



**BAA.2210 Red Bank Neighbourhood, Victoria North HIF Infrastructure Project**

# Project Execution Plan

## Document ref:

| Rev | Purpose description                                                             | Originator  | Checked                           | Reviewed                          | Authorised | Date       | Review Date |
|-----|---------------------------------------------------------------------------------|-------------|-----------------------------------|-----------------------------------|------------|------------|-------------|
| 01  | First issue for review                                                          | J. Annett   | N. Peters                         | N. Peters                         |            |            |             |
| 02  | Second issue for review                                                         | J. Annett   | M. Cullen<br>E. Duncan<br>P. Tims | M. Cullen<br>E. Duncan<br>P. Tims |            |            |             |
| 03  | Further updates based on review                                                 | J. Annett   | N. Peters                         | N. Peters                         |            | 13/09/22   |             |
| 04  | Quarterly Update                                                                | L. Chambers | N. Peters                         | N. Peters                         |            | 19/12/22   |             |
| 05  | Review following Planning Application, inclusion of Air Quality Monitoring plan | L. Chambers | N. Peters                         | N. Peters                         |            | 17/04/23   |             |
| 06  | Updates based on B. Cunningham audit                                            | D. Kiely    |                                   |                                   |            | 2/10/2023  |             |
| 07  | Addition of NT Plots                                                            | A Campbell  |                                   | N Peters                          |            | 7/11/2023  |             |
| 08  | Addition works to St Catherines Wood                                            | J. Annett   |                                   |                                   |            |            |             |
| 09  | June 2024 Review                                                                | A Cheregi   | L. Chambers                       | L. Chambers                       |            | 03/07/2024 |             |
| 10  | Update to nominated roles                                                       | A Campbell  |                                   |                                   |            | 06/08/2024 |             |
| 11  | Updated Dates in planning section                                               | L Chambers  | N Peters                          |                                   |            | 11/10/2024 |             |
| 12  | Updated Org Chart                                                               | L Chambers  | N Peters                          |                                   |            | 21/11/2024 |             |

|    |                                                  |             |            |          |            |            |            |
|----|--------------------------------------------------|-------------|------------|----------|------------|------------|------------|
| 13 | Updated Dates, updated org chart and nominations | L. Chambers | N Peters   |          |            | 24/02/2025 |            |
| 14 | Review focussed on NT works                      | A Campbell  | L Chambers |          |            | 01/07/2025 |            |
| 15 | Update for Phase 2 SCW works                     | L. Chambers | N. Peters  |          |            | 04/08/2025 |            |
| 16 | Updated for Phase 2 Planning Submission          | D.Roberts   | L.Chambers | N.Peters | 16/09/2025 | 16/09/2025 | 16/09/2025 |

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## Section A Project Execution Plan

### A1.0 Introduction

This Project Execution Plan (PEP) describes the methods to be implemented to control the health safety and environmental requirements with regard to project scope of works detailed in section 2.1 of this plan. The BAM Nuttall policy and systems under which this plan is prepared are described in the BAM Nuttall management manual.

This plan is primarily in four parts that define the way in which each aspect of this project will be managed. Part A of this document contains the common BAM Nuttall core set of requirements. When this section is read in conjunction with Part B, Part C or D and associated schedules these interlink to form the following documents as defined in **Table A1.0** below:

**Table A1.0 PEP Layout**

|                                                      |   |                                               |   |                                               |
|------------------------------------------------------|---|-----------------------------------------------|---|-----------------------------------------------|
| Section A<br>Common<br>Requirements<br>and schedules | + | Section B Health and Safety and schedules     | = | Construction phase plan as required under CDM |
|                                                      | + | Section C Environment and schedules           | = | Environmental management plan                 |
|                                                      | + | Section D Quality and schedules               | = | Quality plan                                  |
|                                                      | + | Section B, Section C, Section D and schedules | = | Project Execution Plan                        |

The arrangements for the management of health, safety, environmental and quality issues during site activities within this project are detailed in the sections, schedules of this document. They make provision for the development and use of subsidiary documents – procedures, activity plans, inspection and test plans.

The overall purpose of the plan is to record the initial risk assessment, how we are going to proceed and establish a project system capable of meeting customer, statutory and regulatory requirements. It gives assurance that systems are in place and guides BAM Nuttall staff in implementing them.

### A1.1 Project execution plan administration

#### Authorisation

The plan meets BAM Nuttall, customer and legislative requirements. It is verified as meeting system requirements of BAM Nuttall and those of ISO 9001, ISO 14001 and ISO 45001.

This plan is authorised for use by the agent, area health and safety advisor, area environment advisor and quality manager. The Divisional Director confirms acceptance of overall responsibility for effective operation of this plan. Confirmation is either by e-mail, electronic signature or information management system.

#### Distribution

This plan once approved and verified is stored on the information management system used by the project [01.1 Project Procedure, PEP](#)

The plan once approved and verified is distributed by the agent or document controller via e-mail and stored as detailed in the project document control procedure.

#### Revisions to the plan

Major revisions to this plan are made and approved in the same way as the originals including the obtaining of customer approval and authorisation where required by the conditions of contract. Minor amendments to the plan are not referred to the original plan authorisers, Minor

amendments to procedures are dealt with by the agent through the document management system.

### Inputs into the plan

This plan is based on the contract documents referenced in **Table A2.1** and any pre-construction information provided by the customer, the designer and/or forwarded by the Principal Designer

It has been prepared taking account of:

- ISO 10005 *Quality management guidelines for quality plans*
- ISO 9004 *Management for the sustained success of an organisation – A quality management approach*,
- BS 6079 *Project management. Principles and guidance for the management of projects*,
- PAS 99 *Specification of common management system requirements as a framework for integration*
- 'The Construction (Design and Management) Regulations Guidance on Regulations (L153)– *Managing health and safety in construction*'

Control measures defined within subsidiary documents to this plan (risk assessments, procedures, activity plans, work package plans and inspection and test plans), are primarily based on the following information sources:

### Normative References and Definitions *MG00: Management System Definitions*

Normative references and definitions are defined in the contract specification and documents. These are detailed in **Table A2.1**

## A2.0 The project

### A2.1 The project works

The project to which this execution plan relates is described in **Table A2.1** this plan is subject to continual development as the project progress and information becomes available.

**Table A2.1: The project**

|                                      |                                                                                            |
|--------------------------------------|--------------------------------------------------------------------------------------------|
| <b>Project overview</b>              | Construction of infrastructure to allow for future residential development of the site.    |
| <b>Client</b>                        | <b>Manchester City Council</b>                                                             |
| <b>Client representative</b>         | <b>Turner &amp; Townsend for MCC &amp; Pell Frischmann</b>                                 |
| <b>Principal Contractor</b>          | <b>BAM Nuttall LTD.</b>                                                                    |
| <b>Lead designer</b>                 | <b>HIF: ARUP<br/>NT02-NT04: RoC</b>                                                        |
| <b>Other designer(s)</b>             | HIF: Plan-IT<br>NT02-04: Geofirma (Piling, reinforced earth, NT02 retaining wall, NT03 GI) |
| <b>Principal Designer</b>            | <b>HIF: BAM Nuttall LTD.<br/>NT02-04: RoC</b>                                              |
| <b>Others</b>                        | <b>Pell Frischmann (Technical Advisors)</b>                                                |
| <b>Contract terms and conditions</b> | NEC Option A                                                                               |
| <b>Specification</b>                 | HIF: ARUP Design Specification,<br>NT02-04: RoC Design Specifications                      |

|                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |            |              |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|
| F10                                                   | Date Applied for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Start Date | Finish Date: |
|                                                       | 15/07/2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10/10/2022 | 01/06/2026   |
| Site working hours                                    | Mon to Friday- 0730-1800hrs.<br>No weekend work unless agreed with client representative.<br>If weekend work is permitted hours shall be Saturday 0830-1400, no Sunday or bank holiday working is permitted.<br>No night work unless authorised within the contract.<br>All local authorities' embargos to be adhered to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |              |
| Scope of work<br>(Project works covered by this plan) | <u>HIF</u><br>Site setup<br>Tree clearance<br>Bulk Earthworks – to sub formation level.<br>Treatment of invasive species<br>Ground remediation<br>Partial demolition of Honey Street retaining wall<br>Redundant service disconnection and decommissioning<br>Highway construction (red bank tie in only)<br>Hydroseeding<br>Retaining wall installation<br>Fencing<br>Removal of temporary infrastructure<br>U-tube river crossing<br><br><u>NT02-04</u><br>Removal of all vegetation<br>Construction of site hoarding<br>Disconnection of all utilities at site boundary<br>Diversion of HP Gas main within site boundary<br>Demolition of Love Factory and surrounding buildings<br>Removal of all hard standings<br>Construction of 50m piled retaining wall at Network Rail Boundary<br>Cut and fill of existing earthwork profile to meet future building layouts.<br>Construction of temporary works<br>Removal of Invasive Non-native species<br>Removal and remediation of areas of contaminated soils<br>Remediation of contaminated groundwaters<br><br><u>PHASE 2 Works</u><br><u>St Catherines Wood</u><br>Earth works, remediation and associated works to create new park area:<br><br>Woodland management (including selected tree removal and new tree planting)<br>Earthworks (cut and fill)<br>Reprofiling of existing slope to river edge<br>Removal and treatment of invasive species in the area<br>Installation of walking and cycling routes |            |              |

