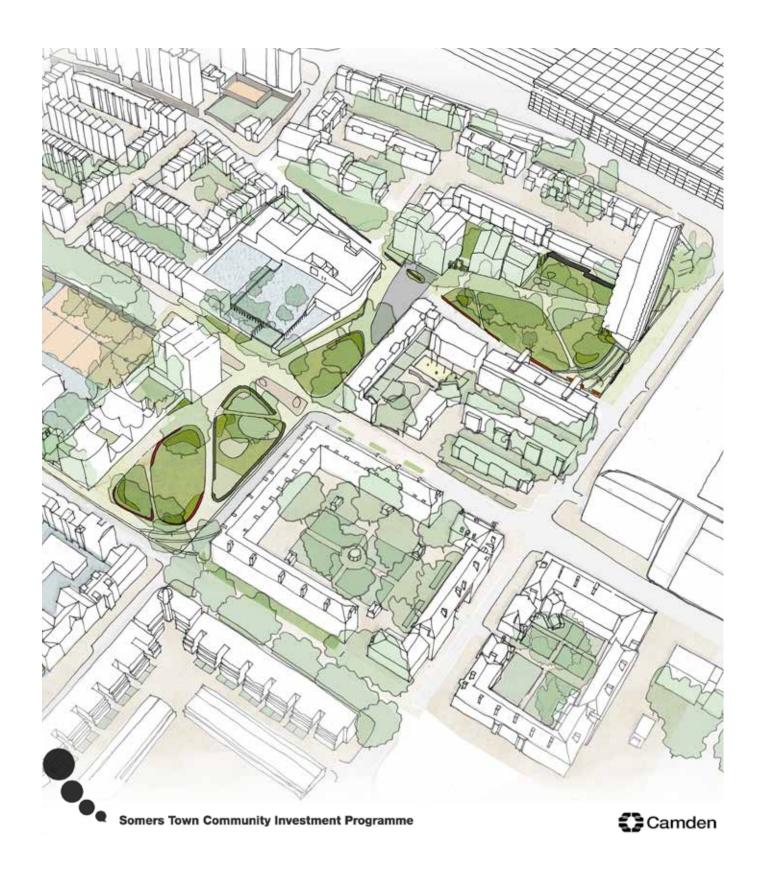
### **Central Somers Town CIP**

Central Somers Town Redevelopment Construction Manager Plan

DECEMBER 2015



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#### 1. Introduction

BAM Construction Ltd has been commissioned by The London Borough of Camden (LBC) to prepare a Construction Management Plan (CMP) to support the Planning application for the redevelopment of <u>Central Somers Town</u>, Camden, London (hereafter referred to as "the Development").

This CMP has been prepared in advance of the appointment of a Principal Contractor, or Principal Contractors (hereafter referred to as "the Contractor").

This CMP provides a framework to ensure the Contractor once appointed minimises construction impacts, and relates to both on site activity and the transport arrangements for vehicles servicing the site.

Following Planning approval, the CMP will be adopted by the Contractor when appointed and amendments made to the CMP at that stage will be made with the agreement of The London Borough of Camden (LBC) in line with their CMP minimum requirements and pro-forma.

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 completed CMP will follow the best practice guidelines as described in <u>Transport for London's</u> (TfL's Standard for <u>Construction Logistics and Cyclist Safety</u> (**CLOCS**) scheme) and <u>Camden's</u> <u>Minimum Requirements for Building Construction</u> (**CMRBC**).

### 2. The Proposed Development

Edith Neville School's buildings are at their end of their life and need rebuilding. The need to rebuild the school has created an opportunity to look at possible benefits for the immediate area.

The Central Somers Town project is part of the wider Somers Town CIP programme. The Development will aim to address the <u>Central Somers Town regeneration priorities</u>.

The proposals include, demolition of existing buildings and the provision of approximately 2,180sq.m replacement school (Use Class D1); approximately 1,765sq.m of community facilities (Use Class D1); approximately 207sq.m of flexible Use Class A1/A2/A3/D1 floor space and 136 residential units (Use Class C3) over 7 buildings ranging from 3 to 25 storeys in height comprising:

- **Plot 1:** Community uses at ground floor (Use Class D1) (approximately 1,554sq.m) to include a children's nursery and community play facility with 10no. residential units above
- Plot 2: 35 residential units over flexible A1/A2/A3/D1 floor space at ground level (approx 137sq.m)
- Plot 3: Extension of Grade II listed terrace to provide 3no. dwellings
- Plot 4: Replacement school (Use Class D1)
- Plot 5: 20no. residential units over a replacement community hall (Use Class D1) (approx 211sq.m)
- Plot 6: 14no. residential units, and
- Plot 7: 54no. residential units over flexible A1/A2/A3/D1 floor space at ground level (approx 70sq.m)

Provision of public open space along with associated highways works and landscaping.

**Figure 1: Development Location** 



### 3. Outline Construction Method

### 3.1 Construction Programme & Activities

An outline indicative Construction Programme for the works from start to completion has been prepared for the Development and is included on the following pages. Construction of Central Somers Town is planned to commence in June 2016 and last for a total 6 and a half years – subject to final phasing.

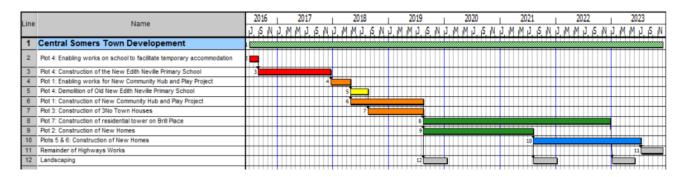
At the time of writing, it is proposed that the construction of the Development is split into 6 Phases (or areas) the timing of the construction of which may overlap:

- Phase 1a: Enabling works on the New Edith Neville Primary School (Plot 4)
- Phase 1b: Construction of the New Edith Neville Primary School (Plot 4)
- Phase 1c: Construction of the New Edith Neville Primary School (Plot 4) & enabling works for New Community Hub and Play Project (Plots 4 & 1)
- Phase 1d: Demolition of Old Edith Neville Primary School, construction of New Community
  Hub and Play Project & enabling works for the 3No Town Houses (Plots 1 & 3)
- Phase 2: Continued construction of New Community Hub, Play Project and construction of the 3No Town Houses
- Phase 3: Construction of residential tower & Charrington Street residential block (Plot 2 & 7)
- Phase 4: Construction of residential tower continues and construction of New Homes begins (Plots 7, 5 & 6)
- Phase 5: Construction of New Homes begins (Plots 5 & 6)
- Phase 6: Remainder of Highways Works

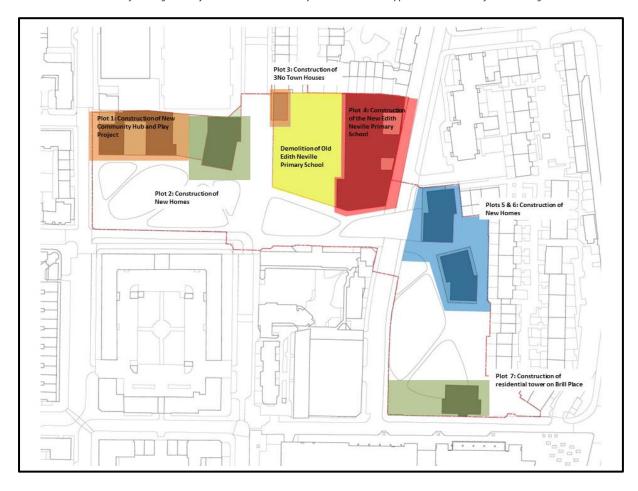
Landscaping will be sequenced to minimise disruption and maximise available public open space.

