

- Dead Dog Basin; and
- East Vaults – proposed waste store and exhibition space

A description of the proposed works is set out in the following sections.

8.1.1 Dead Dog Basin

The works within Dead Dog Basin are expected to include:

Desilting of the basin

The desilting of Dead Dog Basin will be undertaken by mechanical means from a water barge or pontoon and either allowed to move naturally with the canal or be carried away on a barge to a suitable dumping location for reuse. All works will be undertaken by a specialist contractor and agreed with the Council and Canal River Trust in advance.

Installation of a maritime working platform

To afford safe working within the basin, a floating working platform will be formed with handrails and edge protection to allow the contractors to work safely. All contractors will be inducted to working from a platform and emergency procedures.

Building fabric cleansing

As the space will be utilised for public use and as an access point to the canal, the walls and soffit will need to be cleaned and repaired (in parts). All cleansing will be carried out by inert methods of cleaning, so as to avoid pollution of the canal.

Where chemical cleaning is required, this will be kept to a minimum, and within the area of the working platform, which will be suitably prepared for the works (this may include bunding on the platform and or use of absorbent layers etc.).

Where brick repair is required, this will be undertaken by hand tools and by the use of similar brick (potentially reused from the exhibition space works, to maintain the walls aesthetic and to address circular economy requirements.

Painting and finishing

Where paint or finishing (to steel and iron predominantly) is required, this will be undertaken from the pontoon, and as with cleansing, safety measures put in place (such as bunded and absorbent layers to the base of the platform etc.)

Drilling and fixing

Drilling & fixing for services and support brackets will be required, and these will be undertaken with hand tools from the platform.

8.1.2 General safety notes for the works

- During the works all contractors will be inducted to the area of works and to its special circumstances.
- All contractors will be advised of safety policies and rescue methods;
- All contractors will be marshalled to ensure that “good” habits are formed early on to minimise accidents;
- Ladders will be prohibited from the pontoon platform and replaced by step ups and protected platforms;
- In line with standard temporary works policies, no contractor will alter the platform, unless fully trained in the operation and with instruction to do so.

- A risk assessment will be undertaken for safety measures considered necessary, and the recommendations will be put in place, regardless of the cost. This may mean extra supervision, specially trained first aiders and or a safety boat.

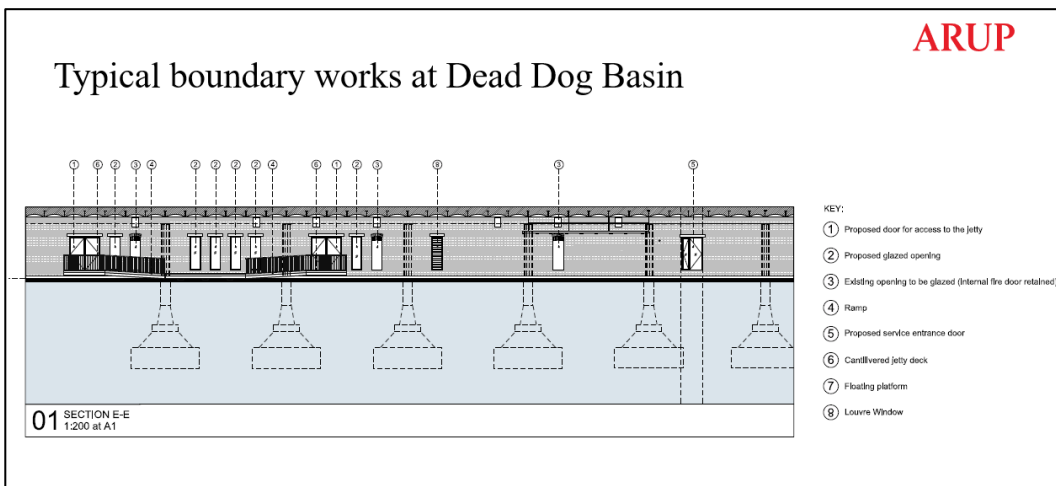


Figure 14 Architectural Changes to Dead Dogs Basin



Figure 15 Architectural vision for Dead Dog Basin

8.2 Exhibition space and waste store

The works to refurb retail land uses, create the proposed exhibition space and waste store are less complex as the works are predominantly held within a standard aerated basement area and/or within the West Yard area.

The anticipated work activities will include:

- Clearance of the area;
- Cleansing of architectural brick work and repair with reclaimed brick;
- Cleansing and repair of structural members and redecoration;
- Preparation of surfaces and finishing as directed by the design (plaster / plaster board or other);
- Checking and replacement, where necessary, of existing services;
- Installation of new services;
- Installation and finishing of new structures;
- Demolition of brick work and making good;

- Installation of handrails / glazing and safety measures at the boundary with Dead Dog basin; and
- Installation of shop fit outs and facilities.

The above list is reflective of the works to allow the reader to understand the nature of the works but is not exhaustive.

It is anticipated that a small works compound will be formed within West Yard area. Materials and waste will be stored close to the access to Camden Lock Place.

Deliveries and removal of waste will take place from/to Camden Lock Place, with material transported using buggies or platforms as appropriate.

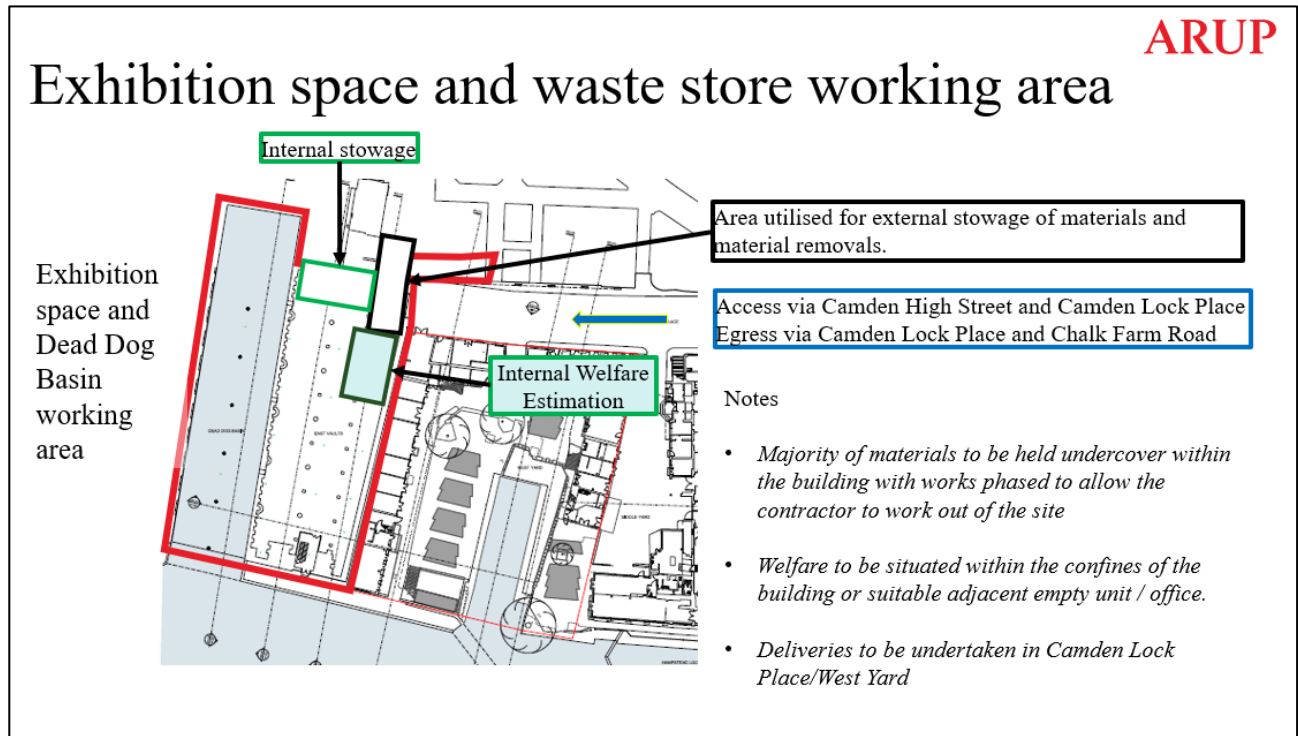


Figure 16 Exhibition Space and Dead Dogs Basin working area

8.3 Number of staff

The works will vary in number but can be estimated to have approximately 22 workers on site at any one time due to compact nature of the site.

Activity	Number of Staff
It is estimated that three traffic marshals and a site manager will always be present on site during the works.	It is estimated that 3 traffic marshals and a site manager will always be present on site during the works.
Electrical works	4
Mechanical Works	2
Plumbing Works	4

Demolition and Deconstruction (hand maul potentially)	8
Brick Repair (1 gang)	4
Architectural finishes	6
General Labour	4
Total team for the phase is estimated (excluding delivery drivers) at about	32
Average no. of workers on site on any given day (due to the size of the area.	22

This list is not exhaustive but reflective of the works considerations for the programme.

8.4 Dead Dog Basin and Exhibition space build out programme

The programme for the works has been estimated at about 20 weeks.

8.5 Dead Dog Basin and Exhibition space plant and equipment

The plant and equipment for the works can be generalised as:

- Step ups and mobile platforms;
- Hand tools;
- Pontoon system (Dead Dog Basin only);
- Barge (tow for Pontoon);
- Muck away barge; and
- Pallet trucks.

No large mechanical plant has been considered for these works due to the nature of the area and accessibility. All works will be agreed with the Council and Canal River Trust (where appropriate) in advance.

8.6 Task 2: Retail refurb

The works in the West Yard are a traditional refurbishment and will be contained within the yard and utilising access via Camden Lock Place.

Welfare for the area will be set up within a suitably sized unit (or multiples at the site entrance).

Storage will be staged and by use of just in time delivery, and daily spoil removal to either the barge waste holding area in Dead Dogs basin or directly off site by small lorry after hours storage will be minimised.

The storage locations will flow with the works and be placed adjacent to their working area as far as is reasonable and maintained under cover predominantly to allow unfettered access into the West Yard area.

The key materials being brought to site are light weight and hand maul, or pallet truck manipulable, such as plaster board, aluminium frame walling sections, cabling, pipework etc.

There will be no open stock piling will all granular materials such as plaster will be bagged and delivered and stored as such until required usage.

Deliveries to the yard will be undertaken on the whole by LGV vehicles due to the quantities envisaged presently and articulated or HGV type vehicles will not generally be considered as appropriate.

The principal works will include:

- Removal of non-structural walling;

- Architectural finishes;
- Renewal of fabric finishes (including windows and doors)
- Formation of new cut ins to masonry walling for cabling and pipework;
- Installation of new flooring and walling (with lightweight systems or non-structural masonry) tied into the slab and soffit;
- Architectural finishes (including new plaster, painting, stucco (as appropriate) decoration, and steel work;
- Electrical rewiring; and
- Making good.

This list is not exhaustive but reflective of the proposed works.

8.7 Task 3: Installation of piling

8.7.1 Marine pile in the West Yard basin (Set 1)

To facilitate the installation to the Observation Wheel a supporting marine pile and a fixing cap will need to be installed in the West Yard basin. The piling is to be undertaken from the structural quay side behind the quay wall and not from the adjacent timbered platform to the West Yard basin.

It is anticipated that an extended arm piling rig (specific machinery to be confirmed) will be used to implement the piles. A typical example of this machinery is shown below in Figure 17.



Figure 17 Typical Long Reach Piling Rig

The concrete for the piles and cap will be drawn to site in standard and suitably sized concrete mixer wagons and pumped to the pile location from Camden Lock Place.

Piling in Basin

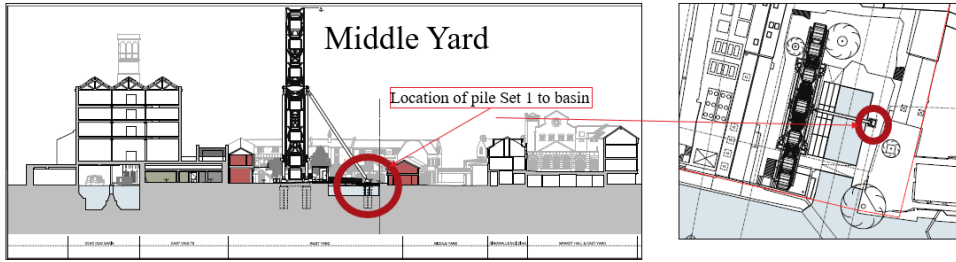


Figure 18 Location of Pile Set 1 and pile cap

8.7.2 Installation of West Yard piles (Set 2)

The pile to be constructed in West Yard, is required to mount the Observation Wheelbase, will be installed with either a smaller piling rig drawn to site via the Middle Yard access from Camden Lock Place or via Middle Yard and driven over the basin by use of ramps and a NATO Pontoon system (to be utilised for the Crane situation in subsequent phases).

Typical mini piling rigs



Figure 19 Typical mini piling rigs

The concrete for the piles will be pumped to location from the Camden Lock Place logistics area.

The following works will also be undertaken:

- Removal of granite sets to the West Yard to enable the piling (to be stored for reinstatement); and
- Protection (as required) of local services including the drains and cable routes within West Yard.

Pile Set 2 Observation Wheel supports

Note: Pile Set 2 is considered as 6 sets of piles and caps located on the east side of the basin

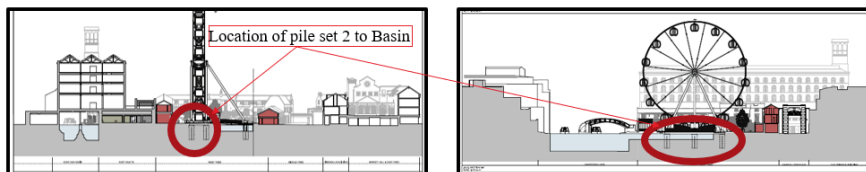


Figure 20 Location of Pile Set 2 (estimated at six sets and pile caps)

8.7.3 Making good

On completion of the piling works the area is to be cleared and made good for the installation of the wheel by the specialist supplier. Historic materials removed to enable the installation of piling will be stored away and subsequently cleaned for reinstatement when the wheel is moved on after the temporary permission has lapsed.

