

# Station Yard, Twickenham

# Preliminary Construction Management Plan on behalf of Solum Regeneration (Twickenham) LLP

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# **Project Particulars**

Construction of a 46 Apartments in a ground plus 5-storey block on the existing Station Yard car park area.

Station Yard car park area (the Site) is located at the junction of Station Yard and Mary's Terrace.

Along the north boundary of the site is the Reading to London Waterloo rail line.

The main access to the site is from London Road (A310) via Railway Approach.

#### General

This Construction Management Plan has been prepared based on the current initial design information and gives an indication of a general approach to the construction and management of the project. A more detailed construction method statement will be produced prior to starting work on site to capture any issues arising through the planning and detailed design phase.

#### Pre-start Activities

Prior to commencement of site works, an external survey will be carried out to confirm the existing site levels and the extent of existing services, both live and redundant.

A full condition survey of the existing environs will also take place including the adjacent roads.

These will be plotted on a drawing and a photographic record will be taken, which will be maintained as a record throughout the contract.

Notification of the project commencement will be issued to all Statutory Authorities, advising them of the construction works and the proposed programme of works.

Pre-commencement newsletters will be delivered to all neighbouring addresses introducing the site team and outlining the upcoming activities and relevant points of contact etc.

This will continue quarterly, or as required, throughout the works and a noticeboard will be placed on the hoarding for general project information and emergency contact numbers.

# Site working hours

08.00 – 18.00 Monday to Friday

08.00 – 13.00 Saturday

# Security & Site Establishment

A secure hoarding (solid timber and metal heras) will be erected around the construction site area.



Site setup will be at the top end of Mary's Terrace. Leaving a minimum of one lane clear for emergency vehicle access. The triangular parcel of land beyond the building will be used for site cabins etc whilst the substructure and structure is built, thereafter part of the internal ground floor will be used for site accommodation and welfare facilities.

The existing boundary fence along the rail line to the North will be maintained until such time as it is replaced, which may form part of the development works.

The footpath adjacent to the site along Station Yard will be required for construction working space and as such will be suspended. Pedestrians will be diverted onto the footpath on the south side of Station Yard.

All hoarding will be 2.4m high, inspected weekly and maintained. On occasions it may be necessary to adapt the hoardings during the construction period to suit the phasing of the works and this will be communicated to the local residents and road users (through advanced warning signage) as necessary.

# General Access, Deliveries & Material Storage

Vehicle Access to the site will be via London Road (A310), Railway Approach, Station Yard and Station Road. The existing bus station owned by TfL will always remain operational and deliveries will be booked in on an 'as required' basis given the limited storage availability on the site. A drop-off area for smaller vehicles will be provided at the western end of Mary's Terrace.

Part of the existing bus station may be used for a 'Holding Area' on occasion and only in agreement with TfL. Normal bus operation will be unaffected by the proposed works.

A traffic marshal will attend during working hours to ensure safe movement of vehicles, buses and pedestrians within and around the bus station area.

To ensure congestion is avoided suppliers and sub-contractors will be contracted to deliver to an agreed schedule listing both the date and time of delivery. Delivery vehicles will be provided with directions to the site and be required to turn off engines to avoid nuisance upon arrival.

Vehicles will be unloaded from the unloading bay (see Logistics Plan) by either the tower crane or forklift.

Pedestrian access/egress onto the building site will be via secure turnstile.

There will be no parking on site, all operatives and visitors will be encouraged to take public transport.

No waiting will be permitted on the roads adjacent to the site. The traffic marshal will ensure that construction vehicles do not obstruct pavements or queue on the roads adjacent to the site. The traffic marshal will ensure delivery and construction vehicles moving around the site do not exceed 5MPH.

Access to Mary's Terrace will be maintained via a single lane and will not be blocked at night-time.



The site access/egress will be kept clean to prevent debris and other materials being deposited on the surrounding streets and footpaths.

Safety Signs will be placed around the site and along all pedestrian routes.

Adequate signage will be displayed directing traffic to/from site and traffic movements into/out of site will be controlled by the traffic marshal.

A Banksman will be employed to receive and manage deliveries arriving and large deliveries will be required to book in advance to avoid multiple, unexpected arrivals on site.

