

Project
BH0045 Radcliffe Hub

Document
Environmental Management Plan Rev A

Approval / Acceptance Status				
	Title & Company	Name	Signature	Date
Author:	Contracts Manager Building NW	Rob Symons	<i>RC Symons</i>	17-03-23
Reviewed and Approved:				

The master copy of this document is retained on TWWW

Foreword

Before completing this document, all projects must complete the Environmental Assessment and Risk Register (EARR) as per Divisional Environmental Standard (DES1): Environmental Management.

The Senior Site Representative (SSR) is responsible for completing this document on projects, the Regional Director for Regional Offices.

The VINCI Construction UK, Building Division HSEQ Team can provide guidance and review where required.

Revision History

This document is to be reviewed and updated, together with all other associated documents every 3 months to maintain its effectiveness. Or whenever there is a significant change to the site conditions such as a change in scope of works, site area, methodology, a change in legislation, interested parties, or after an environmental incident etc. Review to include elements such as progress on objectives and targets, training requirements, results on audits, significant communications, and close out of actions.

Record review changes in the table below.

Rev	Date	Revision details and Reason for change	Prepared by	Approved by
A	17-03-23	Original Version – for comment by LPA	R Symons	

Distribution of Environmental Management Plan.

Rev	Date	Name	Position
A	21/03/23	Bury Council – Planning Department	

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1. Introduction

1.1 Project Description and Scope

The new Civic Hub will be built in the heart of Radcliffe town centre. It will become the new permanent home for leisure in Radcliffe, together with a new library, learning opportunities, Leisure space, community space and enhanced support for health and wellbeing.

In addition to the new Civic Hub, the project includes the complete refurbishment of an adjacent buildings known as “Market Chambers”, and the renovation of the basement of the existing Radcliffe Market.

Finally the external areas surrounding the new Civic Hub, will be worked on to provide improved pedestrian circulation space, dwelling spaces, new hard and soft landscaping and general improvements to the town centre street scene.

The project site is located in the town centre, an area currently occupied by an old concrete retail building, and an external public space. These buildings will be demolished to make way for the new Civic Hub.

1.2 Overview of Environmental Aspects and Impacts Associated with the Project

There are a number of significant Environmental Aspects and potential Impacts on this project and can be summarised as follows;

ASPECT	IMPACT
Air Quality	Construction Dust
Noise & Vibration	Impact to local businesses and the public in general
Ecology & Biodiversity	Loss of habitat
Water Environment	Potential impact to surface and ground water
Managing Waste	Potential for breaches of legislation
Working close to watercourse	Potential for spillage causing environmental damage to River Irwell
	Flood Risk
Excavations	Reuse of excavated material on site
Invasive Plant Species	Control of Spread/effective management
Previous Industrial Use	Potential for contaminated land

This plan sets out to address each of the environmental aspects identified, and provide details of mitigation measures to be implemented during the works.

The following information has been obtained during the pre-construction phase, and is referenced in the preparation of this plan.

1.2.1 Environmental report and assessment information

Report / assessment / survey title	Author	Date	Significant aspects	How aspect could impact on the project operationally
Invasive Weeds Management Plan	Stephenson Halliday	July 2022	Identification of invasive plant species including Japanese Knotweed, Himalayan Balsam and Giant Hogweed	Invasive species are located in the river channel adjacent the site boundary. Effective treatment is required to prevent unintentional spread
Preliminary Ecological Appraisal Report	RSK Biocensus	November 2021	Scattered trees offering nesting and foraging opportunities	Trees are to be removed – bird nesting check by qualified ecologist required prior to felling as likely to be within nesting season.
			Nesting opportunities in River Wall	Nesting birds in the river wall could inhibit construction works.
Letter Statement (breeding bird / bat emergence surveys)	RSK Biocensus	July 2022	Variety of birds identified around the site – most notably in connection with the river corridor	Nesting birds in the river wall or scattered trees could inhibit or delay construction works.
			No bats found to be entering emerging buildings on the site	n/a
Flood Risk Assessment			Superficial deposits and bedrock are classified as a Secondary A Aquifer	No pollutant sources identified during investigation, which could be transferred to the aquifer.
			The site is not within a groundwater source protection zone (GSPZ)	n/a
			Site is in Flood Zone 1	Chance of flooding is less than 0.1%
			Reduction in permeable area	Reduced risk of surface water ponding and reduced volume of surface water runoff from the site
Ground Investigation Report (GeoEnvironmental Appraisal)	I D Geo	August 2022	No significant pollutant linkages found during investigations	REM STRAT unlikely to be required by LPA
			A Dye Works used to be present in the south of the site	Watching brief to be established during excavations in the south of the site
			Intermediate Probability Radon Area	RADON assessment will be required, post construction. Radon protection measures should be incorporated into building design.

2. Project Organisation

2.1 Purpose and Commitments

ISO 14001:2015 S4.3 & S4.4

This Environmental Management Plan (EMP) and the Environmental Assessment & Risk Register (EARR) sets out how the project intends to mitigate and reduce environmental impacts and fulfil all compliance obligations, including contract specific requirements in line with ISO 14001:2015 requirements.

Where project specific procedures, e.g. Client's requirements, planning conditions, ecology reports, etc., are required, these are integrated into the EMP and communicated to those responsible for implementation, management and monitoring.

This EMP will:

- Outline the works to be undertaken by VINCI Construction UK, Building Division and its Subcontractors and how these works affect the environment and the environment the works are in.
- Evaluate and identify the significant environmental aspects and impacts associated with the delivery of the project.
- Outline operational control measures to mitigate the environmental risks associated with the project.
- Determine compliance obligations and how these will be managed.

2.2 Environmental Policy

All VINCI Construction UK, Building Division sites display the VINCI Environmental Policy and ISO 14001:2015 certificate on site notice boards and make all site operatives aware of these documents within the site induction. The Policy will be made available to all interested parties.

2.3 Leadership, Commitment and Resources

The SSR ensures the works are carried out in accordance with the EMP, all relevant compliance obligations and that there are appropriate resources for the EMP. The SSR integrates the EMP into all the projects activities and is responsible for the effectiveness of the success, failures and continual improvement. Environmental issues must be an agenda item on management and site meetings.

insert copy of site management organisation chart once all personnel confirmed

2.4 Interested Parties

Client

Bury Metropolitan Council

Knowsley Place

Knowsley Street,

Bury BL90SW

Contact – Rebecca Lord

Tel – 0161 2535000

Email – r.lord@bury.gov.uk

Client Consultant

Gardiner & Theobald
2 Bond Street
Leeds LS1 2JZ
Contact – John Bramley
Tel – 0113 2848900
E-mail j.bramley@gardiner.com

The Principal Designer for the Project is:

Project Four
Blackfriars House,
St Mary's Parsonage,
Manchester M3 2JA
Contact – Gavin Richards
Tel - 07916237091
E-mail gavin@projectfoursafety.com

The Principal Contractor:

VINCI Construction UK Ltd
Ditton Road
Widnes
Cheshire,
WA8 0PG
Contact – Robert Symons
Tel – 01514223800
E Mail Robert.symons@vinci-building.co.uk

Landscape Architect,

Planit IE
Manchester Studio:
2 Back Grafton Street
Altrincham
Cheshire

WA14 1DY

Contact- Rob Moore

Tel – 0161 9289281

E-mail rm@planit-ie.com

Environment Agency

National Customer Contact Centre
 PO Box 544
 Rotherham
 S60 1BY
 United Kingdom

Local Council

Email: environmentalprotection@cheshireeast.gov.uk

Telephone: 0300 123 5015

2.4.1 Interested parties

Interested Party	Needs and expectations	How will communication be maintained?	Frequency	Responsible person
Bury Council	As ultimate client they will be involved in all aspects	Email / Site Visits / Meetings	As required	SSR
Environment Agency	To be kept informed and notified of any non-compliance. To be consulted in regards to permitting and approvals	Email / Site Visits / Permit Applications	As required	SSR

2.5 Project Roles and Responsibilities

The organisation structure and the responsibilities of VINCI Construction UK, Building Division employees are defined in the VINCI Construction UK Environmental Policy.

Roles with specific environmental responsibilities and management are defined within the table 2.6.1.

2.6 Training, Awareness and Competency

The training, awareness and competency levels that are required for all staff whose work may affect the objectives, targets and/or other environmental issues relevant to the project are identified by the SSR in accordance with the VINCI Construction UK Environmental Policy.

