

Date:- 08/11/21

To whom it may concern.

Re:- Approved Construction Management Plan, The Manchester College City Centre Campus

Following approval of the construction management plan approved under Planning permission number 124995/FO/2019, Willmott Dixon Construction and our supply chain have been working in line with the approved content of this document and continue to do so.

Regarding the Old Brewery Gardens -Top Platform works, planning application number 118831/FO2018, the approved CMP for The Manchester College is still live. The works required to the top platform will fall within our site once the fence line is extended to cover the construction area.

The approved CMP under application 124995/FO/2019 will be maintained and the construction works completed will be done so in line with this approved CMP. The scope of works for the top platform will fall within the timescales advised in the approved CMP.

Kind regards



Chris Baker MCIOB
Construction Manager

Our purpose is to deliver brilliant buildings, transform lives, strengthen communities and enhance the environment so our world is fit for future generations.



2.3 CONSTRUCTION MANAGEMENT PLAN



2.3 CONSTRUCTION MANAGEMENT PLAN

Contents:

1. Project Delivery
 2. Mobilisation Period
 3. Site Establishment and Logistics
 4. Programme and working hours
 5. Construction of Manchester College
 6. Internal fit out and services
 7. External Works
 8. Commissioning
 9. Delivery Management
 10. Health and Welfare
 11. Health & Safety
 12. Environmental
 13. Acoustic Requirements/Management
 14. Remediation Strategy
- Appendix A – Site Logistics Plan

2.3 CONSTRUCTION MANAGEMENT PLAN

1. Project Delivery

Our approach to the construction of The Manchester College has been tailored around the proposed design, external works and locality. The site team has a vast amount of experience in the construction of educational facilities within close proximity of local neighbourhoods. The written proposals and logistics plan demonstrate how we plan to manage the project effectively and in a safe manner.

This plan has been drawn up to ensure compliance with Willmott Dixons procedures whilst identifying specific requirements to the scheme.

2. Mobilisation Period

During the mobilisation period our management team will be responsible for the early planning, health, safety and environment plans and the procurement to enable works to commence on site. For this we will allocate site management and quantity surveying resources headed up by an Operations Director. This team will be supported by our health and safety managers, environmental manager, design managers, building services managers and supply chain department.

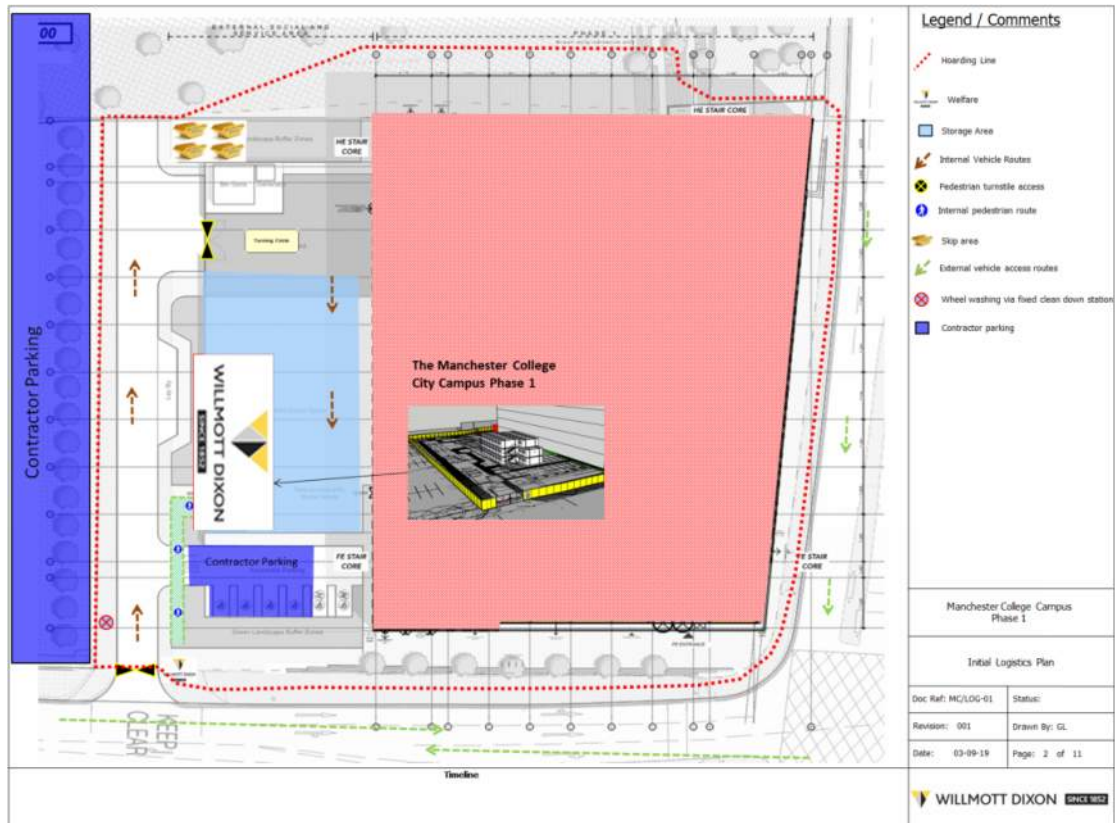
During this period the project will be transferred from our pre-construction department to the Construction project team however the project estimator will support the quantity surveyors for a minimum of a month after the start on site. For this project the Construction Manager and Senior Quantity Surveyor are involved throughout the pre-construction process ensuring that all knowledge is transferred into the construction phase.

3. Site Establishment & Logistics

From the outset the site team will establish the site set up in line with the phasing/logistics plan attached below. The site boundary will remain consistent by utilising a permanent timber hoarding line where possible, with additional lines of hoarding and heras fence to secure the site. (A larger scale plan can be logistic plan contained within Appendix A)

The site hoarding will secure the boundary whilst incorporating WD Corporate Guidelines with signage and branded colours on the external perimeter. There will be an opportunity for the customer to advertise the project by means of signage on the hoarding.

2.3 CONSTRUCTION MANAGEMENT PLAN



It is our intention to make use of the existing site access from Great Ducie Street for access and egress to the construction area as identified within the logistics plan. This will also remain as the main entrance to the college once it is completed.

The site entrance area will include all Willmott Dixon HS&E Information to display to members of the public alongside the emergency contact information. This will also involve information and signage regarding the site operations and latest information. Refer to Appendix 4 for further information of emergency contact details.

4. Programme and working hours

Contract start date – 06/01/2020

Contract competition date – 17/01/2022

Working hours – 0730 to 1800 weekdays – 0830 – 1400 Saturdays. No works on Sundays or Bank Holidays

We will comply with the EHO's standard working hours however certain activities including power floating will necessitate out of hours working, which will be agreed with Environment Health in advance.

5. Construction of The Manchester College

Prior to commencement of the works a comprehensive site services survey will be carried out by a specialist contractor. This will entail identification of services by ground penetrating radar detection and hand digging. All services across proposed access points and key junctions will be exposed and plotted accurately for future reference.

The remediation to the building footprint will commence using tracked excavators and a dumpers taking arising's to stock piles. The stockpiles will be remediated in line with the remediation strategy that will incorporate crushing, screening and re use.

2.3 CONSTRUCTION MANAGEMENT PLAN

In addition, the new proposed car parking, service area and entrance road from Great Ducie Street will be constructed as one of the initial activities. The reason we have constructed this area early in the programme, is to provide a safe turning area and is key to our routing strategy. Laying the tarmac is also key to our dust and mud control on site. We will also install the attenuation tank beneath the road construction and form the initial service connections to avoid further disruption further down the line. To achieve these early works, we will have temporary welfare units on site powered by means of a generator and effluent tank whilst we provide the foundations and services for the main set up. Refer to Appendix 4 for further clarification on the swept path analysis.

On completion of these works, the full site set-up will be constructed and services installed. The cabins will be delivered by ridged wagons and off loaded and erected by crane. Lifting platforms will be allowed for.

Once stoned levels are achieved, kerbs will be laid and access road and car parks, including the Existing access from Great Ducie Street and will be surfaced in accordance with the structural engineer's design and highway requirements.

During this period, any areas not covered by existing boundary fencing will be fenced off using heras, solid panel fencing and FSC timber hoardings with proprietary gates where necessary. This will ensure that the construction area is fully segregated and inaccessible to unauthorised persons.

The existing access from Great Ducie Street will ultimately be for both the vehicular and segregated pedestrian access for the site office accommodation and parking. Routes for emergency vehicles will be kept clear at all times. A specific holding area at the pupil drop off entrance will be created for deliveries loading and unloading. In the event of a vehicle needing to reverse they will do so with the aid of a qualified banksman. The construction entrance and associated traffic will be managed by the designated gateman who also acts as the qualified banksman when required.

The site compound and construction areas will be specifically designated and segregated which will ensure safe access for site operatives, staff and visitors to the site compound with a controlled boundary preventing unauthorised access to the construction area. Access to the construction area will be via pedestrian turnstile activated by a finger print reader, with access authorised after site induction. Access into the compound will be controlled via an external security gatehouse including a pedestrian finger print reader, activated once enrolled and inducted onto site. Any visitors will be authorized onto site via an intercom system connected directly to site reception. Refer to Appendix 4 for more information relating to the site compound.

Within the construction area, a haul road will be constructed and specifically designated for site vehicles. In addition, segregated pedestrian walkways will be provided from the site compound and welfare with demarked crossing points at interfaces with haul roads to ensure safe pedestrian access and egress to the workface for staff, operatives and escorted visitors.

As the reduced levels are exposed they will be rolled, a geotextile laid and then stoned in accordance with the structural engineer's specification for beneath the slab, car park and access roads.

The foundation solution incorporates CFA piles and caps formed on the bedrock layer. The insitu ground beams between foundations will be dug by 360 degree excavators with arising's removed to stock pile by dumper. It is the intention to re-use all generated arising's on site. Once excavations are complete and trimmed, Building Control will be invited to inspect foundations prior to pouring. If mesh or bent steel cages are to be used, the base of the excavations is to be blinded. Excavations are to be made safe at all times and are to be fenced off. Ground support will be used where the risk of collapse exists. Quality procedures will be in place to ensure the correct approved concrete mix is used, sample cubes are taken and the concrete is vibrated correctly.

2.3 CONSTRUCTION MANAGEMENT PLAN

The steel frame erection will commence from the South East elevation working into the site. Edge protection will be installed to the roof as the steel erection progresses. On completion of each phase the steel frame is to be lined, levelled and base plates grouted ready to be handed over to follow on trades. As the steel frame progresses the large elements of precast namely lift shaft shall be sequenced, lift and landed by the steel frame contractor. Temporary edge protection will be installed to all upper floors by the steel erector and upon completion of the steel frame; the composite deck to the upper floors will be laid and fixed allowing the upper floor slabs to be poured insitu.

Following the steel frame, drainage runs within the building will then be dug, terminated outside the footprint, tested and witnessed prior to construction of the sub-structure brickwork and the ground floor slab. The drainage will be tested and witnessed by Building Control. Manholes will be constructed as pipes are laid.

Following completion of drainage to a specific area, the formation will be trimmed, capped off with type 1 MOT, the perimeter shutter will be installed and any penetrations formed. The slab will then be prepared for pouring including any DPM, insulation, expansion provision and reinforcement laid ready to receive the in situ ground slab. The ground floor slab will be installed using a truck mounted concrete pump following extensive quality checks and witnessing by building control.

When the ground floor slab has been cast, the Lightweight structural steel frame and super structure corium is then to commence once drainage tails have been brought out of the building. This will be accessed via perimeter mast climbers to complete the elevation works.

Just in time mortar deliveries are to be used to minimise wastage, with mortar tubs used for transport around site by telescopic forklift. Particular attention will be paid to the installation of the associated insulation, vapour barrier, air tightness and reveal detailing along with cleanliness of the cavity. The envelope cladding process towards roof level once the low level brickwork height has been achieved. The upper elevations will be constructed using a helping hand system and cladding rails. Corium panels will then be placed and levelled over the elevations.

The roof system will also commence once roof nets, access stairs and edge protection have been installed. The roof consists of a composite top deck panelling system. Any roof lights or penetrations will be boarded over and cut out after the main roof installation under strictest health and safety control prior to the removal of nets local to them. We are proposing to utilise a crash deck scaffold structure to the underside of the atrium which will provide fall protection with the installation of the roof light system during construction.

We have specified a mobile tower crane to be located externally upon completion of the roof system in order to lift and locate the Roof Plant in the desired positions. These Lifting Operations will be strictly monitored and segregated in line with the WD Lifting Procedures which includes a Permit to Lift.

6. Internal Fit-out and Services

On completion of the roof structure and when it is safe to do so, any non-load bearing internal partitions will be constructed. Window installation will also commence at this point. Materials required internally are to be loaded by forklift onto loading bays and distributed by pump truck internally. There will also be a passenger and goods hoist located in the atrium for distribution of material onto floors. The window installation will work in line with the corium installation and is to be accessed via the perimeter mast climbers.

Mechanical and electrical 1st fix services at both high and low levels can then be installed, particularly any natural or mechanical vent units.

Once windows are in place 1st fix joinery can commence. Due to the weight of the glazed panels, we will install internally with use of a mechanical glazing robot to avoid manual handling of the glass. Final finishes to the frame will be accessed externally via the mast climbers.

2.3 CONSTRUCTION MANAGEMENT PLAN

During this period, we will progress one specific room as a sample so finishes can be approved.

As the Mechanical & Electrical services and joinery approach second fix, mist coating, sanitary ware, painting & decoration, toilet cubicles, ceramic wall tiling, floor finishes and hand railing works can commence. These will be coordinated around screeding to floors. We will pay particular attention here to air tightness.

