

Outline Construction Management Plan – Meaningful Start

The Christie Advanced Scanning and Imaging Centre
Development (CASICD)

By IHP

Revision P02
February 2026

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Client

The Christie NHS Foundation Trust

Our reference

CASICD-IHP-XXX-XXX-RP-W-000011

Rev P01 - December 2026

1. Introduction

1.1 Document Introduction

This Outline Construction Management Plan (CMP) has been prepared by Integrated Health Projects Ltd (IHP) to support the implementation of meaningful start works for the Christie Advanced Scanning and Imaging Centre Development (CASICD) at The Christie Withington site in Manchester. This document is submitted as part of the requirement for the partial discharge of Planning Condition 17. A full CMP and a Demolition Management Plan will be provided to Manchester City Council as part of the subsequent full discharge process.

1.2 Document Purpose

The purpose of this document is to set out the principles of the construction methodology, together with site logistics, for the proposed meaningful start works.

1.3 Description of Full Works

The overall development comprises a new advanced clinical facility to support the Radiology and CT Department. The building will be located adjacent to the new Paterson Building on Wilmslow Road, occupying the footprint of Blocks 19 and 20 and part of Block 21 following demolition. The ground floor will accommodate the new CT and Radiology Department, providing critical links to the existing hospital and the Paterson Building. Upper floors (first and second) are to be shell and core but will likely ultimately provide ward accommodation to support The Christie Hospital. An internal plant room is provided at Level 03 with external plant housed on the roof.

1.4 Description of Meaningful Start Works

The meaningful start works comprises of the installation of three 450mm diameter piles and an associated pile cap foundation for the Paterson Building link bridge that will go on to form a link between the Paterson Building and the CASICD. These works represent the initial construction activities referenced within this document.

2. Site Location

2.1 Project Site Location

The proposed site sits to the northeast of the existing Christie's Withington hospital site. It is bordered on three sides by the existing hospital estate. To the north is the workshops, to the south is the new Paterson development and to the west is the existing clinical accommodation. On the east of the site is Wilmslow Road as shown on the Local Site Plan in figure 1:

Local Site

- 1 Existing Block 19 & 20
- 2 Proton Beam Therapy Centre
- 3 Oak Road Treatment Centre
- 4 Paterson Building Redevelopment
- 5 Manchester Cancer Research Centre
- 6 Maggie's Centre

KEY

- Primary Vehicular Routes
- Site Boundary
- Main Entrance
- Outpatients / Holt Entrance
- Palatine Road Entrance
- MCRC Entrance
- Staff Parking
- Staff / Visitor Parking
- Main Hospital Building



Figure 1 – Local Site Plan

2.2 Project Site Description

The site is long and narrow in shape. Its topography is flat with little variation across the site. To the southern end of the development area lies an existing courtyard, referred to as the Nathan House courtyard, within which the meaningful start works will be undertaken.

2.3 The Christie Withington Site

The Christie Withington Site has evolved over recent years with the adopted Strategic Planning Framework (2014) being instrumental in providing an effective framework to guide and shape the development. In doing so, there have been several transformational projects delivered across the site over recent years. Such as the Paterson building and the multi-tiered car park.

2.4 Surrounding Area

Beyond its immediate boundaries, the site is located within a predominately residential area. Most dwellings located on Wilmslow Road opposite to the site consist of larger 2.5/3-storey detached villas, some of which have been sub-divided into apartments.

Across Wilmslow Road lies the Oglesby Cancer Research Building, see Figure 2. This is a three-storey building on the corner of Wilmslow Road and Cotton Lane, which is a research centre run in partnership by the University of Manchester, Cancer Research UK, and The Christie. The multi-tiered car park and Cuthbert's Primary School are located further along Cotton Lane.



Figure 2 - Photograph of the Oglesby Cancer Research Building

3. Scope of Works and Outline programme

3.1 Overview

This section defines the scope of the meaningful start works covered by this Outline Construction Management Plan.

3.2 Included Activities

- Site preparation and enabling works necessary for piling operations.
- Installation of three 450mm diameter piles and associated pile cap for the Paterson Building link bridge.
- Temporary works and safety measures to facilitate access and maintain site security.

3.3 Excluded Activities

- Full demolition of Blocks 19, 20, and part of 21.
- Construction of the main CASICD building and associated superstructure works.
- Permanent landscaping and external works.