All staff, sub-contractor and operatives receive a site induction which provides an overview of the significant environmental aspects and the control measures implemented which they must adhere to.

A significant proportion of the environmental aspects of the business are a direct result of Subcontractor and supplier activities. Subcontractors are assessed prior to works commencing, through pre-qualification on Construction line and iPortal before being registered as a supplier on our COINS system.

Training needs are reviewed regularly by the SSR.

2.6.1 Environmental roles and training

Name	Position	Key environmental roles and responsibilities	Environmental training and awareness obtained
TBC	SSR/Project Manager	- Secures the resources required to maintain the EMP. - Ensure the EMP is established, implemented and maintained. - Monitor the performance of the EMP. - Act as the main point of contact with regulatory authorities and maintain records of telephone conversations and all written communication relating to environmental issues.	- Environmental Awareness E Learning - Asbestos Awareness E Learning - SEATS Training
TBC	Construction Manager	Ensures compliance obligations are adhered to and continually improved.	- Environmental Awareness E Learning - Asbestos Awareness E Learning - SEATS Training
TBC	Supervisors	Ensures compliance obligations are adhered to and continually improved.	- Environmental Awareness E Learning - Asbestos Awareness E Learning - SEATS Training
TBC	Ecologist (appointed consultant)	- Writing the ecology report. - Monitoring and reporting ecology throughout contract	
TBC	Environmental Champion	Raise awareness of the VINCI Environmental Policy, EMP and its requirements and all environmental aspects, targets and compliance obligations to all staff.	
Staff and Subcontractors		- Comply with all VINCI Policy's and Standards. - Comply with all applicable legislative. - Contribute to the success of environmental targets and implementation of the EMP	

3. Planning

3.1 Aspects & Impacts, Risks and Opportunities and Life Cycle Assessment (LCA)

An Environmental Aspect is:

‘an element of the projects activities, products and services that it can control and/or influence that interacts with the environment’.

An Environmental Impact is:

‘Changes to the environment, either adverse or beneficial, that result wholly or partially from environmental aspects.’

An organisational risk is an:

‘actual or potential threat of adverse effects to the organisation (VINCI Construction UK Building Division) arising from our activities.’

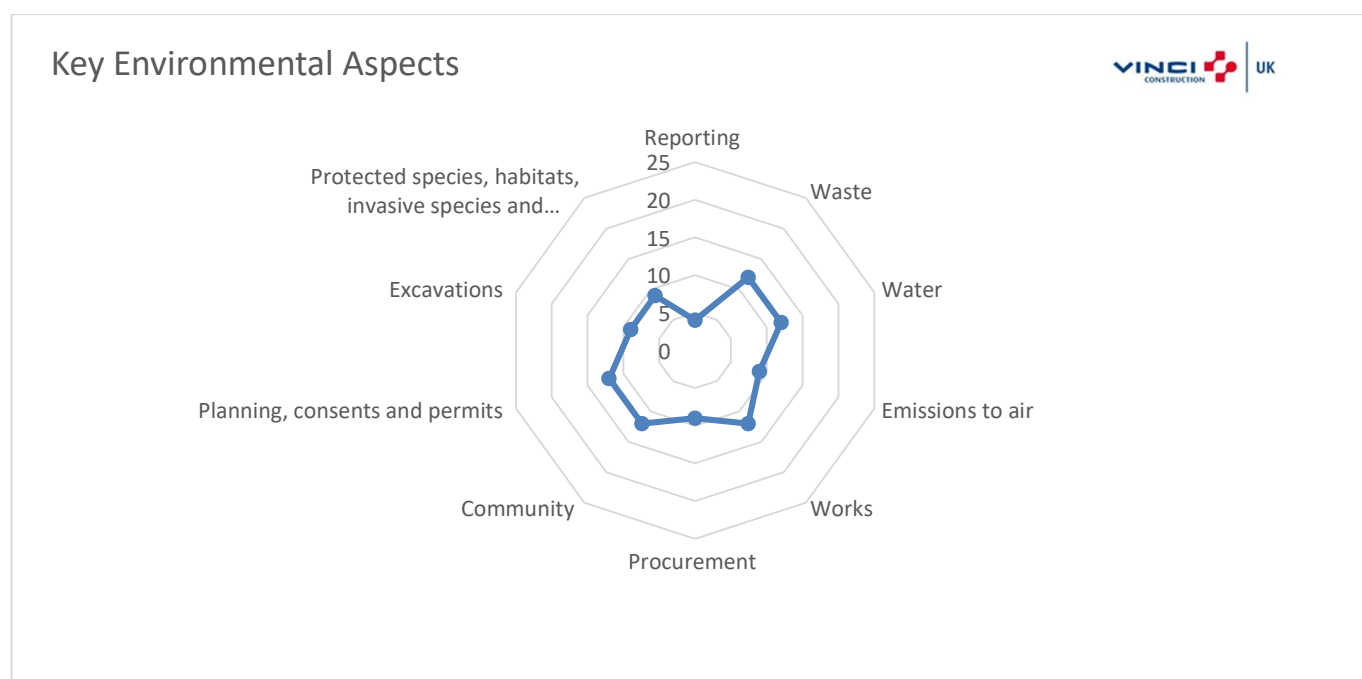
Environmental opportunities are:

‘potential beneficial effects the project/contract can provide and means to improve its performance and competitive advantage and reduce organisational risk.’

Risk management on all projects is subject to DES1 Environmental Management. This standard sets out the risk management arrangements for the environment. Every Project will complete The Environmental Assessment & Risk Register to identify and record the specific aspects, impacts, Life Cycle Assessment and compliance obligations.

Projects consider its control and influence over environmental impacts associated with product use and end-of-life treatment or disposal.

Project Specific Environmental Aspects / Impact Assessment is shown below:



3.2 Compliance Obligations

The Legislation Register is held online using Legislation Update Service (LUS). Compliance obligations relates to all relevant environmental legislation that the project must comply with and any other requirements the project subscribes to or is imposed by the Client or contract requirements.

The Head of HSEQ for the Building Division will communicate any relevant changes to legislation to the project, in the form of environmental alerts and guidance.

Key compliance obligations are detailed within the Environmental Assessment & Risk Register.

3.3 Environmental Objectives

Environmental objectives will be agreed at Divisional Level. Each site implements supporting objectives which are detailed in the table below.

The project also complies with Client specific contractual environmental objectives as required, also detailed within the table below.

3.3.1 Environmental objectives

Objective	How will this be achieved	Responsible person and position	Target completion date
<21t waste/£1M turnover	Implement waste reduction best practises	Project Manager/SSR	Monthly Reporting End of Contract
<15K kWh/£1M turnover	Implement energy reduction best practises	Project Manager/SSR	Monthly Reporting End of Contract
<3 nuisance complaints over the course of the project	Consideration to neighbours, effective monitoring, management of operations and early consultation.	Project Manager/SSR	Complaints Log End of Contract
Zero Environmental Incidents over the course of the Project	By following the mitigation measures set out in this and other management plans	Project Manager/SSR	Monthly Reporting End of Contract
100% Environmental Inspections to be rated GREEN	Full compliance with DES1 Understanding of Environmental Impacts and mitigation measures required Proactive leadership from the VINCI site management team	Project Manager / SSR	At each inspection End of Contract
98% diversion of waste from landfill	Materials Management Plan for excavation arisings targeting reuse of materials on site Streamlining waste generated and actively looking for ways to reduce, reuse, recycle	Project Manager/SSR	Monthly Reporting End of Contract
Number of BLUE brag scores during inspections to be >1	Full compliance with DES1 Understanding of Environmental Impacts and mitigation measures required Proactive leadership from the VINCI site management team	Project Manager / SSR	At each inspection End of Contract

4. Communication

4.1 Internal Communications

Divisional communications consists of email and internet sources, environmental alerts and briefings.

Site specific communications are as detailed below:

Communications relating to Environmental Matters will be by a variety of means, including site notices, posters, newsletters, site inductions, and toolbox talks.

4.2 External Communications

Relevant information from the EARR is communicated to Subcontractors to ensure it is captured within their Method Statements.

A Community Contact and Complaints Record is used to record all environmental communications and complaints between interested parties and the public. This log is shared with all relevant persons.

Liaison with local businesses with respect to environmental matters, particularly airborne noise, dust, odour, and ground vibrations, will take place. VCUK will work with BMBC to develop a suitable and effective communications plan to share information about the proposed work, the proposed timeline of events, provide information on activities that may lead to noise, vibration etc, and to set out the mitigation measures implemented to reduce the impact.