As the scheme moves forward the above Phasing and overall time frame for the Development may change. Any change to the proposed phasing will be discussed in advance with Camden's Planning Committee.

The detailed construction methods and programme for each phase will be concluded in future stages, but is likely to require the temporary diversion of the cycle route currently using Purchese Street so that the Contractor can use the large footpath and cycle path areas for the required site accommodation and welfare facilities during the first phase of construction (New Edith Neville Primary School)



 $Note: The \textit{ final Programme of works will be determined by the contractor once appointed and \textit{ relsease of detailed design}} \\$ 



### 3.1.1 Indicative Phasing Overview

The time frames for individual Phases will need to be reviewed following release of detailed design.

Phase 1a: Enabling works on the New Edith Neville Primary School (Plot 4)

Enabling works and temporary accommodation set up for the Edith Neville Primary School

**Phase 1b**: Construction of the New Edith Neville Primary School (Plot 4)

This will be the first Phase of the Development to commence targeted in July 2016 with new school facilities complete for April 2018.

**Phase 1c**: New Edith Neville Primary school Construction (Plot 4) & Set up works to community hub & affordable housing (Plot 1)

As construction draws to a close on the New Edith Neville Primary school enabling works will begin for the community hub & affordable housing.

**Phase 1d:** Demolition of Old Edith Neville Primary School (Plot 4), enabling works for the 3No town Houses (Plot 3) & construction of the New Community Hub, affordable housing and Play Project (Plot 1).

Once the construction of the Edith Neville Primary School is complete and the students and staff members have been decanted into their new facilities, Phase 1d can begin. This will involve the demolition of the old Edith Neville Primary School, the construction of its new play area.

The new community hub and play area will also advance at this stage. Given the site constraints including tight access, the location of the Contractors required accommodation and welfare facilities may need to be located outside the foot print of the site in the adjacent open land, and will need further consideration as well as enabling works for the development of the three town houses (Phase 2)

**Phase 2:** Construction of New Community Hub, affordable housing and Play Project (Plot 1) & Construction of 3No Town Houses (Plot 3)

During this phase the construction of the New Community Hub, affordable housing and Play Project will continue, whilst the construction of the 3No town houses will commence.

Phase 3: Construction of residential tower (Plot 7) & Charrington Street residential block (Plot 2)

Once the construction of the New Community Hub, affordable housing and Play Project (Plot 1) is completed Phase 3 can commence. This phase sees the construction of the residential block on Charrington Street (Plot 2). Consideration of a tower crane to construct the 9 to 6 story buildings, which may over sail the adjacent sports pitches and play areas in its out of service condition.

Also in Phase 3 the high rise development will also begin which will include construction of a basement and c25 upper levels to provide new homes off Brill Place. The required site accommodation and welfare facilities for this phase of the project will be located within the site boundary on the corner of Brill Place and Purchese Street.

Phase 4: Construction of New Homes (Plots 5 & 6) & continuation of residential tower (Plot 7)

Phase 4 will start after the Charrington Street residential block (Plot 2) has been completed. It is expected however, that the tower (Plot 7) will be still under construction at the start of this phase. This is sequenced to reduce disturbance to the neighbours of the site. The contractor will find a suitable location for their accommodation and welfare facilities within the site boundary. With the overlap of this Phase with the construction of Phase 3 the residential tower (Plot 7) there will be a temporary reduction in the amount of Brill Place that is accessible to the public. Access to this space will be retained by temporary accesses and paths if required.

Phase 5: Construction of New Homes (Plots 5 & 6)

Once the tower (Plot 7) has completed the construction of New Homes (Plots 5 & 6) will continue whilst the landscaping of the associated areas continues.

Phase 6: Remainder of landscaping and highways works

Final elements of highway works and landscaping will complete the Development as construction of Plots 5 and 6 draw to a close.

### Landscaping

A key aim of Camden's Development Team is to maintain as much open public space as possible during construction. With this in mind the landscaping is phased in small chunks to occur throughout the development. The Contractor will be mindful of this requirement during construction planning and construction works.

### 3.2 Logistics and Traffic Management

### 3.2.1 Introduction

The CMP aims to minimise disruption to traffic (vehicles, pedestrians and cyclists) caused by construction activities to ensure the safety of all road users. It considers the arrangements to be set in place for management, provides practical guidance on the planning of traffic issues and identifies the control measures that will be implemented.

### 3.2.1 Surrounding Area

The site is bounded on all sides by existing properties both residential and commercial uses. It is very close to St Pancras Station and is accessed via Purchese Street, which is currently a busy route for cyclists.

It is proposed that the cycle path will be temporarily diverted, possibly down Charrington Street, to minimise the risk of extra construction traffic to cyclists.

### 3.2.2 Site Access and Egress

During Phase 1, Edith Neville Primary School is to be kept operational during the entire construction process. It is a key priority that disruption to the school is kept to a minimum. With this in mind, all construction traffic, during the construction of the new school, will access the site from the north via Purchese Street. Construction vehicles will then leave the site south bound towards Euston Road via Brill Place and Midland Road as displayed on Figure 2 below.

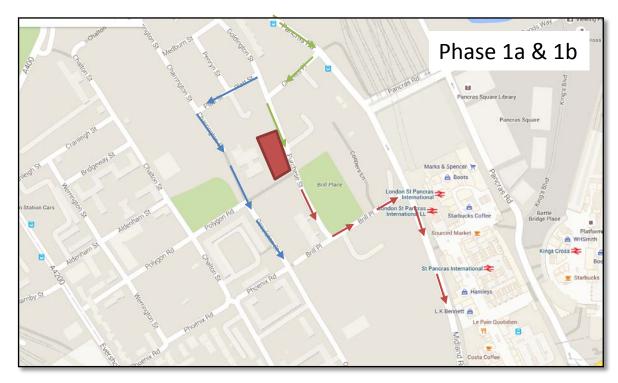
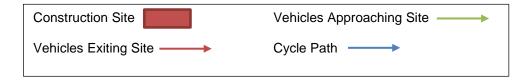


Figure 02 SITE ACCESS, EGRESS AND CYCLE PATH DIVERSION



During Phase 1c the enabling works for the New Community Hub, Affordable Housing and Play Project will commence. The construction traffic for this element will be required to travel down Charlton Street and leave either heading back north up Charlton Street or by heading West on Polygon Road. This is whilst the construction traffic for the New Edith Neville Primary School continues to access the site from the north via Purchese Street. Construction vehicles will then leave the site south bound towards Euston Road via Brill Place and Midland Road. As displayed on Figure 03 below.



Figure 03 SITE ACCESS, EGRESS AND CYCLE PATH DIVERSION

Phase 1d see's Edith Neville Primary School move into their new premises and the demolition of the old school buildings followed by the construction of the new playground, and enabling works for the development of the New Community Hub, Play Project three town houses (Phase 2). Construction traffic will now arrive and leave the site via Charrington Street, this will also see the reinstatement of the cycle path down Purchese Street to Ossulston Street to keep cyclist away (as much as practicable) from construction traffic.

Construction vehicles for the New Community Hub and Play Project enabling works will be required to travel down Charlton Street and leave either heading back north up Charlton Street or by heading West on Polygon Road. As displayed on Figure 04 below.

