

Construction & Environmental Management Plan

For

Arundel Street Development

Manchester;

Document Reference: rev F



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E	13/07/22	Sam isherwood	Pedestrian crossing routes added (3.10). Project description and Ellesmere road priority added
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1.0. Introduction

1.1. Arundel St Development

The site occupies an area of approximately 4400m². It is bounded to the northeast by A57(M) and to the northeast, southwest and southeast by Worsley St, Arundel St and Ellesmere St respectively. (



Figure 1)

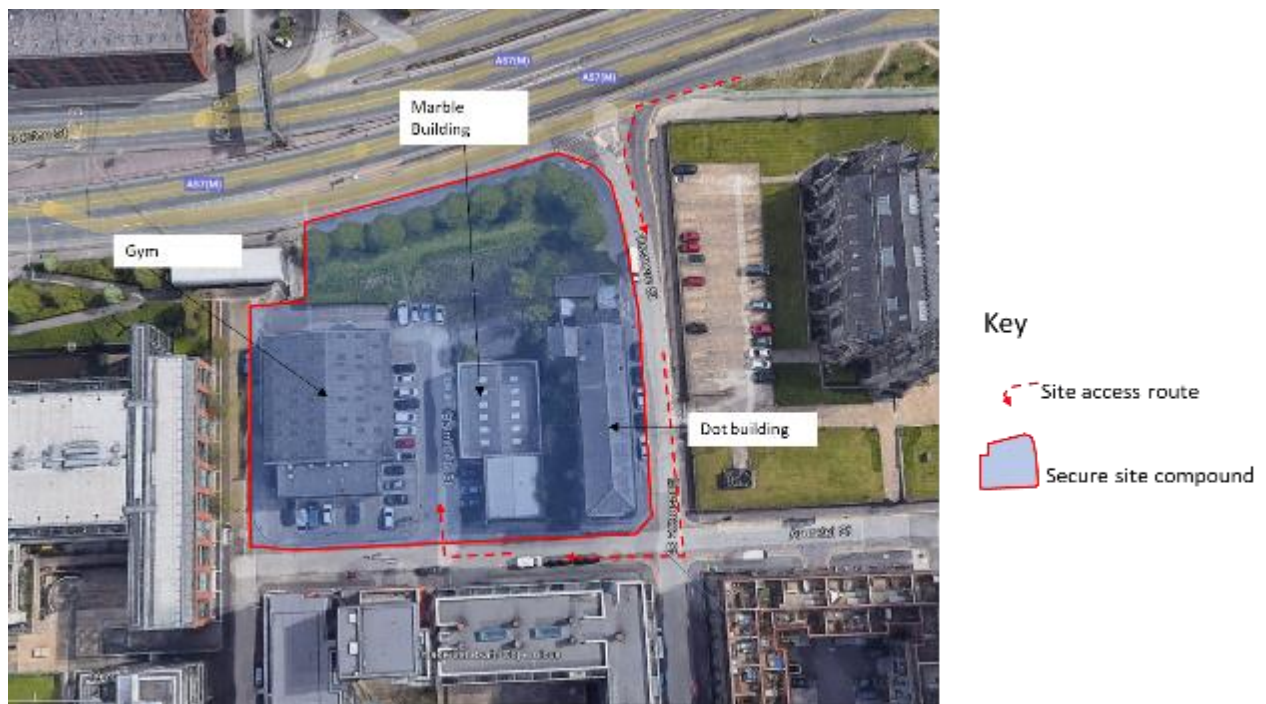


Figure 1

The site is covered by hardstanding and existing buildings of which the Dot building is to remain and all other will be demolished and the site clear in preparation for the new build consisting of 355 residential apartments over 2 buildings from 24 storey to 8 storey.

1.2. Purpose and Implementation

This construction and environmental management plan (CEMP) is proposed for the Logik Development at Arundel Street and is in place to ensure the secure and safe operation of the site, thereby protecting staff, the environment and the businesses that operate on site, from unnecessary harm. This document describes the site rules, security arrangements and intended methods of effectively managing potential environmental impacts arising from construction activities.

The responsibility for implementation of the CEMP lies with the Principal Contractor, working in conjunction with other Developers on the site, key personnel (construction director, sub-contractors, suppliers etc.) to ensure it is implemented effectively. To ensure this CEMP remains current and relevant, the Principal Contractor, shall take control of the document and regularly revise/update as necessary to reflect any new information which arises from construction activity.

