

URBAN SPLASH

New Islington Phase 3A

Manchester

M4 6HF

CONSTRUCTION MANAGEMENT PLAN

(Construction Methodology and Management Strategy)

Prepared by RCS on behalf of Urban Splash Ltd.

ISSUE 2: 10.July 2020 (Page 8: ref. to vibration monitoring added)



Construction Management Plan

NOTE: Section 8 of this document summarizes & cross references response(s) to specific issues highlighted in the Pre Commencement Condition relating to Construction Management Plan (CMP). Application No. 122598/FO/2019

1.0 Introduction

The purpose of this document is to give a broad overview of the construction proposals in respect of the proposed new-build development, which is known as **New Islington Phase 3A**. The construction site is situated within The New Islington redevelopment area of Manchester. This 'brownfield' site was originally cleared and remediated some years ago, when the Ashton Canal was extended to form the New Islington Marina.

Phase 1 (modular housing) was completed a few years ago. **Phase 2** ("Mansion House") is currently under construction and due to complete later this year.

The **Phase 3** overall site is to be developed in 3 Sub-Phases, which are designed as **Phase 3A** (21 houses built in 3 straight rows, each comprising 7 houses), **Phase 3B** (two "Mansion House" apartment blocks, which are located adjacent to the Marina) and **Phase 3C** (13 houses built as one staggered terrace, facing onto Lockyard Lane.)

The relationship between the various sites (Phases) is shown on the Architect's Planning Strategy Drawings, which form part of this Planning Submission. Please note **This CMP only relates to Phase 3A (21 houses). Separate CMPs will be submitted for Phases 3B & 3C at the appropriate time.**

2.0 Scheme Overview

The proposed **Phase 3A** works consist of the erection of 21 new dwellings, which are built in 3 straight terraced rows, each comprising 7 houses, with all associated infrastructure works, public realm, landscaping, new roads etc. The houses are 3 storeys, modular pre-fabricated units, which are mostly completed off site and lifted into position with a mobile crane. This modular housing concept is known as "hoUSE" and has been successfully developed for other sites in Manchester and elsewhere.

The Client (**Urban Splash House Ltd.**) has appointed **Urban Splash Construct Ltd. (USC)** as Principal Contractor and the modules are manufactured by **Urban Splash Modular Ltd. (USM)**, who design, manufacture and install this construction system.

The Design and Access Statement (part of the Planning Application) produced by the Architect (SHED KM) proposes that there will be a communal parking area, with allocated parking for each plot plus 'accessible' and visitor's spaces, and provision for several electric charging points. In addition there will be secure visitor's cycle spaces provision.

The car park will be constructed in consideration of access vehicles that use it in the permanent condition, i.e. to accommodate refuse vehicles, if necessary, or occasional fire tender access.

Site access will be via one entrance/exit off Lockyard Lane, which is an existing road currently serving the Phase 1 housing development and this road will also serve the Phase 2 "Mansion House" block, when this is completed. There will also be communal landscaped areas, all as shown on the Planning Submission drawings.

The pre-fabricated houses will be positioned on, and secured to, concrete ground beams bearing onto piled foundations. The houses will be connected to the drainage & services infrastructure.

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SHED KM is the architect responsible for the overall design, which will be constructed by USC (Urban Splash Construction), and the houses will be manufactured by USM (Urban Splash Modular).

As previously stated, these houses are modular pre-fabricated units, which are mostly completed off site and lifted into position with a mobile crane. In the current design, the 21 houses are to be constructed in three terraces (see Proposed Site Plan).

The procurement programme indicates an anticipated start on site during May 2020, with **Completion at the end of May 2021**, which equates to a **52-week construction period**. However, this is still to be confirmed and agreed with the Employer & the Principal Contractor (USC)

As part of the design and development process, a number of surveys have been undertaken, and further surveys and design statements are being/will have to be, undertaken, including:

- Topographical survey
- Underground Utility surveys
- Existing services infrastructure (site wide)
- Search reports (relating to STATs)
- Existing site constraints reports
- Geo-Environmental Investigation, Risk Assessment & Remediation Strategy
- Site investigation reports
- Geo Environmental Assessment and Remediation Strategy
- Exploratory holes and trial pits (as part of S.I.)
- Archaeology investigations (completed by the end of February 2020)

A brief overview of the proposed program for this site is:

