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.

Due to the predominant internal fit out and refurbishment nature of the works, he primary noisy works will be related to the structural works to the facades of Shaftesbury Avenue and Mercer Street, level 5-6 terrace and internal structural alterations.

	Numi	umber of items at each workstage		_	cal		
Plant Item	1.Site Preparations/		3.Concreting Operations	4.General site activites	SWL dBA	SWL Data Source Within BS5228	Estimated On-time (% of typical working day)
Circular saw, bench mounted			3	3	112	C.4 71	10%
Compressor		2			103	C.3 19	20%
Compressor			2		100	D.6 19	20%
Compressor				2	102	D.7 9	20%
Concrete mixer		2	2		108	C.4 20	30%
Concrete pump, lorry mounted			2		109	D.5 16	30%
Diesel combined rig (rotary)		2			113	D.10 6	75%
Dumper	2	2	2		104	C.4 3	75%
Generator (power)	4	4	4	4	95	C.4 78	100%
Hand-held electric circular saw			2		112	C.4 73	10%
Hand-held electric circular saw				2	109	D.7 76	10%
Hand-held hammer		2	2	2	97	C.1 19	10%
Lorry	2	2	2	2	108	C.2 34	50%
Poker vibrator			2		106	C.4 34	20%
Power float			2		100	D.6 44	10%
Scaffold poles and clips				1	108	D.7 1	20%
Site fork lift truck			2	2	104	D.7 93	75%
Tipper lorry	2	2			113	D.3 112	75%
Tracked excavator	4				104	C.2 5	75%
Water bowser		2	2		109	C.6 37	10%
Water pump	2	2	2		106	C.6 41	10%
Wheeled crane			1	1	110	D.7 103	10%
Wheeled excavator/loader fitted with hydraulic rock breaker			1		106	D.8 12	10%

Table 03 - Summary of Typical Construction Activities and Sound Power Levels

The highlighted equipment could operate at any time within the permitted construction hours (0800-1800 hrs weekdays and 0800-1300 hrs on Saturdays).



Construction Phase	Stripping out	Demolition / Enabling Works	Substructure Works construct basement	Superstructure, core and frame	Building envelope, cladding and roofing	MEP installation	Lift installation	Fit out	Landscaping	Commissioning
Scaffold	✓	✓	✓	✓	✓	✓	✓	✓		
Diamond cutting tools / saws	✓	✓	✓	✓		✓	✓	✓	✓	
Hand/power tools	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Hoist		✓		✓	✓	✓	✓	✓		
Forklift	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mobile Access Platform (Cherry picker)	✓	✓		✓	✓	✓		✓		
Skips and skip trucks	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mini Cranes / Manipulators	✓				✓		✓			
Crushers		✓								
Floodlights	✓	✓	✓	✓			✓		✓	
Generators		✓								
Hydraulic benders and cutters	✓	✓	✓	✓					✓	
*										
•		✓	✓	✓					✓	
Ready Mix Concrete trucks Concrete pumps and booms		✓	✓	√					V	

Table 04 - Schedule of Expected Construction Plant



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.

The most recent noise survey to establish the ambient and background noise levels was undertaken by Clarke Saunders in December 2021 and is provided as part of the Planning Submission pack.

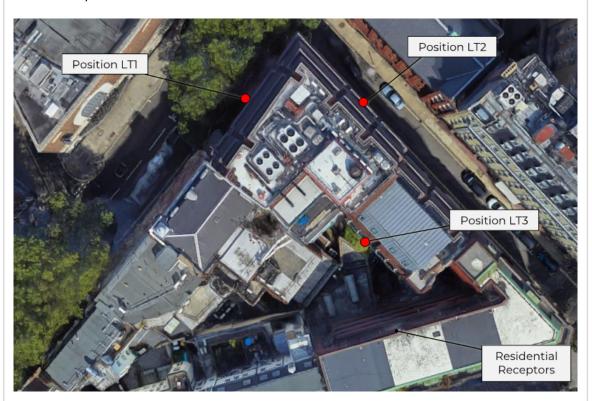


Figure 11 – Site Plan indicating positions of noise survey microphones

Representative background sound levels measured during the survey were:

POSITION	MONITORING PERIOD	TYPICAL BACKGROUND* LA90, SMINS	AVERAGE LAMO, T
LT	07:00 - 23:00 hours	55 dB	66 dB
LΠ	23:00 - 07:00 hours	47 dB	64 dB
1.72	07:00 - 23:00 hours	52 dB	62 dB
LT2	23:00 - 07:00 hours	48 dB	60 dB
LT3	07:00 - 23:00 hours	49 dB	52 dB
LIS	23:00 - 07:00 hours	48 dB	51 dB

Table 05 – Typical measured background and average free-field noise levels



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

Information on predicted noise and vibration levels will be provided by the Demolition and Main Contractor using the noise survey already completed as baseline reference when considering appropriate mitigation measures.

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.

During both the demolition and constriction phases, all available measures will be implemented to reduce noise, vibration and dust emissions from construction activities wherever reasonably achievable. These measures have been developed in line with the guidance given in BS5228:2009 and 'Camden's Minimum Requirements for Building / Construction / Demolition Sites' Document and are considered to represent the Best Practical Means (as defined in Section 72 of the Control of Pollution Act 1974 and BS5228):

- Noise, vibration and dust emissions onsite will be carefully managed via real-time continuous monitoring systems throughout the works until otherwise agreed with the Local Planning Authority.
- In the event of complaints, the cause of the complaint(s) will be investigated immediately, including a review of the noise/vibration/dust monitoring results (if monitoring is being undertaken at the time) and the site activities that were being undertaken at the time. The results of the investigation will be sent to the Local Authority for review upon request.
- Site hoarding will be installed around all relevant parts of the site boundaries. This should provide around 5-10 dB of additional screening to ground floor rooms of nearby NSRs.