3.4 Programme

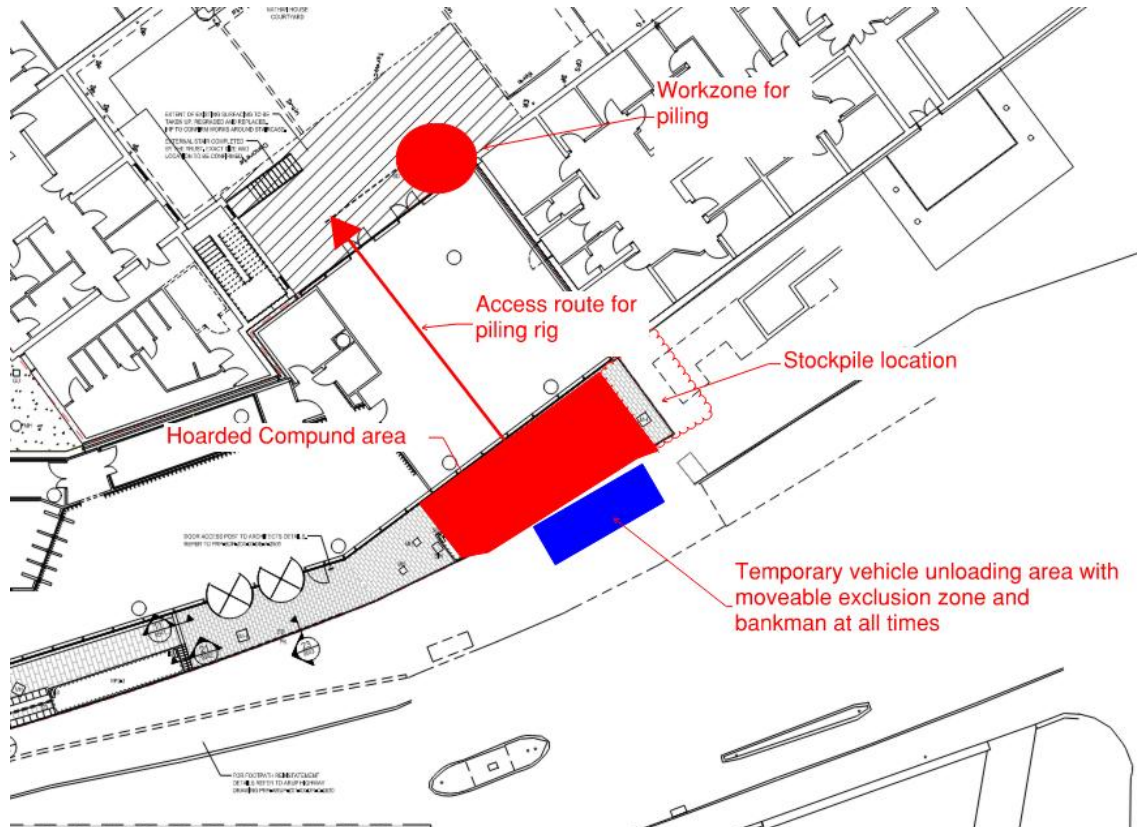
The works are programmed to be undertaken in March 2026 for a period of approximately 4 weeks.

The main construction phase of CASICD will follow a decant of the present facilities, diversion of current underground services and finally the demolition of the existing buildings.

4. Site Establishment

4.1 Site Layout and Access

To facilitate the redevelopment, there will be a requirement to ensure appropriate wayfinding and signage is in place to advise patients, staff, and visitors of alternative entrance route locations. Pedestrians may be directed over to the other side of Wilmslow Road to continue their journey.



A swept path for vehicular access can be seen in Appendix 1.

4.2 Site hoarding

A new temporary hoarding line will be erected around the hoarded compound referenced in Section 4.5. The exact position of hoarding and gates will be agreed in alignment with any necessary party wall agreements and The Christie's daily operations.

The hoarding will:

- Be a 2m high heras fencing system with sheets and acoustic barriers as required.
- Include secure gates for controlled access.
- Display clear signage for safety and wayfinding.

4.3 Access and Security

Security of the site and its perimeter is the responsibility of the Principal Contractor (IHP). The project will adhere to GMP Security Needs Assessment recommendations.

Key measures include:

- SIA-approved security contractors.
- Removal of unattended valuable items from public view and storage in locked areas.
- Securing site boundaries when not in use with fencing and locked gates.
- Locking fuel outlets and immobilising plant and equipment out of hours.
- Controlled movement of personnel using site access gates.

4.4 Site Office & Welfare Facility

The welfare provision provided will be in accordance with CDM Regulations 2015.



4.5 Hoarded Compound for Piling Works

A secure hoarded compound will be established outside the Paterson Building, to support the meaningful start works. This compound will accommodate:

- Grout mixer and pump (Colcrete 4/10)
- Bunded fuel tank with spill kits and fire point
- Stores container/toolbox (6.1m x 2.4m)
- Diesel jet wash
- Lined skip for grout washout and waste

The compound will include:

- Bunded washout area for cleaning plant and equipment
- COSHH-compliant storage for chemicals and fuels
- Fire extinguishers and emergency contact board
- Appropriate signage and lighting

4.6 Courtyard Work Area

The Klemm 702 restricted access rig will be positioned on a certified piling mat extending at least 2 metres beyond all pile positions. The courtyard will be accessed via the vacant Paterson Building, with plywood or other suitable protection provided to safeguard internal floors.