Specialist activities like hoisting, sensory room, fixtures, fittings & equipment and kitchen fit out will be programmed and installed to suit.

Snagging of the building will be carried out as works progress in line with our quality management procedures and not left to the end.

7. External Works

On completion of the erection of the superstructure and when it is safe to do so the external works will commence.

Incoming services installations will be carried out by specialist subcontractors and their methods of construction and risks will be evaluated once the utility companies have stipulated what is required.

External drainage and attenuation will be installed as soon as it can be to enable the site to drain. All drainage is to be checked by building control prior to backfilling. CCTV survey of drains will be carried out on completion.

As part of the external drainage design a road crossing is required to connect the new drainage system onto the existing line, located within Great Ducie Street. This is required due to the site's current drainage system being insufficient for the new building. We will liaise with TfGM to proactively plan and manage these works, ensuring minimal disruption to the surrounding area. The majority of the surface water generated on site is dealt with via the attenuation system and existing outfalls.

The external formation will be prepared and leveled in preparation for external finishes. Works will progress from the South of the site around both clockwise and anti-clockwise to the North.

External paving and hard surfacing is to take place as soon as the finishing trades allow.

The soft landscaping (top soiling and planting) is to be programmed with the seasons in mind. The soft landscaping is to commence as soon as the external works are sufficiently progressed.

Once the building is ready for hand over – decant, the site fencing is to be removed and all areas to be made good as necessary. At all times the site is to be secure and safe.

8. Commissioning

A commissioning programme will be compiled to manage the overall commissioning activities with dates constantly reviewed to ensure successful completion and handover of the building services. The projected dates for commissioning are shown on the construction programme and will be updated and target to provide contingency for any unforeseen issues.

Ensuring the building commissioning is thorough and the results interpreted accurately is a vital part of achieving zero defects at handover. Therefore, to ensure the technical commissioning of the Manchester College is of the highest quality, an **Independent Commissioning Manager** will be employed to oversee this phase of the project.

2.3 CONSTRUCTION MANAGEMENT PLAN

ICT integration and commissioning is a key element of this process. This will be thoroughly planned and reflect the end user requirements. Willmott Dixon's experience in ICT integration together with our specialists will provide a seamless transition from the existing school to the new purpose built facility. Our quality management systems ensure that ICT and Customer Commissioning is featured on every Customer and Design Team Agenda, such is the importance we place on ICT.

Once the ICT decant is complete the respective equipment will be demonstrated to appropriate individuals from the school and the client to sign off and agreed the installation is complete and works to the required standard.

9. Delivery Management

A liaison manager will be appointed from within the Willmott Dixon Site Management Team. The manager will liaise closely with the neighbours and local businesses to ensure restrictions are adhered to and deliveries are well managed. Materials will be ordered on a 'just in time' basis wherever possible to minimise the amount of materials to be stored on site. All deliveries will arrive via Great Ducie Street. Refer to Appendix 4 for more information relating to consultation with local neighbours.

We will have a permanent gateman in place to manage construction vehicles whilst ensuring minimal disruption to the main highway and members of the public.

A CMP co-ordinator will be in place prior to commencement of the development to organise and arrange regular meetings with stakeholders and residents on a weekly basis to discuss the construction schedule and to inform the stakeholders and residents of any known changes to the schedule or works or operations that are reasonably anticipated. Prior to our start on site we will implement a letter drop with the relevant contact details of the CMP on site so that a direct contact link can be made with the site team should residents have any concerns or complaints they wish to discuss.

A 24h all access emergency number will be visible on the site hoarding along with site managers details for out of hour's emergencies 08457335533

Delivered and offloaded materials will be distributed around the site by telescopic forklift onto loading towers positioned around the building envelope. Secure containers will be available on site to secure small plant and materials. Passenger and Goods hoists will be utilised to assist with the management of materials. Material storage areas will be identified and included in the site management plan.

We will utilise sheeting over construction vehicles to ensure minimal disruption in terms of construction traffic and to reduce any risks in line with our traffic management strategy. Our measures for controlling on-site noise and dust are dealt with in section 12. Our measures for any specific acoustic controls are dealt with in section 13. Refer to Appendix 4 for further details on proposed sheeting over construction vehicles.

10. Health & Welfare Facilities

Good quality health and welfare facilities will be established on site throughout the construction phases. The welfare facilities will be comprised of male, female and disabled toilets, shower, canteen and drying room. All the facilities will be shown on a welfare plan which will be displayed in the site canteen and site offices. A copy of this will also be kept in the Health and Safety file. All welfare facilities will be maintained daily in good order. The First Aid box and accident book will be maintained in the open plan office on the first floor of the site cabins.

The details and locations of the site offices and compound can be found in appendix A logistics plan. The location of our waste recycling area will be placed in the service yard area see page 19 and 20 showing the skips at the top of the access road.

2.3 CONSTRUCTION MANAGEMENT PLAN

Recycling of waste will take place at source, the materials will be segregated into individual skips, such as general, plasterboard, inert, metal, aerosols and plastics will also be segregated into individual skips, all waste will be tracked with a full duty of care and rigorous waste transfer system in place and monitored.

11. Health & Safety

The construction of a new College alongside two main roads will present a greater than normal degree of Health and Safety risks to operatives and to others that may be affected by our actions.

We believe that the following proposals will help us to mitigate the risks as the work progresses:

Fire Planning

The site specific fire plan needs to be agreed prior to positioning the site offices and welfare facilities. The plan will take into account the any members of the public that will be using the pedestrian pathway that runs through the site. The plan will be up dated at regular intervals to reflect the stages of construction of the project. Fire points will be positioned in and around the site offices, welfare facilities and on the construction site. The positions will be clearly identified in the Fire Plan and location maps around the site. Fire Extinguishers will be clearly marked and checked once a week as laid down in Willmott Dixon's procedures. A fire drill will be carried out once a month.

Underground Services

All necessary steps will be taken to accurately locate and identify existing underground services prior to any excavation taking place. These steps will include:

- Referral to all relevant statutory authority drawings.
- Communication with the relevant authorities in order to accurately locate services on site.
- Cable Avoidance Tool (CAT) and Genny surveys of all areas prior to excavation work.
- Issue of a Permit to Dig by the site manager following strict WD Service Avoidance Procedures.
- Where necessary a non-intrusive radar survey will be completed
- Vac Excavation works to areas of high risk with lots of services within the vicinity.

Traffic Movement

Wherever practical the layout of the site will include separate routes for vehicular traffic and pedestrians with priority given to safe access and egress to pedestrians. This principle will include for the elimination of reversing vehicles wherever possible. The traffic plan is to be made available to all suppliers and contractors working on site.

The site compound will be set up and with two meter high fencing with anti-climb mesh. We have developed a strategy for traffic movement to ensure minimal disruption to the ongoing activities and adjacent businesses during the construction works. This includes for a turning circle on site which allows smooth flow of construction traffic at all times via the main access gates.

Adequate signage will be displayed directing traffic to/from site and traffic movements into/out of site will be controlled by a trained banksman/ signaler.

Audible warning devices will be fitted to vehicles that need to reverse, and they will be supervised by a banksman at all times.

2.3 CONSTRUCTION MANAGEMENT PLAN

Construction vehicles, other than vehicles delivering materials and plant, shall be fitted with reversing beepers.

A fixed budded wheel wash will be in place so that all vehicles can be cleaned prior to leaving the site lines. Refer to Appendix 4 for further information on the wheel wash proposals.

The routing strategy can be seen on the logistics plan in appendix A

Access to / from site

Access/egress to the site will be directly off Great Ducie Street. There will be adequate signage to ensure that minimum disruption is caused to the usual traffic flow of Great Ducie Street by site traffic. Site vehicles will not be allowed to park outside the site compound, unless in emergency situations.

Routes for ambulances and fire engines will be kept clear at all times. Additional access points for emergency vehicles will be installed in the site fencing to facilitate access.

The access gates to the site will be securely locked outside normal working hours.

Parking

Our construction strategy involves forming the new proposed car park, entrance road and service area as one of the initial activities in the programme which will provide on-site parking facilities for our people and supply chain partners. We will mainly utilize the paid adjacent car park for staff and supply chain.

There will also be capacity to utilize the existing, adjacent car parking facility in the event the on-site area is full as shown on the logistics plan. Refer to Appendix 4 for further clarification.

Manual Handling

Designers have a duty under CDM to design out high-risk activities wherever possible, which should include the 'weight' implications of materials specified.

Notwithstanding item 5 (a) above, all heavy materials will be mechanically off-loaded and whenever possible transported around site by mechanical means, i.e. fork lift trucks, hoist, pallet trucks, sack trucks, wheelbarrows, etc.

Where risks are identified then contractors will carry out written manual handling assessments, which will be prepared in accordance with Manual Handling Regulations. The assessments must be attached to the method statements.

The manual handling of kerbs and slabs is not permitted and mechanical means will be used wherever practical. If mechanical means are not practical then a detailed risk assessment will be carried out.

Permits to Work

Where necessary, the following permits will be issued by Willmott Dixon:

- Permit to Work
- Permit to Enter (Confined Spaces)
- Hot Works
- Permit to Dig
- Permit to Lift
- Permit to Use Electrical Equipment Greater Than 110v

2.3 CONSTRUCTION MANAGEMENT PLAN

- Permit to Load

COSHH

Any necessary COSHH Assessments will be made by the relevant contractors and attached to their method statements.

The Building Manager has overall responsibility to ensure that COSHH assessments are completed and to ensure that all relevant parties on site are aware of any operation that may affect other persons.

Personal Protective Equipment

Any necessary Personal Protective Equipment (PPE) will be supplied by the relevant employer and must be worn as, when and where necessary. As a minimum, helmets, safety footwear, Hi-Viz clothing and appropriate safety gloves must be worn by all persons on site including visitors who must report to the site office on arrival.

Method Statements & Risk Assessments

All necessary Method Statements and Risk Assessments will be prepared and kept in separate method statement files, which are held on site.

We work on the principle of 'He who creates the risk - creates the necessary Method Statement/Risk Assessment'.

The requirement for a Method Statement will be highlighted to the sub-contractor by the Construction/Operations/Projects Manager, at the pre-order meeting and the requirement thereof forms part of the contract documents.

All such Method Statements/Risk Assessments must be available on site prior to that operation commencing. These will comply with the requirement of the Health and Safety Policy to ensure that they are sufficient in detail and, if acceptable, will be signed on site by all operatives who will agree to comply with the Method statement/Risk assessment at all times. If at any stage of the work the Statement requires revision then work will not be permitted to continue until the revision is in writing and again all concerned have signed it.

2.3 CONSTRUCTION MANAGEMENT PLAN

12. Environment

Environmental Management Plan

Willmott Dixon's Environmental Management Plan details the environmental management system that is to be used on this project and thus control our environmental impact to the area; this is to achieve continual environmental improvement and to ensure compliance with relevant environmental legislation, standards and codes of practice. The system is designed to be compliant with all the clauses of the International Environmental Management System Standard ISO 14001:2004. The Environmental Management System (EMS) also aims to provide a framework so that there is linkage and connection between the legal requirements on the business and the Environmental Policy, the scope of our operations and also our environmental aspects. The EMS takes the significant aspects of our operations and applies objectives, controls and targets to achieve continual environmental improvement.

All EMS documentation will be amended as and when deemed necessary by the Company and controlled by the Company's Environmental Director. The Environmental Manager for the North West region in conjunction with the site will produce the site specific Environmental Management Plan, (EMP) and a dedicated champion, based on site will be responsible for the day to day management of the plan which will be audited by the Environmental Manager. Copies of Willmott Dixon's Environmental Plan is referenced in Appendix 3 and attached.

Tree felling and scrub clearance shall be undertaken outside of the bird breeding season (March-August) unless a checking survey by a suitably qualified ecologist has deemed active nests to be vacant and appropriate notice of such provided to the Local Planning Authority prior to any such works commencing. It is not anticipated that any are required on this project.

Any trenches left uncovered/open overnight shall provide a means of escape for mammals including badgers through the provision of a ramp at least 30cm wide and at an angle of no greater than 45 degrees.

Site Waste Management Plan

Construction projects generate many environmental matters that require control measures. To ensure that these matters are controlled the Environmental Tool box talks as listed below will be considered as 'Activities with Risk to Health and Safety' and will be part of the H&S Managers and Safety Inspectors inspections regime. Toolbox Talks are the responsibility of the Willmott Dixon Environmental Manager. The site will have a site specific Site Waste Management Plan (SWMP) on site

- Spill Controls
- Water Pollution Prevention (Fuel and Oils)
- Dust and Air Quality
- Noise and Vibration
- Water Pollution –SILT
- Water Pollution- Cement and Concrete
- Tree Protection
- Storage of Waste
- Storage and use of Petroleum, Diesel and Oils
- Pumping and Over Pumping
- Washing down Plant and Machinery
- Be a Good Neighbour

A separate Project Environmental Plan has been developed by the site management team alongside our Environmental Manager and identifies the procedures in place for environmental considerations throughout the project duration. This can be found under Appendices 3 below.

2.3 CONSTRUCTION MANAGEMENT PLAN

Dust, Noise & Waste

A number of building operations are inherently noisy and/or dusty. We will keep dust to a minimum by the use of damping down sprays where applicable and noise by ensuring that all plant used on site has the appropriate silencer and baffles. We will have a segregated cutting zone which will enable us to exercise greater control over the noise and dust pollution created during cutting exercises this will be position at the furthest point away from sensitive receptors in the area.

