



**UNIVERSITY
OF LONDON**

GARDEN HALLS, UNIVERSITY OF LONDON

Draft Construction Management Plan

March 2013

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1. Introduction

This Construction Management Plan (CMP) has been developed for London Borough of Camden to demonstrate that the applicant, the University of London, and the developer, University Partnerships Programme (UPP) will provide due care in minimising and managing the detrimental effects of construction on the local amenity and highway safety.

The document will form the basis of the Construction, Environmental and Health and Safety Plan which will be finalised once a main contractor has been appointed for the scheme. The main contractor will be selected from a list of top tier contractors all of whom will have a demonstrable track record for the successful delivery of similar projects in Central London.

The document recognises that the site is located in a conservation area in the centre of London and that there is a need to maintain the quality of life for people living and working within and around the development. The document is split into sections. The first section describes the proposed work and the construction programme. The second section looks at site ingress and egress for construction vehicles. The third section looks at the site logistics and the last section addresses the environmental impacts of the development.

The proposed aims of the CMP are:

- Minimise disruption to the local area;
- Ensure best practice is followed which will be further demonstrated by the appointed contractor being a member of the Considerate Constructor Scheme;
- To keep lorry movements to a minimum, ensure contractor vehicles do not park in the local area and keep all roads to the site clean and clear;
- Limit hours of working – with no noise created outside of the agreed hours;
- Reduce dust, noise and vibration by monitoring levels on site and following best practice;
- Ensure there is a dedicated point of contact for the construction site and that the community is kept informed throughout the construction process by a regular newsletter;

We have a commitment to working with local communities and The Prince's Trust to provide work experience opportunities for local young people. It is our intention to create opportunities with this project.

The CMP shall be kept on site available for inspection at the request of an authorised Officer of the Council. The CMP shall be reviewed as necessary throughout the duration of the development and all revisions shall be signed and dated in an addendum format forming part of the original CMP.

2. Construction Programme

The Garden Halls development comprises the redevelopment of the existing student accommodation comprising the demolition of Canterbury (including York) and Commonwealth Halls, partial-demolition and refurbishment of Hughes Parry Hall and provision of new student accommodation (Sui Generis) to provide a net increase of 187 units (from 1,013 to 1,200 student bed-spaces); associated ancillary uses (including communal areas); two external courtyards; together with public realm improvements to Cartwright Gardens and the surrounding area. There are two phases of the development:

- Phase 1: The refurbishment of Hughes Parry Tower.
- Phase 2: The redevelopment of Canterbury and Commonwealth Hall

The Existing Site.



The construction programme for the entire development is scheduled to take 25 months. The refurbishment of Hughes Parry tower is scheduled for completion twelve months following commencement. The redevelopment of Canterbury and Commonwealth Hall will commence at the same time and be run in parallel with the refurbishment of Hughes Parry Tower and is programmed to be completed in 25 months following commencement.

Throughout this period the applicant, the developer and the main contractor will seek to act considerately, communicate effectively and put the safety of people and the local environment first.