8.7.4 Number of staff

Activity	Number of Staff
It is estimated that three traffic marshals and a site manager will always be present on site during the works.	4
Piling will potentially require a driver, supervisor, and labourer	3
Spoil removal will require an excavator and potentially a 1-3 tonne dumper. This would traditionally be assisted by a “shovel” or labourer	3
Concreting will require a gang of potentially four plus driver to manage the hose and operations.	4
Total team for the phase is estimated (excluding delivery drivers) at about (Peak):	14

8.7.5 Preparation of the works programme

The programme for the preparation stage is estimated at about two weeks with one week being used for the piling with a few days either side for set up and take down (including making good for access for the wheel erectors).

8.8 Task 4: Installation of the Observation Wheel

The works are anticipated to take place in a number of phases:

8.8.1 Phase 1 Enabling

To protect the historic cobbles within the Market, suitable protection will be laid down along Camden Lock Place, West Yard and Middle yard for the areas required to for the wheel implementation. Where required, street furniture including covered street seating and signage etc. will also be removed. Where necessary tree pruning and tree root protection will be undertaken.

To enable the lifting of wheel components into place it is proposed that a barge will be installed within the West Yard basin. It will be stabilised to allow a crane to undertake lifting work. In preparation of this works to include desilting and levelling West Yard basin for the sinking of a barge will also be undertaken.

Activity	Number of Staff
It is estimated that three traffic marshals and a site manager will always be present on site during the works.	4
Protection of paving (estimated) for sheeting	4
Protection of services (specialists)	3
Safety boat requirement during the over water works	2
Arboricultural works	4

Desilting operations (by impeller)	2
Total operatives (Potential on site)	27
Total team for the phase is estimated (excluding delivery drivers). Not all activities will be run concurrently:	16

8.8.2 Programme for enabling

The programme will be flexible but considered to take about a week to remove material/granite sets, with other activities being undertaken around that time.

As such it is estimated that a three-week programme will be required to undertake the works.

8.8.3 Phase 2: Installation of the wheel

The installation of the wheel is to be undertaken by the Observation Wheel manufacturer. The company has extensive experience of undertaking similar works around the world.

The erecting will follow a simple format using a tried and tested approach with prefabricated elements.

Wheel components will be brought to site in approximately sixteen shipping containers. Each delivery will be timed to arrive to enable the next stage of works. It is proposed that the shipping containers will arrive to site via Camden High Street, then reverse under supervision into Middle Yard, where the containers will be offloaded, and the empty truck will then leave site in a forward gear.

An indicative breakdown of components by shipping container is shown in Figure 21.

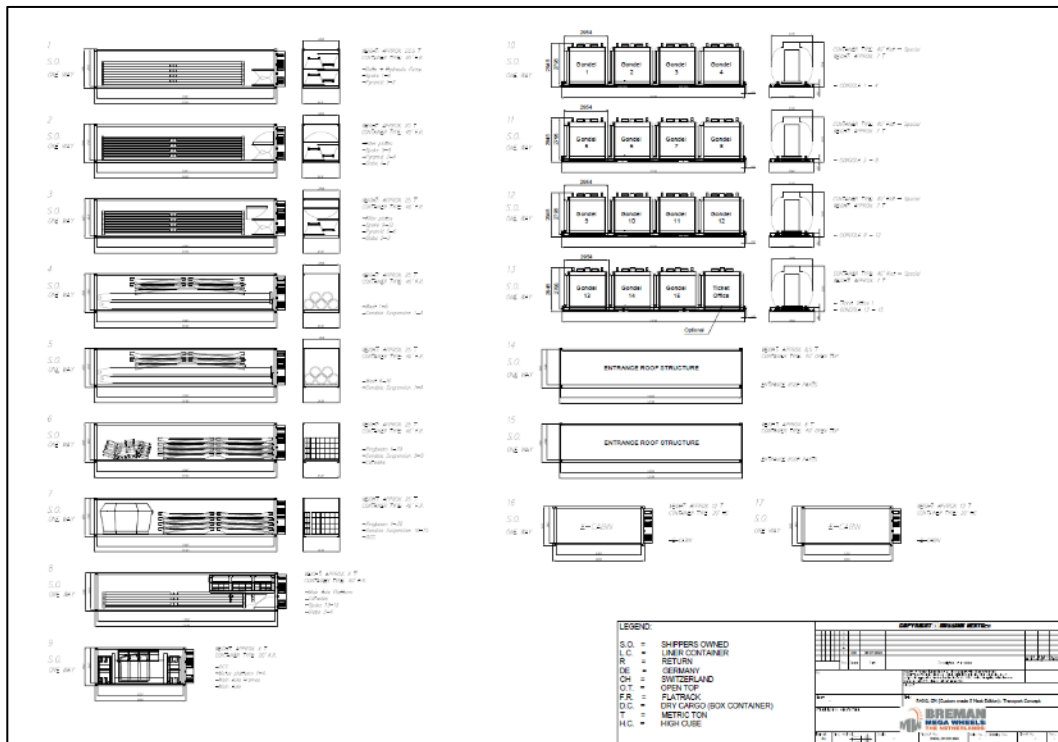


Figure 21 Wheel delivery by truck (provided by the wheel manufacturer)

Appropriate permissions will be sought from the Council in advance of these activities being undertaken.

The proposed access and site layout for the wheel implementation is shown below in Figure 22

HGV / Container access and site layout

A reverse is required from the Camden High Street for HGV traffic **ONLY**

All other vehicles can be turned on site through either a 3 point turn in a controlled environment or by a managed reversing manoeuvre in to West Yard.

It may be reasonable to undertake this manoeuvre with a trailer and this will be investigated further.

Early or late deliveries for container delivery HGV and crane delivery would be considered as best practice.

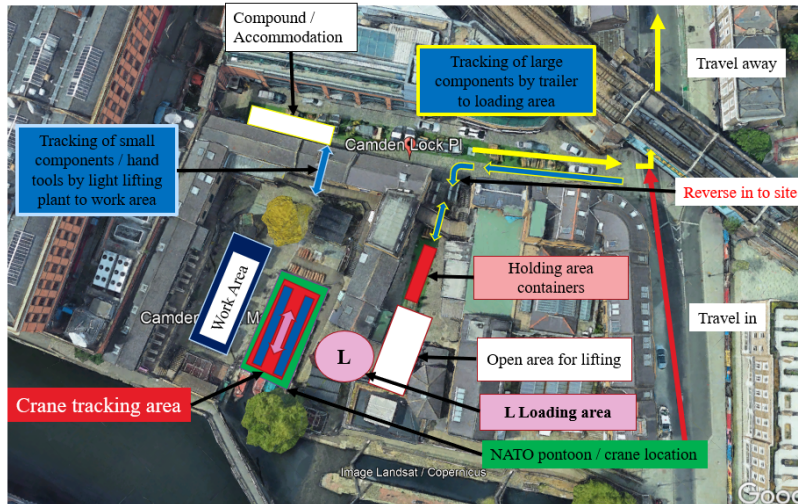


Figure 22 HGV and container access into Camden Lock Place

To ensure access via Middle Yard to the lifting location is achievable, a swept path analysis was undertaken to prove the consideration. This is shown in Figure 23.



Figure 23 Middle Yard swept path analysis – containers reversed in

Initially the wheel supports/frame will be erected. The installation will follow the process diagram in Figure 24.

Observation Wheel support implementation plan

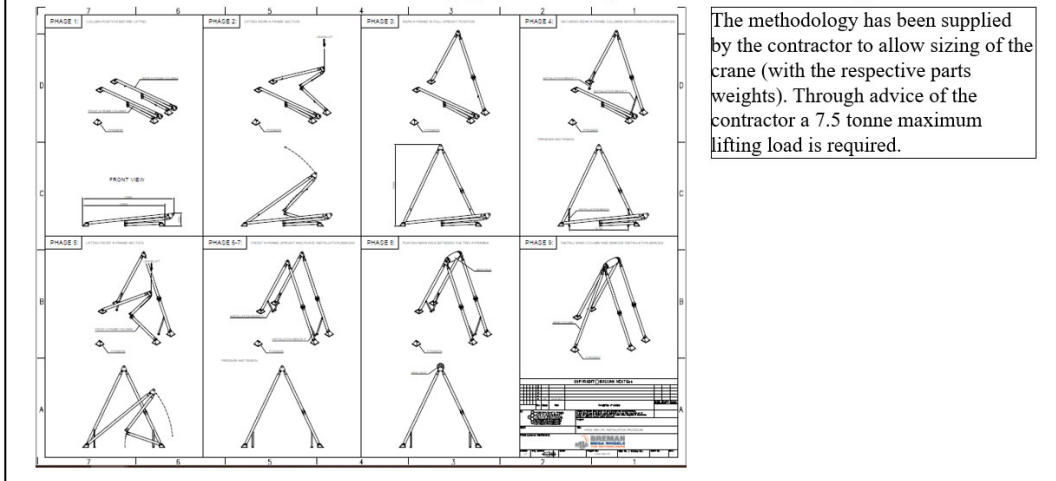


Figure 24 Observation wheel support implementation process

As noted in the diagram the legs will be attached at ground level to the pile caps and then raised and braced when ready. On completion of the legs (including anchoring) the spokes and heel components will then be attached onto the secured frame and central hub.

8.8.4 Lifting of wheel components

The lifting of the Observation Wheel central hub, spokes and wheel components and gondolas will be undertaken by a 40-tonne crane approximately and situated on a NATO or similar submersible pontoon that will be floated to site under tow and then sunk into the West Yard basin.

The crane will then be driven on to the pontoon via a suitable ramp system from Middle Yard. To enable access for the crane and delivery of shipping containers it will be necessary to temporarily remove the footbridge that spans the access to Middle Yard to enable access for the shipping containers and crane.



Figure 25 Footbridge across Middle Yard access to be temporarily removed

On completion of the lifting operations, the crane will leave the pontoon, and retrieve the ramps prior to be removed from site.

The pontoon will then be re-floated and drawn away from site back to its source depot by tow. The Applicant has been in discussions with WHH Barges, a specialist company with experience of providing this

service. The Applicant and the pontoon contractor will ensure all relevant permission are agreed with the Council and Canal River Trust in advance of works in the canal being undertaken.

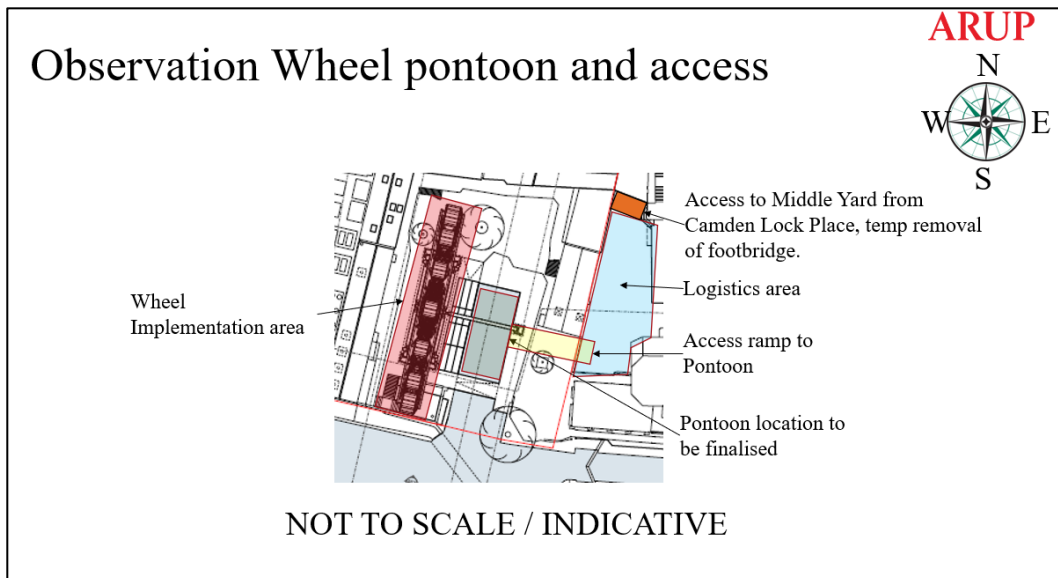


Figure 26 Proposed Observation Wheel pontoon arrangement

Once the Observation Wheel has been erected the footbridge across the access to Middle Yard will be reinstated.

8.8.5 Observation Wheel implementation numbers on site:

Activity	Number of Staff
It is estimated that three traffic marshals and a site manager will always be present on site during the works.	4
Wheel implementation	8
Crane operative	1
Total team for the phase is estimated (excluding delivery drivers) at about (Peak):	13

8.8.6 Observation Wheel programme

The wheel manufacturer has indicated that a two-week programme for the wheel build with a set up and take down of approximately three days either side. Preparation of the West Yard basin to accommodate the pontoon barge is likely to take 2-3 weeks in advance of the wheel implementation.

8.8.7 Prefabricated components

To ensure the correct lifting vehicles are utilised the wheel manufacturer has supplied a parts list and weighed all key members and structures to be erected as part of the Observation Wheel.

