
CONSTRUCTION ENVIRONMENT MANAGEMENT PLAN

PLANNING CONDITION 15

Relating to Plot F2 Great Jackson Street

Planning application number :- 132199/FO/2021

Revision V3 – July 2023

Construction Environmental Management Plan (Planning condition 15)

1.0 Introduction

This document describes the proposed management strategy for construction and the programme duration for key activities to be carried out on the site at Plot F2.

The main aim throughout the build is to minimise impact on the surrounding residential properties and businesses and on the local highway and public space around the development.

The following narrative explains in detail this strategy and timescales envisaged at the time of planning prior to more detailed liaisons with specialist subcontractors as and when they are procured. This detailed proposal will describe our approach to Project Management, Health and Safety, Human Impact, Environmental management, security, site waste management, logistics and traffic management.

2.0 Community consultation strategy

During the construction of the development Renaker will ensure that signs are located on the site hoarding and on the main gates, displaying an emergency 24 hr a day telephone number. This number is **0845 076 6405**. Details of the call will be handled by our trained and briefed customer care call centre, and the appropriate Renaker Build Ltd member of staff will be notified, a response to the complainant will be provided within 12 hours. All calls are recorded and logged by the care centre and on our internal incident reporting system, these complaints are reviewed by Senior Management who then agree the appropriate action, an important part of this process is the constant engagement with the complainant to ensure all parties are satisfied with the actions taken and that the complaint is resolved. Items raised on this system are reviewed at our monthly Directors Project Meeting to act as a lessons learnt and to enable sharing across our Projects. Local residents will be engaged firstly through a mail drop, explaining the development, initial works, impending logistics around the site, and advising our intent to setup a neighbour's forum. The neighbour's forum will be engaged throughout the project which will allow direct access to a responsible Renaker member of staff. When the situation arises that out of hours work is unavoidable, e.g. large concrete pours, Renaker will liaise and agree with MCC Environmental Health Dept, the parameters and circumstances of the operation and then consult with the residents and businesses via written notification.

3.0 Working Hours

The site will be operational over the following hours :-

Monday – Friday :- 7.30am to 6.00pm (Noise to be minimal for the first hour inc Saturday)

Saturday – 8.30am to 2.00pm

Sunday and Bank Holidays – No work

No work will occur outside of these hours without prior written consent from MCC.

4.0 Location, removal and recycling of waste

Renaker will develop a scheme for the recycling and disposal (reduced quantities) of construction waste. This will commence at the design stage, with workshops being held to identify means for waste minimisation and material selection which may suit recycling. Renaker will then engage with sub-contractors and suppliers to identify both waste minimisation actions and/or on or offsite re-use or recycling actions. Renaker will estimate the volume of waste that a typical trade would produce, e.g. plasterboard and brickwork, we will then put a tracker in place to monitor planned v actual. Skips will be kept on site and collected on a daily basis by a reputable waste company to be segregated at their transfer station. Skips will be sheeted to avoid debris falling or dust escaping. We will receive monthly reports showing waste diverted from landfill and percentage recycled.

5.0 Air Quality plan and measures to control dust and dirt during construction

Control of Air Quality

5.1 Dust management:

Good practice measures will be adopted at Plot F2 to control the generation and dispersion of dust such that significant impacts on the neighbouring residential properties and businesses should not occur. The hierarchy for mitigation will be:

- Prevention
- Suppression
- Containment

The following sections provide detail on the management and monitoring of dust during the undertaking of construction works on site.

On Plot F2, the high risk dust related activities will take place during the first 5 months of the project. Thereafter the risk will reduce to a medium risk managed through method statements and risk assessments.

