JONAP
round table construction

45 Pilgrims Lane

Development and Construction Management Proposals

Introduction:
This document describes the proposed programme of the demolition and construction works for the redevelopment of 45 Pilgrims Lane, Hampstead and summarises the key activities that will be undertaken as part of the proposed development. It then identifies, in general terms, the likely potentially significant short term local environmental impacts associated with the construction activities and outlines the proposals for their mitigation by means of the CEMP

Development Programme and Phases:
The construction programme can be divided into five main stages:

- Site preparation
- Demolition and Remediation
- Construction of Substructure
- Construction of Superstructure
- Internal services and fit out

Site Preparations
Site hoardings and boundary fences together with security arrangements for the protection and safeguard of pedestrian access will be established immediately possession of the site is granted. Neighbourhood liaison will be established with a specific point of contact on the site side. Local Authority liaison together with **c**ondition surveys of adjacent properties / boundaries and traffic routes would be undertaken.

Internal verification surveys of the property will be produced in conjunction with specialist demolition sub contractor. Erection of External and Internal scaffold and the sheeting of erected scaffold would be undertaken prior to commencement of demolition. Existing services will be disconnected and temporary supplies provided in conjunction with Utilities.

A specialist firm will be employed to facilitate any necessary (and agreed) tree pruning and removal together with clearance of mature vegetation as required.

Party wall agreements will be reviewed with temporary works engineers and record surveys undertaken.

Demolition and Remediation
Soft Strip works will constitute the removal of any hazardous material from the works, the removal of furnishings, non load bearing walls, redundant services, windows and internal doors. The removal of all non permanent ceiling finishes and of retro fit timber items such as skirting boards, window boards, architraves work tops along with the removal of all redundant sanitary ware items. All plasterboard partitions will also be removed.

Prior to demolition any required temporary condition structure will be prepared. Dependant on agreed sequence of works this will be installed during or prior to superstructure demolition.

The demolition and removal of the existing superstructure will be by non percussive methods**.** Traditional masonry and timber structures will be carefully taken down and sorted prior to removal from site. Re-usable timber from the existing house will be labelled and taken from site for cleaning and storage. Materials will be returned paletted. Concrete sub structures will be taken down using hydraulic crunching and crushed on site for re-use as hardcore. This will reduce the requirement for cart away of this material.

Construction of Substructure and Basement
The removal of the existing ground slab and foundation structures will be required along with the removal of redundant underground drainage. Silent piling technologies such as Giken sheet piling will be incorporated into the works to dig out the new basement level and revised garden level prior to the construction of retaining structures. Spoil will be retained on site for back filling and redistribution where appropriate but there will by necessity be carting away required. Levelling of the ground and installation of hardcore base will be undertaken prior to the installation of new foundations. The use of pre formed concrete retaining walls over pre installed waterproofing to form the basement retaining will be considered. Formation of the new ground bearing concrete slabs over pre installed waterproofing will complete below

ground works. All options are aimed at minimising the requirement for site concrete deliveries. New underground drainage will be set prior to forming the new basement floor and retaining walls over the required waterproofing system.

Construction of Super structure
The steel frame will be formed from structural elements followed by infill floor construction from pre cast floor slabs or slim-line in situ cast. The new staircases are to be incorporated within the structure at this stage. The infill of the external structure can be with lightweight Metsec framing and the external brick envelope will be constructed over slab insulation installed on to the metal frame. Prefabricated solutions will also be investigated. The complete installation of waterproofing to the roof would follow. The construction of internal walls and the installation of carcass work for new services will be undertaken whilst the external envelope is completed by the installation of windows and glass.

Internal services and fit out
Complete Mechanical and Electrical services in conjunction with completion of internal walls and ceilings. Install new doors and frames. Complete sanitary ware installations and bathroom carcassing. Install new decorations and new floor finishes. Complete heating and lighting together with feature fittings and finishes. Complete external pavements and steps and landscape items. Green roofs and living wall elements will be completed at this time.