- Partial remediation works (to be undertaken by L K Remediate Ltd) to commence 9.April 2020
- Further site investigation, including ground gas monitoring (report due 24.April 2020).
- Site set up for USC's accommodation, welfare, subcontractors, parking and storage.
- Establishment of site security perimeter for the site and site compound.
- Construction Phase Plan (including Traffic Management Plan) to be reviewed by the Principal Designer and confirmed (to the Client) as being suitably developed to permit a start on site.
- Establishment of required site levels and any re-grading or removal of same as required.
- Establishment of road line and levels, together with sub base.
- Site drainage (foul and storm) together with construction of manholes etc.
- Construction of foundations to suit site layout
- Incoming services laid to terminate just outside each house
- Delivery and installation of the "hoUSe" modules
- Completion of work, which cannot be undertaken in the factory.
- Connection to services infrastructure (both services and drainage).
- Completion of external works, including fencing and paving.
- Soft landscaping work

NB. Some of the above works will be undertaken concurrently and some sequentially.

The above Scope of Works will be developed by USC as Principal Contractor (PC), who will produce specific information (Construction Phase Plan, Traffic Management Plan etc.) in relation to dates and timescales for the above works.

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As previously described, the Phase 2 “Mansion House” development is on going and due to complete in October 2020. The Principal Contractor for that development is ARTEZ and they have been in discussion (and they will continue to liaise) with USC regarding the management of access to the Phase 3A site and any other relevant issues.

One factor, which could affect the Urban Splash site, is the location of ARTEZ’s site compound. Compound, which is currently located at the end of Lockyard Lane. Due to the nature of the delivery and erection of the modular buildings, **access for large vehicles and a mobile crane is critical** and USC’s Traffic Management Plan will allow for providing adequate turning widths at the site entrance. “Modular Movements Ltd” has undertaken swept path analysis to inform this process.

Urban Splash Construct (USC), as Principal Contractor (PC), will develop the above by and produce specific information including: Construction Phase Plan (CPP), Traffic Management Plan (TMP) etc. and this will identify dates and timescales for the above works.

3.0 Access to, and traffic circulation around, the site:

Access for pedestrians and vehicles into the construction site will only be allowed at position(s) identified in the Traffic Management Plan. It is proposed to use of the existing ‘haul road’, which was constructed by BAM for recent Marina works, which that contractor undertook for MCC.

Entrance to this ‘haul road’ is at the junction of Lockyard Lane and Coppersmith Road. This will be the main site entrance and it will also be used for the delivery of the modular “hoUSe” units.

At present, Lockyard Lane provides vehicle access to ARTEZ’s site compound and the Phase 2 “Mansion House” site. Discussions are on going to establish if it is feasible for ARTEZ to retain that compound for the next two “Mansion House” buildings, which will be Phase 3B.

There will be a ‘limited’ amount of parking available on site for other vehicles (plant and site operative’s cars etc.) and all vehicle access will use the new site entrance. Both vehicle and pedestrian access onto this site will be controlled.

Car parking for site operatives will not be permitted on Lockyard Lane and it should be noted that other surrounding streets currently have problems with car parking. However, it should also be noted that this site is also relatively close to railway, tram and bus routes so these offer another means of easy access for operatives working on this site. NOTE. Although there is (currently) pedestrian access adjacent to this site along the Marina side it is **not** envisaged that this will be available for site access use, during the construction phase. Security Hoardings will be erected to prevent any unauthorized access from the Marina side, and this will also protect that environment from any dust/debris generated by the construction activities (see later).

4.0 Surrounding land use and restrictions:

New Islington Phase 3 site is well served by public transport with several bus routes running along Great Ancoats Street. Piccadilly Railway Station is situated to the south of the site and the Metrolink Tramway system is also reasonably accessible. There are several new build residential developments in the area. To the North West of the Phase 3 site, there does exist occupied housing, which is Phase 1 of the New Islington project. That development has its own parking, which is accessed from another road, within that development but the footpath which runs along one side of Lockyard Lane may still

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be used by pedestrians. Therefore, security fencing will be erected between Lockyard Lane and the construction site(s).

Although only Phase 3A is to be constructed initially, the Mansion House (Phase 2) building is due to be completed in early October 2020 and it is considered likely that the next two Mansion House blocks (Phase 3B) may be commenced shortly thereafter? A separate CMP will be produced for that phase and this will address any concerns about construction work affecting the Marina.