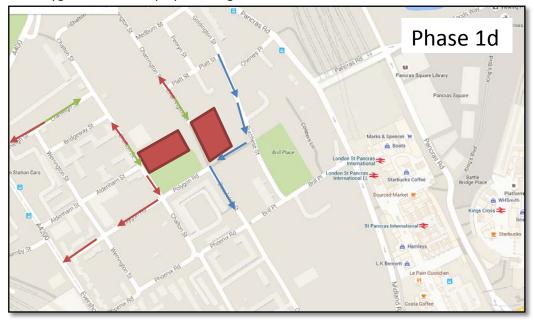


Figure 04 SITE ACCESS, EGRESS AND CYCLE PATH DIVERSION

When construction begins for Phase 2 (delivery of the community facilities & 3No Town Houses), construction vehicles required to service the community buildings will travel down Charlton Street and leave either heading back north up Charlton Street or by heading West on Polygon Road. Construction traffic required for the construction of the three town houses will arrive and leave the site via Charrington Street. As displayed on Figure 05 below.

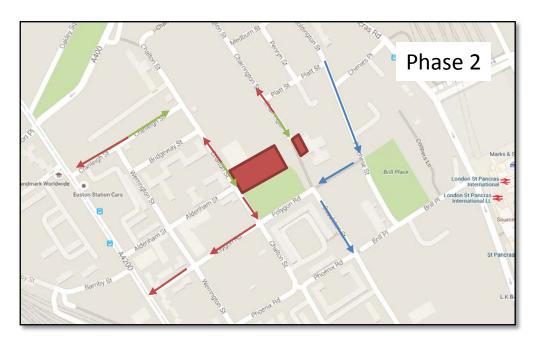


Figure 05 SITE ACCESS, EGRESS AND CYCLE PATH ROUTE

During the Phase 3 (Construction of 25 storey Tower, Plot 7 & residential block on Charrington Street Plot 2) construction traffic will continue to arrive and leave the site via Charrington Street as they did for the three town houses. The construction traffic for Plot 7 will access the site from the north via Purchese Street. Vehicles will then leave the site south bound towards Euston Road via Brill Place and Midland Road. As displayed on Figure 06 below.



Figure 06 SITE ACCESS, EGRESS AND CYCLE PATH ROUTE

Phase 4 (Construction of New Homes, Plots 5 & 6 & Continued construction of the Residential Tower Plot 7), construction traffic, will continue to access the site from the north via Purchese Street. Vehicles will then leave the site south bound towards Euston Road via Brill Place and Midland Road. As displayed on Figure 07 below.

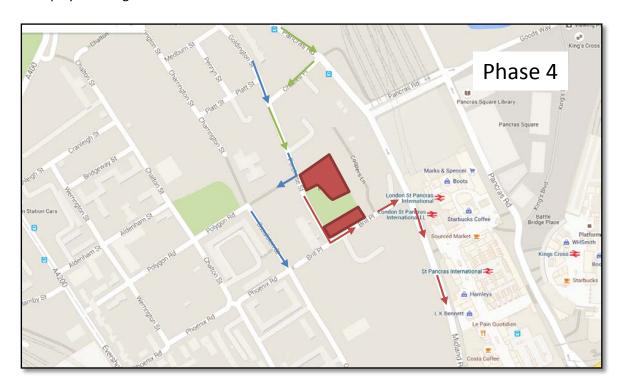


Figure 07 SITE ACCESS, EGRESS AND CYCLE PATH ROUTE

Phase 5 (Construction of New Homes, Plots 5 & 6), construction traffic, will continue to access the site from the north via Purchese Street. Vehicles will then leave the site south bound towards Euston Road via Brill Place and Midland Road. As displayed on Figure 08 below.



Figure 08 SITE ACCESS, EGRESS AND CYCLE PATH ROUTE

Phase 6 (Remainder of landscaping and highways works), construction traffic, will continue to access the site from the north via Purchese Street. Vehicles will then leave the site south bound towards Euston Road via Brill Place and Midland Road. As displayed on Figure 09 below.

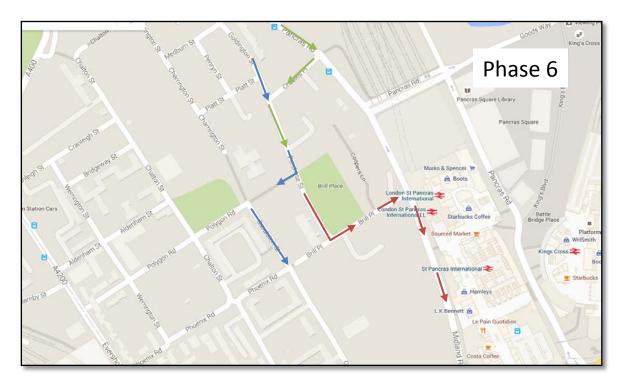


Figure 09 SITE ACCESS, EGRESS AND CYCLE PATH ROUTE

### 3.2.3 Controlling Access

For all Phases, the Contractor will strictly control access to the site and ensure the health and safety of all people in the proximity of the site at all times.

A solid hoarding will be installed to secure all boundaries around the perimeter of the site.

Signage will be placed next to the site gates to ensure pedestrians are aware of the construction site entrance.



Material deliveries will be via manned gates.

Access to the site for operatives will be via segregated controlled pedestrian gates.

The site boundaries and the hoarding will be regularly inspected and repaired immediately if any damage is found.

### 3.2.4 Deliveries

The Contractor will plan works including vehicle movement, deliveries, temporary routes and facilities to ensure that the safety of the public is maintained at all times.

All deliveries will be pre booked to avoid unexpected deliveries and congestion including vehicles waiting in the surrounding streets.

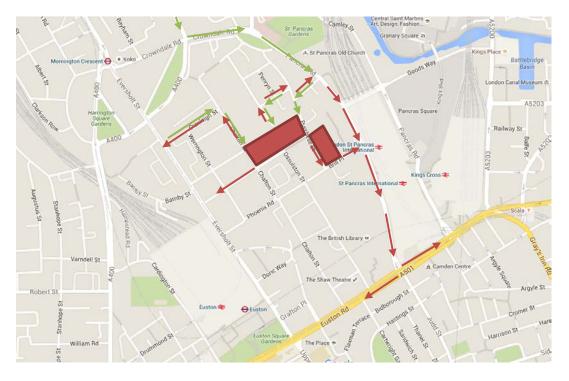
Vehicles entering and leaving site will be supervised by a banksman.

Due to the close proximity of serval schools there may be restrictions on the timing of deliveries. Such restrictions may include deliveries only between 09.30 and 15.00 Mon–Fri during school term times, 09.30 and 16.30 during school holidays, and 08.00 to 13.00 on Saturdays.

All suppliers and subcontractors who are supplying materials to the site will be issued with a transport plan which will include a prescribed route into the site to deliver materials from the Transport for London Road Network.

#### 3.2.5 Construction Routes

Due to the location of the development, all construction traffic access will be via Purchese Street.



### 3.2.6 Public Saftey

When vehicles are entering or leaving the sites, these will be supervised by The Contractor's traffic marshals and banksman. Vehicles will be unloaded from within the boundary of the site. If this is not possible vehicles will be unloaded from designated unloading bays on the street. The position of these unloading bays will be agreed between the Contractor and Camden.

During Phase 1 (Construction of the new Edith Neville Primary School) the cycle lane and footpath along the western side of Purchese Street will be closed with the cycle path being diverted down Charrington Street. Pedestrians will be directed to use the footpath on the opposite side of the road. Once Phase 1 is completed the cycle path will return to its original position and the temporarillarly closed footpath will re-open.

Construction site gates will be kept closed. Only when deliveries are made to the site will they be opened to allow vehicles onto the site, at which time control measures will be used to prevent access by pedestrians and warn any passing cyclists. The control measures will be manned by traffic marshall and banksmen.