Dust suppression equipment will be used wherever necessary and this will be monitored on a task basis and is to be included in each Method Statement in line with the Risk Assessments produced to minimize dust. Refer to Appendix 4 for the Dust Suppression measures in place.

We have allowed for wheel washing throughout the groundwork's phase to ensure all vehicles that leave the site will not soil the surrounding roads. This will be achieved via a wheel wash station inbound of the main site gates, this station will have a temporary drainage system (silt trap) that will contain the spoil on site so it can be disposed of in line with our Environmental management plan. Refer to Appendix 4 for further information on the wheel wash strategy.

The wheel washing strategy will also make use of the Banksman who is stationed at the main site gates, this banksman will check in and out the construction vehicles, during this check the banksman will wash off any debris collected on site via a jet wash station. Further to this road sweepers will be utilized throughout the day as a capture all clean down of the roads leading to and from site.

Surplus materials will be placed in segregated skips for removal from site to a registered waste processing centre and will be recycled where possible. Willmott Dixon's site specific Environmental Management Plan will identify these items as risks and will identify the necessary control measures. Refer to Appendix 4 for more information relating to recycling and dealing with waste during construction.

We will not allow any fires on site for the burning of materials.

The river Medlock will be protected from spillages by ensuring that all plant is bunded and silt traps are installed at all drainage point on site. Dust mitigation such as dampening down will be utilized on site and debris netting preventing materials leaving the site lines will be in place.

The location of the site and the construction activities to be undertaken pose a concern to the nearby businesses and occupants adjacent to the site. Several meetings / discussions have taken place with the stakeholders and nearby residents to refine the impact of noise generated from various construction activities in advance of works commencing on site.

As per the recommendations of the Hoare Lea Acoustics Report dated 21st June 2019 and in order to reduce vibration levels on site, Willmott Dixon will ensure a solid hoarding fence is erected around the adjoining boundary and will be in place throughout the full duration. This will be accompanied by vibration and noise monitoring equipment to ensure the levels do not exceed the agreed threshold in accordance with BS5228-1 and BS7385-2.

All cutting operations shall take place within the defined area located within the building and screened locally with acoustic mitigation material. These areas will be constructed with a tube and fitting scaffold, covered with Monarsound Acoustic Insulation Sheeting. This will provide internal acoustic screening to the main building.

The code of practise for noise standards – BS:5228 -1 measures parameters –L_{aeq}(1 Hour) and we have outlined limits to be set with a trigger level of 75dB (at the Beaumont Building) and 65db (at the Travel Lodge) would apply at the façade of the receptor. Willmott Dixon will monitor the actual level based on the location of the monitoring equipment (e.g/ a level of higher than 75db would need to be set at the site boundary to account for the distance attenuation to the Beaumont Building and Travel Lodge).

2.3 CONSTRUCTION MANAGEMENT PLAN

This will be monitored on a regular basis by the site management team. The below table identifies an environmental noise survey which was carried out over three visits to site between 28 March and 4 April 2019.



The code of practise for vibration standards – BS:7385-2 and BS:5228-2 Vibration control on construction and open sites, refers to a building measure parameter based on PPV mm/s which we have identified a maximum trigger of 10mm/s with our anticipated maximum vibration levels when undertaking piling identified at 6.1mm/s. This vibration assessment is available from the site management team if necessary.

A construction vibration assessment has been undertaken by Hoare Lea utilising historic data. Please refer to the below Table 9 for clarity and our assessment undertaken by the supply chain identify the assumed vibration levels is expected to be below the threshold outlined.

Annex D of BS 5228-2:2009 provides summaries of case histories of vibration measured during rotary bored piling operations. Data indicates that particle peak velocities of 0.23 mm/s at a distance of 20 metres have been recorded during rotary bored piling of 1050 mm diameter piles, with soil conditions described as, 'Fill/dense ballast/clay'.

Calculations have been carried out based on the historic data to estimate the vibration levels during piling at the nearby noise sensitive premises. The calculations indicate the vibration levels set out in Table 9.

Table 9 Predicted vibration levels

Receptor	Predicted vibration level during piling	Significance impact
Beaumont Building	0.13 mm/s	Negligible
Travelodge	0.10 mm/s	Negligible

It can be seen that the impact on the nearby receptors due to vibration caused by construction activities is predicted to be negligible.

We will work closely with our supply chain and select the most suitable plant available taking into account noise and vibration generation from plant and work activities.

The operation of site equipment and/or plant and machinery generating noise that exceeds 75dB (A) Laeq (over a 1 hour period) at the facade of any noise sensitive receptor including Campus Manor shall only be carried out between the hours of 0900 and 17.00 Monday - Fridays and 0900 and 1300 hours on Saturdays and at no time on Sundays or Bank Holidays.

2.3 CONSTRUCTION MANAGEMENT PLAN

This information is based on the above assessment which was noise levels recorded prior to any construction works taking place.

We have enabled Early Grid Connections which have removed the requirement for any generators creating noise and vibration pollution at the start of the project.

Willmott Dixon will continue to work openly with supply chain partners to order to manage the impact of construction activities and nearby residents/businesses. A CMP co-ordinator (liaison manager) will be in place post prior to commencement of the development to organise and arrange regular meetings with nearby businesses on not less than a weekly basis to discuss the construction schedule and to inform stakeholders and neighbours of upcoming activities which may create minor disruption.

The below table has been taken from the Hoare Lea construction noise and vibration assessment for the scheme as identified anticipated plant and key noise generating activities. The table below, Table 6, further outlines predicated noise levels at sensitive receptors, notably the Beaumont Building and Travel Lodge.

Table 5 Key noise generating activities

For the purposes of the assessment, key noise generating activities have been considered for the various phases of construction. These are summarised in Table 5.

Table 5 Key noise generating activities

Phase	Activity	Programmed date	Assumed plant
Enabling works & piling	Ground remediation	02/03/2020 - 28/05/2020	2x Excavators, 2x Concrete breakers, 2x Dump trucks. All assumed to be operating for 80% of the working day.
	Form contiguous pile wall	23/03/2020 - 16/04/2020	1x CFA piling rig. Assumed 30 minute cycle time with 50% on time during each cycle.
	CFA piling	18/05/2020 - 30/06/2020	2x CFA piling rigs. Assumed 30 minute cycle time with 50% on time during each cycle.
Superstructure	Erect pre-cast concrete cores	16/06/2020 - 27/07/2020	2x Mobile cranes. Assumed to be operating for up to 50% of the working day and idling the remainder of the time.
	Erect steel frame	13/07/2020 - 30/11/2020	2x Mobile cranes. Assumed to be operating for up to 50% of the working day and idling the remainder of the time.
	Upper floors	26/05/2020 - 01/03/2021	3x Concrete pumps and 3x Poker vibrators. Assumed to be operating for up to 80% of the working day.
Building envelope	Installation of cladding	01/09/2020 - 13/08/2021	3x MEWPs and 3x Mobile cranes. Assumed to be operating for up to 50% of the working day and idling the remainder of the time.
Internal fit-out	General fit-out	24/11/2020 - 30/11/2021	No activities assessed due to screening provided by envelope.

2.3 CONSTRUCTION MANAGEMENT PLAN

Table 6 Predicted noise levels at sensitive receptors - single activities

Phase	Activity	Predicted noise level from individual activity, L_{Aeq}	
		Beaumont Building	Travelodge
Enabling works & piling	Ground remediation	76	70
	Form contiguous pile wall	67	60
	CFA piling	68	62
Superstructure	Erect pre-cast concrete cores	71	65
	Erect steel frame	71	65
	Upper floors	72	67
Building envelope	Installation of cladding	67	61

Table 7 Predicted noise levels at sensitive receptors - simultaneous activities

Phase	Activity	Predicted noise level from combined activity, L_{Aeq}	
		Beaumont Building	Travelodge
Enabling works & piling	Form contiguous pile wall	76	71
	Ground remediation		
	CFA piling	77	71
Superstructure	Erect pre-cast concrete cores	72	67
	Erect steel frame	74	68
	Upper floors	74	69
	Installation of cladding	73	68

Fugitive Dust Mitigation Measures

Willmott Dixon will implement the below in line with the Air Quality Report

Communications

- Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary.
- Develop and implement a stakeholder communications plan that includes community engagement
- Display the head or regional office contact information
- Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the LA

Site Management

- Record all dusty and air quality complaints
- Make the complaints log available to the LA when asked
- Record any exceptional incidents that cause dust/or air emissions, and the action taken to resolve the situation
- Hold regular liaison meeting with other high-risk construction sites within 500m of the site boundary (if applicable). Ensure plans are coordinated and dust and particulate matter emissions are minimized

2.3 CONSTRUCTION MANAGEMENT PLAN

Monitoring

- Undertake daily on-site and off-site inspection where receptors are nearby to monitor dust. This is to be picked up in line with the Willmott Dixon Weekly Inspections procedure.
- Carry out regular site inspections to monitor compliance with the DMP
- Increase frequency of site inspections when activities with a high potential to produce dust are being carried out.

Preparing and Maintaining the Site

- Plan Site layout so that machinery and dust causing activities are located away from receptors.
- In the event of high potential for dust production, adequate measures are to be put in place such as dust suppression equipment to be utilized when operations last an extensive period.
- Avoid site runoff of water or mud.
- Keep site fencing, barriers and scaffolding clean using wet methods
- Remove materials that have a potential to produce dust from site as soon as possible. In the event this is the case dust suppression methods are to be utilized at all times to minimize the risk.
- Cover, seed or fence stockpiles to prevent wind whipping
- Use water as dust suppressant where applicable

Operating Vehicle/ Machinery and Sustainable Travel

- All vehicles to switch off engines - no idling vehicles. All vehicles to comply in line with the FORS procedure and being responsible within the community in line with Considerate Contractors scheme.
- Avoid the use of diesel or petrol-powered generators where Practical.
- Impose and signpost a maximum-speed-limit of 15mph on surfaced and 10mph in unsurfaced haul roads
- Produce a Construction Logistics Plan to manage sustainable deliveries. This is to be discussed at each pre-start meeting with the supply chain.
- Implement a Travel Plan that supports and encourages sustainable Travel.

Operations

- Cutting equipment to use water as dust suppressant or suitable local extract ventilation
- Ensure adequate water supply on the site for effective dust/particulate matter suppression/mitigation
- Use enclosed chutes and covered skips where possible.
- Minimize drop heights
- Ensure equipment is readily available on site to clean any spillages. Spill kits to be adopted in line with WD Environmental Procedures and fuel storage equipment to be double bunded and padlocked to avoid issues.

Waste Management

- No bonfires

Earthworks and Construction

- Re-vegetate earthworks and exposed areas
- Use Hessian, mulches or trackifiers where it is not possible to re-vegetate
- Only remove the cover in small areas during work and not all at once
- Avoid scabbling where possible and if so adequate dust suppression equipment is to be used.
- Ensure sand and other aggregates are stored and not able to dry out,

2.3 CONSTRUCTION MANAGEMENT PLAN

- unless it is required for a specific process
- Ensure bulk cement and other fine powder materials are delivered and stored to prevent escape
- For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust

Track out

- Use water-assisted dust sweeper on the access and local roads
- No dry sweeping is to be utilized and dust collection / suppression is to be adopted on site.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials. Refer to the sheeting section above as listed.
- Inspect on-site haul routes for integrity, instigate necessary repairs and record in site log book
- Install hard surfaced haul routes which are regularly damped down.
- Implement a wheel washing system at a suitable location near site exit
- Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits
- Access gates to be located at least 10m from receptors, where possible

12. Acoustic Requirements/Management

Meetings / discussions have been undertaken with local stakeholders in order to define the impact of noise generated from various construction activities may have on the local community and the wider community in advance of works commencing on site.

We will actively monitor site noise levels and vibration levels during the noisier activities and this will be recorded on a daily basis. Relevant equipment will be utilised to measure these activities and if in the event these are over the recommended figure, adequate protection measures will be utilised to minimise disruption.

Given the sites location adjacent to two major highways and being located in a non-residential area the construction activities are not likely to cause a nuisance.

All cutting operations shall take place within the defined area and screened locally. These areas will be constructed with a tube and fit scaffold frame and covered with Monarflex MonarSound Acoustic Insulating Scaffold Sheeting. This material will also be used to provide acoustic screening to the main building access scaffolding. The full design specifications of this system can be viewed via the link below.

http://www.monarflex.co.uk/~media/IcopalUK/Download/Datasheets/Scaffold_Sheeting/TDS1443-Monarflex-MonarSound-Fence-FlameSafe-Datasheet.pdf

The Code of practice for noise and vibration control on construction and open sites BS 5228-1 2009, refers to the need to reduce noise levels, By introducing a noise barrier as we have proposed the general noise level is cut in half.

We will work closely with our supply chain and select the most suitable plant available taking in to account noise generation from plant and equipment.

The operation of site equipment and/or plant and machinery generating noise that exceeds 65 dB (A) Laeq (over a 1 hour period) at the facade of any noise sensitive receptor including Campus Manor shall only be carried out between the hours of 0900 and 17.00 Monday - Fridays and 0900 and 1300 hours on Saturdays and at no time on Sundays or Bank Holidays.

Deliveries, servicing and collections, including waste collections, shall not take place outside the following hours:

2.3 CONSTRUCTION MANAGEMENT PLAN

07:30 to 20:00 Monday to Saturday with no deliveries on Sundays and Bank Holidays

The Construction working hours will be strictly adhered to as below:

Monday to Friday 07:30 to 18:00 Saturday 08:30 to 14:00 with no working on Sundays or Bank Holidays.

Temporary generators will be used in the first instance until a temporary supply is available from the existing or new substation. Generators of this nature shall be screened by the site accommodation block and housed in an acoustic container. All generators to be used on site shall be classed as "quiet" (i.e max 70dB at 7 m from source) this will be housed in an acoustic container that will not allow the noise emitted.

