61, 63, 65 CHARLOTTE STREET CONSTRUCTION MANAGEMENT PLAN

Introduction

Rosguill Developments Limited (the Contractor) has been instructed by Merchant Land to produce a Draft Construction Management Plan (CMP) in relation to the proposed conversion, extension and refurbishment of 61, 63 & 65 Charlotte St London W1T. Rosguill Developments Ltd, contractors established in London since 1997, have provided some construction consultancy at a time when no main contractor has been appointed to the project. Structural and Civil Engineers (BW Murray Ltd) and Transport Consultants (TTP) have also provided specialist input.

The aim of the Draft Construction Management Plan is to establish some principals in terms of:

- Deliveries and loading/unloading of vehicles carried out in a planned way;
- Safe access/egress is maintained to all members of the public, neighbours and their visitors/business operations and own workforces;
- Disruption to vehicle traffic movements on public highways in minimised;
- Keeping the public and community informed via an External Relations programme.

The Draft CMP provides detail of all measures that are considered appropriate at this time however will be a live document that will evolve as we move through detailed design to reflect issues that may be identified as the project progresses or as we consult with local residents.

When appointed, the Contractor's Project Manager will be responsible for implementing measures set out in the CMP and will be the main point of contact for the local residents during the construction process. The Contractor, and their Project Manager's, name, telephone and email addresses will be added to the CMP once this appointment has been made.

Prior to the appointment of the contractor the implementation of any necessary measures will be managed by Merchant Land's Construction Director Seamus Porter. Contact Details:

seamus@merchantland.co.uk

Telephone: 020 7522 8743

Address: 66 Leman Street, London E1 8EU

Proposal Summary

The proposals involve the tidying up and repair of the existing façade, the refurbishment of the two existing retail units and restoration of their ground floor level shop front facades, the conversion of some of the existing upper floors of the building into 7 new apartments, the construction of a new recessed mansard 4th floor over part of the site and the extension and redevelopment of modern B1 space to the rear of the site.

The developer seeks to ensure that the refurbishment and part redevelopment of this part Victorian part 1990s building, which in recent times has lain vacant and in significant disrepair, has minimum environmental

impact both during construction and post occupation. This is reflected in both the selection of materials and the construction methodology adopted to date.

Site Context

The site is currently a vacant and obsolete office building with two small retail units.

The neighbouring properties consist of a mixture of residential (flats), office and retail (primarily food use) with an Islamic Centre several doors down. Reasonably significant levels of development and construction activity are currently underway in the local vicinity *including Fitzroy Place (Exemplar), 74 Charlotte St, 71 Charlotte St and 69 Charlotte St.*

Pre-Application Community Engagement

As part of the scheme development, the team have carried out extensive pre-application community engagement with the following neighbours to discuss both the scheme and the construction management:

- Local residents & Business Owners: 999 letters were sent out on 3rd of December 2014 to surrounding properties;
- A public exhibition was held on 15th of December 2014;
- Meetings held with Fitzrovia Bid Partnership and Bloomsbury Conservation Area Advisory Committee;
- LB Camden: Pre-Application Meeting.

Any relevant comments will be incorporated and overall, we consider that the approach adopted in the CMP will be generally supported by all of the parties.

Programme & Construction Methodology

As planning is yet to be granted, the programme below provides an indication of the duration of each phase of the works. The programme will be updated once planning permission has been granted and a contractor has been appointed and a date for the works to be started on site has been determined.

However at this stage the programme has been estimated at 68 weeks in length to reflect the fact it's a tight sight in a busy Central London location.

Works Phase	Duration	Typical Labour Levels (excluding management & supervision)
Site set up & establishment	3 weeks	4
Piles & Ground Floor	9 weeks	8
Superstructure Frame	9 weeks	10
Envelope	18 weeks	10
Internal works (non fit out)	19 weeks	10

Commissioning final fit out and furnishings	10 weeks	25
Overall Works	68 weeks	

It is currently anticipated that the overall construction period will be 68 weeks.

Working hours will be Monday/Friday 8am to 6pm and Saturday 8am to 1pm.

General Scope of Structural Works

- Works will commence with the demolition of the existing structure to the offices and the existing flooring joists and the roof of all flats in No 61, 63 & Flat 3 in No 65;
- A bulk dig of the areas in the basement will take place to achieve the necessary floor levels;
- Where underpinning is required during the bulk dig will not be excavated and left as a bund to support the existing foundations. A hit and miss installation of the underpinning will follow as specified per the engineers drawings. Once the underpinning has been completed the basement concrete raft/slab foundation will be formed with external walls and columns to ground floor levels.
- A uniform concrete slab will form the ground floor level itself across the entire office floor plan.
- All rising elements from ground to roof will consist of steel/concrete columns to support the roof.
- The roof will be comprised of a steel structure at higher level and concrete slab at lower level.