The Contractor will as part of thier sub contractor procurement process ensure that all sub contractors and suppliers delivering materials to the site follow the conditions outlined in the Standard for Construction Logistics and Cyclist Safety (CLOCS) scheme.

The Contractor will deal with comments or complaints from the public or neighbours and will ensure that they are resolved swiftly. A record will be kept of all comments and complaints.

### 3.2.7 Parking of Vehicles for Site Operatives & Vistors

There will be no parking within the development site for any site operatives, visitors or site management.

- Mornington Crescent, St Pancras, King's Cross and Euston Stations are all within walking distance from the development
- There are numerous buses that serve the site from the Euston Road

All subcontractors and suppliers will be briefed on the parking restrictions during pre-start meetings and the parking restrictions will be incorporated into their orders.

Each contractor will be required to install a management regime to monitor compliance.

### 3.2.8 Wheel Washing

In order to keep roads and footpaths free from deposits of soil, mud and the like the Contracor will ensure that the wheels of any vehicles leaving this site are thoroughly clean prior to going on the public roads.

If any mud or construction debris does get onto the street within the vicinity of the site then the these areas will be keep clean by the Contractor. Usually via the use of water hoses and manually swept. In addition, mechanical road sweeper may be used to clear any debris.

### 4. Environmental Management

### 4.1 Codes, Standards and Acts of Parliament

There are many Codes, Standards and Acts of Parliament which cover environmental and related matters and these will be applicable in the final CMP.

The Contractor will comply with any other legislative requirements applicable at the time of construction activities.

The Contractor will, where relevant, also take account of any additional measures set out in Camden's Minimum Requirements for Building Construction (CMRBC).

The Contractor will be required to sign up to and adhere to the **Considerate Constructors Scheme**.

The Contractor will be required to develop and implement an Environmental Management System (EMS) that follows the principles of BS EN ISO 14001.

The Contractor's EMS will include the Contractor's environmental policy, operational, monitoring and auditing procedures to ensure compliance with all environmental requirements be implemented to monitor compliance with environmental legislation and the environmental management provisions in the CMP.

### 4.2 Skills, Training and Competence

The Contractor will seek to employ staff with appropriate skills, qualifications and experience appropriate to the needs of the works to be carried out during construction. Where appropriate, the Contractor will identify training needs for the construction workforce and will ensure that appropriate training requirements are fulfilled. Site briefings and toolbox talks will be carried out on a regular basis to ensure the construction workforce have a level of knowledge on environmental topics and community relations, and can effectively follow environmental control procedures.

### 5. General Requirements

### 5.1 Good Housekeeping

The Contractor will follow a "good housekeeping" policy at all times. This will include, but not necessarily be limited to, the following requirements:

- General maintenance and cleanliness of site boundary, welfare facilities and storage areas
- Provision of adequate welfare facilities for site personnel
- Appropriately located designated smoking areas with waste container
- Appropriate waste management provision and regular collections
- Open fires will be prohibited at all times
- No discharge of site runoff or water discharge without agreement of the appropriate authority
- Appropriate security and lighting will be installed
- The use of less intrusive noise alarms which meet the particular safety requirements of the site, such as broadband reversing warnings, or proximity sensors to reduce the requirement for traditional reversing alarms
- Provision of site layout map showing key areas such as material storage, spill kits, material and waste storage

### 5.2 Hours of Working

The standard working hours for construction sites in Camden are:

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

Prior agreement for any extension to these hours for specific engineering and technical reasons will be sought from Camden.

The Contractor will obtain section 61 consents from LBC under the Control of Pollution Act 1974 for the proposed construction works. The applications will include details of proposed working hours.

Permission to work outside of the standard working hours or on Sundays, Bank Holidays or Public Holidays will be subject to prior agreement with Camden and within the required noise limits.

The Contractor may require a period of up to one hour before and after core working hours for startup and close-down activities. Activities will not include the use of plant or machinery likely to cause disturbance to neighbouring residents/business but may include deliveries, movement to place of work, unloading, maintenance and general preparation works.

### 5.3 Hoardings and Fencing

Hoardings and fencing will be provided and maintained by the Contractor. The worksite area will be completely fenced from public ingress. The following measures will be applied, as appropriate:

 Maintenance of adequate fencing and hoardings to an acceptable condition to prevent unwanted access to the construction site, to provide noise attenuation, screening, and site security where required

- Use of different types of fencing and hoarding (e.g. mesh fence or solid hoarding including hoardings used for noise control)
- Providing site information boards with out of hours contact details, telephone helpline number (for comments/complaints) and information on the works
- Displaying notices on site boundaries to warn of hazards on site such as deep excavations, construction access, etc.
- Installing adequate lighting near hoardings
- Positioning and constructing gates in the fencing or hoarding to minimise the noise transmitted to nearby noise sensitive buildings from the site direct or from construction plant entering or leaving the site

Forms of fencing and hoarding will be fit for purpose taking into consideration location, construction activities and the surrounding landscape. Where hoarding is required, it will be 2.4m minimum height. Hoarding height and type may be altered to enhance the acoustic performance for specific locations.

### 5.4 Security

Worksite security will be under the control of the Contractor who will provide adequate security to prevent unauthorised entry to the site. The following measures may be used by the Contractor to prevent unauthorised access to the site:

- Site lighting around site perimeters
- CCTV and alarm systems where required
- Adequate security guards and patrols
- When there is no site activity, site gates will be closed and locked and site security provisions will be set in motion
- Consultation with neighbouring properties on site security matters
- On-going consultation with local crime prevention officers on security proposals; and
- Preventing access to restricted areas and neighbouring properties by securing site equipment such as scaffolding and ladders

### 5.5 Lighting

Site lighting and signage will be provided with the minimum luminosity sufficient for safety and security purposes. Where practicable, precautions will be taken to avoid shadows cast by the site hoarding on surrounding footpaths, roads and amenity areas

Motion sensor lighting and low energy consumption fittings will be installed to reduce usage and energy consumption

Lighting will comply with the Institution of Lighting Engineers' guidance notes for the reduction of light pollution

Site lighting will be positioned and directed as not to unnecessarily intrude on adjacent buildings and land uses, ecological receptors and structures used by protected species, nor to cause distraction or confusion to passing motorists

### 5.6 Community Engagement

The Contractor will take all reasonable steps to engage with stakeholders in the local community, focussing on those who may be affected by the construction works including residents, businesses, community resources and specific vulnerable groups.

The Contractor will develop a stakeholder engagement programme and will provide appropriately experience community engagement personnel to implement the programme, provide relevant information on the project and be the point of contact to resolve community issues.

The Contractor will implement the following in connection with Community Liaison and Consultation in connection with the development and see regular improvement and upkeep of the Construction Management Plan.

#### Communication will be via:

- A quarterly newsletter will be published and delivered to the neighbours. The newsletter will also be displayed on a fixed notice board that will be mounted on site gates
- A Site Manager will be the first point of contact for any liaison with the local community including addressing any complaints or concerns. The Contractor may also use a liaison officer for this project to assist with communications
- The contact details for the site manager will be displayed prominently on the site gates with communication available with the site manager 24/7

Consultation may also be sought throughout the Development via a Construction Working Group where the Contractor can report on their progress and key construction activities but at the same time seek feedback and comment from the group with a view to constant improvement of the Construction Management Plan. The Construction Working Group would include, but not be limited to the following:

- The immediate residents who are neighbours to the site
- The managers of the adjacent residential buildings
- The Local Ward member for which the site falls within

The Contractor will maintain a log of all visits to the site by the public and neighbours where they wish to make any complaints – any such complaints will be acted upon and report at the Construction Working Group.