Element	Weight [kg]	Quantity
Pyramid	1.500	5
Column segment	2.858	8
Column (diagonal) segment	2.965	2
Main Axle	900	1
Globe	685	2
Spoke	3.626	15
Inner Ring 1	18	30
Inner Ring 2	54	30
Ring Beam	1.142	30
Gondola Suspension	330	15
Gondola	1.300	15

Figure 27 Weight and quantity of wheel components

8.8.8 Removal of the wheel at end of temporary permission

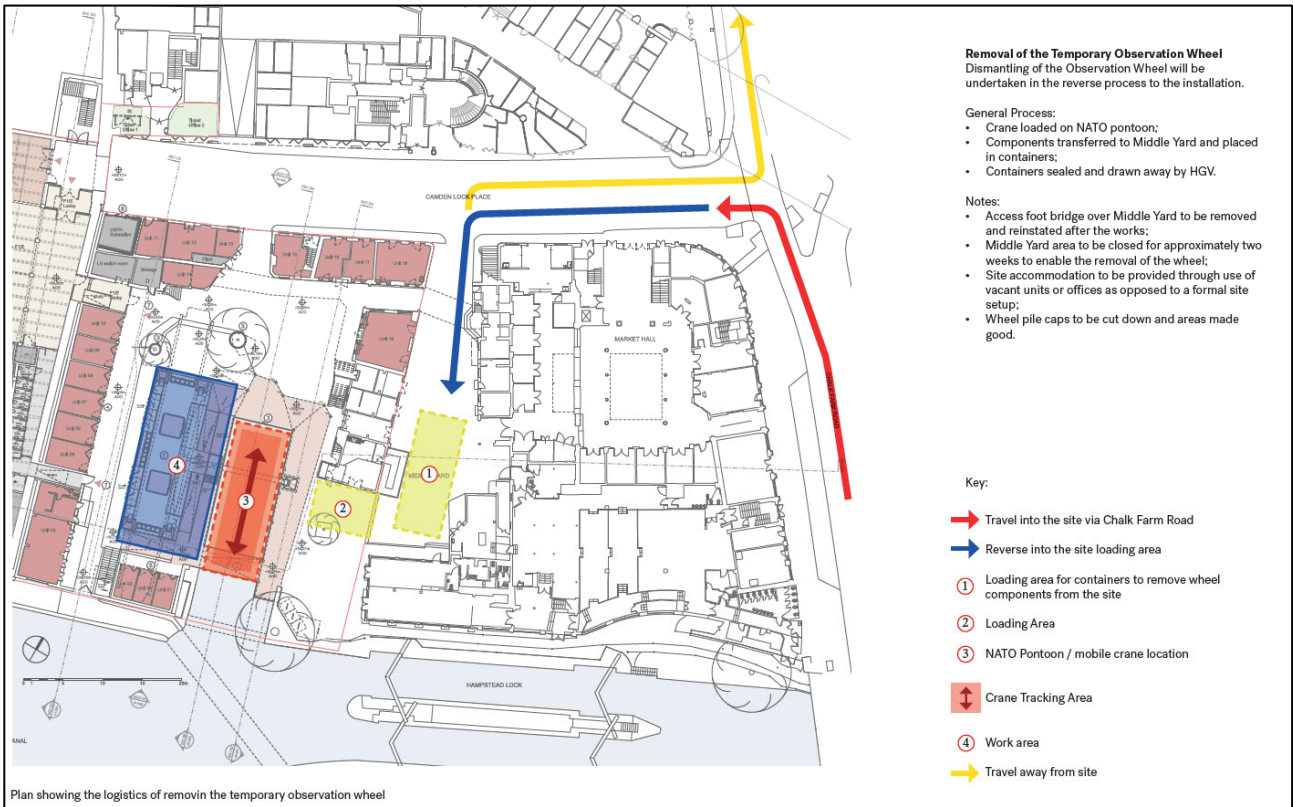


Figure 28 Deconstruction of Wheel

At the end of the temporary permission the wheel will be deconstructed in line with its implementation.

The key principles are:

- West Yard and Middle Yard will be closed for approximately two weeks to allow the usage of the yard area for dismantling of the wheel and packing of the containers;
- The Middle Yard foot bridge at the access to Camden Lock Place will be dismantled and reinstated after the completion of the dismantling works;
- The footbridge across the West Yard basin will be removed;

- Protection will be provided to the cobble roadway and appropriate measures instigated for separation of the public from the works;
- The Middle Yard will be closed for the duration of the works;
- A NATO pontoon will again be provided to act as the crane base and be situated in the West Yard basin;
- Dismantling will be undertaken in reverse to installation (remove pods, then wheel elements; then support legs);
- All parts will be lifted to Middle Yard and installed safely into the appropriate container and lifted on to a HGV (reversed on to site) which will then drive forward off site;
- Reinstatement work including removal of pile caps and return of cobbles to West Yard.

The list is not exhaustive, it provides an overview of the anticipated wheel deconstruction and reinstatement works. The application is accompanied by a Reinstatement Strategy report, this details the works to be undertaken once the wheel is removed from site.

9. Electrical sub station

To improve the electrical delivery to Camden Market the current substation on located on Camden Lock Place will be upgraded.

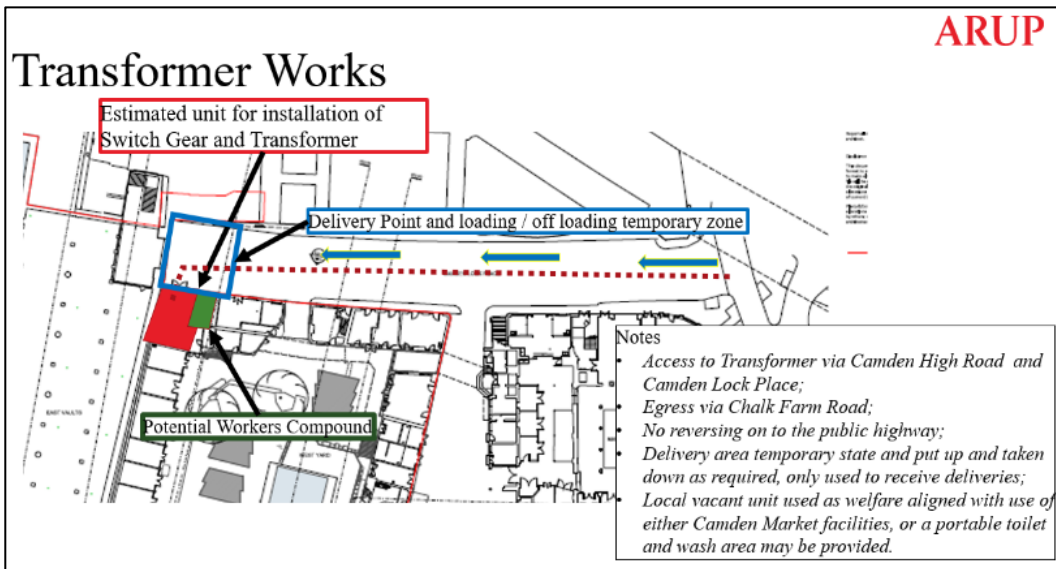


Figure 29 Transformer works

A new sub station will be formed within a unit (to be agreed) on Camden Lock Place.

The unit will house a transformer that will be fed by a new HV cable drawn into the unit from Camden Highstreet and along Camden Place.

The unit will then feed associated distribution boards to be located within the unit and then power drawn from that point to feed the market.

The key works will include:

- Lifting, protecting, and replacing the cobble baguettes to Camden Lock Place;
- Excavation and fill of a trench suitable to take a HV cable (size to be agreed);
- Formation of a plinth (s) within the unit for mounting of an HV transformer and associated switch boards;
- Minor architectural structural amendment to the unit for integrity and improved security (inc. repointing, removal and replacement of damaged masonry, new doors, and windows (louvers) and general decoration;
- Installation as required of fire proofing and protection both to the room and 3rd parties;
- Installation of HV and associated plant;
- General electrical works (earthing, cabling, connections, testing, and commissioning).

The list is not exhaustive but to assist the reader in understanding the basic scope of works that will be developed through the design and surveys.

10. Traffic

10.1 Overview

The Client (through the design team) will ensure that the works are designed and carried out in such a way as to minimise disruptions to traffic flows causing inconvenience to the public or undermining the safety of road users.

Due to the nature and quantities of deliveries there are opportunities to use early or late slots (with the consent of the council and aligned with a policy of public transport strategies for workers attendance, this could alleviate the majority of site journeys.

Disruptive effects of construction traffic on designated routes outside of Camden again are to be minimised by consideration of a number of mitigations in advance of construction, to be agreed with the Council.

Except by exception, all, existing public access routes and rights-of-way during construction will be maintained or protected in agreement with the Council and other associated bodies. Where this cannot be achieved the developer will agree mitigations, including alternative routes and signage solutions both pedestrian and vehicular traffic.

Through the creation of a “Construction Liaison Group” (CLG), Where construction activities are planned on a number of sites in proximity to one another, contractors will where possible coordinate their requests for road / lane closures, access routes, lorry movements, etc. in order to reduce the impacts on the surrounding area for residents, businesses and other development projects and contractors. It is the intent of the Client that the project aligns itself with other construction sites, and either forms a CLG or joins an existing one to ensure local construction co-ordination is undertaken.

10.2 Site access

The site has only one road access, which is located at the junction of Camden High Street, Chalk Farm Road and Castlehaven Road. Access to the site will be managed by both traffic marshals and site security, the site access will be enabled just prior to deliveries, and then maintained open until such time that it is safe to close access to the site.

Camden Lock Market is currently accessed by large delivery vehicles, it is not considered that there will be any vehicle size issues for standard sized Heavy Goods (including 6 axel articulated / draw bar 44 tonne) type vehicles.

It is not expected that any loads to site will be “out sized” or greater in size than a standard UK Heavy Goods Vehicle (HGV) however if this were to be the case in the future, the principal contractor will develop a design for the specific vehicle and provide evidence of manoeuvrability and a logistics plan to the Council prior to the delivery.

Note: the Camden Wheel is of modular construction and will be delivered in standard size containers and will not require special consideration. The only other large kit (fixed size) will be related to building plant and the substation and are considered to be transportable on 10m rigid or smaller HGV class vehicles.

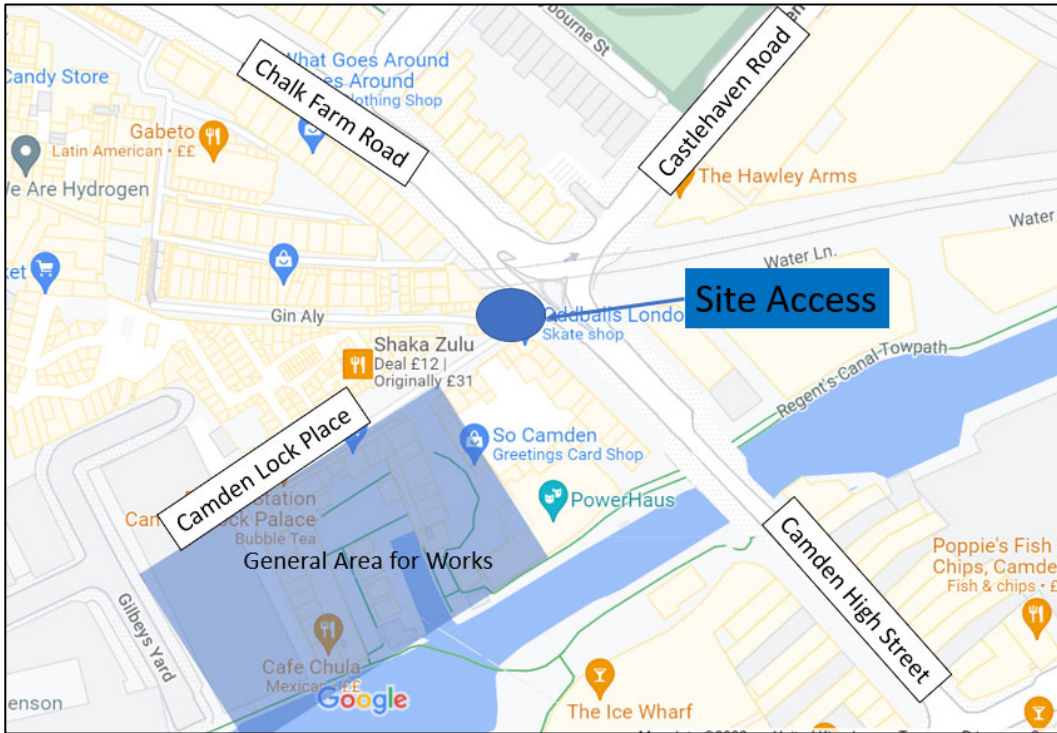


Figure 30 Location of Site Entrance

10.3 Ingress and egress from site

At all stages of the construction phase, the site will have vehicle segregation to maintain a safe distance between people and vehicles on site.

All vehicles will be met by traffic marshals. All manoeuvring on to site will be directed by the marshals which may include reversing manoeuvring on to the site with the traffic marshals using concertina barriers to stop traffic to maximise safety to both those on site and third parties.

All egress from the site into the public highway will be undertaken in a forward gear.

10.4 Management of deliveries / pick ups

Deliveries and collections to site will be required on a regular basis and sizes of vehicles will vary. To minimise visits by road vehicles, the Applicant is considering construction waste removal by barge, and will negotiate with their current waste supplier, iRecycle, to enable this.

Due to the single point of access into the site as well as the close proximity of the public and with the site being on an arterial route into London, careful and close management of deliveries to site will be required.

The cross over from the pavement to the property will be managed / marshalled to prevent any major disruption to pedestrians passing by.

The Principal Contractor will be required to implement a managed system of material movements to and from the site to ensure that there is no congestion of vehicles on the highways.

It is considered that generally loading and offloading will be conducted on site and within the confines or directly next to the working area.

If any offloading is required to occur from the public highway, permissions will be sought on a need-by-need basis and a full Method Statement detailing delivery details, size, timing, durations, special lifting requirements etc. and request their approval from the Council to proceed.

10.5 Electronic booking system

All deliveries to site will be organised through an electronic “booking-in” system, managed by the Principal Contractor. Each delivery will be allocated a specific time slot. Typically, failure to adhere to their time slot may result in a sub-contractor’s delivery being denied access to the site. Waiting on street for access to the site will not be permitted.

10.6 Traffic marshals

All deliveries will be met by a suitably sized team of traffic marshals to ensure safe passage into site, and safe manoeuvring on site.

The marshals are specifically trained in vehicular safety management.

