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Construction Management Plan

Project Name:

12 Cromwell Avenue, Hornsey, London, N6 5HL
Preliminary Construction Management Plan
(Subject to Design Development)

Introduction

This document describes the construction management for the proposed Development at 12 Cromwell Avenue, Hornsey, London, N6 5HL, for the demolition of the existing rear extension, the construction of new rear extension, the lowering of existing basement and a new front light well.

This Construction Management Plan (CMP) is designed to minimise the impact of the proposed construction on the surrounding community, both for the construction on site and the transport arrangements for servicing the site.
The CMP addresses how any impacts associated with the proposed works will be mitigated and manage the cumulative impacts of construction in the vicinity of the site.
The level of detail included in this CMP is designed to meet the requirements as specified in the 'Pre-Commencement Conditions' item 4 related to the planning decision notice for planning application reference number HGY/2023/2834

a) parking and management of vehicles of site personnel, operatives and visitors
b) loading and unloading of plant and materials
c) storage of plant and materials
d) programme of works (including measures for traffic management)
e) provision of boundary hoarding behind any visibility zones
f) wheel washing facilities:

This CMP follows the best practice guidelines in Transport for London's (TfL's Standard for Construction Logistics and Cyclist Safety (CLOCS) scheme)

The contents of this CMP must be complied with unless otherwise agreed with Haringey Council. The project manager shall work with the Council to review this CMP if any problems arise in relation to the construction of the development. Any future revised plan must also be approved by the Council and complied with thereafter.

It should be noted that any agreed CMP does not prejudice or override the need to obtain any separate consents or approvals such as for road closures or hoarding licences.
This scheme will involve the demolition of the existing rear extension and hoardings will be established within the boundaries of the site and therefore the project manager does not anticipate the need to apply for any local authority licences.
(Note the term 'vehicles' used in this document refers to all vehicles associated with the implementation of the development, e.g. excavation, site clearance, delivery of plant & materials, construction, etc.)

Planning for construction is necessarily broad at this stage, and may be subject to modification during the detailed construction design stage. For this reason, the following construction statement is based on reasonable assumptions in the preliminary construction programme, experience in relation to other development sites of a similar size and nature, and the best judgement of the construction experts. The following key activities will be addressed:

- Construction Overview
- Programme of Works
- Description of Works
- Enabling Works
- Demolition Works
- Building Superstructure
- Fit Out

The Application Site is a two storey, Edwardian, terraced property, early 20th century dwelling house, built as one of five within a terrace on the outside of the bend at the northern end of Cromwell Avenue. The property has been divided into two self-contained flats. This application only relates to the ground floor, garden flat.

The property is typical of the Wide Terrace with pitched roof, recessed doorway and single storey front bay. To the rear, the property has an existing, single storey extension. The terrace is built in traditional red brick under a natural slate roof, with columns and quoins to windows and elaborate detailing in stone above porches. It is note that all four other properties within the terrace have front lightwells and make use of their basements.

The application site is within the Highgate Conservation Area, however the property is not listed. The property has been converted into two flats, Ground Floor Flat No.12 and Frist Floor Flat No. 12A. The ground floor flat benefits from an existing basement with rear garden access. The immediate surrounding area consists of residential properties mainly from the same era. The properties are set back from the road, some of which have trees, hedgerows and shrubs planted in their small front gardens. With the close by Highgate Tube Staton and bus stops on Archway Road the site is well connected to the London Public Transport.

This together with road traffic, pedestrian traffic and residential areas adjacent to the site will be taken into account during the preconstruction phase and agreement will be reached with all interested parties on how construction and vehicle movements will be managed to minimise disruption to neighbours.

Construction Overview
d) programme of works (including measures for traffic management)

1.0 Following the discharge of reserved matters and party wall matters, extensive discussions and consultations with Building Control, Statutory Authorities and other interested parties will take place. Construction design information will be produced at this stage. The construction work will take about 9 months.
Works will be in accordance with British Standards BS 5228-1:2009+A1:2014 and best practicable means are employed.