Residential (Excluding Flats 1 & 2 65 Charlotte Street)

- Prior to the removal of the existing floor joists in the flats mentioned above new timber joists will be installed at differing levels indicated in the proposed design;
- This will be done on a floor by floor basis before the removal of the existing joist to provide lateral stability to the existing structure at all times during the process;
- Felt and batten party wall between 63 and 65 in advance of the roof demolition in unit 63;
- The removal of the roof will take place to allow the construction of the new mansard roof level.

Flats 1 & 2 No 65

See Appendix 1.

Internal Finishes

The internal finishes will use a high proportion of pre-fabricated and pre-finished materials ranging from joinery (doors and panelling), stone/timber flooring etc. The finishes will be chosen to limit site works, the number of operatives required to complete the installation, as well as limited the volumes of waste materials generated by the installation.

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Access

Access Routes – Charlotte Street

All construction and delivery vehicles will approach the site on Charlotte St from the North.

Vehicles Sizes & Tracking

The following list provides detail of the types of vehicles that will need to gain access to the site during the demolition and construction process.

- Skip Lorry 4 Wheel 17 Tonne GVW;
- General Buildings Materials 4 Wheel 17 Tonne, GVW, HIAB Flat Bed;
- Mobile Crane 24 Tonne GVW.

Swept path analysis has been undertaken to demonstrate that a 17 Tonne rigid vehicle can negotiate access and egress to the site? The above are the largest vehicles that will need to manoeuvre to and from the site and therefore it is not necessary to repeat this exercise for smaller vehicles. It should be noted that these manoeuvres will not require the suspension of any on-street parking bays or any works to the Highways Network.

Swept Path analysis has been undertaken to show the 17 tonne rigid vehicle undertaking manoeuvres to the site?

Vehicle swept paths are attached in Appendix 2

Vehicle Movements

Construction vehicle movements will not be permitted at weekends or during public holidays and will be scheduled to take place between the hours of 10am and 4pm so to avoid typical peak period vehicle movements along Charlotte Street. Heavy goods vehicle movements will be scheduled to avoid more than one movement every 30 minutes. The following table provides a break down of the number of vehicle movements during each phase of the construction process. This will be updated to provide more specific detail of anticipated delivery times once planning permission has been granted and a date for works to start on site has been determined.

Works Phase	Duration	Total HGV Movements	Average Daily Movements	Peak Daily Movements
Site set up & establishment	3 weeks	20	1.3	Max 4 per day
Piles & Ground Floor	9 weeks	50	1.7	Max 8 per day
Superstructure Frame	9 weeks	100	3.3	Max 8 per day
Envelope	18 weeks	32	0.5	Max 2 per day
Internal finishes	19 weeks	30	0.3	Max 2 per day
Commissioning final fit out and furnishings	10 weeks	20	0.4	Max 8 per day

Overall Works	62 weeks			

Nuisance Control

A range of measures will be implemented to ensure the potential impact of the works on local residents and neighbours will be minimised. The measures are discussed in turn below.

Dust Control

Water dampening will be utilised and dust screens will be incorporated by using a fully sheeted scaffold around the perimeter and height of the building.

The new superstructure will be delivered as pre-fabricated or modular elements pre-cut to size to the potential for dust generation has been limited by the selection of materials and methods.

Wheel Wash

Site vehicles will have wheels washed down prior to leaving the site as to reduce unwanted debris spreading onto Charlotte Street. A temporary concrete slab will be installed at the site entrance to form an impervious area that can be used as a wheel wash area. Waste water from the wheel wash, and also from general site operations such as dampening down, will be stored in a temporary 'silt buster' holding and separation tank on the site level which will be monitored by the Principal Contractor. When full the tank will be emptied by a registered waste disposal contractor using a vacuum tanker and transported to a local depot for processing prior to disposal. This operation will be controlled by an consignment note to allow full traceability of all material removed from site.

Road Cleaning

The public highway and footpath outside the site will be kept clean and free of debris by regular cleaning.

Noise Control

Deliveries to the site will take place between the hours of 10am and 4pm and scheduled to distribute vehicle movements throughout these hours so as to avoid periods of intensive activity and thereby limiting noise and vehicle emissions. The noise levels associated with particular materials has, and will continue, to be taken into consideration as part of the design specification process.