Key arrangements include:

- Moveable exclusion zone fencing around the rig
- Spray-painted pile positions and cones for demarcation
- Task lighting if required

4.7 Utilities

- Water supply located adjacent to the grout mixer for batching and washout.
- Power supply for lighting and small tools (generator if required).

5. Ingress & Egress for Personnel & Vehicles

5.1 Personnel Ingress and Egress

Personnel will access the site via the existing footpath and pedestrian crossing on Wilmslow Road. All internal access and egress routes within the hospital site will remain clearly signposted and agreed with The Christie.

Routes within the site will be communicated during site induction and reinforced through daily activity briefings (DABs) led by the Site Manager prior to work commencing.

During DABs, all team members will be informed of:

- Current work locations and activities
- Exclusion zones
- Designated access and egress routes
- Specific access points for localized work areas will be identified and communicated to all relevant personnel.

5.2 Vehicle Access and Egress for Deliveries

All vehicle access will be via the northern carriageway of Wilmslow Road, approaching from the south. Vehicles will stop externally alongside the site compound for unloading, and a temporary exclusion zone will be established around the vehicle.

All vehicle movements will be controlled by a trained banksman from approach to departure. On exit, vehicles will be marshalled and instructed to turn left to avoid crossing the main carriageway. Updated Vehicle tracking can be found in appendix 1.

Delivery scheduling will align with hospital operational requirements and peak times and be organised for times that minimize disruption to residents, pedestrians, cyclists and road users.

The following deliveries are expected for the meaningful start works:

- 2 No. Rigid Hiab for delivery and collection of the piling rig.
- 2 No. Rigid Hiab for delivery and collection of the mini excavator.
- 7 No. Rigid Hiab for delivery and collection of stores containers, excavator, mixer, jet wash, and reinforcement cages.
- 4 No. skip lorries for delivery and removal of waste skips.
- 2 No. rigid wagons for delivery of cement and associated materials.
- 1 No. concrete wagon for pile cap concrete pour.
- 1 No. Rigid flatbed for delivery of reinforcement cages and steel bars

All deliveries will be booked through the site booking system. Holding points for larger vehicles will be established off-site to prevent congestion and ensure site is prepared for arrival.

Delivery vehicles must always maintain radio contact with the site banksman. Banksmen will ensure safe unloading and departure while safeguarding pedestrians and other road users.

6. Car Parking for the Site Workforce

6.1 Parking for Construction Workers & Visitors during the Construction Period

To avoid disruption to surrounding neighbours, parking within adjacent residential streets will be strictly prohibited and IHP personnel will rigorously enforce this, with regular patrols of the local area. It will be made clear during procurement and at site induction that parking in the Controlled Parking Zone or surrounding area is not acceptable, with failure to comply leading to sanctions against individuals involved, which could culminate in a ban from the site. To minimise traffic and congestion. The site welfare area which will be situated across the road from the Christie building will enable parking for circa 5-10 vehicles. IHP are also currently awaiting confirmation from the trust regarding contractor parking. It has been suggested to be located on the southwest of the hospital on the junction of oak road and palatine road in front of the proton beam centre. The site parking will eliminate any disruption to the surrounding area.



6.2 Public Transport

IHP will instruct workers and visitors to travel to site by public transport and walking/cycling where appropriate. Regular bus services pass along Wilmslow Road and Palatine Road adjacent to the site, and West Didsbury tram stop is a short walk to the south off the site, at the junction of Lapwing Lane and Palatine Rd. Burnage railway station is on Fog Lane to the

Southeast of the site, Figure 9 shows the location of public transport locations near the site:

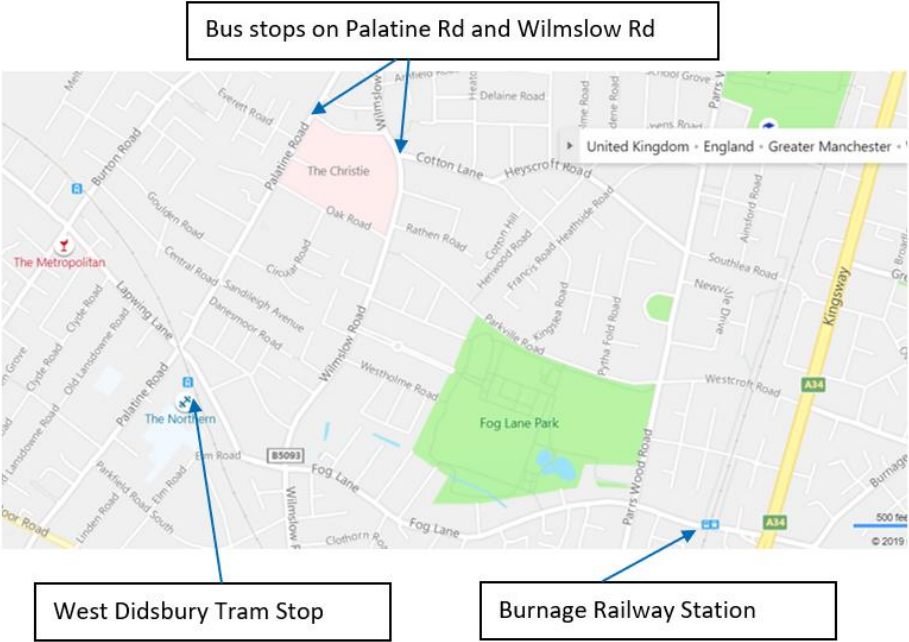


Figure 7 - Local Public Transport

7. Hours of Site Working

7.1 Standard Working Hours

Hours of work will be restricted to the following times:

- Monday to Friday: 08:00 - 18:00
- Saturday: 08:30 - 14:00
- Sunday and Bank Holidays: No work permitted

Site access will be available 30 minutes prior to the stated working hours for preparation and safety checks.

7.2 Extended Working Hours

No extended working hours are anticipated for the meaningful start works. Extended hours will only be implemented in the event of emergency works required to maintain site safety or respond to unforeseen circumstances.

Where extended working is necessary, it will:

- Be limited to the minimum duration required to complete the activity safely.
- Ensure noise and vibration are kept to the lowest practicable levels.

Emergency Works

In exceptional cases, emergency works may be carried out at any time (24 hours a day, 7 days a week) to make the site safe. Examples include:

- Securing fencing or other temporary works
- Stabilising ground support structures
- Responding to extreme weather events or other unforeseen hazards

8. Meaningful Start Works Sequencing

8.1 Introduction

This section of the CMP is to provide an overview of the methods by which the proposed works will be constructed. The general sequence of works will comprise:

- Site establishment.
- Installation of reinforced concrete piles.
- Installation of reinforced concrete pile caps including cropping of reinforced concrete piles below ground level.
- Reinstatement / making good works.

8.2 Site Establishment

See section 4.

8.3 Reinforced Concrete Piles

CFA piles will form the foundations for the link. First a piling mat will be installed allowing the installation of CFA piling using CFA piling rig to form foundations. See appended RAMS.

8.4 Reinforced Concrete Pile Cap

This will involve the excavation of the installed piles to crop the top of the piles and test them. Following this is the install of the foundation formwork and steel reinforcement, before pouring the concrete pile caps.

8.5 Final Stages of the Works

The site establishment will be de-mobilised following the practical completion of the works and reinstatement / making good of the courtyard area.

9. Pollution and Public Relations

9.1 Introduction

The purpose of this section is to set out the environmental measures that will be adopted during the construction of the works to prevent or minimise the potential environmental effects associated with construction activities.

This sets out:

- An environmental management framework to which IHP's management systems will comply
- Environmental management and monitoring measures to be adopted and implemented throughout the works; and,
- Responsibilities for implementation of management and monitoring measures during works.

9.2 Responsibility for Environmental Measures

IHP take their environmental responsibilities seriously and only select sub-contractors who are suitably qualified, competent, and experienced in terms of environmental management for the works they are contracted to undertake.

As part of IHP's works, IHP are required to:

- Regularly review environmental requirements on site (including legal and other requirements) and update/revise as appropriate
- Define the environmental responsibilities of relevant personnel within the site management structure and raise awareness of key environmental issues
- Identify environmental risks and opportunities particular to the site by reviewing relevant documentation; consulting regulatory agencies; and liaising with clients and designers;
- Establish the process for monitoring, reporting (see below), auditing and management review with the aim to ensure environmental compliance.

Unless stated otherwise, all requirements set out above and, in the sections, below will be the responsibility of IHP.

9.3 Environment Incident Response

IHP will establish and implement an environmental incident procedure which is designed to respond accordingly to the anticipated environmental hazards and risks presented at the site. This will include emergency control procedures which incorporate the Environment Agency's Pollution Prevention Guidelines, including:

- The development of an environmental incident/pollution reporting and response plan
- Measures to mitigate the adverse effects of an environmental incident
- Measures to be adopted to investigate and prevent the recurrence of an environmental incident.

9.4 General Control Measures

Construction Site Hoarding

Site hoarding to the construction site will be of timber construction and located as show in Section 4 above. Site hoarding to Construction Site Welfare & Compound and Contractor Parking will be agreed with The Christie and align with any party wall agreements or boundary conditions.

Materials Handling and Storage / General housing keeping

Construction materials will be stored within the Project Site or Site Compound, typically at the edges of the site, or within the building as the structure progresses.

The stockpile of excavated materials will be temporary and sprayed with water or if appropriate sprayed with an appropriate chemical dust suppressant.

Good housekeeping will be maintained on-site and on access routes. Measures will include but are not limited to:

- Clear access routes with appropriate signposting and site marshalling.
- Segregation and regular removal of waste
- Keeping the site clean and tidy
- Inspecting hoarding frequently, repairing and repainting as necessary
- Visual inspections of plant, equipment and material storage areas for leaks or spills
- Welfare facilities will be kept clean
- Open fires will be prohibited.

