Embassy Village
Manchester



Project Ref: VCL ---

Date	Section	Summary	Revision Number

INTRODUCTION

Health and safety principles and objectives.

"Vermont recognises the primary business driver of safeguarding and promoting the health and safety of its employees, contractor's employees and of all those, including members of the public, who may be affected by our work.

The Company will discharge its statutory obligations and duties placing health and safety issues on an equal priority with other business objectives, or as arbiter, in matters of debate.

The minimum health and safety standards acceptable to us are those required by relevant legislation and authoritative guidance. These requirements will be met and enhanced where long-term business or stakeholder interests can be improved. We intend to make Vermont the contractor of choice and position itself at the forefront of best practice in those countries in which it operates, and influence others accordingly".

The Chief Executive and Directors of Vermont fully endorse the above policy statement and all the requirements of the Vermont 'Health and Safety Management System. A summary of the Vermont Health, Safety and Environmental Policy statement is posted on the designated safety notice board(s). A copy of the full Vermont Construction Health and Safety Management System is held by the Project Manager and is available for inspection at any time.

This CPHSEP describes how risks to health and safety will be managed on this specific project. Preconstruction information has been taken into account in the development of this Construction Phase Plan.

It will be maintained and developed throughout the project to ensure it constantly reflects the management of specific risks to health & safety arising from the project.

This Plan describes how we will manage Health and Safety on this Project.
I expect everyone working on the project to comply with its requirements and work to maintain the standards it has set.

Name: (print) Paul McGowan *(Add the relevant title).*

Signed: 

Date: 04 07 23

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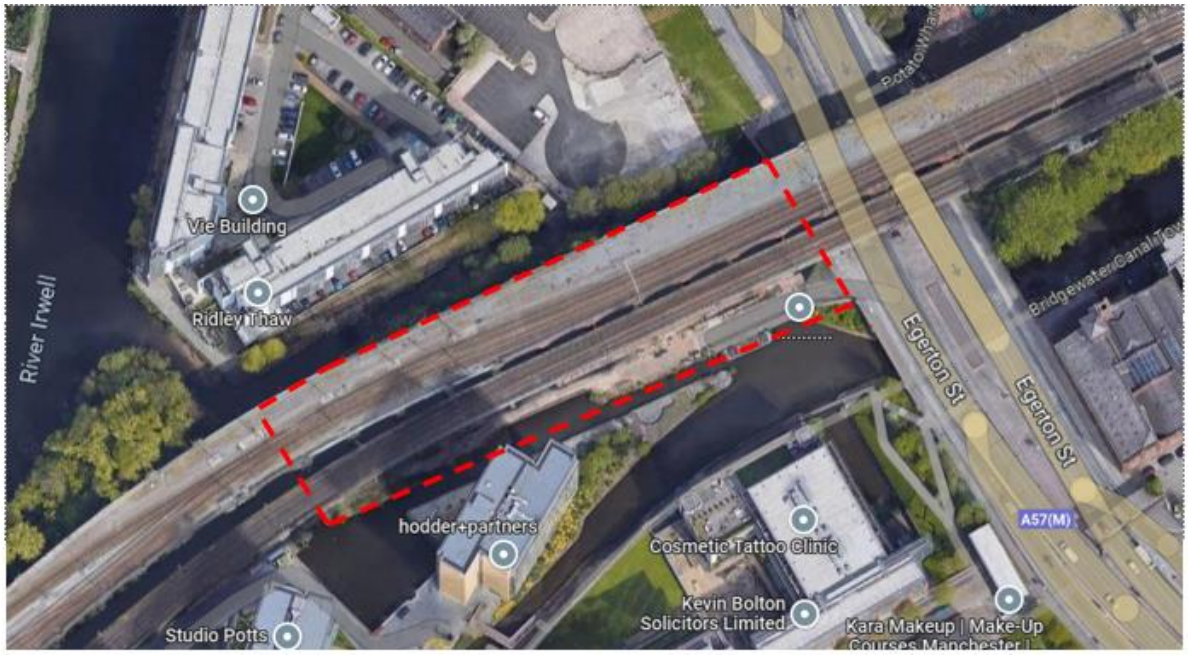
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1.0 DESCRIPTION OF PROJECT

1.1 Project Description

The project consists of the construction of 40 studio accommodation units, village hall and staff accommodation for Embassy Village, a charity in Manchester providing a new community project to provide accommodation for homeless and vulnerable people.

The scheme is located off Egerton Street Manchester and located underneath existing railway arches. The site is bound by the Bridgewater canal to the south and the river Medlock to the north:



The units are traditionally constructed in pods of 8 studios per archway comprising mini piled foundations, reinforced concrete ground floor slab, traditional blockwork superstructure structural walls, timber first floor, timber flat roof structure with single ply membrane and aluminium external wall cladding.

The scheme also includes extensive external landscaping works.

1.2 Programme Details

Construction operations are scheduled to commence on site 2023 Q4 with a 46 week duration.

1.3 Details of Client Group

Embassy Village Sid Williams 07939909640 Sid.williams@embassybus.org

Capital and Centric Tim Heatley th@capitalandcentric.com

Peel Holdings James Whittaker jwhittaker@peellandp.co.uk

1.3.1 Details of Principal Contractor

Vermont Construction [Manchester Ltd]
1 Sefton Street
Liverpool
L8 5TH

Project Director Paul McGowan 07795628547 paul.w.mcgowan@vermontcl.com

1.3.2 Details of Principal Designer

CDM Services
Hales Court
Stourbridge Road
Halesowen
West Midlands B63 3TT

Dan Blakeley 03332244070 07966431378 dblakeley@c-cdmservices.com

1.6 Details of Designers (including key sub contractors)

Architect:

AEW Architects
Trinity Court
16 John Dalton Street
Manchester M2 6HY

Ben Smith 01612144370 07513724155 bsmith@aewarchitects.com

1.7 Details of Other Consultants

Structural Engineer
Curtins
17-19 Whitworth Street West
Manchester M1 5WG

Darren Cheetham 01612362394 darren.cheetham@curtins.com

MEP
Crookes Walker
Alberton House
30 St Mary's Parsonage
Manchester M3 2WJ

John Barnett 07375929159 jbarnett@cwcon.co.uk

Fire Engineering
OFR
Sevendale House 3 rd Floor
Lever Street
Manchester M1 1JA

Richard Rankin 07545076315 richard.rankin@ofrconsultants.com

Landscape Architect
Planit I.E.
2 Back Grafton Street
Altrincham
Cheshire WA14 1DY

Kevin Redhead 07876686444 kr@planit-ie.com

Acoustician
Cundall
Fourways House
57 Hilton Street
Manchester M1 2EJ

Rob Turner 01612445660

Building Control Approved Inspector
Ball & Berry
Piccadilly House
49 Piccadilly Gardens
Manchester M1 2AP

Paul McNeill 03330230262 paul@ballandberry.co.uk

VCL Health and Safety Advisor.

X1 Media City Vermont Construction [Manchester] Limited
Harbour City,
Michigan Avenue,
Salford Quays,
M50 2GY

Contact: Sean Devaney 07471 351 533

1.8 Extent and Location of Existing Records and Plans

Please refer to the attached GPR survey identifying existing services under **appendix 3.3**

1.9 Existing Issues or Restrictions that May Affect the Work

- Vehicle access off main arterial road crossing footpath and cycle path
- One way in and out. Vehicles to manoeuvre on site before exiting
- Narrow road running parallel with canal – consider surcharge onto canal wall
- Site adjacent to water – Bridgewater canal and the river Medlock – 4m drop to river level
- Overhead restrictions with railway archway structures
- Existing vegetation on site. Invasive species survey required
- Low level asbestos particles present in the ground
- Large residential and office building opposite the site
- Potential ecology – bat survey to be concluded, nesting possible in vegetation on site
- Planning restriction preventing any vegetation clearance during nesting season
- Water contamination is a risk due to proximity of water courses to the site
- Planning condition 12 prohibits piling without first gaining consent from MCC on method
- Limited parking available on site and only during initial tasks of the project
- Works are subject to a BAPA with Network Rail and agreement with TfGM
- Canal wall is listed and works affecting will be subject to vibration monitoring

1.10 Local Planning Authority Conditions and Restrictions

The time of construction activities on site.

- Monday - Friday 07:30 - 18:00
- Saturday 09:00 -14:00
- Sunday (occasional as instructed / required)

The site will minimise disturbances / nuisances by carrying out the following restrictions within the above site working times:

- Excessive noise / vibration will be limited to the hours between 9 am - 4.30 pm Monday to Friday and 9 am – 2 pm Saturday only (no working on Sundays or Bank Holidays unless strictly necessary).

- Quieter activities which are carried out inside buildings such as electrical works, plumbing and plastering may take place outside of agreed working times so long as they do not result in significant disturbance to neighbouring occupiers.
- All heavy good vehicles shall be limited to between 8 am – 6 pm Monday to Friday and 9 am - 2pm Saturday only (no working on Sundays or Bank Holidays).
- Any traffic management measures required on the highway to be communicated with as much lead in time as possible.

Removal of Vegetation Material

No removal of or works to any hedgerows, trees or shrubs shall take place during the main bird breeding season 1 March and 31 August inclusive, unless a competent ecologist has undertaken a careful, detailed check of vegetation for active birds' nests immediately before the vegetation is cleared and provided written confirmation that no birds will be harmed and/or that there are appropriate measures in place to protect nesting bird interest on site. Any such written confirmation should be submitted to the local planning authority.

Details of Construction Phasing

The intention is to complete the scheme in three phases with construction operations progressing from the furthest end of the site towards the site entrance south west to north east: Phase one will include the construction of three accommodation pods, one staff pod and one village pod, temporary tarmacadam to the site entrance and under the Network rail arches and small landscaping works to the Northern boundary. Phase 2 will complete the two accommodation pods. Phase 3 will implement the landscaping and multi-use games area.

Please refer to the attached project phasing plans under **appendix 3.8**

Environmental Aspects and Impacts

Please refer to the attached environmental aspects and impacts plan under **appendix 3.1**

Piling Solution – cond 12

Planning condition 12 states:

Piling or any deep foundation solution using penetrative methods shall not be carried out other than with the written consent of the local planning authority. The development shall be carried out in accordance with the approved detail. Reason - To ensure that any piling or an alternative deep foundation solution does not harm groundwater resources in line with paragraph 170 of the National Planning Policy Framework.

We propose to use 168mm diameter steel mini piles installed using a D500 series drop hammer machine which is a mini tracked piling rig as per the attached details in **appendix 3.4**

Emergency Contact Numbers

Vermont Construction head office 0151 236 8094
Paul McGowan Project Director 07795 628547

Wheel Washing

The site will have wheel cleaning facilities within the site boundary. A ~~and will utilise a r~~road sweeper will also be employed when required, particularly if off site vehicle manoeuvres deposit mud and debris on the road. We will be retaining all current hard standing access roads to mitigate the need for vehicles to enter muddy areas of construction during the foundation operations.

The gateman is to check all vehicles before they leave the site boundary and carries out the washing of vehicles wheels.

The site will have 'site entrance ahead' signs which are displayed on all approaches during working hours.

Every effort will be made to firstly reduce the chance of mud getting into contact with vehicles, followed by measures to ensure vehicles leave the site in a clean state. In the event mud does get deposited on the highway, a road sweeper will be employed during that activity.

The site will utilise signs at the first signs mud being deposited on the adopted highway i.e., slippery road sign with 'Mud on Road' sub plates.

Dust Suppression Measures

Damping down measures are used for any open soiled work areas and the above measures of washing facilities reduce the tracking of dirt outside of the vehicle gates. Once the floorplate of foundations is formed the area of site at a subbase build up will reduce to much smaller areas which will further reduce the dirt transfer on site.

Run off contamination control

Please refer to the attached water management plan for details of run off contamination control **appendix 3.5**

Temporary works lighting strategy

90% of the site is covered by railway arches so temporary safety lighting will be required. This will be provided in the form of low energy 110v LED 5ft IP65 rated fittings located within the confines of each arch to provide adequate safety lighting for the works.
Lighting will be turned off out of working hours to prevent disruption to wildlife.

Bat survey was undertaken in March 2024 to assess the potential for roosts on site. Two areas were identified as suitable roosting spots so these areas will be closely monitored. A nocturnal survey has been deemed a risk to health and safety so the ecologists report recommends the use of RAMs during the construction phase.

Temporary lighting design to follow the guidance of Bat Conservation Guidance note 08/18.

Compound set up

Please refer to the attached site set up information contained within the logistics plan in **appendix 3.2**

Waste Management Strategy

Please refer to the attached waste management strategy contained in **appendix 3.6**

Routing Strategy and Swept Path Analysis

Routing Strategy and Swept Path Analysis contained within the logistics plan in **appendix 3.2**

Parking of Construction Vehicles and Staff

It is anticipated that up to 25 personnel will be employed on the site at any one time comprising approx. 2 Vermont management staff, average 5 visitors and 20 contractors working on site.

In the early stages of site set up, piling and groundworks, car parking will be available on site.

Once works on superstructure starts to progress no parking will be possible on site.

Embassy Village have contacted neighbouring Porcelanosa who may be able to assist with room on their site for parking. Vermont will explore this option.

There is also land available for our use at Cornbrook which may be used for parking and material storage.

Vermont will encourage contractors to utilise shared vehicle transport and public transport where possible to reduce the number of vehicles associated with the project.

Secure cycle parking will be provided. Vermont also offer staff a cycle to work scheme to encourage local active transport to site.

Sheeting Over of Construction Vehicles

8 wheel rigid tipper vehicles will be utilised with integral deployable body covering sheets to reduce dust from excavated waste material when transported.

Engagement with TfGM & Network Rail

Embassy Village have engaged with both TfGM and Network rail. Network rail have agreed a BAPA in principle and this will be coordinated through Vermont once appointed.

Vermont will engage with Transport for Greater Manchester (TfGM), produce and agree a Metrolink specific CMP to ensure that the works are carried out safely around the live overhead equipment and its support structure all in accordance with TfGM requirements.

TfGM do require 24hr access to the site for emergency access to the viaduct. This will be provided by using a daisy chain dual padlock.

The works are subject to a party wall award with TfGM.

Communication Strategy with Adjacent Residents

Vermont will produce and circulate periodic newsletters commensurate with the main stages of construction – start on site including piling operations, superstructure works, fitout and completion.

There are no heavy crane works or road closures envisaged other than the installation of the off site rising main drainage. This will also be identified on the newsletter.

2.0 COMMUNICATION AND MANAGEMENT OF THE WORK

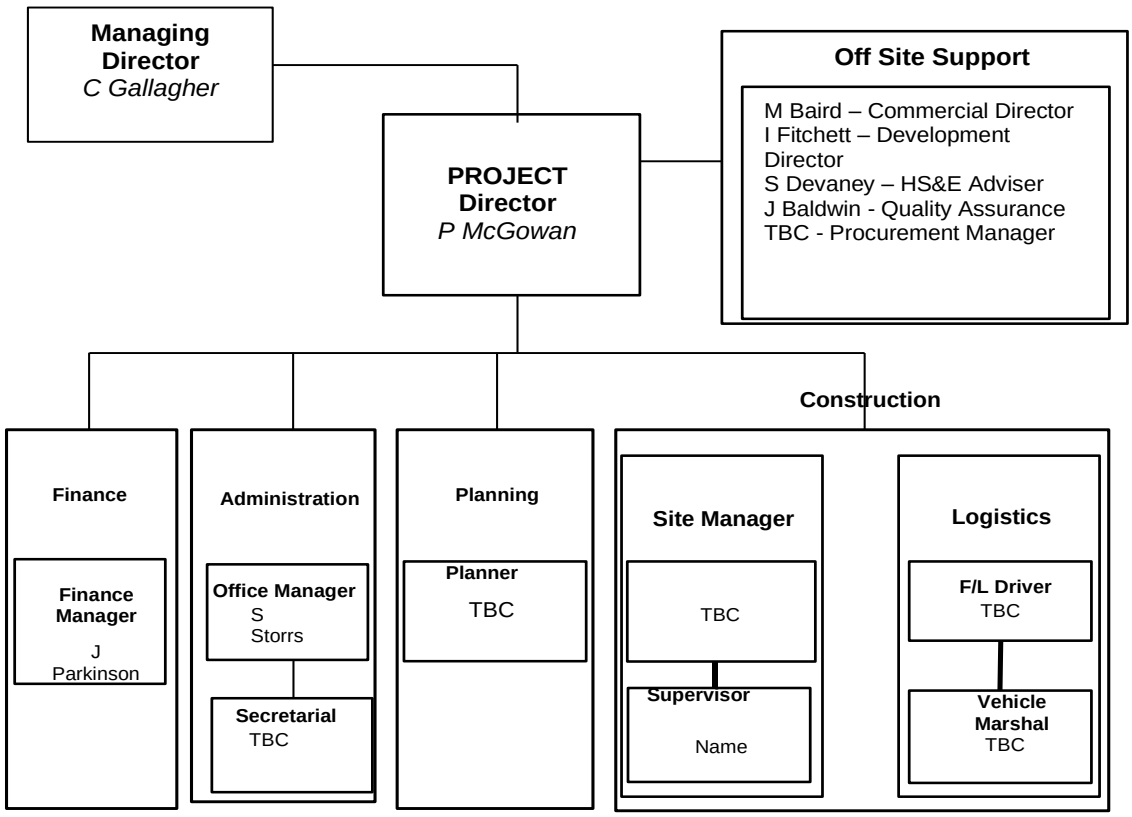
2.1 Management Structure

Senior off-site personnel responsible for the project include:

Paul McGowan	Project Director	07795 628547
Sean Devaney	Visiting HS&E Adviser	07471 351533

On-site Personnel and off-site support:

Prompt box:
Detail an organisational chart with lines of responsibility, for example: -



Appendix 3.1

ASPECT AND IMPACT ASSESSMENT July 2023

CRITERIA	LEGAL IMPACT	ENVIRONMENTAL ASPECTS	ENVIRONMENTAL IMPACTS	CONTROL MEASURES	ACTION
WATER	WATER POLLUTION Anything that you put into a river, stream or drinking water aquifer may be classified as pollution. This includes: • Mud, silt and slurries • Oils, fuels and chemicals (including paints and sealants) • Concrete, including washout • Spoil, cement, PFA • Litter and waste vegetation. Road drains and surface water gullies generally discharge into controlled water and should be treated as such. DISCHARGES TO SEWERS A construction site is committing an offence if trade effluent is discharged into a sewer without the sewerage undertaker's consent. Applicable legislation: • Groundwater Regulations 1998 • Environment Act 1995 • Environmental Protection Act 1990 • Land Drainage Act 1991 • Water Resources Act 1991 (WRA) • Water Industry Act 1991 (WIA) • The Salmon and Freshwater Fisheries Act 1975.	Main environmental aspects associated with water pollution from construction sites: • Spillages of pollutants directly into watercourses, drains, drinking water wells or onto paved surfaces. • Poor storage of oils, fuels and chemicals. • Damage to drums, tanks and pipes, either as a result of an accident of vandalism. • Uncontrolled surface water runoff from site roads, excavations or disturbed ground. • Pumping dirty water into watercourses or surface drains • Working in, over or next to watercourses and groundwater. • Disposing of washout from concreting operations. • Hosing of dirt and concrete from various surfaces.	Main environmental impacts associated with water pollution from construction sites include: • Fish kill and effects on another river life. • Contamination by change of water pH and chemical balance. • Contamination of groundwater and domestic drinking supplies. • Visual impairment e.g., silting and foaming. • Destruction of microbiological process in sewerage works. • Cross contamination of air and ground by gases and chemicals released from contaminated water.	Preventative control measures • Identify unknown liquids or material by sampling, analysis and description • Store oils, fuels and chemicals where they will be protected and are away from watercourses and drains • Store large quantities of hazardous liquids in bunded tanks • Ensure pipe valves are secure • Provide appropriate site security • Always supervise refuelling. • Seal off or remove abandoned drains • Use drip trays underneath mobile plant • Keep roads and hard standings clean • Stop uncontrolled water entering or leaving excavations • Control surface water runoff from earthworks • Provide sumps in excavations. • Produce emergency response plans • Isolate / bund / cover stockpiled contaminated material Corrective control measures • Report spills to PM and the EA. • Identify source of pollution and stop flow. • Avoid the spillage spreading. • Get a spill kit. • Block off drains • Shovel contaminated sand or earth into sacks or skips and dispose of appropriately.	Water discharge licence to be applied for via Environmental Agency Produce water management plan Store fuel in bunded tanks. Locate refuelling area away from water course under archway 10 Existing broken network rail drain to be repaired Concrete washout to be directly into skip Provide pumps for excavations Utilise existing water holding tank as silt pit