1.3. Objectives

The overall objectives of this CEMP are to ensure that:

- All practicable steps are taken to minimise disruptions to users and occupiers of the surrounding road and buildings caused by construction activities.
- All practicable steps are taken to minimise the environmental effects of construction works.
- All activities are conducted in accordance with the CEMP, relevant legislation, Codes of Practices, Guidelines, and any local environmental procedures.
- Licenses, permits and consents and other statutory requirements are obtained prior to works commencing, and fully complied with.
- All staff (including sub-contractors) are aware of the environmental issues relevant to the project through the provision of site-specific information on the environmental impacts of construction and the mitigation measures to be applied during inductions, briefings and toolbox talks.
- Environmental controls remain adequate throughout the duration of the project.

This CEMP is part of a governance framework that includes UK law and generally accepted Code of Conduct and industry best practice. They are to be followed in this context and also taking into consideration our company requirements.

2.0. Site Rules

2.1. Emergencies

If an incident or accident occurs, follow the Principal Contractors emergency procedure and call 999. Details of the emergency procedure are to be included in the Construction Phase Health & Safety Plan (CPHSP), site-specific induction and displayed on the site.

2.2. Security

Access to the Site

Access onto the Arundel Street site will be via the Principal Contractors processes and Procedures and will be managed under the Principal Contractors Safe System of Work (SSOW).

Procedures for 'out of hours' access to Arundel St Site

Out of hours working - it is the responsibility of the Principal Contractor to follow their procedures for any intended works on site out of hours. It is the responsibility of the Principal Contractor to act as host and to ensure that their contractors comply with all procedures. Individual Contractors and sub-contractors will not be allowed onto site out of hours unless they are supported and accompanied by the Principal Contractor for the duration of their works or visit.

Photography and Video recording

Photography and Video recording is not permitted without prior authorisation from Logik Developments team. Any images or recordings that are to be used for external purposes, also require approval from the project team.

Searches

Site Security are authorised to request any personnel to demonstrate the authority for carrying goods which may be the property of Logik Developments. Such requests may include requests to show the contents of (hand) bags, cases, packages and vehicles.

2.3. Site Assets and Equipment

Removal of goods from site

No items are to be removed from the site without prior written permission from the asset/equipment owner e.g. Facilities Manager. Site Security must be informed of the intent to remove items and to

agree a suitable time for removal. A copy of the authorisation to remove any items must be presented to Site Security on removal.

Security of portable electronic equipment and valuables

Items of portable electronic equipment and valuables should not be left unsecured/unattended for any length of time. Such items should be locked away securely out of sight when not in use.

Mobile Phones and Wireless technology

Use of Mobile phones and wireless technology is permitted on the site except in clearly identified areas and buildings. For items with built-in camera technology, please refer to the 'Photography and Video Recording' policy section of this document.

Personal effects brought on to site

Personal effects brought on to site remain the responsibility of the individual. The project team takes no responsibility for the safeguarding of personal effects.

Tools, Work Equipment and Electrical Equipment

Tools and work equipment used on the site must be compliant with UK legislation and the user must be able to demonstrate competence prior to using the tool/equipment. This includes hand tools, office equipment, ladders etc. All electrical items plugged into the mains must be tested by a competent electrician prior to use on site.

Lost and Found

All items found on the site including cash and documents must be handed to site Security and must not be removed from the site. Lost property items will be stored for a maximum of 3 months, after this time, the items will be offered to the finder or given to charity.

2.4. Use of Vehicles and Driving

Vehicles

- All vehicles used and driven on the site must be compliant with UK legislation and have a valid MOT, road tax and insurance where applicable.
- License to drive or operate a vehicle on site

- Any driver of a vehicle driven or operated on site must be in possession of a valid licence for the type and application of a vehicle used or operated. This applies to personal, commercial, construction and farm vehicles.

Speed limits

- There is a 30 mph speed limit on the local roads outside the site. Unless a lower speed limit is otherwise indicated.

Parking

- All contractor parking is to be within the construction site boundary or in Public Car parks in the city around the site location.
- Under no circumstances are non-emergency vehicles to be parked on double lines anywhere on the site.
- Sisk site security are authorised to enforce scaling sanctions on any individual that contravenes these rules. These scaling sanctions may result in warning notices being placed on vehicles and escalation to company line management.