Plant and Equipment;
Indicative plant and equipment to be utilised during the programme phases identified above:

Site Preparation; Electric drills and circular saws, scaffold
Demolition and remediation; Excavators, cutters, drills and saw, non percussive breakers, mobile cranes, delivery and disposal vehicles
Substructure; Silent and bored piling rig, excavators, disposal vehicles, dumpers, concrete trucks, cutters, drills, circular saws, concrete pumps, mobile cranes
Superstructure; Self erecting static crane, hoists, scaffold, concrete pumps, fork lifts, system formwork, specialist concrete equipment, vibrating concrete poker, mobile plat forms
Internal Services and Fit out; mobile platforms, hand tools, electric drills, and saws, cutters, electric screw drivers

Hours of Work;
Hours of work will laid down in the planning consent and form part of the conditions
It is envisaged that in general the hours of will be as follows

08:00 – 18:00 hours Monday to Friday and
08:00 - 13:00 hours Saturday

However as there is residential accommodation in close proximity to the site where noisy works or other activities are being undertaken which may cause disruption there could be self imposed restrictions. On going liaison with the neighbours will ensure that they are informed of the works being undertaken and that consideration is taken of any concerns they may have.

The Construction and Environmental Management Plan (CEMP)
Consideration is given to best practice demolition and construction activities to determine an appropriate CEMP suitable for the proposed development. The proposed development is set in a residential location adjacent to Hampstead Heath. All access is therefore by necessity through residential areas with main approach being Pilgrims Lane accessed from the A502 via local roads governed by the area one way system. The proposed methods of construction outlined above are therefore designed to utilise component sizes that will reduce the size of required delivery vehicles. Detail assessment will be required to establish the appropriate balance between one off exceptional deliveries and the overall aim to reduce the flow of construction traffic to the site. The CEMP would take into account the governing local authority code of practice for the Control of Pollution & Noise from Demolition and Construction sites. It would address environmental issues in a comprehensive manner and would be discussed and agreed with the governing authority following the granting of the planning permission and appointment of contractors; however details of necessary mitigation to be included within the CEMP are outlined within this document.

Mitigation and Scope of Environmental Management Controls
The preparation of the CEMP is an established method of managing environmental impacts resulting from construction works and is consistent with methods adopted for other schemes in the London area. The establishment of agreed methods enables any prospective departures to be identified, the reasons understood and appropriate provisions made. While the provisions of the CEMP will be used to exert all practicable controls over the sources of impact, the proximity and sensitivity of neighbouring properties is often the determinant of the extent and degree of impact and would certainly be in this case.

Implementation
Once Planning permission is granted and the Principal Contractor (PC) has been appointed the detailed CEMP will be drawn up and circulated to the governing authority and other consulting parties for comment. Responsibility for the preparation of the CEMP will lie with the applicant. A requirement to comply with the CEMP will be included in the contracts of the Principal Contractor and Subcontractors appointed by the Principal contractor and independent checks will be made during the works to ensure it is being complied with. In addition, contractors will also be bound by relevant legislation (in respect of water pollution, waste management, health and safety legislation) and local authority regulatory mechanisms to achieve control, on for example, noise. Records of compliance and non compliance with the provisions of the CEMP will be held at the Principal Contractors site office. These will be available for inspection by the representatives of the applicant, the Environmental Health department and Environment Agency. The site will also be registered with the Considerate Constructors Scheme. A notice board with the Site Managers contact details will be positioned at the entrance to the site

Contents of the CEMP
The CEMP will include the following;

- The plan of the work phases
- Details of construction operations highlighting those likely to result in disturbance and/or working hours outside the core working period
- Requirements for monitoring and record keeping
- Contacts details during normal working hours and emergency details outside of
- Provision for reporting, public liaison, prior notification etc;
- Mechanism for public to register complaints and response procedures
- Details of how responsibility for management is allocated at all levels and how management responsibility is structured
- Mechanism for audit and review of the CEMP
- Details of prohibited or restricted operations (location, hours etc);
- Housekeeping procedures and environmental control measures relating to water, waste, incidents, ecology and contamination.
- Baseline levels for noise, vibration, and dust and monitoring protocols
- Setting of “Action levels” for noise, vibration and dust to warn of activities which may require particular care and control.
- Details of proposed traffic routes both on and off site and their monitoring (see appended draft traffic management plan

- Details of all works involving interference with a public highway (footpath closures diversions etc;)

General Site management
In accordance with good site management practice, measures will be adopted to maintain the site and surrounding area in a tidy condition. Designated areas will be reserved for storage and disposal of refuse and spoil, and for the storage and unloading of building materials. Such areas will be identified within detailed method statements that will be agreed prior to commencement.