We will also provide clear lines of communication and maintain records of correspondence

5. Document Control

5.1 Document Control

This Environmental Management Plan will be reviewed and updated every 3 months, together with all other associated documents to maintain its effectiveness. Or, whenever there is a significant change to the site conditions such as a change in scope of works, site area, methodology, a change in legislation, interested parties, or after an environmental incident.

The details of all changes made as a result of each review will be recorded within the Revision History section on page 2 of this document.

Our management system documents are stored electronically in our business management system known as The Way We Work (TWWW).

A copy of this completed EMP should be saved on Viewpoint along with all other Divisional Environmental Management Plans and Documents to allows files to be shared with the project team.

5.2 Records

All the key environmental records required to be held, and the minimum length of time they must be retained for are stated in the table below.

5.2.1 Environmental records

Record	Minimum retention period
Waste Transfer Notes	2 years
Waste Consignment Notes	3 years
Record any complaints re: noise, dust, vibration etc	2 years
Record any exceptional incidents causing excess dust / noise	2 years
Keep records of monitoring results	2 years

6. Operational Control

Site specific activities not covered by the Group or Divisional Standards that may impact on the environment, or are relevant to the management of environmental issues will be controlled by the implementation of site specific procedures. These are to be developed by the SSR with input from appropriate specialists, interested parties and the VINCI Construction UK, Building Division HSEQ Manager/Advisor.

All operatives and sub-contractors are required to have a site induction prior to starting work, which highlights environmental aspects applicable to the project, the control measures in place and the requirements from all operatives. Confirmation of receiving the induction must be obtained and retained.

Contact details for the Senior Site Representative will be displayed on external hoardings / signboards and included in any neighbourhood correspondence

Table 3.8.1 Operational control

Document	Management
Waste Management Plan (REMP)	Waste Management Plan (REMP)
Noise Control	A Noise and Vibration Plan will be produced detailing vibration monitoring points Best Practical Means (BPM) mitigation will be implemented to control construction noise at source. (refer to section 6.1)
Dust Control	Develop and implement a stakeholder communications plan Best Practical Means (BPM) mitigation will be implemented to control construction generated dust at source. (refer to section 6.2)
Vibration Control	A Noise and Vibration Management Plan will be produced detailing vibration monitoring points along Riverside Drive. Best Practical Means (BPM) mitigation will be implemented to control construction generated vibration (refer to section 6.3)
Consents and Licenses	Consents and Licenses (refer to Section 6.4)
Ecology & Biodiversity	Protected Species/Breeding Birds (refer to Section 6.5)
Ground Conditions: Impact to Environment	Positioning of stockpiles to limit any impacts of surface run off in event of extreme rainfall event. Appropriate consents for the storage and use of controlled substances will need to be obtained e.g. Oil Storage Regulations, Environmental Permitting regulations. Emergency spillage response procedures. Spill kits kept on site appropriate to the types of materials being stored. (also refer to section 6.6)
UXO	Initial search confirms site UXO potential is LOW (refer to Section 6.7)
Flood Risk	The contractor will consult with the EA and the Local Lead Flood Authority and other relevant risk management authorities on areas at risk of flooding and make

	appropriate use of the EA floodline flood warning for areas at risk of flooding. B10 permit to be obtained for works adjacent the River Irwell (refer to section 6.8)
Construction Traffic/Site Access	Agreed route for HGV/LGV Travel Advice for Site Staff & Operatives (refer to section 6.9/6.10)

6.1 Noise Control

Given that this project is located within a town centre location, there are a number of receptors who could be impacted by excessive noise emanating from the Construction Site.

These are summarised as such;

- A. Radcliffe Market
- B. River Court Apartments
- C. Bridge Tavern
- D. Various Retail businesses on Dale Street
- E. Sorting Office
- F. Aldi Supermarket



Construction Site noise is generally created through the use of:

- Noisy powered tools or Machinery
- Heavy Plant operating on the site
- Explosive sources such as cartridge operated tools
- Noise from impacts from hammering, pneumatic impact tools etc
- Delivery vehicles accessing and egressing the site

Having assessed the construction activities anticipated on this project we feel that a section 61 notice is not required, due to the low duration, and non-continuous nature of potential noise exceedances. It is accepted that these may occur, and our perimeter noise monitoring will highlight to us when and for how long.

VCUK will use Best Practicable Means to mitigate against the frequency and severity of any such incidents, and the measures are described below;

Control measures for noise will be recorded on Task Briefing Sheets and will be clearly communicated to the workforce. The Task Briefing Sheet is a daily sign-off and review for the workforce so they understand what the risks are when undertaking the task, and/or how their works may affect the surrounding external members of public or businesses.

These daily briefing meetings often take place on site with the relevant member of the VCUK management team. A plan for the works that day are discussed including logistics and H&S aspects of the works. The subcontractors employed by VCUK will be requested to demonstrate a process of surveillance for any of their personnel who are exposed to noise which is likely to exceed 80 dB.

Using Best Practicable Means, and with reference to relevant guidance such as BS5228-1, noise on site generated by construction operations will be reduced by;

- Positioning noise sources further away from boundary and/or workers wherever possible. (eg crushers, screeners during demolition phase), and the use of solid site hoardings to help block the direct path of soundwaves, as necessary.
- Identifying hearing protection zones. i.e areas where the use of protection is compulsory, and mark them with signs. Also, marking these locations on the site plans so the workforce are aware about where these are positioned on site.



Use ear protectors



Ear protection zone

No entry without ear protection

- Only operating the site during the approved site working hours which are expected to be between 08:00 – 18:00 Monday to Friday and between 08:00 – 13:00 on occasional Saturdays. Work will not ordinarily take place on Sundays, unless written agreement is received by the Local Authority.
- The site will be able to receive deliveries to the site from 07:00 Monday to Saturday
- By maintaining core construction operations to these hours, it will enable us to be a good neighbour and not cause unnecessary disturbance to local residents and businesses.

Furthermore;

- We shall carefully consider the location of static equipment, giving consideration to our neighbours and informing them in advance of any significant noisy operations that may give rise to disturbance.
- Promote the selection of low noise emission plant where practicable to do so.
- We shall provide operatives with training and information on how to use and care for hearing protection is important

- We shall also ensure that the hearing protection is used properly, through on site monitoring.
- As with dust, and other potential “nuisances” we plan to work together with the Bury Council project team to develop an effective communications strategy with local neighbours and residents.

A thorough review of noise / noisy activity will be take place via the following processes;

- Weekly team inspections
- Review of task control/briefing sheets and the control measures documented
- Review evidence of subcontractors on site training and tool box talks covering noise

Finally, the Control of Noise Regulations 2005 (*Noise Regulations 2005*) require employers to prevent or reduce risks to health & safety from exposure to noise at work. The regulations require employers (VINCI) to:

Assess the risks to employees from noise at work;

- Take action to reduce the noise exposure that produces those risks;
- Provide employees with hearing protection if you cannot reduce the noise exposure enough by using other methods
- Make sure legal limits on noise exposure are not exceeded;
- Provide employees with information, instruction and training;
- Carry out health surveillance where there is a risk to health.

The Project Manager on this scheme will ensure that the Site Management Risk Assessment (SMRA) is completed at the beginning of the scheme. This will then be reviewed during the project programme and once the plan to manage noise has been developed. The risk assessments must be recorded with actions taken, or intended to take, to comply with the guidance set-out by the HSE. The risk assessment will be reviewed if circumstances change or if it is no longer valid. For example, the site operation changes and the worker's/or external environment exposure to noise changes. In this case the works will stop so the new risks can be assessed.

6.2 Dust Control

Due to the nature of the construction activities generally and particularly earthworks/groundworks operations, dust is something that will inevitably become part of the project during dry weather.

We shall develop a dust management plan, in conjunction with our subcontractors, to prevent, reduce and manage the control of dust on this project.

The control of dust will be covered in the project specific induction and where relevant a toolbox talk will be delivered by the sub-contractor's supervisor on the control and reporting of dust. Dust control measures will be included within specific RAMS and Task Control Sheets.

As with noise, and other potential “nuisances” we plan to work together with the Bury Council project team to develop an effective communications strategy with local neighbours and residents.