5.1.1 Excavation and earthworks

Excavation and earth work activities can be a potential source of dust if they are not properly controlled. The following mitigation methods will be adopted on site:

- Potential dust related activities will be damped down, especially during dry weather.
- Working areas will be stripped as required in order to minimise exposed areas.
- During excavation works drop heights will be minimised to control the fall of materials thus reducing dust escape.
- Temporary cover may be provided for earthworks if necessary, completed excavation and exposed areas will be covered with permanent materials in order to stabilise surfaces as soon as practical.
- Vehicles carrying spoil away will have their loads sheeted to avoid debris and dust escaping

5.1.2 Stockpiling of loose materials

The use of long term stockpiles on site will be avoided wherever possible. If necessary, the following measures will be in place;

- Ensure that stockpiles exist for the shortest possible time.
- Material stockpiles will be low mounds where possible based on available space.
- Wherever necessary and possible stockpiles will be sheeted.

- Material stockpiles will be located away from the site boundaries

5.1.3 Vehicle Movement

Haul Roads within the site will be sufficiently damped down. This is particularly important for locations close to residential properties or other sensitive receptors. The following mitigation methods will be adopted on site:

- At suitable intervals or when required the roads within the construction area will be damped down.
- Covers will be used on the road vehicles to stop the migration of dust.
- The use of mechanical road sweeper on the surrounding roads and on the approach to site will be employed daily.
- An appropriate speed limit will be imposed around site to prevent excessive generation of surface dust on unsealed routes.

5.1.4 Details of wheel washing

The depositing of mud on the highway will be controlled by utilising the following measures:-

- Eliminate mud on road vehicle wheels – we intend to excavate and transport the arisings via large dumper trucks from the excavation to a spoil heap on a hardstanding, the road vehicles will use the “clean” road and hardstanding and be loaded from the spoil heap to the vehicle
- The formation of a stone run off – from the hardstanding there will be a clean stone run off to allow any debris caught on the wheels to be removed
- Jet washing / wheel wash – dependant on space and advice from the Specialist contractors, we will utilise either an automatic wheel wash or operatives with high pressure jet washes to clean the wheels at final exit point.

5.1.5 Construction activities

All other construction activities will be monitored with appropriate risk assessments and method statements produced to reduce or eliminate dust.

- Cutting of blocks, bricks or concrete will only be carried out using water suppression methods
- Cutting of timber products will be limited to the use of dust collection to minimize any dust arising's.

5.1.6 Monitoring

As part of the daily site inspections, Renaker will monitor dust emissions created by the works. Particular attention shall be paid to the immediately adjacent buildings such as The Boatmans (Off River Place) and the four towers at Deansgate Square.

Where required, additional dust suppression controls will be implemented if deemed necessary.

Dust monitoring will be undertaken with increased frequency during periods of prolonged dry weather or during activities with the potential of generating high dust levels.

In addition to the above the following points will aid in the satisfactory management of dust control on site:

- Communication and engagement before and during the site activities with a clear identification of the responsible persons on site.
- The site will be fully hoarded to create a physical barrier between the construction activities and adjacent residential and public highway.
- The construction of the superstructure will be carried out from behind screens.

6.0 Noise and Vibration

Consideration will be given to noise and vibration at the planning stage for all the various activities involved with constructing the buildings, we will take specialist contractor advice to ensure we minimise excessive noise and vibration, some general considerations include :-

Noise

All construction plant and equipment should comply with EU noise emission limits;