Fuel Leaks

- Any fuel leak observed or detected must be reported to site management in order to prevent contamination of the local water course or to prevent ignition.

Drivers Rules

- No person is allowed to operate vehicles and plant unless trained to do so.
- No passengers are to be carried unless the vehicle is specifically designed to do so.
- No children or animals are to be brought onto the project in delivery or other vehicles.
- Drivers/operators must be familiar with all operating controls and safety devices of the particular piece of plant they are to use.
- Drivers/operators are to carry out pre-use safety checks of the unit prior to use each shift.
- All drivers/operators to drive carefully at all times and note the presence of pedestrians on site.
- All drivers/operators are to, only operate the vehicle/plant strictly in accordance with manufacturers recommendations/instructions.

- All drivers/operators must comply fully with all safety signage including:
 - speed limits
 - stop signs
 - give way signs
 - one-way signs etc.
 - loading restriction signs.
- Reversing is to be kept to a minimum and only undertaken when clear all round vision is available and or under the direction of a trained banksman.
- Hazard warning lights or flashing beacons to be on all times the vehicle is moving.
- Excavations only to be approached when safe to do so and guided by a trained banksman (stop blocks or other adequate edge protection must be available).
- Delivery drivers to remain with their vehicle at all times, in the cab when safe to do so.
- Outside the cab drivers must wear:
 - Head protection
 - Foot protection
 - Eye protection
 - Hand protection
 - High visibility clothing
 - other PPE as required by the task method statement.
- Vehicles left unattended must be left in a safe condition and with the key removed or immobilised.
- No reversing onto public highways/roads.
- All vehicles must pass through the wheel wash and weigh bridge area.
- Open top lorries to be sheeted.
- Dumper operators must leave the unit when it is being loaded and keep a safe distance away if the cab does not have adequate debris protection.

Traffic

- All roads & pedestrian routes are to remain clear from obstructions, parked vehicles, skips etc.
- A wheel wash facility is to be provided on site to avoid bringing muck and debris onto the local Roads.
- All roads are to be cleaned and maintained. Any mud/waste should be cleaned up immediately. A road sweeper will be employed as required to ensure no muck or debris is left outside of the site boundary.

Deliveries

- Deliveries & all construction traffic should enter the site via the signed and gated access off Arundel St
- They should be arranged during normal working hours (Monday - Friday: 7.30am - 6pm, Saturday: 8.30am - 2pm).

2.5. Prohibitions

Photography and Video Recording

- Please see 'Photography and Video Recording' section above.

Pets and animals

- No pets or animals are permitted on the site at any time.

Gambling

- Gambling is not permitted on the site under any circumstances.

Smoking (Including E-Cigarettes)

- Smoking inside any buildings is prohibited and subject to the requirements of UK Law. Smoking is not permitted within 10 metres of any building. Smoking shelters are to be provided by the Principal Contractor for the use of staff and visitors.

Alcohol and Illegal Substances

- Alcohol is not permitted to be opened or consumed on the site other than in designated restaurant and leisure facilities. Illegal substances of any nature are not permitted on the site. Breaches will be dealt with as a criminal offence under UK law.

Firearms and Explosives

- Firearms and explosives including fireworks are not permitted on the site under any circumstances.

2.6. Construction

Working Hours

- Site working hours will be Monday - Friday: 7.30am - 6pm, Saturday: 8.30am - 2pm. The Workforce may arrive on site 30 minutes prior but no working outside these times, unless changed by prior agreement. Noise to be kept to a minimum in the first hour.

Site Boundary

- All construction activities are to be contained within the designated development site boundary, except for specific boundary construction works where access outside the boundary is required. Approval to proceed with these works will be required and coordinated with the project team and the relevant statutory undertakers

Permits

- The Principal Contractor is to manage and operate their own permit to work system as part of their safe system of work (SSOW). The processes & permits are to be located onsite and available for the project team to review if required.