The SSR will nominate a member of the team to undertake a perimeter walk of the site to review and monitor evidence of dust build up on roads, street furniture etc. These inspections will be recorded, along

with any remedial measures required (additional deployment of road sweeper / washing down of street furniture etc).

All checks and measures will be increased if prevailing weather conditions are such that the potential for airborne dust is increased (ie prolonged warm or dry periods)

The list below describes some of the proactive control measures that may be implemented:

- Installation of physical site barriers 2.4m high
- Actively damping down areas using a towed bowser / spray unit (recycling water from on site lagoons)
- Utilisation of a road sweeper
- Reduction in on site speed limits (typically <10mph)
- Washing down wheels for vehicles leaving site
- The use of auto sheet on the wagons removing muck and spoil from site.
- Eliminate dust at source - (misting cannons used during crushing or demolition for example)
- Covering certain stockpiles that may be contributing to dust generation
- Utilisation of dust suppression during any cutting operations
- Prohibiting dry sweeping techniques
- Daily inspection of site perimeter and haul routes out of site
- Placement of rumble strips or clean surface on approach to site gates to restrict transfer of mud/dust

In addition to the above, other measures will be actively explored including:

- Limiting of stockpile height and dampening them down.
- Ensuring site hoarding is well maintained to reduce wind effects.
- Fires Will not be permitted on site
- Explosive techniques or blasting will not be permitted on site

Prior to reporting the dispersion of dust to the construction manager the member of the team will ask the supervisor of the subcontractor responsible to stop work and an assessment on how to prevent it from occurring again will be carried out. Major incidents (defined as clouds of escaping dust or the receipt of complaints from neighbours) will be logged in the site log book along with the remedial action(s) taken.

6.3 Vibration Control

In order to achieve the compaction requirements to meet the specification of engineered fill material in the ground, certain techniques will need to be utilised. Vibration generating machinery is key to achieving the required levels of compaction. Such machinery might include vibrating rollers.

Where possible we have assessed and discounted machinery or plant which is known to generate significant vibration. For example, the new civic hub building will be founded on CFA piles (rather than driven precast piles), which generate very little ground vibration.

The mini piling in the market basement is a bottom driven mini pile. This is an impact driven pile, but the point of impact is at the bottom of the pile. This means that the hammer impact gets lower and lower into the ground, thus minimising the potential vibration effect.

In terms of other vibration mitigation measures, we can vary the way we operate this machinery.

- When compacting placed soils we can operate the machinery so it is running perpendicular to the site boundary, rather than parallel, compacting the ground in long strips. This reduces the time that the machinery is operating close to the boundary, and increases the duration between each event.
- Starting up and switching off of plant will be done away from the boundary, to avoid the transient frequency sweep which can be perceived as intrusive.
- Such measures will reduce the effects of vibration but will not be able to fully mitigate.

6.4 Consents & Licences

The earthworks are proposed to be carried out following the Definition of Waste, Code of Practice (DoWCoP). A Materials Management Plan (MMP) will be prepared and submitted for approval by a Qualified Person, and then submitted to CL:AIRE (Contaminated Land: Applications In Real Environments).

- The earthworks shall take place in accordance with the MMP and evidence will be recorded and submitted to validate the works.
- A discharge consent shall be obtained for the discharge of any contaminated water created during the works. This is required as the Controlled Waters Risk Assessment prevents discharging across the site, and into soakaways.
- Works adjacent the River Irwell will be subject to a B10 Flood Risk Permit, issued by the EA
- A hoarding licence will be required from Bury Council
- Consent to temporarily close footpaths will be required from Bury Council

Planning consent has been applied for, for these works. Approval and any associated conditions are currently awaited.

6.5 Ecology & Biodiversity

In order to minimise the potential disturbance to either protected species or breeding birds we intend to follow best practice guidance. On this project the following measures shall be taken;

Tree Felling

Due to delays in the pre-construction phase of the project, it is now likely that the initial site clearance works, which includes felling of trees will need to take place within the normal bird nesting season.(March-August)

Where this is identified to be the case a nesting bird check shall be undertaken by a suitably qualified ecologist. An Ecological Clerk of Works (ECoW) will be appointed to undertake such activities through a watching brief.

Invasive Weeds

An invasive Weeds Management Plan has been developed to define how the various invasive species found on this site will be managed. This plan has identified schedule 9 species in the form of Giant Hogweed, Himalayan Balsam and Japanese Knotweed. These are all located within the adjacent river bed. These are technically outside of the site boundary, but due to the location of the proposed balcony, these plants will need to be managed so as to avoid further spread.

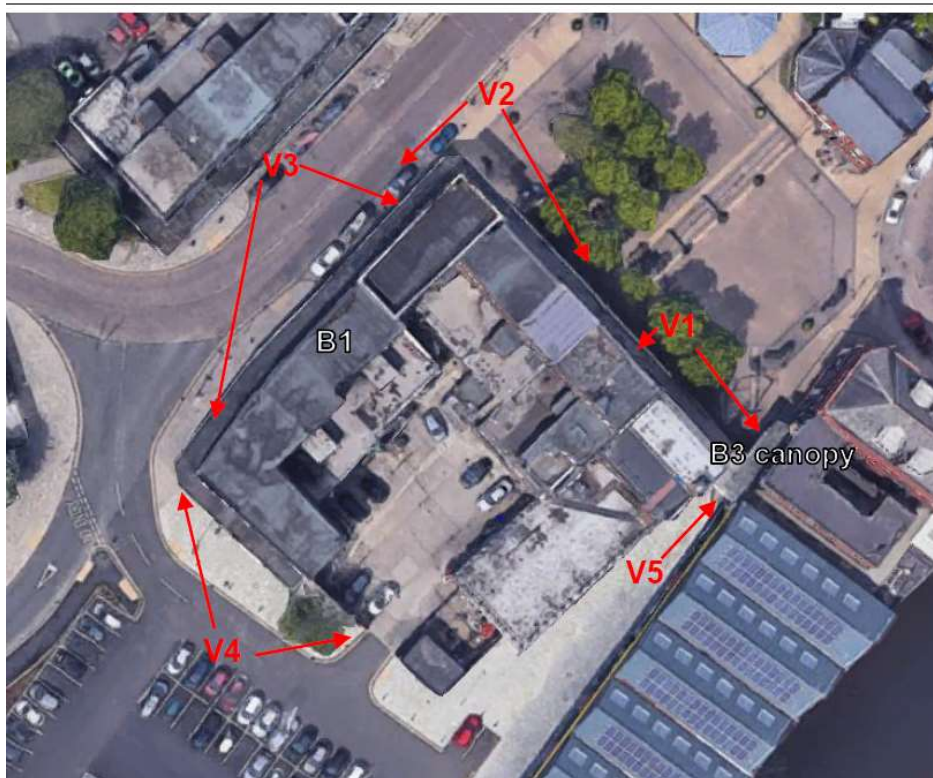
- The presence of Schedule 9 species will be covered in the general site induction, and followed up with specific Toolbox Talks.
- Schedule 9 species will be identified on site.
- The River Irwell presents a considerable constraint to many control options. Japanese knotweed, giant hogweed and Himalayan Balsam are present on the banks of a water body. A glyphosate-based herbicide should only be used for treatment adjacent to a watercourse. If adopted as the appropriate control measure, then any such treatment will require prior consent from the Environment Agency via means of the submission of a AqHerb01 application (Agreement to use herbicides in or near water). Certification demonstrating the competency of the operative who will carry out the treatment will need to be provided to the EA

Bats

Bats and their roosts are protected by the WCA 1981 and the Conservation of habitats and Species Regulations 2010. As such it is an offence to recklessly or intentionally disturb, destroy, or obstruct bat roosts; it is also illegal to kill or maim any UK bat.

A check of potential bat roosting features within the trees has already been undertaken.

Approximate Location of Surveyors



During the surveys common pipistrelle were observed foraging and commuting adjacent to the building and the nearby trees, however, no bats were seen to emerge/re-enter building B1 and the canopy between B1 and B3. No other bat species were recorded during the surveys. Due to the low level of activity noted, and the timing the bats were recorded, it is anticipated that a bat roost is located within the local area **but not** within the site or close proximity to the site.

As there were no bats identified emerging/ re-entering B1 or the canopy between B1 and B3 during the bat surveys, no further steps are required to safeguard bats onsite. However, as is discussed above in the

unlikely event that a bat is found inside any buildings due for roof repairs or demolition, works must cease and advice sought from an ecologist and Natural England.