There will be a requirement to comply generally with the recommendations of BS 5228 for minimising noise levels during the execution of works and all compressors, percussion tools, and vehicles will be fitted with effective silencers of a type recommended by their manufacturers.

Site Security

All construction materials will be stored within site. 2.4m boarded hoardings are proposed to be erected (following discussion with LB Camden by the appointed Principal Contractor) along the site boundary with Charlotte St. Access gates will be firmed to the main entrance and will be locked outside of working hours to ensure all materials and equipment are stored safely and securely.

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Consultation With Local Residents

As well as regular letters updated local residents of progress on site, the new community information website will be set up to provide updates on programme and site issues.

On-going meetings and telephone dialogue will be maintained with residents with specific issues – as has already been initiated and progressed.

Travel Plan

There will be typically a total of up to 15 construction workers on site although this may increase to 25 during the later stages of the project when internal finishes are being undertaken. It is estimated that there will be in order of 3-4 light vans needing access per day during these phases to allow workers to transport tools and materials to and from site.

Hoarding & Scaffold

- A 2.40m high timber hoarding will be erected to the site frontage with 2 lockable personnel doors. This hoarding will provide a clear boundary between the site and public footpath.

- Scaffold will be erected to the full width of the front elevation of the building extending to roof level but cantilevered to avoid obstruction and oversail of adjoining properties and their entrances/shop fronts.

- Scaffold at the front elevation to be fully enclosed with clear Monoflex or similar protective sheeting. Scaffold will continue over the roof to provide temporary protection.

- To assist with speedy uploading of vehicles and subject to the requisite licenses and approvals a scaffolded gantry will be erected over the public footpath, the support legs of which will be located on the front edge of the pavement. The gantry will provide a clear headroom over the pavement of a minimum of 3.00m. The scaffold legs will be fully enclosed in plywood. All scaffold and protection will be painted to be clearly visible up to a height of 2.5m.

- All hoarding and gantry will be provided with warning lights, mandatory signage and a copy of the planning consented.

Access & Traffic Routing

- As the scheme does not yet have planning consent a Principal Contractor has yet to be appointed. As a result there is no information currently available regarding detailed construction programme and construction quantities available at this stage.

- When considering construction vehicle types, a balance is needed between the size of vehicles and the number of vehicular trips to be carried out. Generally the larger the vehicle, the fewer trips will need to be made; therefore environmental protection means that it is best to use larger vehicles where possible to limit vehicular movement.

- As there is no opportunity for on-site construction access, it is proposed that any HGVs serving the site will use areas of single yellow line restrictions (Mon – Sat, 08:30 – 18:30).

- It is noted that the site is also located within the London Congestion Charge Zone.

- Construction traffic routes to the site from the north, south, east and west will generally follow a similar route. The primary route to the site will be xxx

- Subject to vehicle swept path analysis, it is envisaged that traffic egressing the site will xxx

- Larger construction vehicles will generally access the site via the B507 Lisson Grove.

- The access routes will be a condition of all supply orders and subcontracts and no local roads should therefore be impacted. In the event of non-compliance, the subcontractor or supplier would be in breach of contract, allowing disciplinary action against individual drivers.

- All vehicles will enter and leave the available kerbside space in forward gear. All vehicles should be able to achieve kerbside access adjacent to the site and will not restrict general movements along Charlotte St.

- Prior to leaving site, all lorries will be inspected by the driver and designated traffic marshall to ensure that the vehicle is safe to leave the site, all loads are secured and as necessary – such as for waste removal – all lorries are sheeted over.

- All plant and material storage areas will be on hard standings within the site compound. No storage of materials outside the site hoarding area will be allowed.

- During the construction period it is not anticipated to be necessary to close the public footway adjacent to the development site. To achieve this it is considered that a “crash deck” will be used to span across the footway which will maintain the public footway beneath. A licence for this will be acquired from WCC, most likely either as part of the hoarding or scaffold licence. Appropriate pedestrian signage will be in place to ensure the safety of the public is not compromised. Other than this it is not envisaged that there would be any other temporary structures on the public highway.

- There is no car parking on site and highway parking restrictions will be observed subject to restrictions. All Staff and Contractors will be encouraged to use public transport services and will be provided with information on the closest underground stations and bus stops and the services associated with each.

- All visitors will be directed to the site compound offices for registration and as necessary, site induction. All site visitors will be required to be in possession of the relevant Construction Skills Certificate Scheme (CSCS) certification card.

Ground Water and Surface Water Run Off

Surface water flow from any potential sources of contamination such as mixing baths or wheel wash points will be separately contained and not discharged into the land drainage system.