Willmott Dixon will continue to work openly with all stakeholders in order to manage the impact of construction activities on local business operations. A CMP co-ordinator (liaison manager) will be in place post prior to commencement of the development to organise and arrange regular meetings with stakeholders on not less than a weekly basis to discuss the construction schedule and to inform stakeholders of any known changes to the schedule or works or operations that are reasonably anticipated.

Based on guidance provided in BS 5228, the following mitigation measures are to be adopted to ensure that the general noise impact is reduced as much as practicable:

- Industry standard hoardings to provide screening to the site boundary 2.4 high solid timbers
- Use of acoustic enclosures for continuous plant as above
- Cutting activities to be carried out in defined areas with localised screening
- Use of electrical plant items rather than diesel plant wherever practicable
- Appropriate maintenance of exhaust silencing and plant muffling equipment
- Construction activities to be limited to take place during normal sociable hours
- Audible reversing warning systems on mobile plant and vehicles will be of the type which, whilst ensuring that they give proper warning, has a minimum noise impact on persons outside open sites.

In addition, BS 5228 notes that good community liaison and information distribution regarding noise impacts can help improve the attitude towards the contractor and reduce the impact from high noise levels. This strategy will be implemented.

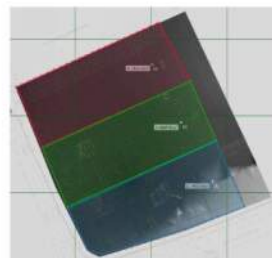
We will monitor the noise levels at the receptor points

We will also monitor vibration at the closest receptors, should the vibration pose an issue the operation will be stopped and a new compliant strategy will be implemented.

14 Remediation Strategy

As we continue to develop an effective solution to overcome the challenges within the ground, a robust remediation strategy will be submitted as part of the Planning Application.

Figure 1: Current ground levels and proposed Site Areas 1 to 3.



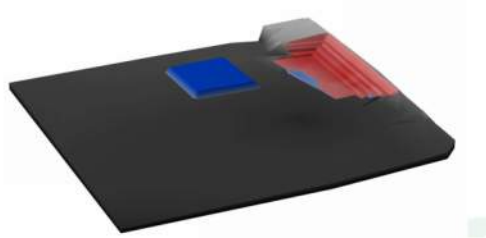
We anticipate the remediation works to be complete in ten to twelve weeks which will involve a large number of heavy plant and equipment to adequately remediate the site area to the necessary ground levels ahead of following trades.

Initially, our supply chain partner will commence breaking out of the existing structure to the South East elevation (Area 3) whilst ensuring the full excavation perimeter is benched in order

2.3 CONSTRUCTION MANAGEMENT PLAN

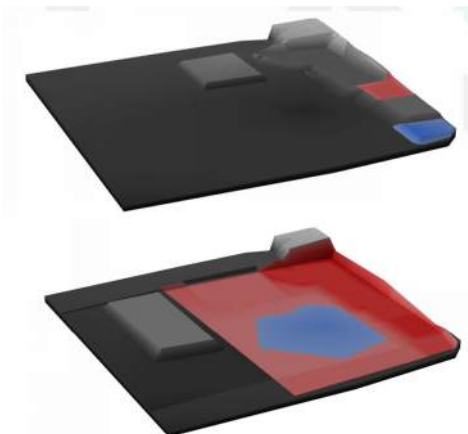
to provide a safe working environment for following trades. This methodology will continue progressively in line with our standard H&S procedures.

Figure 2: Days 1 to 3, break out and bench into existing ramp, 825m³ cut from Area 3.



We anticipate a 825m³ cut from Area 3 followed by importing and placing 900m³ Type 1 MOT to form a piling ramp and platform. This operation will be required to enable our piling partner adequate access to the work area through construction of the ramp and platform whilst allowing the remediation works to progress.

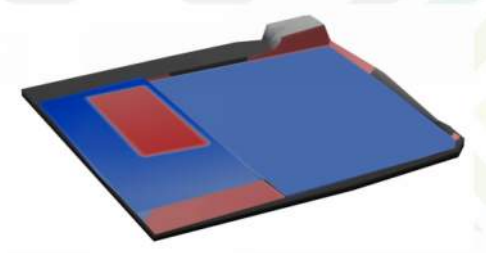
This will progressively continue with the cut and fill of MOT along the elevation from Week 2 to 3 whilst providing an adequate piling platform and ramp whilst the piling to the contiguous wall continues. The contiguous piled wall is part of the remediation strategy and must be in place in order to commence and complete the remediation of the site. An agreement in principle that the contiguous piled wall can commence will be required from MCC planners and highways.



Up until the completion of the contiguous wall, works will progress with the stripping of the hardstanding surface to the existing car park and break out any obstructions within the area. Following completion, final remediation to Areas 2 and 3 involving reduce level excavations and crushing of material to reuse.

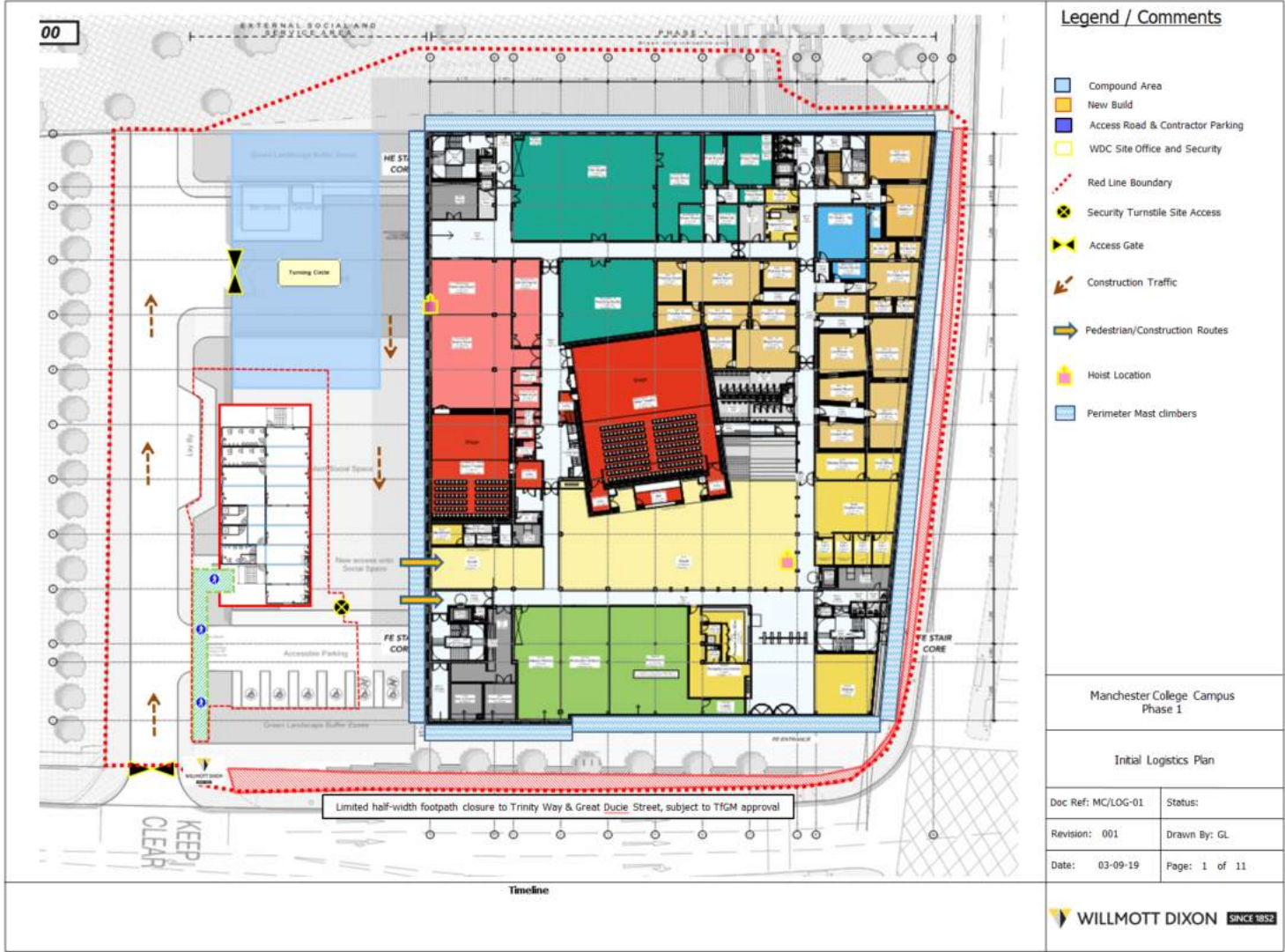
During Week 10, we will construct and form the piling matt in anticipation for the piling to commence within the building footprint along with the final remediation of Area 1. The surplus spoil generated from the piling ramps will be placed to level the area as well as stockpiled for later use during construction. The rest of the site will be appropriately remediated to level.

Figure 7: Weeks 7 and 8, place piling mat, remediate Area 1, and place surplus soil to level.