- Machines in intermittent use should be shut down in the intervening periods between work or throttled down to a minimum;
- Proper use of plant with respect to minimising noise emissions and regular maintenance. All vehicles and mechanical plant used for the purpose of the works should be fitted with effective exhaust silencers and should be maintained in good efficient working order;
- Selection of inherently quiet plant where appropriate. All major compressors should be 'sound reduced' models fitted with properly lined and sealed acoustic covers which should be kept closed whenever the machines are in use and all ancillary pneumatic percussive tools should be fitted with mufflers or silencers of the type recommended by the manufacturers;
- Plant and equipment such as flatbed lorries, skips and chutes should be lined with noise attenuating materials. Materials should be handled with care and be placed, not dropped;
- Care should be taken when erecting or striking scaffolds to avoid impact noise from banging steel. All operatives undertaking such activities should be instructed on the importance of handling the scaffolds to reduce noise to a minimum before access is possible;
- All ancillary plant such as generators, compressors and pumps should be positioned so as to cause minimum noise disturbance. If necessary, localised screens and enclosures should be used to reduce noise from particular noisy, static operations;
- Wherever possible, the use of hydraulic attachments or other means of crushing concrete and hard materials should be used in preference to pneumatic breakers. Where the use of impact hammers is necessary, their attachment to larger and heavier excavators often can reduce the level of vibration;
- Deliveries should be programmed to arrive during daytime hours wherever practicable. Care should be taken when unloading vehicles to minimise noise. Delivery vehicles should be routed so as to minimise disturbance to local residents. Delivery vehicles should be prohibited from waiting on the highway or within the site with their engines running; and
- Removal of obstructions to piling (e.g. old basement floors, old foundations etc.). Where an unexpected obstruction is encountered, it might be preferable for piling to be halted at that position until the obstruction can be dealt with, rather than attempting prolonged hard driving;
 - Training and communication of operatives in correct use of machinery.
 - Attitude- of operatives to noise emission to be addressed, to have an understanding that work activities have an effect on those around not just operatives but residents and the public. This will be achieved through toolbox talks and daily activity briefings.
 - Hours of operation and activity- consideration to the time of day for particularly noisy activities will be made. E.g. Carry out these activities in the afternoon rather than 1st thing in the morning.
 - Use cast in halfen brackets for the cladding in lieu of post drilling into concrete.
 - Screens surrounding the concrete slabs and proprietary formwork wrapping the stair and lift core to minimise noise break out from concreting activities
 - Acoustic screens used to shield metal pipe cutting or concrete cutting activities on site
 - Proprietary acoustic cutting stations for cutting metal wall studs.

Vibration

- Where reasonably practicable, plant and/or methods of work causing significant levels of vibration at sensitive premises should be replaced by other less intrusive plant and/or methods of working;
- To minimize any potential adverse impacts as a result of vibration from stationary plant, equipment immediately adjacent to sensitive receptors could be relocated or isolated using resilient mountings; and
- The characteristics of vibration emissions from each item of plant, and their collective effect, should be assessed during the selection process for the acquisition of plant. Where practicable, plant should be selected which will have the least impact in terms of vibration.

Please see Section 2 for details of our complaints procedure

7.0 Parking of construction vehicles and staff

We have identified that there is a need to alleviate where possible the parking burden on Manchester City centre. As such we have car parks on land we own which gives us 60 possible car parking spaces for staff, visitors and the long term operatives. Site personnel who are not allocated a parking space will be encouraged to utilise the extensive array of public transport options available to them, failing this there is currently a variety of grade car parking facilities and pay and display street parking surrounding the site.