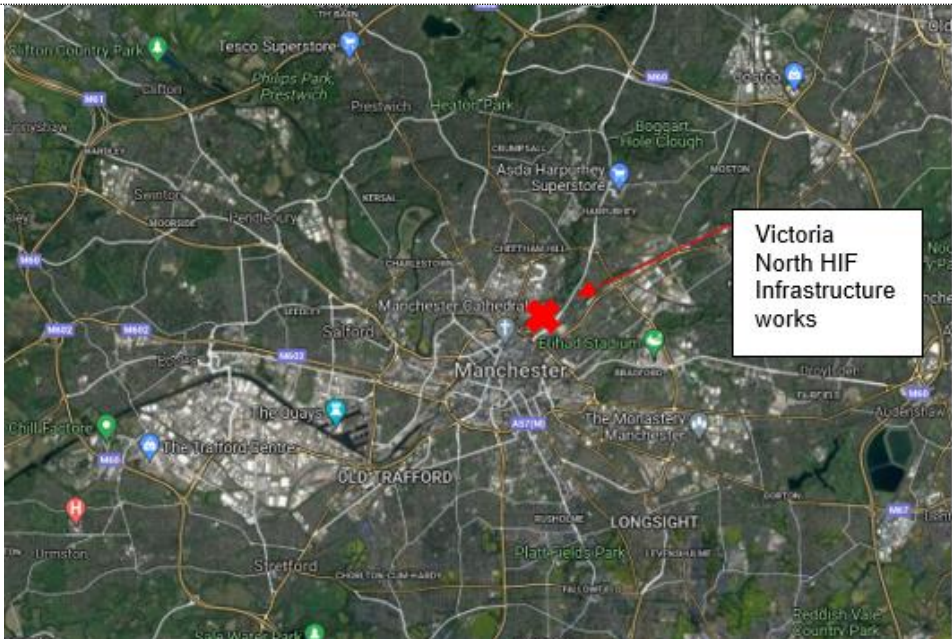
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|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              | <p>Installation of seating areas<br/>Lighting and security installation<br/>New tree and landscape planting<br/>Investigations and associated repair work to existing St Catherines footbridge<br/>Installation of gates and bollards<br/>Construction of new gabion retaining structures</p> <p><b>Riverside Footpath, Meanwhile Use space</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                               |
| <b>Significant works to be subcontracted</b> | <p><b><u>HIF</u></b><br/>Tree Clearance<br/>Hydroseeding<br/>Kerbing and Surfacing works<br/>Invasive Species Management<br/>Materials Testing<br/>Precast Manufacture<br/>Demolition of Structures<br/>Removal of Contaminated Ground Water<br/>Fencing<br/>Security + CCTV monitoring</p> <p><b><u>NT02-04</u></b><br/>Demolition<br/>De-Vegetation<br/>Hoarding<br/>Utility Works<br/>Piling<br/>Groundwater remediation<br/>Scaffold<br/>Masonry works</p> <p><b><u>St Catherines Wood</u></b><br/>Removal and treatment of invasive species in the area<br/>New tree and landscape planting<br/>Installation of play equipment and seating areas<br/>Lighting and security installation<br/>Investigations and associated repair work to existing St Catherines footbridge</p> |                                                                                                                                                                                                                                               |
| <b>Key Risks and Opportunities</b>           | Identify and list the 5 key risks on the project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Identify and list 5 key opportunities on the project                                                                                                                                                                                          |
|                                              | <p>1. Thefts/Vandalism of plant and materials</p> <p>2. Earthworks balance, potential that the quantities priced within in the model are incorrect.</p> <p>3. Roger/Chase/Hargreaves Street parking restrictions could impact the delivery of the works</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p>1. Design change of U-Tube, utilisation of alternative solution</p> <p>2. Reduced cost of installation of U-Tube</p> <p>3. Programme betterment, reduced cost and programme</p> <p>4. Roger Street Access Concrete vs Steel, move away</p> |

|  |                                                                                 |                                                                                                                |
|--|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
|  | 4. Delay from Network Rail interaction<br>5. Ground conditions leading to delay | from concrete and construct in steel.<br>5. Design development and value engineering during construction works |
|  |                                                                                 |                                                                                                                |

## A2.2 Project location and Green Travel Plan

### Project location

Table A2.2: Project location

| Project Name and address                                                            |                                                                                                                                                            |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Victoria North HIF Infrastructure Works                                             |                                                                                                                                                            |
|  | <p>Main site compound and offices located on Hargreaves Street, M4 4EJ.</p> <p>Access routes on to site for deliveries and work are subject to change.</p> |
|                                                                                     |                                                                                                                                                            |



### Green Travel Plan

In line with our corporate requirements to consider the impact our works activities have on the environment; the agent has considered transport arrangement to and from site for personnel and visitors. **Schedule A2** defines the arrangements.

### A2.3 Site security

Appropriate site security arrangements are selected by the agent following an assessment of the risks of injury to members of the public. Outline arrangements are defined in **Table 2.3**

**Table A2.3: Site security**

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Security fencing</b>         | Fencing to be erected around all work areas whilst in progress, and security on site for out of hours working. Where existing fencing is in place this will be maintained for the period of works.                                                                                                                                                                                                                                                                                                                            |
| <b>Controlled access points</b> | <p><b>HIF</b><br/> Former Creamline Dairy Entrance – Locked gates.<br/> P&amp;P Entrance – Locked gates.<br/> Hargreaves Street compound – Locked gates.<br/> <b>Roger Street (Meanwhile Use space Entrance)</b><br/> <b>SCW Bridge</b></p> <p><b>NT02-04</b><br/> Dantzie Street Access gates B &amp; C – Locked Gates<br/> Dalton Street Access Gate A – Locked gate.</p> <p><b>St Catherines Wood</b><br/> Pedestrian access via SCW bridge only</p> <p>4x4 Vehicle access across site from Hargreaves Street compound</p> |

|                                  |                                                                                                                                                                                                                              |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  | 4x4 Vehicle access via Packaging plastic coatings ltd (then through the woods if necessary).                                                                                                                                 |
| <b>Warning signs</b>             | To be provided advising public that works being carried out. Warning signs are also to be secured to temporary fencing around specific work areas and at access points.                                                      |
| <b>Security cameras</b>          | To be deployed around the main compound on Hargreaves Street and wherever else that is deemed practical as the project progresses.<br>Mobile cameras around NT plot compound.                                                |
| <b>Security guarding</b>         | Overnight Guard with Dog at Hargreaves Street compound.<br>Security guard stationed at NT plot welfare.                                                                                                                      |
| <b>Material and plant</b>        | Locked, isolation switches, secured within fenced compound. Hargreaves Street, former Volker Yard and Plateau Compound                                                                                                       |
| <b>Fuel security</b>             | Lockable Double Bunded 6000L Fuel Tank plus 1000L AdBlue tank                                                                                                                                                                |
| <b>Any other relevant matter</b> | If 3 <sup>rd</sup> Parties enter the fenced off area, works to stop and direct the party out of area.<br>If persons approach the work, the operators will stop work and direct them safely past and away from the work area. |

#### A2.4 Project objectives and targets

Specific objectives and targets with measurable performance indicators, including those set by the client, are defined for this project within the **Table 2.4** below. These targets are monitored by the agent for distribution to other interested parties.

| Objective /Target | Performance indicator                                                                                                                                                    | Responsibility |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Safety            | 100% of AP's are briefed<br>100% of Site Inductions<br>All incidents and near misses reported within a timely manner.<br>Promotion of safety culture across the division | BAM            |
| Environment       | Report all incidents in a timely manner.<br>All waste to be logged on BAM Site                                                                                           | BAM            |
| Quality           | Close out NCRs within 4 weeks                                                                                                                                            | BAM            |
| Management        | CCS Score >40                                                                                                                                                            | BAM            |
| Sustainability    | Sustainable procurement and influencing the supply chain will be key to driving low carbon initiatives and performance measures                                          | BAM            |
| Social Value      | Ratings on SVDP and committed targets throughout project                                                                                                                 | BAM            |

#### A2.5 Management arrangements

The agent is responsible for the implementation of this plan and ensures that it is communicated to all those who require to work in accordance with it directly and indirectly, including the supply chain.

### A2.5.1 Project Organisation

The organisation chart contained in **Schedule A1** describes the project team, their relationships, contracted and nominated / designated roles. This includes any off-site support staff who may be called upon for assistance by the project team. The project team is constantly reviewed against contract needs and requirements including any changes in the scope.

### A2.5.2 Personnel selection (competence, knowledge, awareness)

Personnel are selected on the basis of qualifications, skills, knowledge, behaviours and experience (competence) to suit the scope of project works. The aim of this is to ensure that the selected project team has complimentary skills to meet the engineering delivery and requirements of the customer. A record of this knowledge skills analysis process is listed **Schedule A4** in the project personnel file. This schedule contains confidential information, which must be stored securely at all times in accordance with data protection requirements.

### A2.5.3 Project appointment - *NP17: Signatory Powers*

The agent gives written notice to individual personnel of the responsibility for the nominated / designated roles listed in **Schedule A1**. Health and safety duties are further detailed in the BAM Nuttall health and safety policy booklet.

### A2.5.4 Drugs and alcohol - *NP3.2: Monitoring for drugs and alcohol (non-rail)*

*NP3.3: Monitoring for drugs and alcohol, (rail) NP3.4: Declaration of medical restrictions, NP3.13 Discipline*

BAM Nuttall expects employees and subcontractors to take a responsible approach to drugs and alcohol.

BAM Nuttall carries out pre-employment drug screening. On this project BAM Nuttall reserves the right to:

- carry out random tests for alcohol and drug use
- to test employees and subcontractors who are involved in industrial accidents
- where a manager believes that substance abuse has contributed to an incident, changed behaviour or affected work performance.

BAM Nuttall takes disciplinary action, including, counselling, which may lead to dismissal or removal from site. This includes personnel who refuse to undertake any testing which may or may not result in a positive test. In the case of subcontractors, this will lead to removal from the project.

## A2.6 Supply chain management - *NP5: Supply chain management*

Supply chain management within BAM Nuttall is carried out in accordance with the requirements defined in NP5: Supply chain management and associated procedures. A list of vendors for this project is contained within the **project procurement schedule SCF01**. [SCF01 Procurement Plan - Project Live.xlsx](#)

### A2.6.1 Procurement of good and services for the project - *NP5.3 Procurement of material goods, NP5.4 Procurement of sub-contractors and equipment*

The agent reviews the procurement schedule or equivalent document prepared during the bid process in conjunction with the relevant company buyer or estimator. This joint review is to ensure that nominated vendors have the necessary skills, knowledge, experience and training to allow them to fulfil their requirements on this project. Procurement dates and special arrangements will be agreed and monitored by the agent and buyer. This is achieved through regular communication as the project progresses. Client supplied goods are subject to the same process of evaluation as those supplied by BAM Nuttall.

#### **A2.6.2 Management of sub-contractors - NP5.6 Management of vendors on site**

Subcontractors are required to submit documented information to illustrate how they intend to meet the contract and specification requirements to demonstrate compliance. Key sub-contractors are informed of the documents to be provided within their initial enquiry, for subsequent discussion and agreement during the start-up meeting carried out for sub-contractors and major suppliers.

