Marshalls to check the progress timing of receiving of materials and confirm which holding area to be specified – H1 or H2.

All vehicle movements to be controlled by Traffic Marshalls who will call in the vehicle when space is available on site. Entry into the site is via Gate 1, exit is via Gate 2. There is a separate entry for delivery of smaller materials via Gate 3. Refer to construction layout plans included at Appendix H for location of gates.

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.

The haulier responsible for POD deliveries has a holding area located at South Mimms service station off the M25, approximately 35 minutes from the Holmes Road site. Vehicles would therefore be able to wait at this holding area before being called to the site.

For General deliveries there will be a holding area located on Claremont Road. Vehicles would therefore be able to wait at this holding area before being called to the site.

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).

Pre-fabricated materials will be used, including PODs, which will reduce the amount of traffic associated with the development.

Only one delivery vehicle will be permitted on site at any one time and there will A working group has been established with the first meeting held on the 12/12/2016 and a subsequent meeting proposed for the 27th of 2017 (date to be confirmed). The meetings will take place at least every three months during the construction phase and meeting minutes will be circulated within 10 days following the meetings.

The hauliers associated with the POD delivery have a holding area at South Mimms service station off the M25 where vehicles will be able to wait before being called to the site.

For General deliveries there will be a holding area located on Claremont Road. Vehicles would therefore be able to wait at this holding area before being called to the site.

A traffic marshal will be present at the gates being used to oversee all vehicular access/egress from the site.

In addition traffic marshal will also be present when pupils leave the school whenever possible. Times will need to be coordinated with CFBL.

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

All construction vehicles will access the site via the A400 Kentish Town Road and Holmes Road. Vehicles will enter the site from a gate central to the site on Holmes Road and will park in the designated area for loading/unloading. They will then exit via a gate to the west of the site onto Holmes Road.

A number of options have been explored for construction vehicle routing, as follows:

1. ***Vehicles will serve the site and leave heading west on Holmes Road. Vehicles will then turn left onto Willes Road and continue south, turning left onto Prince of Wales Road and then right onto Kentish Town Road (right-turn only at this junction).***

2. ***Vehicles will serve the site and leave heading west on Holmes Road. Under supervision of a minimum of two traffic marshals, the vehicles will turn around in the Willes Road / Spring Place junction before heading back northeast along Holmes Road towards the A400 Kentish Town Road.***

3. ***Vehicles will serve the site and on leaving via the western gate, under the supervision of traffic marshals, will reverse into Cathcart Street, turning right into Holmes Road and continuing east towards Kentish Town Road. No works traffic will access the cobbled part of Cathcart Street.***

4. ***Vehicles will turn left into Cathcart Street from Holmes Road and reverse into the site access on Cathcart Street, under the supervision of traffic marshals. Vehicles will then leave the site from the Cathcart Street access, turning right onto Holmes Road and continuing towards Kentish Town Road.***

Pedestrian access for authorised site personnel will be via a pedestrian gate on Cathcart Street.

It is proposed that Option 3 and/or Option 4 are used wherever possible, when the hoarding and cabins can be located on another area of the site i.e. after the ground floor slab is in place. When this option is not available (i.e. when the hoarding line is located in Cathcart Street), it is proposed that the larger vehicles (i.e. articulated vehicles) will utilise Option 2, under the supervision of a minimum of two banksmen. This option will only be used exceptionally, when the hoarding is located in Cathcart Street. Smaller vehicles such as cars and vans will be able to utilise Option 1 or Option 3.

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

The gates will be controlled by banksmen who will be stationed at the site access and exit throughout the construction period to assist construction vehicles to enter and exit the site safely and to minimise inconvenience to traffic on Holmes Road. A minimum of two traffic marshals will be stationed at the Holmes Road/Willes Road and Kentish Town Road/Holmes Road junctions to oversee the movement of articulated vehicles at these junctions. Traffic marshals will be in radio communication with each other and will be equipped with STOP – WORKS signs. All traffic marshals will be trained in the use of signalling when directing large vehicles. Vehicle deliveries will be scheduled to ensure there is no waiting outside the site.

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).