A plan of the current car parking provision is shown below (Fig 1) :-

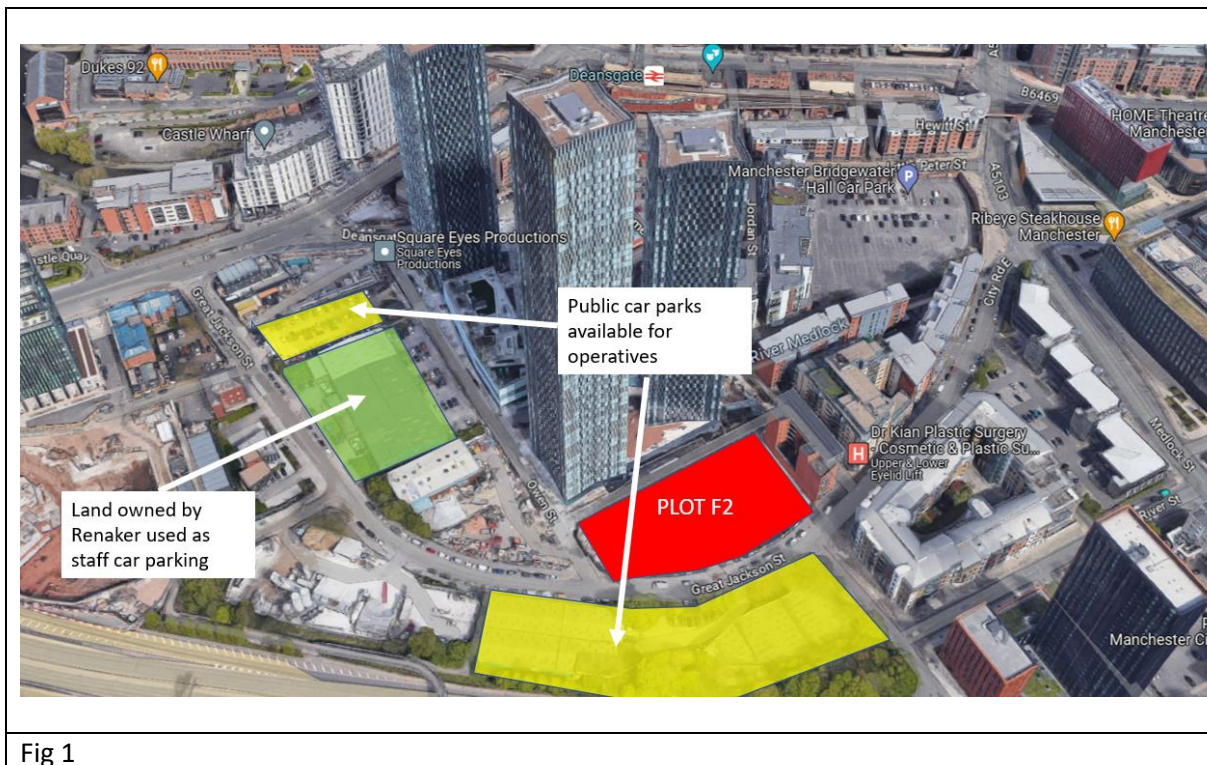


Fig 1

8.0 Loading and Unloading of plant and materials

All loading and unloading is planned to be undertaken within site boundary. Materials will be unloaded at designated unloading/loading bays by tower crane or forklifts. There will be no requirement to lift materials outside of the boundary. Materials lifted by forklifts can be transported to various storage areas and hoists without leaving the site boundary.

9.0 Storage of plant and materials

Material storage for the development will be generally contained in our storage compound, within a hoarded and secure area on site. The storage compound will be located on the site of Plot F1. At the stage that the concrete frame reaches podium level, small low height fork lift trucks will be employed to store materials within the basement car parking provision. Components stored include those associated with the façade construction and fit out elements of the works. A large percentage of materials will be brought on a just in time basis and stored directly on the floor they are designated to be installed upon.

The site will have 24hr security. Plant will be returned close to the security hut at night and will be locked with keys removed and cab guards in place.

10.0 Security Hoarding

Protecting the public from risks to their health and safety arising from the construction work is a high priority. Every care will be exercised to prevent risk to members of the public and appropriate action, including the erection of perimeter fencing to a specified standard, will be taken.

Vandalism and theft of plant, equipment, materials and fuel is possible throughout the duration of the development. Renaker will take appropriate action, as described in previous sections, to ensure the site is secure at all times from unauthorised access. As described previously, the site will have metal turnstile access system controlled by an individual fingerprint system.

We will be utilising the provision of CCTV to cover the perimeter of the site and compound areas to assist in the prevention of unauthorised activities.

The hoarding to the perimeter of the site will be a minimum of 2.4m. At vehicle interface, where the delivery / unloading area is formed off Great Jackson Street (See fig 2 in section 11.0 below). Water filled red and white crash barriers with corrugated steel panels (50% mesh and 50% solid) will be in place. The panels will be fixed to posts inserted into sockets in the red and white crash barriers, creating a minimum 2.4m hoarding

Renaker have a monthly security monitoring system which all qualified staff undertake and a hoarding inspection which is a weekly check. Any findings arising from these inspections are dealt with immediately.