The following general noise and vibration mitigation measures will also be adopted for the works:

 NSRs will be informed of the construction works. They will also be provided with contact details for an appropriate member of the site management team who can be contacted in the event of noise, vibration or dust related concerns. Proactive and regular community liaison is a powerful tool for preventing construction noise, vibration and dust related issues. It is our experience that NSRs are less likely to complain about perceived noise, vibration and dust levels if informed of the works that will be carried out and the mitigation measures that are in place;



- Site personnel will be informed of the sensitivity of the site to noise due to the proximity of the surrounding noise-sensitive receptors an
- Hoarding and fencing will be inspected regularly and repaired as necessary, access gates will be well maintained to minimise noise
- All hand-held and portable equipment will be electrically-powered where practicable;
- All plant and equipment will be maintained in good working order and operated in accordance with manufacturers recommendations;
- As far as reasonably practicable, sources of significant noise will be enclosed. The
 extent to which this can be done depends on the nature of the machine or process to
 be enclosed and their ventilation requirements;
- Site personnel will be informed of the sensitivity of the site to noise due to the
 proximity of the surrounding noise-sensitive receptors and carefully managed to
 ensure that noise is kept to a minimum;
- Hoarding and fencing will be inspected regularly and repaired as necessary, access gates will be well maintained to minimise noise
- All hand-held and portable equipment will be electrically-powered where practicable;
- All plant and equipment will be maintained in good working order and operated in accordance with manufacturers recommendations;
- As far as reasonably practicable, sources of significant noise will be enclosed. The
 extent to which this can be done depends on the nature of the machine or process to
 be enclosed and their ventilation requirements;
- Excavator, dumper and lorry operators will avoid unnecessary revving of engines and all machinery will be switched off when not required;
- Stationary equipment and plant will be placed so as to provide a screening to other items of plant and located to provide minimum noise emissions in the direction of noise sensitive areas;
- Care will be taken when loading and unloading materials to limit impact noise. The
 movement of material with excavators and dumper trucks will be carried out slowly
 and carefully to limit impact noise. Material will be placed rather than dropped
 wherever feasible;
- Vehicles will not be permitted to queue on the road or pavement outside the site access;
- Vehicles parked within the site, outside working hours will have their engines switched off;



- Vehicle routes and traffic management plans will be arranged to avoid reversing operations where possible;
- Where practicable, activities which can produce significant levels of noise and or vibration will be arranged for times which are less likely to cause disturbance.
- Wherever feasible, noisy site activities will be carried out as far from NSRs as possible;
- Any compressors brought on to site will be silenced or sound reduced models, fitted with acoustic enclosures, where feasible;
- Excavator, dumper and lorry operators will avoid unnecessary revving of engines and all machinery will be switched off when not required;
- Stationary equipment and plant will be placed so as to provide a screening to other items of plant and located to provide minimum noise emissions in the direction of noise sensitive areas;
- Care will be taken when loading and unloading materials to limit impact noise. The
 movement of material with excavators and dumper trucks will be carried out slowly
 and carefully to limit impact noise. Material will be placed rather than dropped
 wherever feasible;
- Vehicles will not be permitted to queue on the road or pavement outside the site access;
- Vehicles parked within the site, outside working hours will have their engines switched off;
- Vehicle routes and traffic management plans will be arranged to avoid reversing operations where possible;
- Where practicable, activities which can produce significant levels of noise and or vibration will be arranged for times which are less likely to cause disturbance.
- Wherever feasible, noisy site activities will be carried out as far from NSRs as possible;
- Any compressors brought on to site will be silenced or sound reduced models, fitted with acoustic enclosures, where feasible;
- Pneumatic tools will be fitted with silencers or mufflers and will only be used when hydraulic equipment cannot be used;



- There will be no site noisy working during any anti-social hours, unless otherwise agreed by the relevant authorities;
- Vehicle reversing alarms (if used) should be set to the minimum required for safe and efficient operations;
- Modern, silenced and well-maintained plant will be used at all times, conforming to standards set out in the EU Directives;
- Routes and programming for the transport of construction materials, fill, personnel
 etc. will be carefully considered in order to minimise the overall noise impact
 generated by these movements;
- Hydraulic construction to be used in preference to percussive techniques where practical;
- Hydraulic construction to be used in preference to percussive techniques where practical;
- Off-site pre-fabrication to be used, where practical;
- Loading and unloading of vehicles, dismantling of site equipment such as scaffolding
 or moving equipment or materials around site will be conducted in such a manner as
 to minimise noise generation. Where practical these will be conducted away from
 noise sensitive areas:
- Deviation from approved method statements to be permitted only with prior approval from the Principal Contractor and other relevant parties. This will be facilitated by formal review before any deviation is undertaken;
- All sub-contractors onsite will be made fully aware of the above requirements.

BS 5228 states that;

- All reasonably practicable means should be employed to ensure the protection of local communities and of people on construction sites, from detrimental effects of the noise generated by construction operations.
- With the mitigation measures listed above, it is our view that noise and vibration emissions from the construction works will have been reduced as far as practicable and the proposed construction methods are therefore appropriate.
- Real-time continuous noise, vibration and dust monitoring will be carried out during the construction phase of the development.



In terms of appropriate noise, vibration and dust triggers and action levels for the monitoring locations, it is recommended that the following limits are adopted as onsite levels.

Monitoring Equipment	Limit	Reference Periods
Dust	150 $\mu g~m^{-3}$ 15-minute mean for PM10 concentrations (trigger level) 250 $\mu g~m^{-3}$ 15-minute mean for PM10 concentrations for any consecutive periods (action level) ¹	0800-1800hrs Monday through Friday 0800-1300hrs on Saturdays
Noise	82 dBA LAeq,1hour (trigger level) 85 dBA LAeq,15minute for any <u>consecutive</u> periods (action level)¹	0800-1800hrs Monday through Friday 0800-1300hrs on Saturdays
Vibration	2 mms ⁻¹ PPV (trigger level) 5 mms ⁻¹ PPV for any <u>consecutive</u> periods (action level) ¹	0800-1800hrs Monday through Friday 0800-1300hrs on Saturdays

NOTE – Action levels have been nominated for consecutive periods as this would distinguish between isolated events which will occur from time to time on construction sites (i.e. site personnel working close to or knocking equipment or accidentally dropping material etc.) from activities which are prolonged and require site management to act upon to reduce construction emissions as far as reasonably practicable

The dust trigger and action levels above are based on the guidance given in Paragraph 6.4 of the Mayor of London Supplementary Planning Guidance document 'The Control of Dust and Emissions during Construction and Demolition'.

The noise trigger and action levels above are based on the guidance given Camden Minimum Requirements for Building / Construction / Demolition Sites document. The trigger level is equal to the highest predicted noise level at the worst affected receptor during the construction works, whereas the action level is +3dB higher than the trigger level.

The vibration limits are based on guidance given Camden Minimum Requirements for Building / Construction / Demolition Sites document and BS5228-2 guidance.



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

Evidence to be provided by Principal Contractor when appointed.

It will be a requirement of the project that the Contractor will be responsible to train all the relevant employees. All training records will be kept in an overall matrix of site personnel.