### 5.7 Advance notice of works

The Contractor will ensure that local residents, businesses, occupiers, general users of the area and Camden are informed in advance of construction activities that may affect them. Notifications will detail the nature, estimated duration and working hours of the works. All notifications will include the community helpline number to which any enquires can be directed. The Contractor will be responsible for preparing and issuing the notifications subject to Camden's approval.

Camden and the Contractor, in consultation with LBC, will decide whether to arrange any further liaison or consultation with the public on a local basis.

#### 5.8 Site Reinstatement

The Contractor will reinstate all working areas both within and outside the site and accesses as work proceeds and on completion of the construction works. All plant, materials, temporary buildings and fencing, vehicles will be removed and the surface of the ground restored as near as practicable to its original condition. The Contractor will be responsible to undertake their own surveys to establish full extent of underground services prior to commencing works at the site.

### 5.9 Fire Prevention and Control

The construction worksite and welfare facilities will have in place appropriate plans and management controls to prevent fires.

#### 5.10 Welfare Accommodation

### 5.11.1 Welfare & Office Compound

The welfare and office facilities will be situated in a site compounds in various locations throughout the different phases of the Development. Initial thoughts include:

- Phase 1 On the footpath on Purchese Street
- Phase 2 Within the site boundary off of Charrington Street (West)
- Phase 3 Off road, within open space adjacent to site, accessed from Chalton Street
- Phase 4 Within the site boundary off of Charrington Street (West)
- Phase 5 Off road, adjacent to the tower, accessed from Brill Place
- Phase 6 Within the site boundary off of Charrington Street (West)
- Phase 7 Within site boundary off of Purchese Street

### 5.11.2 Welfare Facilities

Welfare facilities will be provided on site in strict compliance with the <u>Construction (Design and Management)</u> Regulations 2015, <u>Schedule 2</u>. These facilities will be made available from the outset of construction work until completion. Male and female toilets, washing facilities, changing rooms + lockers, rest facilities, drinking water and a canteen will be available for office staff and operatives.

#### 5.11.3 PPE & First Aid

Specific PPE will be worn as identified in the specific method statements and risk assessments along with hard hats, safety boots, high visibility vests as mandatory. It is the responsibility of individual persons to inspect their PPE for damage before each use. Damaged PPE must be replaced.

The Contractor will monitor the use of PPE and issue verbal and written warnings for non-conformance as necessary.

Adequate provision will be made for suitable persons to be trained in First Aid. Equipment and facilities will be made suitable to Health & Safety (First Aid) Regulations 1981. First aid equipment will be located in the site offices and the welfare facilities. The equipment will be checked regularly by a designated person to ensure that supplies are sufficient. First aiders will be posted inside welfare facilities and the site offices.

First Aid procedures are as follows:

- 1 no first aider per 50 persons on site will be present on site at all times of working.
- Notices will be posted to notify all of the names of first aiders and will be included in induction talks.

### 5.11 Pollution Prevention

The Contractor will prepare and implement appropriate measures to control the risk of pollution due to construction activities, materials and extreme weather events and document in an incident control plan.

The Contractor will consult with the relevant organisations statutory bodies and other relevant parties such as the Health and Safety Executive (HSE) (Construction), the London Fire and Emergency Planning Authority (LFEPA), the Ambulance Service, the Environment Agency (EA), Natural England (NE), utilities companies and LBC (emergency planning and pollution control functions) when preparing response measures. Reference should also be made to the EA Pollution Prevention Guidelines (PPG) 21 (Incident Response Planning).

In the event a pollution incident does occur, the Contractor will be required to investigate and provide a report including the following:

- A description of the pollution incident, including its location, the type and quantity of contaminant and the likely receptor(s)
- Contributory causes
- Adverse effects
- Measures implemented to mitigate adverse effects; and
- Any recommendations to reduce the risk of similar incidents occurring

### **5.12** Emergency Preparedness

The Contractor will prepare and maintain an emergency contact and set of procedures, with contact details displayed prominently at the site. The Contractor will be required to follow the procedures in any site emergency. The procedures will contain emergency phone numbers and the method of notifying local authorities/services for action by the Contractor and/or LBC

### 5.13 Unexploded Ordnance

The Contractor will include procedures to deal with unexploded ordnance encountered on site and ensure that all operatives are aware of them

### **5.14** Protection of existing structures

The Contractor will be required to make his own investigations and to take all appropriate actions concerning existing foundations, buildings, structures, walls, roadways, sewers cables and other services, apparatus and installations

### **6** Considerate Constructors

### 6.1 Description

The scheme will be registered with the <u>Considerate Constructors Scheme</u>. The Contractor will also follow the guidance set out by Camden in their "<u>Guide for Contractors working in Camden</u>".

The Considerate Constructors Scheme is the national initiative, set up by the construction industry, to improve its image.

Sites and companies that register with the Scheme sign up to a Code of Considerate Practice, designed to encourage best practice beyond statutory requirements.

The Scheme is concerned about any area of construction activity that may have a direct or indirect impact on the image of the industry as a whole.

The main areas of concern fall into three main categories: the Environment, the Workforce and the General Public

### 6.2 Site Code of Considerate Practice

The Site Code of Considerate Practice forms the basis of all the Scheme's requirements. The first 4 Areas are discussed below:

#### 6.3 Considerate

Everyone affected by the project should be advised before work starts. This includes Neighbours, schools, shops etc. Nuisance caused by deliveries, traffic and parking should be minimised. Diversions should be clearly signed with special attention paid to the needs of local businesses and people with sight, hearing and mobility difficulties.

#### 6.4 Environment

The potential environmental and ecological effects of construction should be identified and assessed, with appropriate action taken to minimise all forms of pollution. Every effort should be made to reduce, reuse and recycle waste. Materials should be obtained from sustainable sources, and local suppliers used where possible. The site should make a positive contribution to the natural environment.

### 6.5 Appearance

The site should be doing all it can to create an image of which the industry can be proud. The site boundary, the offices and all welfare facilities should be clean, tidy and well presented, and all materials stored neatly. Waste, rubbish and litter should not be allowed to collect. Dusty work should be managed to prevent any inconvenience. Damage caused by graffiti should be repaired quickly.

### 6.6 Good Neighbour

The site should have a positive influence on the local community. The Site Manager should interact proactively with residents, businesses, schools, etc. throughout the project to inform them about site activities and to avoid complaints. Any complaint should be logged and handled quickly and positively to achieve a satisfactory outcome for all concerned.

Operatives will be made aware in the inductions that loitering outside the site and disrupting local residence will not accepted and is subject to disciplinary action.

### 7 Air Quality

### 7.1 Air Quality Management

LBC will require the Contractor to manage dust, air pollution, odour and exhaust emission during the construction works in accordance with Best Practicable Means (BPM). This will include the measures outlined below.

### 7.1.1 Construction Plant, vehicles and equipment

Measures will be implemented to limit emissions from construction plant, vehicles and equipment, which will include the following, as appropriate:

- Construction plant, vehicles and equipment, will be located away from sensitive receptors, exhausts directed in an appropriate height / direction where practicable and enclosures, shielding and filters used where appropriate
- Construction plant, vehicles and equipment will be operated in accordance with manufacturers' guidance and will be regularly maintained and checked, with records kept on site
- Damping down of dust-generating vehicles and equipment, as well as roads and access will be kept clean by methods such as brushing and provision of dust suppression
- Provision of easily-cleaned hardstanding for vehicles
- Watering of unpaved surfaces and roads
- Control of cutting or grinding activities on site will be conducted using equipment and techniques which reduce emissions and incorporate appropriate dust suppression measures
- Use of electrical / battery powered equipment and low emission vehicles where practicable
- Non-road mobile machinery will use ultra-low sulphur diesel, where reasonably practicable
- Use of sheeting during demolition works; and
- Vehicles and plant will be switched off and secured when not in use

The Contractor is to note that from 1 September 2015 non mobile road machinery (NRMM) of net power between 37kW and 560kW used in London are required to meet engine emissions standards from EU Directive 97/68/EC. Details can be found here.