Sub-contractors' performance on site is continually managed over the course of the project works. This is the responsibility of the agent, who monitors and provides feedback on the vendor's performance as described within the company procedure.

### **A2.7 Product Traceability**

Product traceability is a contract requirement of this project as defined in **Table 2.7**.

**Table A2.7: Traceability requirements**

| <b>Products and materials where traceability is required</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Tarmac</li> <li>Kerbs</li> <li>Concrete – cube tests</li> <li>Ducting</li> <li>Pre-cast concrete elements</li> <li>Duct chambers</li> <li>Retaining wall elements</li> <li>Aggregates</li> <li>Earthworks – traceability, contaminated soils, structural qualities, chemical properties</li> <li>Gabion baskets (St Catherines Wood)</li> <li>Play equipment (St Catherines Wood)</li> <li>Seating areas (St Catherines Wood)</li> <li>Lighting and security equipment (St Catherines Wood)</li> </ul> |

Materials may be incorporated in the works as 'status unknown' and held traceable until tests confirm acceptability.

On this project we do not envisage the use of a new or modified products that will require product acceptance, where they are required the above standards and guidance will be complied with.

### A2.8 Equipment control - *NP11: Measuring equipment control*

Monitoring, measuring and test equipment is inclusive of all surveying instruments, laboratory equipment, cable locators, field testing equipment, gas and noise monitors and any other specific items identified by the agent. The need for monitoring, measuring, testing and calibration of site equipment is identified within the project's inspection and test planning, company procedures and work specific activity plans.

Control of equipment is the responsibility of the site equipment engineer who is appointed in writing by the agent to ensure project equipment is controlled, checked and calibrated.

## A3.0 Risk Management

The effective management of risk is fundamental to the control of work delivery and to the ultimate successful completion of this project. Continual forward thinking and introduction of appropriate controls prevents the occurrence of the unexpected, ensuring project objectives are achieved. The risks to health, safety, quality and environment have been identified during the preparation of this plan. These risks have been detailed in **Section 3.2** and **Section 3.3** of this plan.

### A3.1 Management of project risk - *NP22.5: Risk and opportunity management of project works*

Risk and opportunity management at the construction stage commences with preparation of this project execution plan following a review of the contract requirements. Ongoing management of risk and opportunity is undertaken throughout the project. This is monitored using the live threats and opportunity management register (ROMR).

[Victoria North ROMR Rev 5.xlsx](#)

### A3.2 Health, safety, quality and environmental risk - pre-construction and designers - *NP23: Health safety and environmental risk assessment*

The hazards identified from pre-construction information, including design risk assessments, which incorporate design lifecycle are listed in **Table 3.2** which provides a checklist for where they are dealt with in this plan.

**Table A3.2: Hazards from pre-construction information**

| Hazard:                          | Section of plan addressing hazard:                                                  |
|----------------------------------|-------------------------------------------------------------------------------------|
| Giant Hogweed                    | A3.2: Constraints and enhancements                                                  |
| Existing/uncharted utilities     | B4.01 underground services                                                          |
| Temporary Works                  | <b>B4.02</b>                                                                        |
| Contaminated Ground              | <b>B4.08 C3.04</b>                                                                  |
| Piling                           | <b>B4.10</b>                                                                        |
| Demolition                       | B4.12                                                                               |
| Working near existing structures | B4.17 Stability of existing structures                                              |
| Working close to railway lines   | B4.18 Railways                                                                      |
| Asbestos                         | <b>B4.20 Other significant hazards</b>                                              |
| Leptospirosis                    | <b>B4.20 Other significant hazards</b>                                              |
| Plant movements                  | <b>C3.05 Nuisance - NP27.4 Control of site nuisance</b>                             |
| Working on or near a watercourse | Schedule D1.3 Register of activity plans and inspection and test plans / checklists |
|                                  |                                                                                     |

### A3.3 Health, safety, quality and environmental risk - construction phase - *NP23: Health safety and environmental risk assessment*

The risks from safety, health, quality and environment are identified during detailed planning of work activities. This includes work carried out in the design phase. Actions to prevent and reduce risks are identified with any remaining (residual) risks clearly understood and communicated to the workforce.

- **Section B** details health and safety risks
- **Section C** details environmental risks
- **Section D** details quality risks

Risk assessment may identify the need for an activity plan as a necessary control to manage the outcome and it is appropriate to prepare an activity plan for all activities of significant risk.

### A3.4 Emergency procedure - *SG23: Emergency planning*

Site specific emergency procedures are prepared to ensure limitation of injury and damage should an incident occur.

The emergency procedures listed and included in **Table A3.4** below apply. Site notices describing these procedures are included in **Schedule A6**. A list of key personnel and organisations for contact or liaison in the event of an emergency, together with contact telephone numbers, is displayed as a site notice and included in **Schedule A6**.

**Table A3.4: Incident and emergency arrangements**

| Site specific emergency arrangements | Are arrangements to be drilled? | Frequency of drill |
|--------------------------------------|---------------------------------|--------------------|
| Accident                             | Yes                             | Annually           |
| Fire                                 | Yes                             | quarterly          |
| Confined space rescue                | Yes                             | Before activity    |
| Person in water                      | Yes                             | Annually           |
| Oil and chemical spill               | Yes                             | Annually           |
| MEWP Rescue                          | Yes                             | As required        |

Following an incident, the emergency services and senior members of the management team are informed immediately and where applicable the relevant enforcing authority is also informed. Communication with the media and public is managed and controlled. Thereafter, all communication is referred to the Head of Communications at Head Office.

### A3.5 Site tidiness

The agent ensures that facilities are kept clean, and tidiness (housekeeping) is maintained in the following areas by completing **table A3.5** below:

**Table A3.5: Site tidiness**

| Area                | Action                            | Minimum Frequency |
|---------------------|-----------------------------------|-------------------|
| Offices             | Cleaner employed                  | Daily             |
| Welfare and toilets | Cleaner employed                  | Daily             |
| Access routes       | Foreman                           | Weekly            |
| Materials storage   | Supervisor                        | Daily             |
| Work areas          | Foreman/subcontractor supervisors | Daily             |

## A4.0 Project design, planning and programming

### A4.1 Design - NP7: BAM Nuttall design services NP20: Design management for design services

BAM Nuttall is responsible for the following elements of permanent works design:

- Management of Arup permanent design.

Communication contacts for the designers are listed in **Table A4.1**

**Table A4.1: Communication with designer(s)**

| Name of Lead Designer                  | Name of representative              | Position         | Contact details |
|----------------------------------------|-------------------------------------|------------------|-----------------|
| HIF: Arup                              | Michael Wilton                      | Project director |                 |
| NT2-4: ROC                             | Mike Newman                         | Project director |                 |
| Method of communication                |                                     |                  |                 |
| Meetings                               | Weekly meetings                     |                  |                 |
| Document transfer arrangements         | Use of ProjectWise                  |                  |                 |
| Other                                  | Email                               |                  |                 |
| Name of Other Designer                 | Name of representative              | Position         | Contact details |
| BAM Nuttall Temporary works department |                                     | Design Engineer  |                 |
| Method of communication                |                                     |                  |                 |
| Meetings                               | Microsoft Teams, Meetings in person |                  |                 |
| Document transfer arrangements         | Email                               |                  |                 |
| Other                                  | ProjectWise                         |                  |                 |

The BAM Nuttall nominated project design co-ordinator ensures that design information, including all design changes and risk assessments, is issued to the Principal Designer. For projects containing design elements this project execution plan is updated to reflect designer risk assessments.

The Lead Designer is also responsible for ensuring:

- Safe by design review is carried out
- That the work of all other designers meets the overall design requirements
- Design is subject to an interdisciplinary check
- That a constructability review is carried

The agent ensures any subcontractor designed temporary works, including formwork and falsework, are referred to the BAM Nuttall Design Department for the relevant categorised checking.

## Design validation

The arrangements for any design validation, as defined in the customer's requirements, specification, or designer's quality plan, are set out in the quality control plan of **Schedule D1**.

The design co-ordinator ensures that testing or trials are supervised appropriately, the designer is notified of the results and that the lead designer reviews them.

## A4.2 Engineering Management

The agent appoints an engineering management team in accordance with BAM Nuttall procedures. Engineering appointments for this project are defined in schedule A1 of this plan.

If required a separate engineering management plan is produced and detailed in Section E of this plan. This section should be read in conjunction with Section A together they form the Engineering Management Plan for this project.

## A4.3 Project planning - NP2: Planning and programming

For the project, the bid programme is used as the basis for the contract programme submitted for the approval of the client or his representative. From this programme, activities are identified, and arrangements made for detailed planning.

In addition to work activities, arrangements are planned for the establishment of capability in terms of system, resources and competence. The planning process enables the timely identification and provision of these requirements in sufficiently robust form to allow the works to progress as programmed to the satisfaction of all stakeholders.

## A4.4 Project programme - NP2: Planning and programming

The outline programme for the works is as described in the following table. Whilst the anticipated completion date stated is updated as necessary in revisions to this plan, it is indicative only and has no contractual significance.