Swept path analysis for the three options outlined above is shown in Appendix I. This includes the following vehicles:

- ***Articulated vehicle (15.5m & 16.3m long and 2.6m wide)***
- ***Mobile Crane (approximately 11.3m long and 2.75m wide)***
- ***Large Tipper (10.2m long and 2.5m wide)***

For Option 1, the swept path analysis shows that large vehicles would be required to use the opposite lane when making left hand bends. This option allows vehicles to serve the site and then continue without making any turning/reversing manoeuvres. However, due to the residential nature of Willes Road and the presence of double parking, it is proposed that this option is only used for smaller vehicles, such as cars, vans and LGVs.

For Option 2, the swept path analysis shows that all of the vehicles are able to turn around using the Spring Place/Willes Road/Holmes Road junction. Turning at this junction will be overseen by a minimum of two banksmen to ensure the safety of pedestrians and other road users.

For Option 3, the swept path analysis shows that the vehicles are able to turn around using the Cathcart Street junction. Reversing into Cathcart Street will require the suspension of a number of parking bays on the north side of Holmes Road and will be overseen by banksmen. For Option 4 swept paths show vehicles reversing into the site from Cathcart Street, before returning via Holmes Road.

It is proposed that Option 3 and/or Option 4 are used wherever possible, when the hoarding on Cathcart Street can be reduced to only cover the footway, and cabins can be located on another area of the site i.e. after the ground floor slab is in place.

The drawings show that the larger vehicles will need to utilise the oncoming lane on the approach to the site along Holmes Road. The turning manoeuvre at the Holmes Road / Kentish Town Road junction will be supported by a minimum of two traffic marshals in order to reduce vehicle conflict.

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.

Vehicle wheel washing facilities will be provided and there will be a road sweeper on hand at the site to clear up any material deposited on the public highway by vehicles accessing/egressing the site. This will be done as quickly as possible after any identified occurrence.

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.

Loading and unloading will take place within the site hoarding on Holmes Road as shown on the construction layout plans included at Appendix H. Safe loading and unloading will be ensured through the use of traffic marshals located at both the site entrance and exit gates.

Strict material delivery scheduling and booking systems will be imposed on the project to ensure that congestion is avoided. Each delivery will be allocated a delivery time period and an allotted area from which to load or unload. This will be suitable for the material being delivered and will adhere to site working hours.

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.

Five parking bays adjacent to the site entrance will require suspension to facilitate access to the construction site and to allow for deliveries/unloading vehicles. Parking suspensions may be required on the northern side of Holmes Road opposite the Cathcart Street access, to facilitate the turning manoeuvres of vehicles reversing into Cathcart Street. Parking suspensions will also be required directly opposite the site on the north side of Holmes Road in order to maintain an effective carriageway width of 6.5m for two-way traffic flows.

It is envisaged that the three parking bays on Cathcart Street (adjacent to the junction with Holmes Road) will need to be suspended as they will be located within the site hoarding during some phases of construction.

The traffic situation on site and on local roads such as Holmes Road will be continuously monitored throughout the construction period. Measures such as further parking suspensions along Holmes Road have been considered and could be implemented if considered necessary through the monitoring process, in coordination with the Council.

All relevant licenses will be applied for from LBC prior to the commencement of the construction works. A plan showing the location of parking bays is included at Appendix B.

In addition to parking bay suspensions, a temporary footway closure would be required adjacent to the Holmes Road and Cathcart Street frontages. The footway on Cathcart Street will be restored where possible after the ground floor slab is in place, however the Holmes Road footway will require closure for the duration of the construction period. Temporary zebra crossings are proposed to be installed either side of the footway closure on Holmes Road to enable pedestrians to cross safely and continue their journey on the opposite footway.

A drawing showing the proposed highway arrangement incorporating the pedestrian diversion is shown at Appendix J. A temporary traffic light with push button (pelican) or zebra crossing is suggested although the temporary crossing type should be discussed with LB Camden.

The eastern crossing is proposed next to 55-57 Holmes Road and the western crossing is proposed next to 78 Holmes Road (please refer to the drawing in Appendix J). These locations minimise interference to existing vehicle accesses/garages and road junctions and provides reasonable visibility splays. The plan also shows the highway works that would be required, including parking suspensions.

Cathcart Street will require temporary closure during the final phase of POD installation where the mobile crane will need to be located in Cathcart Street. It is proposed that this is coordinated with the school holiday periods. The closure will maintain an effective carriageway width of 2.5m which will enable two-way cycle flows to continue along Cathcart Street.

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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).

A drawing showing the highway works is included at Appendix J.