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

The major influences on air quality throughout the construction works associated with each phase are likely to be dust-generating activities during the façade enabling works.

The emphasis of the construction works would be to minimise the potential effects at source, through appropriate site management and control practices.

Potentially, nuisance can be caused by the deposition of construction dust. Construction-derived dust effects cannot be easily quantified and therefore a more qualitative approach is employed to predict potential effects from these works. The emphasis of this approach lies in the minimisation of potential dust effects at source through appropriate environmental management controls relating to, at least, 'good practice' site management practices. This includes identification of good working practices and suitable mitigation measures to minimise the potential for dust emissions, and nuisance risk, and the likely generation of construction vehicle movements.

Premises and occupants within 100m of a construction site are generally considered to experience the most significant effects from construction dust. Examples of dust-sensitive receptors are listed in the table below:

Dust Sensitive Receptors

High Sensitivity	Medium Sensitivity	Low Sensitivity	
Hospitals and Clinics	Schools	Farms	
Retirement Homes	Residential Areas	Light and Heavy	
Hi-Tech Industries	Food Retailers	Outdoor Storage	
Food Processing	Offices		

The proximity of sensitive receptors and their orientation in relation to the prevailing wind, in addition to the scale and duration of demolition and construction activities, will have a bearing on potential dust nuisance effects.

The works due to its size and construction duration may be classified as a Major Development and as a "High Risk" by the GLA "Control of Dust and Emissions from Construction and Demolition, Best Practice Guidance".



The construction works have the potential to effect local air quality conditions, as follows:

- Dust generated from construction activities.
- Emissions from construction plant e.g., concrete mixers and generators; and
- Emissions from vehicles (e.g., lorries, cars and vans) associated with the construction of the entire development, import of building materials and removal of waste materials, accessing and leaving the Site on the local road network.

The area surrounding the site is predominantly occupied by residential and commercial uses.

Given the proximity of the residential properties to the site, it is likely that without mitigation, there would be the potential for at worst: local, temporary substantial adverse effects from construction activities at the closest properties within 10m of the Site; local, temporary moderate adverse effects at properties between 10m and 100m from the Site; and local, temporary minor adverse effects at receptors between 100m and 200m from the Site. As such, specific management controls would be required to reduce the potential for dust effects on these properties.

A range of environmental management controls will be developed, including the BRE guidance 'Controlling Particles, Vapour and Noise from Construction Sites 26', the LB Camden Codes of Construction, the GLA 'The Control of Dust and Emissions during Construction and Demolition SPG 8', relating to 'High' risk sites for the Works and the Institute of Air Quality Management (2016). Guidance on the Assessment of Dust from Demolition and Construction (Version 1.1). These measures will prevent and mitigate the release of dust entering the atmosphere and/or being deposited on nearby receptors and will include:

- Routine dust monitoring at sensitive residential locations with the results and
 effectiveness of controls reviewed at regular meetings. A safety method statement will
 outline the control measures necessary to minimise the risks to an acceptable level,
 and all statutory notices will be placed with the Health and Safety Executive (HSE).
- Damping down surfaces during dry weather (use of rain guns and mist system).
- Erection of appropriate hoarding and/or fencing to reduce dust dispersion & restrict public access.
- Sheeting of buildings, chutes, skips and vehicles removing demolition wastes.
- Building elevations which front public boundaries or are immediately adjacent to adjoining properties would be fully scaffolded and completely enclosed by sheeting to provide a dust and safety shield during the demolition process.
- Appropriate handling and storage of materials, especially stockpiled materials.



- Restriction of drop heights onto lorries and other equipment.
- Keeping vehicle wheels clean by use of hard-standings and local use of jet washers, limiting of vehicle speeds to 5 mph, avoidance of unnecessary idling of engines and routing of site traffic as far from residential and commercial properties as possible.
- Fitting all equipment (e.g., for cutting, grinding, crushing) with dust control measures such as water sprays wherever possible.
- Main's power is to be used on all small power applications such as hand tools, welders, etc. unless is not feasible to extend power the work location.
- Use of alternatives fuel source generators (solar/gas/hybrid) will be considered in the
 first instance with gas powered generators as a second choice. Diesel generators will
 be avoided if possible. The responsible parties will ensure that all plant and vehicles
 are well maintained so that exhaust emissions do not breach statutory emission limits.
- Switching off all plant when not in use.
- Ensuring that a road sweeper is available to clean mud and other debris from hard standing roads and footpaths.

Attention will be paid to operations which would inevitably have to take place close to the most sensitive surrounding properties (due to their proximity and orientation in relation to the Site) at the boundary of the Site.

Measures to control dust are routinely and successfully applied to construction projects throughout the UK and are proven to significantly reduce the potential for adverse nuisance dust effects associated with the various stages of construction work.

Following the employment of appropriate environmental management controls which are routinely and successfully applied throughout the UK, negligible to moderate adverse residual effects would likely arise from construction-related dust emissions from the enabling works.

Detailed mitigation measures to control construction traffic in relation to the Enabling Works will be discussed and agreed with London Borough of Camden to agree the most suitable access and haul routes for site traffic. The most effective mitigation will be achieved by ensuring that construction traffic does not pass along sensitive roads (residential roads, congested roads, via unsuitable junctions, etc.) where possible. The timing of large-scale vehicle movements to avoid peak hours on the local road network will also be beneficial.

It is anticipated that the effect of construction vehicles arriving and leaving the site would be negligible, during peak construction periods, in the context of local background pollutant concentrations and existing local road traffic emissions.

For the source of water, to minimise dust the site's main will be utilised and extended as close as reason to the work face. In certain situations, it may be necessary to use bowsers to transport water around site.



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.

Vehicles whilst on the site will predominately be restricted to concrete hardstanding and surfaced site roads. Vehicles that are required to move off these areas will be cleaned before exiting the work area so that mud and dust is not tracked onto the main roads. Therefore, the potential for distribution of dirt onto the highway is limited and no wheel washing facilities are therefore envisaged.

Should any spoil spill onto the highway during loading or offloading it will be manually picked up immediately, and road sweepers will be deployed as necessary to deal with any local issues.

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

Noise, dust and vibrations monitoring will be undertaken prior to and during all the demolition and construction phases. A safety method statement will outline the control measures necessary to minimise the risks to acceptable agreed levels, and all statutory notices will be placed with the Health and Safety Executive (HSE).