**Table A4.4: Project programme key dates**

|                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Contract award date</b>                                         | 10/05/2021 PCSA, 31/10/2022 NEC 3 Option A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Start on site date</b>                                          | 20 <sup>th</sup> September 2022                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Appointment / arrival on site of critical / key contractors</b> | <p><b>HIF</b><br/>Cabin delivery and installation – Nixon's – 12/9/22<br/>Tree clearance – Cornthwaites – 20/9/22<br/>Invasive Species Clearance - Feb 2023<br/>Gas diversion (Dantzic St) 17/01/23<br/>BT diversion (Dantzic St) 14/03/23</p> <p><b>NT02-04</b><br/>De-veg: 08/01/24<br/>Demolition: 22/01/24<br/>Earthworks: 01/05/24<br/>Groundwater remediation: 12/12/24<br/>Masonry: Nov 2025</p> <p><b>St Catherines Wood</b><br/>De-veg, Invasive Removal, Topsoil 21/01/2025<br/>Earthworks 10/02/2025<br/><b>Phase 2 16/09/2025</b></p> |

|                                                 |                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Key consent dates</b>                        | <p><b>HIF</b><br/>Planning Approval 14/07/22<br/>Judicial Review 25/08/22</p> <p><b>NT02-04</b><br/>All Planning conditions discharged 01/03/2024</p> <p><b>St Catherines Wood</b><br/>permission ref: 137079/JO/2023<br/>Planning Application being prepared</p>                                                                                           |
| <b>Key sectional/milestone completion dates</b> | <p><b>HIF</b><br/>New Comms Supply ducting complete 29/11/23<br/>New HV Supply ducting complete 12/04/24<br/>ENWL Power on Date 03/05/24</p> <p><b>NT02-04</b><br/>NR possession #1 – 22/02/2024<br/>NR possession #2 – 03/10/2024</p> <p>NT02 – 29/09/2025<br/>NT03 – 28/01/2026<br/>NT04 – 11/12/2025</p> <p><b>St Catherines Wood</b><br/>20/05/2026</p> |
| <b>Anticipated completion date</b>              | <p>HIF – 06/05/2025</p> <p>NT02-04 – 11/12/2025</p> <p>St Catherines Wood – 20/05/2026 Likely to change</p>                                                                                                                                                                                                                                                 |

The bid programme has been used as the basis for the contract programme. From this programme, activities are identified, and arrangements made for detailed planning. The developed contract programme can be reviewed by following this link. [VNIF-BNL-ZZ-YYY-PR-WP-0134](#)

#### A4.5 Access and egress / traffic routes (on and off the project) - NS2: *Access and egress*

The agent ensures that sufficient time and resources are allocated to maintain access routes for pedestrians and vehicles. Arrangements in place are listed in table A4.5 below.

**Table A4.5: Access and egress / traffic route maintenance**

| Route                   | Responsibility | Action                                                                                                                                                                                                                                                                                                                        |
|-------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Deliveries              | BAMN           | <ul style="list-style-type: none"> <li>- Complete SF811</li> <li>-Access across P&amp;P bridge off Collyhurst road.</li> <li>-Access via former Creamline Dairy on Red Bank</li> <li>-Access to Hargreaves Street compound via Roger Street</li> <li>- Access at Dantzig Street</li> <li>- Access at Dalton Street</li> </ul> |
| Personnel segregation   | BAMN           | BAM to install safe walkways to work areas across site.                                                                                                                                                                                                                                                                       |
| Plant and equipment     | BAMN           | To only use designated access routes as per delivery procedure<br>Write/Check lift plans as required                                                                                                                                                                                                                          |
| Monitoring              | BAMN           | Supervisor and gate men to monitor at all times.                                                                                                                                                                                                                                                                              |
| Access to point of work | BAMN           | As per Workplace Transport Plan. Access within site following designated vehicle and pedestrian routes.                                                                                                                                                                                                                       |
| Zonal working           | BAMN           | BAM Supervisor to install segregation appropriate to work area and maintain                                                                                                                                                                                                                                                   |

#### A4.5.1 Workplace transport plan

The layout of access to and egress from the site, traffic routes, sheeting and loading/unloading areas, restricted areas are prominently displayed on a Site Transport Plan, including rules can be found in Schedule A8.

#### A4.6 Budget and financial control - NP9: Budget and financial control

BAM Nuttall seeks to deliver a sustainable business result by implementing a process of comprehensive, effective and consistent budget and financial control.

The project team are responsible for establishing financial controls as described below:

- Establishment of a robust performance monitoring systems that provides a basis for subsequent commercial monitoring during the life of the project.
- Obtaining a timely understanding of the project's performance against budget, taking into account the programme position.
- Providing management with a report of accurate and auditable costs at the end of each monthly accounting period.
- Ensuring that applications for payment, certification and cash received are all in accordance with the contract.
- Providing a reliable and clear forecast of the expected financial outcome of the project.
- Preparing clear, accurate and comprehensive commercial plans and reports.
- Cashflow management

#### A5.0 Communication

The agent determines and implements effective arrangements for formal communication with all stakeholders. Details of communication routes for this project are detailed in **Tables A5.1 to A5.5**

##### A5.1 Customer communication

On this project, such communication is achieved as indicated in the following table.

**Table A5.1: Customer communication**

| Name of customer's representative               | Position and organisation                                                                                    | Contact details |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------|
| <i>Customer's representative name</i>           | Linden Tero<br>MCC Project Manager                                                                           |                 |
| <i>Name of safety manager</i>                   | Steve Martin<br>KOK Surveyor                                                                                 |                 |
| <i>Name of environmental manager</i>            | Eddie Duncan                                                                                                 |                 |
| <i>Name of quality manager</i>                  | Sophie Pell Frischmann<br>Project Manager                                                                    |                 |
|                                                 |                                                                                                              |                 |
| <b>Arrangements for other meetings / forums</b> | Regular Planned Public drop-in meetings with BAMN representatives<br>Teams & face to face meetings - Monthly |                 |

### A5.2 Principal Designer

The agent will provide information to the Principal Designer in the ways described in the following table.

**Table A5.2: Principal Designer Communication**

| Name of Principal Designer                  | Position and organisation               | Contact details |
|---------------------------------------------|-----------------------------------------|-----------------|
| Alex Leahy                                  | Principal Designer                      |                 |
| <b>Meeting / communication arrangements</b> | Teams & face to face meetings - Monthly |                 |
| <b>Information transfer method</b>          | Email, ProjectWise use.                 |                 |

### A5.3 Contractors

The agent will provide information from contractors to the Principal Designer in relation to construction information and for inclusion within in the health and safety file in the ways described in table 5.3.

**Table A5.3: Communication with other contractors**

| Name of contractor             | Name of contractor representative | Position           | Contact details |
|--------------------------------|-----------------------------------|--------------------|-----------------|
| Nixon's Welfare Hire           | Sarah Jones                       | Module Specialist  |                 |
| <b>Method of communication</b> |                                   |                    |                 |
| Meetings                       | Pre-start                         |                    |                 |
| Document transfer arrangements | Email                             |                    |                 |
| Other                          |                                   |                    |                 |
| Name of contractor             | Name of contractor representative | Position           | Contact details |
| Cornthwaites                   | Brian Thoburn                     | Operations Manager |                 |
| <b>Method of communication</b> |                                   |                    |                 |
| Meetings                       | Pre-start                         |                    |                 |
| Document transfer arrangements | Email                             |                    |                 |
| Other                          |                                   |                    |                 |
| Name of contractor             | Name of contractor representative | Position           | Contact details |
| Rhodar                         | George Roberts                    | Project Manager    |                 |
| <b>Method of communication</b> |                                   |                    |                 |
| Meetings                       | Pre-start                         |                    |                 |
| Document transfer arrangements | Email                             |                    |                 |

|                                |                                          |                    |                        |
|--------------------------------|------------------------------------------|--------------------|------------------------|
| Other                          |                                          |                    |                        |
| <b>Name of contractor</b>      | <b>Name of contractor representative</b> | <b>Position</b>    | <b>Contact details</b> |
| Flannery Plant Hire            | Tom Owen                                 | Operations Manager |                        |
| <b>Method of communication</b> |                                          |                    |                        |
| Meetings                       | Pre-start                                |                    |                        |
| Document transfer arrangements | Email                                    |                    |                        |
| Other                          |                                          |                    |                        |
| <b>Name of contractor</b>      | <b>Name of contractor representative</b> | <b>Position</b>    | <b>Contact details</b> |
| Hydrainer                      | Jimmy Corless                            | Depot Manager      |                        |
| <b>Method of communication</b> |                                          |                    |                        |
| Meetings                       | Pre-start                                |                    |                        |
| Document transfer arrangements | Email                                    |                    |                        |
| Other                          |                                          |                    |                        |
| <b>Name of contractor</b>      | <b>Name of contractor representative</b> | <b>Position</b>    | <b>Contact details</b> |
| S Evans & Sons                 | Jonathon White                           | Contracts Manager  |                        |
| <b>Method of communication</b> |                                          |                    |                        |
| Meetings                       | Pre-start                                |                    |                        |
| Document transfer arrangements | Email                                    |                    |                        |
| Other                          |                                          |                    |                        |
| <b>Name of contractor</b>      | <b>Name of contractor representative</b> | <b>Position</b>    | <b>Contact details</b> |
| Provectus                      | Simon Starovla                           | Contracts Manager  |                        |
| <b>Method of communication</b> |                                          |                    |                        |
| Meetings                       | Pre-start , Fortnightly                  |                    |                        |
| Document transfer arrangements | Email                                    |                    |                        |
| Other                          |                                          |                    |                        |
|                                |                                          |                    |                        |

#### A5.4 Other Interested Parties

The agent establishes communication links with other interested parties such as the local authority, regulators, community representatives. Details of these are listed in **Table A5.4** below. Details of community links are provided in the community action plan contained in **schedule A3**.

The project will be registered with the Considerate Constructors Scheme (CCS) in accordance with criteria defined in BAM Nuttall Management Bulletin MB123 unless the client restricts such membership. Community investment activity data is recorded monthly on BAM Nuttall Ltd. Central database.

**Table A5.4: Other interested parties**

| Designated Parties          | Name & Address                                               | Contact Name (s) | Contact Details (Email, mobile, telephone) |
|-----------------------------|--------------------------------------------------------------|------------------|--------------------------------------------|
| Local authority departments | Linden Tero                                                  |                  |                                            |
| EA                          | Richard Fairclough House, Knutsford Road, Warrington WA4 1HT | Andy Davies      |                                            |
| HSE                         | Redgrave Court, Merton Road, Bootle, Merseyside L20 7HS      |                  |                                            |
| Local groups                | Friends of St Catherine's Woods                              |                  |                                            |
| Project Planning consultant | Avison Young                                                 | Ed Harvey        |                                            |
| FEC                         | Linden Tero                                                  |                  |                                            |
| Network Rail                | (via) Rhiannon Monaghan                                      |                  |                                            |

### A5.5 Workforce - NP24 Activity Plan, SG26 Workforce consultation

The agent identifies workforce representatives to be involved in discussions pertaining to the ongoing methodology and programming of the works. People and personnel consulted are listed in the relevant activity plans or work package plans.