Hoarding & Fencing

- Hoarding is to be located on or within site boundary. Heras fence should be double clipped with dust screen mesh and wind ports and designed to suit wind loading, etc. Daily site inspections of the Hoarding and Site Boundary, by the Principal Contractor, and are to be logged and recorded

Branding

- All display/advertising/screening branding is to be approved by the Client

3.0. Environment Management

3.1. Dust

The Principal Contractor site is located in Arundel St Manchester. The adjacent occupied local roads are considered to be sensitive receptors which may be adversely affected by the generation and dispersion of dust, resultant from construction activities. Nevertheless, it is also recognised that in periods of high winds the receptors affected by wind-blown dust could be areas further away than those mentioned if suitable dust mitigation measures are not implemented. The generation of dust outside of the site boundaries is a potential source of statutory nuisance and can lead to complaints being received which may be actionable through legal proceedings. Furthermore, dust can also have an impact on human health and similarly the local ecology. Potential sources of dust during construction activities could include:

- Site clearance
- Ground excavation and earthworks
- Earth moving operations
- Site levelling
- Vehicle movement (especially on rough ground)
- Cutting, grinding, drilling etc. operations
- Stockpiling of excavated materials
- Unintentional spillage and loss of load from vehicular transportation
- Tipping Nuisance caused by the generation of dust could be exacerbated by prevailing winds and a prevailing climate.

It is believed that particulate dust emissions from construction activities have the potential to impact on local site users and the local ecology and as such, mitigation and control measures should be implemented to minimise or totally negate this impact. On-going monitoring should be undertaken by construction supervisors at regular intervals to assess the level of dust which escapes the site boundaries and settles in the nearby vicinity. Any received complaints regarding fugitive dust should be logged and dealt with appropriately. With regards to mitigation measures, the following have been identified as appropriate actions:

- Ensure construction traffic follows specifically designated routes, is limited to slow speeds and is covered if transporting loose materials.

- Introduce a wheel-wash facility for vehicles leaving site.
- Regular road sweeping should be carried out, the frequency of these will be determined by the site activities taking place.
- Damp down or enclose stockpiles as appropriate. It may be necessary to spray with chemical bonding agents to prevent the escape of fugitive dust.
- Site stockpiles away from sensitive receptors as identified above.
- Introduce enclosures where safe and practicably possible around activities which are deemed to generate high levels of dust.
- Cutting and grinding should employ dust mitigation measures where possible (i.e. wet cutting).
- Complete prohibition of burning of any materials on the site.

3.2. Noise & Vibration

The criteria for construction noise is discussed at paragraphs 11.27 – 11.31 of the attached Noise and Vibration EIA chapter. The criteria for vibration is discussed at paragraphs 11.47 – 11.53 of the attached Noise and Vibration EIA chapter.

The identification and evaluation of likely significant effects for construction noise impact is highlighted at paragraphs 11.69 – 11.81 of the EIA. The identification and evaluation of likely significant effects for construction vibration impact is highlighted at paragraphs 11.82 – 11.91 of the EIA. Mitigation measures are discussed at paragraph 11.119 of the EIA.

3.2.1. Noise

Similar to the ramifications of excessive dust noted above, excessive levels of noise outside the construction site boundaries can constitute as statutory nuisance and lead to complaints and potential subsequent legal action. The sensitive receptors to noise have been identified as the same identified as sensitive receptors for dust, being the local occupiers of the adjacent buildings and nearby natural environment and ecology areas. Tenants, customers and users of the site are gifted the legal right to free use and enjoyment of their relative demises which could be impeded by the intrusion of excessive noise. Additionally, excessive noise which is produced from construction activities can disrupt the balance of the nearby ecology.

A simple control measure to limit the exposure of the nearby population to noise would be to perform 'noisy' and disruptive works outside the usual working hours for the site, however, it is also imperative that construction works do not impact on the nearby domestic population. Therefore, any works which are considered to be excessively loud should be communicated to supervision and managerial staff at on site to procure a sensible and appropriate way forward.

Control measures which should be implemented, as necessary, are listed below and are based on guidance from the BRE Pollution Control Guide: Part 1- Pre-project Planning and Effective Management:

- Acoustic barriers to be implemented for static activities where necessary and practicable.
- All construction plant and machinery must comply with EU noise emission limits.
- All vehicles used for construction purposes should be fitted with effective exhaust silencers and attenuators.
- All generators should be 'sound reduced' models and fitted with acoustic covers.
- Ancillary plant should be positioned so as to cause minimum noise disturbance to identified sensitive receptors.
- Drop heights of materials should be minimised.
- No plant or machinery should be left running unnecessarily.