The location of monitoring stations has not yet been defined but it is high likely that monitoring stations will be stationed around the perimeter of the site to the each of the sensitive receptor boundaries.

The number of monitoring stations may vary once a technical assessment of the performance of the stations has been undertaken. High capacity sensor stations might provide extended coverage and the number of monitoring stations might then reduce, with the same level and accuracy of monitoring but this level of detail will be provided going forward.



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

An air quality assessment was undertaken for the Proposed Development and is reported in the Environmental Statement.

For construction dust, it is anticipated the work associated with the Proposed Development would be high-risk based on the IAQM's Guidance on the Assessment from Demolition and Construction [1] and Greater London Authority (GLA) guidance [2].

As such, mitigation measures for high risk sites have been recommended. Specifically, the GLA 'The Control of Dust and Emissions during Construction and Demolition SPG"

The GLA 'The Control of Dust and Emissions during Construction and Demolition SPG 8' recommended mitigation measures will be implemented and delivered on this site as described above. 60% of construction vehicles will be at least Euro compliant and where applicable LEV will be implemented.

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

The GLA 'The Control of Dust and Emissions during Construction and Demolition SPG 8' recommended mitigation measures will be implemented and delivered on this site.



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

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

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

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

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

Based upon the proposed scope of works the site identifies as Low Risk of dust soiling during and Low Risk. The site is identified as a Negligible risk of human health impacts as a result of all construction activities.

Impacts of dust soiling are typically in relation to loss of amenity and potential nuisance effects of dust which is most noticeably attributable to the coarser fraction of dust (i.e., >10 microns in diameter). Impacts on health relate to the impacts of the construction activities on the short-term PM10 concentrations at nearby sensitive receptor locations.

The site action level used will follow the criteria detailed in the IAQM (2018) Guidance on monitoring in the vicinity of demolition and construction sites.

Real time noise, dust and vibration monitoring will be undertaken during all the construction phases.

A safety method statement will outline the control measures necessary to minimise the risks to an acceptable level, and all statutory notices will be placed with the HSE.



It is considered necessary to monitor for dust soiling and PM10 emissions, using real time automatic monitors, as recommended on Appendix 8 of the GLA's Supplementary Planning Guidance on the Control of Dust and Emissions from Construction and Demolition (GLA, 2014). All monitoring will be carried out in accordance Camden Council's requirements for real-time dust monitoring on demolition and construction sites (Camden Council, 2021).

Based on the outcome of the Construction Dust Risk Assessment there is anticipated to be a Medium Risk during façade demolition and Low Risk of impacts during the majority of the works, it is considered that two Osiris monitors (optical analysers, which utilise light scattering of particulates) will be appropriate. These monitors are MCERTS accredited for PM10 measurements and recommended for this purpose by the IAQM in its Guidance on Air Quality Monitoring in the Vicinity of Demolition and Construction Sites (IAQM, 2018). The Osiris monitors are to be located at the site boundaries close to sensitive receptors, ideally oriented with regard to the prevailing wind.

The exact locations of the two monitors to be installed on site needs to consider access, security and power supply. Camden Council require that the monitors not be located on or powered via lampposts. During the baseline monitoring period, power supply will be readily available from the existing building.

Potential locations directly on the eastern boundary were investigated, however, no suitable locations were identified due to location of a void directly adjacent to the high boundary wall. Power will be supplied from the existing building, so there will be no requirement to obtain power from lampposts.

Camden Council will be provided access to the real-time PM10 monitoring data and log-in details sent to airquality@camden.gov.uk, once the monitors have been fully installed on site.

The guidance recommends red trigger levels of 250 μ g/m3 is set as a 15-minute mean and 190 μ g/m3 as a 1-hour mean for concentrations of PM10 close to construction sites. Internal amber PM10 alerts will be set at 150 μ g/m3 (15 minute mean). Action in the event an alert occurs is as follows:

- Amber alert site manager or other appropriate person to review activities to identify
 any potential dust or particulate sources and if cause of alert relates to a site activity,
 mitigation will be put in place immediately to reduce impacts
- Red alert site manager or other appropriate person to review activities to identify any potential dust or particulate sources.
- if cause of alert relates to a site activity, mitigation will be put in place immediately to reduce impacts.
- if the mitigation is identified as insufficient then activities causing the elevated dust / particulate levels will cease.



In the event exceedances of the trigger levels automatic alerts will be issued to the site manager who will investigate the cause of the exceedance and implement additional mitigation if necessary.

Air quality monitoring data will be collected from the air quality monitors for the duration of baseline, demolition and construction works and will be issued on a monthly basis (within 4 weeks of month-end) to the council by e-mail to Tom.Parkes@camden.gov.uk, airquality@camden.gov.uk and SustainabilityPlanning@camden.gov.uk

The monthly summaries will include mean concentrations, alert level exceedances and data capture rates and explanations for any exceedances and data loss for each month. Any photographic records taken will be kept, recorded, and maintained alongside monitoring records. The installed real-time MCERTS Particulate (PM10) monitors will be calibrated annually, in accordance with manufacturer's instructions.



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 control of pests in and around the site is a key responsibility when planning works and caring for the workforce and neighbours.

A crucial factor in pest management is the investment in prevention and restriction of the opportunity for pests such rats and mice to thrive.

This will be achieved by eliminating food sources and nesting sites which can be achieved through good housekeeping and management generally.

A canteen area will be provided, and no food will be allowed to be consumed outside of this area, all rubbish will be collected regularly throughout the working day and disposed to prevent the attraction of rodents.

Prior to occupation of the site, it is proposed that a rodent/pest survey is carried out to establish the presence of any rodents such that appropriate action can be implemented.

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

Prior to soft strip activities commencing an intrusive pre-demolition survey will be undertaken and the appropriate HSE notification process followed prior to any removal works taking place.

We have made an allowance in the programme for the removal of ACMs.

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.

Smoking and/or vaping will not be permitted on the work site or within the welfare facilities.

A suitable area/shelter will therefore be set up in the open adjacent the site boundary for smokers. This will be screened from neighbours and regularly cleaned.

Given the location of the site and surrounding residential and commercial neighbours, the site induction will cover behavioural issues such bad language, shouting etc. and these will not be tolerated on site. For such behaviour, a penalty system will be in operation Verbal Warning, Yellow card and Red Card which will result in removal of the offender from site permanently.

Where appropriate any issues will be directed to the Community Liaison Representative appointed by the Contractor.