Highway works include as can be seen on the plan:

- ***Relocation of existing street lighting column within the hoarding and litter bin***
- ***Road sign to be removed within existing hoarding***
- ***Relocation or protection of existing tree***

In relation to the proposed pedestrian crossings which is to be discussed with LB Camden:

Eastern Crossing:

- ***Existing bollard(s) to be relocated (if required)***
- ***Existing on street parking sign to be removed***
- ***Proposed removal of road hump***
- ***Proposed suspension of on street parking as shown on the plan***
- ***Review of existing street lighting and subject to liaison with LB Camden alterations to lighting column positions and/or installation of new street lighting at the proposed crossing location***
- ***Indicative locations of road markings are shown on the plan***

Western Crossing:

- ***Proposed suspension of on street parking as shown on the plan***
- ***Proposed removal of road hump***
- ***Review of existing street lighting and subject to liaison with LB Camden alterations to lighting column positions and/or installation of new street lighting at the proposed crossing location***
- ***Indicative locations of road markings are shown on the plan***

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

A drawing showing the highway works is included at Appendix J. A pedestrian diversion signage strategy can be prepared subject to the footway suspension principles being agreed with LB Camden.

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).

The footways along the site frontages on Holmes Road and Cathcart Street will be closed and pedestrians will be required to use the opposite footways. Cathcart Street is required to be closed during the final stage of POD installation to facilitate the positioning of the mobile crane. This would require vehicles wishing to access Cathcart Street from Holmes Road to divert around the works using Holmes Road, Willes Road, Inkerman Road and accessing Cathcart Street from the south.

It is proposed to install zebra crossings either side of the footway closure on Holmes Road, as shown in Appendix J, to enable pedestrians to cross safely and continue their journey on the opposite footway. A temporary footway will be provided in the carriageway (protected by water filled barriers or similar) until the temporary zebra crossings can be installed by the Council.

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 pedestrian footway adjacent to the site boundary on both Cathcart Street and Holmes Road will need to be closed during the construction works. This is a result of piling on the boundary line which requires hoarding to be located over the footway as well as to ensure the safety of pedestrians.

Alternative footways on the other side of the carriageway will remain open for use by pedestrians. Appropriate directional signage will be displayed on the footways leading up to the proposed closure on both Holmes Road and Cathcart Street. Zebra crossings are proposed to be installed either side of the footway closure on Holmes Road as shown in Appendix J, to enable pedestrians to cross safely and continue their journey on the opposite footway, meaning they will be further from the works and in a safer position than walking alongside hoarding. The proposed pedestrian diversion route is shown on the plan with a green dashed line.

No London Cycle Network cycle routes will be affected by the construction. Banksmen / Traffic Marshals will be located at the site entrance and exit as well as at turning points on the local highway network to ensure the safe passage of pedestrians, cyclists and other motor vehicles during these manoeuvres.

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.

Hoarding will be positioned as shown on the plans included at Appendix H. The hoarding on Holmes Road encompasses the footway. On Cathcart Street the hoarding encompasses the parking bays on the east side of Cathcart Street as well as the eastern footway during the first phase of the construction and afterwards it will be moved to the footway line.

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.

The construction works have been divided into three phases:

1. ***Demolition and Site Preparation (3 to 4 weeks)***

2. ***Sheet / CFA Piling, Excavation, and Concrete Structure***

   2.1 Piling (6 weeks): Sheet/CFA Piling, HGV movements, excavators, dumper, roller, generator;

   2.2 Concrete Structure (18 weeks): HGV movements, excavator, dump truck, concrete pump, mobile crane;

3. ***Steel Structure and Fit-Out:***

   3.1 Steel Structure and POD Installation (11 weeks): HGV movements, forklift truck, mobile crane;

   3.2 External Cladding, Mechanical and Power (33 weeks): HGV movement, forklift truck, mobile crane, portable generator;

   3.3 Fit out and Landscaping (17 weeks): HGV movements, dump truck, vibratory roller / wacker plate

It is the intention of the main contractor to reduce the risk of damage to the hearing of all employees and those not involved or connected to the working activity from the exposure to noise. All activities resulting in the production of noise at or above the first action level (80dB(A)) will be subject to risk assessment. At this level ear protection will be made available to all employees. Should employees be exposed to the second action level (85dB(A)) or the peak action level (140dB(C)) then the Company will implement the following procedures:

Where the measured noise levels are more than 3 dB (A) above the predicted noise levels or inthe event of a complaint of noise an investigation shall be carried out to ascertain the cause of the exceedance or the complaint and to check that Best Practicable Means are being used to control the noise in accordance with the steps set out in the application for 'prior consent'. Noise levels shall be reduced further if it is reasonably practicable to do so.