Temporary Lighting

Lighting will be provided at site boundaries with illumination sufficient for the safety of the passing public at locations where, because of the works, lighting has been removed. Precautions will be taken to avoid shadows cast by site hoarding on the surrounding public highways, footpaths, and amenity areas.

For all lighting on, or adjacent to, the Public Highway prior approval will be obtained from the Highway Authority.

Lighting will be positioned and directed so as not to unnecessarily intrude on adjacent buildings and land uses and prevent any unnecessary interference with residents and passing motorists.

Temporary lighting within the site will be kept at a minimum level out of hours to ensure the safety and security of the works.

9.5 Specific Measures to Avoid / Minimise Adverse Effects to Environmental Receptors

Presented below are measures which are intended to prevent or minimise adverse effects of the works activities on various environmental receptors. Measures are presented in relation to:

- The control of dust emissions
- The control of emissions to air from plant and equipment (air pollution)
- The control of noise emissions
- Investigation of ground conditions and investigation of contaminants
- The prevention of water pollution
- The handling of hazardous substances
- The management, segregation, and removal of general waste
- The protection of site workers

9.6 The Control of Dust Emissions

Dust emissions will be controlled during all construction operations and periods of dry weather and prevailing winds. The works will take into consideration the local sensitive receptors including Hospice patients, Hospital staff, residents, schools, occupiers and pedestrians.

The mitigation of dust emissions is critical not only because of the potential nuisance it may cause to the identified sensitive receptors but also because of the potential health risks posed to hospital & hospice patients.

Therefore, best available measures shall be implemented to prevent dust, or where this is not practicable, reduce dust emissions from the construction processes. Monitoring of particulate distribution shall be undertaken by visual observations prior to the commencement of operations and periodically thereafter. Should the visible particulate matter be emitted beyond the site boundary operations will cease and working practices adjusted and/or control measures shall be implemented.

Standard working practices that shall be implemented for the meaningful start works are as follows:

- Damping down the site and stockpiled aggregate using water sprays;
- Water-spray dampening of areas to be undertaken to prevent dust blow;
- Cleaning access roads by means of a road sweeper;
- No fires will be allowed on the site at any time;

Mud on the public highway is a statutory nuisance and health and safety hazard. Therefore, it will be minimised and prevented on the Project by keeping the access roads free from mud by road cleaning to be carried out by a road sweeper.

Further details of measures for the prevention and management of dust are presented in Table 1 below.

Table 1 - Dust Management

Source Description	Primary Dust Control Measures	Thresholds / Triggers for Management	Contingency Dust Control Measures
Tipper wagons and Vehicle Traffic	Add water to unpaved road surfaces if necessary. Implement a speed limit of 5mph to slow vehicles and therefore reduce fugitive dust emissions. Where access roads adjoin public highways, there is the potential for material to be tracked onto the paved public highway. If material is tracked onto public highways, and is creating dust, the road will be cleaned (ie. tracked material will be removed from the road surface using a road sweeper). All tipper wagons will be covered.	If tipper wagons or vehicle traffic emissions are occurring that may impact air quality beyond the property boundary: If visible dust is being generated from tipper wagons or vehicle traffic; and/or If the weather forecast indicates dry conditions and strong winds are likely. Visual cues would be the primary trigger for mitigate action to be taken with respect to fugitive dust emissions. If the weather forecast indicates dry weather and strong winds are likely, this is also a trigger for preventative dust management action to be taken. Visual monitoring during site activities will be conducted by the site manager/ environmental officer to determine if contingency control measures should be implemented. Complaints by nearby residents Install dust monitoring stations to the perimeter of the site and record readings daily	Apply water to roadways that are being used and producing dust. Ensure covers for tipper loads are intact. Apply gravel to roadways approaching access points. Cease activities during high wind events or when dust emissions cannot be adequately controlled.
Vehicle Fleet Operation	Avoid engine idling.	Periodic maintenance of vehicles. In addition, excessive or consistently black exhaust fumes are a signal that an engine is not operating optimally.	Replace worn or malfunctioning equipment.

Source Description	Primary Dust Control Measures	Thresholds / Triggers for Management	Contingency Dust Control Measures
	Ensure fleet vehicles are maintained according to manufacturers' guidelines. Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport. Implement a wheel jet washing system. Adhere to site speed limits and designated roads.	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. Inspect on-site traffic routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable. Record all inspections of traffic routes and any subsequent action in a site log book.	Consider different scheduling and routing options
Loading and Unloading	Keep drop height onto stockpiles and tipper wagons to a minimum. Empty loader bucket and tipper wagons at rate to limit dust emissions. Tipper wagons will not be loaded above the sides of the tipper wagons.	If the weather forecast indicates dry conditions and strong winds are likely. Visual cues will be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. If the weather forecast indicates dry weather and strong winds are likely, this is also a trigger for preventative dust management action to be taken.	Increase frequency of water spray usage. Installation of engineered controls such as dust covers or collection mechanisms. Cease activities during high wind events.