The marshals will also be trained in the use of safety equipment that can be used from time to time, such as concertina crown barrier etc. to stop any interaction between manoeuvring vehicles and pedestrians.

All traffic marshals will be qualified for their role and their qualifications registered for periodic inspection by the Council.

All traffic marshals will wear full PPE including:

- Helmet
- Safety Glasses;
- Hi Visibility coats or Vests;
- Hi Visibility trousers;
- Gloves; and
- Protective footwear.

10.7 Schedule of deliveries

A schedule of predicted size and frequency of vehicles will be finalised by the contractors. Vehicle movements/deliveries during peak times of activity will be minimised, namely:

- Highway and school peak hours: 08:00-09:30.
- School finish: 15:00-16:00
- Weekends.
- Any other hours that may be requested by the Council.

Any vehicular movement for site deliveries outside of the normal working hours will need to be agreed with the Council in advance.

10.7.1 Out of hour deliveries

Consideration will be given to early and late deliveries and collections to reduce any traffic congestion during the peak periods.

The main deliveries that will require careful planning will be the container lorries bringing the Observation Wheel components and the mobile cranes. Out of hours arrivals and departures to site for these vehicles would minimise any adverse impact on the highway network.

Where out of hour deliveries are considered, the contractor will ensure that the correct number of traffic marshals are available to undertake receipt of the loads.

10.8 Vehicles manoeuvring on site

The Principal Contractor will endeavour to:

- Maintain safe manoeuvring on site all vehicle paths will be detailed out to provide best practice segregation from the site operatives (and agreed with the delivery supplier in advance);
- Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London Non-Road Mobile Machinery standards, where applicable;
- Reversing operations (may be required due to the linear nature of the site) but will be minimised as far as is practicable and fully managed;
- Traffic marshals will be used on site to assist manoeuvring;
- All vehicles will be maintained correctly within the cab to ensure that no objects or personal effects can obscure the driver's vision;
- All vehicular windows and mirrors will be maintained correctly and in a clean state and window wash will be made available on site to ensure compliance;
- Where vehicle manoeuvring cameras are used, these will be inspected for cleanliness and drivers will be trained in their usage so as to ensure that changes in lighting areas etc do not confuse the driver.
- Impose and signpost a maximum-speed-limit of 10 mph on surfaced haul roads and work areas;
- Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.

10.9 Construction vehicle numbers

It is envisaged that the site will be a low vehicle usage site over and only over a short duration. Through the wheel activities, it is estimated that:

10.9.1 Camden Wheel

Vehicle	No.	No. Rate per hour	Comment	Journeys
HGV	2	0.20	Containers with kit for erecting	4
LGV	2	0.20	General Deliveries	4
Total	4	0.4	Combined	8

10.9.2 Interchange House

Vehicle	No	No. Rate per hour	Comment	Journeys
HGV	4	0.40	Builders' materials	8
LGV	4	0.40	General Deliveries	4
Total	8	0.80	Combined	12

10.9.3 Sub Station

Vehicle	No	No. Rate per hour	Comment	Journeys
HGV 1 off	2	0.10	Switch gear and transformer <u>over 2 plus days</u>	4
HGV	0	.0	Builders' materials	0
LGV	4	.40	General Deliveries	4
Total	5	.5	Combined "peak" (not total no.)	10

10.10 Construction vehicle number conclusion

At peak there will be 2 potential vehicles an hour, but this should be for 2 days of the site only.

The general peak could be about 12 vehicles a day or 1.2 an hour if the interchange works were combined with the substation works. Though this is considered unlikely due to the tightness of the site.

10.11 Staff journeys to site

The developer will implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).

In order to support efforts to minimise the effects of construction traffic on the surrounding highway network, there will be no formal car parking provision on site for construction workers. Construction personnel would therefore be encouraged to use other forms of transport to travel to the site.

Given the site's proximity to excellent public transport services, it is envisaged that most construction personnel would travel to the site by public transport including:

- London Underground;
- Camden (Northern Line)
- Bus no.s:
24 - 27 - 29 - 31 - 46 - 88 - 134 - 168 - 214 - 253 - 274 - N5 - N20 - N27 - N28 - N29 - N31 - N253 - N279

Certain trades may require short-term parking for vehicles due to the transportation of specialist equipment/ plant requirements. Limited drop off / pick up parking will be provided on site, but only for this purpose. These vehicles will generally be sized so as to be able to drive directly forward on to site, and turned safely prior to exit in a forward manner.

10.12 Car parking on site

Due to the constraints of the site in relation to its build / deconstruction complexity and the local environment car parking is prohibited. This should not affect transportation to site with most workers considered to use the local public transport infrastructure.

Car parking is available off site locally at:

Lomax Car Park: Curnock Estate Car Park 38-40 Pratt Street, London

JustPark: Camden St, London NW1 9PA

Express VPN London NW1 8NZ

Euro Car Parks: Underhill Street, Camden Town

Carparking facility will be notified to all workers and attendees to the site to ensure that local parking facilities are not overused by contracted individuals to minimise local parking issues.

It should be noted that the number of staff on site will not be excessive. During the Installation of the Wheel and is not considered to be in excess of 15 workers (including traffic and site management). The greatest number on site may rise to 25 to 30 but due to the size of the site, it would not be able to cope with large numbers and with the quality of public transport in the area, it is not expected that there will be a significant number of employees driving to site.

10.13 Access by neighbours to their buildings

In line with good neighbour relations, the contractor will conduct full negotiations with the adjacent landlords and tenants to ensure that there is a shared philosophy to deliveries, pickups, and access. An agreed route for good communication with all parties will be agreed and be bespoke where necessary for individual needs.

It is considered that access may be temporarily interrupted from time to time at the end of Camden Lock Place adjacent to Chalk Farm Road / Camden High Street and Castlehaven Road.

To mitigate traffic issues, and stoppages in footfall on the public pavements, all parking and kerb side drop off will be prohibited.

To further mitigate any stoppages to footfall on the public pavement, mobile concertina gates will be used to allow access and egress from site, and maintained on site until a delivery, minimising any obstacles on the pavement.

It is envisaged that all deliveries will be maintained within the site.

The Contractor will agree all access arrangements to Camden Lock Place with the LA prior to commencement of the works and ensure a traffic plan is shared with the local residents, and businesses.



Figure 31 Access to Camden Lock Place

11. Construction logistics and cyclist safety

The principal contractor will be required to operate with the following established construction schemes, namely:

- Fleet Operator Recognition Scheme (FORS); and
- Construction Logistics and Cyclist Safety (CLOCS) safety.

11.1 Macro and micro traffic routes

The sketches provided show anecdotal routes to the key roads and motorways that should be considered for large vehicle movements, as well as local routes through the project area and surrounds. This is not an exhaustive list. These roads include:

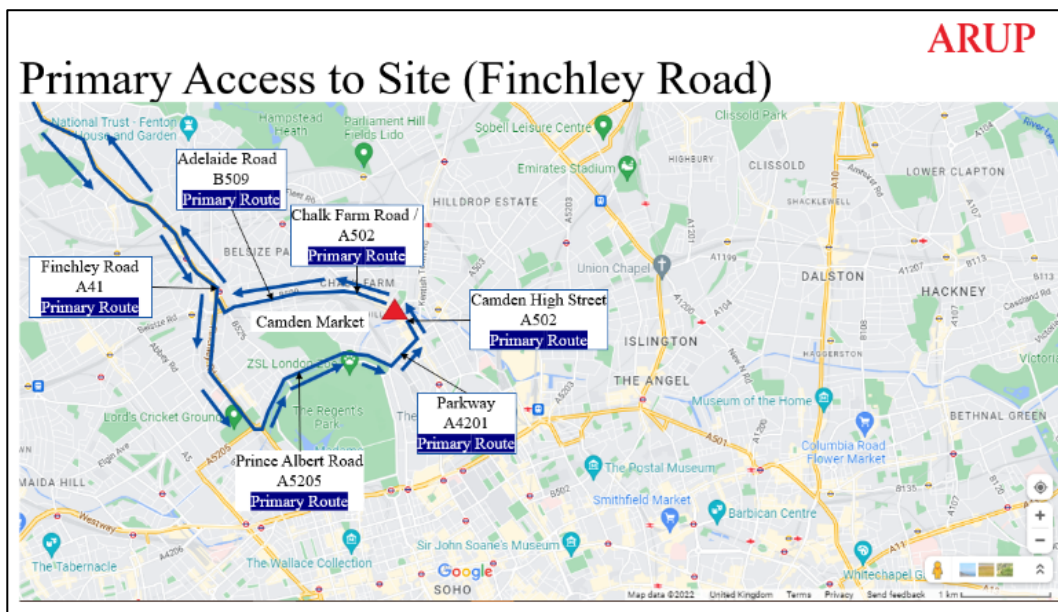


Figure 32 Primary Macro Route to Site

The primary route selected at this stage is from the M25 via the A41 Finchley Road. The route to meet the one-way system reasonably at Camden (South to North through Camden High Street to Chalk Farm Road runs via:

- London Orbital M25 or North Circular A406);
- Finchley Road A41;
- Prince Albert Road A5205;
- Parkway A4201; to Site

and return journeys via:

- Chalk Farm Road A502;
- Adelaide Road B509;
- Finchley Road; to the North (M25 A406)

A key alternative route could include the A1 route via Kentish Town. Other suitable routes will be investigated and be dependent on direction of travel to and from source locations of materials and components.

11.2 Macro logistics route risks:

Along with general risks of highways logistics there are two major risks to the route that will need to be considered, however, where possible the strategy is to maintain all traffic (minimal) to the key infrastructure routes to avoid delays in deliveries to site.

The traffic generated to site is not considered to be a significant material consideration to either highway operations (max no. two HGVs a day during the two weeks of the Observation Wheel works) or to the local and associated areas in and around Camden.

The key risk to the Finchley Road route will be the HS2 works and their status regarding their utility works on and about the Prince Albert Road and Park Way area.

Also, regardless of the route there is a running risk of increased traffic levels during the muck away segment of the HS2 works, which may affect the Camden Chalk Farm Road system adversely due to weight of numbers removing spoil from HS2 Euston.

11.3 Micro logistics

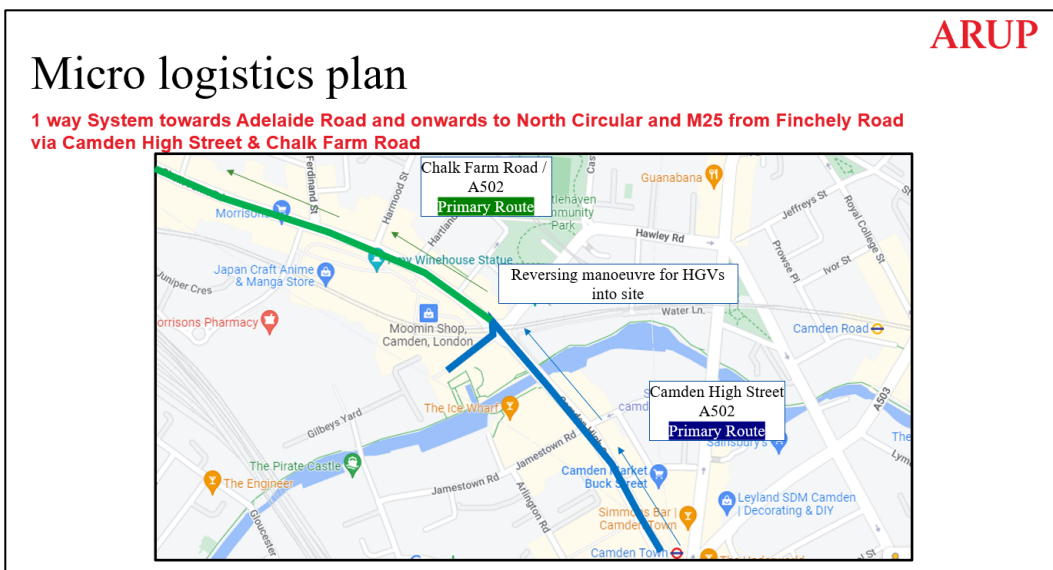


Figure 33 Micro Logistics showing access via Camden High Street

The micro logistics require a reversing manoeuvre to be conducted from the busy Camden High Street / Chalk Farm Road into the Camden Lock Place.

11.4 Highway works

11.4.1 Road and lane closures

Full road closures are to be avoided throughout the works, with the primary proposals to only include lane closures on a temporary basis to allow the connection of utility cables (power) up to the site boundary.

All considerations relating to potential road or lane closures will be considered well in advance to enable full and meaningful discussions with the Council and TfL especially as this is an arterial bus route.

11.4.2 Temporary structures on the highway

It is not envisaged that there will be a need for temporary structures on the highway. However, in accordance with best practice and if the need arises, the Developer will agree the extent with the Council in advance.

If fenced areas, or other temporary works were required on the highway, established, or maintained, this would be in accordance with all appropriate licences and conditions thereof issued by the Council or TfL by the Developer. Due to the nature of temporary works and associated risks, the developer will ensure that the designers are suitably qualified and aware of temporary works as defined in BS5975:2008.

11.4.3 Clearance of off-site temporary works

On completion of works in or on third party areas the Principal Contractor will clear away and remove from the highway all plant, surplus materials, rubbish and temporary works and structures.

The site will be left clean and in a condition to the satisfaction of the Council and other third parties with an implicit interest to the area.

Any potentially hazardous defects to the highway will be made good, prior to permanent reinstatement by the Council. It is accepted that the provisions of S278 Highways Act 1980, which may require landowners to make financial contributions towards the carrying out of highway works, may also be applicable. This would require agreement of the process and the need for prior inspection to be agreed before works commence.

12. Construction constraints

The building is to be constructed within a busy commercial area of the borough and the contractor should be aware that high levels of foot traffic may be generated periodically by the local shop's offices, hotels, and local eateries within the area.