Materials for the structure and envelope will be stored within the site. As the structure is progressed, upper floor slabs and the roof slab will also be used for storage of materials. Due to the limited storage areas, the works will need to be phased to facilitate storage on site.

Internal finishes materials will be stored inside the building (once the envelope is weather tight).



STATION YARD, TWICKENHAM LOGISTICS PLAN

Delivery egress

Hoist

Site cabins & material

storage below London

Road Bridge

unloading bay



# Wheel Washing Facilities

A wheel washing area will be located within the site to prevent deposit of materials on to the public highway.

Any necessary wheel washing will be via a handheld pressure jet washer.

Road sweeping will be carried out weekly (or as required) to remove any construction debris from the adjacent roads.

# Signage

Site signage will be provided within the boundaries of the site as necessary to advise operatives/visitors and delivery staff of safety requirements within the confines of the site and here to report on arrival.

Such signage will include:

- Accommodation / Access requirements
- Speed Limits
- Overhead / Underground Services
- Safety Helmet and Footwear Requirement
- Danger Construction Site, etc.

# Waste Management

A waste removal strategy will be developed during the pre-commencement period. This strategy will be incorporated within all trade contractor orders.

Rubbish skips will be provided within the site area, the skips will be removed and replaced on a regular basis.

Waste will be segregated, partly on site and completed off site, this provides optimum opportunity for recycling materials.

# Scaffolding

Access Scaffold will be required to all elevations.

Mary's Terrace elevation. Mary's Terrace is used for emergency access (fire brigade, etc.) and as such the scaffold will be erected so that the proper access is always maintained.

Scaffold along the rail line boundary will be erected in accordance with Network Rail requirements and all permissions from Network Rail will be obtained.

Scaffolding will be independent with boarded lifts to suit the nature, location and type of site activities.

All scaffolding will be securely tied to the structure and will include suitable ladder access.



Scaffolding will be provided, erected and maintained in accordance with all current statutory regulations.

Scaffold 'fans', debris netting etc. will be erected to protect the general public where required, a detailed proposal will be worked up by the appointed contractor.

No person other than a certified competent scaffolder will be permitted to erect, alter, adapt or dismantle any scaffolding.

# **Temporary Services**

110v power will be utilised throughout the building site.

All lighting will be controlled via time clocks to ensure they are not left on outside of the permitted working hours.

Security lighting will be linked to CCTV.

Any flood lighting used on site will be pointed into the site to minimise light pollution outside of the site boundary.

Bulkhead type lighting will be provided on hoardings, storage areas along Mary's Terrace and under the London Road bridge.

Water will be provided direct from the mains system for use in the welfare facilities and construction activities.

Temporary drainage (site cabins and site toilets) will be connected to the existing foul drain.

Telephone lines and an electronic data transfer line will be provided to the site offices utilising the existing network in the vicinity.

# Air Quality and Dust Management

Best practice will be employed in respect of dust and debris control from the construction activities and the following mitigation measures will be employed during the construction phase of the project to reduce the impact of on-site activities.

The principles outlined in 'The control of dust and emissions from construction and demolition best practice' produced by the Greater London Authority will be used.

#### **Construction Traffic**

- All vehicles to switch off engines
- Effective cleaning and wheel washing on leaving site
- All loads entering the site are to be covered
- No runoff of site water or mud
- All plant on site to regularly maintained and appropriate filters in place
- Ensure that onsite haul routes are effectively maintained and kept clean.

#### Site Activities

- Minimise dust generating activities
- Use water as dust suppressant where applicable



Enclose stockpiles or keep securely sheeted

# **Dust Monitoring**

A visual assessment is considered appropriate for this site.

Dust generating activities such as; excavating, piling, movement of excavated materials, hard landscaping, will be controlled by spraying water where required.

#### Noise & Vibration Control

Noise & Vibration monitoring will be carried out on site once the operations are underway to ensure that the agreed levels are not exceeded. All in accordance with BS5288:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites.

These will be regularly monitored by the contactor at set locations near sensitive receptors and records maintained.