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

Direct link to NRMM Practical Guide (V4): https://www.london.gov.uk/sites/default/files/nrmm practical guide v4 sept20.pdf

From 1st September 2015

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

From 1st September 2020

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

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



- a) Construction time period: Quarter 3 2022 Quarter 4 2024. REVIEW Refer to the Summary Programme within Appendix 1 for further details.
- b) Is the development within the CAZ? (Y/N):

Yes. The development (shaded red) is located within the Central Activities Zone (shown shaded in orange), and the development is located within the Greater London Zone (shown in blue) and therefore NRMM (Non Road Mobile Machinery) will be required to meet at least Stage IV of EU Directive 97/68/EC.

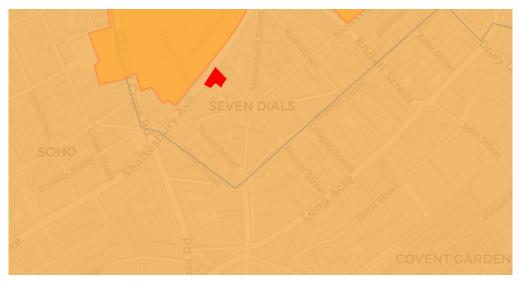


Figure 14 – Extract of NRMM Development Zone Map

- c) Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Y/N): Yes. Confirmed where site vehicles required.
- d) Please confirm that all relevant machinery will be registered on the NRMM Register, including the site name under which it has been registered:
 - We can confirm that the Contractor will ensure that all relevant machinery will be registered on the online NRMM 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:
 - We confirm that the Contractor will ensure that all NRMM will be kept on site and that any machinery will be regularly serviced, and service logs kept on site for inspection.
- f) Please confirm that records will be kept on site which details proof of emission limits, including legible photographs of individual engine plates for all equipment, and that this documentation will be made available to local authority officers as required:

In accordance with requirements of NRMM we confirm that the Contractor will keep the records required.



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

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

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

The appointed Contractor will commit to the #EnginesOff campaign detailed as part of the Idling Action Project is supported by the project, which will involve;

- Driver education workshop for fleet and business drivers so they do not understand why they should not contribute to unnecessary air pollution by idling.
- Ask your drivers to take the #EnginesOff pledge.
- Implement supporting policies by using our template engine idling and template green vehicle procurement and management policies.
- Promote the campaign by using our car stickers in your vehicles; using our logo on the
 corporate social responsibility section of your website; display our posters; share our
 @idlingaction tweets and tell your customers that you support the campaign.
- Take part in an Idling Action event we can help you arrange a day of direct action utilising volunteers to head out and speak directly to idling vehicles around your site.

Details of the numbers of contractors actively engaged in the campaign will be provided once the Principal Contractor has been appointed.

In addition to these initiatives;

- It will be a requirement that any vehicles either waiting to enter the site or within the site are directed to switch off their engines when not in operation.
- 60% of construction vehicles will be at least Euro compliant and where applicable (local exhaust ventilation) LEV will be implemented.

The construction traffic routes have, as far as possible been developed to avoid high density residential and commercial areas.





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:	
Print Name:	
Position:	
Please submit to: planningobligations@camden.gov.uk	
End of form. V2.7	