The Phase 3A site has little accessible space for the bulk storage of materials; however this requirement is much reduced by virtue of the dwellings being of modular construction (manufactured off site). Any storage required, together with all site accommodation (offices, welfare, toilets etc.), will be located in USC's compound, which will be a designated area adjacent to Phase 3A and accessed from the existing 'haul road'. In addition there is a requirement for a 'lay down' area adjacent, for the offloading and temporary storage of the large modular units, prior to their transport to and installation within the building footprint.

All of the above will be shown on the Traffic Management Plan (TMP), which forms an integral part of the Construction Phase Plan (CPP).

Although the existing Phase 3 site has been cleared of existing buildings, it has not been fully remediated. Therefore, L K Remediate has been appointed to undertake work to remove near surface obstructions, reduce site levels to formation generating working platforms for the piling, verify CBR elsewhere to suit USC requirements and probe piling positions to establish the extent of obstructions.

L K Remediate are scheduled to commence work on site on 9 April 2020 and they are expected to complete those works (for Phase 3A) during May 2020, at which time Urban Splash Construct will become Principal Contractor for the main contract works.

As required under the CDM Regulations 2015, the Client has appointed Rawlings Safety & Training Consultancy Services Ltd (RCS) as "Principal Designer" and they have produced a **Pre-Construction Risk Coordination Plan** and this identifies that there remain certain risks, which include the possible presence of some ground contaminants. RCS understand that limited remediation has been undertaken to the site and the SI Report, identifies where work will have to be undertaken to prepare this site for future residential use.

Obviously, there remains the need to exercise caution and to undertake RAMS for certain works. All of this is discussed in detail in the Pre-Construction Risk Coordination Plan, which will be shared with the Principal Contractor(s), LK Remediate & USC, and the Design Team as a whole.

The main critical areas for safety consideration during the construction works are identified in the Pre Construction Risk Co-ordination Plan (prepared by RCS) and this document, together with the Designers Risk Assessments, form the Pre Construction Information, is issued to the Principal Contractor (USC) at Tender stage. This document will also be used for further tendering.

Appropriate construction management practices will be adopted by USC to mitigate any residual risks and these practices will be identified in their Construction Phase Plan.

5.0 Proposed works:

5.1 Architectural design:

Shed KM is the appointed Architect, however, the extent of their design responsibility (during the construction phase) is limited to mainly the external works (hard/soft landscaping etc.) and their drawings and specifications for these works are included in the Employers Requirements

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Although Shed KM are involved with the 'conceptual design' for the "house" project, detailed design responsibility for the prefabricated, modular, units remains with the manufacturer (Urban Splash Modular Ltd) who is referred to as "USM"

As previously stated, RCS is appointed as Principal Designer (under CDM 2015) for this project and they are working closely with the Design Team to fulfil this role.

The modular buildings are delivered to site as Ground, First or Second storey elements. These units are complete, save for some internal works, which need to be undertaken on site. Also, the junctions between the various elements (units) need to be secured and waterproofed, mainly in terms of external panels. Each unit is lifted and positioned on top of each other, using a mobile crane and the remaining (external) works are undertaken from Mobile Elevated Work Platforms (MEWPs).

5.2 Civil and Structural design:

Although Joule is the appointed civil and structural engineer, the extent of their design responsibility is limited to mainly the external works (car park, drainage, retaining walls etc.) and their drawings and specifications for these works are included in the Employers Requirements. On this project, the ground floor units of the modular house will be secured to R.C. ground beams (designed by Joules) bearing onto piled foundations (designed and installed by others).

It is important to recognise that this site has **not** been fully remediated, as such, and therefore, RAMS for any excavation or piling work must take into account the risk of encountering 'relic' structures. That risk is being addressed by 'probing', which will be undertaken prior to piling. Pile design is by the sub-contractor, CFA piles are anticipated at this stage (though a driven pile may be appropriate if pile positions are clear).

Design responsibility for the prefabricated, modular, units remains with the manufacturer, Urban Splash Modular Ltd who is also referred to as "USM".

5.3 M & E Design:

TACE is the Client's appointed M&E Engineer, and together with "Service Connections" they will co-ordinate the new external supplies but USM is responsible for the design and installation of all internal M & E services (electric, water, telephone/cable). All internal plumbing/drainage, fixtures and fittings are also USM's responsibility.