1.1 The enabling and construction programme will be designed to minimise disruption to local residents, the general public, and the environment. Works will include:

- Initial site preparation, including diversion of services and setting up of designated construction areas.
- Installation of site hoardings, security measures, signage of entrance and exit;
- Proposals for construction vehicle routes and specific no access routes to certain residential streets.
- Offsite and onsite infrastructure works, including foul and storm sewers, maintenance and inspection chambers;
- Diversion of services;
- Demolition of existing extension
- Earthworks, including removal of any contaminated materials in line with legislative guidance;
- Excavation of ground levels;
- Construction of new rear extension, laying foundations and connection to services; Lowering existing basement by 800mm and creation of new front lightwell, please refer to Structural Methodology Statement.
- Land profiling, landscaping; and site completion, including removal of construction compounds.

1.2 The proposed scheme comprises the demolition of the existing rear extension, the construction of new rear extension, the lowering of existing basement and a new front light well. It is anticipated that the development programme will span about 7 months.

1.3 Sign off and handover of the flat will take place, this will be agreed with Building Control to allow inspection to take place and to ensure that fire safety regulations are not breached. A strategy will be put in place to track the progress of the development throughout the various construction stages through to completion.

1.4 Due to a very small access to site, it is intended that construction vehicles will not access the site. The far rear of the site will be designated as ‘No Construction Access’ and ‘Tree Protection Zone’ to avoid unnecessary disruption to residents and protect the existing trees.

1.5 It is envisaged that the single story rear extension’s superstructure will consist of masonry brick work and block work, local steels and timber joists flat roof, with a suspended beam & block floor at ground level.

Demolition, Groundworks and Infrastructure

1.6 Existing services and drainage will be adopted and enhanced as necessary to comply with the new scheme requirements.
A 'soft strip' of all internal fixtures, fittings, furniture and furnishings will be carried out and removed from site.

1.7 Demolition of existing rear extension will proceed once it has been decanted and all services isolated.

1.8 Generally it would be anticipated mass concrete trench fill footing for the new extension will then be required however this is subject to detailed structural design.

1.3 The proposed Groundworks will involve the conversion of the existing cellar space beneath the main body of the house into a fully habitable area. These works will include increasing the floor-to-ceiling height by approximately 800mm. At the rear of the building a new patio area, at the level of the basement will be created. A new lightwell at the front of the house will provide light into the new basement space. The works will require limited structural alterations to the superstructure to suit minor internal alterations.
For lowering the existing basement, please refer to Structural Methodology Statement

Building Superstructure

1.9 The superstructure of the building will be single story, new block/brick work, with beam and block floor at floor level timber flat roof, variety of materials to reflect the local setting and design goals.
The sequence for the construction of the new building would be as follows:

- Excavation for mass concrete trench fill footing
- Purring mass concrete trench fill footing
- Laying of beam and block ground floor
- Laying of brickwork will be applied form traditional or climbing scaffold with local steels.
- Erection timber roof will be applied form traditional or climbing scaffold

Fit Out

1.10 This will generally be achieved by the use of external hoists located on the building for any larger items or manhandled through the building.
Where feasible external sheeting and hoarding would be removed at this stage to allow the public to view the development unobstructed. All fit-out activities would be undertaken inside the buildings.

Plant and Equipment

1.11 Consideration has been given to the types of plant that are likely to be used on-site during the construction works. The estimated plant and equipment associated with each key element of the deconstruction and construction process is set out in Table 1-1

Table 1-1 Schedule of Mechanical Plant

Plant	Stage		
	Demolition	Substructure	Fit-out
Tracked /wheeled 360 degree excavators			
Crushers			
Dumpers	•	•	
Mobile Carnage			
Muck away trucks	•		
Air Compressors	•	•	
Diamond cutting tools/saws	•	•	•
Power Tools	•	•	•
Hand / power tools	•	•	•
Wheel Washing Plant	•	•	•
Scaffold			
Delivery trucks	•	•	•
Skips and Skip trucks	•	•	•
Forklift trucks			

• *Indicates plant will be used during that stage of works*

Materials and Resource Use

1.12 Wherever possible waste construction materials will be re-cycled.
1.13 No skips licence will be required as waste skips will be located on site.
1.14 Construction Martials will be stored on site at the designated stage area, (please refer to 'Site Logistics Plan' Drawing Number 335.23/201).