ASPECT AND IMPACT ASSESSMENT July 2023

CRITERIA	LEGAL IMPACT	ENVIRONMENTAL ASPECTS	ENVIRONMENTAL IMPACTS	CONTROL MEASURES	ACTION
WASTE	DUTY OF CARE It is Vermont responsibility as the contractor to dispose of waste arising from their projects at a licensed and suitable disposal site under the Environmental Protection Act, 1990 and the Environmental Protection (Duty of Care) Regulations, 1991. Vermont personnel responsible for waste on sites must be able to describe the waste kept and being taken off site. Each waste transfer must be accompanied by a waste transfer note (or special waste transfer note) that records the description of the waste, its current holder, the person collecting it and its destination. *Breach of the duty of care is a criminal offence.* SPECIAL WASTE REGULATIONS 1996 apply to hazardous waste produced on site, which is difficult to manage, or for which storage, treatment or disposal is dangerous. The Regulations provide for a system of consignment notes and record keeping so that the special waste can be tracked from production to final disposal or recovery. Other applicable legislation: • Carriage of Dangerous Goods by Road Regulations 1996 and the Carriage of Dangerous Goods by Rail Regulations 1996. • Landfill Tax Regulations 1996 • Waste Management Licensing Regulations 1994 • Producer Responsibility Obligations (Packaging Waste) Regulations 1997.	Main environmental aspects associated with waste from construction sites: Primary: • Excavation of potentially contaminated material • Removal of vegetation, scrap metal and top soil • Removal of hazardous building materials • Wasting excess quantities of raw materials • Poor storage, protection or multiple handling of materials and wastes • Over ordering materials and bad stock control • Lack of training • Poor site control • Disposal and transport of waste to landfill • Reuse and recycling of aggregates, demolition, and construction wastes or soil e.g., crushed concrete, uncontaminated top soil, metal scrap. Secondary: • Quarrying for primary aggregates • Energy use in the extraction, production and transport of materials and aggregates	Main environmental impacts associated with waste from construction sites: Primary negative impacts: • Re-exposure and cross contamination to air, ground and water. • Use of natural non-renewable resources • Loss of off-site landfill space • Excess waste going to landfill. • Increase noise, dust and vibration from transport Primary positive impacts: • Reduced use of raw materials and aggregates. • Income / savings. Secondary: • Damage to countryside habitats and ecology. • Contribution to global warming. • Reduced landscape quality. Secondary positive impacts: • Reduced damage to countryside habitats and ecology.	Preventative control measures • Identify unknown wastes by location, description, sampling and chemical analysis. • Classify your wastes before disposal • Use the *Vermont Wastage report* to monitor waste. • Implement Waste Management Plans. • Allocate responsibility for waste on site. • Provide waste training and raise awareness of site workers. • Ensure waste transfer notes are completed, as required under 'duty of care. • Verify waste carrier's registration and licenses. • Order the correct amounts of materials. • Prevent damage of materials during delivery • Avoid accepting incorrect deliveries, exceeding shelf life of materials and double handling • Provide appropriate site security. • Prevent damage to materials during storage. • Dispose of different wastes in the correct containers. • Use prefabricated materials were possible. • Return pallets that have a deposit on them and where possible excess packaging to suppliers. • Reuse / recycle materials e.g., crushed concrete, shuttering, boarding, scrap metal, cut offs and identify local recycling markets e.g., BRE Materials Exchange. Corrective control measures • Notify Vermont Environmental and Legal Services.	Waste management plan to be implemented

CRITERIA	LEGAL IMPACT	ENVIRONMENTAL ASPECTS	ENVIRONMENTAL IMPACTS	CONTROL MEASURES	ACTION
AIR	ENVIRONMENTAL PROTECTION ACT 1990 – statutory nuisance provision. 'Works generating dust, emissions or odours on any of Vermont's sites that affect the wellbeing and personal comfort of residents and the use and enjoyment of their property, constitute a statutory nuisance. The local authority, will serve an abatement notice on the works causing the statutory nuisance. *Breach of an abatement order is a criminal offence*. CLEAN AIR ACT 1993 This is the primary legislative means of control over smoke, grit and dust. It is enforced by the local authorities and applies to emissions of dark smoke from trade premises or Vermont sites that originate from sources other than chimneys. Construction activities where the Act particularly applies are: • Demolition works. • Bonfires on demolition sites emitting dark smoke. ENVIRONMENT ACT 1995 PART IV Gives local authorities the power to manage and review air quality within their areas to determine whether national air quality objectives are being made. Here this does not happen, the local authority may designate air quality management areas and prepare action plans to help them meet the air quality objectives. If the construction site is located on or near these designated areas, activities on site may be restricted. These may include: • Roadside emissions testing • Stricter traffic control • Granting planning permission	Main environmental aspects associated with air pollution from construction sites: • Dust from earthworks and excavations earth moving, blasting, demolition, crushing. • Soil treatment or ground stabilisation • Dust from cutting, grinding, grouting and packing. • Poor handling and storage of materials i.e., stockpiling sand, spoil and aggregates without covers. • Dust from concrete batching and pouring. • Dust generation from the transport of materials onto or from the site. • Loading and unloading of dust generating materials. • Traffic fumes from plant and vehicles. • Fumes from the use of solvents, glues and paints. • Fumes from the use of weed killers and other similar chemicals. • Disruption of potentially contaminated sites and the release of contaminated dusts and gases.	Main environmental impacts associated with air pollution from construction sites: • Reduction of local air quality, mal odours and visual impairment leading to neighbour annoyance and complaints. • Reduction in plant and fruit growth. • Alteration or deterioration of plant and animal communities. • Constraints on cost and/or programme of project from unacceptable dust levels and/or issue of an abatement notice. • Cross contamination of surface waters and soils. • Creation of low-level ozone. • Contribution to global warming.	Preventative control measures *Hauls Routes* • Select suitable haul routes away from sensitive areas if possible. • Pave heavily used areas. • Reduce the width of haul roads. • Vacuum sweep paved access roads and public access roads • Limit vehicle speeds. *Demolition* • Avoid / minimise unnecessary breakage of large demolition slabs - remove in one piece were possible • Use chutes and regularly dampen them • Use mobile plant when crushing materials and locate away from sensitive areas. *Plant* • Use wheel washes • Exhausts not to discharge directly at ground level. *Earthworks and excavations* • Revegetate or seal temporary or completed groundworks as soon as possible. *Materials handling and storage* • Store materials out of the wind. • Cover all dust generating materials (transported off/on site and stored on site) with tarpaulin. • Compact and bind stockpile surfaces. *Concrete batching and pouring* • Mix concrete / bentonite slurries in enclosed / shielded areas. • Keep large concrete pours clean when turned off. *Cutting, grinding, grouting and packing* • Minimise cutting and grinding on site. • Use dust extractors on cutters and saws. • Damp down dust generating surfaces and areas. • Do not burn waste materials / tyres on site • Corrective control measures • Erect screens to act as windbreaks or dust screens.	

ASPECT AND IMPACT ASSESSMENT July 2023

CRITERIA	LEGAL IMPACT	ENVIRONMENTAL ASPECTS	ENVIRONMENTAL IMPACTS	CONTROL MEASURES	ACTION
NOISE	ENVIRONMENTAL PROTECTION ACT 1990 defines noise emanating from premises, which is prejudicial to health or a nuisance, as a statutory nuisance. There is no defined level of noise, which constitutes a statutory nuisance – this depends on the facts. Noise nuisance from trade premises may be subject to a fine of up to £20,000. CONTROL OF POLLUTION ACT 1974 (COPA) deals with noise abatement and reduction on construction sites. This includes the erection, construction, alteration, repair or maintenance of buildings, structures or roads and demolition works. Local authorities can serve a notice, which specifies what plant and machinery may be used, the working hours and noise levels. NOISE AND STATUTORY NUISNACE ACT 1993 makes noise in the street emitted from or caused by a vehicle, machinery or equipment a statutory nuisance. Other applicable legislation and guidance: • Noise Act 1996 • Noise at Work Regulations 1989 • Construction Plan and Equipment (Harmonisation of Noise Emission Standards) Regulations 1985 and 1988. • BS 5228 – Noise control on construction and open sites.	Main environmental aspects associated with noise from construction sites: • Site clearance • Demolition works. • Ground preparation e.g., soil stripping, clearance of rubble, scabbing, road laying • Excavation and diversion of services. • Loading and unloading of lorries. • Auditable reversing warnings on vehicles • Mobile generators • Piling, excavation and foundation work • Various plant / compressors, cement mixers etc. • Operation drills, hammers etc. • Vehicles transporting materials onto and off the site. • Shouting, bad language, radios and out-of-hour deliveries.	Main environmental impacts associated with noise from construction sites: • Disturbance of wildlife • Complaints from neighbours • Poor public relations.	Preventative control measures • Use a working method that uses equipment or modes of operation that are less noisy. • Reduce need for noisy assembly e.g., buy pre-fabricated. • Keep noisy plant away from public areas. • Restrict noisy activities to certain periods of the day. • Arrange deliveries to suit the area • Route construction vehicles to take account of the need to reduce noise • Keep haul roads well maintained • Use mufflers or silencers to reduce noise transmitted along pipes and ducts. • Minimise drop height into hoppers, lorries or other plant. • On sensitive sites use rubber linings on tippers. • Liaise with nature conservation bodies to minimise noise disturbance to wildlife. • Use plant conforming to relevant standards and emissions guidelines. • Use noise control equipment on operating plant. • Use noise screens were appropriate. • Where possible use electrically powered plant. • Shut down plant that is not in use. • Maintain plant to minimise rattling or squeaks • Ensure that audible warning systems are switched to the minimum setting required by the Health and Safety Executive. • Investigate whether there is a requirement for noise monitoring on your project.	Low noise mini piling solution to be employed Low noise telehandler to be used

ASPECT AND IMPACT ASSESSMENT July 2023

CRITERIA	LEGAL IMPACT	ENVIRONMENTAL ASPECTS	ENVIRONMENTAL IMPACTS	CONTROL MEASURES	ACTION
VIBRATION	Refer to 'LEGAL IMPACT' on the 'NOISE' Project Site Environmental Assessment Table	Main environmental aspects associated with vibration from construction sites: • Use of surface breaking equipment, e.g., pneumatic drills, hydraulic hammers, rock-breaking equipment. • Use of explosives or rock blasting. • Movement of heavy plant and vehicles onto and off the site.	Main environmental impacts associated with vibration from construction sites: • Disruption to wildlife. • Damage to geological, geomorphological and archaeological sites. • Damage to nearby structures and buildings.	Preventative control measures • Evaluate the potential for vibration from different works activities. • Monitor / survey sensitive locations and structures before starting and completing works. • Inform neighbours of the potential for vibration. • Where possible use working methods or plant which produce low frequency vibrations. • Isolate plant from the transfer medium. • Place plant on a heavy base e.g., suspended slab • If working on water-saturated ground in tidal areas, carry out works during lower tides. • Monitor vibration levels during the works. • Fix rotating or impacting machines on anti-vibration mountings. • Don't use jackhammers and peckers where you could cut and lift material out.	Low vibration mini piling to be employed Vibration monitoring required to canal wall

CRITERIA	LEGAL IMPACT	ENVIRONMENTAL ASPECTS	ENVIRONMENTAL IMPACTS	CONTROL MEASURES	ACTION
CONTAMINATED LAND	ENVIRONMENTAL PROTECTION ACT 1995 – *the new contaminated land regime* provides a statutory definition of contaminated land. If the land is identified as 'contaminated', those who caused or knowingly permit the contamination will be liable. If they cannot be found, the present owner or occupier could be liable for clean-up. LANDFILL TAX (CONTAMINATED LAND) ORDER 1996 THE ANTI POLLUTION WORKS REGULATIONS 1999 gives more direct power to the Environment Agency to serve notice on polluter or potential polluters to clean-up or prevent water pollution. Other relevant pieces of legislation that are relevant: • *Section 33 EPA waste management licensing provisions* – the treatment of contaminates soil on site, unless it is expected by regulations, will require a waste management license. • *Section 34 EPA duty of care* – there is a duty of care on all persons who import, produce, carry, keep, treat or dispose of waste to take steps to ensure the waste is disposed of safely. • *Water Resources Act 1991* – liability may arise for reimbursement of costs incurred by the local authority in respect of works they consider necessary in order to prevent poisonous, noxious or polluting matters from entering controlled waters. • *Town and Country Planning legislation* including the *Assessment of Environmental Effects Regulations 1988*	Main environmental aspects associated with contaminated land and construction sites: • Encountering and disturbing existing or residual contamination during groundworks, excavations, tunnelling, dredging, grouting, piling, cut and fill, service trenches, stream and sewer diversions. • Stockpiling contaminated ground on clean ground in the course of works on site • Stockpiling materials containing contaminants that are liable to leach out • Spillages of contaminants such as oil onto the ground during construction • Dewatering causing contaminated groundwater to migrate across from adjacent sites • Spillage / leakage of paint, solvents, wet concrete, mortar, oils blackjack and fuel. • Disposal of contaminated soil to incorrect landfill site	Main environmental impacts associated with contaminated land and construction sites: • Cross contamination of land, air, ground and surface waters. • Air pollution from contaminated dust, vapours, landfill gases, airborne asbestos fibres, etc. • Spread of contamination from and into adjacent sites. • Increased traffic flows from removal of material off site. • Negative impact on fauna and flora. • Affect / deterioration of building foundations.	Preventative Control Measures • Obtain information on the site contamination site assessment and investigation reports. If necessary, carry out a Preliminary Environmental Assessment and plan a Remediation Methodology to treat contaminated soil where necessary. • Classify contaminated waste material e.g., special, hazardous, etc. • Develop contingency plans for dealing with undiscovered areas of contaminated soil during works. • Minimise contaminated land disturbance. • Do not stockpile contaminated soil unless it cannot be avoided. • If necessary, only stockpile on hard standing areas. • Cover stockpiled material to prevent windblown dust or to prevent ingress of rainwater. • Control surface drainage from stockpiled areas. This may require special disposal off site. • Collect contaminated water from excavations in a tank and only discharge to sewer if permitted. • If asbestos is uncovered, re-cover temporarily to prevent release to the atmosphere. • Prevent the spread of contaminated dust – refer to the CONTROL MEASURES for AIR of the Project Site Assessment Table. • Store hazardous materials, oils and chemicals in bunded and locked areas. • Use screens to prevent the spread of sprayed material. Corrective control measures • Halt works immediately • Clear the site and ensure there is no smoking within 10m of the site. • Seek expert advice from Environmental consultant	Low levels of asbestos containing material noted within site investigation report. Excavation minimised by using mini piling

CRITERIA	LEGAL IMPACT	ENVIRONMENTAL ASPECTS	ENVIRONMENTAL IMPACTS	CONTROL MEASURES	ACTION
WILDLIFE AND NATURAL FEATURES / ECOLOGY	WILDLIFE AND COUNTRYSIDE ACT 1891 (and amendments) provides for the establishment of Sites of Special Scientific Interest (SSSIs), which give protection to flora, fauna, geological or physiographical features of special interest. Full lists of protected flora and fauna can be obtained from nature conservation bodies. The Act has two main parts: *Species Protection* deals with the protection of plants, animals and birds. An offence relates to the killing, injuring or taking of any wild bird or scheduled wild animal. It is an offence to be in the possession or destroy eggs or nest of wild birds. It is an offence to possess a scheduled animal live or dead or any part of one. PROTECTION OF BADGERS ACT 1992 protects the welfare of badgers rather than conservation. LICENSING In certain cases, it is possible to obtain special permission to disturb badgers and other wildlife; e.g., the removal of protected species or their exclusion from sites where this serves a conservation purpose, or the interference with a badger set for development. Other relevant legislation: • Hedgerow Act 1997 • The Habitats Directive (92/43/EC)	Main environmental aspects associated with wildlife and natural features and construction sites: • Impacts on groundwater levels from tunnelling. • Site clearance of soil and vegetation • Dredging resulting in silting and potential mobilisation of contaminants. • Damage to tree roots from micro tunnelling. • Working near water may cause direct or indirect disturbance to bankside and in-stream ecology. • Excavating or cut and filling may damage a geological site • Uncontrolled spraying of weed killer to remove vegetation. • Using bright lighting during night works in rural areas. • Creation of new water bodies and new habitats. • Regulating and diverting rivers.	Main environmental impacts associated with wildlife and natural features and construction sites: • Disruption or loss of wildlife. • Change / loss / fragmentation of habitat. • Changes in species number and diversity • Attracting wildlife. • Changes in food source • Changes to water quality • Interruptions to the movement of wildlife e.g., impediment to fish migration • Removal of hedgerows and other vegetation • Damage or removal of important rock formations or landforms. • Changes to water quality.	Preventative control measures • Determine if the client or partners has identified and designated ecological sites or protected species. If not seek advice from Environmental Department • Before works, identify and fence off any sensitive areas and make staff aware • Plan appropriate transport routes • Consider schedule of works in relation to wildlife breeding or nesting periods • Where possible establish close working relationships with nature conservation bodies and with local environmental groups for advice. • Plan and design replace habitats and wildlife destroyed or removed *Trees* • Check if any trees on site are protected by a tree preservation order. • Keep vehicles and plant away from trees. • Put up temporary fencing to mark out the protected area around the tree. • Do not cut or damage roots greater than 25mm in diameter within the protected area. • Cut roots with a clean hand saw. • Wrap damp sacking around any exposed roots until ready for backfilling • Compact the backfill tightly around the tree roots. • Do not store spoil or building materials within the protected area *Working near water* • Place a protective bund around ponds • Consider monitoring water levels during works in particular during dewatering. Ensure run-off is directed from sensitive areas Corrective control measures - If you suspect that a protected plant or animal is affected, stop and seek specialist advice before continuing.	Vegetation clearance to be carried out after nesting season from September 2023 onwards. Daytime bat survey to be carried out