5.4 Site services:

All dwellings will be provided with utility water, electricity and telecoms. No mains gas supply will be provided. Negotiations are ongoing for the provision of data services. RCS understands that there may be a requirement for a new electricity sub station for the Phase 3 development as a whole but discussions are on going to determine if this will be provided as part of Phase 3A or a later phase.

New storm and foul drainage disposal systems will be provided and discussions are on going to determine how the drainage from each phase of the site will be integrated and ultimately connected into the existing combined sewer on Coppersmith Road.

An attenuation tank is to be installed as part of the first (Phase 3A) development and this is sized to also store the "Mansion House" site surface water. This tank will be located in the communal gardens area, where the second phase drainage can be connected at a later stage. A second attenuation tank, will be located at the bottom of the stepped terrace, positioned in private gardens and this is designed to serve the Phase 3C site only.

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Extensive topographical and other surveys have been (or will be) undertaken to establish the location and condition of existing services and drainage runs. These included a CCTV survey of existing drains, including the Shooters Brook Relief Sewer.

6.0 KEY INFORMATION

Commencement Date:	USC's Main Contract works will start, following completion of LK Remediate's work, which is anticipated during May 2020
Completion Date:	Currently anticipated to be at the end of May 2021 (Assuming a 52 week contract period)
Hours of Operation:	Monday to Friday 8am to 6pm and Saturday 8.30am to 2pm No works will occur on a Sunday or Bank Holiday. There will be no "out of hours working" with the prior written agreement of MCC.
Emergency contact number:	USC office number: 0161 839 2999 Project Coordinator (Lee Richardson): 0777 873 3390

6.1 Measures to control noise and dust:

6.1.1 Dust suppression

Dust may be created externally, on this site, during the early stages of construction (ground works) but this will be managed throughout the construction phase. Measures will be taken to minimise and control dust on site through industry standard measures, i.e. dampening down, use of dust extraction attachments etc. Superstructure and fit out works: the potential for creating dust is very small, due to the fact that the modular houses are effectively factory finished.

Generally good housekeeping will be employed to reduce the amount of dust created. The Principal Contractor (USC) in conjunction with its sub-contractors will ensure dust generated from site activities does not become a risk to others and in doing so shall assess the dust risk for each work package, ensure adequate controls are in place and review these controls with their contractors.

Measures will be taken to eliminate, or at least minimize, dust generation with consideration given to material usage, type of work equipment used and work methods applied. Where dust creation is unavoidable, dampening down techniques will be applied.

Due to the nature/scale of the proposed Works it is **not** envisaged that an Air Quality Plan (AQP) will be required for this development.

6.1.2 Noise

As part of the pre-planning process of work activities, those works, which may bring about excessive or high levels of noise will be pre-assessed, including the impact upon construction operatives and residents/neighbours in nearby premises. The requirements described within The Noise at Work Regulations 2005 and the British Standard BS 5228 Noise and Vibration Control on Construction and Open Sites will be adhered to fully.

In brief, The Principal Contractor will limit as much as is practical high noise operations and where this is unavoidable measures will be taken, such as the selection of plant and equipment or work processes, which does not emit high noise levels or equipment, which is fitted with silencing/anti-vibration equipment.

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Also any noisy equipment will be sited as far away from occupied premises as possible and turned off when not in use. Noise paths will be restricted by the placement of enclosures/barriers where practical. The above measures will be considered as part of the assessment process, which will identify noisy hazards, estimate likely exposure to noise by construction operatives and any other persons likely to be affected, identify measures required to eliminate or reduce noise exposure, and make persons likely to be affected by noise aware of the risks and controls which are being taken.

Full liaison will occur with affected residents/neighbours as part of the pre-planning of construction work activities and every effort will be made to minimise the impact upon their work activities as described above and also to work in cooperation with residents regarding any specific requirements they may have, including restricting high level noise during key times.

VIBRATION MONITORING: Vibration during site piling works will be monitored on an ongoing basis. All obstructions have been removed from the ground prior to piling works in order to prevent excessive vibration. If, during the piling works, vibration levels exceed 1mm.s⁻¹, then works will be stopped and further assessment will be made of the ground as to whether further obstruction removal will be necessary. The piling contractor measures the level of vibration continuously while the Auger is in use, and will be notified instantly should the level rise above 1mm.s⁻¹. All residents will be notified in advance of piling works taking place, via a postal drop."