Hours of Work

1.15 It is anticipated that the core working hours for demolition, construction and fit out will be as set out below:

- 08:00 – 18:00 hours on weekdays;
- 08:00 – 13:00 hours on Saturdays; and
- No working on Sundays or public holidays.

1.16 Any work outside these hours will be subject to prior agreement, with reasonable notice (typically 14 days) to London Borough of Barnet who may impose certain restrictions.

Housekeeping Procedures

1.17 Items :

- A log book for complaints will be stored on site
- Standard construction site hours are 8am-6pm Monday – Friday, 8am-1pm Saturday and not at all on Sundays and Bank Holidays.
- Bonfires are not permitted on site.
- Details of a dedicated point of contact during both normal working hours and after hours, will be clearly marked on hoarding
- Wheel washing facilities will be situated at the entrance of the site

Public Relations

1.16 Considerate Contractors Scheme is in Operation
A designated Project Team member will deal with any complaints and enquiries. This individual will be named at the site entrance on the hording, with a contact number, and will be identified to the London Borough of Haringey and community groups, prior to the start of construction, and whenever a change of responsibility occurs; this will be part of the Considerate Constructor Registration.
Any complaints will be logged on-site, fully investigated and where appropriate corrective action taken as soon as possible. The complainant will be informed as to what action has been taken. A log book for complaints will be stored on site.
In the event of unusual activities or events, the London Borough of Haringey and other relevant third parties (i.e. statutory and non-statutory bodies) will be notified in advance of the work being carried out.

Management of Trade Contractors

1.17 Individual contractors (for example for waste removal) will incorporate relevant requirements in respect of environmental control, based largely on the standard of 'good working practice' as outlined in the statutory requirements.

Traffic Management

1.18 Estimated numbers of construction-related vehicle journeys are shown in Table 1-2 below for different stages of the works; we would estimate that a project of this nature would require a peak labour force of 7 per day. All contractors are specifically required to minimise the use of private cars / vans when travelling to site and to maximise the use of public transport and the use of shared vans where necessary.
As part of the procedure for the allocation of delivery times to suppliers, care will be taken to reduce the amount of vehicle travelling time within peak periods. Whenever possible, deliveries will be scheduled to avoid peak traffic periods to allow greater efficiency in predicting delivery times and reducing haulage costs.
All deliveries and collections will take place between 09:30 and 16:30 during school holidays.

During term time deliveries and collections will only take place between 09:30 and 15:00. Deliveries will also be accepted between 8.00am and 1.00pm on Saturdays.

All suppliers and contractors will be notified of these conditions and the site manager will reject any deliveries/collections outside of these designated hours.
As the maximum dwell time of any vehicle is unlikely to exceed one hour the latest delivery to site will be scheduled to arrive by 3pm or 1:30pm (depending on school holidays) to ensure that it can be off loaded by the allotted time and the vehicles are able to leave site to avoid peak traffic periods.
Where peak deliveries cannot be avoided we will attempt to limit activity during this period.
All construction vehicles will be managed and prevented from causing obstructions to the highway

Table 1-2 Estimated Construction Related Vehicle Journeys

Work Stage	Peak Estimated number of cars/vans per day	Peak Estimated number of HGV per day
Enabling works	**1**	**Up to 1**
Demolition	**2**	**Up to 2**
Substructure	**3**	**Up to 1**
Fit out works	**2**	**Up to 1**

Access and Egress

1.19 Access routes to and from the development site to be used by HGVs will be agreed with by the London Borough of Haringey prior to initiation of the construction programme. It is anticipated that the strategic road network will be used as far as possible for this purpose. The only main access road will be Cromwell Avenue which is of Archway Road (A1). It is anticipated that most construction and delivery HGVs will come from the A406 North Circular Road or the M1 via the A1 (please refer to Traffic Management Plan Drawing Number 335.23/200).
There are no known other developments in the area or on route that are likely to affect the traffic volumes in the vicinity of the site.