Air Quality
Key sources of dust include;
- Demolition of existing structures;
- Earth moving and major excavations;
- Material handling from stockpiles or from vehicles
- Movement of vehicles over unpaved or soiled surfaces
- Cutting or grinding of stone or brick

Measures to control the source of dust;
- Barriers erected around dusty activities or around the site boundary
- No bonfires
- Stockpiled materials will be kept for the shortest time possible. Where they are likely to occur for significant periods they will be covered to prevent wind whipping
- Dust sources such as skips will be covered
- Road ways, Site haul roads, and dust generating activities will be dampened and swept
- Wheel washing facilities may be used
- Water suppressants used where applicable

Noise and Vibration
Possible mitigation measures may include;
- Specific working hours (no working weekends or bank holidays)
- Engaging in early and good public relations with adjacent tenants and building occupants to reduce the likelihood of complaints and timing construction activities to avoid noise and vibration nuisance to surrounding areas
- Where possible avoid the use of driven piles
- Parking construction traffic off the public highway
- Controlling the discharge of trucks from the site to avoid congestion
- Implementing suitable traffic management systems at the site entrance
- Carrying out all works in accordance with Best Practice means as stipulated in the Control of Pollution act and Local authority codes

Traffic and Access Management
Detailed information regarding routes for construction traffic and measures to minimise the risk of traffic congestion will be presented in detail through a construction Traffic Management plan that will be compiled by the Principal Contractor and adopted by the Principal Contractors subcontractors and discussed and agreed with the Governing Authority prior to commencement of the works. Wherever possible, routes will be chosen to minimise disturbance to users and occupiers of adjacent buildings as well as pedestrians and other road users.

Visual Impact
With respect to the visual characteristics of the proposed site and surrounding, the inevitable visual intrusion resultant from cranes and tall construction plant can be mitigated by ensuring good maintenance of the site and boundary hoarding. Pathways and vehicle access ways on and off the site be kept in good condition and kept clean. Condition surveys will conducted prior to the commencement of works and all works disturbed shall be reinstated to similar condition.

Control of site drainage and contamination
All liquids and solids of a potentially hazardous nature (e.g. diesel fuel, oils, solvents) will be stored on impermeable bases, with bunding to the satisfaction of the Environmental Agency and all in accordance

with COSHH Regulations. The drainage system of the bund shall be sealed with no discharge to any water course, land or underground strata. All associated pipework shall be located above ground and protected from accidental damage.

No discharge of sewage will be made to the ground. Surface drainage during construction will probably pass to a modified drainage system. Where necessary, settlement and oil interception facilities will be provided. Discharge arrangements will be agreed with the EA and water Authority. The Principal Contractor will ensure that water that may have come into contact with contaminated materials will be disposed of in accordance with all current legislation and to the satisfaction of the EA

Site Safety and Security

The site boundary will be secured by perimeter hoarding. Responsibility for security will rest with the Principal Contractor, and comply with their Health and Safety obligations. All personnel will be made aware of their responsibilities with respect to CEMP, and its appropriate implementation. All construction personnel will undergo site specific induction to include health and safety and environmental issues, prior to commencement of work on site. Additional Tool box talks will be used for specific Items that require more in depth training.

Summary

This draft document covers the considerations pertaining to the proposed development and further assessment in detail of the precise environmental impacts that will result from the works will be required to complete the full CEMP taking into further consideration the following:

1. The detailed method statements and techniques of working by the specialist contractors (not yet appointed) and

2. Specific site activities will vary in frequency depending upon the particular stage of demolition or construction

However what has been identified within this document are the broad impacts associated with the works and a general framework for the management of environmental impacts during the works by means of the CEMP. The CEMP will define policies, procedures and the management framework for the implementation of specific management controls