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 Demolition and Construction Noise and Vibration Assessment has been carried out and submitted to the Local Authority as part of this application.

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

Noise Assessment

Calculations of the potential noise levels generated by the demolition and construction works have been carried out using the guidance of BS 5228. The level of noise generated by the infrastructure construction activities will depend upon a range of factors, which include plant to be used, distance between source and receptor and % on-time for each item of plant.

Calculations have been undertaken for each of the identified phases and for the typical and minimum distance between each work site and the nearest receptors. Precise details relating to the construction methodology are not available so reasonable assumptions have been made with reference to the demolition and construction contractors' management plans.

Source-term noise data for the plant has been taken from the database contained in BS 5228 and also from measurements of similar plant previously undertaken by 24 Acoustics.

Example calculations are provided in Appendix B and the results summarised in Table 5 of the Demolition and Construction Noise and Vibration Assessment issued on 23th of January.

Vibration Assessment

Consideration has been given to vibration levels due to construction operations and the primary activities with the potential to produce significant levels of vibration are demolition and piling.

In order to reduce noise and vibration at adjacent residential properties, the contractor has proposed an hydraulic powered, static load method of sheet piling (non-vibratory) and an area of Continuous Flight Auger (CFA) piling (See Figure 2). The piling works comprise:

- ***Sheet piles around the entire site perimeter.***
- ***16 Continuous Flight Auger (CFA) piles in the centre of the site.***

As described in BS5228 , The levels of vibration associated with continuous flight auger and pressed-in piling are minimal, as the processes do not involve rapid acceleration or deceleration of tools in contact with the ground but rely to a large extent on steady motions.

It is considered therefore, that vibration levels from CFA piling, subject to correct operation and no ground obstructions, are not likely to exceed 1 mm/s at the nearest residential properties.

Please refer to 'Demolition and Construction Noise and Vibration Assessment'.

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.

Communication and Best Practicable Means

Due to the anticipated noise levels at nearby receptors, it will be necessary to ensure regular communication with residents and businesses, as stated in BS 5225-1:

Best Practicable Means (as defined in Section 72 of Control of Pollution Act 1974) shall be used. Embassy Demolition Contractors Ltd has committed to employing BPM throughout the demolition phase (Page 48 of the Demolition Management Plan) and Designated Contractors Ltd is committed to employing BPM throughout the demolition and construction phases.

It is recommended that perimeter hoarding be provided along the residential site boundaries. Comprehensive noise and vibration monitoring will be undertaken throughout the project. The monitoring system will be configured to record both noise and vibration levels in high resolution samples in addition to real time noise and vibration data, allowing intelligent trigger alerts to be generated and interrogated.

A minimum of two noise and vibration monitoring locations are recommended: to the rear of 55-57 Holmes Road and the rear of Azania Mews. The exact locations are to be agreed with London Borough of Camden Environmental Health.

Noise and Vibration Trigger Levels

It is proposed to adopt a maximum construction noise level of 75 dB LAeq, 10 hour. The following two stage alert strategy is recommended to regulate noise levels at the nearest residential properties.

Measured Noise Level at the Façade	Recommended Action of the Receive
> 75 dB LAeq, 1hr	*Amber alert issued to the lead contractor and actions taken as appropriate to control noise levels over the 10 hour daytime period*
> 80 dB LAeq, 1hr	*Red alert issued to the lead contractor who will take immediate action to reduce noise levels*

The following two stage alert is recommended to regulate vibration levels at the nearest residential properties.

Measured Vibration Level at the Façade	Recommended Action of the Receiver
> 1 mm/s	*Amber alert issued to the lead contractor. Trigger review and, where appropriate, action taken.*
> 4 mm/s	*Red alert issued to the lead contractor who will take immediate action to reduce vibration levels*

Trigger Actions

Noise monitoring with a look-ahead trigger algorithm will be used to communicate to key construction staff who in turn can take action to limit operations on site.

Where a trigger event is considered to be genuine (determined by reviewing live noise and vibration measurement data and recorded audio), the contractor will identify the source of the noise or vibration that triggered the alert. The Contractor will undertake a risk assessment to determine the likelihood that the activity that generated the alert might generate further noise or vibration.