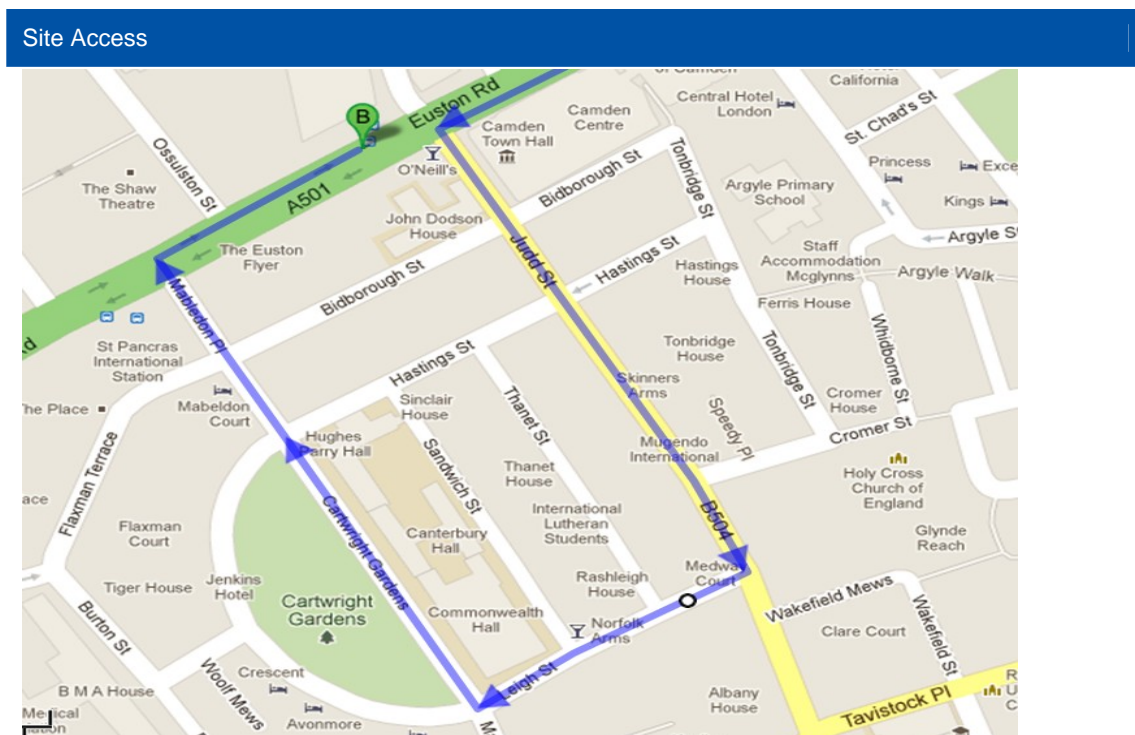
3. Site Access

Ingress

The preferred principal access route to the site is proposed to be off the Euston Road which is on Transport for London's Road Network (TLRN). To minimise disruption to the local community we propose to use a one way loop for all deliveries. Vehicles will turn off Euston Road onto Judd Street. At the corner of Leigh Street the vehicles will turn right and right again on to Cartwright Gardens. A delivery drop off/collection point will be set up on Cartwright Gardens. There will no construction vehicle movement around the Crescent.

Egress

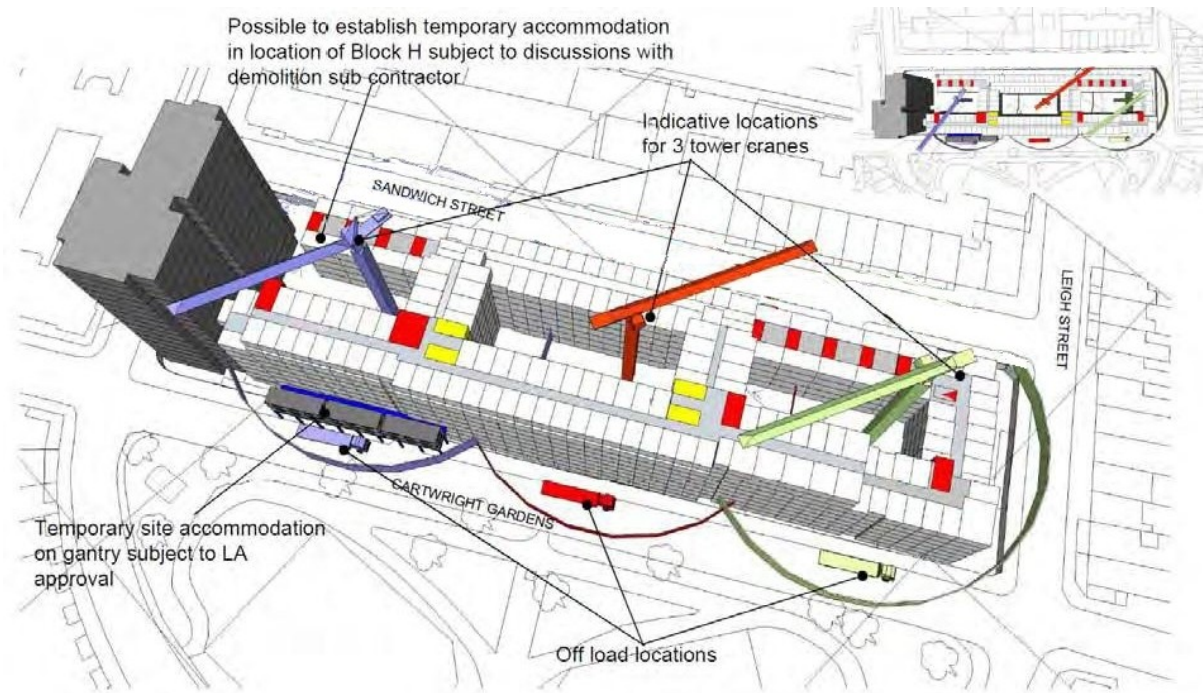
Construction vehicles leaving the site will continue down to Mabledon Place and return to Euston Road which restricts traffic to turning right only. We expect that the 'hard material' generated during demolition will head east along the A501 and A13 to Silvertown for crushing.