1.20 All delivery vehicles will not access site due to site restrictions and dwell times will occur within the loading area to avoid any impact on traffic along Cromwell Avenue. (please refer to Site Logistics Plan Drawing Number 335.23/201).
There will be only one proposed site gate which be controlled during working hours by a gateman. This person will be on duty throughout the day with breaks covered. The gateman will ensure that all gates remain closed, when not in use. It will be the responsibility of vehicle banksman to ensure that relevant paperwork is checked on arrival and the vehicles parked correctly within the loading area.
The gate will be locked every evening by the site manager. The gate will be locked using chain wrap with padlock.

Loading and unloading of materials and equipment will occur outside the site boundary within the designated loading area, wherever possible, minimising the likelihood of congestion on highways surrounding the site. Delivery HGVs will reverse backwards into the loading area under guides of designated site personal and will be unloaded in the designated loading area (please refer to Site Logistics Plan Drawing Number 335.23/201). Vehicles will exit the loading area forwards facing Cromwell Avenue.

To further minimise the likelihood of congestion, strict monitoring and control of all vehicles arriving and leaving the site will be maintained including:

- The setting of specific delivery dates and collection times, where feasible;
- Consolidation of deliveries where feasible;
- A system of 'just in time' deliveries;
- The requirement for authorisation when visiting the site via vehicles; and
- Pedestrian access around the site perimeter will be safely maintained.

1.21 There will be no storage of plant or materials on any area of the public highway Pedestrians will be protected from the construction site by use of secure hoarding around the boundaries of the site with lockable access.
It is not anticipated that any obstruction of pedestrian movements will take place other than during unloading of delivery vehicles, in which case a banksman will be dedicated to managing pedestrian movements during this process, ensuring the pedestrians are held until safe passage in front of the site is available.

1.22 A vehicles delivering to this construction site must be registered with the Freight Operator Recognition Scheme (FORS) administered by Transport for London.
All vehicles over 3.5 Tonnes must also abide with the new 'Safe lorry Scheme' introduced in London on September 1st 2015 ensuring that these vehicles are fitted with side guards along with Class V and Class VI mirrors.
A restriction of HG

1.23 Vehicles site will require the washing of wheels prior to departure. The designated wheel wash area will be established for vehicles. This platform will facilitate the washing of wheels prior to departure from the construction site. The site manager will be responsible for ensuring that mud is not deposited on the pedestrian pavements or public highway. A power jet water spray will be utilised for the washing of wheels or spillages on pavements or the public highway. The operator will be given strict instructions to ensure that the spraying is directed into the construction site to avoid concrete/mud being washed into the public highway or local authority drainage system.

Road Closures/Diversions/Parking Bay Suspensions

1.24 Due to the size and the type of project neither long-term nor temporary road closures are envisaged. It is anticipated that 2 parking bay suspensions will be required, but it is anticipated that no traffic management orders will be required on this project.
The Green outlined area shown on the Site Logistics Plan (Drawing Number 355.23/201) represents the proposed hoarding which will encompass the boundaries of the construction site.

Car Parking and Travel to Site

1.25 There will be a general policy of no car parking and the site labour force will be encouraged to use public transport. Unapproved parking on public roads will not be allowed. Due to site restrictions no onsite parking is proposed. Any local traffic management measures for site will be agreed with the London Borough of Haringey.
Bike stands will be provided to encourage the use of public transport. The contractor will provide parking for everyone who already cycles to work plus another 50 per cent. When the cycling facility reaches 70% capacity, it will be increased by 20%. This will be revised periodically.