If a risk of increasing noise levels from the activity is identified, the Contractor will review the working method and machinery to determine whether alternatives are available that reduce the risk. The Contractor's Expert may be consulted for an external view on whether the best practicable means to minimise noise and vibration have been proposed and adopted;

In any event, noise and / or vibration levels will be kept under close scrutiny as the activity continues until such time as the risk of exceedance becomes negligible.

All noise monitoring equipment will comply with the Class 1 specification of BS EN 61672-1 (IEC 61672-1). All vibration measurements will be undertaken in terms of Peak particle Velocity (PPV) with the dominant frequency also noted. The measured PPVs will be assessed in accordance with guideline levels defined in BS 5228-2:2009. Any maintenance issues will rectified promptly so as to ensure any periods where monitoring is not taking place is as short as possible.

Please refer to 'Demolition and Construction Noise and Vibration Assessment'.

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

Construction site staff are trained in the use of handheld equipment to monitor noise and dust. Staff will carry out monitoring to manufacturers requirements. The contractor staff are trained to use dust suppression equipment to reduce the impact of dust during site works. All site staff are aware of the measures that are to be taken on site to minimise noise, vibration and dust generation. All employees would be advised regularly of the following, as part of their training: The proper use and maintenance of tools and equipment and in particular, sound-reduction equipment; The positioning of machinery on site to reduce the emission of noise to the neighbourhood and to site personnel; The avoidance of unnecessary noise when carrying out manual operations and when operating plant and equipment; The protection of persons against noise.

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

Overall, the construction site has been identified as a low-medium risk site for dust soiling and a low risk site for health effects, as set out in Table 7. The dust risk categories have been used, along with the professional judgement of the consultant, to determine the appropriate level of mitigation at the site. The professional experience of the consultant preparing the report is set out in Appendix A2 of the Construction Dust Assessment and Dust Management Plan.

<u>Site Management</u>

- Develop and implement a stakeholder communications plan that includes community engagement before work commences on site;
- Develop a dust management plan;
- Display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues on the site boundary;
- Display the head or regional office contact information;
- Record and respond to all dust and air quality pollutant emissions complaints;
- Make a complaints log available to the local authority when asked;
- 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;
- Increase the frequency of site inspections by those accountable 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; and
- 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 in the log book.

<u>Preparing and Maintaining the Site</u>

- Plan the site layout: machinery and dust-causing activities should be located away from receptors;
- Erect solid screens or barriers around dust activities or the site boundary that are, at least, as high as any stockpiles on site;
- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period;
- Avoid site runoff of water or mud;
- Keep site fencing, barriers and scaffolding clean using wet methods;
- Remove materials from site as soon as possible;
- Cover, seed or fence stockpiles to prevent wind whipping;
- Carry out regular dust soiling checks of buildings within 100 m of site boundary and cleaning to be provided if necessary;
- Agree monitoring locations with the Local Authority; and
- Put in place real-time dust and air quality pollutant monitors across the site and ensure they are checked regularly.

Operating Vehicle/Machinery and Sustainable Travel

- Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone;
- Ensure all non-road mobile machinery (NRMM) comply with the standards set within the London Plan SPG on The Control of Dust and Emissions During Construction and Demolition;
- Ensure all vehicles switch off their engines when stationary – no idling vehicles;
- Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery-powered equipment where possible;
- Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials; and
- Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).

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;
- Ensure an adequate water supply on the site for effective dust/particulate matter mitigation (using recycled water where possible);
- Use enclosed chutes, conveyors and covered skips;
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate; and
- 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; and
- No bonfires and burning of waste materials.

Measures Specific to Earthworks

- Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces;
- Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil; and
- Only remove secure covers in small areas during work and not all at once.

Measures Specific to Construction

- Avoid scrabbling (roughening of concrete surfaces) if possible;
- 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;
- 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; and
- For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.

Measures Specific to Trackout

- Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the site;
- Avoid dry sweeping of large areas;
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport;
- Record all inspections of haul routes and any subsequent action in a site log book;
- Install hard surfaced haul routes, 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;
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable);
- 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;
- Access gates to be located at least 10 m from receptors where possible; and
- Apply dust suppressants to locations where a large volume of vehicles enter and exit the construction site.