The key constraints will be:

- Foot and vehicular traffic along Camden High Street;
- Local shops including Skinny Dip and Odd Balls (site entrance);
- Camden Lock Rail Bridge (Height Restricted);
- Residential dwelling (various);
- Camden Lock Bridge;
- Regents Canal (and physical canal wall toe);
- Camden Wharf (and adjacent commercial and residential premises on the far side of the canal); and
- Camden Market.
- Potentially other "third party" building sites will also be located within the area, however this will be reviewed prior to and during construction.

For further constraints, a full review will be required to be carried out in direct relation to each phase when agreed.

13. Programme

The programme has not been set at this stage for the works and is both dependant on the considerations of procurement and allowable development.

The programme will seek to minimise disruption to local residents, businesses and market operations.

The programme, where possible, will work tasks together and seek to work from the back of the site (Dead Dog Basin) towards West and Middle Yard towards Camden High Street.

The reasoning for this is that it will be safer to work out and remove third party interaction with vehicles traversing Camden Lock Place. If mitigations, or safety advantages can be found, this policy may be changed accordingly.

The duration of the works is still being considered and will be dependant on the linkages to the adjacent works and will be developed for the next stage of the CMP.

14. Potential impacts during works

A review has been undertaken of the potential source of adverse impacts, which can be associated with the proposed works. The results of this are presented in the table below.

Industry accepted practical means of preventing, reducing and minimising noise generation will be adopted in agreement with the Council and Canal River Trust. Appendix D provides additional detail to the table and will be reviewed and updated throughout design development, and with the contractor to ensure that the best mitigations can be in place prior to commencement on site to look to exceed the standards set by the Council and the Canal River Trust.

Issue	Potential Impacts	Mitigation
Noise	Increased road noise levels from vehicles. Increased noise levels from plant during excavation, and general de-construction works (e.g., from the use of air compressors and diamond cutters).	Defined working hours, baffles to certain plant, local acoustic screening. Vehicle routing. Beepers, radios etc. to be silenced. Engines turned off and all measures outlined in the considerate constructor's scheme. Use of a barge to transfer waste off site.
Vibration	Increased vibration levels from vehicles. Increased vibration levels from plant during works,	Defined working hours. Selection of appropriate plant and work procedures. Phased deliveries to minimize numbers of vehicles attending site, Vehicle routing. Engines to be switched off when vehicles are idle or on site
Dust / Air Quality	Windblown dust from ground surfaces, stockpiles, vehicles, work faces and cutting and grinding of materials. Exhaust emissions from lorries and plant delivering and removing materials including dust and particulates.	Cover all open backed vehicles; 'Water down' de-construction activities; Switch off vehicle engines when parked; Regular and controlled monitoring of air quality, including agreement; Implementation of trigger and action levels.

Waste	Waste generation and its disposal.	<p>Instigate Site Waste Management Plan and re-cycling program.</p> <p>Minimise packaging to site;</p> <p>Engage predominantly with suppliers who utilize recyclable packaging;</p> <p>Ensure deliveries to site are required at the time of issue to minimise damage to stored goods.</p>
Water	<p>Increased sediment loadings to storm water system.</p> <p>Potentially contaminated storm-water runoff.</p>	<p>Do not allow direct discharge of water into sewerage collection system or the Regents Canal transport System.</p> <p>Ensure site water is pumped into vessels for removal from site in a safe manner</p>
Traffic	<p>Traffic congestion caused by site traffic. Local traffic management will be required for delivery of mobile cranes and wheel component containers.</p> <p>Increased vehicle movements mainly consisting of Heavy Goods Vehicles (HGVs).</p> <p>Nominal levels of transfer of mud and material from vehicles onto the public highway.</p> <p>Disruption from abnormal or hazardous loads.</p> <p>Exhaust emissions.</p>	<p>Phased deliveries to minimise numbers of vehicles attending site, switch off vehicle engines when parked, minimise abnormal loads.</p> <p>Vehicle routing.</p>
Storage of fuels and construction materials	<p>Accidental spills, discharges to drains/storm-water systems.</p> <p>Contamination to ground.</p>	<p>All fuel tanks etc. to be banded, no discharge allowed into the sewerage collection system.</p>
Pedestrian access	<p>Restrictions within the market to walkways, footpaths and roads.</p>	<p>Erect hoarding to works areas and maintain traffic management marshals at all times of work.</p>

Hazardous and contaminated materials	Exposure of the workforce to deleterious / hazardous materials and contaminated land, mobilization of any source contaminants and creation of pathway from source to groundwater receptor.	Site investigation reports to indicate if any contaminated fill is present. COSHH assessments and careful implementation of associated working method statements to ensure that no hazardous materials find a path to groundwater source.
Ecology	Water / mud run off into the drains.	Do not allow direct discharge of water into sewerage collection system, utilise interceptors where necessary.
Energy usage	Indirect impacts associated with energy consumption such as CO2 emissions, depletion of natural resources, air pollution etc.	Site environmental plan to implement.

Table 3 Typical Site mitigation measures considered

Appendix A

Temporary works design management

A.1 Design requirements

The design and detailing for all temporary works and other required designs to facilitate the works will be carried out by qualified and experienced temporary works engineers.

All design management will be undertaken in accordance with BS5975 and established company procedures using QA systems SMS020 for Temporary Works.

To deliver the construction works successfully with the highest level of safety considered, early site investigations are critical to verify the existing site conditions under the guidance of our in-house structural engineering department. Proceeding onsite findings, calculations, calculation checks and drawings will be prepared to substantiate the conclusions provided ahead of works commencing.

In line with our procedures, when designing due cognisance is given to:

- The proximity of third-party assets, public footways and bridges, the Regents Canal (and associated locks), and roads;
- The protection of adjacent third-party assets and structures;
- Management of traffic on external and internal roads;
- Services and utilities that are to remain in place.
- The temporary works requirements for the site may include designs for:
 - Construction of hoardings;
 - Construction of protective decks / screens & debris fans etc.
 - Localised deconstruction scaffolding (oversailing water, as well as at height, to the perimeter facades, to include fans and Monorflex type safety systems and materials if required;
 - Pedestrian walkway scaffold if required both on and off site;
 - Back-propping and or strengthening of the floors and walls facilitate the plant and machinery required for the upper-level demolition during the refurbishment of the retail units;
 - Mobile crane out-rigger pads to facilitate lifting demolition plant and other materials and equipment and or potentially piled bases for fixed cranes;
 - Suitable temporary welfare structure for the project;
 - Manhole and access chamber's steel plate covers to enable the movement of heavier vehicles for the project; and
 - Cobble stone protection and sub surface services protection.

The list is not exhaustive, but representative of the typical temporary works required for the site.

A.2 Design risk management

All designers' risks will be rated and recorded on a standard risk matrix proforma using a scale of impact and severity.

Remaining risks that are not able to be eliminated through design shall be clearly marked on drawings.

Method statements with risk assessments and designs for the installation of the temporary works will be produced prior to the works commencing for comment and approval by the Client design team. To ensure only up to date design information is in use all issued design information will be controlled by that information being recorded in the site drawing register.

Risk Register

Element:	Hazard/Risk:	Impact:	Control Measures & Notes:	Residual Impact	Input required from:	Risk Owner:
Ground stability	Ground gives way to heavy loads	Medium	Provide ground protection	Low	Structural engineer	LabTech
Extended reach and mana	Ineffective crainage of components	Medium	Change location of reach if possible	Low	Crane operator	LabTech
Interface with protected trees/roots	Tree or ground gets damaged	Medium	Zone around tree	Low	Structural engineer/agn culturalist	LabTech
Interface with surrounding	Crane operations damages adjacent buildings	Medium	Minimise jacking over/close to existing structures	Low	Structural engineer/crane operator	LabTech
Working next to and over v	Interface with water/drainage	High	Working close and water legislation. Safety team.	Medium	Crane operator	LabTech
Traffic management to lift	Collisions/traffic impact	Medium	Traffic marshals	Low	Contractor	LabTech
Travel over protected/histo	Damage to historic features	Medium	Travel slowly and protection to cobbles.	Low	Contractor	LabTech

Figure 34 Sample of Risk Register

A.3 Design installation management

All design management will be undertaken in accordance with the contractors Safety Management System procedures and best practice for Temporary Works and all associated design documentation.

An appointed Temporary Works Coordinator (TWC) will have overall responsibility for managing the installation of temporary works and this will be managed on site by an appointed Temporary Works Supervisor (TWS). The role of the TWC and the TWS may be combined depending on works.

Works progress will be checked regularly by the structural engineer against the Temporary Works Register.

A.4 Exchange of design information

The names and contact details of all participants in the design process will be placed on a Temporary Works (TW) Directory so that all of the relevant parties are invited and included in all TW communications or at least receive the minutes of each meeting.

The exchange of design information will be accomplished by holding regular design information exchange and approval meetings at predetermined times with the Applicant's design team and other interested parties such as the Temporary Works Coordinator and Temporary Works Supervisor and the Temporary Works Designer. The outcome of the meetings will be emailed to all relevant parties, through email or other electronic data transfer systems as agreed (such as "Drop Box", "One Note" etc.).

Appendix B

Hoarding

B.1 Standard Hoarding

All work sites will be completely fenced to prevent public access with lockable gates, using LFB accepted locking systems.

All hoarding will comply or better BS476 part 6 and 7 with class 0 certification for fire rating.

The standard public facing hoarding will be 2.44m minimum height, plywood faced, timber framed boundary hoarding, of a surface density of not less than 7kg/m² for normal security and noise limitation requirements.

Non-standard height hoarding may be required for the surrounding of stockpiles and or high-level construction works that are not easily scaffolded and or dust is a high risk. Where hoarding is to raise above the 2.44m height prior agreement will be sought with the Council to ensure compliance with guidance on over height hoarding is maintained.

Through discussion with the Council, the contractor may at the behest of the authority move to recycled (and recyclable) PVC hoarding in a 2.44m height, fire rated to BS476 part 6 and 7 with class 0 certification.

Where local terrain or structures would allow the fence to be scaled by potential intruders, the height will be increased reasonably to protect the site.

All hoarding will be designed to minimise opportunities for anti-social behaviour and rough sleeping.

The Principal Contractor will ensure that all hoardings are painted in a plain uniform manner but will have contrasting markings at projecting angles (to assist the visually impaired) to the satisfaction of the Council. Where the Contractor / Developer requires specially designed exterior decorations they will request the council's approval and, where necessary seek consent under the Control of Advertisements Regulations.

Signage will be displayed on the hoarding for health and safety purposes, Considerate Contractors, and general site signage. All signage will be agreed with the Council in advance of installation.

The Principal Contractor will design a commercial brand signage for use on the hoarding and agree the signage with the Council prior to instigating its installation.



Figure 35 Typical example of branded Hoarding (Sample Google images)

All solid-state hoarding and site fencing and barriers will be maintained using controlled wet methods for cleansing and avoiding water runoff from the activity.

B.2 Green hoarding

Due to the proximity of the site to residential areas and the busy commercial Camden Market the contractor will consider the use of Green hoarding with the Client and the Council. Where this is considered desirable

and the duration of the fence line is greater than 12 weeks, the Client will agree the extent of the “green” area with the Council and instruct the contractor to install as required.



Figure 36 Example of green hoarding

B.3 Special circumstances

The Applicant accepts the special nature of the area on the human and architectural levels and the areas importance in driving the heart of Camden’s tourism industry. The developer will accept guidance from the Council in relation to

Incorporation of artwork visualising the proposed development or photographic views of the local area or incorporating artwork, mounted onto standard well-maintained hoardings.

Incorporation of viewing windows into standard well maintained hoardings to preserve important views and provide opportunities to observe construction activity.

Incorporation of a full cover of climbing plants, with the plants trimmed back only to allow for essential lighting and health and safety signage.

B.4 Hoarding gates

Gates in the fencing or hoarding will be, as far as is practicable, positioned and constructed to minimise the noise transmitted to nearby noise-sensitive buildings. This will take account of noise emerging directly from the construction site direct and noise from plant entering or leaving the site.

Any gates will be designed such that they open inwards onto the site or slide within the site lines;

Access gates are to be located at least 10 m from receptors where possible;

All gates will be of a suitable standard and size for vehicles accessing and egressing the site.

B.5 Hoarding lighting

All hoarding will be reviewed for lighting requirements at onset and throughout the seasons with the Council and where and when it is reasonably deemed that additional lighting is required, this will be provided by the contractor.



Figure 37 Typical hoarding lighting

Generally lighting to site boundaries will be provided as standard.

Illumination will be designed to meet the minimum sufficient to ensure the safety of the passing public, including disabled people, and security, when on surrounding footpaths, roads, and amenity areas.

B.6 Scaffolding

Scaffolding on site will not be wholesale and localised to support construction activities as “raised platforms” of work. As such the CMP sees the scaffold as temporary works considerations only and will not be discussed at this point.

It is not considered that any of the works will require the wrapping of any building or works over 2 storeys.

B.7 Hoists / lifts

Due to the nature of the site and the available access through existing stairways and lifts, it is not envisaged that hoists and lifts will be required as temporary structures.

Through the development of the design and construction methodology it is probable that smaller demountable hoists (mechanical block and pulley type) may be required, however these will be maintained away from the general public, formed as required within demarcated exclusion zones and considered as temporary works.

Appendix C

On site practice

C.1 Introduction

This appendix details ways of working when on site including Health and safety,

C.2 The Considerate Contractors Scheme

The contractor will be chosen based on their ability to undertake the works in a collaborative manner, both with the Client and their design team, and the Council.

The contractor will uphold all best practices and demonstrate this by enrolment within the Considerate Contractors Scheme. This will ensure that they are up held to a third party standards supervision to meet the goals set by the CCS:

Care about *Appearance*

Respect the *Community*

Protect the *Environment*

Secure Everyone's *Safety*

Value the *Workforce*



C.3 Health and Safety

C.3.1 Health and Safety bodies

The following table contains the address of the pertinent Health and Safety bodies including the local hospital

Body	Address	Postcode	Telephone No.
HSE	151 Buckingham Palace Road London	SW1W 9SZ	0300 003 1747
Local Hospital	Royal Free Pond Street London	NW3 2QG	020 7794 0500
Local Hospital	St Mary's Hospital Pread Street London	W2 1NY	020 3312 6666

Table 4 Health and Safety bodies

C.3.2 Site induction

All persons employed on or visiting site will be subject to a health and safety induction so that they are aware of the hazards present on the site and the restrictions imposed under the Principal Contractor's health and safety management procedures for that area of works.