### 7.1.2 Transportation, storage and handling of materials

Dust and air quality management measures will be implemented to limit pollution arising from the transportation and storage of materials, including the following, as appropriate:

- Sheeting dusty materials and deliveries such as excavated material entering, leaving and moving around the worksite. This will apply to road or waterway transportation
- Stockpiles will be located away from sensitive receptors, watercourses and surface drains, will take into account the predominant wind direction relative to sensitive receptors where reasonable practicable and will be enclosed / sheeted and sprayed with water as appropriate
- Dry, dusty materials will be stored inside or enclosed to ensure no escape
- For certain dust generating activities such as mixing grout or cement based materials appropriate techniques to prevent dust emission will be used
- The number of handling operations for materials will be kept to the minimum where reasonably practicable

- Materials handling areas will be maintained to constrain dust emissions through the use of measures such as watering facilities to reduce or prevent escape of dust from the site boundaries
- If used, drop heights from conveyors to stockpiles will be kept to the minimum reasonably practicable

#### 7.1.3 Excavations

Dust pollution from excavations will be limited through the use of the following measures, as appropriate:

- Drop heights from excavators to vehicles involved in the transport of excavated material will be kept to the reasonably practicable minimum, and
- Materials will be compacted after deposition, with the exception of topsoil and subsoil on areas to be used for landscaping

### 7.1.4 Monitoring

The Contractor will develop and implement inspection and monitoring procedures to assess the effectiveness of measures to prevent dust and air pollutant emissions from the construction of the scheme. Site inspections within the site and adjacent to the site will be carried out to visually assess dust and air pollution that may be generated from the site and appropriate action will be taken where appropriate

### 8 Biodiversity

### 8.1 Ecological Management

The Contractor will adopt appropriate measures to protect the biodiversity and limit habitat loss in the area of the scheme and the worksites and will include the following as appropriate:

The Contractor will comply with the provisions of the Wildlife and Countryside Act 1981, as amended, and other relevant nature conservation legislation and relevant policy and guidance. The following general principles will be applied where practicable:

- Standards of dust and air pollution control, as set out in Section 6 will be applied to protect adjacent wildlife habitats
- Undertaking bat surveys as appropriate, prior to the demolition of buildings
- Habitat loss will be minimised by restricting the working width and extent of the worksite
  area and associated access routes to a necessary minimum. Removal of habitats and
  enhancement works will be undertaken as appropriate in consultation with NE and the EA
- Suitable precautions will be taken to prevent the entry of pollutants into any bodies of water and any incidents reported to the EA and NE (see also requirements of Section 11)
- Procedures to be developed in the event of an unexpected protected species (e.g. bats) or important habitat being encountered
- Preparation of individual species / habitat management plans, and
- Undertaking ecological watching briefs as appropriate

### 8.2 Statutory designated sites, non-statutory sites, protected habitats and species

The Contractor will manage impacts upon any non-statutory designated sites of ecological interest, and other areas of notable habitat where relevant. There are no statutory designated sites within the sphere of influence.

The Contractor will obtain and comply with the requirements of any wildlife licences, including protected species licences necessary for construction of the Scheme.

The timing of construction works will be undertaken with due regard to mitigate potential impacts on protected and/or notable species e.g. bats and nesting wild birds.

### 8.3 Invasive and noxious species

Appropriate measures for the treatment/control of invasive, non-native species (both plants and animals) and injurious weeds will be implemented.

#### 8.4 Protection of trees

The Contractor will avoid the loss of tress wherever practicable and will employ a suitably qualified Arboricultural consultant to oversee any works in relation to trees.

Retained trees will be protected in accordance with *BS 5837*: 'Trees in relation to design, demolition and construction' will be complied with. Any works to trees or felling will be carried out in accordance with *BS 3998*: Tree work - Recommendations.

Impacts on all trees whether statutorily protected or not within or in the vicinity of the site will be minimised by the adoption of suitable mitigation measures which may include the following, as appropriate:

- Installation of protective fencing
- Measures to prevent compaction of soils
- Implement vegetation buffer strips
- Selective removal of lower branches in an appropriate manner, to reduce damage by construction plant and vehicles, and
- Following guidance for working within root protection zones (RPZ)

### 8.5 Tree replacement

Any tree that is damaged or cut down without approval or dies as a consequence of the construction will be treated or be replaced by a suitably sized transplant to the approval of Camden.

The supply, storage, handling, planting and maintenance of new planting will be undertaken in accordance with appropriate British Standards, including *BS 5837 Trees in relation to design, demolition and construction; BS 3998 Tree Work. Recommendations, BS 4043:1989 Recommendations for transplanting root-balled trees, and BS 4428 Code of practice for general landscape operations (excluding hard surfaces)* and other appropriate guidance.

### 9 Cultural Heritage

### 9.1 Cultural Heritage Management

During the works the Contractor will seek to minimise any impact on heritage assets, their setting and the wider historic environment. The Contractor will manage the impact of construction works in accordance with accepted industry practice, taking into account the relevant sections of the National Planning Policy Framework (NPPF) and LBC's local development plan.

General management measures will include:

- Identification of locations and descriptions of all known cultural heritage assets within and adjacent to, construction works, including restrictions to construction methods to protect cultural heritage assets
- The Contractor will consider the location of heritage assets and their setting in determining access routes to the site, in accordance with Historic England (HE) guidance.
- LBC will ensure that any cultural heritage survey and mitigation works prior to and during construction if appropriate are properly programmed
- The Contractor will use a suitably qualified organisation or person to undertake all Cultural heritage works, and
- LBC and / or the Contractor will consult with HE and LBC as appropriate through all stages of the implementation of the programme of cultural heritage works.

The Contractor will comply with the requirements of the relevant legislation in respect of listed buildings and Listed Building Consents. Attention is drawn to the *Planning (Listed Buildings and Conservation Areas) Act 1990, the Ancient Monuments and Archaeological Areas Act 1979 and the Historic Buildings and Ancient Monuments Act 1953 within the Register of Historic Parks and Gardens by HE.* 

### 9.2 Heritage Assets

The Contractor will develop in consultation with HE and LBC procedures where appropriate to avoid damage to important structures or archaeological remains.

### 9.3 Written Scheme of Investigation

A Written Scheme of Investigation (WSI) will be prepared, if required, prior to site preparation and construction, in consultation with HE and LBC. This document will detail the generic principles, standards, methods and techniques to be employed for cultural heritage works.

### 9.4 Archaeological Works

The Contractor will be responsible for implementing such archaeological interventions associated with ground works during construction as are required to mitigate the effects of the scheme. The Contractor will facilitate archaeological specialists to undertake the work.

### 10 Land Quality

### 10.1 Land Quality management

The Contractor will ensure the adoption of appropriate measures to protect, assess, mitigate and remediate land where appropriate.

Any site assessment and remediation works required will be based upon Defra/EA's Model Procedures for the Management of Land Contamination (CLR11).

Measures to protect water resources are outlined in Section 11 and measures to manage waste and materials are included in Section 13.