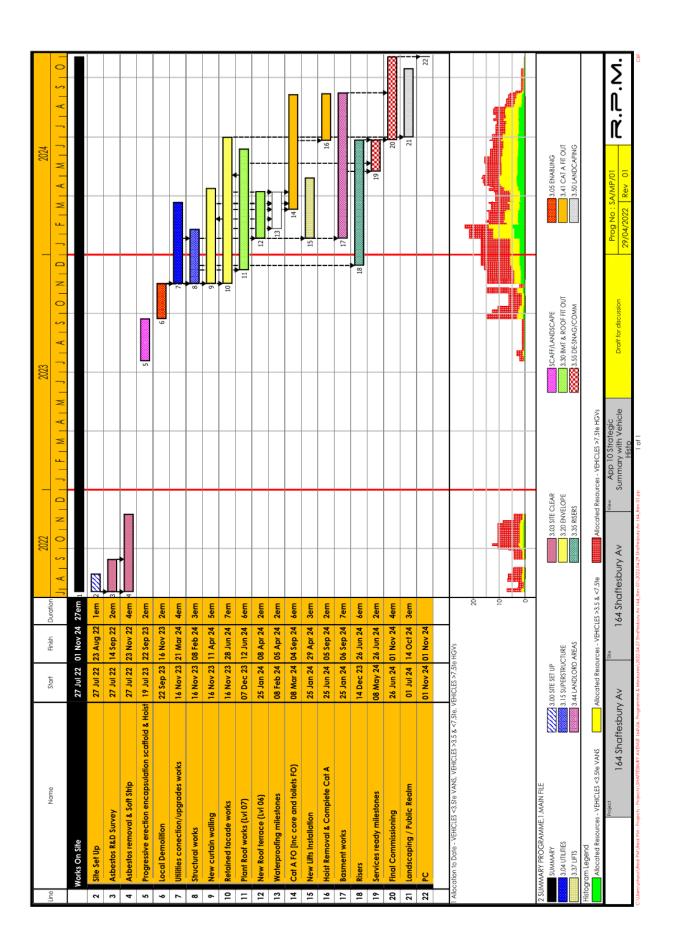


Appendices



1.0 Summary Programme and estimated vehicle numbers

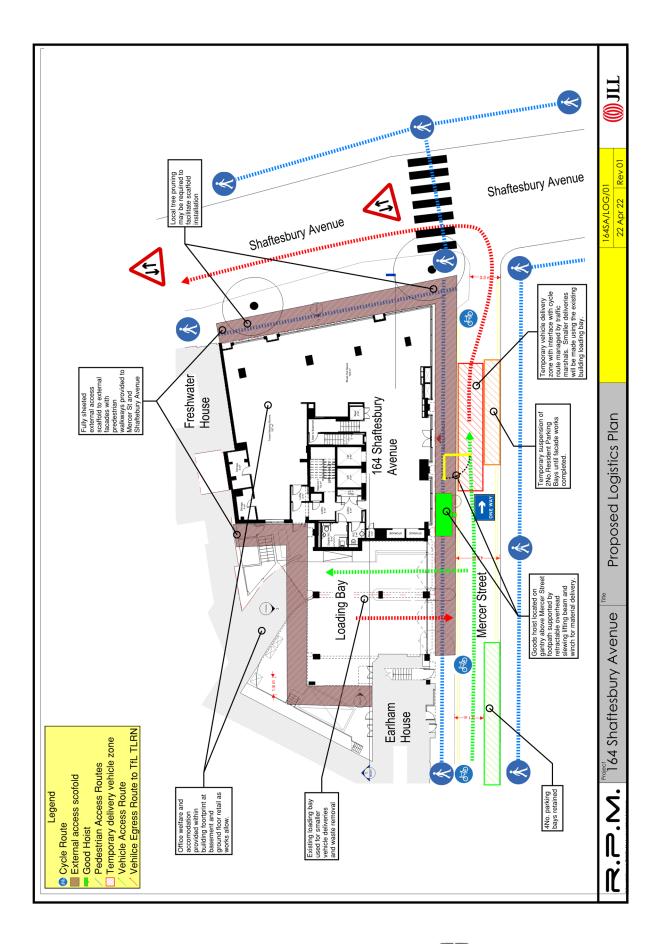






2.0 Logistics Plan

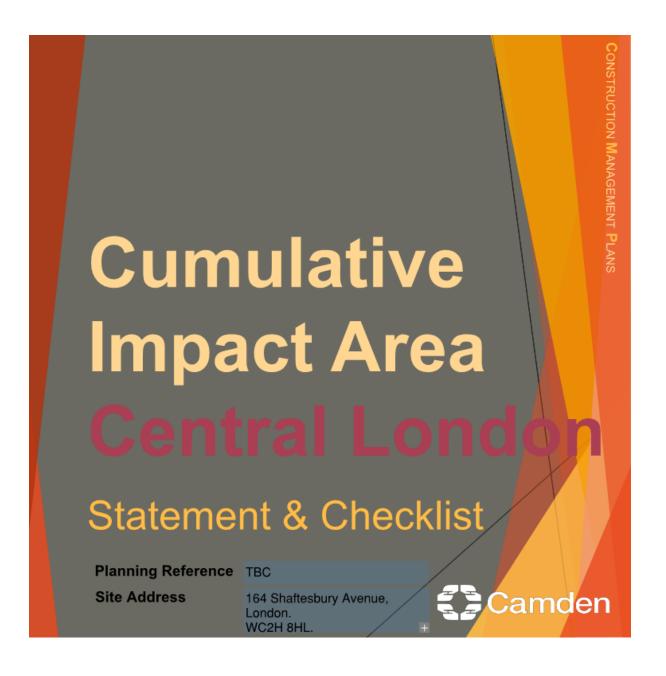






3.0 Cumulative Impact Area – Central London: Statement & Checklist







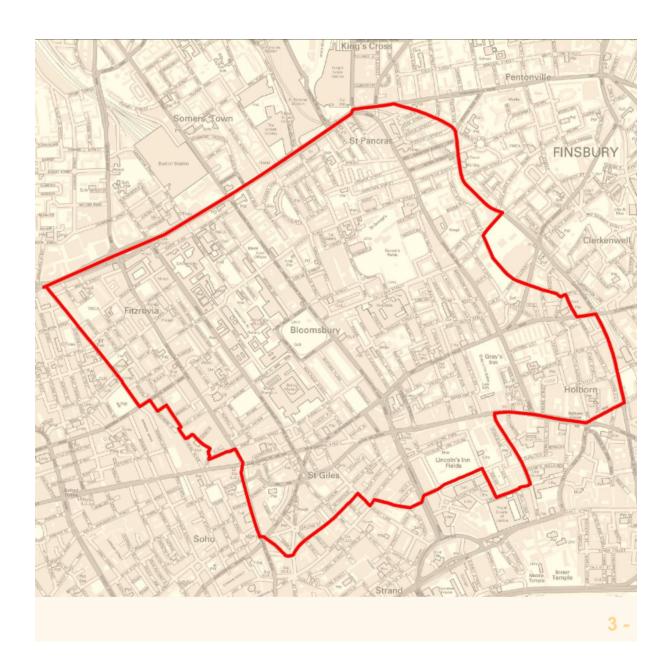
Statement

The Central London area represents just under a quarter of the total planned development activity in the borough despite only representing 13% of the geographical area. In addition to activity related to the redevelopment of sites, there is a significant amount of commercial buildings that undertake refurbishment works that have similar impacts but are not controlled by planning consents. The interaction of high levels of construction and construction traffic with established business/residential travel patterns is giving rise to heightened community concerns and mean that there is an increased need for careful management of construction activities and their potential impacts

The area is characterised by historic buildings with narrow streets alongside high density modern developments, with residential and commercial operations sitting side by side - the area also attract a lot of tourism, and as such the movement of people is much greater than just residents and employees. The busy nature of this area means that even the smallest redevelopment may give rise to complications with traffic and reports of public nuisance.

Noise and vibration from construction sites has the potential to give rise to significant adverse effects on health and quality of life. Based on our experience we know that some of these impacts can be effectively managed. However, this potential is affected by the challenges posed by Cumulative Impacts where the impacts of various construction sites create effects of greater significance than or different to that of each individual construction site. Managing the impacts of various sites in one area and ensuring a consistent approach to noise and vibration mitigation can be a major challenge in its own right.







Redevelopment proposals need think carefully how a site will be delivered, considering issues well beyond the site boundary, in particular:

- The proximity of properties, in particular the potential for structure borne noise and dust control
- Co-ordination with neighbouring sites, considering both construction traffic and business that require deliveries
- Communication and availability of data to a wider audience who may not be in close proximity to the development but nonetheless will be impacted, such as those who work in the area.
- The area is a designated Air Quality
 Management Area (AQMA) and the
 Council has made a commitment to
 reduce particulate air pollution to levels
 recommended by the World Health
 Organisation. In response, all sites in the
 Central London area will be required to
 undertake the following additional
 obligations as part of their Construction
 Management Plan. Developers/
 Contractors will be required to justify (and
 for such justification to be made public)
 why any of the following elements cannot
 be achieved:-

WORKS

- Assumption of no working at weekends any proposals for weekend working will be considered on a case by case basis and communicated to local residents 14 days in advance of works
- Prior to proposing any road closures, weekend working or oversize deliveries (to which all require express approval from the Council) the contractor must provide evidence that they have approached neighbouring sites and attempted to coordinate any proposals with those of the neighbouring site.
- Prior to connecting a site to utilities (Gas, Water, Electric, Telecoms) the contractor must provide evidence that they have approached neighbouring sites (and the utilities providers) and attempted to coordinate connection between neighbouring sites and the various utilities.