All contractors working on the site shall receive a Toolbox Talk in respect of the presence of foraging bats across the site, and the disturbance that can be caused by artificial lighting. The general site induction will also make reference to this, and specifically the requirement to cease works should a bat(s) be found inside any buildings scheduled for demolition.

Birds

All nesting birds are protected under Section 1 of the WCA 1981 (as amended). As such, it is an offence to kill or injure any wild bird, damage or destroy nests of wild birds whilst the nest is in use or being built, or to take or destroy the eggs of any wild bird.

A breeding bird survey has already been undertaken.

During the Breeding Bird Survey, a number of bird species were recorded within and adjacent to the site, with the majority of birds recorded in association the River Irwell.

A colony of sand martins (*Riparia riparia*) was recorded within the river wall of the marketplace, with a minimum of five pairs recorded in holes close to Blackburn Street road bridge. In addition, a pair of dippers (*Cinclus cinclus*) were recorded nesting underneath Blackburn Street road bridge.

A pair of bullfinches (*Pyrrhula pyrrhula*) were recorded nesting in a stand of Japanese knotweed (*Reynoutria japonica*) at the base of the river wall, adjacent to Radcliffe Marketplace.

Grey wagtail (*Motacilla cinerea*) were recorded on the river, with large areas of suitable nesting habitat present, however, no evidence of breeding within or adjacent to the site was observed, though they are likely to be nesting within the local vicinity.

Feral pigeons (*Columba livia domestica*) were recorded nesting on and within the majority of buildings within the site and a single pied wagtail (*Motacilla alba*) was recorded carrying food on a building to the north-west of the marketplace, confirming breeding within close proximity to the site.

Blackcap (*Sylvia atricapilla*), robin (*Erithacus rubecula*), blackbird (*Turdus merula*), goldfinch (*Carduelis carduelis*) and dunnock (*Prunella modularis*) were recorded singing in vegetation within and adjacent to the site. The majority of birds were recorded singing in areas of vegetation on the eastern bank of the River Irwell and were assumed to be possible nesting birds.

A kingfisher (*Alcedo atthis*) was heard upstream of the site. No suitable nesting habitat for the species was present within the site, however, they are likely to nest up and downstream from the site.

Due to delays in the pre-construction phase of the project, it is now likely that the initial site clearance works, which includes felling of trees will need to take place within the normal bird nesting season.(March-August)

Where this is identified to be the case a nesting bird check shall be undertaken by a suitably qualified ecologist prior to the felling of any trees. An Ecological Clerk of Works (ECoW) will be appointed to undertake such activities through a watching brief.

Should active nests be found in the trees, a 5m exclusion zone shall be established around the nest, marked out with timber posts and netlon This must remain in place until the young have fledged and left the nest, or until the nest has provably failed. This will be established by the ECoW. Checks will be undertaken as required by the ECoW. Checks will be undertaken as required by the ECoW in order to

establish nest used by breeding birds. This exclusion zone may be expanded depending on the nature of the works and species involved.

The general site induction will feature information pertaining to nesting birds and the need to be vigilant when carrying out site clearance and demolition works

With regards to the birds identified in and around the river, it was noted in the survey results that the Radcliffe market hall riverside wall will require soft blocking of any crevices suitable for nesting sand martins outside of the breeding bird season. This is to discourage sand martins from nesting in the riverside wall in 2023 over the summer months (June – August 2023) when construction works are due to commence.

The soft blocking took place during early September 2022 prior to the first herbicide application for treatment of invasive plant species. Following completion of the construction works, soft blocking will be removed to allow the nesting provision for sand martins to be reinstated.

6.6 Ground Conditions: Impact to the Environment

Large Construction projects, do have the potential to impact on the surrounding environment. This section seeks to detail management of stockpiles, surface water discharge, storage and use of fuel, and emergency procedures.

Stockpiles & Excavation

During the enabling phase of the project it will be necessary to demolish existing buildings, and also to excavate and store material in stockpiles, either as it is awaiting processing, or immediately after it has been processed. There are likely to be separate stockpiles of crushed brick and concrete, granular material and cohesive material. There may also be smaller stockpiles of contaminated land awaiting treatment or disposal, should any be found.

The location of the stockpiles will vary at different stages of the project as work progresses, but when starting a new stockpile consideration will be given to its location, size and height.

Consideration will be given to the location to ensure surface water run off does not cause any damage to surrounding areas. It is anticipated that all stockpiles will all be in the main body of the site, away from the site perimeters as far as is practicable given the relatively small area of the site. This will help to reduce potential risks of air borne dust whipping off the top of a stockpile.

Excavation sequence will be methodical around the site, balancing opening up suitably large areas to enable the ground to be processed and the ground to be engineered back in to place, with not having unnecessarily large areas open to the elements.

All earthworks will be in accordance with the Materials Management Plan (MMP)

A discharge consent will be required from United Utilities to enable the pumping of surface water discharge if required. Similarly a discharge consent may be required to enable the pumping of ground water that may be encountered when excavating the deeper basement areas.

Works generally will be carried out in accordance with Guidance for Pollution Prevention (GPP) guidance notes, particularly;

GPP5 Works Near Water

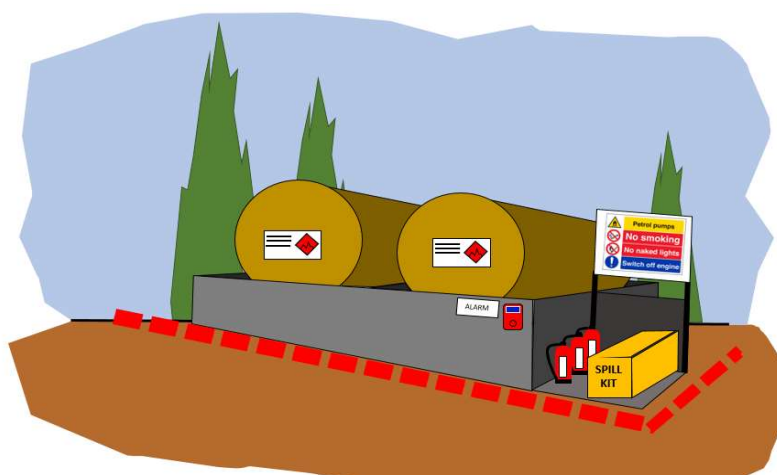
GPP21 Pollution Incident Response Planning

Fuelling of Mechanical Plant

Given the nature and the size of the site, there will be multiple excavators, and dump trucks and other plant – all of which will require regular fuelling. Contractors fuel tanks will all be located in one place, which will be securely fenced and signposted, and furnished with emergency equipment including spill kits and fire extinguishers.

The filling area will be bunded and on an impermeable surface. It will be located away from watercourses and drains. All aspects of Fuel storage and filling will be operated in accordance with Guidance for Pollution Prevention (GPP) guidance notes, particularly;

- GPP2 Above Ground Storage Tanks
- GPP8 Safe Storage & Disposal of used oils
- GPP26 Safe Storage of Drums and Bulk Containers



- All funnels, buckets, containers, brushes and other associated equipment should also be kept in the bunded area when not in use.
- We will clearly label tanks with their contents and storage capacity; this will reduce the risk of overflow and spillage.
- As a matter of course, a bucket or container will be placed under taps to safeguard against drips and leaks. Any leakage can then be reused. This will also prevent fuels and oils mixing with any water in the base of the bunded area.
- Wherever practicable we will promote the use of biodegradable hydraulic oils
- Spillage kits would be placed locally, together with fire fighting equipment.
- Signage regarding fuel safety, no smoking and PPE requirements will also be displayed.
- All fuel stored on site will be in accordance with the Fuel Storage Regulations.

