

**Raag (St. Pancras) Ltd.**  
**Proposed Hotel & Residential Development**  
**Britannia Street, Kings Cross**

**Construction Management Plan**

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# **Construction Management Plan**

## **1. Summary**

These notes describe the activities necessary to construct a new mixed use building between Britannia Street and Wicklow Street within the Borough of Camden. They also describe the management of the construction operations and the environmental impacts and mitigation measures to be considered.

The site is currently an open car park accessed from Britannia Street and incorporates a brick built vent stack from a railway tunnel below which comprises two lines operated by Network Rail. Running parallel with the south-west boundary of the site is an alternative railway cutting comprising two tracks for London Underground Circle Line. The north-east boundaries of the site adjoin existing established properties occupied for residential and office uses.

## **2. Building Structure Description**

The hotel element of the development extends up to five storeys in height with a roof top plant room. The hotel will be built up to the existing boundaries adjoining the residential and office accommodation. Currently, existing walls are blank with a linking 6m high boundary wall of poor construction. This will be replaced by the new hotel development.

Foundations to the hotel will comprise of augured piles designed specifically to the satisfaction of Network Rail by the appointed engineers. The foundations will be designed in a manner which will not impact upon the existing tunnel structure.

The hotel superstructure is likely to be constructed in a lightweight Metframe composition clad with masonry and punched hole windows. To the rear of the hotel block will be a separate element incorporating 5 no. 'open market' residential housing units accessed solely from Wicklow Street. Between the hotel and the railway cutting, the social housing structure will be founded on a reinforced concrete raft spanning over the existing railway tunnel. The 2/3 storey structure above will comprise of a Metframe system incorporating punched hole windows. The external wall of the new social housing units will be sited approximately 3m from the existing revetment to the railway operators to avoid materials being deposited on the line.

## **3. Incoming Services, Drainage Diversions and Adjacencies**

New foul and surface water drainage will be installed for the mixed use development to discharge into existing systems within Wicklow Street and Britannia Street. The site will be surveyed to establish if any existing utility services need to be capped off/made safe. New utility services for both the housing and the hotel will be brought on site as necessary.

With regard to the existing party walls, a party wall surveyor is being appointed to advise on the method of the new construction adjacent to existing properties and to mitigate against the impact upon the occupants.

## **4. Construction Method Statement**

The construction phase will include the following stages:

### **4.1 Site set-up**

Hoardings will be erected to both Britannia Street and Wicklow Street following appropriate licenses being approved by the Local Authority – Deliveries will be made initially via both Streets through heavy duty metal

/ timber gates. The use of one carriageway will be necessary to unload deliveries with tower crane once the substructure works have been completed and the superstructure works commence

#### 4.2 Demolitions

Once the hoarding has been completed and a suitable agreement with Network Rail has been achieved along with a permit to work, the existing brickwork vent shaft will be demolished and carted away from site in wagons. A suitable deck / protection layer will be installed to prevent debris discharging onto the track and to allow the existing tunnel arch to be in filled with a reinforced concrete layer as per the structural design. The deck will consist of scaffolding with a layer of polythene between the boards and the perimeter will be monarflex sheeting lapped into the polythene to ensure no dust or debris will affect the running track below. The former car park will have all hard surfacing broken up and again be carted away from site at a manageable size. The vent will be protected during the breaking out works to ensure that no debris is allowed to drop on to the track as it is likely that these works will take place prior to the shaft being in filled. Excavation will continue to formation level and a hardcore sacrificial piling matt will be laid for setting out and piling purposes.

#### 4.3 Foundations and ground slabs

Piles will be installed to depths as per structural engineers design parameters taking account of the proximity of the underground railway line. Following testing of piles they will be cut to length with pile caps and reinforced ground beams being constructed to enable the ground floor slab to be laid. Suitable design work will be carried out to allow the inclusion of a tower crane base placed centrally within the site, on a suitable independent piled foundation by agreement with Network Rail.

#### 4.4 Superstructure erection

The superstructure will be built away from the ground floor slab having a full scaffold to all external elevations and internal where building within Party Wall Parameters. The hoarding will need to be moved. The scaffold ( subject to license approval by Local Authority ) will be totally enclosed with Monarflex or equivalent protection to prevent any debris from falling on to the pavement / railway line respectively. An additional scaffold 'wall' will be erected adjacent to the railway cutting once the detailing has been agreed with London Underground and a suitable scaffold fan will be positioned over the railway to the building boundary line with a polythene layer if deemed necessary by London Underground. This will provide a physical barrier from the site to the railway cutting to prevent any machinery or debris being allowed to fall on the track. By agreement with London Underground, these protection works will be carried out over night. Masonry walls / cladded panels will be constructed in a methodical manner. Upper floors to be constructed from Metsec framing complete with Acoustic Chipboard proprietary floor systems making use of the on-site tower crane. Traditional timber truss roof and tiling will also be lifted in the same manner.

#### 4.5 Cladding

Masonry and traditional brickwork to installed with the use of Tower crane and scaffolding.

#### 4.6 Fitting out

Traditional Gyproc partitions and walling systems will be utilized to form bedrooms / apartments once the external envelope is sufficiently water tight.

## **5. Plant Proposed**

A 360 degree machine with breaker will be used to demolish rotunda and break up existing hardstand and then used to perform the reduced level dig to formation.

A piling rig will be used to carry out the piling process.

Concrete pump will be used to pour ground floor slabs / retaining structures etc.

Mobile crane will be used to erect tower crane.

Tower crane will be used for construction and material distribution. The crane will be fitted with limits to operate within oversailing agreements with adjoining parties.

Full scaffold to be used for external wall cladding / masonry and glazing.

## **6. Safety**

The scaffold used for external wall cladding / masonry and glazing will be fully netted to ensure that no construction debris can come in contact with the general public.

The hoarding will have necessary lighting and signage as required by the local authority.