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Run off from piling?? TBC.

Deliveries & Unloading

- It is proposed that drivers of commercial vehicles who will be visiting the Site on a regular basis will attend a site induction;
- A traffic marshall will attend at scheduled delivery and collection times to assist the vehicles and direct any pedestrian traffic using the footpath outside the site.
- Vehicles shall not be held in any adjacent streets awaiting site access.
- Delivery vehicles will park outside the site in accordance with scheduled arrangements. There will be no more than two vehicles at any one time. The procedure will be:
    - All deliveries/collections booked 24 hours in advance so that delivery times can be allocated to minimise congestion in the highway
    - All deliveries will be assigned a slot
    - All drivers will notify site approx. 15 mins before arrival
    - Traffic marshall and appropriate labour will attend in advance of the vehicle arrival
    - Vehicles pull up outside site and will be coned off during unloading/loading
    - Vehicles will be unloaded/uploaded as safe and swiftly as possible
    - All operatives will wear high visibility clothing
- HGV movements will be restricted as far as reasonably possible so as to avoid peak traffic flow periods (i.e. from 0800-0900 and 1700-1800), with the potential to investigate restricting HGV movements during school pick up/drop off hours.

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Appendix 1.

Flats 1 & 2 No 65

As these units are not part of the new proposed works and are to remain as they are, special measures will be put in place to ensure that;

1. **That during construction above these units they remain 100% dry and waterproof;**
2. **That all structural elements/fabrics of both flats remain intact during the construction of works both beneath and above;**
3. **That all works carried out are done in a safe manner that protects the occupants residing in both flats during construction.**

Therefore

1) Waterproofing

Prior to the roof above flats 1& 2 a temporary weathering system will be installed above the existing roof to ensure that when the roof has been removed the flats remain dry. This will be a scaffold system covered with a water proof sheeting and monoflex, as per specialist specification.

2) Structural Stability

- All temporary systems designed and works to support flats 1 & 2 at basement to ground and first floor level will be prepared by a specialist temporary works engineer and checked by a chartered civil engineer and CDM Co-Ordinator employed by Merchant Land/its contractors.
- A protocol for the structural monitoring of the works will be implemented (specification for which to be forwarded to the flat owners and their advisors for review prior to commencement). This regime will monitor any vibration prior, during and after works have been completed.
- Installation of temporary works and structural systems will be catered for by using a close centred needles, props and bracing system designed by a temporary works specialist. This will adequately support the existing structure of Flats 1 & 2.
- Careful demolition of the structure beneath will take place which will involve the removal of the bulk dig material, floor slabs and walls directly beneath.
- The new proposed works will then be incorporated to support the above structure of flats 1 & 2 which will comprise of raft/concrete slab foundation, concrete walls and columns.
- Steel beams will be placed on designated columns to support the existing floor of Flat 1.
- The final step to follow with the slow systematic removal of the temporary works system facilitating the structural load to transfer safely to the now permanent structure. This will be carefully monitored by Merchant Land's structural engineer.

3) Protection of Works

- After the weathering system has been erected above the roof at Flat 3 this will be followed immediately by the installation of a crash deck directly above Flat 2. A series network of steel beams (designed by a specialist) will be incorporated in the horizontal plane approx 0.5m above the floor

level at Flat 3. The steel will be sheeted by a double layer of 18mm ply and staggered joints. All works regarding the formation of the crash deck will on completion be inspected by the Merchant Land appointed chartered structural engineer and CDM.

- The demolition of the existing roof above Flat 3 will take place and all dormant internal walls.
- The new lightweight structure for Flat 3 and the upper floor/roof will be constructed.
- On completion of the new build elements (ie structure and envelope) and when 100% weathering has been achieved, both the temporary weathering and the crash deck systems will be safely dismantled and removed to allow finishes to commence.

4) Internal Finishes

- Below and above Flats 1 & 2 all finishing works including services will at no point penetrate the floor and ceiling levels respectively of Flats 1 & 2 during or after the construction of the development above or below.
- All consideration will be given in planning and executing the works surrounding Flats 1 & 2 to ensure it is done in a manner that is as non intrusive as practically as possible by the contractor working on behalf of Merchant Land and will be incorporated into their scope of works and tendering process/contract.
- The Merchant Land Construction Director will be reviewing with all the extended team (including the chartered structural engineer and CDMC) all method statements and risk assessments submitted by the contractor prior to construction taking place.

All specifications associated with the above works requiring specialist design will be made available for review prior to works commencing on request.