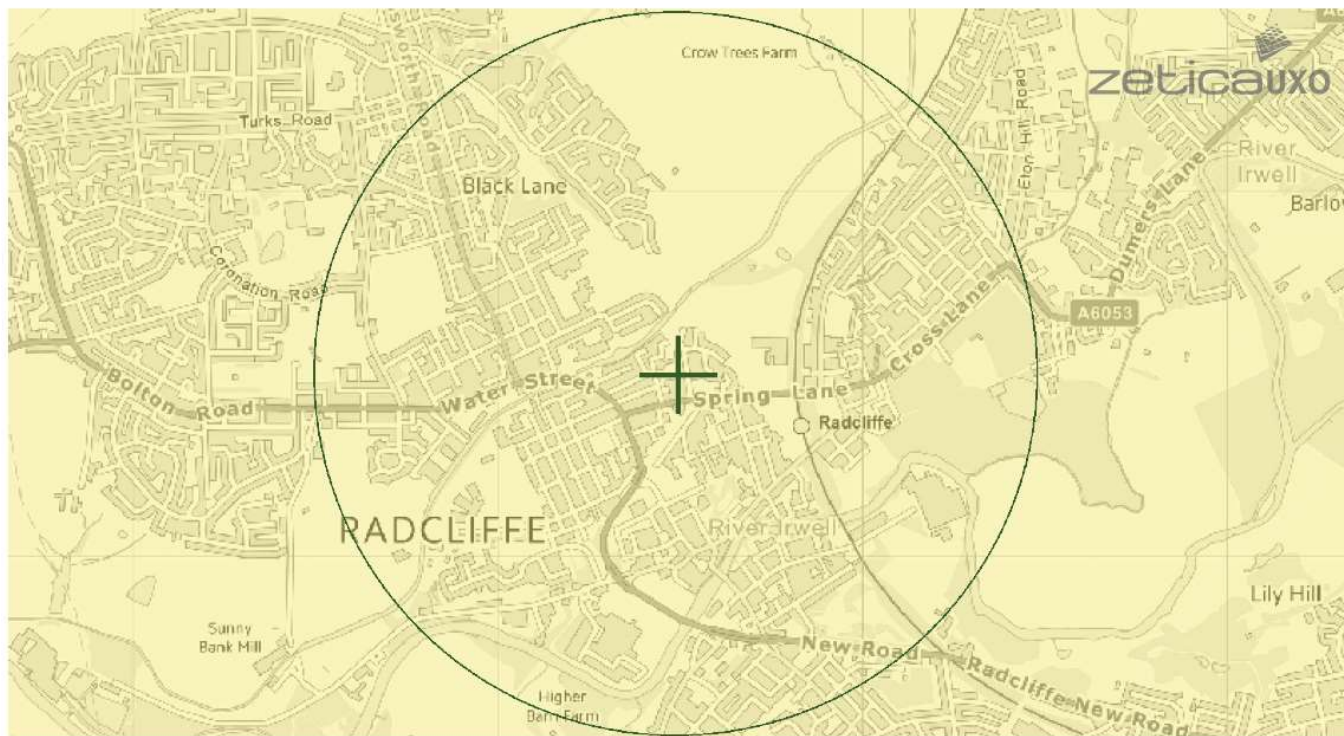
6.7 UXO

An initial unexploded bomb search has been undertaken, and the risk profile for this location is considered to be LOW. No special considerations are required during the construction phase.

Cont/...

SITE LOCATION

Location: Radcliffe, Bury
Map Centre: 378500,407500



LEGEND

- **High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- **Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- **Low:** Areas indicated as having 15 bombs per 1000acre or less.

- military
- industry
- UXO find
- transport
- dock
- Luftwaffe targets
- utilities
- Bombing decoy
- other

6.8 Flood Risk

A flood risk assessment has been undertaken and issued in February 2023.

It has already been determined that the site lies within the Environment Agency's (EA) Flood Zone 1 – which is classified as having a LOW RISK of flooding

It has been determined that the risk of flooding from rivers (notably the River Irwell) is also low. Albeit the river itself is Flood Zone 3, which may impact the construction of the balcony structure. The Flood Line website provides regularly updated information relating to current river levels, as well as the normal upper levels that can be expected at any given stretch of river.

Height over the last 5 days



How levels here could affect nearby areas





Due to the overall low risk of flooding to the site, there are no special measures or mitigations anticipated to address Flood Risk for the Civic Hub Building and the main body of the site.

The works to the River wall of the market, including the construction of the proposed balcony will be subject to a B10 flood risk permit.

The site management team will regularly refer to the EA Floodline warning system and sign up for automatic alerts via email and SMS message. The monitoring location at Pioneer Mills (station ID 5230) (located slightly upstream of the site) is the closest point.

Your flood warnings are set up

You have signed up for flood warnings.

Your customer reference number is: 50237516

Furthermore, we have had initial correspondence with the Environment Agency relating to these works, and a permit application will be made.

6.9 Construction Staff - Travel to site

We have estimated that the proposed scheme will require an average of 80 personnel on site per day, but peaking at around 120 per day

VINCI will encourage wherever possible that operatives walk or cycle to site, if location permits. If this is not feasible, then we encourage operatives come to site in shared vehicles, or take advantage of public transport links.

The site is fortunate in so much that it is well linked to a variety of local public transport options, with both bus and metrolink stations nearby. Details of bus and tram routes will be made available in the site welfare areas:

Bus

Bus Route 98 – Operates between Manchester & Bury stopping at Radcliffe Bus Station
 Bus Route 512 – Operates between Farnworth & Bury stopping at Radcliffe Bus Station
 Bus Route 513 – Operates between Farnworth & Bury stopping at Radcliffe Bus Station
 Bus Route 524 - Operates between Bolton & Bury stopping at Radcliffe Bus Station
 Bus Route 886 – Operates between Tottington & Radcliffe
 Bus Route 890 – Operates between Bradley Fold & Unsworth stopping at Radcliffe Bus Station
 Bus Route 896 – Operates between Walshaw & Radcliffe

The bus station is located 300ft west of the site. Approx 1 minute walk

Metrolink operate a tram system across greater Manchester, and Radcliffe is a stop on the Bury/Altrincham and Bury/Picadilly lines. Radcliffe is located in Zone 3

The metrolink station is located 0.4 miles north east of the site. Approx 8 minute walk.

For those who cannot utilise public transport options, parking can be found at various locations around the town.

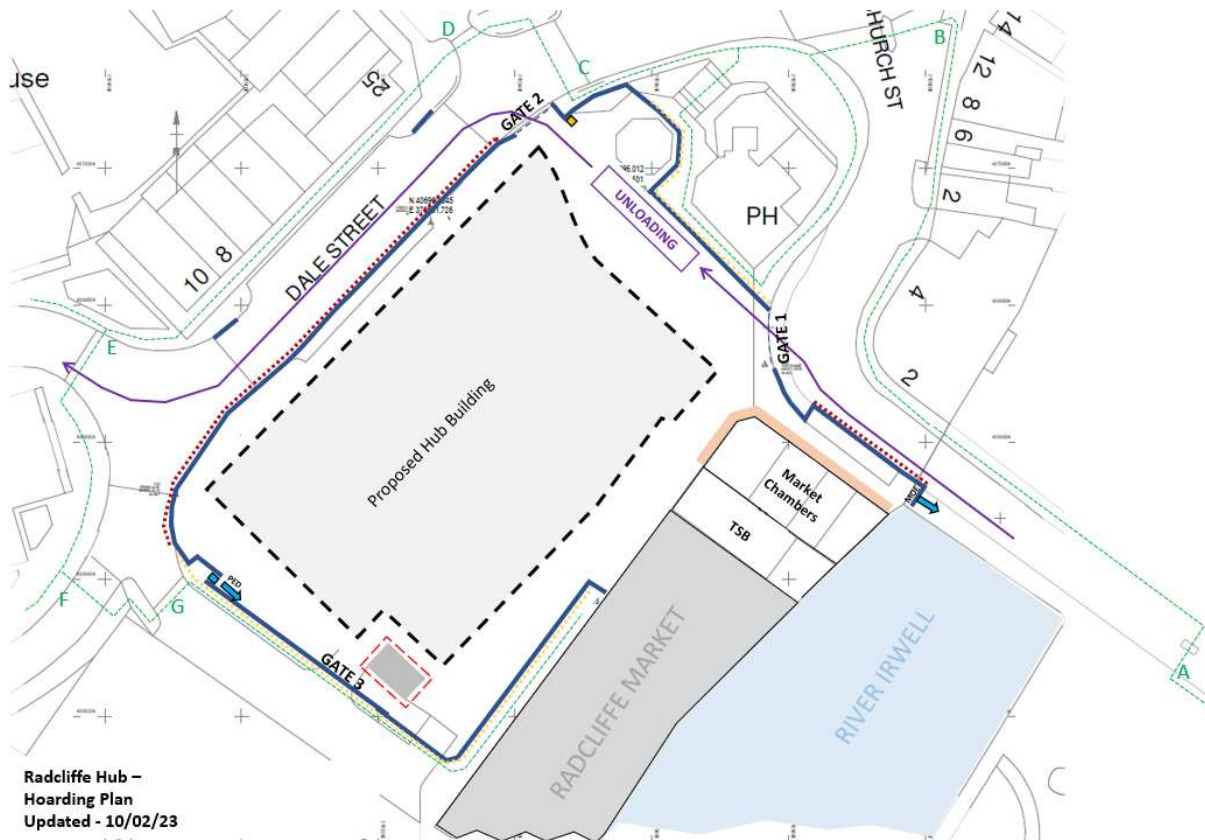
Library Car Park – Stand Lane, M26 1NW
 Riverside Car Park – Mill Bank, M26 1NW
 Railway Street Car Park – Railway Street, M26 1AB
 Lidl Car Park – Dale Street, M26 1AB

Furthermore, we will also provide lockable cycle storage for those choosing to arrive by bicycle. To further promote this as an option, showers will be provided in the site accommodation.