In addition, the following formal arrangements have been established to consult with the workforce generally

**Table A5.5: Other communication arrangements**

| Information discussed    | Method                                           | Frequency                                                                       |
|--------------------------|--------------------------------------------------|---------------------------------------------------------------------------------|
| Site Induction           | Presentation with Verbal briefing and visual aid | Upon first visit to site<br>Every 12 months or if absent from site for 3 months |
| General site information | Safety Committee                                 | Monthly                                                                         |
| Alerts and bulletins     | Face to face                                     | As determined by issue                                                          |
| Toolbox talks            | Face to face                                     | As determined by site needs                                                     |
| General observations     | Observation cards<br>Observation App             | As matters are identified                                                       |
| Briefings                | Verbal                                           | Daily and feedback at the end of the shift                                      |
| Activity Plans           | Verbal                                           | Each AP & RA                                                                    |
| Feedback Friday          | Verbal                                           | Weekly                                                                          |
| Voice meeting            | Verbal– Minutes Taken                            | Monthly                                                                         |

### A5.6 Induction and site rules

The induction and site rules are developed from pre-construction information, and these can be found in **Schedules A5** and **Schedule A6**. Documents are subject to review and revision as work or information changes or develops.

### A5.7 Project Documented Information - NP10: Disposal and retention of company documents

Documented information used in the management of the project is defined by the agent. The agent is responsible for ensuring that the relevant documents are available to personnel required to use them and personnel carrying out work are responsible for ensuring that current documentation is used.

#### Project data - NP10.3: Management of documents during the contract phase of a project

The agent establishes a formal project data management system in accordance with division specific requirements. All documents received or issued by the project are controlled and maintained in accordance with this project system. It is fully described in a project specific procedure, listed in **Schedule D2** of this plan. The relevant parts of which are communicated to all project personnel required to work with documents.

Project documents are maintained throughout the duration of a project as evidence of the compliance, conduct, progress and certification of the project works, and to provide assurance that requirements have been met.

These documents include all correspondence, instructions, minutes of meetings, as-built programmes, resource schedules, registers, test certificates, inspection checklists, training records etc. Project documents are maintained and archived in accordance with the project document control system defined within this project management plan.

## **A5.8 Health and Safety File**

The Health and Safety File details the information needed to alert those carrying out future construction work, including cleaning, maintenance, alterations, demolition and refurbishment. It identifies information to help those carrying out these works to determine a safe system of work.

The file will contain information for the client who has a duty to provide information about their premises and infrastructure, to those who carry out work there.

### **A5.8.1 Layout, format, and storage**

Information will be collected throughout the project for the Health and Safety File by all parties. BAM Nuttall is responsible for preparing and submitting the Health and Safety File to the Principal Designer in an agreed format. The Health and Safety File will be submitted to the Principal Designer within a time frame identified by the contract from the date of substantial completion.

## **A5.9 Management of change - *NP21: Change management***

All changes to contract requirements, together with changes to arrangements, resources and subcontracts are recorded in accordance with any relevant contract requirements, and on the project change management register (CMR).

Superseded documents are promptly withdrawn from use and are clearly marked as superseded. All changes to construction requirements are reviewed for possible effects on existing risk assessments and subsequent control arrangements.

## **A5.10 BIM - *BIMG A1.4 BAM Nuttall BIM Standard***

BIM utilisation has been deployed on this project. A BIM execution plan (BEP) has been prepared using template BIMG A1.6. This plan is contained in **Appendix 7** to the project execution plan.

## **A6.0 Project Performance, Evaluation and Improvement**

### **A6.1 Project Nonconformity, complaints and corrective action**

#### **A6.1.1 Quality nonconformity - *NP14: Non-conformity and corrective action***

Nonconformities may be errors in work items or failures of management systems. Any person discovering a potential nonconformity reports it to the engineer responsible for inspections of that element of work so that it can be resolved immediately wherever possible. The engineer also informs his line manager. All project non-conformities are recorded on the project improvement register contained in BAM Flow, accessed via Connect. [BAA.2210 BAM Flow](#)

Investigation concentrates on identification of root causes in order that appropriate action can be taken to avoid recurrence. Monthly reviews are made and analysed by the Quality Manager to ensure that all necessary action has been taken. All non-conformities are referred to quarterly divisional system review meetings for the initiation of suitable longer-term actions.

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#### **A6.1.2 Health and safety nonconformity - NP1.14: Reporting and investigation of incidents**

Nonconformity in respect of health and safety is recorded as an accident or incident, i.e., reportable accident, a lost time accident, an accident book entry, a reportable dangerous occurrence, significant incident, health and safety incident, near-miss / observation or inspection finding as appropriate.

Investigation concentrates on identification of root causes in order that appropriate action can be taken to avoid recurrence. Periodic reviews of accidents and incidents are made and analysed by the Director, Health and Safety to ensure that all necessary action has been taken. Recurrent problems or those relevant to other projects are referred to divisional system review meetings for the initiation of suitable longer-term actions.

#### **A6.1.3 Environmental nonconformity - NP27.7: Reporting environmental incidents**

Nonconformity in respect of environmental matters is recorded as an environmental incident, near miss or inspection finding. Incidents are reported and inspection findings are recorded on the environment department database in accordance with departmental procedures.

Investigation concentrates on identification of root causes in order that appropriate action can be taken to avoid recurrence. Periodic reviews of incidents are made and analysed by the Head of Environment to ensure that all necessary action has been taken. Recurrent problems or those relevant to other projects are referred to divisional system review meetings for the initiation of suitable longer-term actions.

### **A6.2 Audit and inspection**

#### **A6.2.1 Project audit - NP12: Audit**

A programme of audit for the project is set by the divisional director at system review meetings. Audits are carried out by trained internal auditors who are independent of the project. A copy of the audit programme for this project is available from the *area quality manager*.

The agent makes arrangements to accommodate internal audits, together with any external audits requested by the customer or his representative or arranged by the Head of Business Process and Quality, Director Health and Safety or Head of Environment for the registration bodies.

#### **A6.2.2 Project Inspection - SG05: Safety tours, EG42: Closing out issues raised in BIM 360 Field Environmental inspection report**

It is a requirement that health, safety, quality and environment are monitored continuously as a day-to-day activity. A site safety and environmental engineer is appointed to carry out routine weekly site inspections. Reports of these inspections are passed to the project agent who ensures that timely action is taken, usually confirming this at weekly site meetings.

Safety, environmental and quality inspections are carried out by divisional safety and environmental advisors and divisional quality manager(s). Results are reported in writing to the agent. The agent confirms to the divisional director in writing actions taken as a result of these visits.

In addition to the inspections detailed above project inspection visits will be conducted by senior managers. These visits not only act a monitoring tool for improvement, but they also provide valuable interaction and communication for project personnel with senior managers.

### A6.3 Review - NP13: Review

#### A6.3.1 Project review (meetings)

Regular reviews are undertaken throughout the duration of the project at internal meetings of the project team to verify that planned arrangements remain suitable and are effective in controlling the work. These meetings also review the results of audits, nonconformities and problems and establish actions to prevent recurrence and improve the system.

Attendance and agenda for meetings are set out in **Tables A6.3.1a and b**.

**Table A6.3.1a: Review meetings**

| Alter table to suit site requirements                  |           |                                                                                                                                 |
|--------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------|
| Meeting                                                | Frequency | Attendance                                                                                                                      |
| Progress                                               | Monthly   | Agent<br>Senior site managers.<br>Senior site QS<br>Client representatives                                                      |
| Internal site co-ordination                            | Weekly    | Agent<br>Sub-agent<br>Section agents<br>QSS                                                                                     |
| Internal health, safety environment and quality review | Monthly   | Agent<br>Sub-agent<br>Section agents<br>QSS<br>Site safety and environment engineers<br>Site quality engineer / quality manager |
| Internal section                                       | Weekly    | Section agents<br>All section staff<br>QS                                                                                       |
| Design management/ review meeting                      | Monthly   | Agent<br>Design coordinator<br>All designer's representatives                                                                   |

**Table A6.3.1b: Review meeting agendas**

| Alter table to suit site requirements                                            |          |                             |               |         |                           |
|----------------------------------------------------------------------------------|----------|-----------------------------|---------------|---------|---------------------------|
| Minimum agenda items                                                             | Progress | Internal site co-ordination | Internal HS&E | Section | Design Management meeting |
| Review and agree previous minutes/actions                                        | ✓        | ✓                           | ✓             | ✓       | ✓                         |
| Health, safety and welfare, including review of CPP                              | ✓        | ✓                           | ✓             | ✓       |                           |
| Environment                                                                      | ✓        | ✓                           | ✓             | ✓       | ✓                         |
| Progress and programme                                                           | ✓        | ✓                           |               | ✓       | ✓                         |
| Resources – plant, materials and labour                                          |          | ✓                           |               | ✓       | ✓                         |
| Client requirements and information required against programme. Review registers | ✓        | ✓                           |               | ✓       | ✓                         |

| Alter table to suit site requirements                                                     |          |                             |               |         |                           |
|-------------------------------------------------------------------------------------------|----------|-----------------------------|---------------|---------|---------------------------|
| Minimum agenda items                                                                      | Progress | Internal site co-ordination | Internal HS&E | Section | Design Management meeting |
| of TQs/RFIs, SIs/CVIs, and drawings.                                                      |          |                             |               |         |                           |
| Commercial matters                                                                        | ✓        | ✓                           |               | ✓       | ✓                         |
| Risk assessments, activity plans, inspection and test checklists and approvals            | ✓        | ✓                           | ✓             | ✓       | ✓                         |
| Suppliers and subcontractors' performance, future programme, client approval.             | ✓        | ✓                           | ✓             | ✓       | ✓                         |
| Nonconformities, problems, complaints, improvements.                                      |          | ✓                           | ✓             | ✓       | ✓                         |
| Results of audit, audit plan.                                                             |          | ✓                           | ✓             |         |                           |
| Quality control plan and allocation of inspection duties and approvals                    | ✓        | ✓                           |               |         | ✓                         |
| Contract records (as built drgs, test results, completed checklists, maintenance manuals) | ✓        | ✓                           |               |         | ✓                         |
| Objectives and targets                                                                    | ✓        | ✓                           | ✓             |         |                           |
| Design delivery risks                                                                     | ✓        |                             |               |         | ✓                         |
| Value engineering                                                                         | ✓        | ✓                           |               |         | ✓                         |
| Next meeting date                                                                         | ✓        | ✓                           | ✓             | ✓       | ✓                         |

### A6.3.2 Technical review – NP25 Technical and engineering delivery

To ensure that the best available technical knowledge is provided to the project agent, technical / quality reviews are held for matters where there is significant risk in terms of:

- health and safety
- activities/ items critical to quality
- quality of construction
- environmental impact
- company image and/or reputation

Activities to be subject to technical review, together with approximate timing, are listed in **Table A6.3.2**

**Table A6.3.2: Technical review**

| Project activities subject to technical / quality review | Approximate date of review |
|----------------------------------------------------------|----------------------------|
| <b>Earthworks</b>                                        | Quarterly                  |
| <b>Highways Construction</b>                             | Quarterly                  |
| <b>Structures</b>                                        | Quarterly                  |
| <b>Contaminated Ground Remediation</b>                   | Quarterly                  |
| <b>Landscaping</b>                                       | Quarterly                  |
| <b>Drainage</b>                                          | Quarterly                  |

| Project activities subject to technical / quality review | Approximate date of review |
|----------------------------------------------------------|----------------------------|
| Fencing                                                  | Quarterly                  |

Records are maintained of all reviews in the form of meeting notes, records of actions, correspondence, and requests for information or as required by the contract.