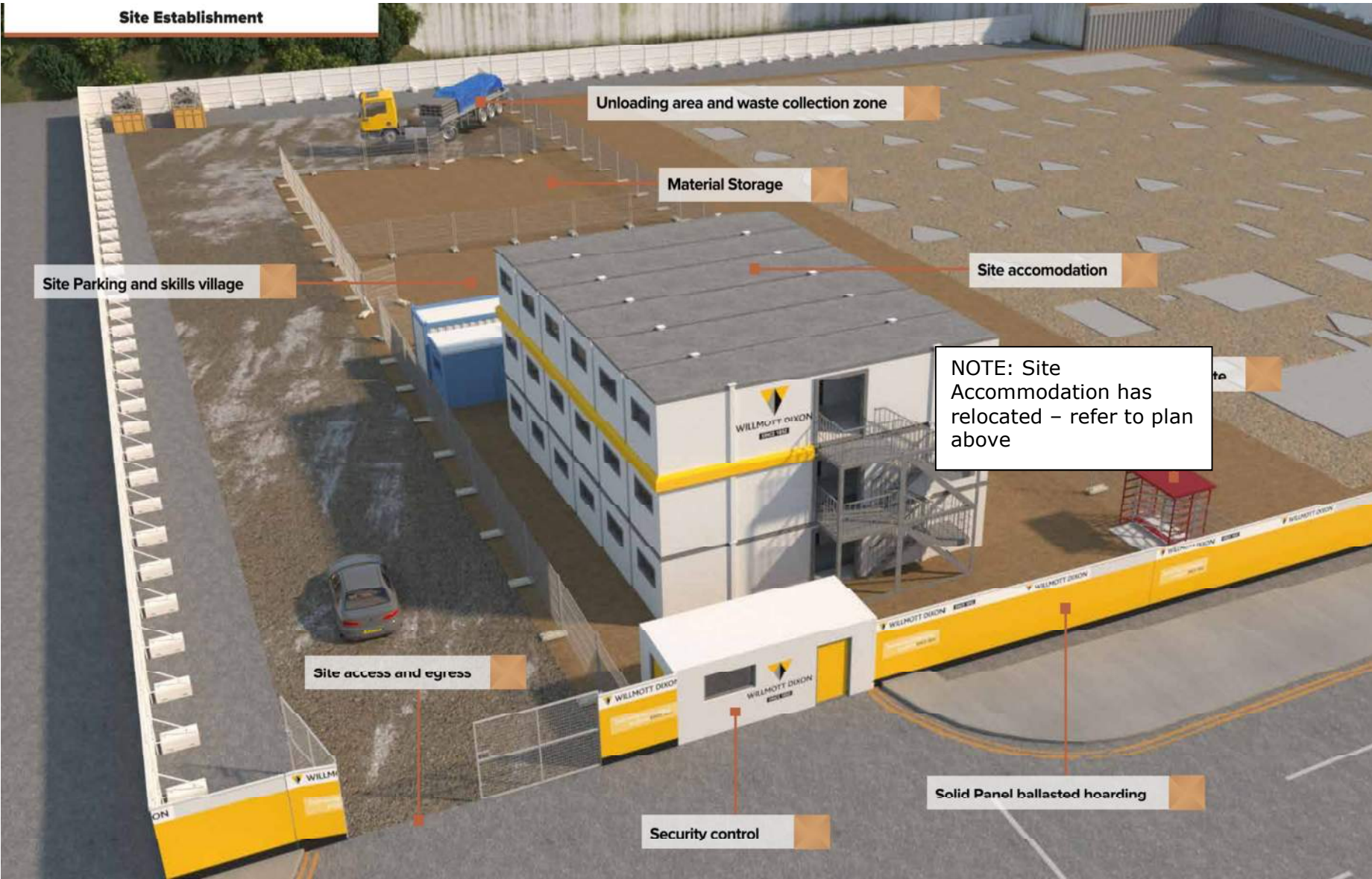


2.3 CONSTRUCTION MANAGEMENT PLAN

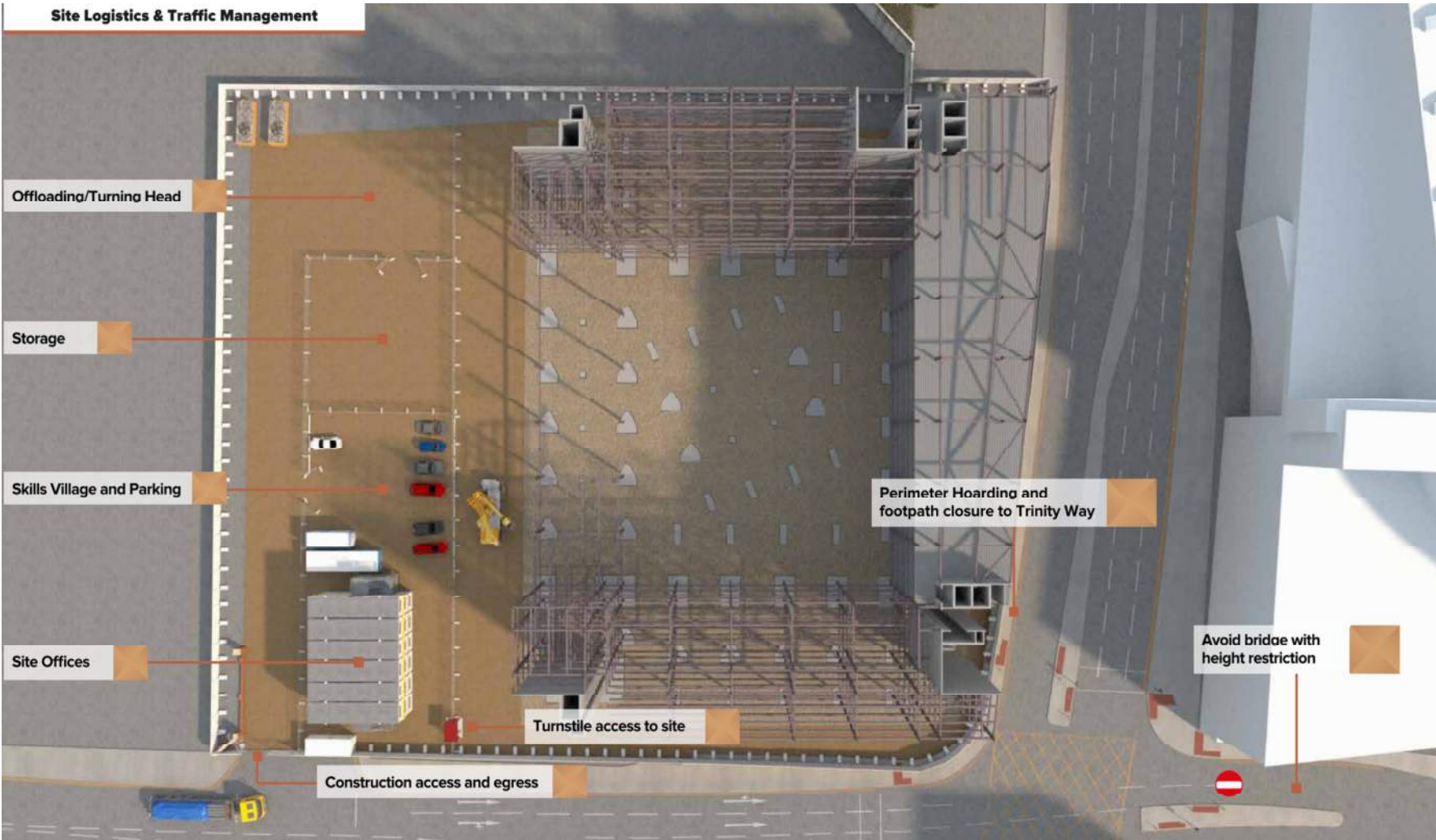
Appendix A – Site Logistics Plan



2.3 CONSTRUCTION MANAGEMENT PLAN



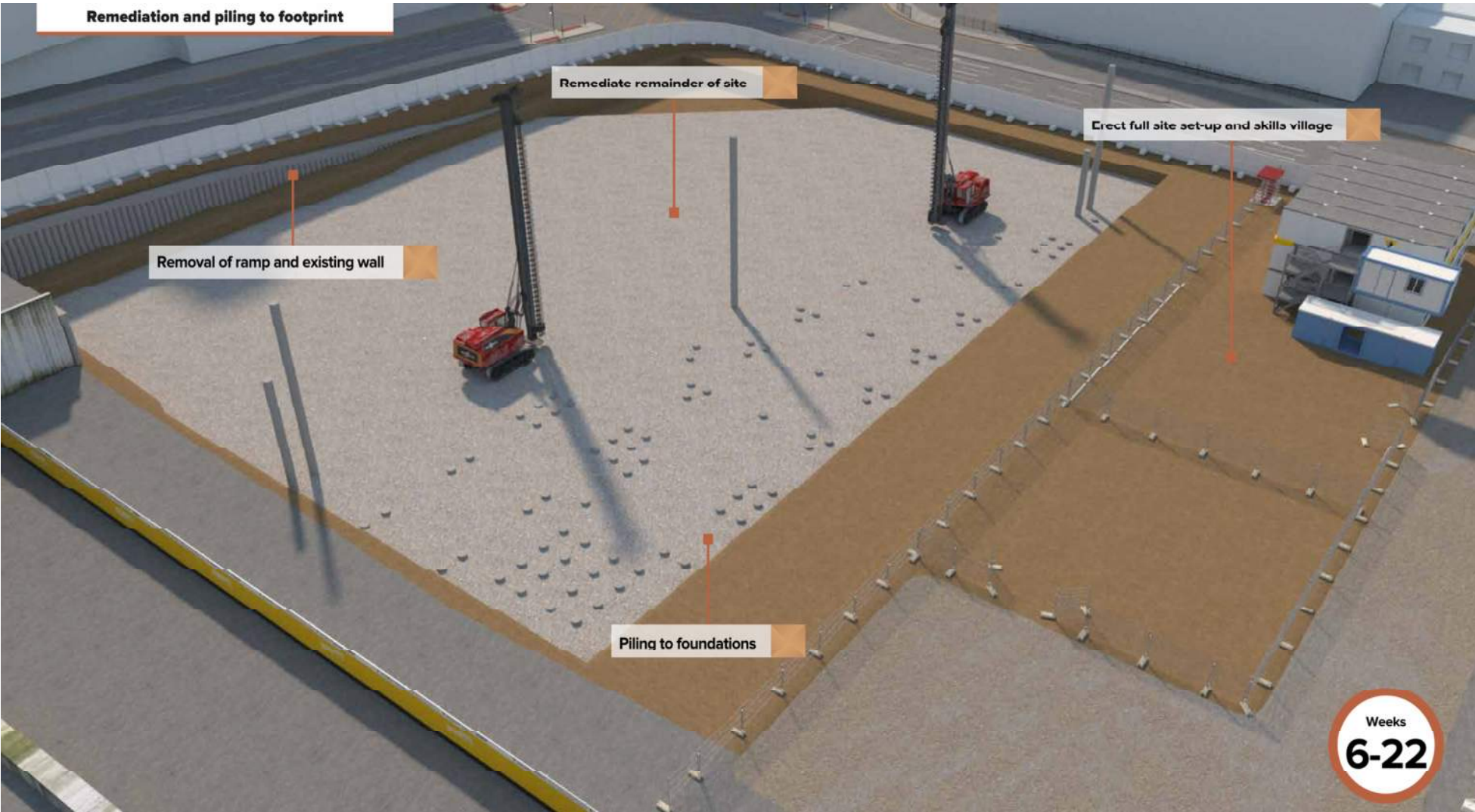
2.3 CONSTRUCTION MANAGEMENT PLAN



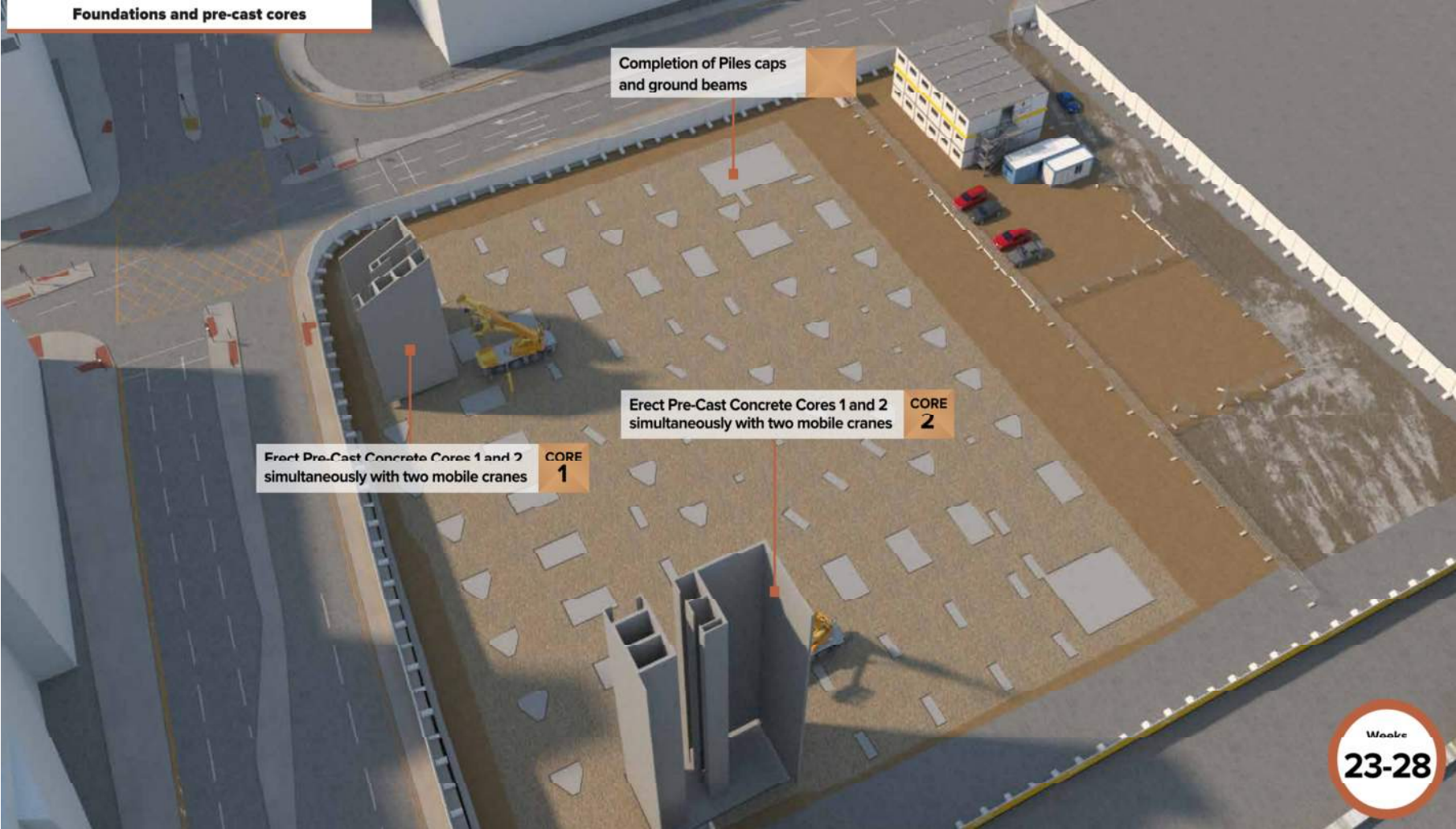
2.3 CONSTRUCTION MANAGEMENT PLAN



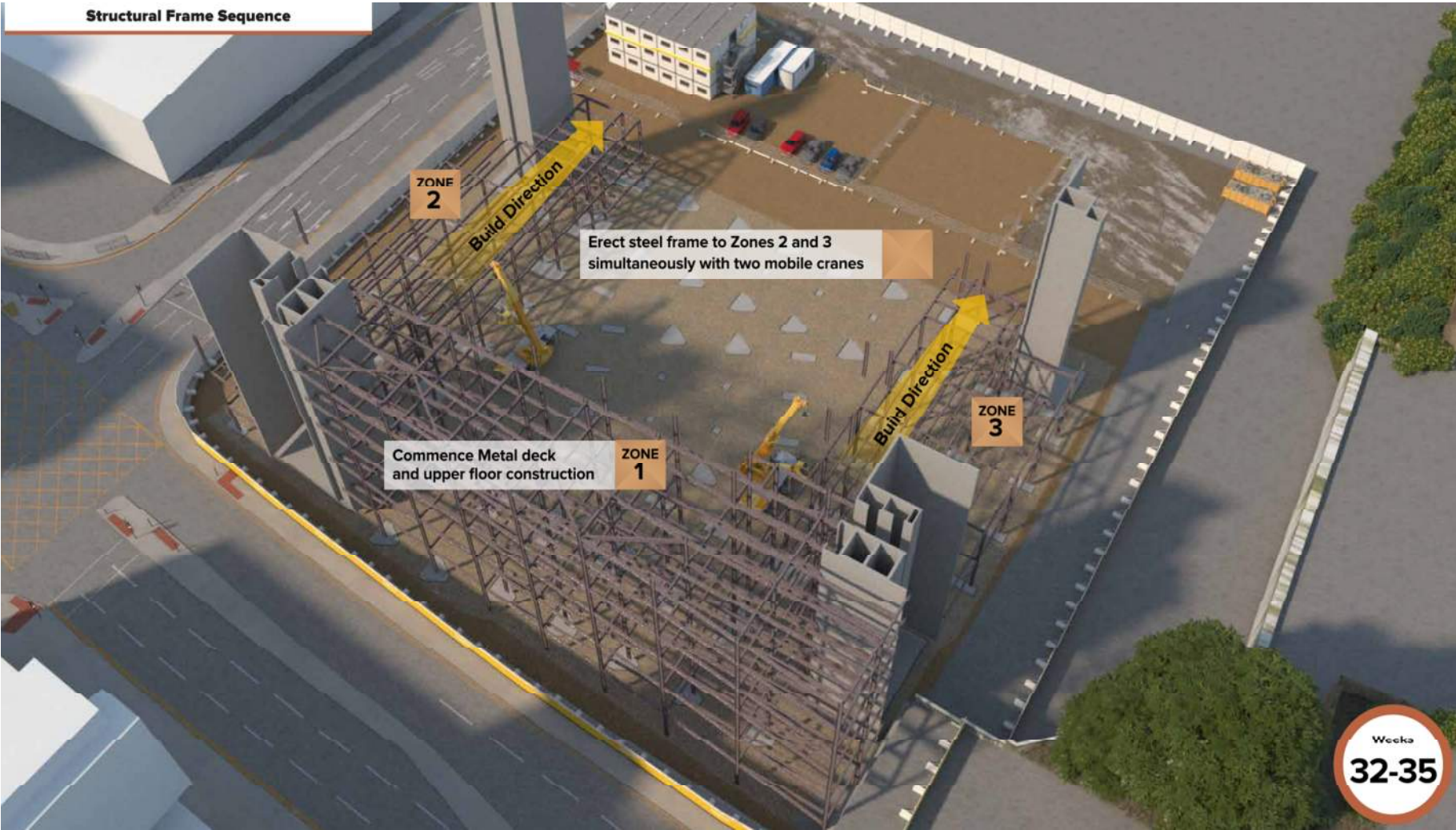
2.3 CONSTRUCTION MANAGEMENT PLAN



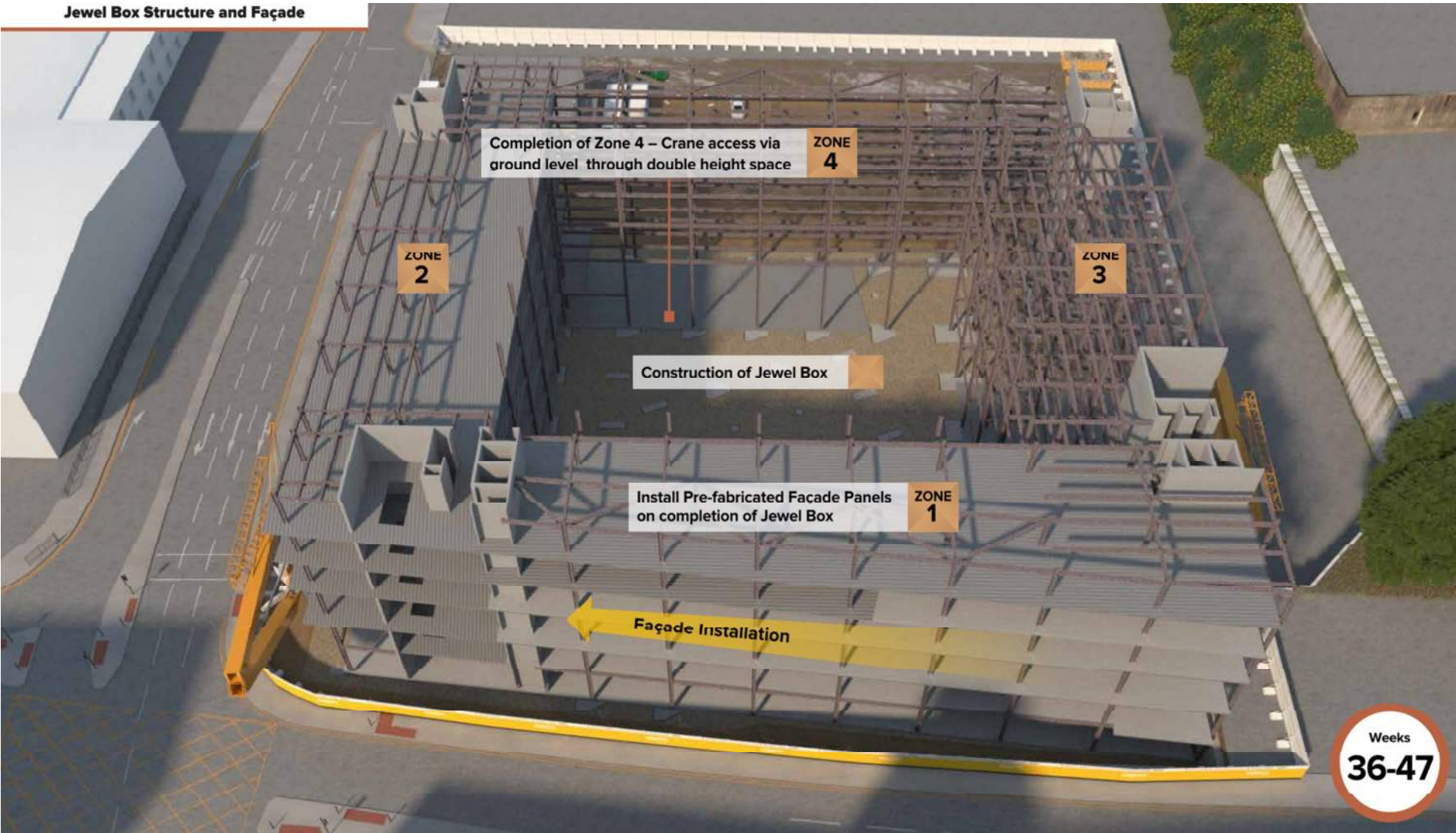
2.3 CONSTRUCTION MANAGEMENT PLAN



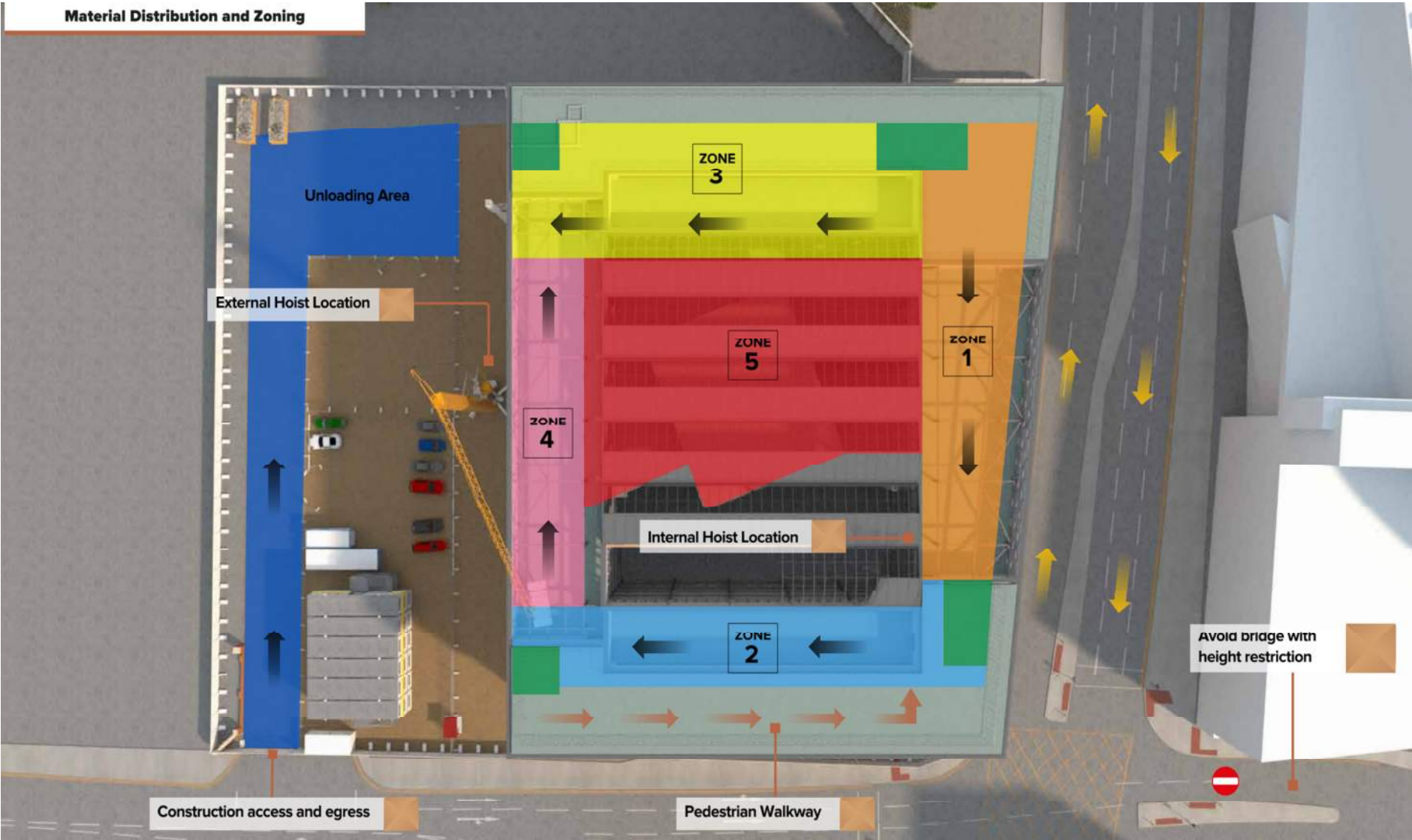
2.3 CONSTRUCTION MANAGEMENT PLAN



2.3 CONSTRUCTION MANAGEMENT PLAN



2.3 CONSTRUCTION MANAGEMENT PLAN



2.3 CONSTRUCTION MANAGEMENT PLAN

Appendix 2 – Mona sound sheeting

Description

The Monarflex MonarSound is made from a 5 ply composition with the top layers consisting of a weather resistant LDPE fire retardant co-polymer that encapsulates a strong multifilament polyester (PET) grid which forms the weather protection layer. On the underside there is a thick (10mm) PE fire retardant special sound absorbent foam layer that provides the "bounce" effect of the acoustic sheeting. The sheeting is equipped with the unique Monarflex fixing eyelets for superior and long lasting fixing points.



Performance and Properties

Material	FR LDPE & FR PET Foams
Reinforcement	9 x 12mm mesh 1670 dtex PET
Roll Size	2.00 x 10.70m 2.36 x 10.16m
Colour	Opal white
Weight per m²	600g (+/- 7%)
Thickness	9.4mm
Tensile strength	>630N/20mm
Pullout strength	>800N
Noise reducing barrier rating	B1
Conforms to	BS 7955 & BS8410:2007
Thermal resistance	0.246 M2K/W
Fire class	DIN 4102 B1
Temperature stability	-40°C to +90°C
Applications	Internal & external use

Durability

Monarflex MonarSound can be used for all types of long term projects up to 12 months. The combination of high quality components forms a tough and durable sheeting for very extreme working conditions i.e. sandblasting and waterjetting. By using Monarflex MonarSound you can meet deadlines and avoid economical surprises regardless of the weather and be safe in that it fulfils all relevant British Standards like BS7955:1999 and BS 8410:2007 in accordance with HSE requirements to sheeting performance.

2.3 CONSTRUCTION MANAGEMENT PLAN

Assessment

The Code of practice for noise and vibration control on construction and open sites BS 5228-1 2009, refers to the need to reduce noise levels, which local Authorities often requires to be considered as part of planning permission. By introducing a noise barrier that provides a at least 10 dB noise level at low frequency (like at 100 Hz) the general noise level is cut in half. Breakout noise is the biggest concern as this may account for 5-10dB noise level, so correct installation is as crucial as the noise reduction from the sneeting material itself. Breakout noise often comes from gaps or the actual installation fixings, so sealed fixing points or overlaps are crucial and Monarflex MonarSound acoustic sheeting provides these.

