

## STANHOPE

# Refurbishment of 129 Malden Road, NW5 4HS, the home of the Simon Community

# **CONSTRUCTION METHODOLOGY**

March 2016

**Revision 02** 

## **REVISION HISTORY**

Revision	Date	Ву	Comments
02	11/04/16	SRM	General update of proposals for planning submission

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## 1.0 Introduction

This report is based upon the latest design information with assumptions noted where appropriate and discussions with the Simon Community. The report sets out the logistics strategy and outline construction methodology for the refurbishment of 129 Malden Road. It also describes how the project will be set up from site establishment to completion.

The aim of the document is to address the following issues:

- How the impact of the works on the neighbours will be minimised
- How traffic routes around the site will be managed
- How the site will be presented
- How the site will be secured and access controlled
- How personnel and materials enter and leave the site
- How the general principles of delivering the project will be managed
- The outline construction methodology

#### 2.0 Description of the project and programme of works

The project works comprise the refurbishment of 129 Malden Road.

The work includes a two storey extension to the rear of the property, internal modifications and a central glazed roof.

The indicative dates for the project are as follows;

Site establishment	Nov 2016
Site demolition / internal modifications	Dec 2016
Commence new extension	Jan 2017
Complete internal finishes	June 2017
Complete extension	August 2017

## 3.0 Good neighbour policy

The success of this project will depend on the execution of the works in such a manner that the impact on the neighbouring properties, the local community and surrounding roads is minimised.

This report identifies the measures we will take to operate the site. In addition we could implement the following measures to address neighbourhood issues:-

Liaison with the local authority Initial meetings and briefings with neighbours External notice board on hoardings with contact names / numbers Registration with the Considerate Constructors Award Scheme

## 4.0 Enabling works

Enabling Works will prepare the site for demolition and construction and will include the following issues:

- Surveys of asbestos and services
- Survey of party wall buildings and agreements regarding any temporary support requirements.
- Party wall agreements for over-sailing by scaffolds or access systems.
- Neighbour agreements on working hours, method etc.
- Licences, water use and sewage.
- Establishment of temporary facilities including Welfare and perimeter hoardings.
- Installation and re-configuration of access/egress routes as the works progress.
- 4 trial pits in the basement.
- Ceiling soffit voids investigated at every floor level.

## 5.0 Traffic routes and Delivery unloading

The existing building entrance for personnel is via the entrance in 129 Malden Road.

As part of our pre-commencement works we will produce a photographical record of the condition of the surrounding roads and footpaths. This will be agreed with the local authority and will be used to assess any remedials needed on completion of the project resulting from the construction activities at 129 Malden Road.

## 6.0 Hoardings and site access control

Hoardings will be required from the start of construction on site and modified where necessary to allow access for construction purposes.

## 7.0 Site working hours

Subject to agreement with the local authority, we anticipate the following working hours:

08:00 – 18:00 hours (Monday to Friday) 08:00 – 13:00 hours (Saturday)

Quiet Periods – to be agreed.

## 8.0 Delivery control

A booking system will be used to ensure that the supply of vehicles and materials is matched by unloading areas and facilities.

## 9.0 Common User Plant

Scaffolding will be erected to the front and rear elevations of the property to facilitate safe access.

## 10.0 Site Accommodation & Welfare

The labour force on site is forecast to peak at around 25 personnel. The facilities required are:

- Toilets & Shower (male and female)
- Changing rooms / drying rooms (male & female)
- Canteen area

Space within the demise of the site will be made available for site accommodation.

## 11.0 Project office accommodation

The project manager team will be located in a room within the existing building.

## **12.0 Proposed Construction Method**

All details on the proposed structures can be found in the appendices following this brief.

Assumptions:

- Access for all equipment, plant and materials will be via the front of the property as this is the only form of access. (Size of equipment brought to site will have to be considered).
- Ground conditions are yet to be confirmed and any requirement for the remediation to be established.
- All preservation orders are to be highlighted on any method statement.
- Any quiet working periods are to be reflected in all method statements.
- Existing foundations are mass concrete strip footings.
- Existing floors are made up of timber joists.
- Existing roof is an inverted pitched timber structure.

## 12.1 Demolition

The two main areas of demolition are at the back of the house and through the centre of the building to form the new staircase. Demolition will not commence until all temporary works has been designed and checked. All internal masonry walls will be demolished and replaced with a new steel frame structure.

Back masonry will be demolished once new double storey height steel frame is built.

Existing roof will be demolished to construct new third floor extension.

Any existing structure will be demolished in order to build the glazed, sloping, timber extension along one half of the rear façade. With the other half of the rear façade having a new brick structure extension.

#### **12.2 Foundations and Substructure**

A concrete pad foundation is the most appropriate type of foundation to use and this will be produced in-situ.

Excavation of the basement will be carried out after the completion of temporary propping to the existing basement area.

Foundations for the ground floor can begin in conjunction with the works on the extended basement area.

Once complete, the basement floor slab will be cast.

All new foundations will be concrete footings, which will support the new steel frames throughout the entire build of the house.

A new concrete retaining wall; 6 meters long and 300mm thick will be built to support the build of the garden room.

#### 12.3 Superstructure

The superstructure for the extension will consist of a steel frame clad with structural insulated panels finished to the architects' specification.

Once the steel frame has been erected, the 2<sup>nd</sup> floor slab can be formed, the party wall constructed and the glazed roof fitted.

All new additions to the superstructure stated below will be constructed from basement upwards unless the works are internal; these works may continue simultaneously to the exterior works:

- Double storey height steel picture frame from basement level to the first floor, consisting of columns and beams. The steel frame should be fitted tight to the existing structure before propping is removed.
- Glazed basement to first extension. This extension covers one half of the rear façade and its primary structure will consist of timber fin beams and columns. A brick and brick cavity wall is to be formed to close the adjacent party wall.

- Next to the glazed extension a basement to second extension will be built from a steel frame; with floors and roof consisting of timber joists.

Third floor

- An extension to the roof is to be built, by removal of the existing roof and extension of the masonry walls on each side. Timber joists will form the main structure, supported by steel beams to the front and rear of the façade. The walls will be either be glazed or formed from a light weight cladding.

## 12.4 Cladding

Once the frame has been installed, the cladding installation will commence.

Windows installed and roof finishes applied to create a waterproof structure.

The glazed basement to first floor extension will be in-filled with either glass or ply wood cladding.

Cladding to each individual exterior of the extensions is yet to be specified.

## 12.5 Internal structural modifications.

Once the temporary propping has been installed, the internal load bearing walls can be modified to accommodate the new internal staircase, partition walls and glazed roof.

The internal masonry walls will be replaced with a steel frame consisting of 4 columns, which will go through the entire building; built up from concrete pad footings below basement slab level.

The existing timber floor joists will be propped and cut back to create a void for the new central staircase and the party walls will also be propped until the new frame is in place.

## 12.6 Services, Finishes, Commissioning and Handover

New heating and electrical systems will be installed in compliance with the latest standards and regulations.

All existing and new walls and ceilings will be plastered and decorated in accordance with the architects' specification.

All heating and electrical systems will be commissioned before completion of the project.