CRITERIA	LEGAL IMPACT	ENVIRONMENTAL ASPECTS	ENVIRONMENTAL IMPACTS	CONTROL MEASURES	ACTION
ARCHEOLOGY	ANCIENT MONUMENTS AND ARCHEOLOGICAL AREAS ACT 1979 require that any works to or within a Scheduled Ancient Monument and likely to damage the monument require the prior consent of the Secretary of State. It is a criminal offence to carry out authorised works that damage a Scheduled Ancient Monument. The Act also enables Areas of Archaeological Importance to be designated. Developers must give six weeks “operations notice” to the planning authority of any proposals to disturb the ground, tip on it or flood it. TOWN AND COUNTRY PLANNING ACT 1990 enables the local authorities to protect archaeological remains. Where development threatens to destroy remains, the authority can require appropriate investigation through a planning condition or legal agreement. THE PLANNING (LISTED BUILDINGS AND CONSERVATION AREAS) ACT 1990. Once a building has been listed, any object or structure fixed to the building is protected, as it any object or structure that forms part of the land and had done so since before 1 July 1948. Other relevant legislation: • Treasure Act 1996 • Burials Act 1857	Main environmental aspects associated with archaeology and construction sites: • Finding unexpected archaeological finds during bored tunnelling or excavations. • Dewatering. • High levels of vibration / compaction	Main environmental impacts associated with archaeology and construction sites: • Potential for the damage, disturbance or loss of national heritage. • Cracking and subsidence. • Contamination from burial grounds	Preventative control measures • Determine that the sufficient investigations have been undertaken to satisfy planning requirements. • Review contract to determine responsibility on the management of archaeology on the site. • Follow contractual obligations e.g., provide attendance and/or access to professional archaeologists. • Ensure that the proposed method of working complies with any contractual obligations required. Corrective control measures • Stop work immediately • Protect the find by fencing / blocking if off. • Contact the site manager • If necessary, seek specialist advice e.g., local archaeological officer at the local authority or county council • Establish if it is necessary to obtain separate Scheduled Ancient Monument consent before continuing work. • If treasure is found, report the find to the district coroner within 14 days after the day on which the find was made or within 14 days after the day on which you realised that the find might be treasure.	The site is located on well worked ground adjacent to the river Medlock and Bridgewater canal. The ground is made ground from the construction of the over head railway. No Archaeological investigations are required from Local Authority Planning Department

Appendix 3.2



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Embassy Village
Initial Logistics Presentation

Initial Logistics Plan

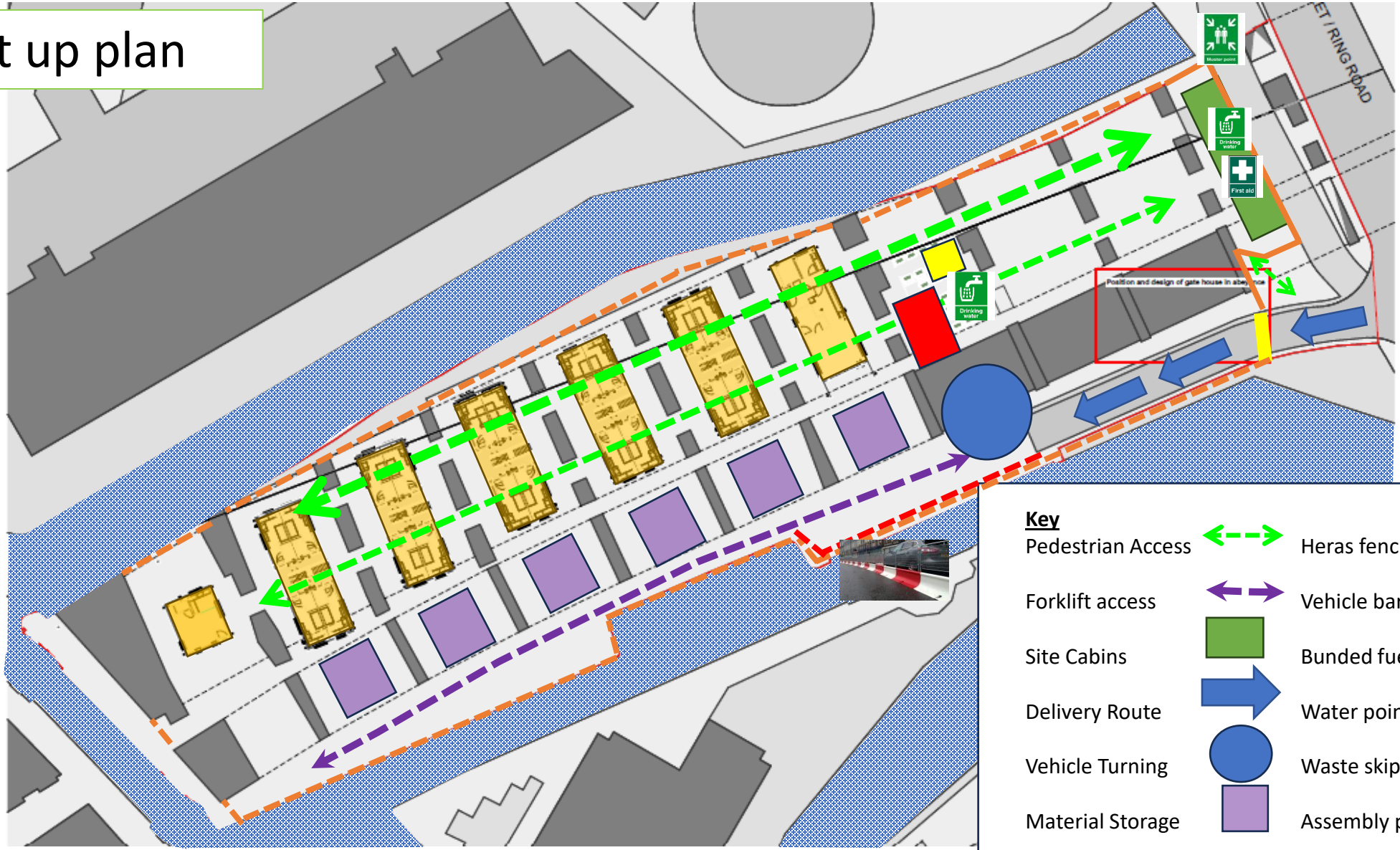


Key

- Pedestrian Access
- Forklift access
- Site Cabins
- Delivery Route
- Vehicle Turning
- Material Storage

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Site Set up plan

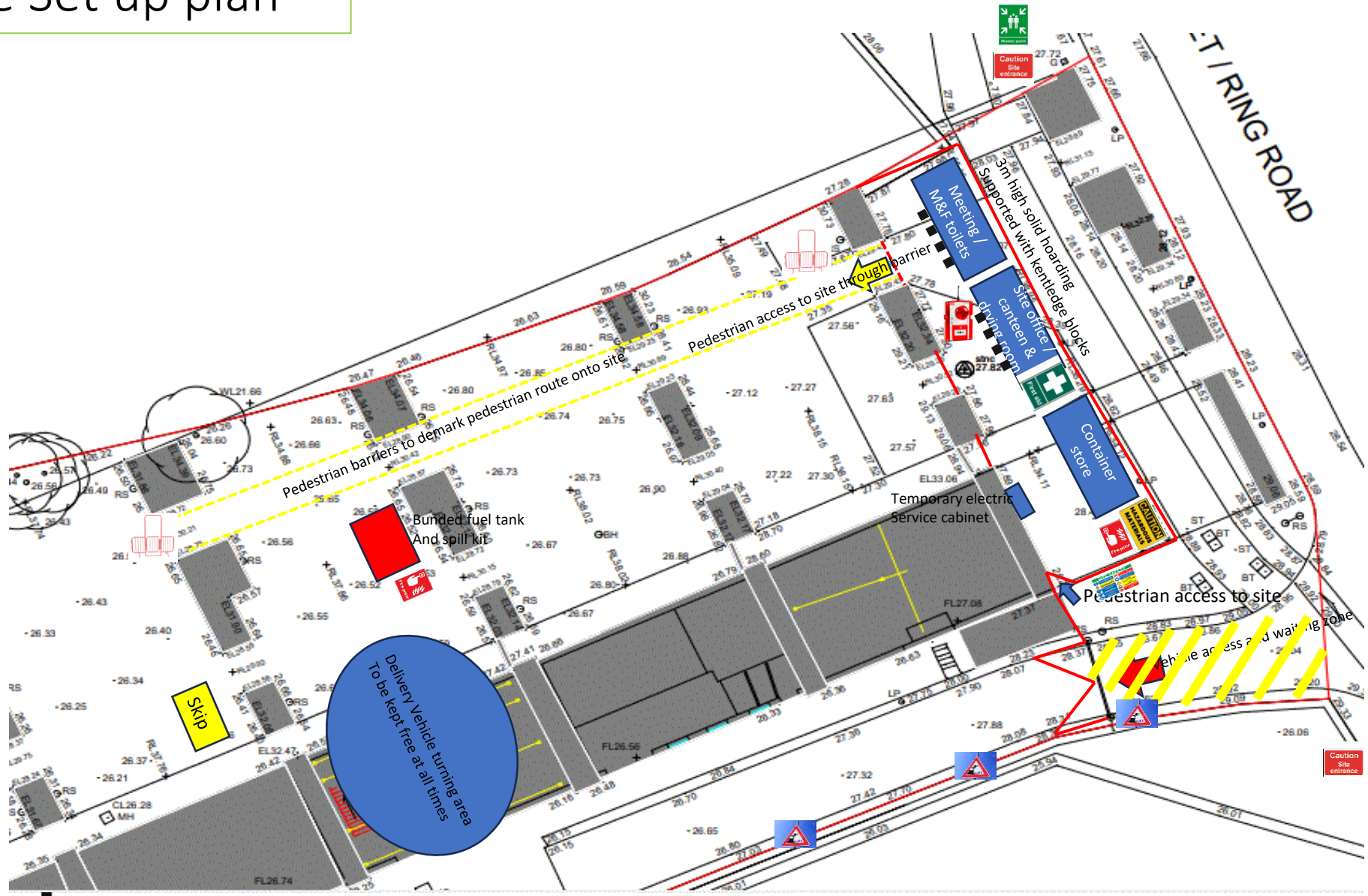


Key

Pedestrian Access	Heras fencing
Forklift access	Vehicle barrier
Site Cabins	Bunded fuel tank
Delivery Route	Water point
Vehicle Turning	Waste skip
Material Storage	Assembly point
3m solid hoarding	

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Site Set up plan

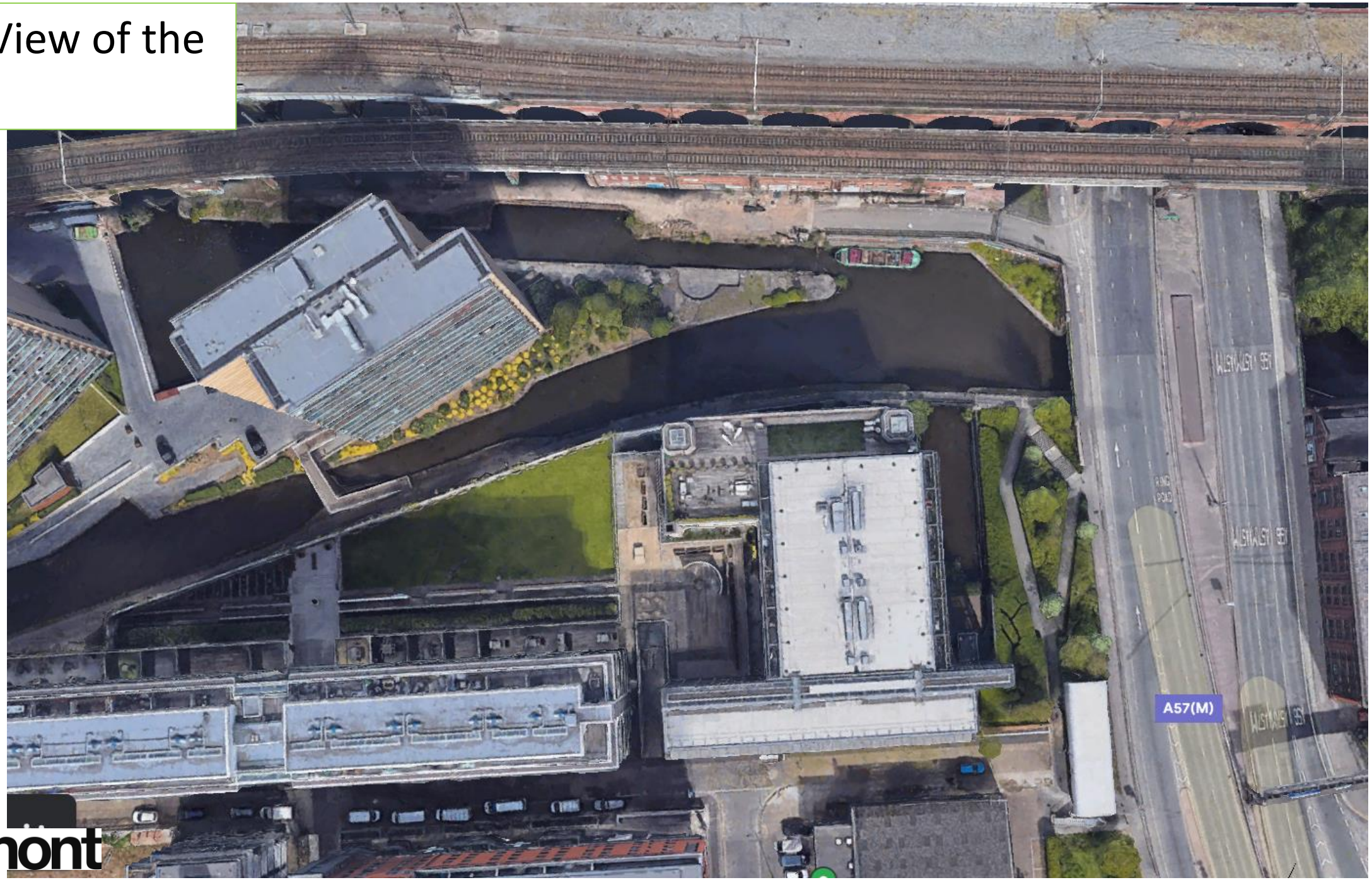


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Site Set up and Prelims requirements

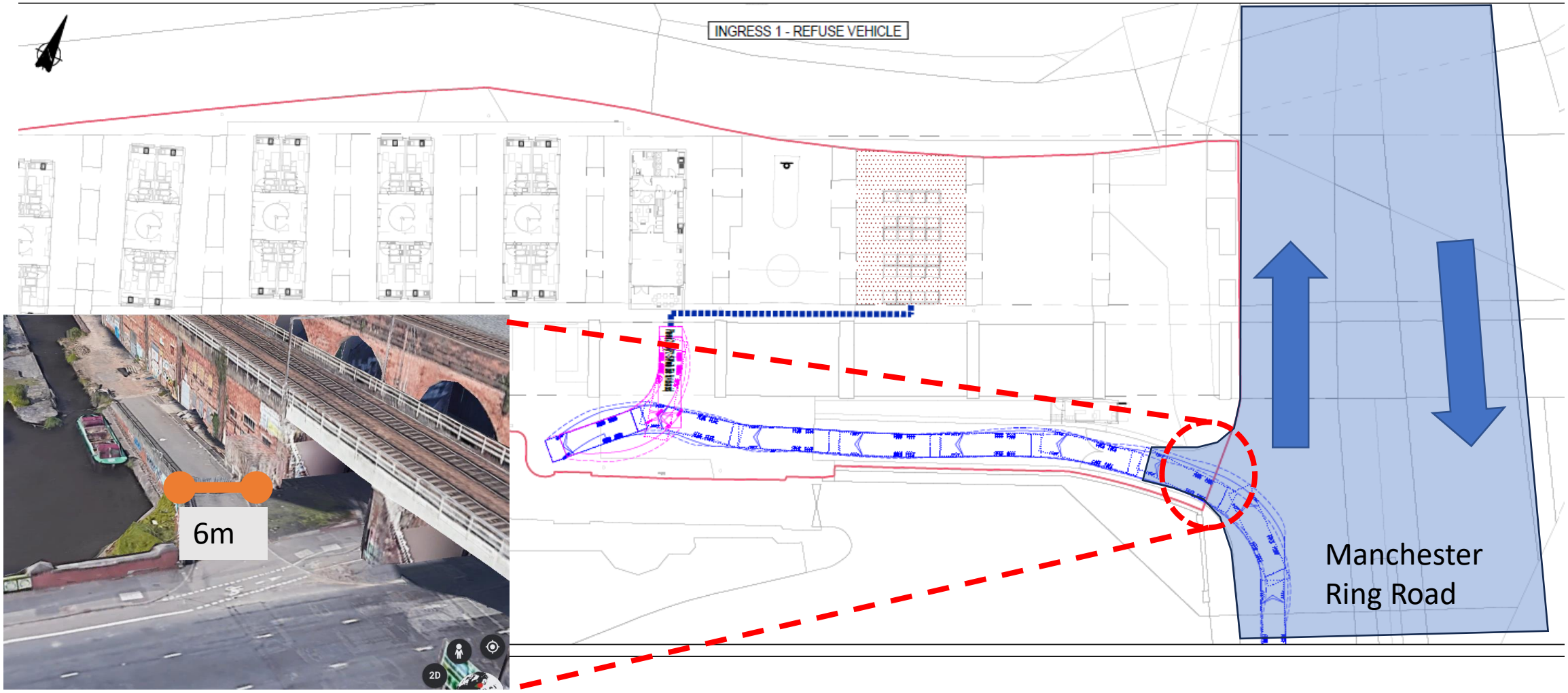
- Site cabins – 24ft x 10ft anti vandal 1nr site office above 1nr combi canteen / drying room. 1 nr 24ft x 10ft meeting room over 1nr male and female toilet unit with waste tank. 1nr 20ft x 8ft steel storage container. 1nr hazardous material store. Stairs to site office and meeting room.
- Hoardings / barriers – 3m high VCL standard close boarded hoarding to the perimeter of the compound and openings within arches. Pedestrian access gate to be provided. Hoarding to site boundaries with river and canal to be 2m high heras fencing supported off posts fixed into the ground. Pedestrian crowd barriers required to demark pedestrian zone onto site. Temporary Concrete Barrier kerbs required to edge of canal as shown on site set up plan. Main vehicle gates to be steel framed close boarded. Site safety signage to warn of site entrance on approaches. Caution water signs required to the canal and river edge. Site entrance safety signage at main entrance. Sign required to warn delivery vehicles not to attempt to exit without vehicle marshal in assistance.
- Other Storage – haz material store provided in the office compound along with fire point. Bunded and locked fuel tank located in archway 8 along with spill kit and fire point. Silo not required – mortar delivery by tubs.
- Fire – Wes alarm system to be utilised. 1 fire point per dwelling cluster, 1 fire point at refuelling station, 1 fire point in compound. Wes base station in site office.
- Attendant labour requirements – Materials to be transported using buggiscopic style telehandler. Telehandler driver required. Vehicle marshal required to control gate, control exiting vehicles and carry out wheel washing
- Plant requirements – Buggiscopic telehandler, 500ltr bunded fuel tank, petrol pressure washer, road sweeper required during groundworks period, 3 nr forklift tipper skips, concrete pump – 1 visit per arch unit, pallet truck.
- Security requirements – CCTV coverage of the site 2 cameras covering compound, 1 camera covering entrance,1 camera covering the refuelling zone, say 4 cameras covering general site areas. CCTV backed up with rapid response security.
- Waste – due to the lack of space, waste to be removed via 8yd skips and waste streams segregated at the waste depot. Waste on site transported by forklift tipper skips during brick superstructure works and via eurobins (1 per arch) during fit out stage.