All visitors will be accompanied around the site by a representative of the employer (generally the appointed contractor) unless previously agreed otherwise. All health and safety inductions will be recorded on a site-specific register that will be available for the Council to review by appointment.

C.3.3 Health and Safety: General

All site work must be carried out in accordance with the provisions of the Health and Safety at Work Act 1974 to the satisfaction of the HSE or its local officer.

The Principal Contractor, for each area of site, will ensure that mechanisms are in place to ensure that the employers, employees and the self-employed, are not exposed to risks to their health and safety. And that every employee while at work will take reasonable care of the health and safety of themselves and of other persons, and to cooperate with their employer or any other person about any duty or other statutory requirement.

The Principal Contractor will ensure that all statutory regulations made under the 1974 Act e.g., provision of personal protective equipment, ladders, lighting, signs, electrical equipment, manual handling are complied with during all construction works.

The developer's nominated representative will ensure that appropriate industry standards for health and safety are applied, and that continuous improvement in safety performance is sought, in accordance with the principles of HSG65 "Successful health and safety management", published by the Health & Safety Executive.

The Principal Contractor will abide with the below Summary of Duties Under Construction (Design Management Regulations 2015 (CDM 2015), i.e:

Principal contractor – A contractor appointed by the client to coordinate the construction phase of a project where it involves one or, more than one contractor.

Plan, manage, monitor, and coordinate health and safety in the construction phase of a project. This includes:

- liaising with the client and principal designer;
- preparing the construction phase plan; and
- organising cooperation between contractors and coordinating their work.
- Make sure:
- suitable site inductions are provided;
- reasonable steps are taken to prevent unauthorised access;
- workers are consulted and engaged in securing their health and safety; and
- welfare facilities are provided.

Contractors – Those who carry out Plan, manage and monitor construction work under their control, so it is carried out without risks to health and safety.

For projects involving more than one contractor, coordinate their activities with others in the project team – in particular, comply with directions given to them by the principal designer or principal contractor.

For single contractor projects, prepare a construction phase plan

Workers – Those working for or under the control of contractors on a construction site.

Workers must:

- be consulted about matters which affect their health, safety and welfare
- take care of their own health and safety, and of others who might be affected by their actions
- report anything, they see which is likely to endanger either their own or others' health and safety
- cooperate with their employer, fellow workers, contractors, and other duty-holders

Note this section is directly related to the HSE web site, source:

<http://www.hse.gov.uk/cdm/2015/summary.htm>

C.3.4 Health and Safety management system

The employers health and safety advisor will set out a structure for the site contractors to follow and abide with. The structure will outline the minimum requirements required for site by the employer, so as to ensure that all contracting parties working within the estate meet a good, standardised level of reporting and management. The system will be based on the principles of the Occupational Health and Safety Advisory Service's 45001 "Reduce workplace hazards and boost employee morale"

The contractors will then produce a health and safety management system in accordance with the principles of 45001. This system will include documentation defining the nominated undertaker's internal arrangements for managing health and safety on the project and the specific requirements for health and safety applying to all designers, contractors and sub-contractors appointed to work on the project.

The arrangements will include a system for management of risks. This will include all hazards being identified, and suitable and sufficient assessments made of the risk, followed by adoption of appropriate measures to eliminate the risk or to control the risk, so far as is reasonably practicable. In parallel measures will also be considered to ensure employee morale is kept positive during the build.

Where risks to the public are involved, these will be reduced to as low as reasonably practicable and will be managed in accordance with the guidance in HSG151 "Protecting the Public" published by the Health and Safety Executive.

The developer's nominated representative will continuously monitor the work of contractors and sub-contractors and will conduct a programme of audits and inspections to ensure compliance with the requirements of this Code and other project health and safety requirements.

C.3.5 Safety objectives for the project

This project involves some limited demolition or deconstruction and construction works adjacent to a number of public interfaces, third party assets, and water.

It is the aim of the project team to eliminate or minimise risk and to prevent ill health and injury to all the site employees, subcontractors, site visitors, site neighbours and the general public.

To meet these objectives the contractors will work diligently towards:

- Maintain zero notifiable accidents and incidents.
- Maintain and improve lost time accident record.
- Move away from safety legislation governance to a safety behavioural culture promoted via communication, coordination, and training.
- To comply with the procedures detailed within this document to achieve and maintain a safe working environment for everyone on site.
- Evaluate & measure performance against this plan through regular safety and environmental inspections and audits.
- To eliminate or minimise risk and control the residual risks.
- Prevent ill health to all those on site through health surveillance.
- Promote proactive safety management and reduce reliance on reactive safety management.

The Principal Contractor for each area of work will regard the above as principal objectives and these objectives can only be achieved by the cooperation of the company employees, subcontractors, the Client, and his representatives. Cooperation shall be at all levels within these organisations through the structures established under the Construction (Design and Management) Regulations. The Principal Contractor will collaborate with all parties to provide the organisation, advice, and resources to meet this commitment so far as is reasonably practicable.

C.3.6 Principles of prevention

The general principles of prevention as per the Management of Health and Safety at Work Regulations 1999 shall be adopted in addition to the above that will be to:

- Give collective protective measures priority over individual protective measures;
- Give appropriate instructions to employees.
 - (a) Avoid risks where possible.
 - (b) Evaluate those risks that cannot be avoided.
 - (c) Put in place measures that control them at source.
 - (d) Adapt the work to the individual, especially regarding the design of workplaces, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work, work at a predetermined work rate and to reducing their effect on health.
 - (e) Adapt to technical progress.
 - (f) Replace the dangerous by the non-dangerous or the less dangerous.

- (g) Develop a coherent overall prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors relating to the working environment.
- (h) Give collective protective measures priority over individual protective measures.
- (i) Give appropriate instructions to employees.

The above measures are not exhaustive but aligned best practice.

C.3.7 Management procedures

To ensure that the site is safe, management procedures will be developed to ensure best practice in working but understanding good audit & documentation and project staff attitudes and behaviours to better instigate best practice and inspire innovation in safety.

The appointed Safety Advisor will visit site on a weekly basis, or more frequently if deemed necessary, to carry out site inspections and produce the safety audit as well as interview site staff for comment.

In addition to the safety audits, the following techniques will be used for monitoring compliance with:

- Legal requirements – Inspection and reporting arrangements as laid down in Principal Contractors Site Management Systems (SMS);
- The health and safety requirements contained within this plan;
- The health and safety site rules;
- Regular safety advisors’ inspection / directors’ safety tours / quarterly safety reviews / sub-contractors meeting;
- On the record interviews with site staff;
- Off the record interviews with site staff;
- Instigation of an anonymous “whistle blowing” facility;
- Special requirements for public interfaces; and
- Principal Contractor’s Engineering Safety Management System.

C.3.8 Workplace inspections

Workplace inspections will be carried out by the Principal Contractor’s appointed site supervisor in control of the specific workplace, or a subcontractor supervisor, where considered appropriate.

All appointed site supervisors conducting inspections will be suitably qualified to undertake the review of the works that they are assessing.

Inspections will be recorded on the standard SMS (Safety Management System) Inspection Form provided within the Safety Management System and filed in the site office.

Where subcontractors are required to carry out such inspections, the responsible Principal Contractor’s manager will have a system in place to ensure the adequacy of the inspection process involving random inspection checks.

Inspections of temporary works will be carried out and recorded within a temporary works register that will be provided for review by the Council at their behest in a timely manner:

- Welfare facilities;
- Site Perimeter/Public interface areas for trip hazards, rubbish, and clear routes;
- Site hoardings and lighting;

- Site access gates;
- Water safety equipment / edge protection;
- Pontoon / marine working platforms;
- Scaffolding and alarm systems;
- UKPN Substation Protection;
- Exclusion and Restriction zones;
- Site temporary services i.e., water and electricity and any relevant meter readings;
- Floor loadings and back-propping;
- Temporary works structural retention systems;

This list is not exhaustive

The Temporary Works Co-ordinator (TWC) will maintain a list of personnel involved in the Temporary Works Process within the Temporary Works Register.

The Principal Contractor's supervisor will record, and file inspections carried out by the Temporary Works Team.

The temporary works for each parcel of work will be identified in fullness by the appropriate contractor prior to commencement of their works package.

C.3.9 Compliance monitoring

Compliance monitoring will be carried out to verify that agreed procedures and methods are being implemented and are producing the required results.

Compliance monitoring will be carried out by:

- The Principal Contractor's Project Manager
- The Principal Contractor's manager/supervisor controlling the area in which work takes place.
- Visiting personnel, including the allocated Safety Manager, Operations Manager and Directors.
- Observations and actions arising from monitoring will be tabled at the weekly planning meetings, minutes written and filed, and actions allocated to the responsible persons.

C.3.10 Ensuring safe places and systems of work (demolition)

The CMP will cover both the minimal demolition and the construction work. The CMP will include aspects of the DEMP (Demolition Environmental Management Plan) and ensure that the project achieves and maintains Safe Places of Work and Safe Systems of Work through following the below guidance and aligned with the Construction Measures below:

- 45001: 2018 Occupational Health & Safety Management Standard
- Health and Safety at Work Act (HSWA) 1974 section 2
- ISO 14001:2015 Environmental Management Standard
- ISO 9001:20015 Quality Assurance Management Standard.
- The perceived safety risks and relevant control measures particular to this project and is also intended to meet or exceed the requirements of the CDM Regulations 2015, Council standards and Client's expectations.
- The project will adhere to the following published guidance and British Standards:

- BS 6187:2011 Code of practice for full and partial demolition
- Mayor of London’s ‘The Control of Dust and Emissions during Construction and Demolition SPG July 2014
- The GLA’s ‘The Control of Dust and Emissions from Construction and Demolition: Best Practice Guidance
- In accordance with Policies 5.18, 6.3 and 7.14 of the London Plan 2011 and Policies DM J1, J6, H5, H8, H9, H10 and H11 of the Development Management Local Plan 2013.
- Camden Project Specific Demolition Specification as produced by the Designers.

C.3.11 Ensuring safe places and systems of work (Construction)

- 45001: 2018 Occupational Health & Safety Management Standard;
- Health and Safety at Work Act (HSWA) 1974 section 2;
- ISO 14001:2015 Environmental Management Standard;
- ISO 9001:20015 Quality Assurance Management Standard;
- The Construction (Design and Management) Regulations 2015;
- Personal protective equipment (PPE) at work regulations from 6 April 2022;
- Manual Handling Operations Regulations 1992 (MHOR) (as amended 2002);
- The Management of Health and Safety at Work Regulations 1999;
- RIDDOR - Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013;
- The Electricity at Work Regulations 1989;
- Gas Safety (Installation and Use) Regulations 1998 (GSIUR) as amended. Approved Code of Practice and guidance;
- The Control of Vibration at Work Regulations 2005 (the Vibration Regulations);
- The Confined Spaces Regulations 1997;
- Provision and Use of Work Equipment Regulations 1998 (PUWER)
- The Supply of Machinery (Safety) Regulations 2008 (amended 2019)
- The Control of Noise at Work Regulations 2005; and
- The Work at Height Regulations 2005.

The above noted list is not exhaustive but relevant to the considerations for the project and insurance that the project team are protected and provided a safe working environment.

C.3.12 Site rules

The site rules may vary from contractor to contractor on site, which is reasonable, however a base line set of rules will be agreed as below;

- All personnel shall undergo safety induction training;
- All personnel shall undergo “working by water” training;
- Appropriate Personal Protection Equipment shall be worn at all times;
- Every accident and near miss event must be reported to the Site Manager immediately;

- Any person found to be interfering with or misusing fixtures, fittings or equipment provided in the interest of health, safety and welfare shall be excluded from site;
- Smoking will only be permitted in designated areas;
- Visitors must report to Security and will be allowed entry at Site Manager's entrance. Whilst on site visitors must wear the appropriate PPE;
- Vehicle drivers must wear the appropriate PPE (when outside vehicle). Vehicles are not to be reversed on site unless under the control of an authorized banksman;
- Vehicle drivers must remain with their vehicle during loading / unloading;
- Safety signs and notices must be followed;
- The public must be protected from hazards associated with this work;
- No alcohol or illegal drugs are to be brought onto the site;
- No person who is under the influence of alcohol or drugs is allowed on site;
- Offensive or inappropriate language and provocative gestures are not allowed;
- No gambling, threatening or violent behaviour;
- No personnel shall indulge in fighting, horseplay or practical jokes within the site or its perimeter;
- Toilets and washrooms must be kept in a clean and hygienic state after use;
- Refuse must not be allowed to accumulate; work areas are to be kept tidy;
- Combustible materials are to be removed on a regular basis and disposed of in an appropriate manner;
- Transistor radios or personal audio devices are not to be used;
- Permission must be obtained from the Site Manager prior to any work on site on site;
- All site personnel, for their own safety and for the safety of others, are required to fully comply with their employer's statement of safe working method;
- Site fire and emergency alarms, equipment and instructions are designed to protect life.

C.3.13 Key risks to life and health when working for construction

While working in construction generally in a busy and "live" environment such as the Camden Market area of London, the risks include everything from slips, trips and falls to exposure vehicle strike and unwanted attentions to or from the general public. Some of the risks are denoted following but a full risk register will be included within the CDM documentation held for the project and this will be available on request:

- Environmental:
 - Sharps from drug usage;
 - Insect stings;
 - Sun burn;
 - Asbestos; and
 - Airborne fibres & materials.
- Construction
 - Slips, trips, and falls;
 - Working at height;

- Working in confined spaces;
- Vehicle strike;
- Falling objects;
- Electrocutation;
- Building and or ground collapse or destabilisation;
- Hand Arm Vibration Syndrome;
- Manual handling;
- Noise;
- Dust;

The above list is typical of risks considered for the works generally. Note working by water is separated out as a secondary section due to its importance in this location

C.4 Working on or near water (river) safety plan

Due to the proximity of the site to both covered and open-air locks, and canal, the Principal Contractor will form a “working on or near water safety plan”.