Acoustic Control

There are no guidelines for rating the performance of scaffold sheeting. However, BS EN-1793-2: 1998 "Road traffic noise reducing devices - Test method for determining the acoustic performance" allows for the method for categorising the sound reduction performance of barriers that may be used to control road traffic noise.

Application

Take care to overlap the lower sheet externally for weather protection. Fixing the sheeting to the scaffold must be done according to calculations, taking factors such as wind, building season and height of the surrounding buildings into consideration. We recommend the use of v 1 Monarflex Anchor & Strap fixing/m² but any fixing must be placed according to calculations for each project.



Certificate No: 05556



Delivery And Storage

The Monarflex MonarSound is supplied on pallets with each roll individually wrapped in PE foil with label and name identification. The rolls must be stored lying under cover on a pallet and away from heat and direct sunlight.

Health And Safety

Health and safety data sheets are available for all materials. Please contact Icopal's Technical Services Department for further information.

Quality Assurance

Monarflex MonarSound is manufactured under a Quality Management System approved to ISO 9001: 2000 by BSI Quality Assurance.

2.3 CONSTRUCTION MANAGEMENT PLAN

Appendix 3 – Project Environmental plan – On request

2.3 CONSTRUCTION MANAGEMENT PLAN

Appendix 4 – Further CMP Information

Display of Emergency Contact Number

Willmott Dixon Construction will ensure that a 24hour all access emergency number will be visible on the site hoarding and prominent at the site entrance. This information will also include the site managers’ direct contact details in the event should the public or an individual require to contact the site direct. The 24hour access number will have details of all key personnel on the site to make contact in the event of an out of hours emergency – this number is as follows: 0845 7333 5533.

Willmott Dixon Construction adopts an emergency communication strategy in line with the approved SEEPA document (Safety & Environmental Emergency Planning Arrangements). This document is produced and agreed by the site management which identifies how emergencies, incidents and near miss events should be dealt with in accordance with the standardized way utilizing a communication flowchart. It is important that any events are recorded and dealt with speedily and effectively so the situation can be minimized.



2.3 CONSTRUCTION MANAGEMENT PLAN

Details of Wheel Washing



ON-DEMAND, ON-SITE, ON-TIME.