COMMUNICATION

- CMPs will be made available online (both prior to approval and post approval) such as on a dedicated webpage
- All logs (accident, complaint) will be made available online and a physical copy made available for residents to use and view
- Where there are neighbouring site or sites in close proximity that effect the local highway network, joint communication (i.e. Newsletters) will be required.
- Construction Working Groups will be conducted jointly with neighbouring sites
- All environmental monitoring data to be made available on-line and on site boards

DELIVERIES

- A delivery log, specifying the type of vehicle, its purpose, registration number and time on site must be maintained online and updated at least on a weekly basis.
- Contractors will be required to provide evidence that they have communicated their proposed deliveries with neighbouring construction sites and any other business, and have coordinated the deliveries where possible.
- No deliveries shall be scheduled that will require the driver to wait outside the site before 8.00am (and vehicles will not be permitted to circulate the highway to avoid this requirement)
- A pre-booking system for managing deliveries must be operated. All deliveries must contact site at least 20min before arrival to allow the necessary checks to be undertaken

5 -



Statement

MITIGATION AND RESPITE

- Adoption of localised mitigation measures such as washing the windows of neighbouring properties.
- Developments will be required to pay a Construction Impacts Bond to the Council to support the cost of Council officers addressing matters that should have been addressed by the contractor
- Dedicated wheel washing with rumble grids must be utilised unless agreed otherwise by the Council
- Green infrastructure, such as green screens/hoarding, should be utilised. Installation of filtration units, particularly where the site is near (within 250m) vulnerable receptor facilities (such as schools, nursing homes and hospitals)

SITE CONDUCT

- A firm disciplinary policy, such as a two strike warning before removal from site must be operated
- Contractors must attain the Considerate Contractors Scheme 'Exceptional' score

- Contractor must employ an enforcement process to ensure that contractors vehicles do not idle
- A plan and process to encourage site operatives to arrive at the site by sustainable methods (including car sharing / pooling) must be presented and communicated
- CLOCS compliance monitoring results need to be reported to council
- All sites must ensure that Traffic Marshalls /Banksmen are appropriately trained, and that there is at least one operative on duty at any given time that has at least has 1+ year of experience in that role.
- The site must be kept damp at all times, proposed equipment for this purpose must first be agreed to by the local authority.
- Weekly 'toolbox talks' should be conducted with all site operatives to advise of the requirements expected by the Council.
- Site operatives should be identifiable by the public to the site, such as using a uniformed colour of work jackets or branding.



MACHINERY AND EQUIPMENT

- All heavy goods vehicles (HGVs) are required to be Euro VI standard or better, and light duty vehicles (LDVs) are required to be Euro 4 petrol or Euro 6 for diesel, or better. Preference should be for zero to low emission equipment
- NRMM should be to stage IV of EU
 Directive 97/68/EC as a minimum, and an
 up-to-date NRMM log must be kept on-site
 and shared with Camden officers
- The site must connect to mains prior to works commencing to remove the need for diesel generators
- At least four real-time PM10 monitors (certified to MCERTS standard) must be used on site in continuous operation for the duration of the build (from three months prior to implementation of planning permission through to completion on site), at locations and to thresholds approved by the Council. Camden officers must be provided access to the raw data via an online platform, and automated exceedance alerts should be sent to <u>AirQuality@camden.gov.uk</u> in addition to the contractor/developer on-site representatives

- Web-enabled monitoring equipment, allowing real time information accessible by the public should be deployed – including the use of emerging technologies.
- Environmental monitoring summary reports should be sent to Camden officers on a monthly basis

7 -



HECKLIS.



All development sites in the Cumulative Impact Area which are required to submit a Construction

Management Plan (CMP) or Demolition Management

Plan (DMP) are required to complete this checklist.

The checklist will need to be presented for comment to the local community as part of the pre-submission CMP/DMP. The Council will not accept the submission of the CMP/DMP unless it receives both the completed CIA checklist . If a particular requirement cannot be met, stipulate the reason why and propose an alternative solution to achieve the objective



	Requirement	Response
	No noisy working at weekends – any proposals for weekend working will be considered on a case by case basis and communicated to local residents 14 days in advance of works	Confirmed.
WORKS	Prior to proposing any road closures, weekend working or oversize deliveries (to which all require express approval from the Council) the contractor must provide evidence that they have approached neighbouring sites and attempted to coordinate any proposals with those of the neighbouring site	Agreed and noted.
	Prior to connecting a site to utilities (Gas, Water, Electric, Telecoms) the contractor must provide evidence that they have approached neighbouring sites (and the utilities providers) and attempted to coordinate connection between neighbouring sites and the various utilities	Contractor to confirm following appointment.
	CMPs will be made available online (both prior to approval and post approval) such as on a dedicated webpage	Confirmed.
NOIL	All logs (accident, complaint) will be made available online and a physical copy made available for residents to use and view	Confirmed.
COMMUNICATION	Where there are neighbouring site or sites in close proximity that effect the local highway network, joint communication (i.e. Newsletters) will be required	Confirmed, the appointed Contractor will engage and co-ordinate works with any nearby sites through regular communication
OMM	Construction Working Groups will be conducted jointly with neighbouring sites	and structured Construction Work Group that will be arranged with nearby sites as appropriate.
Ö	All environmental monitoring data to be made available on-line and on site boards	Confirmed.



	Requirement	Response
	A delivery log, specifying the type of vehicle, its purpose, registration number and time on site must be maintained online and updated at least on a weekly basis	Confirmed, the Contractor will manage an online vehicle delivery booking system for the duration of the demolition and construction.
ELIVERIES	Contractors will be required to provide evidence that they have communicated their proposed deliveries with neighbouring construction sites and any other business, and have coordinated the deliveries where possible	Confirmed - as noted above nearby sites who share vehicle routes will be coordinated where necessary.
DELIN	No deliveries shall be scheduled that will require the driver to wait outside the site before 8.00am (and Vehicles will not be permitted to circulate the highway to avoid this requirement)	Confirmed - as detailed with body of the CMP.
	A pre-booking system for managing deliveries must be operated. All deliveries must contact site at least 20min before arrival to allow the necessary checks to be undertaken	Confirmed within CMP.
MITIGATION AND RESPITE	Adoption of localised mitigation measures such as washing the windows of neighbouring properties	Confirmed - specific details to be agreed with appropriate neighbouring properties.
	Developments will be required to pay a Construction Impacts Bond to the Council to support the cost of Council officers addressing matters that should have been addressed by the contractor	Confirmed and understood.
	Dedicated wheel washing with rumble grids must be utilised unless agreed otherwise by the Council	Not applicable to 164SA due to site constraint and limited sub-structure works.
	Green infrastructure, such as green screens/hoarding, should be utilised. Installation of filtration units, particularly where the site is near (within 250m) vulnerable receptor facilities (such as schools, nursing homes and hospitals)	Noted.