### A6.3.3 Customer feedback - *NP26: Customer relationship management*

The aim of the project team is to work in collaboration with the customer to achieve a project that is on time and budget. Customer satisfaction is monitored from project meeting and formal feedback.

## A6.4 Improvement

The agent continually seeks to identify opportunities to improve the effectiveness and efficiency of the project, and of the BAM Nuttall business. All personnel are made aware of the need to recognise errors as opportunities for improvement. Without this awareness, mistakes are ignored or concealed and data for the improvement activity lost.

Improvement opportunities on this project are identified from:

- formal reviews of performance (**see Section 6.3**)
- feedback on performance from clients, vendors and regulatory bodies
- review of audit results
- analysis of nonconformities and complaints

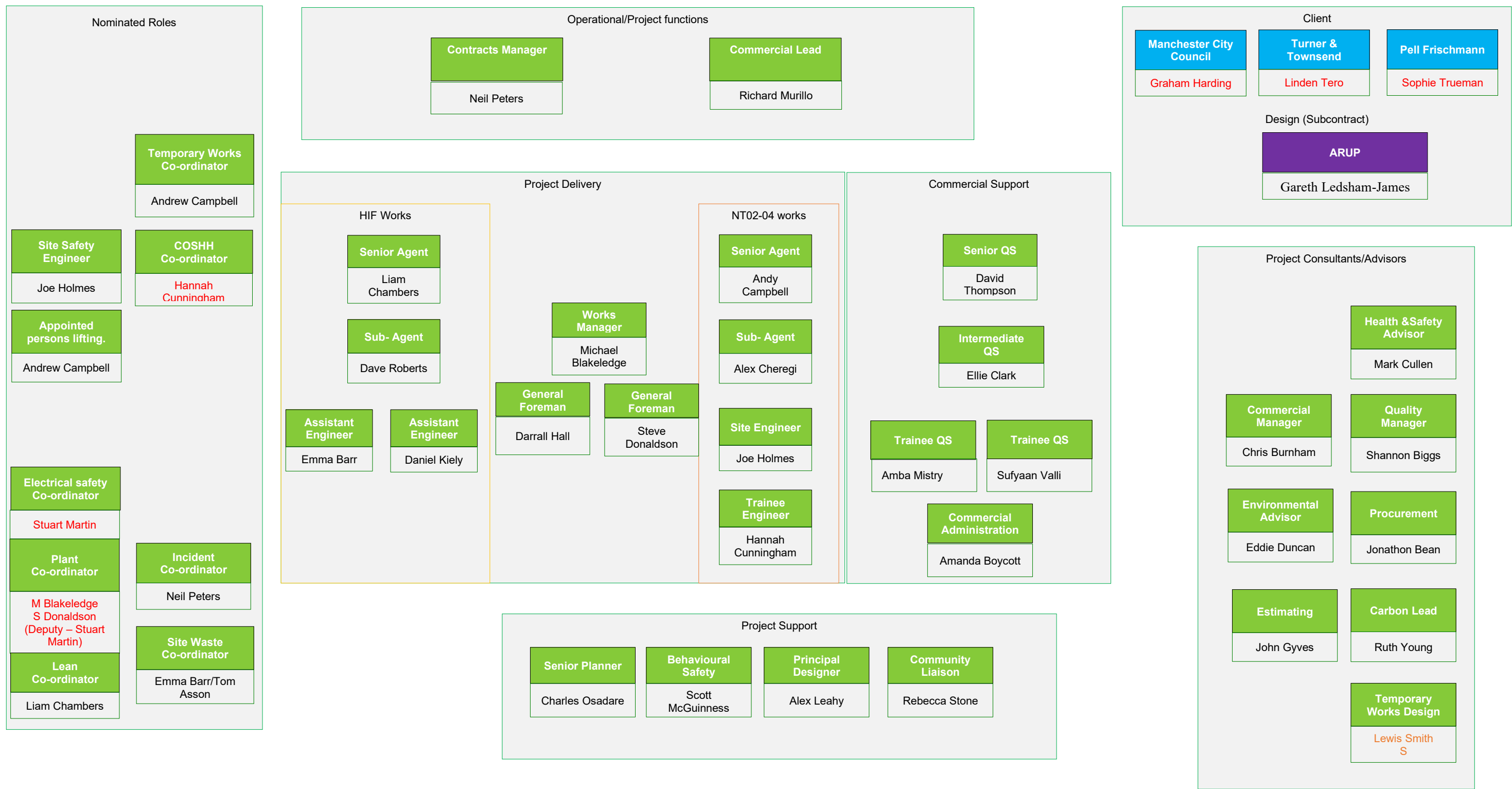
### A6.4.1 Delivering value and continual improvement through Lean

The project will utilise “**Lean Construction Thinking**” to allow conception, development and delivery of value innovation and continual improvement.

To initiate the improvement, process the agent will act as the “**Lean Leader**” who will be responsible for the development of a sustainable lean culture on the project, selection of the lean projects and the improvement plan. This deployment plan is detailed in **insert applicable section** of this plan or insert hyperlink to plan.

In addition to the *lean leader* a “**Lean co-ordinator**” will be appointed who will identify improvement projects, select suitable tools and techniques for improvement, such as collaborative planning, deploy tools such as visual management, collect the data and monitor and report results to the Lean Leader. This organisational structure is detailed in the project organisation chart contained in **Schedule A1** of this plan.

Schedule A1 Organisation Chart

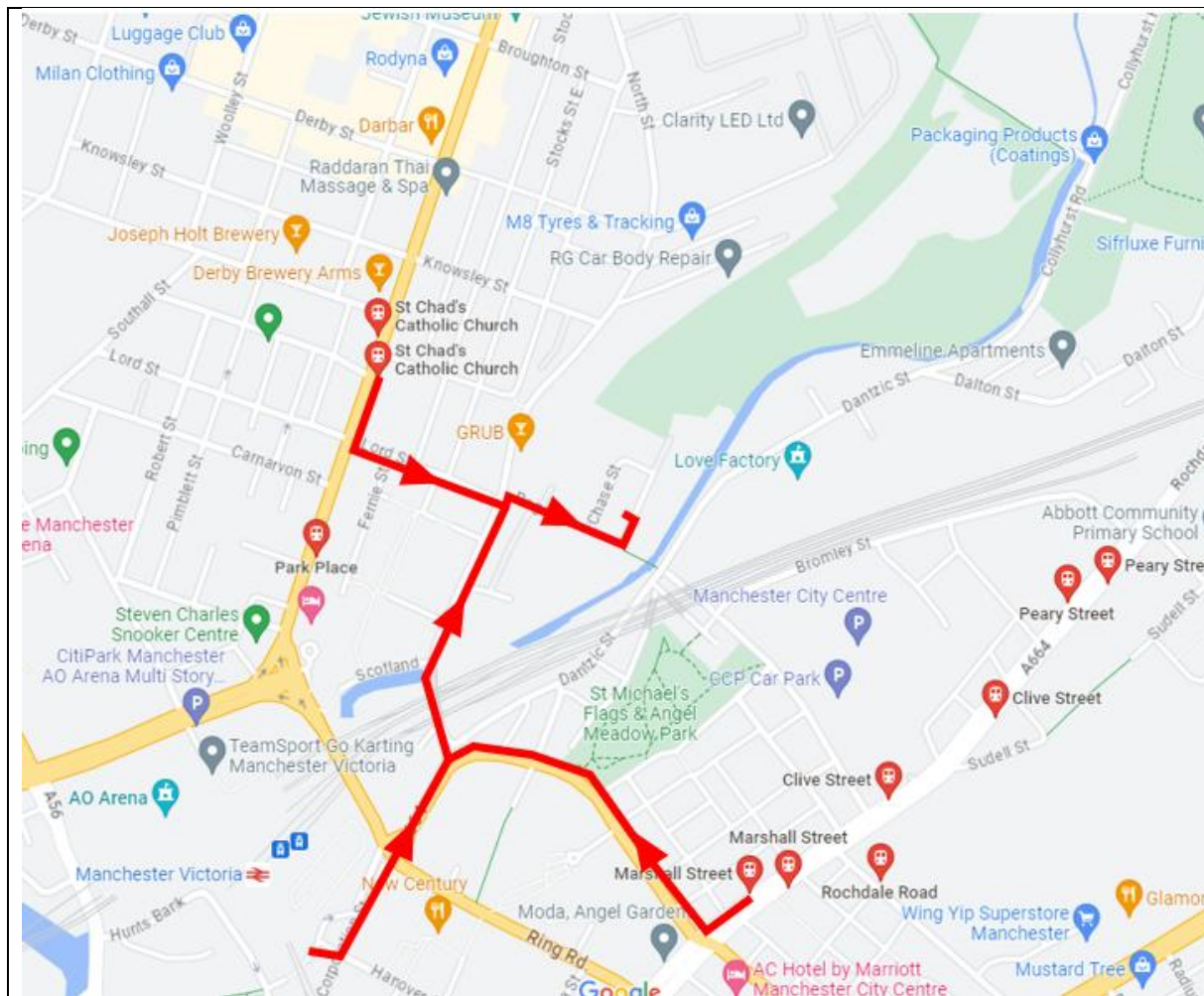


| <b><u>Name</u></b>                                                                                                    | <b><u>Appointment</u></b>                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Neil Peters,<br>Stephen Donaldson,<br>Joe Holmes<br>Alex Cheregi<br>Liam Chambers,<br>Andrew Campbell<br>Dave Roberts | First Aider                                                                                                           |
| Andrew Campbell/Alex Cheregi                                                                                          | Appointed person Lifting                                                                                              |
| Andrew Campbell TWC<br>Liam Chambers TWS<br>John Annett TWS<br>Alex Cheregi TWS                                       | Temporary Works Coordinator<br>Temporary Works Supervisor<br>Temporary Works Supervisor<br>Temporary Works Supervisor |
| Dave Roberts<br>Alex Cheregi                                                                                          | Buried and overhead service coordinator                                                                               |
| Michael Blakeledge<br>Stephen Donaldson<br>Stuart Martin                                                              | Plant Coordinator<br>Plant Coordinator<br>Deputy Plant Coordinator                                                    |

**Note**

Signatory powers on this project are issued by the agent are in accordance with NP17 Signatory powers.