Source Description	Primary Dust Control Measures	Thresholds / Triggers for Management	Contingency Dust Control Measures
Stockpiled Materials (including aggregate piles or contaminated soil)	Stockpiles should be located as far away from sensitive receptors e.g. hospice building, residential and educational buildings as practicable. Where possible, ensure stockpiles are kept protected from wind erosion or enclosed or under sheeting. Dusty materials can be damped with water sprays. Wind barriers (protective fences) with a monoflex lining with similar size and height to the stockpile may be used. Keep stockpile height to a minimum. Minimise drop height of conveyor to the stockpile.	If visible dust is being generated from the stockpiles If the weather forecast indicates dry conditions and strong winds are likely Visual cues will be the primary trigger for mitigative action to be taken with respect to fugitive dust emissions. If the weather forecast indicates dry weather and strong winds are likely, this is also a trigger for preventative dust management action to be taken. If measured concentrations are approaching an Environment Air Quality Standard (see dust management plan), contingency control measures will be implemented. Periodic dust monitoring will be carried out during the Project by installation of dust monitoring stations	Wet the stockpiles. Cease activities at the stockpiles during high wind events or when dust emissions cannot be adequately controlled. Cover the temporary stockpiles. Construct a wind barrier if necessary.
Track out Specific	Inspect on-site traffic routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.	Record all inspections of traffic routes and any subsequent action in a site log book.	Ensure Roads are dampened down on a regular basis to prevent dust from arising.

9.7 The Control of Emissions to Air

The emission of pollutants from plant and equipment will be minimised by the implementation of the following measures:

- Site workers will check that machinery is in good working condition before commencing work and that any exhaust emissions are at an acceptable level. This will be achieved by completing a visual check on the smoke that is emitted from the exhaust.
 - No visible haze emitted from the exhaust indicates that CO₂ levels much lower than 1000ppm 8-hour TWA (time-weighted average). This demonstrates that the plant or machinery poses a very low pollution risk and is in good working order.
 - Occasional white, blue or black smoke emitted from the exhaust indicates CO₂ levels about 1000ppm 8-hour TWA. This demonstrates that the plant or machinery poses a medium pollution risk and will not be used until it has been serviced.
 - Permanent white, blue or black smoke emitted from the exhaust indicates CO₂ levels greater than 1000ppm 8-hour TWA. This demonstrates that the plant or machinery poses a high pollution risk, this plant or machinery must not be used until it has been serviced.
- Any item of plant deemed to be a pollution threat will not be granted access onto the site or allowed to operate. Certified plant on site shall be recorded on a Plant Register held on site by the Site Managers.
- Plant and machinery shall be switched off when not in use and the keys removed from the ignition.
- Regular maintenance shall be carried out and recorded.
- Daily checks on plant and machinery will be carried out.

To prevent emissions of fumes from Chemicals and Solvents:

- Containers of solvents will not be left unattended with lids removed.
- Bunded fuel tanks will be used, with 110% spillage capacity.
- Lids on containers will be replaced when not in use to prevent evaporation to the atmosphere.
- COSHH procedures will be followed to prevent leakage when stored

9.8 The Control of Noise and Vibration

- The piling rig will be the piece of plant that creates the most amount of noise. This will be used for short periods whilst drilling the piles. The maximum amount of noise expected to be produced by this machine will be 106dB LwA and 85dB LpA. This is whilst the machine is running and the drill is being operated (short periods of time). Please see **Appendix 2**.

- The piling activities will affect the operatives operating the machinery, no other operatives will be in the area during these works. The works are carried out externally so the noise transfer to internal spaces will be dramatically reduced.
- The piling/drilling activities will be carried out over a maximum of 4 days, this may reduce to a 2-day period. The drilling activity should last no more than 1hr. Control measures will be implemented during this time.

To mitigate noisy works and vibratory works throughout the meaningful start works, specific measures will be implemented, including:

- Noise/vibration monitoring systems will be installed within the courtyard. This will enable accurate noise/vibration readings to be taken to ensure control measures are implanted to keep disturbance at a minimum. (**Appendix 3**)
- Appropriate screens or enclosures will be provided locally, where practicable, around high noise generating equipment.
- Stationary plant and equipment liable to create noise or vibration will, where practicable, be located away from sensitive receptors or will be controlled using resilient mountings or sealed acoustic covers or enclosures to prevent or reduce the risk of disturbance, and control vibration transfer from demolition and construction areas to occupied areas.
- Designated access and egress points from the site will be utilised.
- Radios will not be permitted to be used anywhere on site.
- All operatives will be issued with hearing protection to be worn if exposed to noise above 85 decibels.
- Hearing protection zones will be put in place using signage in areas suspected to have noise over 85 decibels. These areas will be confirmed by a noise assessment completed by the contractor.
- Only plant and equipment that are in good repair and conforming to the manufacturer/British Standard emissions standards BS 5228-2:2009. + A1:2014 part 2 will be utilised. Any plant or equipment not conforming will be deemed unacceptable.
- Regular maintenance will be undertaken on all plant and equipment in accordance with manufacturer's guidelines. Defect reports shall be held on site in a designated register on site.
- Plant and equipment will be used where practical in a mode of operation that minimises noise. The plant will not be left running when not in use.
- Where possible, plant and equipment will be electrically powered instead of petrol or diesel powered.
- Should vehicles be required to reverse, white noise reversing alarms will be fitted. These reversing alarms are inherently quieter than those of standard manufacture.
- A system will be in place for regular liaison with the healthcare professionals most affected by the works.