	Requirement	Response
	A firm disciplinary policy, such as a two strike warning before removal from site must be operated	Confirmed.
	Contractors must attain the Considerate Contractors Scheme 'Exceptional' score	Confirmed within CMP.
	Contractor must employ an enforcement process to ensure that contractors vehicles do not idle	Confirmed within CMP.
	A plan and process to encourage site operatives to arrive at the site by sustainable methods (including car sharing / pooling) must be presented and communicated	The contractor will produce a travel plan that encourages sustainable travel methods.
	CLOCS compliance monitoring results need to be reported to council	Confirmed.
E CONDUCT	All sites must ensure that Traffic Marshalls / Banksmen are appropriately trained, and that there is at least one operative on duty at any given time that has at least has 1+ year of experience in that role.	Confirmed. Contractor to evidence this.
SITE	The site must be kept damp at all times, proposed equipment for this purpose must first be agreed to by the local authority.	Appropriate damping down will take place during demolition and construction works.
	Weekly 'toolbox talks' should be conducted with all site operatives to advise of the requirements expected by the Council.	Confirmed - to be undertaken by the Contractor and key sub/trade contractors.
	Site operatives should be identifiable by the public to the site, such as using a uniformed colour of work jackets or branding.	Confirmed - project branded hi-vis proposed



	Requirement	Response
	All heavy goods vehicles (HGVs) are required to be Euro VI standard or better, and light duty vehicles (LDVs) are required to be Euro 4 petrol or Euro 6 for diesel, or better. Preference should be for zero to low emission equipment	Confirmed.
	NRMM should be to stage IV of EU Directive 97/68/EC as a minimum, and an up-to-date NRMM log must be kept on-site and shared with Camden officers	Confirmed.
MENT	The site must connect to mains prior to works commencing to remove the need for diesel generators	Confirmed - temporary electricity supply will be provided.
MACHINERY AND EQUIPMENT	At least four real-time PM10 monitors (certified to MCERTS standard) must be used on site in continuous operation for the duration of the build (from three months prior to implementation of planning permission through to completion on site), at locations and to thresholds approved by the Council. Camden officers must be provided access to the raw data via an online platform, and automated exceedance alerts should be sent to AirQuality@camden.gov.uk in addition to the contractor/developer on-site representatives	Confirmed - details to be finalised.
W	Web-enabled monitoring equipment, allowing real time information accessible by the public should be deployed – including the use of emerging technologies	Confirmed where appropriate to the works being undertaken.
	Environmental monitoring summary reports should be sent to Camden officers on a monthly basis	Confirmed - Contractor to provide.
	The use of powered, percussive breaking equipment should be avoided. Where this is considered not possible early discussions with the Council.	



4.0 Pre-Application Consultation Letter



05 April 2022

Dear Neighbour,

RE: 164 Shaftesbury Avenue - Proposed Works

We have been engaged to act on behalf of Freshwater Group with respect to the proposed refurbishment of 164 Shaftesbury Avenue and as part of our role to assist with the public consultation, we are therefore writing to all the key neighbours and businesses likely to be affected by the proposed works to outline the extent and duration of the proposed works.

Summary of the proposed works;

- Internal 'soft strip' of existing office floor plates.
- New cycle storage, shower and changing facilities at basement level.
- New internal office fit-out (Cat A) including new lifts, vertical services and primary plant.
- Relocation of the existing reception/entrance from Shaftesbury Avenue onto Mercer Street.
- New windows on all elevations incorporating new sections of curtain walling to both Shaftesbury Avenue (1 bay) and Mercer Street (3 bays) elevations and decoration of the existing external masonry walls.
- New external roof terrace at level 5-6 on the Mercer Street part of the building and associated access stair.

Expected Programme;

- A formal Planning Application is due to be submitted to London Borough of Camden late April 2022.
- Subject to approval of the Planning Application, the current programme is expected to commence with initial internal strip out works July 2022 and overall complete November 2024.

As part of the initial façade demolition and enabling works, it is envisaged that a fully encapsulated scaffold and associated pavement gantries will be required to both Shaftesbury Avenue and Mercer Street elevations with construction vehicle access taking place from Mercer Street.

Material deliveries and waste removal will take place from Mercer Street only with suitable traffic management and public segregation in place.

We intend to write to you again providing more detailed proposals in terms of the external scaffolding, gantries and walkways and demolition/construction vehicle routing but in the interim, we would welcome any concerns and comments you may have such that we can ensure they are incorporated as we develop the strategy going forward.

Please direct any comments or concerns you may have to 164shaftesburyenquiries@realpm.co.uk with the subject line '164 Shaftesbury Avenue' and ask that these are received by close of business 22 April 2022.

Many thanks for your cooperation.

For and on behalf of Freshwater Group



164 Shaftesbury Avenue – Neighbour Consultation

Shaftesbury Avenue

- > Odeon Convent Garden (Cinema) 135 Shaftesbury Ave, London WC2H 8AH
- > Pure (Restaurant/ Online Food Store) London WC2H 8HR
- > TSQ Playhouse (Bar) 166-170 Shaftesbury Ave, London WC2H 8JB
- Travelzoo Europe Ltd (Office building) Shaftesbury House, 151 Shaftesbury Ave, London WC2H 8AL
- > Brickfield Properties Ltd (Office building) 158, 162 Shaftesbury Ave, London WC2H 8HR
- > Hogarth Worldwide (Office building) London WC2H 8HR
- > FOPP (Music Shop) 1 Earlham St, London WC2H 9LL
- > Bali Bali (Indian Restaurant) 150 Shaftesbury Ave, London WC2H 8HL
- > Talli Joe (Indian Restaurant) 152-156, Shaftesbury Ave, London WC2H 8HL
- Thai Square Convent Garden (Thai Food & temple-inspired décor) 166-170 Shaftesbury Ave, London WC2H 8JB

Mercer Street

- > Chinese Church in London (Church) London WC2H 8HR
- LUMAS Gallery London (Art Gallery) 21-23 Earlham St. Seven Dials, London WC2H 9LL
- > Radisson blue Edwardian (Hotel with a restaurant) 20 Mercer St, London WC2H 9HD
- Earlham House, 35 Mercer Street, London. WC2H 9QS