Conclusion

- The IAQM guidance is clear that, with appropriate mitigation in place, the residual effect will normally be 'not significant'.
- During adverse weather conditions, or where there is an interruption to the water supply, there may be occasional, short-term dust annoyance; however, the likely scale and duration of these effects would not change the conclusion that the residual effects are insignificant.

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.

Where there is evidence of airborne dust from the building construction/demolition activities the site, the contractor should make their own inspection and assessment, and where necessary undertake ambient monitoring with the aim of identifying those process operations giving rise to the dust. Once the source of the emission is known, corrective action should be taken without delay.
Effective preventative maintenance will be employed on all aspects of the construction/demolition works including all plant, vehicles, buildings and the equipment concerned with the control of emissions to air.

Important management techniques for effective control of emissions include; proper management, supervision and training for process operations; proper use of equipment; effective preventative maintenance on all plant and equipment concerned with the control of emissions to the air; and it is good practice to ensure that spares and consumables are available at short notice in order to rectify breakdowns rapidly. This is important with respect to arrestment plant and other necessary environmental controls. It is useful to have an audited list of essential items.

Vehicle wheel washing facilities will be provided and there will be a road sweeper on hand at the site to clear up any material deposited on the public highway by vehicles accessing/egressing the site. This will be done as quickly as possible after any identified occurrence.

Please refer to 'Demolition and Construction Dust Assessment'.

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

Comprehensive noise and vibration monitoring will be undertaken throughout the project. The monitoring system will be configured to record noise, vibration and dust levels in high resolution samples in addition to real time noise and vibration data, allowing intelligent trigger alerts to be generated and interrogated.

A minimum of two noise and vibration monitoring locations are recommended: to the rear of 55-57 Holmes Road and the rear of Azania Mews. The exact locations are to be agreed with London Borough of Camden Environmental Health. Please refer to 'Demolition and Construction Noise and Vibration Assessment' 'Demolition and Construction Dust Assessment'.

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 'Construction Dust Assessment' and 'Dust Management Plan' has been carried out and submitted to the Local Authority as part of this application

The construction will be undertaken using methods that will minimise the risk of dust emissions. Sheet piling will be installed around the perimeter of the site using a Kowan Still Worker, which utilises hydraulic pressure to press the piling into position, with no hammering. Continuous flight auger (CFA) piling will also be used, with an excavator used to remove the spoil. Water jetting will be used during the piling processes, minimising the risk of dust emissions. Steel reinforced concrete will be used to form the underpinning, basement perimeter walls and slab, which will utilise ready mixed concrete poured onto steel cage. No mixing of concrete will occur on-site. The building will be constructed using a steel framework and a pre-fabricated pod system. The living areas will be pre-constructed off-site, delivered using articulated lorries and lifted into position by mobile crane, as per the construction sequence. As each pod is installed, the pod connections will be welded vertically and horizontally in sequence with the adjoining pod below and beside. This method of construction will mean that there will be very little dust generating activity at the site, and no dusty materials used. The size of the construction would usually be considered to be of a medium scale; however, given the low potential for dust release due to the construction method, the dust emission class for construction is considered to be small, using the example definitions in Table A1 in Appendix A1.

The site is classified as "Medium Risk" within the air quality assessment. However, the assessment follows simplified guidance based on site area and building volume and does not take into consideration the site-specific nature of the construction. The ground to basement structure is steel frame with concrete slabs forming the floors. All concrete is delivered to site pre-mixed, with no site mixing of concrete. The upper floors consist of pod construction which are manufactured off site and delivered as completed modules including floors, walls, ceilings and corridors. The external cladding is comprised of pre-rendered insulated panels, pre-cut in factory to fit site dimensions. Pre-fabrication forms a large part of the construction build, so the risk of dust and particulates are significantly reduced and the "Medium Risk" categorisation does not reflect the reality. Dust monitoring will not be required.

Please refer to 'Construction Dust Assessment and Dust Management Plan submitted as part of the application.

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 GLA's 'highly recommended' measures from the SPG document relative to the level of risk identified have been addressed by completing the GLA mitigation measures checklist.

The mitigation measures are included in an Air Quality and Dust Management Plan (AQDMP).

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.