To ensure a smooth flow of traffic we envisage the following measures to be implemented; (1) signage will be erected in clear view of pedestrians, cyclists and other vehicle users. This signage will encourage road users to utilise the crescent and to avoid Cartwright Gardens itself, (2) there will be hoarding to physically separate vehicles from pedestrians (3) there will be traffic marshals stationed on site which will aid vehicle movements in the event of unavoidable deliveries during early morning and evening peak hours (4) there will be a logistics supervisor available to respond to any queries from the public and (5) the site will be monitored by CCTV surveillance.

The timing of deliveries will be restricted to prevent congestion in the area and reduce the risk to the local community, especially during peak times.

4. Site Logistics



Site Offices and Welfare Facilities

The site set up is yet to be determined as this will be developed by the appointed contractor. At this stage, and further to our initial discussions with the shortlisted contractors, we propose that from the outset the set up for the main site compound will be a series of elevated temporary cabins on Cartwright Gardens as shown on the above logistics plan. This would allow for the safe access by pedestrians and keeping the footpath open for use. The set up will remain in place for the duration of contract.

Access onto site itself will be controlled by a turnstile pedestrian access system which will be a palm print type entry system.

All people entering the site will be required to attend a site induction. Site specific logistic & safety information is important in ensuring that all operatives and staff including visitors are aware of the potential dangers on construction sites and preventative steps required to ensure their own personal health and safety.

The site rules will be displayed prominently at all times for example in the canteen, drying rooms and reception so operatives and visitors are kept up to date with any changes to the existing systems and any new systems being used or brought into the effect.

Tower Cranes

To assist with the off-loading and distribution of materials, tower cranes will be utilised. These will be used for the frame construction and also the distribution of materials onto loading bays for the envelope works. The internal fit out works will be serviced using the cranes with areas being preloaded as the structure goes up.

The construction programme is based on the use of three 40 meter luffing jib tower cranes which will be used for the installation of the concrete frame, bathroom pods, loading out of cladding and glazing. The proposed location for the tower cranes avoids over sailing of any neighbouring buildings. All cranes are positioned to enable unloading off Cartwright Gardens.

Modern Methods of Construction

The project will utilise modern methods of construction which involves using off-site production techniques. It is currently planned that the building will use structural precast concrete. The benefit of this is the reduced disruption caused to local residents from dust, noise and commercial vehicle movement and the environmental impact of site generated waste.

Materials Storage

Due to the size of building and boundary restrictions materials storage is limited on site. Most deliveries to site will be unloaded and taken directly to their area of work, reducing the requirement for site storage. Deliver times will be tightly controlled and restricted to times in the day that avoid any unnecessary congestion on the local roads e.g. during rush hour and disturbance to the local neighbourhood.

Materials Distribution

Materials will be distributed around the site by means of the cranes. A crane pickup area will be established off Cartwright Gardens within the radius of the crane for unloading HGV's.