Ariel View of the Area



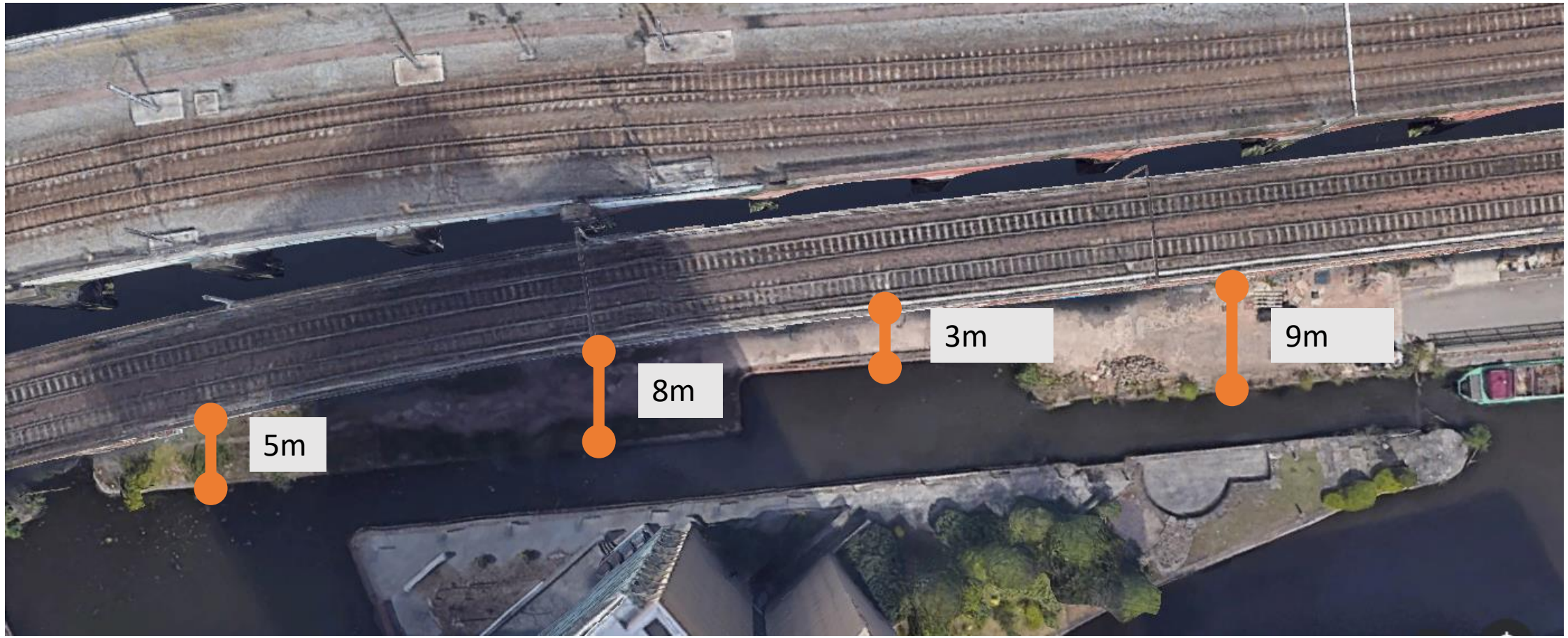
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Swept Path for Lorry Access



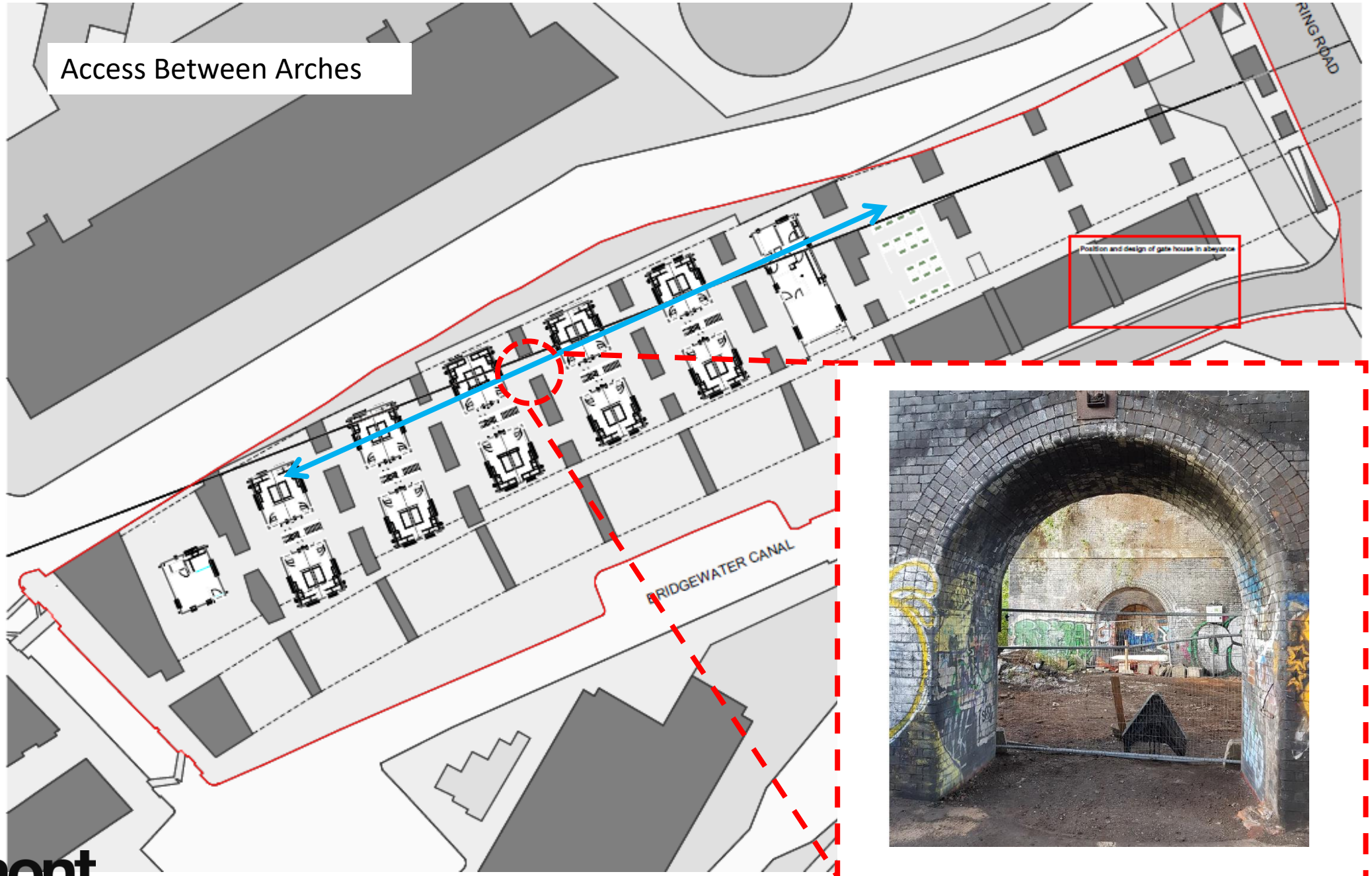
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Approx distances from the canal



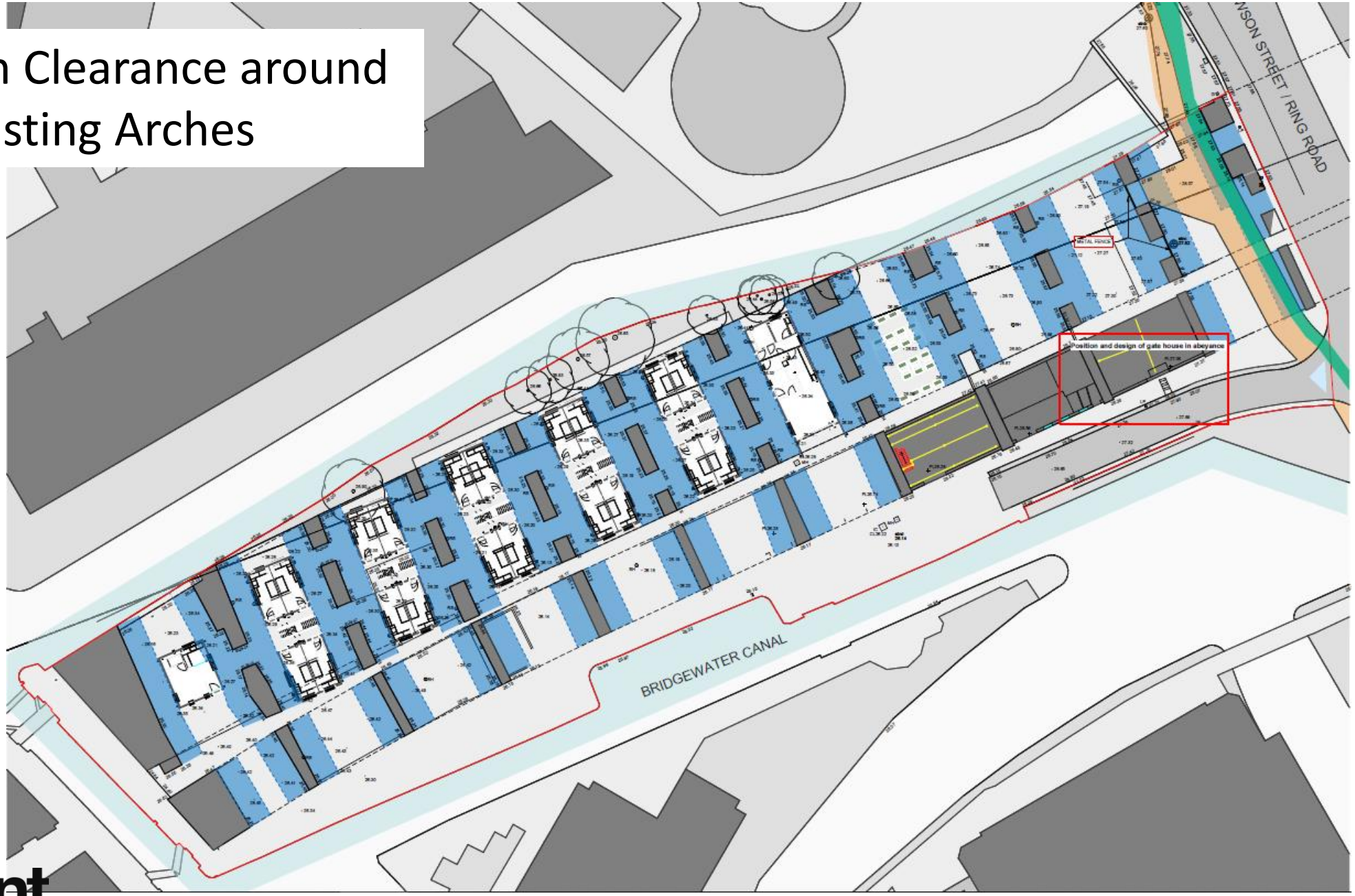
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Access Between Arches



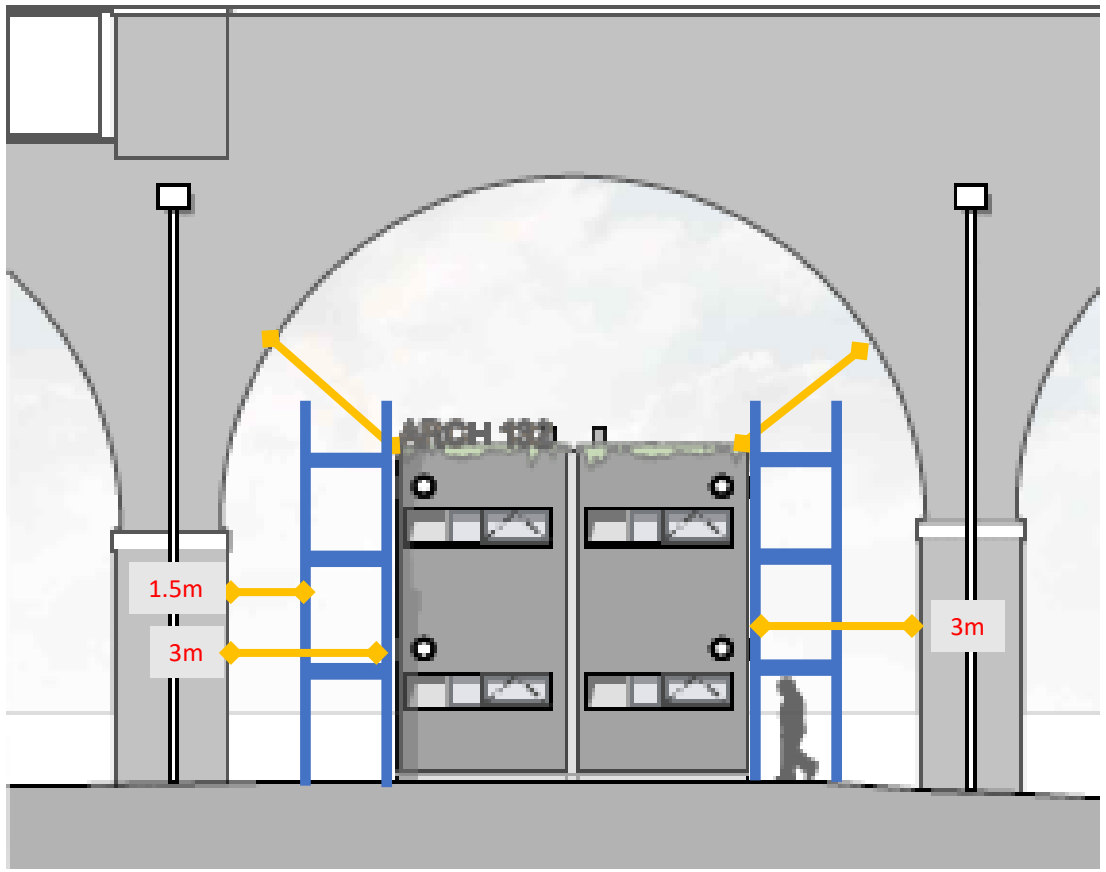
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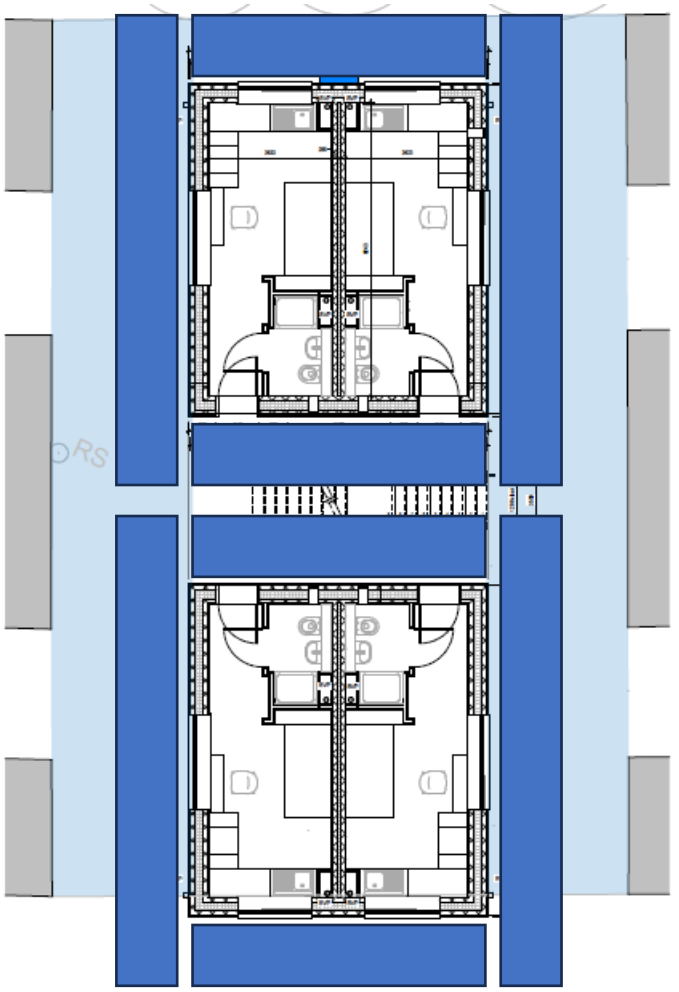
3m Clearance around existing Arches



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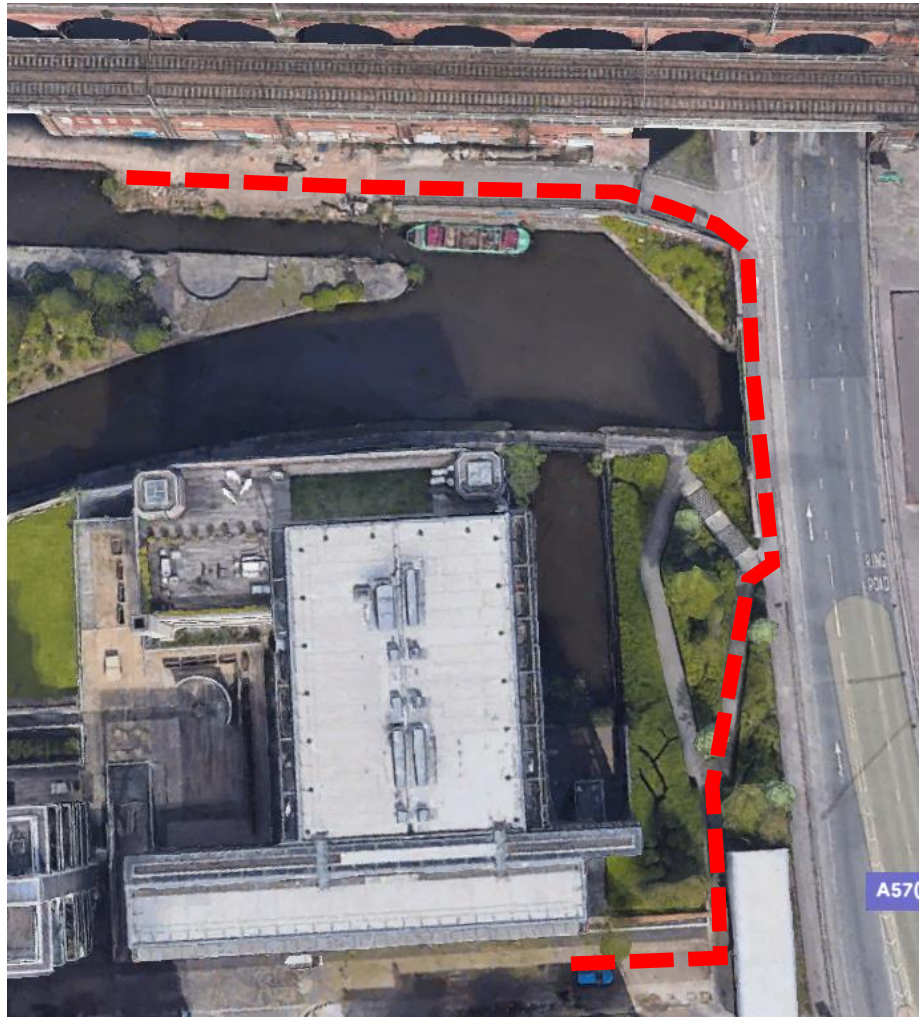
Scaffold Layout