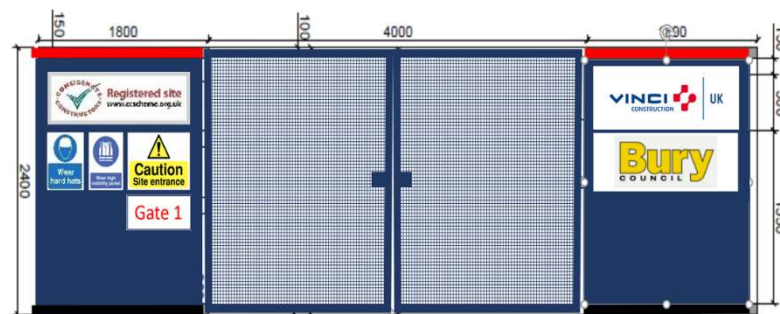
6.10 Construction Traffic

There will be various points of access into the site, for both vehicles and pedestrians.

A pedestrian access point will be provided with security provided via a turnstile controlled with biometrics. There will also be a further MOE gate for pedestrian escape in the event of an emergency or evacuation of site. Refer to plan overleaf for locations.



Vehicle access will be via one of 3 gates (which can be viewed on the plan above). Gates will be numbered Gate 1, Gate 2 and Gate 3 and arranged similar to the diagram below.



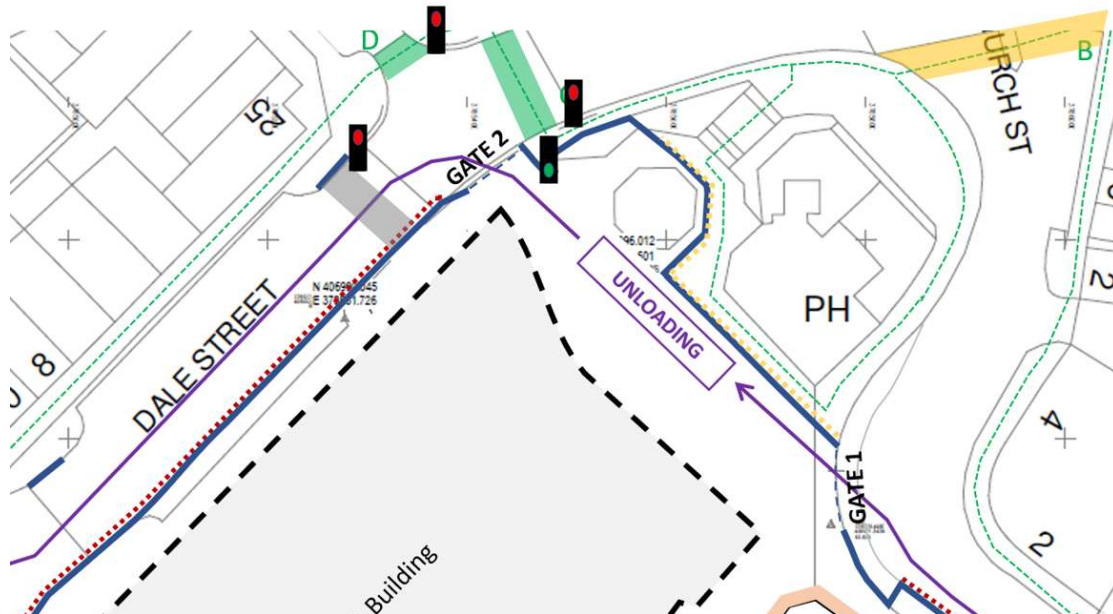
TYPICAL SITE ENTRANCE

As there is limited room on the site for manouvering vehicles (particularly once the building starts to rise from the ground), we have decided upon a one-way system into / out of the site.

The entrance gate is to be located on the bend in the road on Blackburn Street. This enables straight forward entry into the site from Blackburn Street. This gate will be manned at all times to ensure vehicles entering the site can gain easy access, and not have to queue on the road. (deliveries will be booked in advance and allocated time slots)

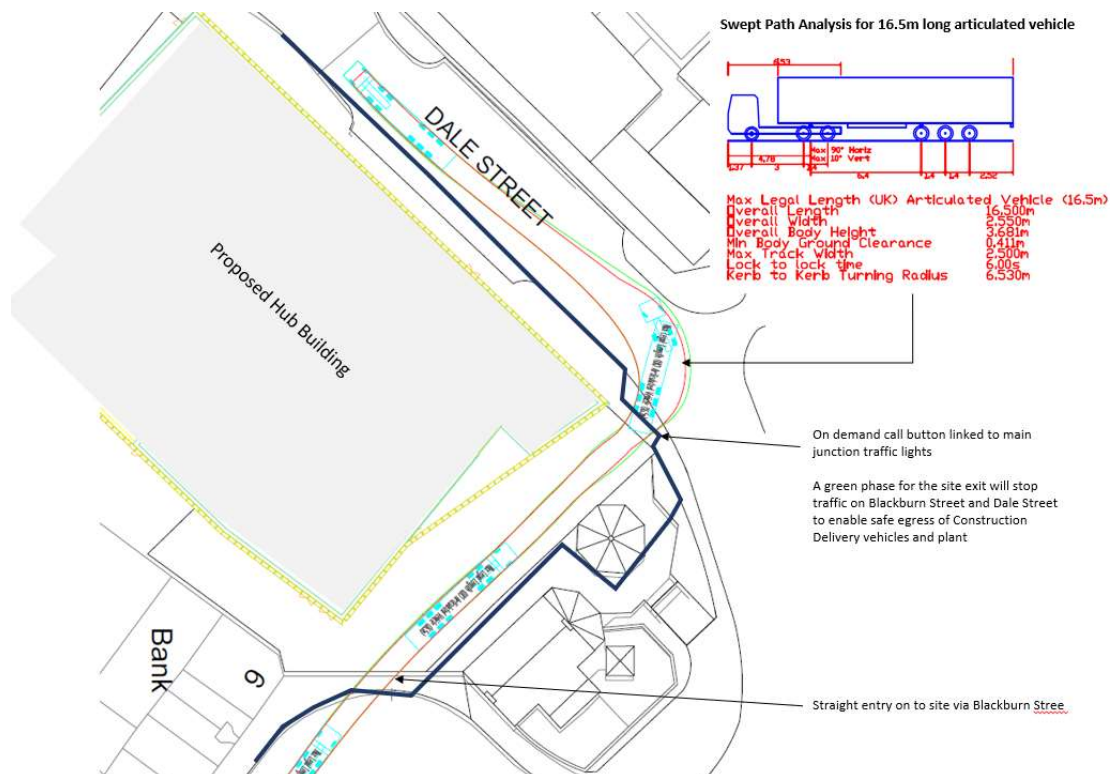
Once on the site the vehicle will be unloaded, and then continue in a forward motion towards the exit gate. Here, a second gateman will operate an on call traffic signal. This call function will be linked to a dedicated traffic signal phase for the site, and will be linked to the other signals on the junction (Dale Street/Blackburn Street). The gate will be opened, and the exiting vehicle will await a green light. At this point the other signals on the junction will be red. The delivery vehicle will be clear to egress the site.

Upon departure, the gate will be closed, and the signals will continue to cycle. The site signal head will turn to red and the remaining phases will cycle through as normal for general traffic.



We have undertaken swept path analysis for a variety of different construction and delivery vehicles to demonstrate this location will be suitable.