If levels are exceeded, the following procedures will be put in place:

- Quickly assess the seriousness of the problem
- Contact the complainant and consider their views and advise how to improve the situation
- Cease the activity causing the problem until preventative measures are in place
- Continue to take noise readings of the incident to demonstrate the effects of the improvements made

#### **Execution of Works**

Reasonably practicable measures to manage construction noise and vibration impacts which will be undertaken during these works include the following:

The hours of working should be planned and account should be taken of the effects of noise upon persons in areas surrounding site operations and upon persons working on site, taking into account the nature of land use in the areas concerned, the duration of work and the likely consequence of any lengthening of work periods

On-site noise & vibration levels will be monitored regularly, particularly if changes in machinery or project designs are introduced, by a suitably qualified person appointed specifically for the purpose. A method of noise & vibration measurement should be agreed prior to commencement of site works

On those parts of a site where high levels of noise are likely to be a hazard to persons working on the site, prominent warning notices should be displayed and, where necessary, ear protectors should be provided.

#### **Control of Noise at Source**

Modification of existing plant and equipment - Noise from existing plant and equipment can sometimes be reduced by modification or by the application of improved sound reduction methods after consultation with the manufacturer



Use and location of equipment - Care should be taken to locate equipment away from noise-sensitive areas. Machines and plant should not be left running unnecessarily. Plant known to emit noise strongly in one direction should, when possible, be orientated so that the noise is directed away from noise-sensitive areas. Acoustic covers to engines should be kept closed when the engines are in use and idling

Maintenance - Regular maintenance of plant etc. will help reduce noise from machinery

# Health & Safety

The works are to be carried out in accordance with the Construction Design and Management Regulations 2015.

When work commences on site a Construction Phase Plan will be in place and the works will be carried out in accordance with the requirements of this plan.

#### **Environmental**

A full project specific Environmental and Site Waste Management Plan will be developed by the appointed contractor. The Plan will contain details regarding what to do if hazardous waste treatment and or removal is required.

# Community Relations

Good community relations are an essential part of the harmonious delivery of the project.

Activities to aid these relationships are as follows:

- Regularly inform residents on progress of the works by way of leaflet drops and/or public meetings
- A telephone "hot line" and agreed procedure for the contractor to investigate and report on complaints will be set up
- 28 Days' notice of times and dates of crane rigging, and de-rigging shall be given to the council
- Regular dialogue regarding road closures as necessary to complete the works.

# Construction Methodology

Following completion of the detailed design the specific construction methods and arrangements will be prepared.

Based on the current information the following provides a preliminary guide to the anticipated arrangements.

Building adjacent to a rail line requires a significant number of approvals from Network Rail. A schedule of all approvals required will be prepared and a process to obtain agreement for each item will be agreed with Network Rail before work commences on site.



#### Sub-Structure

Reduced level excavations will commence following removal of existing car park surface

Any ground remediation will be carried out at this stage

Piled foundation will be installed followed by the ground beams and drainage

The ground bearing slab will be installed ready for the superstructure

#### Structure

The structure will be a reinforced concrete (RC) frame erected by a specialist subcontractor

A tower crane (Luffing Jib) will be used to lift materials, formwork and small volumes of concrete

A concrete pump will be used for placing concrete in the upper slabs

A detailed method statement for the RC frame erection will be produced

#### **Envelope**

Scaffold will be erected to provide access to the elevations

A hoist will be located at the north east corner (see Logistics Plan) to assist in moving materials vertically

The tower crane will also be used for lifting materials vertically, when the roof coverings and façade cladding is substantially complete the tower crane will be removed

#### **Internal Work**

As the structure becomes watertight the internal works will commence

Internal materials will be moved vertically via the hoist, the hoist will be removed when all 2<sup>nd</sup> fix materials have been distributed and the hoist plots (apartments, level 1 to 5, north east corner) will then be completed

#### **External Works**

Following removal of the scaffold the hard and soft landscaping works will be carried out including any public realm works

Section 278 Works, these will be carried out with the hard and soft landscaping works. A traffic management plan (agreed with the highway department) will be required for these works. The new tabletop at Mary's Terrace / Station Yard junction will need to be carried out whilst maintain 24/7 emergency access to Mary's Terrace