The following activities are assumed to be significant noise generators and the principal contractor should take sufficient practicable measures to ensure noise generation is minimised/controlled as best possible:

- Groundworks and excavations.
- Piling.
- Steelwork erection.
- Cladding erection.
- Plant operation.

As stated in the EIA Chapter 11, a background study has already been completed for the scheme and construction works will take place aligned to the recommendations in that report (works will not exceed 75db).

3.2.2. Vibration

The issue of vibration and suggestive implemented measures of mitigation and control is closely linked to the above matter regarding excessive noise. As such, it is likely that by diligently controlling the

emission of noise, the contractor will inherently limit the emission of vibration which could constitute a statutory nuisance if it adversely affects the nearby population or ecology.

To prevent ground vibrations (which could compromise structure), continuous ground vibration monitoring is to be installed if, following desktop risk assessment by the designers, it is deemed there is a risk from proposed works from construction activity deemed to create high levels of vibration (eg CFA piling). Active Vibration monitors on the hoarding or sensitive adjacent buildings will provide live updates to the Sisk site team, with pre-agreed triggers, based on BS 5228 (Specific trigger within EIA report -Appendix 11). Any breach of agreed levels will result in the work causing the vibration being stopped and reviewed.

To mitigate vibration absorbed by operatives (HAVS) all tools will be checked for their HAVS rating and used in accordance to the HSE recommendations on safe working time using the Ready Reckoner. Should the tools or plant have vibration reduction options, these must be used at all times.

Long-Term Noise & Vibration Monitoring

Where considered necessary following liaison with the Local Authority Environmental Health team, noise and vibration levels due to demolition and construction may be continuously monitored via the installation of long-term equipment. This will ensure that the construction noise limits derived within Chapter 11 of the Environmental Statement will be adhered to at all times.

The number of monitoring locations and duration of the monitoring will be based on the proposed programme of works and agreed with the Local Authority in advance. If required, regular noise and vibration reports (i.e. monthly) can be provided or alternatively, monitoring systems are available that upload live data to a web-based system which can be accessed by the relevant stakeholders.

Email/text alerts may be set up to notify the team of any exceedances of the agreed limits (if required warning alerts can also be established to notify stakeholders when levels are approaching the noise limits). Our report will detail the key responsibilities for the relevant parties upon receipt of an alert.

A noise and vibration management report can also be produced that will detail the key responsibilities for the relevant parties upon receipt of an alert / exceedance of the agreed limits.

The scope of this noise monitoring will be discussed and agreed in advance with the Local Authority Environmental Health team, and coordinated with our acoustic consultant (Alex Stromach – RPS) who will clearly establish responsibilities and actions for relevant parties in a trigger event.

3.3. Light Disturbance

During certain periods of the year, it will likely be necessary to unnaturally light the construction site, construction office, roads, complexes etc. for safety and accessibility reasons. It is likely that this lighting may impact the nearby population or wildlife, and it is noted that unnecessary light emission could affect drivers who pass the site. We will ensure that lighting is suitably positioned to detract from passing vehicles.

3.4. Waste Management

The Principal Contractor is to develop and implement a site waste management plan (SWMP) which describes the procedures for the management of waste arising from the construction activities and includes location, removal and recycling of waste. The SWMP shall comply with the relevant regulatory standards

3.5. Vermin

Maintenance of a clean and tidy site including vermin control is essential. An appropriate pest control measures will be adopted as necessary.

3.6. Water

We will ensure that all/any water courses are suitably protected as works proceed during the works. We will apply, and have approved, any discharge consents in place, prior to the commencement of those items of those specific works.

3.7. Site Access

Site access for visitors and staff will be via Ellesmere Street using the Dot building for welfare and office space, with a temporary site entrance where the proposed new cycle/bike shed is to be located.

The diagram illustrates the 'Main Build Site Setup'. It features three main construction blocks: Block 1 (top, blue), Block 2 (middle-left, green), and Block 3 (bottom, brown). Two tower cranes are positioned: TC 1 near Block 1 and TC 2 near Block 2. A 'Site Welfare' area is located on the right side. Two red arrows indicate one-way site access: one from the bottom pointing towards Block 3, and another from the right pointing towards Block 1. A red dashed line outlines the perimeter of the site. Text on the left states: 'One way site access to be used until mast climbers restrict access. Then unloading via segregated bay off Ellesmere Rd'. Text on the right states: 'Main build will require pavement suspension around the site to enable segregation with public. 3nr Car parking spaces to south and 5 to the east to be suspended.' A technical drawing title block is visible in the bottom right corner.