For details of monitoring equipment location in relation to piling activities please see **Appendix 4**.

Monitoring equipment will be reviewed during the noisiest activities; alerts will be received from the monitoring software should levels be exceeded during the activities. At this point works will be temporarily stopped and further control measure put into place to reduce noise/vibrations levels.

9.9 The Investigation of Ground Conditions and Contaminants

General Measures

A ground investigations report has been submitted to Manchester City Council to be agreed prior to commencement of these meaningful start works. It is not anticipated that any remediation will be required.

Monitoring

A watching brief for contamination will be maintained during all ground works. If any ground contamination is revealed during the meaningful start works, the affected area will be investigated, a risk assessment carried out, and remedial action taken as appropriate. The Local Authority/Environment Agency (EA) will be informed in writing of any contamination revealed.

Chemical testing of soils will be undertaken where contamination is suspected or found. Samples will be sent as soon as practicable to a United Kingdom Accreditation Services accredited laboratory for testing against a suite of contaminants. Where possible, the chemical testing of soils will be carried out to MCerts Standards. The results will be used to inform the risk assessment and determine remediation or waste management requirements.

Reporting

Where any contamination is found and treated, details of the remediation will be provided to the planning authority as required by a planning condition application to this.

9.10 The Prevention of Water Pollution

Water pollution can have a damaging effect on the environment, humans and the habitat of plants and animals. Pollution can occur if discharges of substances into surface watercourses or groundwater without prior treatment or by accident, e.g. after an accidental spill. Possible sources of water pollution are as follows:

- Spills or leaks from oil and chemical containers.
- Trade effluent going into surface water drains instead of foul water drains, or straight into watercourses.
- Removing too much water from surface water and groundwater.
- Run-off containing de-icing materials, such as salt during winter months.
- Silt and soil from construction sites.
- Wash waters and waste products.
- Fuel spills.

Therefore, the following environmental management measures will be adopted throughout the demolition and construction phases of the development:

- All potentially polluting substances will be stored on impermeable surfaces with controlled drainage, away from storm water sewers, grids, channels, watercourses and ditches or adequate measures will be taken to protect against pollution.

- Capping all redundant drains (SW or FW) that leave the building by way of the concrete plug. The drains will be privately owned and not within the ownership of United Utilities. The capping positions will be recorded.
- Using sustainable drainage systems to control diffuse pollution from lightly contaminated run-off.
- Using silt traps, buffer strips and sandbags to prevent run-off containing sediment from polluting surface waters and groundwater.
- All hazardous substances on site will be controlled in accordance with COSHH Regulations. The storage compound will be fenced off and locked when not in use to prevent theft and vandalism.
- Refuelling of plant and machinery will take place with appropriate spillage controls. Vehicles will not be left unattended during refuelling.
- Fuel storage tanks will be locked when not in use to prevent unauthorised access and reduce the risk of vandalism.
- Washing out concrete trucks, hoppers, and mixers will take place in areas away from storm water sewers, grids, channels and watercourses to prevent water pollution.
- Spill kits will be held on site with a variety of absorbent materials to be used in the event of a spill of fuel, oil or chemicals and a spill response team appointed.

9.11 The Handling and Removal of Waste Hazardous Substances

Risk Assessments

All hazardous substances being delivered to the site shall be accompanied with the relevant COSHH assessment and paperwork. All operatives on site will sign up to these assessments to agree that they have read and understood the assessment. Any hazardous substances that do not have sufficient/complete paperwork will be refused on site.

Prior to commencement of works, task-specific risk assessments will be carried out and the findings will be used to develop method statements which contribute to formulating the Safe Systems of Work (SSoW).

The SSoW will be communicated to all relevant parties prior to commencing works and will be monitored and reviewed accordingly.

Prior to the start of each day's work, a daily activity briefing will be carried out to discuss the day's activities and the associated hazards and risks and the necessary control measures in place to mitigate them.

Should a variation in task occur, a specific assessment relevant to the variation will be carried out. Necessary additional control measures will be identified.

Subcontractors will be advised of any health and safety requirements associated with hazardous substances that may affect their risk assessments and safe systems of work.