## Schedule A2 Green Travel Plans



| Icon                                                                                | Description    | Description of route                                                    |
|-------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------|
|  | Pedestrian     | Routes as shown in red on the map above                                 |
|  | Disabled       | Routes as shown in red on the map above                                 |
|  | Cycle          | Routes as shown in red on the map above                                 |
|  | Bus            | Routes as shown in red on the map above                                 |
|  | Train          | Mainline into Manchester Victoria and then follow walking route to site |
|  | Tram           | Exit system at Manchester Victoria and follow walking route to site     |
|  | Car/Motorcycle | Access from A665 to area                                                |
|  | Ferry          | N/A                                                                     |
|  | Aeroplane      | Manchester airport                                                      |

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### Schedule A3 Community Action Plan

#### 1.0 Introduction

BAM Nuttall Ltd is a socially responsible organisations committed to meeting the expectations of our stakeholders, while adding value to the environment and society. We aim to fully engage with local community groups, individuals, organisations and stakeholders directly impacted by our projects.

We recognise that how we recruit and retain employees, purchase goods and services can create opportunities to improve the community we operate in as well as improving our business performance.

BAM Nuttall Ltd believes we can make a significant and sustained improvement to the community by:

- Recruiting from and having a workforce profile that reflects the local community.
- Removing barriers to employment.
- Considering local suppliers when purchasing.
- Building local education and training links.
- Investing resources including time and money to support community groups, and charities.
- Listening and communicating with the community.
- Liaising with the community.

Our intention is to identify opportunities for community involvement within a two-mile radius of each of our sites and offices. This plan sets site specific objectives for engagement with the relevant parties. It also designates responsible persons to the tasks and where appropriate, actions and timescales.

The community action plan is divided into four sections. Each section in turn details how we plan to eliminate any negative impacts of the works on the local community and where possible how we will endeavour to bring positive benefits to the local community, residents and supply chain as a result of the works.

- **Section 2: Implementation of plan on site**
- **Section 2: Identifying opportunities for community action**
- **Section 4: Record of community involvement**
- **Section 5: Review**

## 2.0 Implementation of plan

### 2.1 Community Liaison

BAM Nuttall Ltd will maintain an effective liaison with landowners and the local community about ongoing construction activities and any potential disruption. We will use open days, and letter drops to keep the community up to date.

All residents adjacent to the works will be informed about the detailed plans and construction timetable in advance of works starting and all necessary detailed mitigation agreed that relate to access and reducing disturbance.

In the event of a complaint these will be responded to in a timely manner and recorded in the Engagement Register. The contractor and developer are responsible for responding to and resolving complaints. Any complaints will be discussed as required at the regular comms meetings meeting, if appropriate to do so.

### 2.2 BAM Nuttall Contacts

BAM Nuttall Ltd will establish a project contact telephone number, manned during operational hours and with access to representative(s) with authority to resolve key issues. A log of all comments and actions taken will be kept and made available for inspection.

| Contact Name      | Organisation | Position                          |
|-------------------|--------------|-----------------------------------|
| Neil Peters       | BAM Nuttall  | Contract Manager                  |
| Mark Cullen       | BAM Nuttall  | H&S Advisor                       |
| Liam Chambers     | BAM Nuttall  | Snr Agent - HIF                   |
| Scott McGuinness  | BAM Nuttall  | Behavioural Safety Advisor        |
| Stephen Donaldson | BAM Nuttall  | General Foreman                   |
| Rebecca Stone     | BAM Nuttall  | Social Sustainability Coordinator |
| Andrew Campbell   | BAM Nuttall  | Snr Agent – NT Plots              |

### 2.3 Community disturbance

BAM Nuttall Ltd will ensure disturbance to the local community from construction activities is minimised to that required for safe implementation of the works. We will also minimise disruption to access for all properties. Any interruptions to access will be agreed with the landowner / tenant and kept to the minimum time required. Emergency access will be available at all times. Where required diversions and alternatively pedestrian crossings will be setup to avoid endangering the general public

### 3.0 Community Action Opportunities

#### 3.1 Community Liaison

Our site will follow BAM's Social Sustainability BMS and deliver on the social value targets set during tender stage

#### 3.2 Education and training links and work experience opportunities

Outlined in the Social Sustainability Plan  
[Social Sustainability Plan - Victoria North V1.docx](#)

#### 3.3 Employment opportunities

Outlined in the Social Sustainability Plan  
[Social Sustainability Plan - Victoria North V1.docx](#)

### 4.0 Record of Community Action

The record of community action will be recorded on the engagement register and updated regularly. We will also be providing quarterly reports to MCC on the social value delivered.

**Engagement Register** - [VNIF-ARP-ZZ-YYY-RE-WD-0005](#)

**5.0 Review of Community Action**

| Objective                                                                                                                                            | Yes                                 | No                       | If yes, what do we do? If no, why not?                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Does the workforce include members of the local community?                                                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We are working with local charity YES Manchester to advertise employment opportunities locally. We are also encouraging our supply chain to actively employ local people.                                                                                                                                                                                                                                                                                                |
| Are people with disabilities actively employed? Have we removed barriers to employment – correct site setup and provision of welfare facilities etc? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We will share vacancies with Igneous to advertise with their clients. The site set up is all disability access compliant                                                                                                                                                                                                                                                                                                                                                 |
| Were local suppliers considered when purchasing?                                                                                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We are actively seeking to use local suppliers as much as possible. We held a local supplier event in March 2022 to allow local SMEs the opportunity to learn about the project and meet the team. The target set for local spend is 11.5 million as part of the Social Value Delivery Plan.                                                                                                                                                                             |
| Do we work with local educational and training institutions?                                                                                         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Liam Chambers is an Enterprise Advisor for Eden Girls Leadership Academy, which is close to the site. We have also participated in a number of online webinars with Bridge GM which are broadcast to schools across Greater Manchester. We also have plans to attend a number of school careers fairs in the upcoming term. We are currently in discussions with Bridge GM about this.                                                                                   |
| Do we invest resources to support the local community and charities?                                                                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We have a community space on site with access to computers and internet free of charge. YES Manchester and First Asian Support Trust (FAST) have previously used this space once a week to assist their clients with employability training and job applications. We have also had a number of local organisations using this space for educational and training purposes. These include, Groundwork, Working Wonders, Winning Hearts and Minds & Manchester Youth Zone. |
| Do we liaise with the community about our project?                                                                                                   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We work with the client to liaise with nearby business and community groups about our project. We provide regular updates & attend meetings where necessary with the community to keep them informed.                                                                                                                                                                                                                                                                    |

|                        |            |       |            |
|------------------------|------------|-------|------------|
| Review carried out by: | Josh Clark | Date: | 18/10/2023 |
|------------------------|------------|-------|------------|

| Objective                                                                                                                                            | Yes                                 | No                       | If yes, what do we do? If no, why not?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Does the workforce include members of the local community?                                                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Advertise vacancies with local organisations and encouraging supply chain to employ local labour. Recording local labour using SSRT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Are people with disabilities actively employed? Have we removed barriers to employment – correct site setup and provision of welfare facilities etc? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We will share vacancies with Igneous to advertise with their clients. The site set up is all disability access compliant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Were local suppliers considered when purchasing?                                                                                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We are actively seeking to use local suppliers as much as possible. We held a local supplier event in March 2022 to allow local SMEs the opportunity to learn about the project and meet the team. The target set for local spend is 11.5 million as part of the Social Value Delivery Plan.                                                                                                                                                                                                                                                                                                                                                                            |
| Do we work with local educational and training institutions?                                                                                         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We have built a relationship with local school Eden Girls to attend careers fairs and deliver workshops. We have also participated in a number of online webinars in 2022 with Bridge GM which are broadcast to schools across Greater Manchester. We've hosted a site visit for Abraham Moss in March 2024. And attend events a various other local school                                                                                                                                                                                                                                                                                                             |
| Do we invest resources to support the local community and charities?                                                                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We have a community space on site with access to computers and internet free of charge. YES Manchester and First Asian Support Trust (FAST) have previously used this space once a week to assist their clients with employability training and job applications. We have also had a number of local organisations using this space for educational and training purposes. These include, Groundwork, Working Wonders, & Xyrius. Winning Hearts and minds have used the hub for their winter warmth initiative. The project team have used volunteering days to support homelessness charity Coffee4Craig and donated various items such as clothes, food and planters. |
| Do we liaise with the community about our project?                                                                                                   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We work with the client to liaise with nearby business and community groups about our project. We provide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|  |  |  |                                                                                             |
|--|--|--|---------------------------------------------------------------------------------------------|
|  |  |  | regular updates & attend meetings where necessary with the community to keep them informed. |
|--|--|--|---------------------------------------------------------------------------------------------|

|                        |               |       |            |
|------------------------|---------------|-------|------------|
| Review carried out by: | Rebecca Stone | Date: | 09/07/2024 |
|------------------------|---------------|-------|------------|

|                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other comments (e.g., lessons learned, feedback, etc)                                                                                                                                                                                        |
| RS comment July 24 - The project is following BAM's Social Sustainability BMS, with a Local Needs Analysis and Social Sustainability Plan in place, recording progress against targets on BAM's Social Sustainability Reporting Tool (SSRT). |