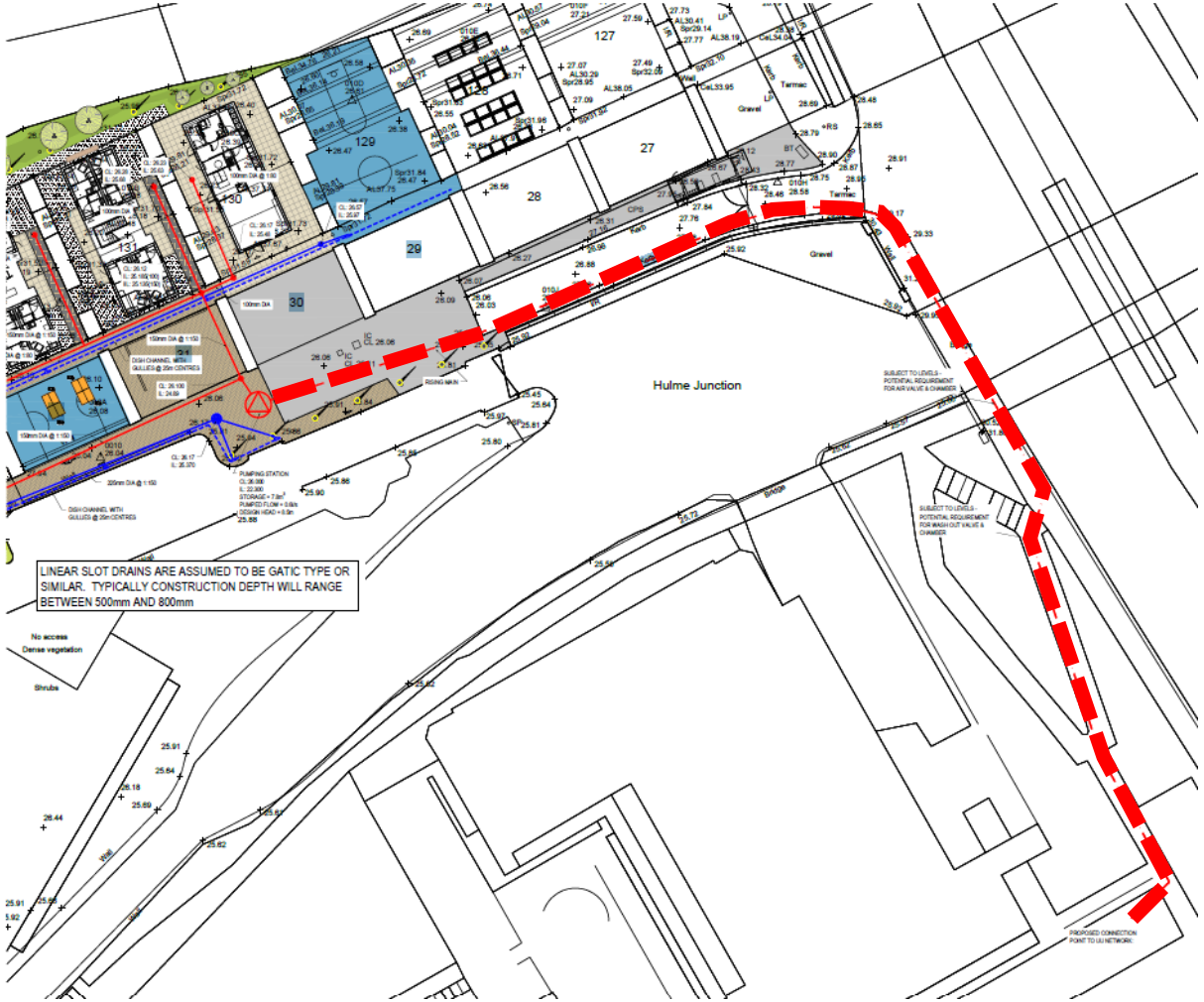




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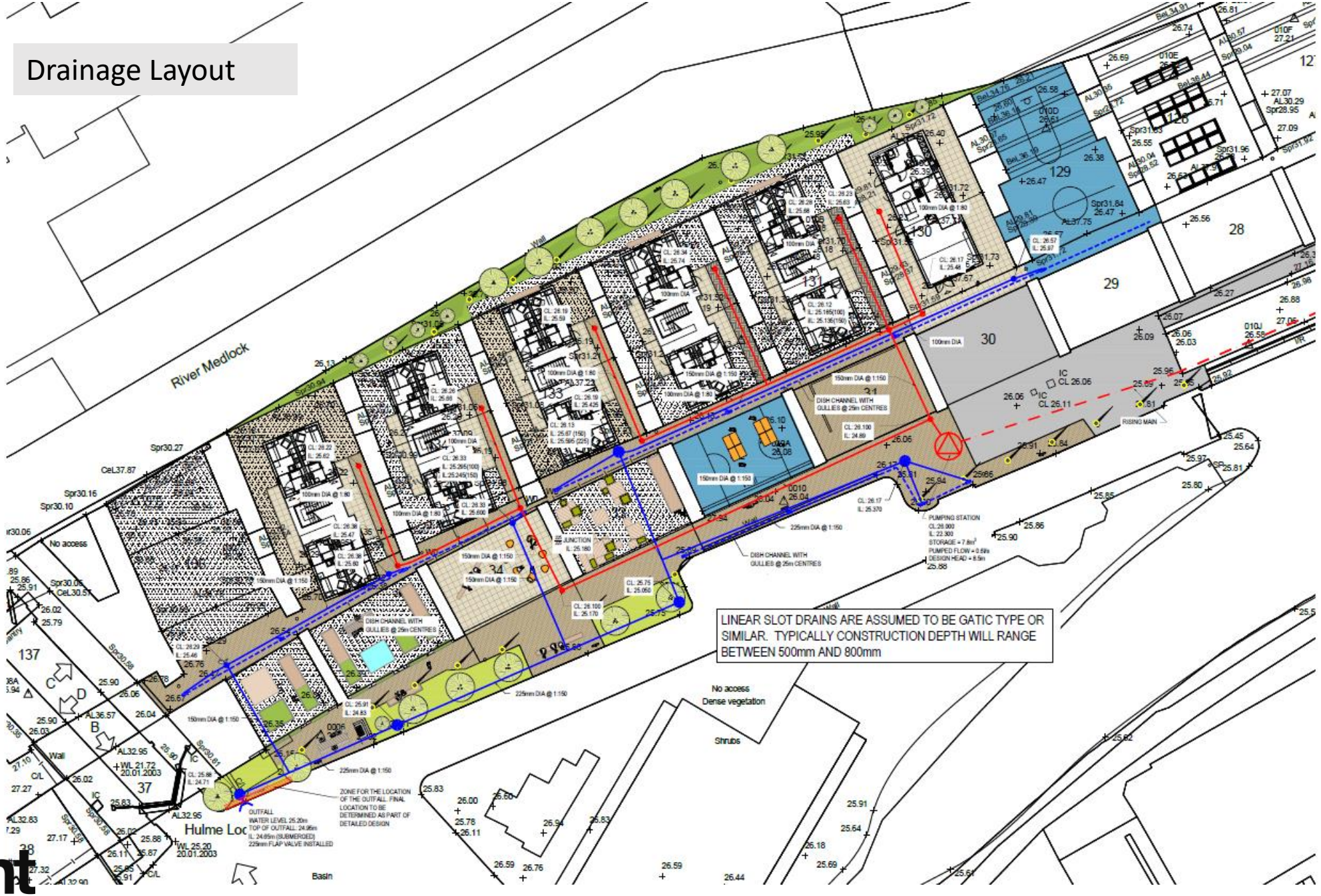
Pumped Drainage Route





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Drainage Layout



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Water Management

The site is bound by the river Medlock to the north and the Bridgewater canal to the south. The site is substantially protected from rainfall due to the overhead railway so run off water is expected to be minimal. However, a plan is required to deal with any surface water run off in the water courses. Run off shall be monitored initially to determine if this control measure is required. The site falls slightly towards the canal so run off into the river is very low risk so no physical action is deemed necessary at this boundary. There is an existing small upstand lip to the canal wall which should be retained to stop run off water entering directly into the canal.

Should run off water into the canal be evident, a small temporary land drain can be installed behind the upstand lip of the canal wall. The wall itself is listed and will not be touched.

The catchment drain can discharge into an existing water storage tank that will act as a temporary silt chamber. Clean surface water may then be pumped from the chamber into the canal.

Although rainwater into excavations will be minimal, any water that does enter the excavation can be pumped into the silt tank before being discharged in the same way.

A discharge licence will be required from Environment Agency.

Other mitigation measures include bunded controlled fuel storage. Designated re fuelling area away from the water edge. Spill kits to be provided. Concrete wash out directly into skips.

Water Management

Key

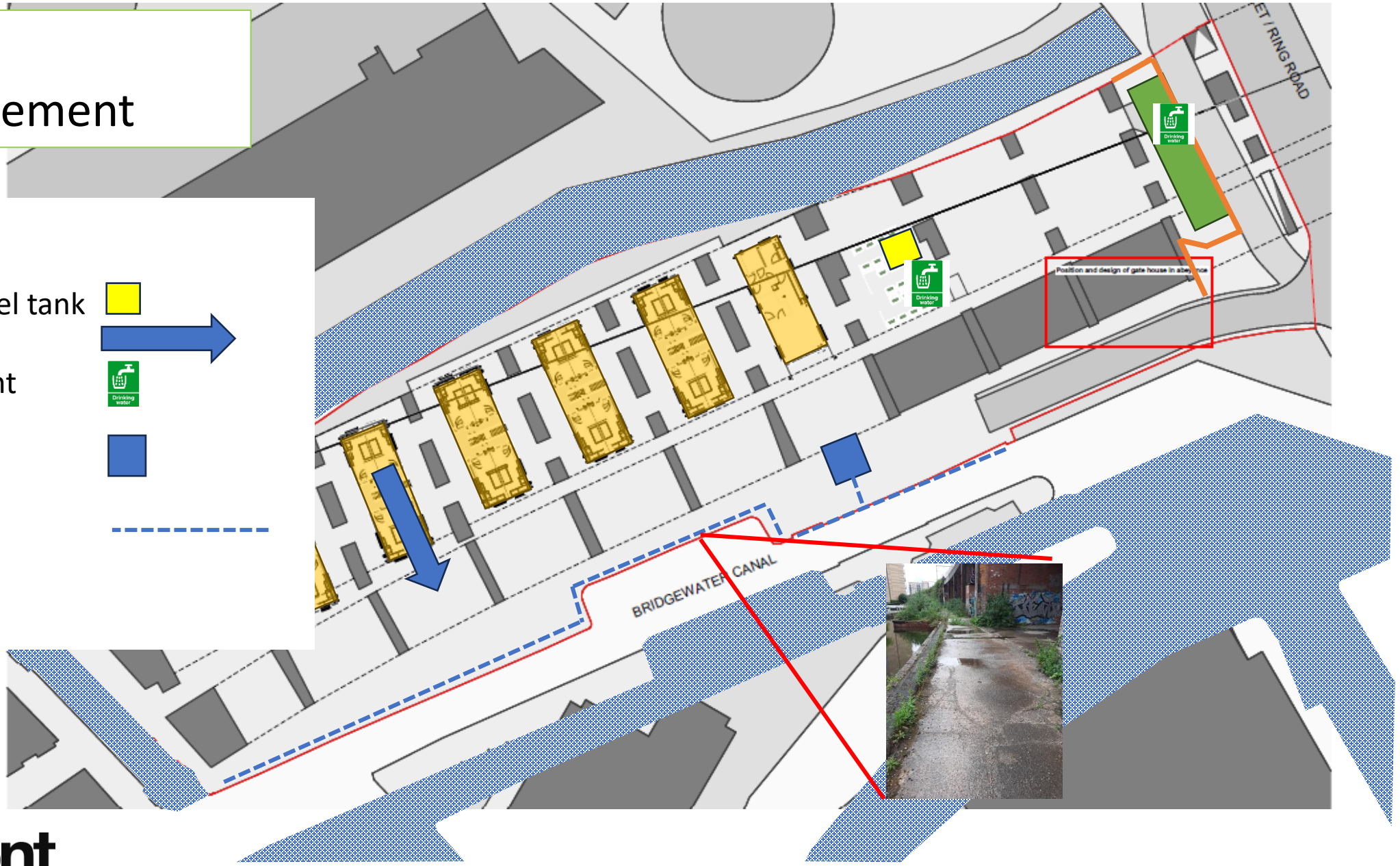
Bunded fuel tank

Slight fall

Water point

Silt tank

Land drain



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Appendix 3.3

PLEASE NOTE UTILITY SURVEY TO BE CHECKED AGAINST THE UTILITY STAT PLANS

LEGEND

BT
CABLE DUCT
CABLE TV
CCTV
COMMUNICATION CABLE
COMMUNICATIONS DUCT
ELECTRIC
FIBRE OPTICS
FUEL LINE
GAS
GUARD RAIL
MAINS WATER
SEWER CB
SEWER FB
SEWER SB
TELECOM SIGNAL CABLE
UNIDENTIFIED TRACE
UNIDENTIFIED CABLE
UNIDENTIFIED DUCT
VEHICLE DETECTION CABLE
SURVEY BOUNDARY

FROM STATUTORY AUTHORITY PLANS

BT
CABLE DUCT
CATV
CCTV
TELECOMS
ELECTRIC
MAINS GAS
SEWER CB
MAINS WATER
SEWER FB
SEWER SB

BD BACKDROP PIPE
BLK BLOCKED
COT COT TO TRACE
EOS END OF SURVEY AREA
NFV NO FURTHER OPR CONTACTS
NVP NO VISIBLE PIPE
S/L SIGNAL LOSS
TPR TRACE FROM RECORDS
UP UNKNOWN PIPE
US UNKNOWN SERVICE
U/L UNABLE TO LIFT
U/PS UNABLE TO PUSH SONDE FURTHER
U/T UNABLE TO TRACE
T.o.t EOT SYMBOL

UNIDENTIFIED - A buried feature or utility that has been located, but we are unable to state what it is.

UNPROVEN - The assumed location of a recorded feature or utility, usually taken from records, but not found during the utility trace due to various conditions.

CAUTION - Electric pot ended cables, even when they are live, are unable to be detected or traced.

UNDERGROUND UTILITIES SERVICES DISCLAIMER

We have endeavoured to locate existing services using records provided by Statutory Authorities as a guide. Some apparatus were untraceable and details have therefore been taken from Utility Record Drawings, which may be of poor quality. Consequently we cannot guarantee accuracy of information taken from such records.

Where indicated, no allowance has been made for subsurface entry into manholes, other chambers or confines spaces below ground level. Therefore any details relating to depths, sizes etc. are taken from the surface and as such will be approximate.

We have endeavoured to supply you with the most accurate data possible by using methods and equipment that are at the forefront of our industry. We have taken great care in the detection of opensore and buried features, but as with all methods of detecting underground or buried utilities the information provided is based on results obtained from electromagnetic techniques, and as such may be liable to distortion or errors beyond the reasonable control of the operator or his instruments.

It is the responsibility of the user under Health & Safety (HSG47) Guidelines to satisfy himself of the suspected location of any services prior to excavation of the services shown.

NOTE 1

This utility survey has been undertaken using:
A Radiodetector RD8100 + RD8000 TdX
A Malo Geoscience Ground Probing Radar

NOTE 2

Power carrying features shown on this drawing are shown as an individual service line. This does not necessarily represent the number of cables actually present and it is possible that there could be multi numbers of cables including HV, LV and communications transmission cables following the same trace line. These could be at different depths, the trace signal from the deeper cables being masked by signal emitted from the shallower service cables. Cable mains could also be present running parallel to the single line shown.

There are two main reasons that GPR can be inhibited when scanning an area one is conductive soils and the second is the dielectric constant.
Conductive soils:
One example of a conductive soil would be clay.
Clay has a large amount of ferric material in it, hence clay is considered a conductive soil type. Due to the soil's conductive nature, the GPR wave gets "scattered" before it can return to the antenna. Other examples of conductive soils would be damp or wet, soils that have a high salt content often near sources of salt or brackish water. The ions from the salts create a much more conductive soil and limits the GPR wave's resolution.

Dielectric constant:
A simple explanation would be that the dielectric constant is a measure of how permissive the soil and the targets in the soil are to the radar wave being pulsed into the ground. It is much more complicated than that, but to not over complicate, we will work with this explanation.
So if you have a sandy-mixed soil with a concrete pipe and a metal pipe in it, the GPR wave will enter the soil at a certain rate and that rate will change as it goes through differing soil layers or differing pipe structures. A metal pipe is 100% reflective so it will stand out in the image. Most utilities will actually be noticeable in a sandier soil because the radar wave meets little resistance in this soil until it hits the utilities. However, an old concrete pipe or structure may have a dielectric constant that is close to the surrounding soil. The result is that pipe or structure may fade into the background of the GPR image, making it hard to see.

Survey category	Quality level designation	PAS 128 CRITERIA USED IN THE DETERMINATION OF QUALITY LEVEL
Desktop utility survey	QL-D	Compilation, review and interpretation of existing records
Site reconnaissance	QL-C	A requirement of a utility survey that is determined by visible evidence of surface features, topographical survey or evidence of previous street apparatus/trench work, the detection possible.
Detection	QL-B1	A utility segment which is suspected to exist but has not been detected and is therefore shown as assumed route. No detection possible.
	QL-B2	Position of the utility survey detected by one of the geophysical techniques (Radio detection or GPR with limited confidence in depth).
	QL-B3	Position of the utility survey detected by one of the geophysical techniques (Radio detection or GPR with confidence in depth).
	QL-B1	Position and depth of the utility detected by multiple geophysical techniques (Radio detection and GPR).
Verification	QL-A	Non-invasive use of plan location of the top visible portion of the utility. Additional attribution is recorded as specified in PAS128. Activity exposed - trial pit, vacuum excavation, CL (Ø) etc). At 10's Mm's where utility is confirmed. Only denote where utility cannot be verified at 10's Mm's e.g. flooded chamber/no space visible.



N
W RJP E
S

COORDINATED STATIONS

STATION	EASTING	NORTHING	LEVEL (m)
A	382802.086	397471.367	30.202
B	382769.465	397532.217	27.630
C	382772.636	397503.685	27.817
D	382736.793	397466.538	26.143

ABBREVIATIONS

AV	AIR VALVE/VENT	IC	INSPECT CHAMBER
BOL	BOLLARD	IL	INVERT LEVEL
BB	BELISHA BEACON	JKW	JAPANESE KNOTT WEED
BM	BENCH MARK	LH	LAMP HOLE
BL	BED LEVEL	LP	LAMP POST
BS	BUS STOP	NP	NAME PLATE
BT	BRITISH TELECOM	MH	MANHOLE
CL	COVER LEVEL	PS	POST/SIGN POST
DII	DILAPIDATED	PB	POST BOX
DIs	DISUSED	PX	UNKNOWN SERVICE
EL	EAVES LEVEL	RE	RODDING EYE
ELE	ELEC JUNCT. BOX	RL	RIDGE LEVEL
EP	ELECTRICITY POLE	RS	ROAD SIGN
FH	FIRE HYDRANT	ST	STOP TAP
FL	FLOOR LEVEL	TH	TRIAL HOLE
FOS	FULL OF SEDIMENT	TL	TRAFFIC LIGHT
FP	FLAG POLE	TP	TELEGRAPH POLE
G	GULLY	TV	CABLE TV BOX
GM	GAS METER	UTI	UNABLE TO LIFT
GV	GAS VALVE	WM	WATER METER

SYMBOLS

SURVEY STATION
E O\H ELEC CABLE
T O\H PHONE LINE
CANOPY\HEDGE
TREE
BENCH MARK
TRIAL PIT
BOREHOLE

NOTES

A) ONLY MANHOLES AND SERVICES VISIBLE AT TIME OF SURVEY SHOWN

B) O/S USED AND ORIENTATED TO TRUE NORTH

C) LEVELS IN METRES RELATED TO G.P.S.