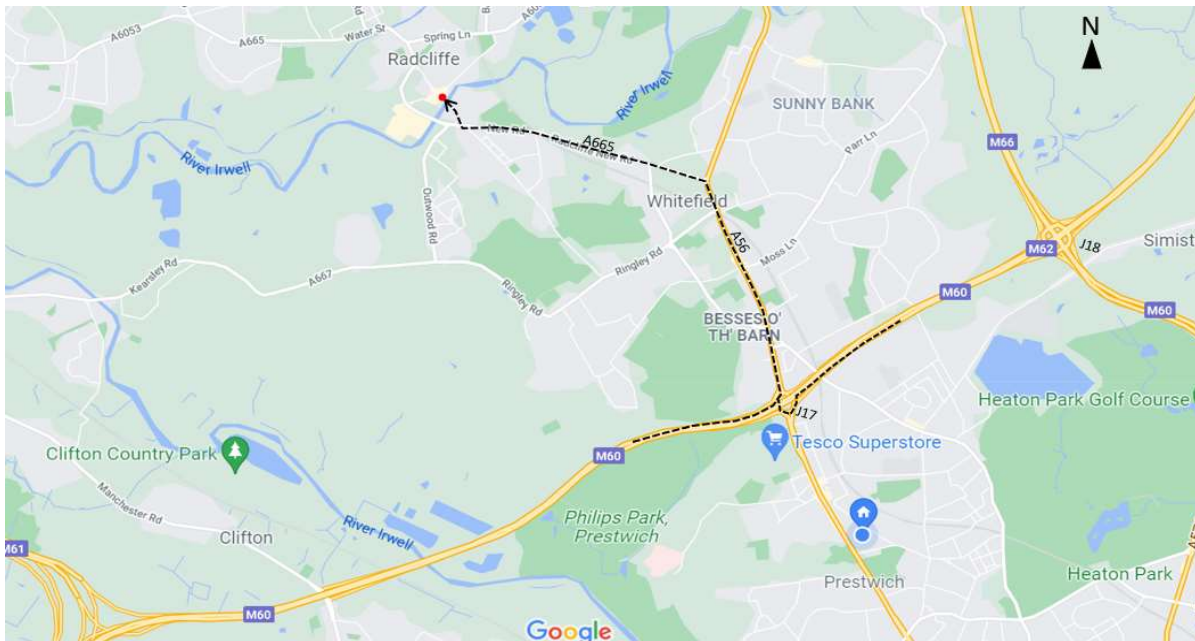
Refer to example Swept Path Analysis drawing :



Vehicle Route to/from Main Highway

Access to site is via J17 of the M60 motorway. From here vehicles will head north on the A56 (Bury New Road), before heading North West on the A665 (Radcliffe New Road) into Radcliffe Town Centre.

On approaching Radcliffe vehicles will take a right turn on to Stand Lane, and then immediately on to Blackburn Street. The main site entrance is located on the corner of Blackburn Street



Route to site from M60, Junction 17

Vehicles egressing the site will turn left on to Dale Street, and follow the road for 300m to the junction with the A665. Vehicles will turn left and re-join the A665 heading South East back towards Bury New Road. At the junction of A665 and A56 vehicles will head south back towards J17 of the M60 motorway.

7. Performance Evaluation

7.1 Monitoring and Measurement & Evaluation of Compliance

During the project the site team determines which aspects need to be measured and will develop a practical monitoring programme.

Monitoring requirements are incorporated into relevant procedures and method statements.

Results of monitoring are regularly reviewed and communicated during project review meetings.

The SSR is responsible for regular site surveillance to evaluate performance against the project specific objectives, legal requirements, environmental commitments and the requirements of the EMP.

7.1.1 Monitoring requirements and how compliance will be evaluated

Monitoring	Frequency	Responsible person(s)	Evaluation of compliance
Site Team Inspection (available on TWWW and Fieldview)	Weekly	As Rota	Fieldview
Visible Leadership Tour (Fieldview)	<u>Bi Monthly</u>	<u>Contract Manager</u>	<u>Power BI</u>
Environmental Performance Indicator reporting – Power BI	Monthly	HSEQ team	<u>Power BI</u>
Noise monitoring	Continuous	SSR	Monthly report
Monitoring of discharges against consent criteria	As required	SSR	
Gas detectors during confined space working	N/A		
Monitoring of compliance with requirements of waste duty of care	On-going	SSR	Visual inspection
Dust monitoring	Continuous	SSR	Monthly report
Waste Monitoring	Continuous	SSR	On-line reports
Ecology Reports	Monthly	TBC	
Regular Site Inspections	Regularly	Site team	Ad-hoc reporting / daily diaries / fieldview
Review of Performance at Project Meetings	Monthly	CM	
Internal Environmental System Audit	yearly	HSEQ team	Footprint
External Environmental System Audit	TBC		
Project Execution Plan	Monthly	SSR	
Aspects and Impacts Assessment	Once	SSR	Environmental file

7.2 Internal Audit Programme

In compliance with the requirements of ISO 14001:2015 the project will be audited, under the combined HSEQ Audit Programme.

A project may be audited more frequently depending on the project's environmental risks, incidents or at project management request.

7.3 Nonconformity & Corrective Action

Corrective Action Report (CAR) will be raised where a system deficiency has been identified during inspections, incident investigations, internal audits, third part audits or customer complaints.

7.4 Continual Improvement

The project will continually improve the suitability, adequacy and effectiveness of the Environmental Management System to enhance environmental performance.

This may include:

- Review of customer feedback reports and development of any specific action plans
- Reviews with our supply chain and their workforce to identify either process or product improvement measures
- Review of audit/inspection/site visit feedback recommendations and findings
- Review of internal reports/meetings, site environmental meeting, monthly project reviews, lessons learnt reviews etc.

8. Emergency Incident Preparedness and Response

The Emergency Response Plan can be found on TWWW. This document details the actions to be taken to mitigate the adverse environmental impacts during emergency situations. It also includes key contacts, reporting requirements, evacuation roles and responsibilities.

This information is predominately displayed across the site and the relevant site staff made aware of the details.

Relevant personal are trained in the effective deployment of pollution control equipment during the site induction and through regular toolbox talks and evidence of training retained.

Spill kits are located alongside fuel storage and refuelling areas, COSHH cabinets or in areas where activities using substances which could cause harm when spilled and enter the environment.

8.1 Incident reporting

The SSR reports environmental incidents, Close Calls and Positive Interventions (CC/PI's) via Footprint and Fieldview in accordance with the relevant Divisional Integrated Management Standard.

An Environmental Incident is defined as:

'an unplanned, undesired event that results in: harm or damage to the environment or the potential for enforcement action relating to environmental legislation, consents and consent conditions'.

Harm or damage to the environment includes (but not limited to):

'pollution of, or damage to, surface water, groundwater, or land; spills or leaks of oil and chemicals; damage to archaeology or heritage (listed and non-listed); damage to wildlife; including protected species and habitats; excessive noise, dust and/or other air pollutants, vibration or light pollution; or failure to control waste or excavated material in accordance with the regulations.

Incidents are classified as Level 1, 2, 3 or 4 (4 = close call)'.

Level 1: An incident which results in catastrophic harm or damage to the environment, with a high likelihood of enforcement action and/or significant media attention.

Level 2: An incident resulting in significant harm or damage to the environment with a moderate likelihood of enforcement action and/or media attention. The incident may involve the receipt of a statutory notice from a regulatory body.

Level 3: An incident resulting in limited or no damage to the environment with a low potential of enforcement action.

Level 4 (Close Call): An environmental near miss with low potential of harm or damage to the environment that could result in enforcement action.

8.2 Investigating environmental incidents

In the case of a Level 1 or Level 2 environmental incident a written investigation report will be produced by the HSEQ team. This will include details of corrective and preventative actions that are to be implemented. Where appropriate a written Root Cause Analysis will be carried out in accordance with the Divisional Integrated Management Standard.

The SSR will be the local point of contact with regulatory authorities and will maintain records of telephone conversations and all written communication relating to environmental issues. The VINCI Construction UK

Building Division Head of HSEQ will be the formal point of contact with regulatory authorities and provide support and guidance for the SSR.

References

VB Environmental Assessment & Risk Register EARR VB-ENV-FR-0001-0002

VB Surface Water Management Plan VB-ENV-PL-0009-0001

VB Waste Management Plan REMP VB-ENV-PL-0003-0001

VB Emergency Response Plan VB-IMS-PL-0004-0001

VB Divisional Integrated Management Standard VB-IMS-ST-XXXX-0004