The Principal Contractor will follow a safety-first strategy and all activities over or by water will need to be fully risk assessed in advance of acceptance to proceed with that task.

All employees will be inducted to working on or near water and where appropriate will be given specialist training. All employees will be supervised and will remain aware of the risks related to the work in or near the water. Any employee found to be working recklessly or endangering others will be either “yellow carded” or “red carded” from site, and a near miss recorded for the incident.

C.4.1 Key risks when working near water

While working in or near water activities/jobs, the risks include everything from slips, trips and falls to exposure to contaminated water. Some of the risks are described following:

- Slips and trips at the water sources (edges);
- Moving heavy vehicles in the basin, and harbours areas (West Yard and Dead Dog basin);
- Slippery tow path and unmarked edges;
- Contact with contaminated water (chemical, substances, polluted, biological, etc.);
- Manual handling and lifting hazards;
- Exposure to Legionella Bacteria (biological & viral);
- The risk of falling into water and drowning;
- The risk of falling in and sustain injury due to water flow into the adjacent lock gates;
- Contact with contaminated water, presenting, for example, the risk of Weil’s disease;
- Exposure to extreme weather, whether it is direct sunlight or cold temperatures;
- Use of electrical equipment, tools, machinery around water, leading to electric shock electrical hazards;
- Trips, slips and falls;
- Impact with submerged objects;
- Floating or submerged debris;
- Hypothermia;
- Collapse of over water working area (pontoon etc.);
- Sunburn and heat stress; and
- Insect/bee stings.

C.4.2 The Employer’s Responsibility

To ensure health and safety is held up at the highest levels the employer ensure that the Principal Contractor follows and will act in alignment with their responsibilities under the Health and Safety at Work Act 1974. “Employers have a legal and moral responsibility to ensure the welfare of employees at work and provide a safe working environment & (SSOW) along with appropriate training, instruction, and supervision”.

The Principal Contractor will be responsible ensure all required on the job type training is provided for both the activity and usage and provision of the correct proper personal protective equipment (PPE) to maximize employee safety.

Before starting and mobilization of the work at the worksite (work near or in the water), the Principal Contractor will conduct a risk assessment and hazard identification exercise. This will identify any potential hazards and assess the severity and range of risks designing a safe system of working (SSOW).

All employees working on or near the water will also require to be aware of the risks and appropriately and well trained in working safely around water.

An essential part of the risk assessment and hazard identification undertaken by the Principal Contractor will be to evaluate the level, severity, and possibility of risk. The PC will consider who is at risk.

The following method of controls is typical of the requirements to be placed on the contractors to manage the risks. This will be developed as the general risks of the location are tied into the construction activities and methods of work:

- Lone working is prohibited on site;
- Waterproofed communication devices must be available;
- An emergency plan must be in place to tackle and handle emergencies;
- Appropriate provision must be available for first aid;
- Specialist training and equipment may be required for the proper first aid including flotation stretchers and lifting equipment;
- Availability and provision of Lifebuoys, meeting an approved standard with an appropriate buoyant lifeline of adequate length attached, should be available within around 50m of any working position where a person could fall into the water;
- Reasonable personal buoyancy equipment, such as life jackets, should be provided by employers where appropriate.
- Other PPE should be provided as mandatory to protect against other hazards, such as chemical exposure.
- Operators also required to cover broken skin and wash hands thoroughly after coming into contact with water from rat-contaminated areas;
- All electrical installations and equipment, tools, machinery should be constructed, installed, operated, protected, and maintained to prevent the risk of danger from electric shock or burns;
- As mandatory, guard rails to prevent and safeguard falling into water are required, e.g., on walkways and platforms. Appropriate safety footwear may be needed to minimize the risk of slipping;
- Proper training, induction/orientations and supervision are mandatory and part of appropriate control measures;
- Health Safety and Environmental Training for Employees Working Near Water;
- Biological Legionella Awareness Training must be mandatory for any trades person working with water systems or near the canal and associated basins. Legionella Awareness Training must be provided to give a good KNOWLEDGE of the disease and the bacteria;
- Weil's disease training must be provided to give a good KNOWLEDGE of the disease.

This list is not exhaustive but reflective of the procedures considered at this point of the design development.

C.4.3 Mobile phone usage

Mobile phone usage is generally banned on site, except for designated areas that will be protected to allow safe usage.

C.4.4 Smoking and vaping

Smoking and vaping are generally banned on site, except for designated areas that will be separate and protected to allow the relevant activities. The smoking area will have a fire point located adjacent to the area, and suitable cigarette bins for stubs and discarded cigarettes.

C.4.5 On site fuel management

All fuel will be stored in bunded tanks away from any surface water drains or gullies. Emergency spill kits will also be available on site. The Council will be notified of any dangerous materials that may be necessary on site to complete the works, and correct signage will be employed on all storage areas.

The London Fire Brigade will be advised of all emergency plans and temporary works relating to combustible materials and potentially explosive canister periodically as best suits the changing anatomy of the site.

C.4.6 Flammable or explosive materials

Flammable and explosive materials will be managed off site generally and only brought to site on an as required basis. Where storage is necessary all materials will be held in suitable containers and stored in designated areas with the correct identifying markings to ensure the safety of all. A schedule of materials and storage locations will be held by the contractor and identified to the London Fire Brigade (LFB) either in advance or in attendance depending on the LFB requirements for each item.

C.5 Site Security & Emergency Planning

C.5.1 Security General

The sites security for the project will be in operation from the outset. Initially they will be manned during the working hours and extend either side of the working-day by approximately 1 hour (aligned with the fire inspection policy and to ensure timely access in the morning).

It is anticipated that during the development works the sites will need to be provided with 24-hour 7 day a week security by either a mix of static or mobile security personnel with CCTV backup covering all aspects of the site hoarding as a minimum.

Site security cameras, where used, will be sited in locations which will not cause nuisance or offence to local residents.

Hoardings and temporary structures will be designed to minimise opportunities for rough sleeping and the behaviours associated with this, as well as anti-social behaviour. Where such issues do arise, the PC aligned with the Council guidance will review and revise the hoarding alignment in a timely manner.

C.5.2 Rough Sleepers Streetlink

Where rough sleepers are encountered the developer's, nominated representative will refer the rough sleeper (s) **Streetlink** on www.streetlink.org.uk. The PC will ensure that the nominated representative is suitably trained (in line with LA guidance) to work with **Streetlink** to enhance the contractor to work proactively with the local teams to address any issues.

C.5.3 Homelessness Prevention Team (Camden Council)

The PC will also advise Camden's "Homelessness Prevention Service" (HPS) to ensure that all homeless persons are aware of the best information available targeted to their situation.

Email: housingneeds@camden.gov.uk
Website: www.camden.gov.uk/homelessness-in-camden
Phone: 020 7974 4444
Address: 5 Pancras Square, London, N1C 4AG.

C.5.4 Emergency Planning and Response

The contractors nominated representative will ensure that emergency procedures are developed, implemented, and updated where necessary. The emergency procedure will include emergency pollution control measures that will consider current relevant Environment Agency and government guidance relating to pollution. The emergency procedures will be produced in consultation with the emergency services.

The emergency procedure will contain emergency phone numbers and the method of notifying the Council and other statutory authorities. Copies of the procedures will be issued to the Council, London Fire Brigade (LFB), the Police, the Ambulance Service, and other relevant authorities etc. Emergency telephone numbers for developer's/contractor's key personnel will also be included.

C.5.5 Emergency Access

The PC will ensure that the requirements of the London Fire and Emergency Planning Authority (LFEPA) will be followed for the provision of site access. Where appropriate, the accesses to the site will be designed to the requirements of the London Fire Brigade Note 'Access for Fire Appliances' which addresses the road widths required for fire apparatus. The access may vary over time and will also be suitable for other emergency providers.

C.5.6 Fire Prevention & Control

The contractor will ensure that all construction sites and associated accommodation or welfare facilities will have in place appropriate plans and management controls to prevent fires. The site fire plans will be prepared and will have due regard to the following documents:

Fire Safety in Construction (HSG 168);

Fire Prevention on Construction Sites (CFPA Europe).

C.5.7 Fire Precautions

All fire precautions will be taken, and fire checks made at the end of each working day before personnel leave the site. Fire points will be set up within easy reach of the work areas, storage points and hot works locations. Throughout the works, “hot works permits” will be required as standard for all hot works. The process will be managed by the main contractor.

C.5.8 Fire Alarm

Each building will be temporarily fire alarmed back to singular security monitoring area on site. The contractors on all phases will co-operate to agree fire communication, evacuation strategies, drills for both themselves and relevant third parties.

C.5.9 Fire Assembly Points

Due to the no. of phases and the changing anatomy of the site, a fire assembly strategy will be drawn up to reflect the special dynamics of the site and may need to look to offsite locating. If the area allocated assembly is off site, the contractor (s) will initiate discussions prior to the phase of works commencing with the Council.

C.6 Working hours

C.6.1 General site working hours

The general site working hours will be in line with the requirements of the Control of Pollution act 1974, Section 61, and the contractor will obtain a consent (which will include noise limits and vibration limits where relevant for noisy out of hours work).

Noisy works associated with a development (e.g. piling) will generally be limited to weekdays from 08:00 to 18:00, unless otherwise agreed. Works will be carefully coordinated with businesses and operations within Camden Lock Market and neighbouring Stables Market and local neighbours.

The hours of work are set out below:

- Monday to Friday: 08.00 to 18.00
- Saturday: No working
- Sunday and Bank Holidays: No working

The Applicant will ensure that the contractor adheres to these working hours unless otherwise agreed with the Council. As far as reasonably practicable and where feasible, operations anticipated to cause disturbance would be limited to these hours, except in the case of an emergency.

The Applicant or contractor will apply for consents (which will include noise limits and vibration limits where relevant) and noisy out of hours work. The applications for consent will include details of the work to be undertaken, including proposed hours of work.

All construction related traffic will abide by the agreed hours of working for each site unless otherwise agreed with the Council.

C.6.2 Out of hour works

Where working is required outside of the above hours due to unforeseen circumstances or planned work that can only occur outside of the core hours e.g., road closure requirements, mobile crane lifts, then these will be undertaken following communication with the Council and residents /businesses advising the reasons for the work, likely impact, if any, and estimated time to start and complete the work.

C.7 Site accommodations

The contractor will endeavour to maintain all accommodation within the curtilage of the site.

Due to the potential availability of vacant retail units the Client's design team is exploring the use of units or "dead space" within the buildings for accommodation areas including offices, welfare, and toileting.

It is not considered that there will be a need to explore external accommodation either over the highway, pavement, or public open space at this stage.

The contractor will ensure that full topographic survey is undertaken and skips, or heavy equipment will be situated away from vaults and basements, or that suitable supportive works are undertaken to accept the proposed load.

It is generally anticipated that the site accommodation for the project will be located within existing buildings on the site. This will provide, in line with the general guidelines and best practice:

Contractor management offices;

Meeting rooms;

Client and design team office space, if required;

Welfare facilities including canteen and kitchen, changing and drying rooms, toilets, and showers;

Induction room;

Security office; and

Sub-contractor offices (these may be located elsewhere within the building during construction).

C.7.1 Living accommodation

No living accommodation will be permitted on site during the works.

C.8 Site Lighting

Site lighting will be positioned and directed so as not to unnecessarily intrude on adjacent buildings, and other land uses.

The design will ensure that any artificial light emitted from premises will not be prejudicial to health or be a nuisance as required by the Environmental Protection Act 1990.

The lighting will be designed to comply with the provisions of BS5489, Code of Practice for the Design of Road Lighting, and Guidance Notes for the Reduction of Light Pollution, GN01, 2005, or later revisions published by the Institute of Lighting Engineers.

The Principal Contractor will discuss any lighting issues or concerns with the Council's Lighting Compliance Officer, including where a hoarding, scaffold or temporary structure is to be installed upon the highway in close proximity to a lighting column or illuminated street signage (less than 2m).

C.9 Good Housekeeping

The Principal Contractor will ensure that all those working on site follow a 'good housekeeping' policy at all times. This will include, but not necessarily be limited to the following:

- Ensuring considerate site behaviour of all those working on a site;
- Ensuring that all operatives are in a medically fit state to conduct their works, and maintain an auditable alcohol and drugs policy;
- Prohibiting open fires;
- Ensuring that appropriate provisions for dust control and road cleanliness are implemented;
- Removal of rubbish at frequent intervals;
- Maintaining a clean and tidy site;
- Frequent inspection, repair, and maintenance of site hoardings;
- Removal of illegal all flyposting;
- Removal of graffiti to the site;
- Maintenance of site facilities and cabin areas;
- Removal of food waste from site;
- Frequent cleansing of wheel washing facilities; and
- Prevention of vermin and other infestations (and prompt and effective action to deal with any that do arise);
- Undertaking all loading and unloading of vehicles off the highway wherever this is practicable and;
- Ensuring that tunnels beneath gantries are always well lit.

C.10 Waste and site cleanliness

C.10.1 Waste general principles

The contractor will be encouraged to propose solutions that reduce waste e.g., to have materials delivered with reduced packaging and/or delivery companies take their packaging away with them. In the case of the Camden Wheel for example, this will be transported to site in containers in an organised manner and the containers when emptied will be taken away for reuse.

The Site is essentially a dry site and a low risk for spoil transmission on to the public highway however regardless of that fact wheel wash facilities will be included at the Camden Lock Place exit from the site. All wagons will be netted and screened to avoid building works detritus falling from the wagon on to the highway.