6.1.3 Air Quality Monitoring.

With the exception of piling, it is believed that the Phase 3A development is predicted to have a **negligible** impact with no exceedance of the short-term 1 hour NO₂ and 24 hour PM₁₀ air quality.

Irrespective of this belief, "Site Specific Mitigation", will be taken into account in the Principal Contractor's Construction Phase Plan (CPP), in particular to measure and control dust and/or other emissions, which may arise during construction activities.

Measures to reduce and control both dust and noise are referred to earlier in this document and any specific recommendations made in regard to the piling works will be considered and reviewed as part of regular site monitoring and review, which includes monthly site safety audits by others.

6.1.4 Site Waste Management Strategy.

Although there is no longer a legal requirement to produce a Site Waste Management **Plan**, USC will produce a Site Waste Management **Strategy** (contained within its CPP) and this will re-use and recycle waste, wherever possible.

Because the proposed dwellings are of modular construction, and mainly manufactured off site, the amount of waste generated (based on previous similar schemes) will be minimal and (again from previous experience) this will be primarily packaging and protective materials, which will be segregated on site. USC's sub contractors and suppliers are responsible for managing their own waste, but this will be monitored as part of the monthly site safety audits undertaken on this site.

6.1.5 Working adjacent to water (the Marina):

Because the Phase 3A site is **not** immediately adjacent to the Marina, there is very little risk of damage to that facility, or accidents arising from these construction works. However, irrespective of this, appropriate measures will be taken to avoid any potential for such damage. This will include

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specific reference to such risks in the **Site Induction**, which will be given to all operatives and visitors to this site.

6.2 Further key issues, which will also be considered, are:

- **Ongoing liaison** with affected persons, pre-construction & throughout construction phase. Urban Splash Construct (USC) will liaise and consult with all persons or organizations, which **may** be affected by this development, either directly or indirectly. All such correspondence, notices or other publicity will clearly identify dedicated points of contact.
- **Hours of work** will be as per Local Authority guidelines.
- **Vehicle movement and deliveries**, which will be controlled by the Principal Contractor. A full Traffic Management Plan for the construction phase of the scheme will be produced which will describe in detail the arrangements for vehicular movement, access/egress, parking and how this will be coordinated and controlled, with personnel identified.
- **Parking of construction vehicles and staff:** Due to space limitations, it is unlikely that sufficient car parking would be available in the compound for all persons requiring this, but that will be determined by the Principal Contractor. It should be noted that there are parking restrictions (time restrictions and/or yellow lines) on some of the surrounding roads, however, there are public car parks available within walking distance of this site, and (as previously mentioned) public transport is also available locally.
- **Emergency work** (where required) must be done in full liaison with City Council representatives and any other statutory persons, i.e. emergency services and HSE. The Principal Contractor will be expected to identify these arrangements within their construction phase health and safety plan, which must also include emergency procedures for the site.
- **Party Wall works** (where applicable) will be done in full compliance with Party Wall Awards and with the input of key personnel, i.e. structural engineer, party wall surveyor.
- **Scaffolding** requirements will be assessed with appropriate permits applied for by the appointed Principal Contractor. All scaffolding will be erected, maintained, inspected and used in accordance with the Work at Height Regulations and relevant British/European standards. It is **not** anticipated that mast climbers would be required for this project.

NOTE: it is **not** anticipated that Scaffold will be required for the Phase 3A works nor will there be any requirement to obtain any formal Licence and/or Approval from **Manchester City Council**. Also, we understand that the **Canals and Rivers Trust**, have no particular authority in this area.

- **Hoardings** and/or 'Heras' type fencing will be erected, which will provide protection for members of the public from construction works, and which also prevent unauthorised access to the site. These hoardings/fencing should cause minimum disruption and impact to members of the public and will consider the needs of highway and car park users, particularly the disabled. Hoardings may be subject to a Temporary Works design, and, in accordance with CDM 2015, **The Principal Contractor must apply for any appropriate permits and licenses required.**

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- **Temporary lighting** will undoubtedly be required during winter working and this will be designed to avoid light pollution and disturbance to neighbours. External floodlighting is to be avoided wherever possible but H & S considerations will form part of Risk Assessments in this regard. Hoardings fronting onto public roads/footpaths will require warning lights (as per normal practice).
- **Use of Cranes** will be limited. It is **not** envisaged that a tower crane will be required on this project, but a large mobile crane **will** be required to lift and install the prefabricated units. This work will be considered as part of the Lifting Plan, Risk Assessment and Method Statement (RAMS) and in consideration of the Lifting Operations Lifting Equipment Regulations 1998 (LOLER).
- **Skips and storage** area will be identified by the Principal Contractor and be within the site boundary/hoardings.