D) DRAINAGE INFORMATION TAKEN FROM LOCAL AUTHORITY RECORDS. INFORMATION MUST BE CHECKED PRIOR TO WORK COMMENCING

Rev	Description	Date

PROPOSED DEVELOPMENT AT EMBASSY VILLAGE, CASTLEFIELD

ARCADIS

GPR SURVEY

AS001/GPR

Surveyed	CF
Drawn	CF
Date	DEC 2022
Scale	1:500 @ A1

RJP Surveying Consultants Ltd
LAND SURVEYORS & SITE ENGINEERS
AYREFIELD COTTAGE
AYREFIELD ROAD
ROBY MILL
UPHOLLAND
LANCASHIRE
WN8 0QP
TEL: 01257 251554
MOBILE: 07710 308709
WEBSITE : www.rjpsurveyors.co.uk
E-MAIL: mail@rjpsurveyors.co.uk

Appendix 3.4



COBRA D500

Compact Versatile Drop Hammer Rig
Made by Adler Arbeitsmaschinen
Sold by Piling Equipment Ltd

Working Dimensions
Length: 2908 mm
Minimum Width: 810 mm
Maximum Width: 1656 mm
Maximum Height: 4256 mm
Basic Weight: 1650 kg

Transport Dimensions
Length: 3172 mm
Width: 788 mm
Height: 1877 mm

Technical Specifications
Engine: Kubota 3 Cyl D1105 18.5 kw @ 3000 rpm
Controls: Onboard Controller
Maximum Diameter Holes: 273 mm
Casings: 273 mm
Drophammer Guide

Main Applications
Steel Case, Mini Piling

Sound Levels
Emission Sound Pressure: 77.1 dB
Sound Power Level: 85.1 dB

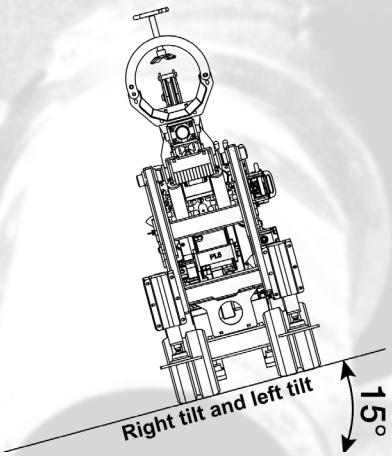
Telescopic Mast
Hydraulical Mast Tilt: 10°
Hydraulical Mast Extension: 1000 mm
Winch: Pullmaster PL 5
Winch Capacity: Up to 750 KG

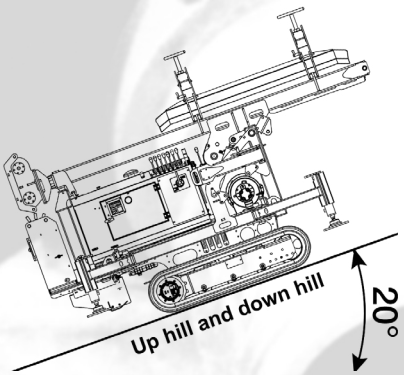
Ground Bearing Pressure
Hydraulic Legs: 312 N/m²
Driving: 46 N/m²
Angle Of Forward Inclination: 20°
Angle Of Side Tilt: 15°

Hinowa PT 15 Undercarriage
Tracks: Rubber / Adjustable
Max Speed: 2.2 km/h

B25 Machine Base
2 Front / 2 Back Hydraulic Stabilisers: Turn-able
Stabiliser Enlargement: 200 mm

Hydraulic Pumps
1: 17 ccm @ 50 l/min, 200 Bar
2: 4 ccm @ 12 l/min, 200 Bar





PILING EQUIPMENT LTD, Solutions House, Centurion Way, Warminster, Wiltshire, BA12 8BT
T: 01985 219192 E: admin@piling-equipment-ltd.com www.piling-equipment-ltd.com

















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Appendix 3.5

Water Management Plan

for

Embassy Village Manchester

Project No **VCL** .....

Rev No: **-** Dated: **July 2023**

Revision Prepared by  Paul McGowan

Print Name

Initial PWS Approved by

Date

Construction Director or Manager

Review Record I confirm that the work is progressing in accordance with this Plan			
Review Date	Revision Details (where applicable)	Rev	Reviewed by

Distribution			
Name	Location	Date	Sections Issued

1.0 Introduction

The Project Water Management Plan (WMP) set out a framework for planning the most efficient use of water within the scheme. The plan outlines the environmental risks associated and considers the appropriate measures to mitigate against these risks both from design through to construction phases.

Project Overview

The project consists of the construction of 40 studio accommodation units, village hall and staff accommodation for Embassy Village, a charity in Manchester providing a new community project to provide accommodation for homeless and vulnerable people.

The scheme is located off Egerton Street Manchester and located underneath existing railway arches. The site is bound by the Bridgewater canal to the south and the river Medlock to the north.

The units are traditionally constructed in pods of 8 studios per archway comprising mini piled foundations, reinforced concrete ground floor slab, traditional blockwork superstructure structural walls, timber first floor, timber flat roof structure with single ply membrane and aluminium external wall cladding.

The scheme also includes extensive external landscaping works.

2.0 Organisation

Vermont Responsible Person

The Responsible Person should ensure that a '**Water Management Plan'** is developed that clearly defines responsibilities, procedures and specific actions required to manage and mitigate the risks. They should nominate competent persons for each activity and populate the below table including the start date of each activity taken from the construction programme. The checklist in Section 7 should be used as reference to ensure that all relevant measures have been included.

Project Design Manager-

The Design Manager should establish the means for bringing in, handling and discharging temporary and permanent water supplies in the buildings under construction. This should include designated water discharge points/routes and should include supply/discharge of water from roof drainage systems, sprinklers, HVCA systems and temporary welfare & accommodation facilities, where set up inside the building.

Mechanical Competent Person–

The mechanical competent person is responsible for implementing the requirements of the WMP within the permanent works including water mains, wet risers, sprinkler installation, HVCA systems and above ground drainage.

Specific Activities - Nominated Competent Persons

All site contractors will pay due consideration to Activities requiring water usage or generating waste water to detail such arrangements within their method statements and ensure controls are implemented

The competent person can be nominated from the Subcontractors as specialists in their area. The people list ed below are responsible for implementing the WMP within the activity that they have been nominated to be responsible for.

Activity	Company	Date Activity Commences	Name	Contact Details
Ground Water	*Groundworker*	October 2023	TBC	TBC
Surface water	*Vermont*	October 2023	Paul McGowan	Paul.w.mcgowan@vermontcl.com 07795628547
Temporary (construction) Water	*Vermont*	October 2023	Paul McGowan	Paul.w.mcgowan@vermontcl.com 07795628547
Permanent Water	*Mechanical Subcontractor*	October 2023	TBC	TBC
Welfare	Powerline	October 2023	TBC	TBC

3.0 Design Considerations and Mitigation

The selection and design of the water distribution systems should be based on a comprehensive risk assessment. (Refer to required standard for examples)
Designers Risk Assessment for water distribution – to be appended to the WMP.

Give any examples of favourable features that have been designed into the project as well as unfavourable features that have been designed out.

Positive examples contained within the project are: Drainage surface water outfall directly into Bridgewater canal. Units are under the semi protective cover of the railway above – very little rainwater will discharge onto the roof areas.
Issues on the scheme to be addressed: Scheme is adjacent to the Bridgewater canal and the Medlock river. Surface water run off needs to be controlled to prevent run off into these water courses. Foul drainage is via pump and rising main to a point of connection approx. 100m off site Fuel storage for plant to be controlled to avoid run off into water courses

4.0 Quality Control

Accreditation

To be confirmed upon appointment of M&E contractor

Testing Regimes

Drainage systems to be air pressure tested, witnessed by LABC and CCTV surveyed before completion. Domestic water installation systems to be pressure tested as work proceeds, inspected, witnessed by principle contractor and recorded

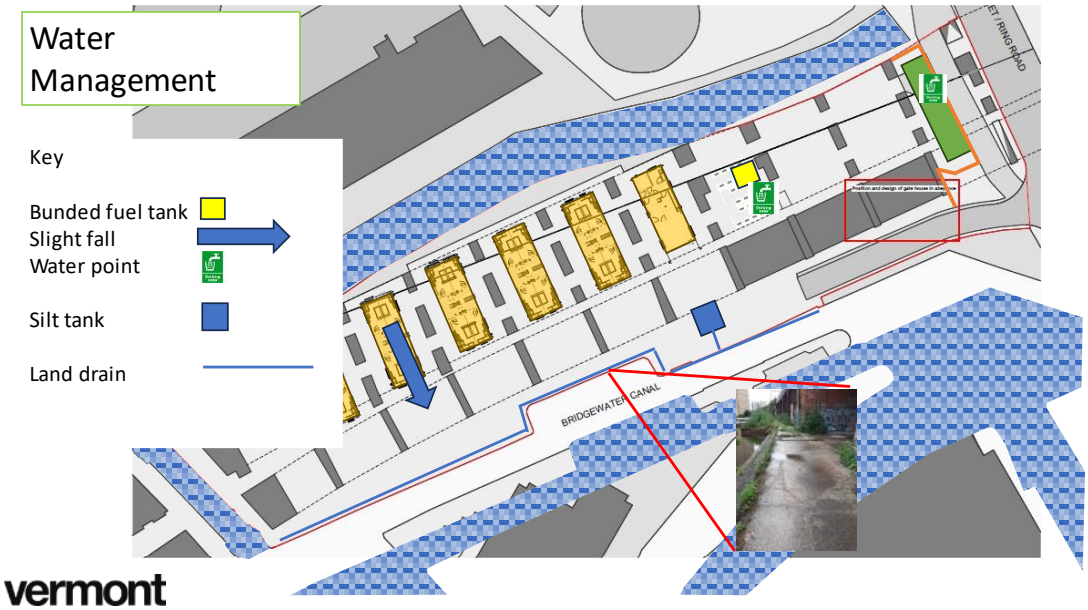
5.0 Mitigation

5.1 Construction Mitigation

5.2.1 Site activities where water is used and sourced

Activity	Water Use	Potable/Non potable
Site Temporary Water Supply	Site construction activities	Non potable
Site Welfare	Drinking, kitchen, canteen	Potable
	Toilets, urinals, handwashing etc	Non potable
Drainage	Flushing	Both
Wheel wash	Cleaning	Non potable
Dust Suppression	Damping down	Non potable

5.1.1 Source of available water



5.1.2 Methods to manage water sources

Complete table to detail method to manage the water sources as identified in the above table

Source – **Surface Water**	Method to manage (options to reduce potable water use, and mitigate leakage and potential flood risk)
(Storm / rain / flood - run off)	The site is bound by the river Medlock to the north and the Bridgewater canal to the south. The site is substantially protected from rainfall due to the overhead railway so run off water is expected to be minimal. However, a plan is required to deal with any surface water run off in the water courses. Run off shall be monitored initially to determine if this control measure is required. The site falls slightly towards the canal so run off into the river is very low risk so no physical action is deemed necessary at this boundary. There is an existing small upstand lip

	to the canal wall which should be retained to stop run off water entering directly into the canal. Should run off water into the canal be evident, a small temporary land drain can be installed behind the upstand lip of the canal wall. The wall itself is listed and will not be touched. The catchment drain can discharge into an existing water storage tank that will act as a temporary silt chamber. Clean surface water may then be pumped from the chamber into the canal. Although rainwater into excavations will be minimal, any water that does enter the excavation can be pumped into the silt tank before being discharged in the same way. A discharge licence will be required from Environment Agency. Other mitigation measures include bunded controlled fuel storage. Designated re fuelling area away from the water edge. Spill kits to be provided. Concrete wash out directly into skips.
Programme Phasing / Sequencing	Land drain requirement needs to be established before works commence on site and if required, installed before groundworks commences.
Identify additional sources of Surface water and methods to reduce water usage / waste	Rainwater is minimal to 90% of the site as it is protected by the railway above. There is however a broken rainwater pipe from the railway. This should be repaired by Network rail prior to commencing on site.

Source – **Ground Water**	Method to manage (options to reduce potable water use, and mitigate leakage and potential flood risk)
Dewatering	Non envisaged other than localised pumping out of excavations. This water can be pumped into the silt tank as above before being discharged as clean water.
Programme Phasing / Sequencing	During excavations
Identify additional Ground water Activities and methods to reduce water usage / waste	

Source - **Construction Water**	Method to manage (options to reduce potable water use, and mitigate leakage and potential flood risk)
Site Temporary Water Distribution	Water supply locations identified on the plan above. Water points to be kept external from the studios.
Welfare	Ensure efficiency of showers, taps and toilets by introducing triggers or sensor controls, consider utilising rainwater capture for flushing.
Drainage	Re use the existing water storage tank and re purpose into a silt pit tank.
General Cleaning	Fill containers rather than use running taps or open hoses / trigger operated spray guns/hose nozzels
Dust Suppression	Use of water efficient road sweepers (which recirculate water)
Concrete Frame / core	N/A
Commissioning	Planned water use – sequential flushing / sub valving and reuse where practicable

	Isolate water flow as soon as water turns clear when commissioning pipes and systems
Programme Phasing / Sequencing	Permanent drainage system is to be installed early in the programme
Identify additional construction Activities and methods to reduce water usage / waste	

5.1.3 Local water resources and catchment

Identify and local water courses. River Medlock and Bridgewater canal directly adjacent to the site.
Site elevation and site conditions – The site is 4m above the river and circa 500mm above the canal. 90% of the site is covered by the railway. The site has a slight fall towards the canal but is generally flat.
Detail plan to consider the removal of existing drainage in line with the installation of new drainage, and the potential requirement for temporary over-pumping, silt traps etc. – Use of existing water storage tank as silt trap. Investigate the existing railway drainage.
Management of rainwater during the progress of the structure. Rainwater is well managed by the presence of the railway

5.1.4 Permits & Licenses

There is a planned permanent outfall discharging into the Bridgewater Canal. Licence will be required from Bridgewater Canal Company. Canals and Rivers Trust do not control this canal or river Medlock.

Permit to discharge into the canal will be required off Environment Agency.

Water related consents, licences, permits and regulatory requirements

Type of Permission	Details	Timing of Submission
Permit for Discharges to Surface Water	*Environmental Permit to be obtained from the EA.*	*3 months prior to construction.*
Water Abstraction License	*License required under Section 24,*	*4 months prior to construction.*

5.1.4 Efficient Site Welfare Facilities and Plan

Site Welfare - Water efficiencies to be made in the selection of amenities for the site welfare facilities

Water efficiency – Main supply	*Site welfare facilities use plumbed in water dispensers*
Hand basins,	*The use of motion sensors; and Installing taps with efficient flow patterns e.g. spray taps or aerated taps*
Toilets	*All new toilets would have a flushing volume of 6 litres or less*
urinals	*installing a device to control the flushing based on how often the urinal is used*
Showers	*showers are to be installed as part of the welfare facilities and a flow rate of 6 to 8 litres per minute*
Sinks / Basins	*A trigger control to ensure auto-isolation of flow would be fitted to sink taps involved in food preparation or canteens.*

Plant and Equipment - The large majority of activities on site using water sources would inevitably involve plant or equipment. Water using activities have

already been identified in 5.1.2 The frequency of use would be taken into account in the procurement

Maintenance

Welfare facilities would undergo on-going maintenance to ensure low water-use. In order to achieve this, basic checks can be carried out to ensure facilities are operating as designed through:

- Checking that taps are not dripping;
- Checking that percussion taps do not run for longer than necessary;
- Ensuring the sensor driven taps and/or urinals are working correctly; and
- Ensuring that toilets are not leaking through the overflow or valves.

Plant and equipment would each have individual maintenance requirements. The instruction provided with the equipment or from the hire company would be followed to ensure efficient water use

6. Emergency Response

Mechanical competent person to be identified once M&E contractor appointed. Leak emergency plan will then be drafted. Spill kits will be provided by all fuel store / refuelling area.

7. Training and awareness

Ensure an induction slide is developed and included withing the site induction to cover project water management. • Induction slide • TBT • MS/RAMS

7.1 Water Damage Checklist

	Item	Y/N	Action
1	A Responsible Person has been nominated to manage the water damage risk		To be appointed when M&E contractor appointed
2	A Competent Person has been nominated to assist in the management of the water damage risk		To be appointed when M&E contractor appointed
3	A documented Water Management Plan is in place	Y	
4	System design and selection has been subject to a risk assessment		To be developed in design
5	Favourable and unfavourable design features have been considered and either incorporated or eliminated	Y	
6	Suitably competent organisations have been appointed to work on the plumbing and heating services		To be appointed when M&E contractor appointed
7	The competence of individuals has been checked and qualifications, training and experience verified		To be checked when M&E contractor appointed
8	A Quality Control Procedure has been put in place for the testing and commissioning of the distribution systems		To be implemented when M&E contractor appointed
9	Appropriate mitigation measures are in place to ensure that escape of water is detected early and services isolated without undue delay		To be implemented when M&E contractor appointed
10	Emergency Response Procedures have been established, documented and tested		To be implemented when M&E contractor appointed
11	Wherever possible, water systems, pumps and temporary supplies etc. are isolated when the building is left unattended	Y	
12	The work has been sequenced so as to reduce the likelihood of weather-related damage	Y	
13	The Water Management Plan is regularly reviewed by the Project Team to ensure that all risks have been identified and that appropriate mitigation is in place	Y	This is the first draft to deal with mainly run off water issues. Plan will be developed as design progresses

14	The risk of damage from weather related causes has been assessed and appropriate strategies, mitigation and emergency response procedures put in place	Y	

Appendix 3.6

vermont

Project Waste Strategy Plan

For

Embassy
Village
Manchester

No **VCL ---**

Rev No: **-** Dated: **July 2023**

Revision
Prepared by



Signed - Site Waste Co-ordinator

Paul McGowan

Print Name

Initial PWSPP
Approved by

Construction Director or Manager

Date

The Project Manager must review this document and amend the different sections to be project specific.
Obtain targets relative to the specific project and type of construction and set targets accordingly.

Review Record	I confirm that the work is progressing in accordance with this Plan		
Review Date	Revision Details (where applicable)	Rev	Reviewed by
03 07 2023	First Draft	-	PMcG

1.0 Introduction

Prior to populating this document, you must have read and be versed with RS 031 Waste Management Strategy for sites. This document should be read in conjunction with the Vermont Materials and Logistics Management plan.

The object of the Project Waste strategy plan (PWSP) is to reduce the overall waste produced during the construction phase of the project by all parties concerned. To ensure this happens it is important to understand what excess materials are likely to be generated and then focus on how the generation of those excess materials can either be avoided or the material can be diverted from landfill.

The key objectives of this plan therefore must be to

1. Minimise the amount of waste generated as part of the project
2. Maximise the amount of material which is sent for reuse, recycling or reprocessing.
3. Minimise the amount of material sent to landfill.
4. Maximise the weight of waste in each skip to minimise the total number of skips sent off site.

2.0 Roles and Responsibilities

Project Lead – Paul McGowan

To plan and communicate the Project Waste Strategy Plan. Ultimate responsibility for managing, controlling all elements of Waste Management and ensure that the Project Waste Strategy Plan is followed and implemented. To delegate any responsibilities throughout the site team as required. Challenge the design so that waste can be minimised through standardised sizes.

Project Manager (site waste Coordinator) – Paul McGowan

To plan and communicate the Project Waste Strategy Plan. Ensure that the team are complying with their responsibilities to effectively manage the Design Team, Supply Chain and Site Logistic Team to ensure that the waste reduction targets are generated and adhered to. Review any Non-Conforming waste outputs with the Supply Chain.

Design Manager – Mike Smethurst

Raise the projects site waste commitments early on in the design process with the Design Team, explore methods to reduce waste generated on site, through off site fabrication, material selection and standardising sizes to reduce cutting.

Project Quantity Surveyor- TBC

Ensure that the requirements of the PWSP are incorporated within all enquiries and understood by the supply chain. To issue the Housekeeping and waste questionnaire document with all tenders. Ensure that monies are held from the supply chain to recover any additional costs for unplanned waste as a result of non-conforming/defective works, over-ordering of materials and/or damage materials as a result of logistical miss management and/or poor storage or protection.

Logistics Manager - TBC

Ensure that the MLMP is kept up to date and communicated to the supply chain, and also ensure that the MLMP is followed so that material damages are minimised, and the waste collection and removal plan is followed. Inform the Project Lead if the MLMP does not align with the PWSP at any time.

Site Manager – TBC

To implement the PWSP, and ensure that the supply chain is following the commitments that they have agreed to as part of their waste reduction plans. Review the efficiency of the waste removal process on site regularly, and report any issued to the Project Manager. Report any unplanned waste production (such as non-conforming/defective works, over-ordering of materials and/or damage materials as a result of logistical miss management and/or poor storage or protection) to the Project Manager and QS for contra charging.