The contractor will be required to provide a Waste Management Control Plan for the works and submit to all relevant parties for comment and information. The efficient clearance of site waste will be key to a successful construction project and to portray the image to the surrounding neighbours and passing public of a well-controlled site, especially in this high-profile location.

The use of skips will be the primary way of removing waste from the site. Regularly rotating skips to ensure no overspill will be important. The site has limited areas to consistently provide a consistent skip location, however the creation of a planned skip strategy is yet to be formulated and will be covered in the temporary works strategy.

C.10.2 Food waste

All site food waste and consumables will be deposited in closed bins and removed from site at regular intervals of no more than a week to minimise rodent and insect infestation on site (especially as the area is by a canal).

Generally, food is prohibited on site except within designated areas.

C.10.3 Battery waste

All batteries will be gathered to a central area and removed from site for disposal / recycling at a suitable facility. Batteries will not be mixed with general waste. In accordance with UK Government guidance all batteries will be separated into appropriate type and disposed of in accordance with the suitable Approved Battery Treatment Operator (ABTO):

Automotive (ignition battery)

Industrial (specifically designed power bank over 4kg)

Portable (Traditional sealed power pack under 4kg / Domestic)

C.10.4 Contaminated waste

Waste is generally considered hazardous if it (or the material or substances it contains) are harmful to humans or the environment. Examples of hazardous waste include:

- Asbestos
- Chemicals, such as brake fluid or print toner
- Batteries
- Solvents
- Pesticides
- Oils (except edible ones), such as car oil

- Equipment containing ozone depleting substances, like fridges
- Hazardous waste containers

Contaminated waste will be removed by specialist contractors and disposed of off-site by them to a licensed location in suitably designed and managed vehicles.

In accordance with UK Environment Agency Guidance note (4 April 2014), hazardous waste must be treated separately from all other waste including other contaminated materials.

C.10.5 Construction waste

Construction arisings will be drawn to a central removal point and sorted into material types where possible, with timbers, glass and metals being stowed in separate skips or euro lidded bins where practical, with spoil being stockpiled for direct removal.

Due to the proximity of the site to occupied buildings, crushing will not be considered feasible especially with the limited amount of spoil available through the construction. As such all spoil will be managed in line with the Dust Management Plan and removed from site by barge or on suitably sized muck away wagons on a daily basis.

Where spoil can be reused as fill, or piling mat these materials will be maintained on site to minimise material road journeys.

C.10.6 Construction waste by barge

The Applicant has an established relationship with iRecycle to remove estate (Camden Market) waste by barge to a waste recycling location on the Regents Canal. The Client is exploring utilising the same resource to manage construction waste removal by barge.

The challenges facing the client will be the frequency of removal, however if this becomes an issue the main strategy for the works will be aimed at:

- Primary waste removal by barge; and
- Secondary waste removal by lorry.

By undertaking the removal in this way of the construction waste, the Client is looking to remove 90 - 100% of the waste removal vehicles off the road.

C.10.7 Biological waste

Biological waste will be damped down where appropriate and bagged for specialist or suitable removal as required.

Sharps will be removed by specialist contractors and removed in approved containers. A specialist Sharps policy will be agreed with the Council in advance of construction works.

C.10.8 Prohibition of incineration

The developer will prohibit the use of bonfires or other methods of incineration of waste on site.

C.10.9 Stockpiles

Due to the compact nature of the site, stockpiles may be utilised to manage either waste or imported construction materials on a daily basis but will not be maintained through the works. All stockpiles will be removed at the first opportunity with imported goods (say piling mat) being brought to site on a 'just in time' delivery basis to minimise stockpiling.

To minimise stockpiles further lidded containers will be utilised for waste (euro bins) to allow filling and removal by barge (as considered feasible) on a regular basis.

C.10.10 Dust management

The PC will develop and implement a Dust Management Plan (DuMP), which will include measures to control emissions for approval by the Council.

The level of detail will depend on the risk and should include all best practice guidance for that risk and be appropriate for the site.

In London additional measures may be required to ensure compliance with the Mayor of London's guidance. The DuMP will include monitoring of dust deposition, dust flux, real-time PM10 continuous monitoring and/or visual inspections.

C.10.11 Site monitoring (in relation to dust)

The Principal Contractor will:

- Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the Council when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars, and windowsills within 100 m of site boundary, with cleaning to be provided if necessary.
- Carry out regular site inspections to monitor compliance with the DuMP, record inspection results, and make an "inspection log" available to the Council when asked
- Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- Agree dust deposition, dust flux, or real-time PM10 continuous monitoring locations with the Council. Where possible commence baseline monitoring at least three months before work commences on site.

Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction and the Dust management Plan and monitoring methodology will be developed in line with the design development.

C.10.12 General basics of site and surrounding area dust and air management

The Principal Contractor will:

Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken in an agreed format within a formal Complaints and Issues Log for provision to the Council in a timely basis, and on demand within 48 hours of instigation of request.

Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the logbook.

Hold regular liaison meetings with other high-risk construction sites within 500 m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport/ deliveries which might be using the same strategic road network routes.

C.10.13 Rodents and vermin

Due to the site location, next to the Regents Canal, the Principal Contractor will ensure that the risk of infestation by pests or vermin is minimised. Adequate arrangements for disposing of food waste or other material attractive to pests will be implemented. If infestation occurs the contractor will ensure that such action to deal with it as required by the City Council's Environmental Health Officer is taken.

To minimise the potential of infestation, the existing buildings will be assessed for the presence of rodents and vermin prior to works. Should any rodent or vermin issues be present, an external contractor will be appointed to eradicate these.

The Principal Contractor will ensure that periodic reviews of the site are undertaken by a specialist contractor to ensure that rodent infestations are minimised and can be removed quickly to avoid the associated health issues affecting the workforce and the neighbouring properties and occupants.

To minimise the adverse impacts from pests and rodents the following control measures will be implemented on site in the following order

1. All drainage systems and access points will be kept secure to prevent rodent access
2. All generated rubbish particularly food waste will be cleared as it is generated and placed into secure containers and removed off site for disposal on a continuous basis
3. A high level of good housekeeping will be maintained on site and in all facilities
4. Site rules will be implemented to prevent the feeding of such pests as pigeons and seagulls
5. All food stuffs brought on site will be within storage containers

Where all other control measures have been actioned then pest control management will be implemented on site by a reputable pest control company

C.10.14 Pigeon waste

It is anticipated that certain areas of the buildings on site will require prior cleansing and decontamination of pigeon waste. These areas are to be surveyed and cleansed prior to project activities taking place in those areas.

It should be noted that bird droppings are associated with at least 60 different diseases which can cause issues for workers from respiratory, intestinal, reproductive illness' to skin issues. The illnesses include:

- Histoplasmosis;
- Candidiasis;
- Cryptococcosis; and
- St. Louis Encephalitis.

C.10.15 Road cleansing

If necessary, a water assisted road-sweeping machine will be periodically employed as required to either brush clean the roads around the site or in periods of dry weather wet down the highway to control the dust. The frequency and nature will be agreed in advance with the Council and if necessary, 3rd party stakeholders. The timing of the cleansing will be managed to avoid peak times except by exception, such as a spill or on request of the Council.

Dry sweeping will be avoided in sensitive and or large areas where dust and particulate pollution could cause an issue both on and off site.

Road cleansing may also require water-assisted cleansing plant on the access and local roads, to remove, as necessary, any material tracked out of the site. Where this is required, the developer will ensure that surplus water is collected and contained for removal from site by appropriate measures.

C.10.16 Wheel wash management

The site is compact and as such, any wheel washing, and vehicle cleansing will be undertaken as required on the Camden Lock Place. The access point to Camden High Street will be monitored by the Principal Contractor and cleaned as required to prevent site materials tracking on to the road.

All ground or surface water run-off will be strictly controlled in line with environmental legislation and best practice to prevent pollution of drains and watercourses.

All vehicles will be inspected before leaving site for cleanliness.

C.11 Third Party Liaison

C.11.1 Public Information

The site hoarding will display up to date information on the construction schedule (as a minimum these will include start and estimated time periods such as “summer and year”). The signage will also display telephone contacts for within and out of hours usage for the developers nominated representative (s) and other key personnel for reporting of issues and incidents.

The contractor will also affix a sign board to hold all necessary certification, statutory notices, safety information and HSE details.

C.11.2 Community Liaison Group (CLG)

To assist in communication, and a more formal approach, the contractor’s liaison officer (this is appointed on site and may be the Site Manager) is expected to set up a Community Liaison Group (CLG) with a set agenda to work with the local community to be agreed.

C.11.3 Construction Forum

To assist in communication, and a more formal approach, the contractor’s liaison officer will set up a Construction Forum Group (CFG) with a set agenda to work with the adjacent and regional construction sites that are affected or affect the Project works as required.

Key Items on the agenda may include:

- Environmental issues:
- Dust, noise, and Vibration etc.
- Transport Logistics:
- Outsized deliveries including cranes;
- Cycle safety initiatives including vehicle educational measures (including school visits potentially);
- Vehicle delivery numbers actual and envisaged; and
- Site worker transport preferences.
- Security:
- Fire management / site evacuation policy / Fire escape areas; and
- High-Cost items / security risks as appropriate.

Appendix D

Mitigation Measures

D.1 Mitigation measures

Industry accepted practical means of preventing, reducing and minimising noise generation will be adopted in agreement with the Council and Canal River Trust.

Appropriate procedures need to be followed in order to mitigate noise, vibration and air pollution (e.g., through dust and fume generation) impacts. Mitigations are detailed in

D.1.1 General mitigations

No works will be undertaken outside the specified working hours; except in cases of emergency, where safety is an issue, or where conditions of dispensation apply.

D.1.2 Plant mitigations

The Principal Contractor will comply with the requirements of the COPA 1974, with reference to Part III of the Environmental Protection Act 1990, The Control of Noise at Work Regulations 2005 and the Health and Safety at Work Act 1974;

Ensure all vehicles switch off engines when stationary - no idling vehicles.

Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.

Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London NRMM standards, where applicable;

All plant and equipment to be used for the works will be properly maintained, silenced where appropriate to prevent excessive noise and switched off when not in use and where practical;

Hydraulic machinery and plant will be used in preference to percussive techniques where practical;

Plant will be certified to meet relevant current legislation and Noise and Vibration Control on Construction and Open Sites (BS 5228). All subcontractors will be made familiar with current noise legislation and the guidance in BS 5228 (Parts 1 and 2), and this CTMP which will form a pre-requisite of their appointment.

D.1.3 Noise mitigations

Noise levels will need to be controlled by the constant monitoring in line with Council guidelines and best practice;

Agreed trigger action levels for noise will be agreed with the Council;

Noisy plant will be maintained away from the site perimeter as far as is practical;

Noise complaints, or exceeding of agreed levels will be reported to the contractor and immediately investigated;

To avoid site contamination of surrounding areas, site runoff of water or mud should be avoided by use of both physical and mechanical measures including bunds and pumps;

Loading and unloading of vehicles, dismantling of equipment such as scaffolding or moving equipment or materials around the site will be conducted in such a manner as to minimise noise generation

D.1.4 Dust (and other particulate) mitigations

Specific Dust measures should be considered as:

Dust levels be controlled by the constant monitoring of air quality levels;

Positioning of monitoring equipment will be agreed with the Council prior to installation;

All vehicles entering and leaving sites will be covered to prevent escape of materials during transport;

Agreed trigger levels for Dust and other particulates will be agreed with the Council in advance of construction;

Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible;

The contractor will erect and maintain throughout the construction period temporary hoarding around all working areas to assist in the screening of noise and dust generation from low-level sources;

Vehicles transporting materials capable of generating dust to and from site will be suitably sheeted on each journey to prevent the release of materials and particulate matter;

All solid-state hoarding and site fencing and barriers will be maintained using controlled wet methods for cleansing and avoiding water runoff from the activity;

Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period;

Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site;

Where materials are being re-used on-site, they should be covered and protected according to best practice in a manner agreed previously with the Council;

Only use cutting, grinding, or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g., suitable local exhaust ventilation systems.

The contractor will avoid scabbling (roughening of concrete surfaces) if possible, to minimise dust

Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.

Use enclosed /covered skips and bins (for removal by canal where possible).

Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.

Maintain existing hard roadways, and regularly damp down during dry weather.

Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

D.1.5 Archaeology

All architectural works are to be undertaken in alignment with the Archaeology Desktop Study. The Archaeology Desktop Study describes the likely significant effects of the Proposed Development on archaeology. It outlines the methodology, the baseline conditions and the likely significant archaeological effects associated with the construction, existence, and operation of the Proposed Development.

Mitigation measures which would be implemented to reduce the effects of the Proposed Development on archaeology are also described, where relevant.

D.1.6 Bats

To minimise disruption to Bats there will be no night-time working during demolition and construction.

A bat policy will be agreed with the contractor prior to commencement of construction (including demolition activities) in consultation with the Council's ecological officers.

To minimise visual disruption to the bats, Lighting of buildings will adhere to good practice guidance: Bat Conservation Trust and the Institution of Lighting Professionals, (2018); 'Bat Guidance Note 08/18 Bats and artificial lighting in the UK. Bats and the Built Environment series.

A Bat Survey will be conducted within the area prior to commencement of works, and cover natural bat environments, local buildings, and bat boxes. The survey will record bats emerging to assist in the formation of bat management strategies.

Where bat boxes are installed or there are bat access points to adjacent buildings or natural flora and fauna, the contractor will minimise light levels as far as is practicable to minimise the disturbance to the bats.

The key guidance for the protection of bats directs that:

- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used;
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
- A warm white spectrum (ideally <2700 Kelvin) should be adopted to reduce blue light component;
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats;
- The use of low-level downward directional luminaires to retain darkness above can be considered;
- Column heights should be carefully considered to minimise light spill;
- Only luminaires with an upward light ratio of 0% and with good optical control should be used;
- Luminaires should always be mounted on the horizontal, i.e., no upward tilt;
- Any external security lighting should be set on motion-sensors and short (1min) timers; and
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.