The project has been prepared on the basis of distributing materials around the site from within the confines of the site whenever possible with access required from time to time onto adjacent public highways for the movement of goods and materials. A Banksman will be provided with the forklift to assist with the manoeuvring on any public highways.

Time of Operations

The time of operations and ancillary works which are audible at the site boundary shall be carried out in line with London Borough of Camden's standard times as noted below:

Mondays to Fridays	08.00 – 18.00
Saturdays	08.00 – 13.00

And at no time Sundays and Bank Holidays.

NB Further to the appointment of the contractor the times incorporated in the updated CMP will be specific to the site and related to the type of work being carried out.

Abatement Noise Techniques

The quietest and newest vehicles/plant machinery shall be used at all times. All vehicles and mechanical plant used for the purpose of the works shall be fitted with effective exhaust silencers, shall be maintained in good and efficient working order and operated in such a manner as to minimise noise emissions.

The Best Practicable Means (BPM), as defined in Section 72 of the Control of Pollution Act 1974, shall be employed at all times to reduce noise (including vibration) to a minimum, with reference to the general principles contained in British Standard BS5228: 2009 'Noise and Vibration Control on Construction and Open Sites'.

Noise Levels

The main Contractor shall carry out prediction of noise and vibration levels before any work is carried out on site. These predicted noise and vibration levels shall be registered in the Construction Management Plan.

Noise attenuation screening to be used if deemed appropriate and noise monitoring to be carried out at the start and at regular intervals during each task period. Any mobile screens shall have sufficient mass so as to be able to resist the passage of sound across the barrier and to be free of significant holes or gaps between or under any acoustic panels or board materials as far as reasonably practical.

Noise monitoring shall be undertaken using a combination of semi-permanent (continuous) and attended monitoring methods. The locations of the semi-permanent (continuous) and attended monitoring and the frequency of the sampling have previously been agreed with London Borough of Camden in writing.

Vibration Levels

In the case of vibration, measured vibration levels shall be compared with the criteria in BS 5228: 2009 part 2 (i.e. 1mms^{-1} PPV for potential disturbance in residential and using a suggested trigger criteria of 2mms^{-1} for commercial). Lower limits must be agreed with the Council if there is a risk that vibration levels may interfere with vibration sensitive equipment or other vibration sensitive objects.

Security

Securing a safe working environment is an integral part in the construction works, in both protection of the site from possible damage and theft and the safety of the public gaining access or attempting to gain unauthorised access to the site with the risk of causing injury. We will have a full time gatemen during working hours that will control all access and deliveries on to site. Out of hours a full time security presence will be on site to secure the area. CCTV cameras will also be utilised. The site perimeter will be surrounded by 2.4m height solid painted timber hoarding panels which will frequently advertise safety and security notices.

Staff and Contractor Parking

Parking on or near to the site will be restricted to temporary drop off and pickup. No long term parking of construction vehicles will be permitted. All construction staff will be required to make use of the surrounding excellent public transport links.

Site Cleaning

Our philosophy is that a tidy site is a safe site; a principal that will be adopted throughout the contract. The contractors will be required to clear their rubbish to skips in appointed locations as work proceeds to assist in maintaining a clean site. Disposal of rubbish will be closely monitored on site and whenever possible will be recycled. Separation for recycling will, where space permits, be done on site or off site by the appointed waste contractor under the terms of their contract.

Keeping Clean Roads

In view of the location of the site, our site management will pay special attention to ensure vehicles both delivering to, and leaving the site are in a clean condition. Drivers will be briefed and instructed to inspect their vehicles to prevent the spread of debris onto adjacent roads. We will make frequent use of jet washing to minimise debris carried off site on the wheels of vehicles. Regular inspections will be made of the adjacent and surrounding roads with mechanical sweeping commissioned as and when required.

Pedestrians and Cyclists

We will install safety barriers and appropriate road safety notifications in front of the site to warn pedestrians and cyclists of the presence of construction vehicles and nearby construction activities. With regards to vehicles entering and leaving the site will be controlled by the gatemen and we will ensure that he is particularly vigilant regarding cyclists.