Dust Nuisance Prevention

1.26 Referring to visible dust, it is imperative to prevent statutory nuisance arising from the construction works or dusty activities. Therefore a philosophy of the prevention of dust formation in the first place shall be adopted. Dealing with dust should be in the following fashion:

1. Prevention
2. Suppression
3. Containment

These three principles are well established and are central to the control strategies to control dust. They follow a hierarchy to control the emissions.
The CMLP has identified the dusty operations and established the best available techniques are required to control dust emissions. The identified dusty operations shall be recorded and in the Future dust emissions should be prevented whenever practicable.
When this is not practicable emissions should be controlled at source. Examples include correct storage of raw materials, organising the process in such a way that spillage is avoided, and maintaining high standards of internal and external housekeeping.
Consideration will be given to the siting of aggregate stockpiles, based upon such factor as the prevailing winds, proximity of site boundary and proximity of neighbours. Minimisation of drop height is very important in stockpiling to reduce wind whipping of particulates. When designing storage bays, internal walls separating storage bays should be at least ½ metre lower than external walls of the bays.
Areas where there is vehicular movement should have a consolidated surface which should be kept in good repair.
The main principles for preventing dust emissions are containment of dusty processes and suppression of dust using water or proprietary suppressants. Suppression techniques need to be properly designed, used and maintained, in order to be effective. For example, where water is used for dust suppression, processes require an adequate supply of water and all water suppression systems need adequate frost protection.
Where there is evidence of airborne dust from the building construction activities on site, the contractor should make their own inspection and assessment, and where necessary undertake ambient monitoring with the aim of identifying those process operations giving rise to the dust. Once the source of the emission is known, corrective action should be taken without delay.
Effective preventative maintenance should be employed on all aspects of the construction works including all plant, vehicles, buildings and the equipment concerned with the control of emissions to air. 17 of 25
Important management techniques for effective control of emissions include; proper management, supervision and training for process operations; proper use of equipment;

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

Prevention

- The site manager will be appointed as the responsible person
- Consideration of weather conditions will be taken into account (dust generating potential of material) prior to excavation works
- Site layout is the maximise distance from plant/stockpiles etc. to sensitive receptors
- A solid screens at least as high as planned stockpiles will be erected.
- Materials generating dust will be removed from site as soon as possible
- No bonfires will be permissible on this site
- Operatives will be instructed on pollution prevention during induction process
- Tool box talks will take place on pollution prevention on days when the potential dust emissions may occur

Suppression

- Exposed soils will be re-vegetated as soon as practicable.
- Minimisation of dust generating activities, particularly near residential receptors during prolonged dry, dusty weather unless using damping and other suppressants
- Adequate water supplies to site and the use water as dust suppressant where applicable
- Any site machinery will be well maintained and in full working order
- Equipment available for cleaning spills etc. will be available at all times
- Sand and aggregates will be stored away from sensitive receptors and screened/shielded.
- Concrete batching will take place away from receptors where possible.
- Loads entering and leaving the site with dust generating potential will be covered and wheel washing facilities made available
- No idling of vehicles, all engines to be switched off.
- Vehicles will comply with site speed limits (5mph) and Low emission zones
- Water assisted sweeping of local roads will be undertaken if material tracked out of site ensuring no site run off of water or mud.
- hard surfacing will be installed as soon as practicable on site and maintained in good condition.

Containment

- Records of dust and air quality complaints will be kept, including likely causes and mitigation measures to reduce impacts if appropriate
- Daily on-site and off-site visual inspections will be undertaken and recorded
- Consideration will be given to dust soiling monitoring at nearby residential properties, at locations agreed with local authority
- Inspection frequency increased for periods of high activity or prolonged dry, windy weather
- The site perimeter, fences etc. will be kept clean.

Noise and Vibration Prevention

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

Where the measured noise levels are more than 3 dB (A) above the predicted noise levels or in the event of a complaint of noise an investigation shall be carried out to ascertain the cause of the exceedance or the complaint and to check that 'Best Practicable Means' are being used to control the noise in accordance with the steps set out in the application for 'prior consent'. Noise levels shall be reduced further if it is reasonably practicable to do so. In the case of vibration, measured vibration levels shall be compared with the criteria in BS 5228-1:2009+A1:2014 (i.e. $1mms^{-1}$ PPV for potential disturbance in residential and using a suggested trigger criteria of $2mms^{-1}$ for commercial). Lower limits must be agreed with the Council if there is a risk that vibration levels may interfere with vibration sensitive equipment or other vibration sensitive objects.
There will be no piling performed on this construction site and therefore the contractor does not anticipate having to set vibration lower limits.