11.0 Routing Strategy

The layout below (fig 2) has been submitted for approval and liaisons are in progress with MCC Highways regarding proposed footpath closure (including suspension 13 parking bays)

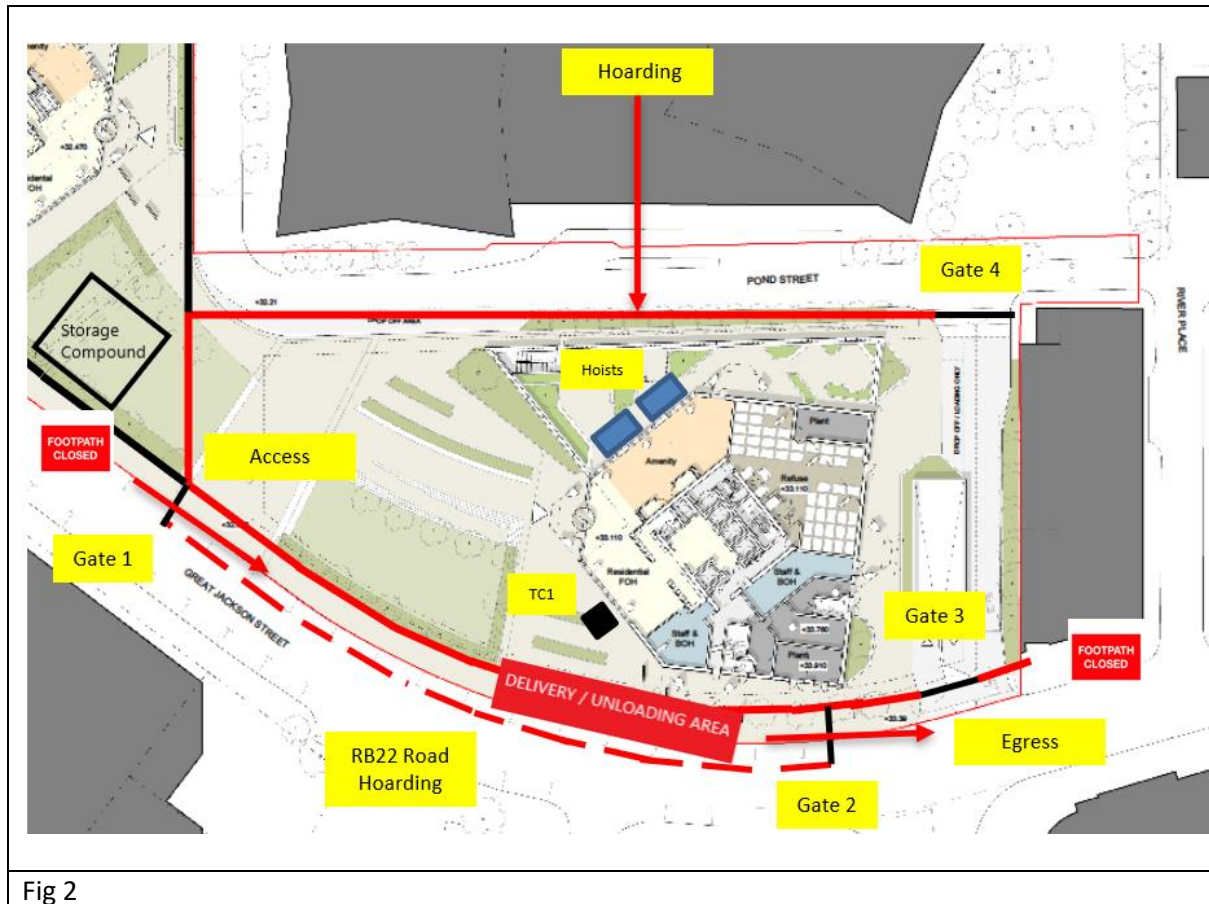


Fig 2

Both access and egress from the delivery / unloading area and designated gates will be controlled to maintain safe integration with interfacing public roads and prohibit unauthorised access on to site