Drive Through Bath

www.garic.co.uk



MIN 1 WEEK HIRE

Standard Specifications:

Unit Name	Drive Through Bath
Dimensions with ramps	77 x 12ft / 23.4 x 3.6m
Dimensions without ramps	35 x 12ft / 10.6 x 3.6m
Weight (bath only)	6300Kg
Weight (with ramps)	15900Kg
Power type	Unpowered
Steel fabricated wash area	✓
Internal removable rumble road sections	✓
25mm water inlet (c/v ball cock fitted)	✓
Heavy duty lifting/lashing points	✓

Key Features:

- Steel fabricated wash area
- Removable rumble road sections
- Heavy duty lifting and lashing points

Optional Extras Available

Ramps
Water Tanks
Corporate Paint Spec

GARIC is based on their product specifications. It is available at the time of hire, an alternative specification model may be required.

0844 848 4560 | www.garic.co.uk | info@garic.co.uk



Willmott Dixon Construction will implement a wheel wash strategy for vehicles leaving site. Throughout the duration of the external works package including remediation, groundworks, piling and steel erecting operations we will endeavor to ensure all vehicles that leave site do not impact the adjacent public roads. This will be achieved via wheel wash station, managed by a dedicated gates man with relevant accreditations and training to ensure compliance with CLOCS. This station will ensure a temporary drainage system with necessary silt traps to contain the spoil on site so it can be disposed in line with the Environmental Plan.

Furthermore, during high risk operatives involving external works in poor conditions, Willmott Dixon Construction will utilize a steel fabricated drive through wash area which will provide an efficient strategy to deal with moderate mud and dirt on construction vehicles. We will also segregate incoming vehicle movements against outgoing vehicles whilst ensuring construction on the permanent access road in a temporary state with hard-standing tarmac installed to create a road-surface most suited to providing a clean environment. In addition, road sweepers will be utilized on a regular basis to ensure the road surface is in good working order by cleaning down the road entering and leaving site. An example can be provided within the image below.

This operation will be managed by Willmott Dixon Site Management however the dedicated gateman will be responsible for ensuring all vehicles are checked in and out of site via the CLOCS Signing in Procedures. They will also ensure that the vehicle is thoroughly inspected prior to being allowed to leave site and ensuring all debris collected from the wash off is disposed of in line with the Environmental Plan.

2.3 CONSTRUCTION MANAGEMENT PLAN

Dust Suppression Measures

Willmott Dixon Construction will ensure dust is minimised by use of damping down sprays where applicable and this will be further defined within each Method Statement and Risk Assessment where the mitigation method will be identified during operations with the potential for dust creation. For example, we will adopt use of damping down equipment in the form of water cannon(s) prior to undertaking remediation or groundwork excavations in dusty environments.

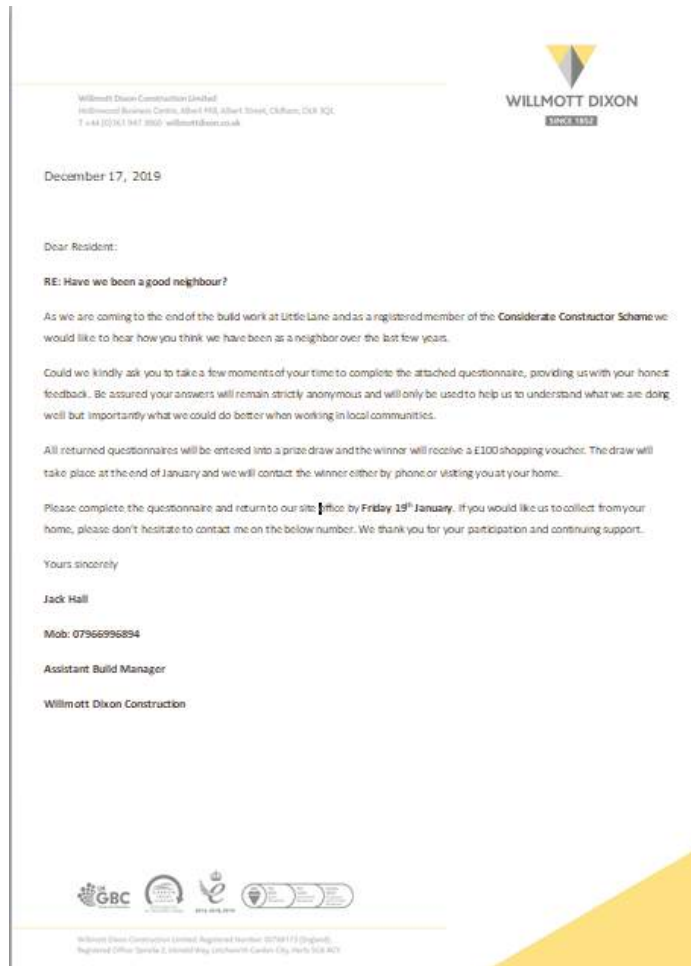
We have also ensured a segregated cutting area, enabling us to exercise greater control with dust pollution by ensuring relevant dust suppression equipment is utilised at all times. Furthermore, regarding use of dust suppressing vacuums, Willmott Dixon has a strict policy with ensuring as a minimum Type H which offers the best equipment on the market for dust extraction. This area will also be designated at the furthest point away from sensitive receptors in the area.

Any operations with the potential to create dust will ensure adequate measures are in place to both suppress and extract dust created or mitigation the issue via damping down utilising dust busters with damping down prior to commencement. A few examples are presented below including the dust extraction equipment which is a robust and powerful, yet lightweight system, designed for on-site use for collection of waste and dust. This will be utilised as the use of a standard brush with damping down techniques is strictly forbidden on WDC sites.



2.3 CONSTRUCTION MANAGEMENT PLAN

Consultation with Local Residents



Willmott Dixon Construction will liaise closely with the neighbours and local business through the site management team and dedicated community engagement team to ensure restrictions are adhered to and the expectations of the local residents are managed. Prior to commencing works on site, introductory letters will be sent out in relation to the project, contact details for any queries and identify previous projects noting how Willmott Dixon value the construction process with the community and environmental impacts in mind. This will include our strategy to reduce negative impacts on local residents such as delivery management with just in time deliveries, duct control and traffic management.

The Site Management team will liaise directly with local residents offering in-sight to the control measures in place such as deliveries arriving via Great Ducie Street on 'just in time' basis to minimise the amount of materials stored on site. Furthermore, a stakeholder and local residents address list with necessary details will be produced which will enable monthly newsletters to be sent out identifying those of upcoming important events as well as the positive impacts Willmott Dixon are creating on the wider community as part of our leaving a legacy ambition.

In line with the Considerate Constructors Scheme, Willmott Dixon Construction will follow the complaints procedures (<https://www.ccscheme.org.uk/affected-by-work/complaints-procedure-monitor-affected-works/>) whilst also having a letter box near to the site entrance enabling local residents to provide feedback. All local residents and stakeholders will be given the opportunity to complete a feedback questionnaire in line with the CCS process allowing WD to listen to comment and concerns, therefore rectifying them.

An example is provided identifying the communication with the local residents offering them opportunity to provide feedback with direct dialogue to the site management team.

2.3 CONSTRUCTION MANAGEMENT PLAN

Compound Locations

The details and location of the Willmott Dixon Construction Site compound and relevant offices can be founded in Appendix A containing the site logistics plan. The location of the waste recycling area including containment of hazardous waste is located within the service yard; refer to page 19 and 20 showing skips at the top of the access road. Willmott Dixon Construction have enabled an allowance for a secure compound via use of an external site cabin with a turnstile situated on the boundary line with a further cabin containing turnstiles located within the compound to enable access onto site.

The compound has been specifically designated and segregated with necessary heras fencing and timber hoarding to ensure safe access and egress for site operatives, staff and visitors whilst considering the controlled boundary to prevent unauthorised access via use of the finger-print turnstile system. Access to the construction area will be via pedestrian turnstile activated by a finger print reader, with access authorised after site induction. Access into the compound will be controlled via an external security gatehouse including a pedestrian finger print reader, activated once enrolled and inducted onto site. Any visitors will be authorized onto site via an intercom system connected directly to site reception.

As part of the initial construction works, pedestrian walkways and the compound will be formed ensuring adequate safe access and egress at all times during construction.

Location, removal and recycling of waste

The details and locations of the site offices and compound can be found in appendix A logistics plan. The location of our waste recycling area will be placed in the service yard area see page 19 and 20 showing the skips at the top of the access road. Recycling of waste will always take place at source and during pre-construction adequate measures will be implemented to ensure recycling is adopted where possible. Willmott Dixon Construction will ensure the site management team complies with the Environmental Plan with assistance from the sustainability manager and environmental team.

Materials to be disposed will be recycled where possible with materials segregated into individuals skips, such as general, plasterboard, inert, metal, aerosols and plastics. All waste will be tracked with full duty of care and rigorous waste transfer system in place which is monitored by the dedicated environmental team.

2.3 CONSTRUCTION MANAGEMENT PLAN

Willmott Dixon Construction will have a robust Site Management Plan identifying relevant control measures in place.

To ensure that these matters are controlled the Environmental Tool box talks as listed below will be considered as 'Activities with Risk to Health and Safety' and will be part of the H&S Managers and Safety Inspectors inspections regime. Toolbox Talks are the responsibility of the Willmott Dixon Environmental Manager. The site will have a site specific Site Waste Management Plan (SWMP) on site.

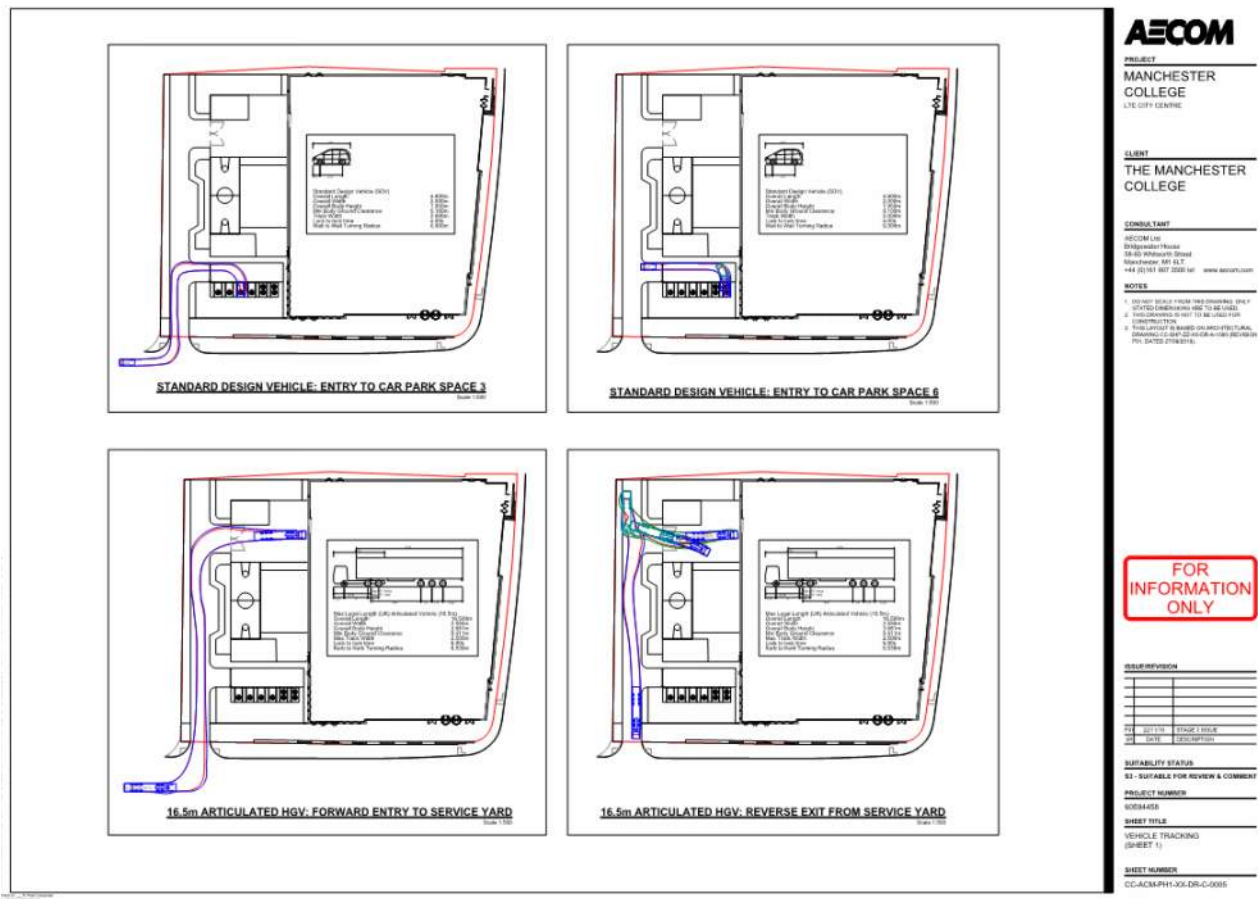
- Spill Controls
- Water Pollution Prevention (Fuel and Oils)
- Dust and Air Quality
- Noise and Vibration
- Water Pollution –SILT
- Water Pollution- Cement and Concrete
- Tree Protection
- Storage of Waste
- Storage and use of Petroleum, Diesel and Oils
- Pumping and Over Pumping
- Washing down Plant and Machinery
- Be a Good Neighbour

A separate Project Environmental Plan has been developed by the site management team alongside our Environmental Manager and identifies the procedures in place for environmental considerations throughout the project duration. This can be found under Appendices 3 above.