### 10.2 Site Investigation and Risk Assessment

LBC/the Contractor will identify those areas within the site where contaminated land may be encountered. LBC/the Contractor will undertake site investigation in accordance with current guidance (BS 10175 Investigation of potentially contaminated sites. Code of practice and BS5930 the code of practice for site investigations) and where this reveals the presence of contamination, a management plan will be prepared to comply with all relevant handling and disposal legislation. A risk assessment will be carried out in line with current guidance (Environment Agency Reports SR2-SR4) to identify potential risks to human health, initially using generic assessment criteria. Further detailed assessment may be required which will involve development of site-specific criteria. The risk assessment will include a Gas Risk Assessment in accordance with CIRIA guidance.

Based on the results of the ground investigation and risk assessment works, LBC/the Contractor will produce (if required) a remediation strategy for approval by LBC. Where applicable, a verification plan will be produced providing details of the data that will be collected in order to demonstrate that the remedial works are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action. The verification plan will be reviewed by LBC prior to submitting to LBC.

Where there is a potential for soil gas generation, any gas protection measures required for buildings and structures will be included in the building design. Control measures will be designed and constructed in accordance with industry best practice and guidelines.

Any contaminated material encountered will be dealt with in compliance with best practice and statutory guidance; for example the Control of Substances Hazardous to Health (COSHH) Regulations and through the Construction Design and Management (CDM) Regulations.

In the event that contamination is found at any time that was not previously identified, LBC/the Contractor will report this in writing to LBC. The investigation, risk assessment and where necessary remediation measures outlined above will be completed, and will be subject to approval in writing of LBC.

### **10.3** Materials Management and Mitigation Measures

The Contractor will not bring soils or infill materials onto the site unless they have been satisfactorily proven to be uncontaminated and present no risks to human health, property and the environment. A declaration to this effect, together with acceptable documentary evidence to confirm the origin of all imported soils and infill materials, supported by appropriate chemical analysis test results.

The Contractor, in accordance with the EA Guidance Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention (EA, 2001) will undertake a piling risk assessment to determine the suitable piling method to mitigate against the potential for vertical or horizontal migration of contaminants both during construction and operation. The piling risk assessment will be based on the results of the intrusive ground investigation and submitted to LBC and the EA for approval prior to commencing works.

Where contaminated material is identified the Contractor will:

- Provide appropriate Personal Protective Equipment (PPE) to be used at all times including
  gas monitoring equipment and breathing apparatus, where necessary. Suitable welfare
  facilities including clean water for washing will be supplied for use by all site personnel;
- Manage contaminated waste in accordance with current legislation;
- Treat contaminated material for potential re-use at the site or dispose of it as a controlled waste, e.g. as hazardous waste to a designated landfill;
- Ensure the safe storage and handling of hazardous materials such as fuels during the remediation and the construction phases; and
- Set out procedures for the protection of adjacent sites including dust suppression and dewatering activities.

### 10.4 Asbestos

Appropriate precautions must be taken if materials containing asbestos are encountered. The Contractor shall comply with the Control of Asbestos Regulations 2012. Where identified, asbestos will be removed by a suitability licensed asbestos removal contractor and managed in accordance with the relevant statutory controls governing its disposal.

#### 11 Noise and Vibration

### 11.1 Noise and Vibration Management

The Contractor will apply Best Practicable Means (BPM) (as defined by section 72 of the Control of Pollution Act 1974) to minimise noise and vibration on neighbouring sensitive receptors.

The Contractor will liaise and consult with LBC with regard to permissible levels of noise, and will apply to LBC for a Section 61 consent under the Control of Pollution Act 1974.

The recommendations of BS 5228: Code of practice for noise and vibration control on construction and open sites parts 1 and 2, will be implemented, together with the specific requirements of this CMP.

### 11.2 Measures to Reduce Noise and Vibration Impacts

Noise and vibration management measures will be implemented to minimise noise and vibration during demolition construction. This will include where appropriate:

- Site induction includes instruction on measures to reduce noise and vibration.
- Selection of piling methods (bored piling is currently the method of choice) which will minimise noise and vibration;
- Breaking out concrete by means other than percussive techniques;
- Fitting of silencers to all plant, machinery and vehicles;
- Design and use of site hoarding and screens, where practicable and necessary, to provide acoustic screening at the earliest opportunity. Where practicable, doors and gates will not be located opposite occupied noise-sensitive buildings;
- Choice of routes and programming for the transport of construction materials, spoil and personnel to minimise noise levels at noise sensitive properties;
- Shouting and raised voices kept to a minimum. Use of loudspeakers, radios prohibited except for safety and urgent communication;
- The use, by preference, of non-audible warning systems and where audible warnings are necessary for reversing, vehicles operations will be planned to minimise reversing;
- Provision of lined and sealed acoustic covers for static equipment will be in place while equipment is running;
- Use of mains electricity instead of generators;
- Regular maintenance of all equipment;
- Adequate lubrication to prevent screeching and squealing;
- Operation of equipment in the mode of operation that minimises noise;
- Careful selection of plant machinery and equipment, use of silencers, regularly maintaining equipment and shutting down equipment when not in use including turning off engines when not in use;
- Construction of hoarding, screens and enclosures at a height and extent to achieve appropriate noise attenuation;
- Selecting methods of works that are less intrusive e.g. for piling or breaking out concrete;
- Planning of construction traffic around sensitive receptors and careful programming so that
  activities which may generate significant noise would be planned with regard to local
  occupants and sensitive receptors;
- Suitably sited equipment so as to minimise noise impact on sensitive receptors;

- Use of site enclosures and temporary stockpiles to provide acoustic screening; and
- Ensuring proactive links between noise management activities and community relations activities.

#### 11.3 Section 61 Consent

The Contractor will seek to obtain Section 61 consent from LBC under the Control of Pollution Act 1974 after the application has been reviewed by LBC. Applications will be made at least 28 days prior to work commencing on site. Details contained with the Section 61 will be discussed in advance with LBC and dialogue between LBC, Contractor and LBC will continue for the duration of the construction period.

#### 11.4 Vibration

Criteria and/or procedures for vibration control are specified for three purposes and assessed using three different sets of parameters:

- To protect the occupants and users of buildings from disturbance, for which vibration dose
  values are assessed (VDVs are defined and their application to occupants of buildings is
  discussed in BS 6472- 1 Guide to evaluation of human exposure to vibration in buildings –
  Vibration sources other than blasting, 2008);
- To protect buildings from risk of physical damage, for which peak component particle
  velocities are assessed in accordance with BS 7385 2 Evaluation and measurement for
  vibration in buildings. Guide to damage levels from groundborne vibration, 1993; and
- To protect particularly vibration-sensitive equipment and processes from damage or disruption, for which peak component acceleration, velocity or displacement are assessed as appropriate to each process or item of equipment.

In establishing criteria, controls and working methods, the Contractor will take account of guidance in BS6472-1:, BS 5228:, ISO 4866: Mechanical vibration and shock, vibration of fixed structures. Guidelines for the measurement of vibrations and evaluation of their effects on structures and BS 7385-2.

### 11.5 Monitoring

The Contractor will agree noise and vibration monitoring protocols with the LPA, and will select specific monitoring locations based on the plant and activities at the site. These locations will be agreed, in advance, with the local authority. The Contractor will undertake regular noise and vibration monitoring at the site in line with the Section 61 consent to highlight any potential noise or vibration impacts arising from the scheme.

The structural and decorative condition of the neighbouring buildings will be assessed and recorded in line with the guidance of BS 7385 – 2 before demolition or construction begins. Maximum targets for vibration will be agreed through this assessment. During operations, if agreed targets for vibration are reached or exceeded, the Contractor will cease that operation while the cause of the vibration and any impact on the neighbouring buildings is investigated.