Site Administrator – TBC

To update the PWSP information tables minimum monthly with the waste volumes removed from site as provided by the Waste Management Company.

Supply Chain Management

All SC's must complete and return their Housekeeping and Waste Reduction Questionnaire forms. Subcontractors to include waste minimisation requirements, ensuring all agreed actions for waste minimisation are confirmed, completed and documented.

Name	Contact Details	Responsibility
Paul McGowan	Paul.w.mcgowan@vermontcl.com	Overall Responsibility
Paul McGowan	Paul.w.mcgowan@vermontcl.com	Generation and implementation
Mike Smethurst	Mike.smethurst@vermontcl.com	Elimination
TBC		Supply chain engagement and cost recovery
Logistic Manager	@vermontcl.com	Onsite coordination

3.0 Contractual Obligations and Requirements

Schedule out all of the contractual Waste/Environmental standards we need to achieve as part of the Planning Conditions, Employers Requirement, Contractors Proposals.

Item	Obligation / Requirement	From
	None	Contractors Proposals
	None	Employers Requirements
	Construction Method Statement: The Statement shall provide for; viii.a scheme for recycling/ disposing of waste resulting from demolition and construction works From CPHSP T3 13-07-21 (submitted for planning). **A scheme for recycling/disposing of waste resulting from demolition and construction work.** Waste removal is to be provided by local waste company such as Kenny Waste, the project will use general waste skips that are segregated at the depot of the skip company with a waste certificate supplied to identify the waste being recycled and the waste going to landfill, wood skips and metal skips are being utilised for site segregation. The site will also use a hazardous waste station with drums for waste such as empty foam cannisters, silicone tubes, spray paint cans etc which are also removed by our waste contractor.	Planning Conditions

4.0 Eliminate Waste

Waste can be eliminated through the design process and offsite fabrication. Use the table below to record any waste reduction that has been achieved through elimination. Skip costs have been based on an average weight of 2.5T per skip at £175.
Click here to review waste elimination records recorded withing the Project Waste Strategy Part 2.

5.0 Reduce Waste

5.1 Supply Chain Waste Reduction Schedule

Activity	Sub-Contractor	SOS Date	Questionnaire returned	Waste Reduction Targets Agreed
Groundworker	TBC	2023 Q3		
Piling	TBC	2023 Q3		
Blockwork	TBC	2023 Q4		
Joinery	TBC	2024 Q1		
M&E	TBC	2024 Q2		
Cladding	TBC	2024 Q2		

5.2 Waste Reduction Targets

Refer to Waste Guidance Note – Reduction for information

Click on this link to populate the Project Waste Strategy Part 2 for the project.

5.3 Recycling and Best Practice Commitments

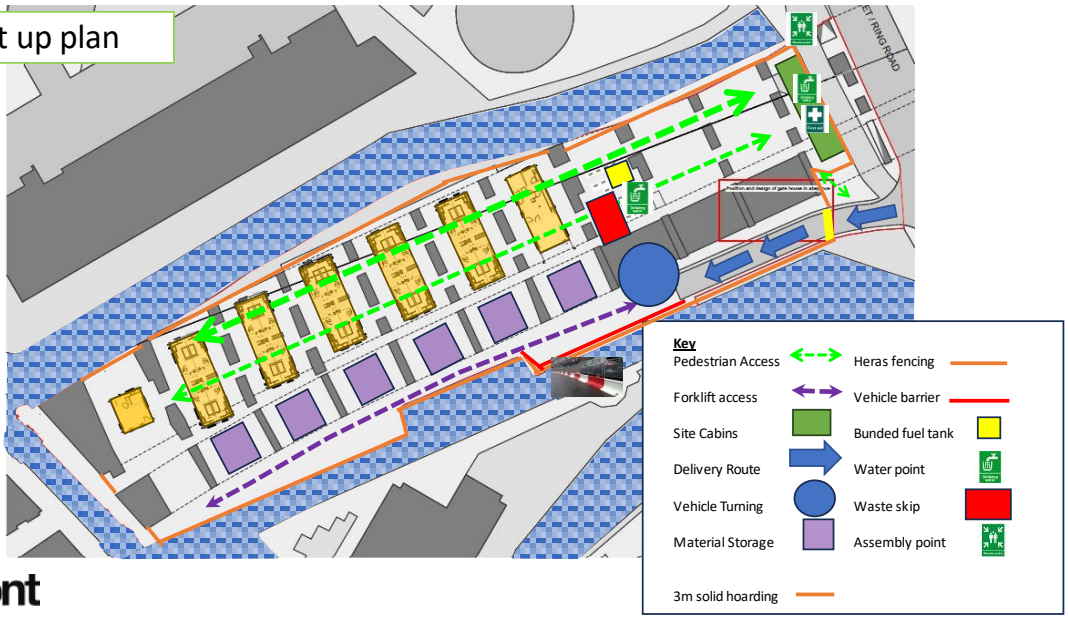
Recycle/Best Practice	Materials Concerned	Approx No. Skips saved	Details Contact
Forming spacers	*Concrete*	1	Best practice note
Recycle	*Timber*	*10*	*Community Wood Recycling* ***E*** *emily@communitywoodrecycling.org.uk* ***W*** *www.communitywoodrecycling.org.uk* ***P*** *+44 1273 203040*
Compactor	*Cardboard*	*8*	*Compactors R Us.com*
Shredder	*Plasterboard*	*25*	*Shredders R Us.com*

6.0 Waste Management

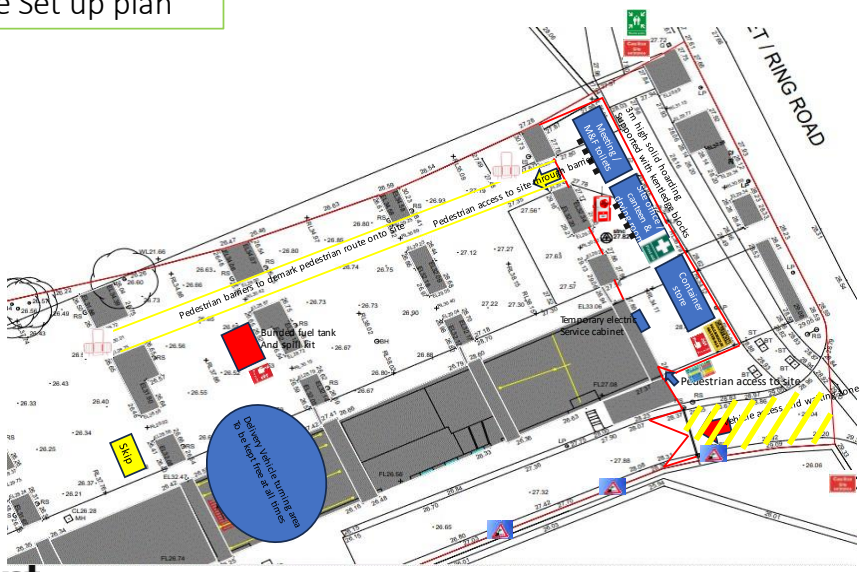
Provide details of how the project waste logistics will be managed;

- External proposed levels to be designed to reduce the amount of reduced level excavation material to be removed from site.
- External works design re uses a lot of existing material on site.
- Mini piling has been selected to reduce the amount of excavation required.
- Space and headroom constraints dictate that waste skips will be limited to 8 yd general waste skips. Each archway unit will be served with either a forklift tipper skip during masonry works, or eurobins during fit out works.
- Buggiscopic forklift will then transfer waste to general waste skips.
- Supply chain will be responsible for removing their own hazardous waste.
- Supply chain waste contractor will be responsible for segregating waste at the waste control station.
- Cardboard will be segregated, bailed and removed separately by our waste contractor.

Site Set up plan



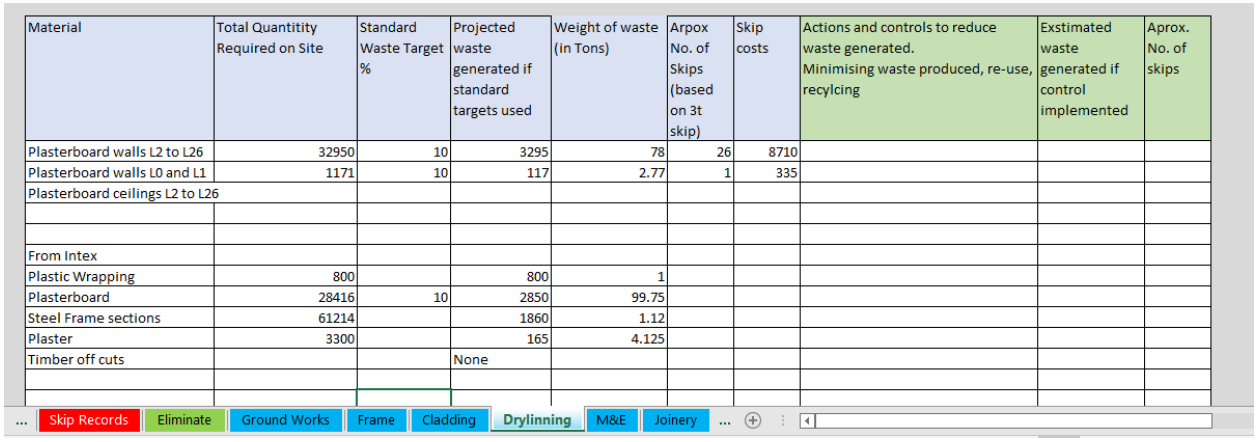
Site Set up plan



7.0 Monitoring

- *Record quantities and inform subcontractors on a regular basis of the site waste streams created on site.*
- *Collection of waste information must be accurate so that the information can be fed back for continual improvement.*
- *Engage with waste collection to discuss what information they can issue, and the quality of the information.*
- *Review waste output against the supply chain targets*

Input the Project Waste removal information into the Project Waste Strategy Part 2 each month



Material	Total Quantitity Required on Site	Standard Waste Target %	Projected waste generated if standard targets used	Weight of waste (in Tons)	Arpox No. of Skips (based on 3t skip)	Skip costs	Actions and controls to reduce waste generated. Minimising waste produced, re-use, recylcing	Exstimated waste generated if control implemented	Aprox. No. of skips
Plasterboard walls L2 to L26	32950	10	3295	78	26	8710			
Plasterboard walls L0 and L1	1171	10	117	2.77	1	335			
Plasterboard ceilings L2 to L26									
From Intex									
Plastic Wrapping	800		800	1					
Plasterboard	28416	10	2850	99.75					
Steel Frame sections	61214		1860	1.12					
Plaster	3300		165	4.125					
Timber off cuts			None						

... Skip Records | Eliminate | Ground Works | Frame | Cladding | Drylinning | M&E | Joinery ...

Appendix 3.7

Embassy Village, Manchester

Project No **VCL---**

Rev No: **-** Dated: **July 2023**

Revision Prepared by



Paul McGowan

Signed – Materials and Logistics Co-ordinator

Print Name

Initial MLMP Approved by

Date

Construction Director or Manager

Distribution			
Name	Location	Date	Sections Issued

This plan must be displayed on the Site Notice Board.

Review Record	I confirm that the work is progressing in accordance with this Plan		
Review Date	Revision Details (where applicable)	Rev	Reviewed by
04 07 2023	First Draft	-	P McGowan

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8.0 Hoist / Hook Time Analysis

9.0 Methods to minimise works / risk

10.0 Monitoring of the Plan

11.0 Amendments, recommendations and Improvements to the Plan

MATERIALS & LOGISTICS MANAGEMENT PLAN

1.0 Introduction

Principal Contractor:	**Vermont Construction Ltd**
Project Director	Paul McGowan
Materials and Logistics Co-ordinator	TBC
Client	Embassy Village
Site Address:	Embassy Village Egerton St, Manchester M15 4NU

Project Description:

The project consists of the construction of 40 studio accommodation units, village hall and staff accommodation for Embassy Village, a charity in Manchester providing a new community project to provide accommodation for homeless and vulnerable people.

The scheme is located off Egerton Street Manchester and located underneath existing railway arches. The site is bound by the Bridgewater canal to the south and the river Medlock to the north

The units are traditionally constructed in pods of 8 studios per archway comprising mini piled foundations, reinforced concrete ground floor slab, traditional blockwork superstructure structural walls, timber first floor, timber flat roof structure with single ply membrane and aluminium external wall cladding.

The scheme also includes extensive external landscaping works.

This plan has been produced to ensure that waste management and distribution of materials are planned and considered at every stage of the project.

A detailed and thorough Materials and Logistics Management plan will ensure that:

- The works areas are safe to access and egress.
- Distribution strategies are planned and communicated for all deliveries.
- A strong image of positive working practices is adopted to ensure that the workforce operate at their safest level.
- Ensure that fire risk is minimised by encouraging the removal of waste materials.
- Reduce the amount of works to be undertaken on site.
- Avoid or reduce the requirement for remedial works to be undertaken.
- Avoid the impact of delays to the project through effective planning.
- Minimise delays and costs associated with poor storage of materials.
- Improve efficiency by all parties understanding their roles and responsibilities.

2.0 Roles and Responsibilities

Project Director – Paul McGowan

To plan and communicate the MLMP to VCL staff and relevant all project stakeholders

MLMP Manager / Coordinator TBC

To implement to MLMP on site with all staff and subcontractors. To monitor and evaluate the effectiveness of the MLMP and to update and amend this where required

Deputy MLMP Coordinator TBC

To implement to MLMP on site with all staff and subcontractors

Commercial / QS TBC

To ensure the requirements of the MLMP are incorporated within all enquires and understood by the supply chain through the procurement process

3.0 Training and Communication of the Plan

*Describe how key **Vermont staff** have been / will be trained & kept informed on the implementation of the MLMP?*

Detail arrangements to:

- brief staff on the initial plan and when any updates have been incorporated. Plan issued and reviewed before work commences on site.
- Monitor the implementation of the plan and make recommendations to improve the efficiency of the project. P McGowan to monitor the plan and review accordingly.
- MLMP to be included within induction.
- Toolbox talks will be used to evidence training of this briefing.

*Detail how **subcontractors** are to be trained and informed on the implementation of the MLMP?* Detail arrangements to:

- QS to ensure that the MLMP is included with each tender enquiry that is issued
- MLMP is briefed to all subcontractors as part of the Pre-Start H+S Meeting prior to mobilisation.
- Relevant sections of MLMP to be included within Project Induction presentation
- Drawing / diagram detailing arrangements to be conspicuously displayed on notice board
- Each subcontractor will be responsible for holding periodic Toolbox talks which shall be used to evidence training of this briefing

Detail the timescales for this training.

- VCL project staff are to be trained on the MLMP by the MLMP Manager / coordinator pre start.
- Pre-Start H+S Meeting is undertaken not less than 2 weeks prior to each subcontractor commencing works and that the MLMP is briefed to the respective subcontractor managers.

4.0 Management of Subcontractors and Suppliers

Detail contractual arrangements that subcontractors and suppliers are to adhere to that help support and implement the MLMP.

- The Scope of Works document is to be read and understood in conjunction with the MLMP for each individual works package. The attendances required will be different for each package but generally the following will apply and are the responsibility of the subcontractor to coordinate and manage unless expressly confirmed as being by VCL within the works order:

Preliminary and Attendance Items:

- Demarcation of access and storage containers and areas
- Provide and maintain demarcation of worksites and exclusion zones around works at ground level to prevent unauthorised access below contractor's works.
- All plant, tools and equipment
- All cranes, lifting and associated hooks, shackles etc.
- All offloading, fork lifts, distribution, hoisting
- Clearance and reinstatement of all plant and equipment
- Transport and haulage
- All access equipment (MEWPs, cherry pickers, hoists etc.)
- Maintaining a good level of housekeeping at all times during the construction phase and defects period, to enable safe working for all affected by the works. Failure to administer adequate daily housekeeping will result in the works being stopped until corrective measures are actioned.
- All vertical and horizontal distribution, loading, unloading and the like as may be required.
- All distribution and storage of materials of materials are to meet the manufacturer's recommendations to ensure material integrity is not affected
- Final clean upon decant from site

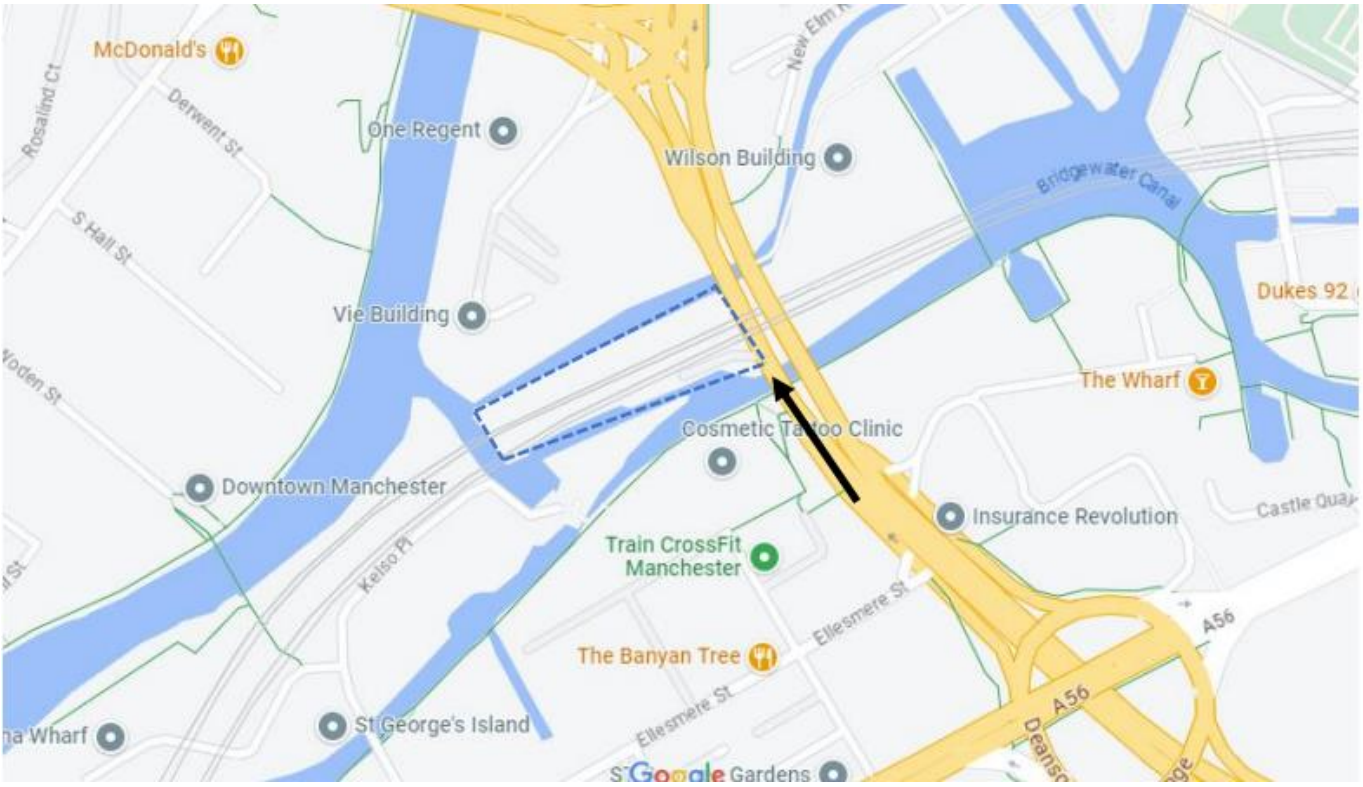
All deliveries are to be notified to MLMP manager / coordinator VCL 24hours prior to delivery site. VCL will coordinate this with other deliveries and we reserve the right to amend the times or refuse delivery to site to ensure that access and offloading operations do not clash.