The site is classified as "Medium Risk" within the air quality assessment. However, the assessment follows simplified guidance based on site area and building volume and does not take into consideration the site-specific nature of the construction. The ground to basement structure is steel frame with concrete slabs forming the floors. All concrete is delivered to site pre-mixed, with no site mixing of concrete. The upper floors consist of pod construction which are manufactured off site and delivered as completed modules including floors, walls, ceilings, and corridors. The external cladding is comprised of pre-rendered insulated panels, pre-cut in factory to fit site dimensions. Pre-fabrication forms a large part of the construction build, so the risk of dust and particulates are significantly reduced and the "Medium Risk" categorisation does not reflect the reality. Dust monitoring will not 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).

The importance of pest prevention through good hygiene, management and exclusion practices should be emphasised. Personnel in charge of a site have the day to day responsibility of ensuring a pest management programme is maintained.

Information posters:
In addition to training sessions the posting of information at sensitive locations such as waste disposal and amenity areas can act as a reminder of the requirements of the pest management programme. These can remind staff of pest related risks and preventive.

Reporting and record keeping:
The organisation of a reporting system and maintenance of records is essential if pest free status is to be achieved.

Records must be kept:

- ***To monitor pest management processes***
- ***To demonstrate compliance with legislation***
- ***To coordinate block treatments***
- ***To liaise with tenant groups***

Pest sightings log:
A record should be kept of any pest sightings made by personnel other than those involved in pest management. This can be in the form of a book or a folder where the following information can be logged:

- ***Name of person making report***
- ***Date and time***
- ***Location***
- ***Pest seen***
- ***Any other relevant information***

In addition to entering the sighting in the book, the sighting must be reported to the appointed manager in charge of pest management who will decide on further action.

Where a pest control contractor is employed the sighting will normally result in a request for service. In the case of an on-going riddance programme the reports will provide information on the success of the treatment. The pest sightings record should be checked by each contractor when they visit the site. The contents of the pest sightings record should be part of a management review process. Designated Contractors will ensure that necessary measures are taken to ensure the control of rodents.

The site shall be kept free, so far as is reasonable practicable, from rats and mice. (Prevention of Damage by Pests Act 1949, part 'H' of the Building Regulations (Drainage & Waste Disposal).

Site Survey and Pest Control monitoring/treatment plan was carried on on 06th January 2017 .

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

NONE ASBESTOS FOUND (as per attached report carried out on 28th of November 2016)

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.

All personnel on this site will attend a site induction carried out by Designated Contractors Limited prior to commencement of works.

All site operatives will hold a C.S.C.S. equivalent Health and Safety certificate.
Plant operatives will also hold the correct certification to operate any machinery that is on site.

Designated Contractors Limited also operate a strict training regime which involves operatives having the correct tickets, or in training for, banks man, abrasive wheels, burning, first aid, etc. Subcontractors to produce certificates confirming training for their relevant tasks.

All training certificates are held at the offices of Designated Contractors Limited.
The copies of these tickets will be in the possession of the client's representative on site and are held until the demolition works are complete.

Site rules, other than those already made, will be made by the Company following consultation with all persons who may be affected by either the rule or the reason for the making of a rule.

In addition to new rules arising as a result of the progression and nature of the work, the Principal Designer, Client or Designer may require additional rules to be made after the commencement of work and these will become site rules and the responsibility of the Company to notify all persons who may be affected by them.

All site rules currently in force will be brought to the attention of personnel during site induction training and be displayed on the site when practicable. Any new site rules made once work has commenced on site, will be brought to the attention of all personnel either directly through tool box talks, as part of daily briefing meetings or through their line manager.

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): **02/2017 – 08/2018**

b) Is the development within the CAZ? (Y/N): **N**

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

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:
See attached Information

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:
Yes

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: Mariano Garcia

Date: 08/02/2017

Print Name: Mariano Garcia

Position: Architect

Please submit to: planningobligations@camden.gov.uk

End of form.

Appendices

- CONSTRUCTION TRAFFIC MANAGEMENT PLAN AND APPENDICES;
- CONSTRUCTION NOISE AND VIBRATION ASSESSMENT;
- CONSTRUCTION DUST ASSESSMENT & DUST MANAGEMENT PLAN;
- HIGHWAY WORKS PLAN + EXPLANATORY EMAIL;
- CONSIDERATE CONSTRUCTORS SCHEME CERTIFICATION;
- ASBESTOS SURVEY;
- PEST CONTROL SURVEY & ASSESSMET;
- FORS AND CLORKS DOCUMENTATION;
- CONSTRUCTION PHASE PLAN;