### 12 Surface and Groundwater

### 12.1 Surface and Ground Water Management

LBC will require the Contractor to manage site activities and working methods to protect the quality of surface water and groundwater resources. Monitoring systems will be employed during the construction works and emergency procedures in the case of any pollution incidents. BPM will be used (e.g. through the use of silt traps and the re-use of water in wheel washers) where appropriate. Where required, the Contractor will obtain appropriate approval for works from the relevant regulatory body or statutory undertaker, which could affect any surface water or groundwater resource.

All ground and surface water bodies (including source protection zones, abstractions and areas at risk of flooding that could be affected by the construction will be identified as well as sources of potential pollution and drainage arrangements on the site. Measures to be used to protect surface water and groundwater from pollution will include consideration of those as set out in the EA guidance document Groundwater protection: Principles and practice (GP3).

The Contractor will be responsible for confirming the full extent of underground services prior to commencing works and undertaking surveys where necessary.

The Contractor will have due regard to the measures outlined in:

- CIRIA guidance 532 Control of water pollution from construction sites: Guidance for consultants and contractors;
- CIRIA guidance 515 Groundwater Control Design and Practice.

### 12.2 Measures to Reduce Surface and Groundwater Impacts

Protection measures for works in or adjacent to surface water bodies will be provided in accordance with requirements set out by the EA. All measures will be in line with the requirements set out within the EA's General Guide to Prevention of Pollution (PPG 1), Works and maintenance in or near water (PPG5) and Control of water pollution from construction sites CIRIA 532.

### 12.2.1 Waste Water, Surface Water and Groundwater

The Contractor will apply for consents and approvals from the EA, Thames Water Utilities Limited (TWUL) or LBC to enable discharge of dewatering, surface water run-off and waste water from the construction site to soak away or filtration systems, watercourses, foul sewers or disposal off-site. All waste water and site discharges will only be permitted where the effluent quality and discharge location is acceptable to the EA or TW (as appropriate).

The Contractor will adhere to the following mitigation measures that will be applicable to construction sites:

- Procedures for monitoring groundwater levels and quality at abstraction boreholes where appropriate;
- Storage of potentially polluting materials, plant and equipment will be more than ten metres from any water body, including drains;
- Fuel stores will be located away from surface water drainage, and would be within bunds with sealed bases;

- Refuelling will always be undertaken remote from drainage and surface water features and using automatic shut-off fuel delivery systems;
- Pumps, generators and small plant will have drip trays to collect any fuel or oil spills;
- Where wheel washes are installed adjacent to site accesses or egresses, these will be selfcontained, would recycle wash water as much as possible and would not directly discharge to the environment;
- Provision of a suitable construction site drainage system including cut-off valves, ditches or drains and sustainable drainage systems, or equivalent, with suitably sized treatment facilities such as settlement or detention basins;
- Emergency response procedures would be developed and implemented that covered any incidents that might lead to release of pollutants to the aquatic environment;
- Implementation of a site drainage plan; and
- Spill kits will be available in the event of a fuel spillage and personnel will be trained in their use.

The Contractor will also comply with BS 6031 Code of practice for earthworks, regarding the general control of site drainage including, for example, all washings, dewatering, abstractions and surface water run-off, unless otherwise agreed by LBC. Any monitoring stations or boreholes should be protected from physical damage. If boreholes are decommissioned the contractors will follow Good practice for decommissioning redundant boreholes and wells (EA January 2012 or subsequent guidance).

Where contaminated land is identified within the scheme, a full management plan will be prepared by the Contractor to comply with all relevant handling and disposal legislation (including dewatering discharge from piling operations). Detailed site investigations at all sites where earthworks or piling are planned will be carried out, prior to works commencing, in order that appropriate mitigation can be implemented.

The Contractor will make provisions to ensure that oil drums and containers or other potential contaminants stored on the site are controlled in accordance with the Control of Substances Hazardous to Health (COSHH) Regulations 2002.

### 12.2.2 Protection of Aquifers

The Contractor will have due regard for underlying aquifers and adhere to the EA's Groundwater Protection Policy. In all instances, appropriate protection of aquifers will be undertaken, following liaison with the EA regarding the piling and construction techniques to be employed. Details of appropriate measures to prevent groundwater contamination (including monitoring) will be agreed with the EA in writing, prior to commencement of the relevant scheme works.

### 12.2.3 Control and Management of Foul Drainage

Foul water and sewage effluents produced by the construction workforce will managed and disposed of from site facilities complying with Pollution Prevention Guideline 4: Treatment and disposal of sewage where no foul sewer is available and the EA's guidance document. Methods include connection to the local foul sewer system as agreed with the relevant authorities or containment by temporary foul drainage facilities and disposal off-site by a licensed contractor.

### 12.2.4 Flood Risk and Defences

The Contractor as far as reasonably practicable, ensure that flood risk including pluvial flooding is managed safely throughout the construction and implementation period and consider flooding when planning sites and storing materials. The contractors will consult with the EA, Lead Local Flooding Authorities (LLFAs) and other relevant risk management authorities on areas at risk of flooding and make appropriate use of the EA's Floodline flood warning service for works within areas at risk of flooding.

### 13 Waste and Materials

### 13.1 Waste Management

The Contractor to implement the waste hierarchy (i.e. prevention, preparing for re-use, recycling, other recovery and disposal as set out in the Waste (England and Wales) Regulations 2011 (as amended) to ensure that material resources are used to maximum efficiency. The Contractor will, where possible, minimise waste at source and where this is unavoidable will reduce the quantity of waste sent to landfill by maximising re-use, recycling and recovery.

### 13.1.1 Identification and Classification

A SWMP will be prepared for the scheme by the Contractor, as currently required in the Site Waste Management Plan Regulations 2008. This will include information regarding the type and quantities of waste to be produced, waste carrier details and plans for the segregation and control of waste at each site and the re-use or disposal. The SWMP will include an audit programme to be undertaken by the Contractor.

### 13.1.2 Segregation and storage

The Contractor will make provision for a waste storage area on the site that will include containers for the collection and segregation of waste and will be clearly labelled as per the Institution of Civil Engineers (ICE) colour coding. This is to facilitate re-use, recycling and recovery of waste. Containers will be covered with sheeting or lids.

Plastic sheeting will be used where there is a need to store excavated materials and aggregates where these are not contained within a container.

Liquid wastes will be stored on hard-surfaced areas with secondary containment systems to prevent spillages.

Waste will not be stored within 10m of any controlled watercourse, borehole, well, spring, surface water drainage system or foul water drainage system.

The Contractor will comply with approved guidance and procedures in the identification, handling, storage, and management of waste. The Contractor will also comply with the measures set out in Section 11 regarding discharges to controlled waters and wastewater.

### 13.1.3 Duty of Care

The Contractor will be required to comply with the relevant legislation governing storage, transfer, treatment and disposal of all waste.

Prior to the removal of waste site from the Contractor will put in place all relevant authorisations and maintain a register of this information. This will be in relation to the transfer of waste (waste carriers); any off-site waste management facilities (permitted or exempt sites) to which waste is taken to and any requirements for hazardous waste premises notification. The Contractor will also ensure that an environmental permit or registered exemption is in place prior to any off-site transfer, treatment or disposal of waste being undertaken.

The Contractor will be responsible for ensuring that all duty of care documentation is in line with the relevant statutory requirements for any waste leaving the site for waste transfer and that waste will be removed only by licensed carriers. Duty of care documentation will be retained by the Contractor.

### 14 Pest Control

A specialist contractor will be appointed to carry out a site inspection and remove rodents if they are found on site to prevent them from moving to other properties around the area. Other initiatives the contractor will implement will include:

- No waste on site
- No eating or drinking on site other than canteen area
- Capping of drains
- Traps installed