5. Environmental Impact

Dust / Dirt Suppression

We realise the importance of preventing dust and dirt migrating from the site boundary as has been reported within the Air Quality Report (Section 6) and we propose to use the following methods during demolition and construction:

- Damping down areas during demolition using mist sprayed around work areas;
- Damping down site during excavation to prevent airborne dust if required;
- Jet wash at all entrances/exits to site to ensure vehicles leaving site are clean;
- Areas where there is vehicular movement should have a consolidated surface which should be kept in good repair;
- Road sweeper visits throughout construction period on surrounding roads as required;
- All demolition plant will have dust suppression sprays;

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 should 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.

Rodent Control

Where the site has been previously developed the contractor shall take the necessary measures to ensure proper control of rodents. 28 days prior to any building works are being carried out the contractors shall submit a method statement on how the dispersion of rodents will be controlled during demolition works. The method statement shall be forwarded to Local Authority Building Control Services for their approval. (Regard shall be had to Part 'H' of the Building Regulations (Drainage & Waste Disposal)).

Community Liaison

We will ensure that the surrounding community is kept informed of the progress of construction activities. Before we begin on site there will be a letter drops throughout the local community, explaining the planned construction project which will include key dates for deliveries. Included with the initial correspondence will be proposals for separate and regular meetings for the local community to discuss the progress of the works, each stage of activities and to hear the concerns of neighbours.

At all sites a Contact Board shall be displayed prominently; this is to ensure that problems can be rectified quickly, and that residents and others can channel their questions and complaints to a member of staff who has the authority to take action.

All Contact Boards shall include the following materials:

- The title 'Contact Board'
- Name of the main contractor, address and person to whom correspondence should be addressed.
- Name of the site manager.
- Month and year of completion of works.
- Names and telephone numbers of staff who can take immediate action, so that contact can be made at any time.

The developer will have full time construction implementation manager working in partnership with the contractor. It will be their role to ensure that there is sufficient informative about the construction process and progress. Drawings, progress photos and artists impressions of the finished product will be on display on the hoarding which will contain vision panels.

The University of London as applicant shall ensure that a staffed telephone enquiry line is maintained at all times when site works are in progress to deal with enquiries and complaints from the local community. The telephone number (and any changes to it) shall be publicised widely in the local community affected by the works. It shall also be notified to the Noise and Licensing Enforcement Team on 0207 974 4444.

Should noise/vibration/dust complaints arise from the building construction/building works, these complaints must be recorded in a complaint's register and made available to the Local Authority, if requested. The complaint register shall provide information on day, time, details of complaint, details of monitoring carried out and any additional mitigation works.

Should complaints be received concerning works/activities, then all works/activities being the cause of complaint must cease (Tasks in progress accepted due to structural integrity issues), until such time as further agreement to work is negotiated.

Traffic Management

We recognise the need to maintain access and parking facilities to the local community and other buildings in use during the construction phase. The site hours will be subject to planning. There will be no deliveries outside of these times unless in specific circumstances with prior agreement with the Local Authority.

Close co-ordination and scheduling of materials deliveries will be one of the key elements to the successful management of the contract including 'just in time' deliveries. As a matter of course all contractors will be required to give a minimum of 48hrs notice of deliveries and exceptional loads will be coordinated and covered under separate logistical planning.

Monitor of waste & emissions

A separate enclosed area will be setup for control of waste on site, consisting of skips and bins for both the site and office waste. This will be easily accessible from the site and for collection vehicle. Our focus on using locally employed people is monitored, and the workforces mileage is recorded to monitor carbon emissions with the aim to reduce emissions, from both an 'on site' and 'off site' perspective.

Considerate Constructor

The Contractor will subscribe to the Considerate Constructor Scheme and through compliance with the 'Code of Considerate Practice' will develop sound relations with anyone that may be affected by the works. We will encourage the contractor to obtain a score of 30.5 - 35.5 to ensure we have a very considerate site.