Site Unloading Bays

2359.7 Sq. m

Block 1

Block 2

Block 3

Unloading Bay 1

Site Welfare

Unloading Bay 2

We will feed the site via 2 dedicated unloading bays.

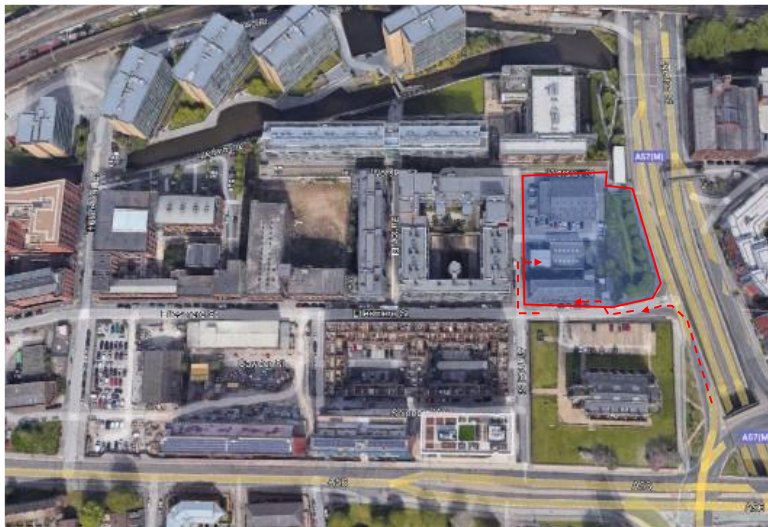
Unloading Bay 1 will be onsite and mainly used for rigid delivery vehicles. Unloading Bay 2 will be via a hoarded "pit lane" off Ellesmere Road, and will be unloaded by crane. (no oversailing of materials will be allowed outside the site boundary). The pit lane will be segregated from Ellesmere Rd with a minimum of 4.1m space left within the highway for 2 way vehicle movements to continue unrestricted

All deliveries will all be required to be prebooked in via an online portal, which will guide them to the correct unloading area.

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3.8. Site Approach & Swept Path Analysis

Site Approach Route



The approach to site for delivery vehicles will be off the A57M where they will proceed into the unloading pit lane on Ellesmere St, or around onto Arundel St and into site to be unloaded.

The restrictions of the site mean that deliveries to site during the majority of the build period will be via rigid lorries.

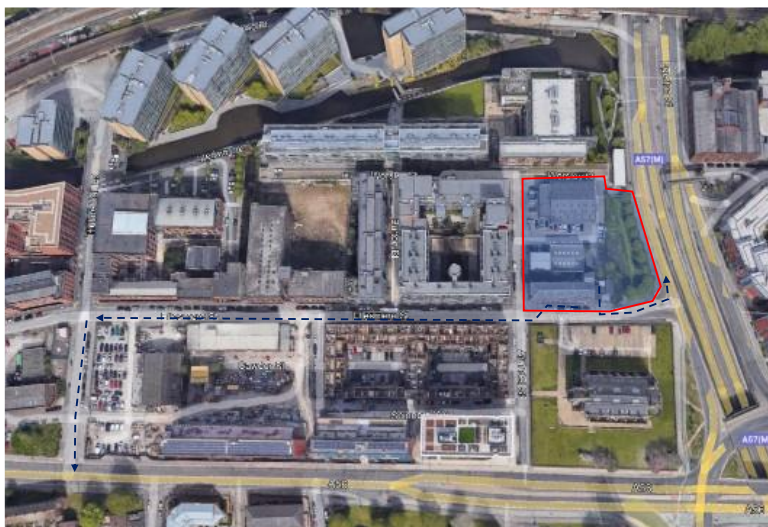
Key

Site access/egress route

Secure site compound

Figure 4 Site approach route

Site Egress Route



Following unloading on site, vehicles will return to the road network via 2 routes.

Vehicles unloaded within the site will be banked back onto Ellesmere Rd and turn left onto the A57(M).