NOTE: there is no longer a legal requirement to produce a Site Waste Management Plan but the Principal Contractor will be required to include within its Construction Phase Plan (CPP), a **Waste Management Strategy**, which includes methods and modes for recycling (see later)

- **Use of access equipment:** Mobile elevated working platforms (MEWPs) may be utilised for some areas and the Principal Contractor will need to ensure that only trained and competent persons operate this type of equipment.
- **Site security:** this will be the responsibility of the Principal Contractor and the details will be identified in the Construction phase Plan (CPP). However, it is anticipated that, if any machinery or construction vehicles remain on site (out of normal working hours) these will be made secure by sheeting and disabling same.

6.3 Details of Site Compounds, storage of plant and materials

Urban Splash Construct (USC) is currently developing its detailed proposals for its site compound, parking and some storage. The arrangements for site accommodation and welfare are still to be finally agreed, however, the Principal Contractor will ensure that facilities are fully compliant with the requirements of the Construction (Design and Management) Regulations 2015, in this regard.

With respect to the storage of plant and materials, as previously detailed, this will be within the confines of the site. Careful management of materials, equipment and storage are to be followed. The delivery, storage and movement of materials around the site shall not adversely affect the day-to-day usage of surrounding land uses. Management of deliveries and the amounts brought to site on a daily basis will be considered and organised in such a way as to not have excessive amounts building up. (Consideration will be given to "Just in Time" procurement).

Suppliers and contractors will be made aware of the transport routes to be adopted. Delivery vehicles will be directed to the site entrance depending on what is being delivered. Deliveries are to be pre booked for delivery times to the site, which are co-ordinated by a site representative,

6.4 Temporary highway works or closures

At this stage it is **not** envisaged that any such works will be required, but liaison will occur with the Local Authority should this change at any point. The use of a mobile crane (referred to above) **should not** require any temporary road closure, but if it does then the appropriate permission(s) will be sought, as necessary.

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Swept path diagrams have been produced for construction vehicles delivering to, or working within, the site. A dilapidation survey (including photographs) will be undertaken to all affected carriageways or footways, relative to construction vehicle route(s) immediately surrounding this site.

6.5 Access for Construction Traffic

Currently, the only vehicular access to the site is via the temporary 'haul road' (referred to earlier). Outside the overall site, there is a constant flow of traffic on all of the surrounding streets. This has been taken into consideration as part of the Traffic Management Plan, particularly when deliveries to site are occurring and this will be managed. A separate pedestrian entrance/exit onto site will be formed.

The majority of vehicles will be delivering materials, although initially there will be a number removing excavated/demolition materials, equipment and surplus-waste materials. Where piling work is required this will be from a temporary piling mat, constructed for that purpose.

This site will require some excavation (foundations) and other earth moving works, it is **not** envisaged that there be any **significant** construction vehicle activity, other than that required for drainage works, car park formation and foundations.

The majority of vehicles will be delivering materials, including the prefabricated house units, although initially there may be a few removing excavated/demolition materials, equipment and surplus-waste materials. However, it is **not** envisaged there will be any significant requirement for very large machines to be brought onto the actual site to carry out excavation/other works. Similarly, where excavation for foundations is required this will be subject to assessment of RAMS.

The number of lorries arriving on site should be minimal, but this will vary depending on the activities being progressed at any particular time.

Access/egress arrangements for the site will allow for safe pedestrian and vehicular access onto site that has the least impact on members of the public and surrounding land uses.

Trained and competent banks-men will control all vehicular movement in and around the site.

Deliveries will be timed to avoid busy rush hour periods and also a build up of site traffic. Construction vehicles will not be allowed to wait on surrounding streets, save for when waiting to be unloaded/loaded in the designated loading bays.

Due to space restrictions, any large vehicles, which have to enter into the site, will have to undertake a "three point turn". This manoeuvre will be strictly controlled by a 'banksman' to minimize any risk. All vehicles will exit the site in a forward gear, i.e. no reversing will be allowed onto Lockyard Lane or Coppersmith Road.