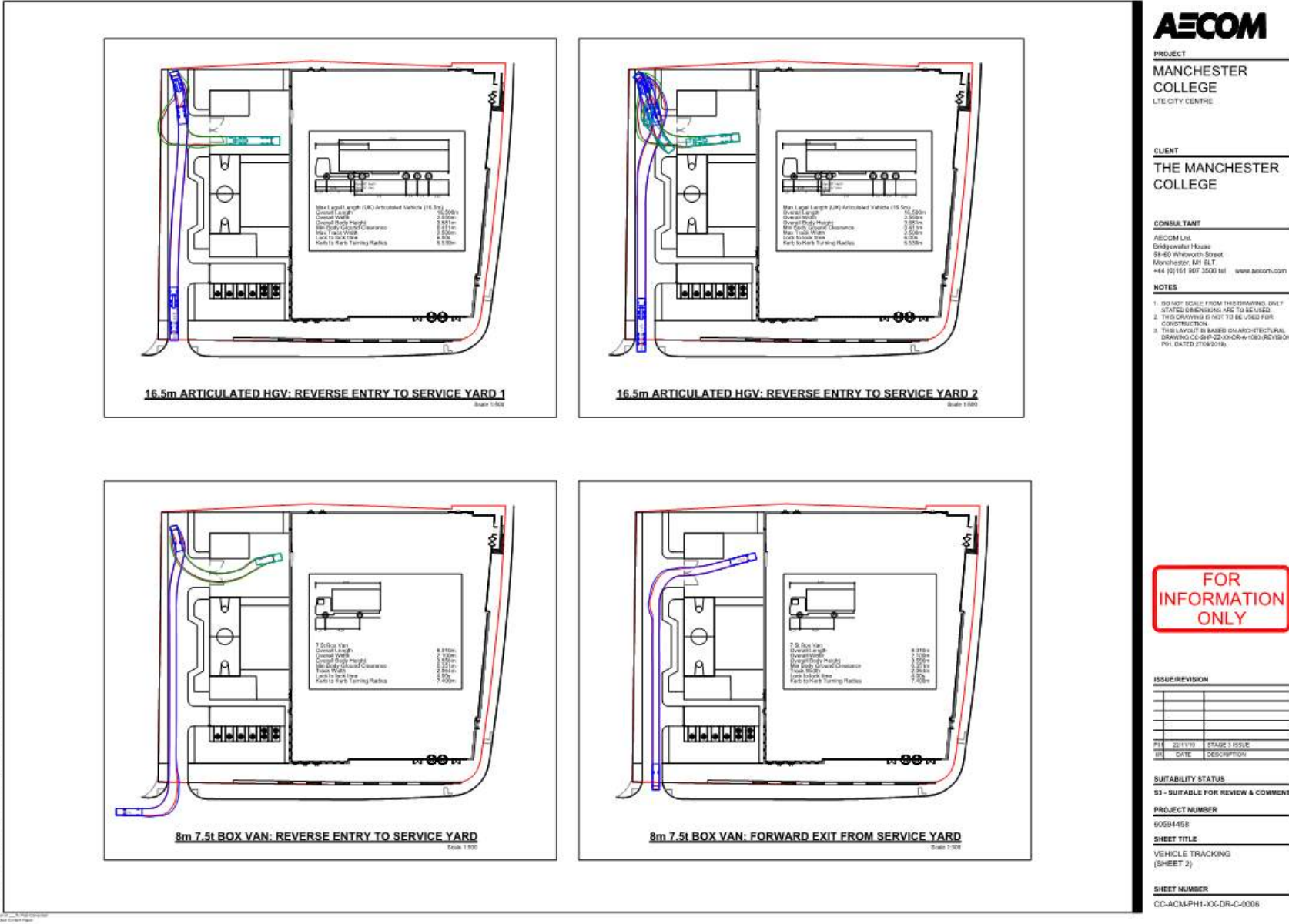
2.3 CONSTRUCTION MANAGEMENT PLAN

Routing strategy and swept path analysis

To ensure minimal disruption with the flow of construction traffic, we have developed a robust routing strategy by providing a safe turning area on site to allow access and egress onto the site – this can be identified within the Logistics Plan contained in Appendix 1. We have utilised our design team to undertake a swept path analysis on the construction traffic during construction and post construction to ensure our construction management strategy can accommodate this with minimal disruption to the public and external stakeholders.



2.3 CONSTRUCTION MANAGEMENT PLAN



2.3 CONSTRUCTION MANAGEMENT PLAN



2.3 CONSTRUCTION MANAGEMENT PLAN

Parking of Construction Vehicles and Staff

In reference to the Logistics Plan located in Appendix 1, due to the logistical constraints on the site we have coordinated the construction of the new proposed car park, access road and service area as one of the early operations which will create some availability for parking for Willmott Dixon and supply chain partners. However, the location of the construction enables parking on the adjacent site which is a secure car park for staff and supply chain. We have formed a relationship with the adjacent business Total Car Parks creating adequate measures for parking to all concerned whilst reducing the impact with parking on main highways and nearby areas.

Sheeting over Construction Vehicles

Willmott Dixon Construction will ensure all construction vehicles entering and leaving site is covered to prevent the escape of materials creating potential pollution and disruption to external stakeholders. This will also reduce the negative impacts in line with our traffic management strategy. The purposes for ensuring all supply chain adhere to the sheeting of vehicles is to prevent

In line with the HSE Guidance document, there are a selection of solutions for the sheeting of construction vehicles however it is advised that there is a hierarchy of selection with a method of sheeting and unsheeting that does not involve other H&S complications such as getting onto the vehicle. A hierarchy of solutions which will be followed are as follows:



unrolling sheeting from front to back of the vehicle body (Fig.1)

- Leave the load unsheeted (if road traffic and environmental law allows it);
- Use automated or mechanical sheeting systems, which don't require people to go up on the vehicle;
- Use manual sheeting systems which don't require people to go up on the vehicle;
- Use work platforms to provide safe access to carry out sheeting from the platform without having to access the load (Figure 9);
- Use gantry/harness systems to prevent or arrest a fall.

Willmott Dixon Construction will endeavour to ensure all construction vehicles entering site utilise automated or mechanical sheeting system to avoid other H&S implications with climbing onto the vehicle. This will be identified in all supply chain Method Statements' moving forward.

2.3 CONSTRUCTION MANAGEMENT PLAN

Tidiness

Willmott Dixon Construction will ensure the Safe Space: Clean as you Go policy is adhered to at all times to ensure that the site environment remains safe, clean and organized at all times. The site management team will ensure all supply chain partners have the upmost respect with housekeeping whilst ensuring a safe working environment with adequate waste management systems in place. Willmott Dixon will appoint general operatives to assist supply chain with up keeping of the site and a dedicated operative will be responsible for the management of waste into the relevant skips in line with the Waste Management Plan incorporating recycling and sustainability methods.

Pedestrian's walkways will be setup in safe areas to create a safe working environment with adequate access and egress routes to all work areas. A site logistics plan has been developed to incorporate relevant walkway routes. At the point of handover, Willmott Dixon will ensure that clear and safe access is provided in around the building.

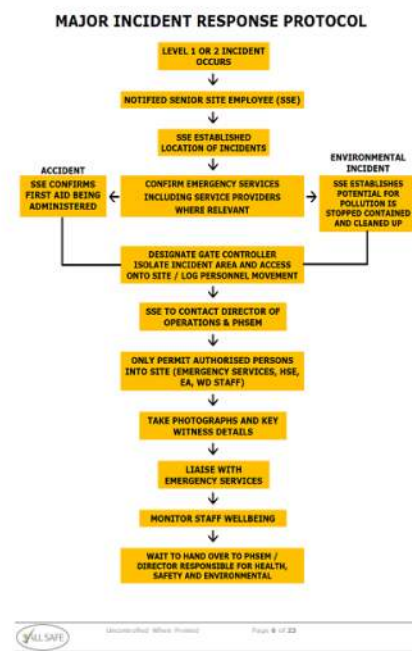
Health and Wellbeing

In line with the Willmott Dixon Emergency Procedures documentation in regards to first aid and fire evacuation processes, a full fire and first aid risk assessment will be complete and presented in the site offices.

Emergencies, Incidents and near miss events should be dealt with using the flowchart as shown below. It is important they are recorded and dealt with speedily and effectively so that any affected or injured persons are given assistance and treatment as quickly as possible.

It is also vital that all persons involved in these kind of situations act decisively and in accordance with their duties and responsibilities as listed in this "SEPPA" document. Also all data, information and photographic evidence concerning what has taken place should be collected, recorded and documented so that the cause can be identified and any necessary measures put in place as to eliminate any future reoccurrence at all WD site locations.

2.3 CONSTRUCTION MANAGEMENT PLAN



The site team will ensure that a defibrillator is located on site in the eventuality that an incident occurs. The site management team will ensure that adequate first aiders are on site at all times in line with the agreed first aid risk assessment. The local hospital and relevant contact numbers have been identified should the situation occur with a medical emergency.

Health and wellbeing to all sites operatives is important to Willmott Dixon and a number of local initiatives which focus on the health of our people and our benefits are designed to encourage a healthy lifestyle. We are proposing to run several events such as mental wellbeing and healthy sessions to promote this to all site operatives. We will actively provide input in terms of fitness and getting active such as the Bike to Work scheme, promotion with giving up smoking, occupational health visits from external companies offered to all operatives.

Willmott Dixon run monthly sessions to promote health and wellbeing on all sites. We have also ensured that we have an adequate site welfare facility which encourages equality, fair treatment and respect. Willmott Dixon have a robust strategy in terms of equality, fair treatment and respect with is managed by the in house People team. The site team are committed to ensuring a diverse, equal workforce which will be incorporated into our supply chain.

2.3 CONSTRUCTION MANAGEMENT PLAN

The site welfare facility has been developed to ensure a top quality environment is in place for site operatives with adequate drying facility, changing and shower facilities, charging facilities, storage facilities and on site catering requirements. Willmott Dixon Construction have a bold stance that providing top-quality welfare facilities ultimately results in a happier, more effective workforce. We will also ensure facilities are available in line with our equality policy including any religious and diverse requirements.

Security Processes

The site compound and construction areas will be specifically designated and segregated which will ensure safe access for site operatives, staff and visitors to the site compound with a controlled boundary preventing unauthorised access to the construction area. Access to the construction area will be via pedestrian turnstile activated by a finger print reader, with access authorised after site induction. Access into the compound will be controlled via an external security gatehouse including a pedestrian finger print reader, activated once enrolled and inducted onto site. Any visitors will be authorized onto site via an intercom system connected directly to site reception. Refer to Appendix 4 for more information relating to the site compound.

The site boundary will be secure via robust, timber hoarding to create a secure site boundary at all times. A robust, CCTV system involving infra-red camera to identify any unwanted trespassers will be in place which will be monitored by a 24/7 monitoring station. A full-time security guard will be situated on site out of hours within the designated security hut which will contain all the camera systems and alarms should any infra-red detection systems be activated. Access onto the site will require finger-print access via a secure turnstile which will be managed by the site gateman located at the front of house during normal working hours.

Training Awareness and Feedback

Willmott Dixon Construction have committed to delivering and providing monthly newsletters to address and inform local residents of upcoming activities along with mitigation measures to prevent disruption. We will engage with monthly workshops to enable stakeholders and local residents to attend site to discuss any issues or queries that may arise which will also create an opportunity to engage directly with the site team.

Training and constant development will be provided throughout the full duration ensuring up to date certificates and records are kept for all site personnel and visitors. Regular toolbox talks will be delivered to all site operatives and 4-weekly reviews will be undertaken with our H&S team to identify training requirements with the site team and supply chain.

All training and certification requirements will be identified within the RAMS for each supply chain partner and it will be agreed prior to commencement the minimum requirements. Ongoing training will be provided to ensure the operatives are trained and competent to undertake the tasks they are completing. As a minimum, all operatives will need to undertake the Willmott Dixon Pre-Enrolment and have a CSCS accreditation or above (such as CPCS, IPAF, NPORS) for the tasks they are to undertake.

Willmott Dixon Construction will ensure that all fleet operators arriving on site will undertake and completion a site induction to agree on all driving rules prior to entering site. Willmott Dixon are a key driver in the FORS (Fleet Operator Recognition Scheme) and CLOCS (Construction Logistics and Community Safety) where the requirements of this accreditation will be a minimum requirement to all drivers arriving on site. This will ensure that the fleet operators are working to industry standards with ensuring driver training and awareness to promote safety within the site development and surrounding areas.

2.3 CONSTRUCTION MANAGEMENT PLAN

Monitoring and Reporting

The Principal Contractor will have an appointed, dedicated gate man who will be responsible for ensuring that all deliveries and fleet operators complete a pre-site induction. This will highlight the importance of capturing and reporting any road accidents, incidents or near misses which will be reported back to the principal contractor. This will enable Willmott Dixon to analyse any issues in the event of accidents, incidents and near misses to ensure relevant mitigation methods can be implemented. Willmott Dixon hold an All Safe Observations board within the site canteen which offer the ability for operatives and visitors to submit any comments, near misses or safety observations for action by WDC.

The above process with the All Safe Observations Board will ensure that all visitors, operatives and community accidents, incidents and near misses are recorded and action is taken to reduce the likelihood of them reoccurring. Willmott Dixon Construction utilise the MiProjects system to log, record and action any of the aforementioned on the site.

Willmott Dixon will ensure there is relationships and communication systems in place with the neighbours, community and local residents to ensure procedures are in place to collect and record feedback from the community. In line with the CCS procedures, Willmott Dixon will provide a monthly newsletter to local stakeholders which will offer the opportunity to provide feedback. The site managers' number will be placed at the site entrance so should any urgent issue arise then the necessary contact is available. Willmott Dixon actively promote feeding back any comments, observations or near misses to ensure action can be undertaken to prevent further issues from arising.