A systematic approach to risk will be implemented. This will include:

- Consideration of each aspect of work activities.
- Identification of all the hazards.

- Determining the remaining risk, the likelihood and severity of any injury and who is likely to be affected.
- Implementation of control measures that will eliminate or reduce (to an acceptable level) the identified risk.

Storage of Chemicals

All chemicals will be stored and segregated on spill trays in lockable containers. The containers will have a raised lip at the entrance designed to contain any spills that may occur within. Suitable COSHH boxes may be used for small quantities of materials if necessary.

Spill kit materials appropriate for the volume and type of substances stored shall be kept within the container for use in an emergency along with the current specific incident procedure.

Leaking or empty containers will be removed from the site immediately and disposed of via appropriately licensed waste disposal contractors.

9.12 The Management, Segregation and Removal of Waste

Waste management

During works, all material will be segregated into the appropriate waste streams and loaded into skips and removed from site. A duty of care will be produced for all materials being exported from site.

The Waste Hierarchy will be used to manage waste in terms of what is best for the environment. Please see below:

Table 2 - Waste Hierarchy to Manage Waste

Prevention	Using less material in design and manufacture. Keeping products for longer; re use. Using less hazardous materials
Preparing for re-use	Preparing materials to be re-used on site by crushing materials for re-use on site
Recycling	Turning uncontaminated waste into a new substance or product e.g. topsoil or 6f2 on site or at one of our recycling yards.
Other Recovery	Using suitable crushed materials for backfilling
Disposal	

	basements, piling mats, haul roads etc.
	Landfill disposal will only be considered for hazardous waste disposal such as asbestos or insulation.

Duty of care

In accordance with Section 34 of the Environmental Protection Act 1990 and in compliance with the requirements of EN ISO 14001 Environmental Management System, IHP and all sub-contractors working for and on behalf of IHP will be required to ensure waste is controlled and managed in accordance with “The Duty of Care” requirements as follows:

- Prevent the illegal deposit or handling of controlled waste by any other person
- Prevent waste material from escaping our control
- Only transfer controlled waste to an “authorised person” (Waste Collection Authority, the holder of a Waste Management Licence, Registered Waste Carriers or District Council Disposal Authority)
- Ensure that waste is transferred under the control of a Waste Transfer Note that provides a clear description of the waste material

All waste is the responsibility of IHP until it has been fully recovered or finally disposed.

9.13 Stakeholder Communications

Direct liaison will take place with the following key stakeholders to maintain effective communication links to and keep them updated on construction matters likely to affect them:

- Local Authority
- Local Residents
- Schools, nursing homes and community facilities
- Appropriate statutory agencies (i.e. Environment Agency)
- Local Businesses
- Local Representative Groups (i.e. the Christie Neighbourhood Forum)

9.14 Noticeboards

Notice boards will be maintained at appropriate locations around the site for the duration of the works. The notice boards will be accessible and clearly visible and will contain:

- A description of the works to be undertaken
- Key Contractors involved in the works
- Contact details

10. Health and Safety

10.1 Construction Health and Safety Plan

A Construction Health and Safety Plan will be developed in detail for the site works prior to any works progressing. Separate Risk Assessments and Method Statements will be required for individual operations carried out as part of the works. All trade contractors are to submit their own health and safety plans, carry out risk assessments / method statements for their works. All site personnel must be suitably qualified for the works they are to undertake and as a minimum by CSCS certified.

The construction works will be legally obligated to comply with the CDM regulations 2015.

10.2 PPE Requirements

All necessary Personal Protective Equipment (PPE) will be provided to site workers and a register of PPE issued will be kept and administered by the Site Manager. Any damaged, unsuitable and non-conforming PPE will be disposed of and replaced. The minimum PPE to be issued and worn will comprise:

- Safety hard hat
- Light eye protection
- Hi-visibility vest/jackets
- Gloves
- Toe and sole protective boots

Other task-specific PPE will be issued as required.

10.3 Emergency Evacuation Procedure

Contact names and phone numbers will be made available in case of out of hour's emergencies relating to the site, namely:

Kyle Crosbie

Construction Manager

Mobile: 07957082048

Matt Thomas

Site Supervisor

Mobile: 07872562394

This information will be displayed prominently on the hoarding.

A fire evacuation plan will be drawn up and prominently displayed on site by IHP. The site offices will have their own plans drawn up. Site evacuation routes will be clearly marked on

site, as will fire extinguisher points and practice drills will be undertaken and recorded on FieldView. All excavation plans will be agreed with the Christie.

10.4 Safety and Environmental Controls

- Exclusion zones and clear signage for restricted access.
- Spill control measures (plant nappies, drip trays).
- Noise and dust suppression measures as per section 9.
- Emergency spill kits and fire points positioned strategically.

Appendix 1 – Vehicle Tracking / Swept Path

Appendix 2 – Technical data of sound level measurement

Appendix 3 – Noise/vibration monitoring

Appendix 4 – Noise/vibration monitoring location