5.0 Delivery Proceedures

Traffic Management Plan

All deliveries must be booked in via reception and posted on the site delivery boards.

All delivery vehicles are to approach site via Egerton Street West Bound from the roundabout junction with A56 :



When approaching site all vehicles will signal with the use of their indicators their intention to slow down and enter the site.

All delivery vehicles are to enter site via Vehicle gate entrance.

All delivery drivers are to report to the site Gateman for instructions.

All vehicles to be unloaded must drive to the holding area, at no time are any vehicles to wait on any roads surrounding the site.

No vehicles are to reverse on site unless aided by a Banksman and vehicles must have an audible reversing alarm.

All drivers leaving site must make sure that all chains, slings and remaining loads are fully secured. (This will include netting sheeting over skips / loads etc.)

When leaving site drivers must ensure that they stop and check for pedestrians crossing the site entrance / exit. No vehicles are to exit without assistance from VCL vehicle marshal.

MATERIALS & LOGISTICS MANAGEMENT PLAN

No vehicles shall leave site until all wheels have been washed (if applicable), provision for this is to be in the delivery / unloading compound adjacent to the site entrance.

A Road sweeper shall be called off by site as and when it is required to maintain the entrance and adjacent Highway's level of cleanliness.

No site operatives / drivers will climb on to the back of any vehicle without adequate edge protection or the use of a harness and inertia block

PPE REQUIREMENTS FOR TRAFFIC DUTIES - All gatemen and vehicle marshals engaged in traffic movements in and around site should wear orange hi-vis jackets or vests

All delivery drivers shall wear all relevant PPE when on site (helmet / boots / Hi-Viz / gloves)

All site plant is to be fitted with flashing lights and reversing alarms.

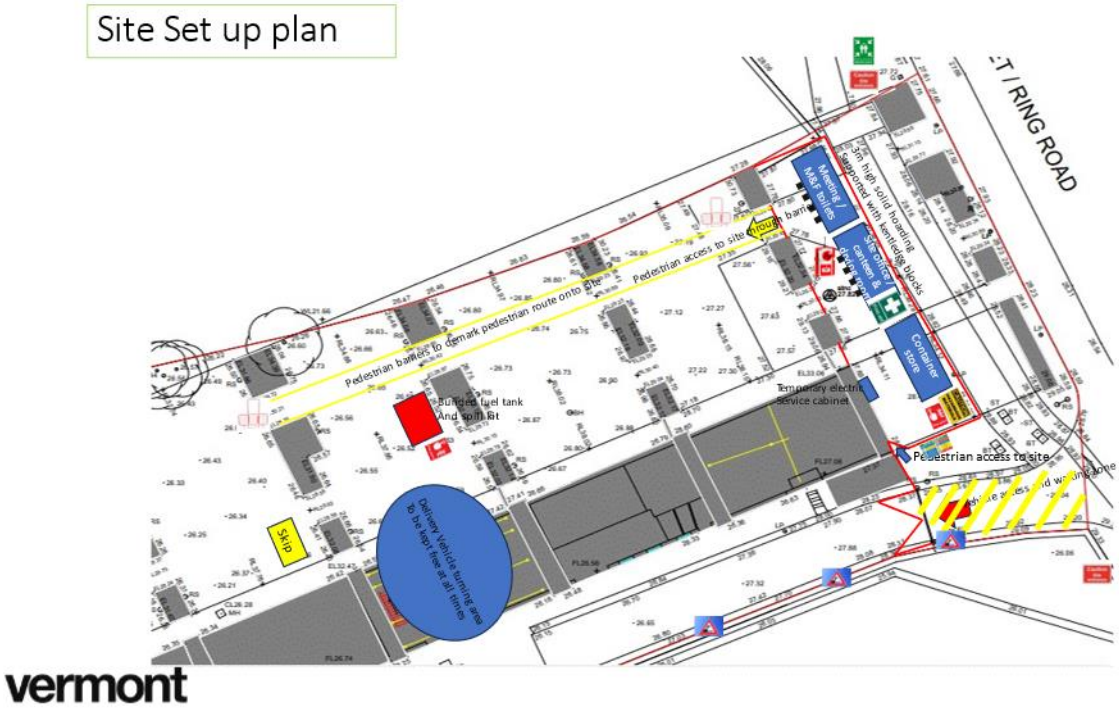
No keys are to be left in unattended plant (inc. all delivery vehicles, distribution equipment and MEWPs).

Site Logistics plan:



MATERIALS & LOGISTICS MANAGEMENT PLAN

Site Set up plan



Site Set up and Prelims requirements

- Site cabins – 24ft x 10ft anti vandal 1nr site office above 1nr combi canteen / drying room. 1 nr 24ft x 10ft meeting room over 1nr male and female toilet unit with waste tank. 1nr 20ft x 8ft steel storage container. 1nr hazardous material store. Stairs to site office and meeting room.
- Hoardings / barriers – 3m high VCL standard close boarded hoarding to the perimeter of the compound and openings within arches. Pedestrian access gate to be provided. Hoarding to site boundaries with river and canal to be 2m high heras fencing supported off posts fixed into the ground. Pedestrian crowd barriers required to demark pedestrian zone onto site. Temporary Concrete Barrier kerbs required to edge of canal as shown on site set up plan. Main vehicle gates to be steel framed close boarded. Site safety signage to warn of site entrance on approaches. Caution water signs required to the canal and river edge. Site entrance safety signage at main entrance. Sign required to warn delivery vehicles not to attempt to exit without vehicle marshal in assistance.
- Other Storage – haz material store provided in the office compound along with fire point. Bunded and locked fuel tank located in archway 8 along with spill kit and fire point. Silo not required – mortar delivery by tubs.
- Fire – Wes alarm system to be utilised. 1 fire point per dwelling cluster, 1 fire point at refuelling station, 1 fire point in compound. Wes base station in site office.
- Attendant labour requirements – Materials to be transported using buggiscopic style telehandler. Telehandler driver required. Vehicle marshal required to control gate, control exiting vehicles and carry out wheel washing
- Plant requirements – Buggiscopic telehandler, 500ltr bunded fuel tank, petrol pressure washer, road sweeper required during groundworks period, 3 nr forklift tipper skips, concrete pump – 1 visit per arch unit, pallet truck.

- Security requirements – CCTV coverage of the site 2 cameras covering compound, 1 camera covering entrance,1 camera covering the refuelling zone, say 4 cameras covering general site areas. CCTV backed up with rapid response security.
- Waste – due to the lack of space, waste to be removed via 8yd skips and waste streams segregated at the waste depot. Waste on site transported by forklift tipper skips during brick superstructure works and via eurobins (1 per arch) during fit out stage.

6.0 Material Receipt and Storage

VCL will provide a series of dedicated storage pens on site for subcontractor use.

- *Storage areas for each contractor will be developed in rev A*

7.0 Distribution Strategy

Insert details or refer to drawing showing the distribution routes and methods to be employed.

- Deliveries to site – vehicles to be restricted to rigid vehicles with off loading capability – no craneage on site.
- Concrete to be pumped from site access adjacent to the compound, this work will be coordinated with other trades as the vehicle entrance will be blocked when carrying out this task.
- Materials on site to be distributed by Buggiscopic telehandler.
- Each unit to have scaffold loading bay capable of taking 1 pack block, mortar tub and a forklift tipping skip.

8.0 Hoist / Hook Time Analysis

Describe the distribution methods to be employed for key material deliveries.

Material	Dimensions (mm)	Weight (kg)	Quantity	Method	Remarks
Concrete		2200/m3	Approx. 150m3	pump	
Spoil arisings				Excavator / dumper	
Reinforcement				Excavator / Fork lift	
Blocks			Approx. 2500m2	Forklift	

Mortar				Delivery via tubs, distribution by Fork lift	
Timber for joists / roofing				By Fork lift	
Steel stairs sets			5nr	TBA	

9.0 Methods of construction that will be used to minimise impacts

The construction technology employed is traditional due to the height and space restrictions imposed by the location of the railway and adjacent canal.

Some off site pre manufacture will be explored for the M&E installation, window systems and cladding systems.

10.0 Monitoring of the Plan

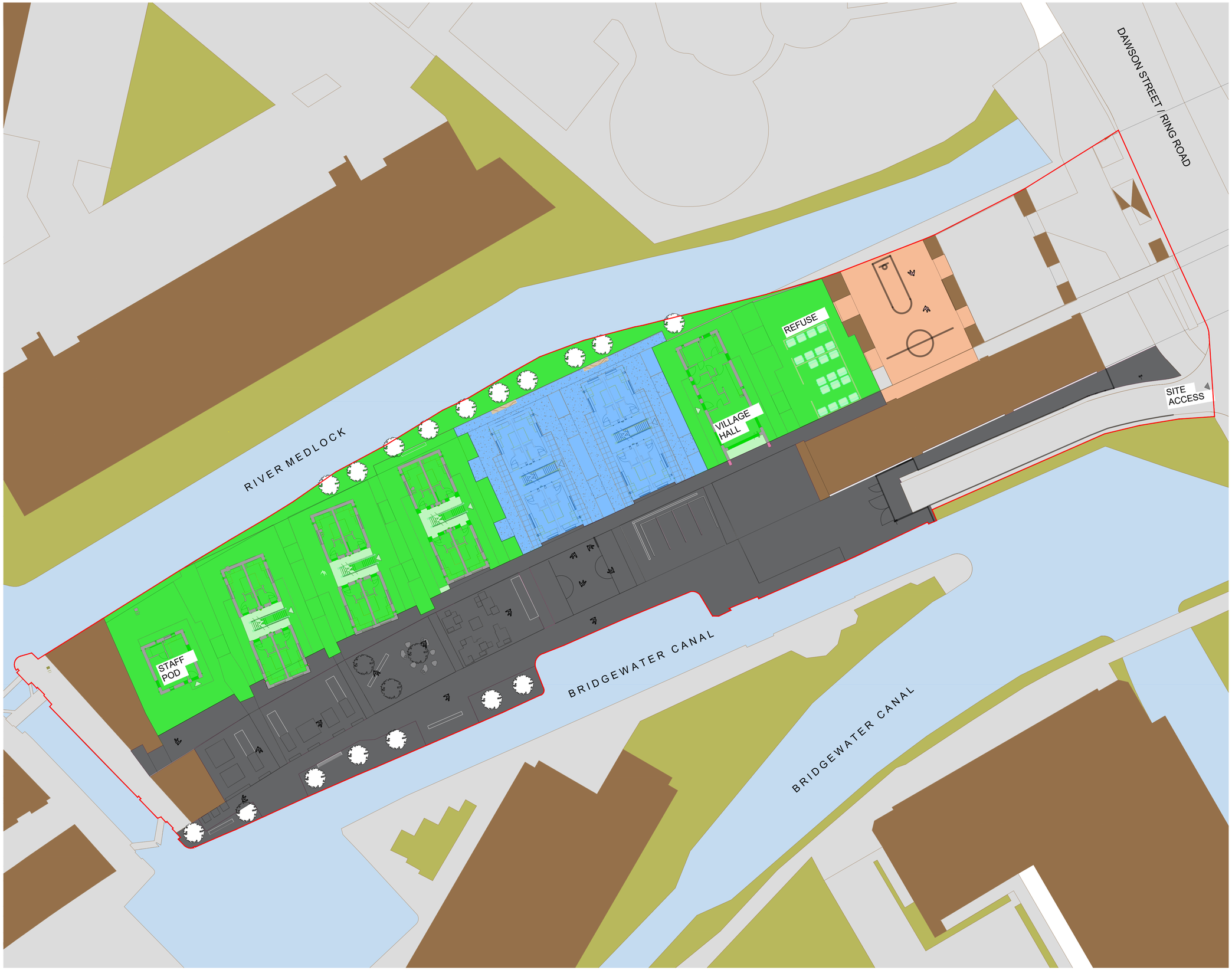
Schedule out the key stages at which the MLMP is to be reviewed

Activity	**Anticipated Review Date**	**Remarks**
Crane installation	N/A	
Hoist installation	N/A	
Commencement of envelope cladding	Q1 2024	
Commencement of Dry-lining 1st fix	Q2 2024	
Commencement of M+E 1st fix	Q2 2024	
Commencement of Joinery	Q2 2024	
Commencement of Soft floor finishes	Q3 2024	
Completion of frame	N/A	
Commencement of BMU	Q3 2024	

11.0 Amendments, recommendations and Improvements to the Plan

- Material storage areas have been identified in principle, these need assigning to contractors as sub contract orders are developed.

Appendix 3.8



NOTES

- All dimensions and levels are to be checked on site.
- Any discrepancies are to be reported to the architect before any work commences
- This drawing shall not be scaled to ascertain any dimensions. Work to figured dimensions only.
- This drawing shall not be reproduced without express written permission from AEW.
- Title overlay drawings and ownership boundaries are produced using all reasonable endeavors. AEW cannot be responsible for the accuracy or scale discrepancy of base plans supplied to them.
- All works are to be undertaken in accordance with Building Regulations and the latest British Standards.
- All proprietary materials and products are to be used strictly in accordance with the manufacturers recommendations.

This drawing contains the following model files: -

13095-AEW-XX-XX-M3-A-0005

CDM 2015

Client notified of duties: **06/09/22**

Principal Designer: **C-CDM Services**

Unless noted below, all known hazards have been highlighted on the drawing:

N

- Phase 1 works staff pod. 3 No. accommodation pods, village hall
- Area to be temporarily finished as tarmacadam to provide safe access to development, whilst awaiting Phase 3 landscaping works
- Future Stage - Hoarding Required
- Future Stage

Rev	Date	Description	Drawn by	Checked By
P02	22/03/24	Grey area description updated.	LK	BS
P01	05/12/23	Initial Issue	JFS	BS

Status: S2 — Purpose of Issue: For Information

drawing stage: **STAGE 4 / Co-ordination**

client: **Embassy Village**

project: **Embassy Village**

drawing title: **Proposed Phasing Plan - Phase 1**

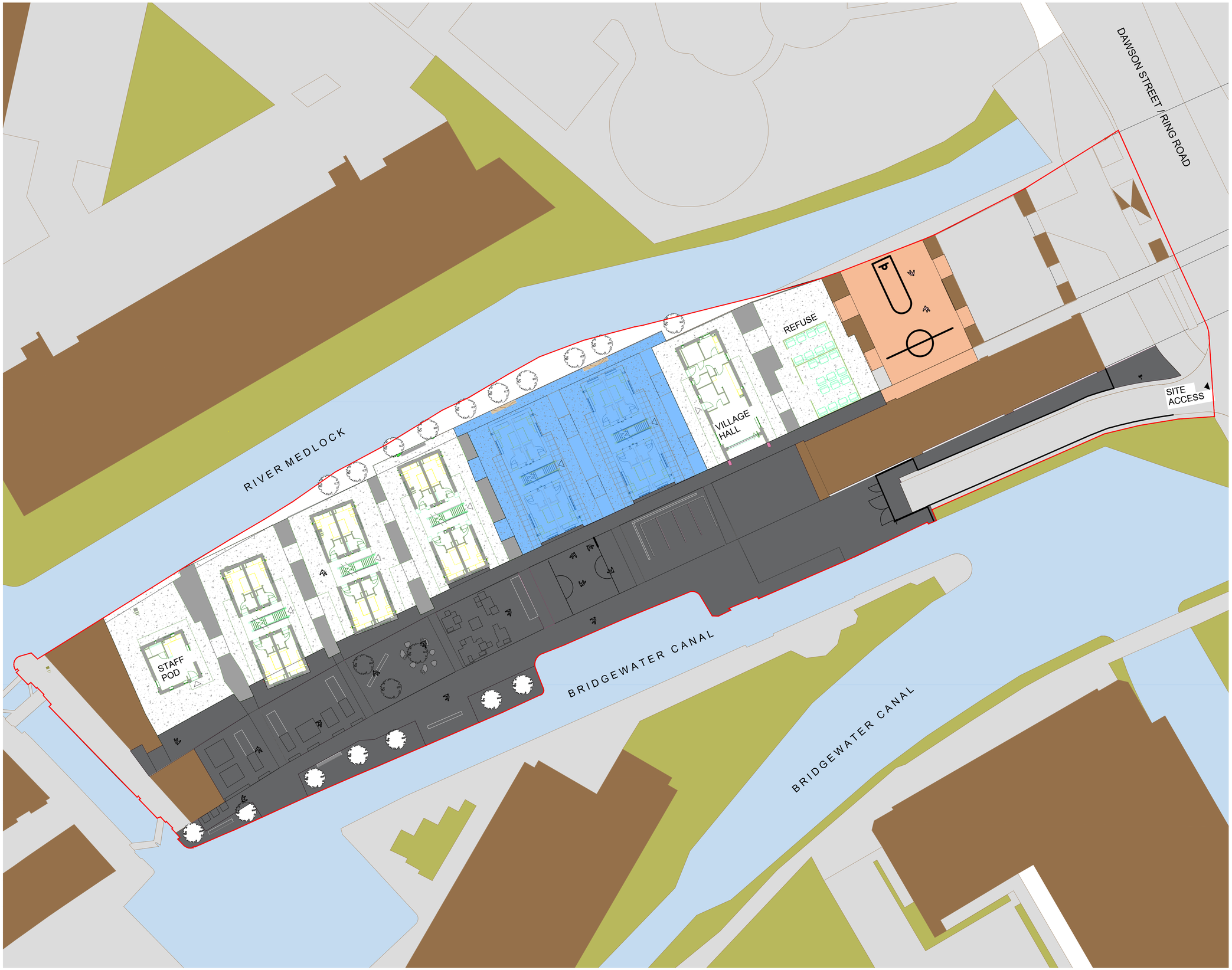
date: 29/11/23 — drawn: JFS

scale @ A1: 1 : 250 — checked: BS

Rev: **P02**

Dwg No: **13095-AEW-SI-00-DR-A-1013**

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This drawing contains the following model files: -

13095-AEW-XX-XX-M3-A-0005

CDM 2015

Client notified of duties: **06/09/22**

Principal Designer: **C-CDM Services**

Unless noted below, all known hazards have been highlighted on the drawing:

N

Area to be temporarily finished as tarmacadam to provide safe access to development, whilst awaiting Phase 3 landscaping works

Future Stage - Hoarding Required

Future Stage

Rev	Date	Description	Drawn by	Checked By
P02	22/03/24	Grey area description updated.	LK	BS
P01	05/12/23	Initial Issue	JFS	BS

Status: S2 — Purpose of Issue: For Information

drawing stage: **STAGE 4 / Co-ordination**

client: **Embassy Village**

project: **Embassy Village**

drawing title: **Proposed Phasing Plan - Phase 2**

date: 29/11/23 — drawn: JFS

scale @ A1: 1 : 250 — checked: BS

Rev **P02**

Dwg No **13095-AEW-SI-00-DR-A-1013**

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NOTES

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This drawing contains the following model files: -

13095-AEW-XX-XX-M3-A-0005

CDM 2015

Client notified of duties: **06/09/22**

Principal Designer: **C-CDM Services**

Unless noted below, all known hazards have been highlighted on the drawing:

Phase 3 works
Landscaping

N

Rev	Date	Description	Drawn by	Checked By
P01	05/12/23	Initial Issue	JFS	BS

Status: S2 — Purpose of Issue: For Information

drawing stage: **STAGE 4 / Co-ordination**

client: **Embassy Village**

project: **Embassy Village**

drawing title: **Proposed Phasing Plan - Phase 3**

date: 29/11/23 — drawn: JFS

scale @ A1: 1 : 250 — checked: BS

Rev: **P01**

Dwg No: **13095-AEW-SI-00-DR-A-1015**

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