Rigid vehicles unloaded from the "pit lane" will either reverse within the pit lane onto the building site and back to the A57. When this is restricted (due to construction activities), they will progress down Ellesmere Rd to the A56.

Key

Site egress route

Secure site compound

Figure 5 Site egress route

Arundel St Construction Vehicle Tracking – Rigid Lorry



Figure 6 Rigid lorry vehicle tracking

Arundel St Construction Vehicle Tracking – Articulated Lorry

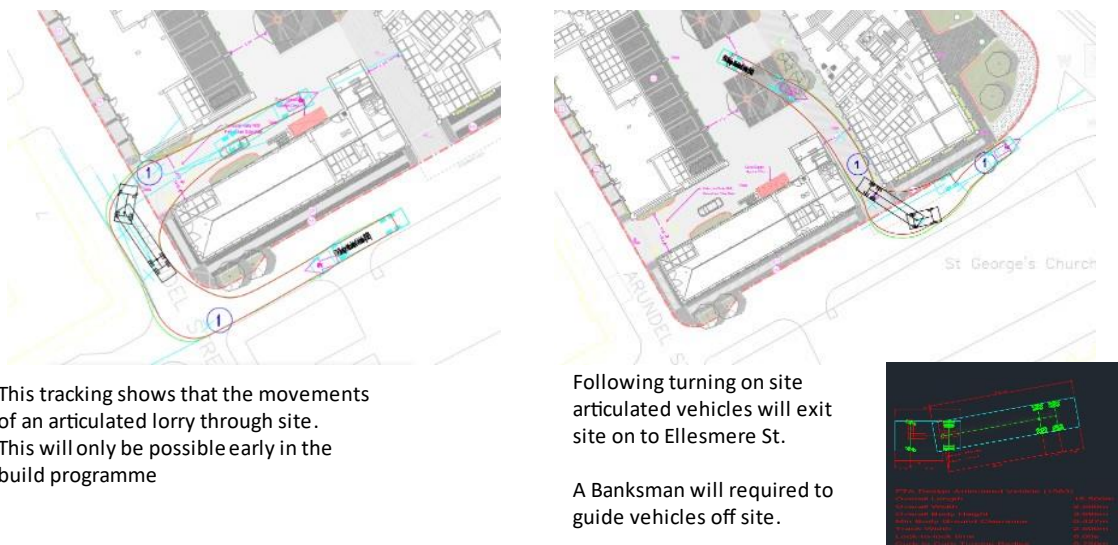


Figure 7 Articulated lorry vehicle tracking

Site Approach Route Pit Lane Access and Egress



Vehicles unloaded from the "Pit Lane" on Ellesmere Rd will be guided into the hoarded area by a banksman.

Vehicles will then be unloaded with materials taken directly onto site.

The pitlane will be segregated from the highway with ballast blocks and a fencing, with concertina gates used for access and egress.

The intention is Ellesmere road will remain 2 way for public traffic with a priority introduced for vehicles coming from the A57M.

We anticipate being able to provide a minimum of 4.4m clear road from the fencing

Access to and from the opposite Church car park will be unrestricted by our access arrangements.



Access back to the road network will be either back via a site gate, or larger rigs will be reversed onto site and back to the A57(M).

Figure 8 Pit lane access and egress

3.9. Public Pedestrian Management.

To limit the disruption of the pavement suspensions required for the site on Arundel and Ellesmere St we will introduce temporary crossing points. These crossing points will move pedestrian flow away from the site boundary onto the opposite footway. Temporary signage will be used to inform pedestrians and motorists, with local community engagement and MCC approvals required prior to the pavement suspension.

Pedestrian Route Around Site



Figure 9 Diagram of proposed pedestrian crossing points

3.10. Communications with local Neighbours

Our Regional Social Value & Stakeholder team will support the development and implementation of the comms plan and report on the communication strategy. This will comprise regular by weekly meetings with the Project lead and SV Manager allocated to the project.

The plan will incorporate:

- Contact details
- Communications roles and responsibilities
- Programme for Monthly Newsletters: circulated to local neighbours on planned works
- Public Site Notice Boards: covering out of hour contact details
- Open doors to project events
- Schedule of key events
- Liaison and introduction to key team members

The site will also be registered with Considerate Constructors Scheme and be expected to engage fully in the good practises recommended by the scheme.