Liaison will occur with affected neighbours throughout the construction phase.

Wheel washing facilities

Because there will be minimal excavation work and this will all be contained within the site, it is likely that there will be no requirement for dedicated wheel washing facilities or indeed any space available to provide same. However, a jet wash hose will be provided, located inside the site entrance, should it be necessary to remove any surplus material from vehicle wheels, before entering onto a public highway. Should any excavated materials be accidentally deposited on the highway, these will be removed a.s.a.p. by use of a road sweeper machine.

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Recycling/disposing of waste

The legal requirement to produce a Site Waste Management Plan was removed in 2013, however, the Principal Contractor will be required to produce and define a waste management hierarchy of control (i.e. a Waste Management Strategy). This should include:

- Mitigation of waste generated
- Re-use of materials where possible
- Recycling of materials
- Disposal of remaining waste at a suitable facility.

Waste produced during the construction process is to be cleared on a regular (ideally daily) basis.

Because of space limitations on this site, it is not envisaged that many skips can be positioned on site. Therefore, to reduce the amount of waste for landfill, waste is to be segregated at the waste transfer station into the following categories:

- Cat A: Hazardous waste i.e. paint tins, mastic tubes etc.
- Cat B: Metal
- Cat C: General waste / building debris

6.6 Details of how excavated materials will be contained with the site and prevented from entering drainage network

The Principal Contractor will be required to undertake Risk Assessments and to prepare Method Statements before commencement, and those RAMS should identify how this issue will be addressed. CCTV surveys will be undertaken within affected drains both before (and after) construction works, and temporary protection will be provided above existing entry points. NB. this is **not** anticipated to be a significant risk in relation to the existing drainage system.

7.0 Summary Statement

The Construction Design and Management Regulations 2015 will apply to this project and all appropriate controls and systems will be in place to comply with the standards of the Regulations and associated guidance.

Every stage of the project will be pre risk assessed and appropriate controls applied, sub contractors will be pre vetted and will be subject to extensive pre contract requirements of information transfer and risk assessment.

A fundamental aspect of the Principal Contractor's role is the development of a **Construction Phase Plan**, which will take account of all known risks, which have been identified at pre-construction stage by the Principal Designer/CDM Consultant, the Design Team and also through site investigations.

The Construction Phase Plan will describe arrangements and procedures for managing these key risk areas in more detail, as well as any future risk, and also the resources, including personnel, which will be applied to the scheme and which will ensure the Health and Safety of all those working on or affected by the project works.

The Principal Contractor will be required to have an on-going process of monitoring health and safety standards throughout its organisation. This is normally done directly (on site) by the site management team through regular inspections, toolbox talks etc. and also via the risk assessment process both during the completion of risk assessments and then by monitoring the effectiveness of risk control

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measures, which have been implemented. Site managers will also undertake regular reviews of safety on site, including any accidents or incidents and any matters raised will be dealt with accordingly.

Health and safety is also incorporated as a fundamental aspect of the overall project review, which will occur and this monitoring and review process will be supported by the **Principal Designer** (CDM) who is Rawlings Safety Training and Consultancy Services Ltd (RCS). We are also available to undertake independent inspections on this site, if required.

The Principal Contractor will at the earliest possible stage of the project enter into dialogue with all relevant parties, including neighbours to ensure there is effective coordination throughout all stages of construction.

8.0 Summary of response(s) to specific issues highlighted in the Pre Commencement Condition relating to Construction Management Plan (CMP) Planning Application No. 122598/FO/2019^[1]_{SEP}

Display of an emergency contact number: see page 7 (Section 6.0)

Details of Wheel Washing: see page 11

Dust suppression measures: see page 7 (item 6.1.1)

Compound location: see page 10 (item 6.3) and Traffic Management Plan (attached)

Location, removal and recycling of waste: see page 8 (item 6.1.4) and also page 11

Routing strategy and swept path analysis: see page 4 (Section 3) and swept path analysis undertaken by "Modular Movements Ltd" for USM (attached).

Consultation with local residents for the duration of the construction period: page 8 (item 6.2)

Parking of construction vehicles and staff: see page 4 (Section 3)

Sheeting over of construction vehicles: see page 10 (item 6.2)

END OF THE CONSTRUCTION METHODOLOGY AND MANAGEMENT STATEMENT.

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