| Objective                                                                                                                                            | Yes                                 | No                       | If yes, what do we do? If no, why not?                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Does the workforce include members of the local community?                                                                                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Advertise vacancies with local organisations and encouraging supply chain to employ local labour. Recording local labour using M-site.                                                                                                                                                                                                                                   |
| Are people with disabilities actively employed? Have we removed barriers to employment – correct site setup and provision of welfare facilities etc? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We will share vacancies with local organisations to advertise with their clients. The site set up is all disability access compliant                                                                                                                                                                                                                                     |
| Were local suppliers considered when purchasing?                                                                                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We are actively seeking to use local suppliers as much as possible. We held a local supplier event in March 2022 to allow local SMEs the opportunity to learn about the project and meet the team. The target set for local spend is 11.5 million as part of the Social Value Delivery Plan.                                                                             |
| Do we work with local educational and training institutions?                                                                                         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We have built a relationship with local school Eden Girls to attend careers fairs and deliver workshops. We've hosted a site visit for Abraham Moss in March 2024. And attend events a various other local school. In 2025 we have made connections with Manchester Skills Academy which provide construction related training & qualifications to local people, we have |

|                                                                      |                                     |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                      |                                     |                          | attended their events and hosted a number of site visits for their learners.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Do we invest resources to support the local community and charities? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We have a community space on site with access to computers and internet free of charge. Various organisations have used this space to assist their clients with employability training and job applications. We have also had a number of local organisations using this space for educational and training purposes. These include, Groundwork, Working Wonders, & Xyrius. Winning Hearts and minds have used the hub for their winter warmth initiative. The project team have used volunteering days to support homelessness charity Coffee4Craig and donated various items such as clothes, food and planters. |
| Do we liaise with the community about our project?                   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | We work with the client to liaise with nearby business and community groups about our project. We provide regular updates & attend meetings where necessary with the community to keep them informed.                                                                                                                                                                                                                                                                                                                                                                                                              |

|                        |               |       |            |
|------------------------|---------------|-------|------------|
| Review carried out by: | Rebecca Stone | Date: | 16/07/2025 |
|------------------------|---------------|-------|------------|

## Schedule A4 Skills Matrix

| Role                                           | Qualifications                            | Competence                                                                             | Evidence                                                                |
|------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <i>Contracts Manager:<br/>Neil Peters</i>      | <i>L7 NVQ qualified</i>                   | Lifting<br>River works<br>Piling<br>Pre-Cast installation                              | TWC<br>SMSTS                                                            |
| <i>Snr Agent:<br/>Andy Campbell</i>            | <i>Degree qualified</i>                   | Lifting<br>River works<br>Rail<br>Highway<br>Precast<br>Temp Work                      | TWC<br>SMSTS<br>CSCS<br>CPCS – Appointed person                         |
| <i>Snr Agent:<br/>Liam Chambers</i>            | <i>Degree qualified</i>                   | Bulk earthworks<br>River works<br>Pre-cast installation<br>Highways<br>Temporary works | TWC<br>SMSTS<br>CSCS<br>Basic Scaffold Inspection                       |
| <i>Sub Agent:<br/>David Roberts</i>            | <i>NVQ L6</i>                             | Construction<br>Highways<br>Civil engineering                                          | SMSTS<br>CSCS<br>NEBOSH<br>EUSR PAS 128<br>BOSC                         |
| <i>Sub Agent:<br/>Alex Cheregi</i>             | <i>Degree Qualified</i>                   | Marine works<br>Piling<br>Civils<br>FRC Works<br>Highways<br>Earthworks                | SMSTS<br>CSCS<br>CPCS – AP<br>TWC<br>BOSC                               |
| <i>Design Delivery Manager:<br/>Alex Leahy</i> | <i>Degree qualified</i>                   | Design Management<br>Infrastructure development<br>Construction<br>Heavy civils        | CSCS                                                                    |
| <i>General Foreman:<br/>Stephen Donaldson</i>  | <i>L3 NVQ Diploma</i>                     | Lifting<br>Piling<br>Precast<br>Structures<br>Earthworks                               | SMSTS<br>CSCS<br>Lift Supervisor<br>Confined Space – medium level 3     |
| <i>Works Manager:<br/>Michael Blakeledge</i>   | <i>L3 NVQ Diploma<br/>Lift Supervisor</i> | River works<br>Earth works<br>Structures<br>Precast units<br>Piling works              | SSSTS<br>SMSTS<br>SWQR                                                  |
| <i>Engineer:<br/>Joseph Holmes</i>             | <i>Degree qualified</i>                   | River Works<br>Engineering                                                             | CSCS<br>SEATS<br>Setting out and surveying<br>Cat and Genny<br>Training |
| <i>Ganger:<br/>Kieran Walters</i>              |                                           | Highways<br>Flood Defence<br>Civil Engineering                                         | Supervisor Training<br>CPCS Slinger<br>Signaller                        |

**Schedule A5****Schedule A6 Induction and Site Rules****Schedule A5.1 Induction**

|                                                                                                |
|------------------------------------------------------------------------------------------------|
| <b>Site induction agenda</b>                                                                   |
| Brief 'Monopoly board' style induction for visitors                                            |
| Introduction to project                                                                        |
| "Your safety is my safety", introduction to BAM health, safety and environment culture         |
| Office layout, including escape routes, fire extinguishers, and first aid kit locations.       |
| Compound layout including car park, site access, assembly point location, and smoking shelter. |
| Site layout including access routes for vehicles and pedestrians.                              |
| Identification of site first aiders, key personnel                                             |
| Location of the nearest hospital with A&E facility.                                            |
| Mandatory 6-point PPE on to be worn site.                                                      |
| Bam site rules.                                                                                |
| Information about observation cards and the observation app.                                   |
| Site restricted zones and exclusion zones.                                                     |
| Spill procedure                                                                                |
| Information on risk assessments and activity plans, and how they are required before work.     |
| Sign in and briefing arrangements.                                                             |
| Mandatory permits to work.                                                                     |
| Site specific hazards.                                                                         |
| Information on mental health support that is available for all workers.                        |
| Appreciation of fair treatment and respect for all.                                            |
| Drugs and alcohol testing procedure.                                                           |
| Waste segregation requirements.                                                                |
| Invasive species present on site.                                                              |
| Public interface procedure.                                                                    |
| Opportunity for questions from attendees.                                                      |

## Schedule A5.2 Site rules

The following rules have been made to ensure the health and safety of you and your work mates on this site and protection of the environment. They apply to everybody on site.



**Working at height**  
I protect myself when working at height



**Interaction between vehicles and pedestrians**  
I do not enter an exclusion zone



**Lifting operations**  
I do not position myself near suspended loads, unless authorised



**Working on / near energised lines**  
I do not work on or near live electrical systems, unless authorised and protected



**Falling objects**  
I secure tools, materials and equipment from falling



**Use of drugs or alcohol**  
I do not work under the influence of drugs or alcohol



If I see something unsafe, I take action to correct it



I call other people to account about unsafe behaviour and accept that others can also call me to account about unsafe behaviour



I understand my job and I am aware of the associated risks. If anything is unclear, I stop and ask for additional information



I only give safe instructions and only follow safe instructions



I only start work after I have been instructed. I follow these instructions



I work with approved equipment and only if authorised to use it



I use my compulsory personal protection equipment



I keep my workplace clean, safe and tidy

These rules are common sense and easy to follow

Failure to follow them may lead to disciplinary action or your removal from site

And remember 'Your Safety is My Safety'

### Schedule A5.3 Rules for Contaminated Land or Red Sites

#### Be on the lookout for:

- Signs of contamination during boring, excavating, soil stripping and similar operations (these could include discoloured soil, unexpected odours, a fibrous texture to the soils (e.g., asbestos), presence of foreign objects (e.g. chemical/oil, containers/waste), evidence of previous soil workings, underground structures or waste pits, evidence of made ground, old drain runs and contamination within buildings).

#### If contamination is suspected:

- Work will be stopped immediately.
- The discovery will be reported to the Agent who will seek expert advice and provide guidance on required controls / mitigation.
- The area will be sealed off to contain spread of contaminants.
- A risk assessment will be carried out to minimise the risk to health and safety of site workers. This will identify acceptable working methods, PPE, contact, and other required procedures.
- Any unexpected, contaminated land that has been disturbed by construction activities will to be dealt with as hazardous waste and disposed of to a suitably licensed site in line with the relevant waste management regulations.
- Ensure that the suspected contamination is tested and characterised and agree changes to the existing site proposals and method statements.

#### Known areas of contamination

Contamination is identified by pre-start site investigation works.

Works will be carried out under remediation strategy.

Due to the variable nature of the hazards identified activity specific risk assessment is required to detail the controls required. This involves in-house or consultant expertise.

The controls cover:

- site set up and security
- personal protective equipment
- health surveillance
- sampling regime
- training
- monitoring of controls

#### Disposal

Materials sent for off-site remediation or for disposal to tip will be recorded by waste transfer notes.

Carriers and tips will be verified as being licensed for the specific material streams

---

### Schedule A5.4 Rules for handling and disposal of sharps

- Never handle discarded needles or syringes – unless you are trained to do so and have the correct equipment
- Warn others close by to stay away
- If safe to do so, stay close to it and report it to your supervisor
- If you are not able to stay close to it highlight it if possible
- Report it to the Supervisor

**In the event of contact with a discarded needle encourage the puncture injury to bleed and wash well under cool running water with soap and cover with a dry (sterile) dressing. Seek medical advice as soon as possible, within 48 hours at the nearest local Accident & Emergency department.**

### Disposing of sharps

- Place needles and syringes into a sharp's container. Always use tongs to pick them up.
- Dispose of as clinical waste

---

### **Schedule A7 Emergency procedure - injury, dangerous occurrence or significant incident**

#### **In the event of an accident:**

- Do not endanger your own life.
- Ensure that the injured person will not come to further harm.
- Notify the site office of:
  - the injured person's name and/or employer
  - location
  - type of incident
  - likely injuries
  - special requirements

#### **The site office will:**

- contact the first aider
- call an ambulance and/or other emergency services by dialling 999
- ensure access route is cleared
- arrange reception of ambulance/fire brigade/police at the nearest public road
- direct emergency services to location
- provide injured person's information to the emergency service
- notify injured person's employer if a subcontractor
- contact divisional director and area health and safety advisor
- initiate for cause drug and alcohol screening

**The first aid kit is held in the site office, and first aiders work vans.**

The site address is:

**BAM Nuttall,  
Site Office,  
Hargreaves Street  
Manchester,  
M4 4EJ**

What3words: ///mats.mental.post

## Hospital Locations

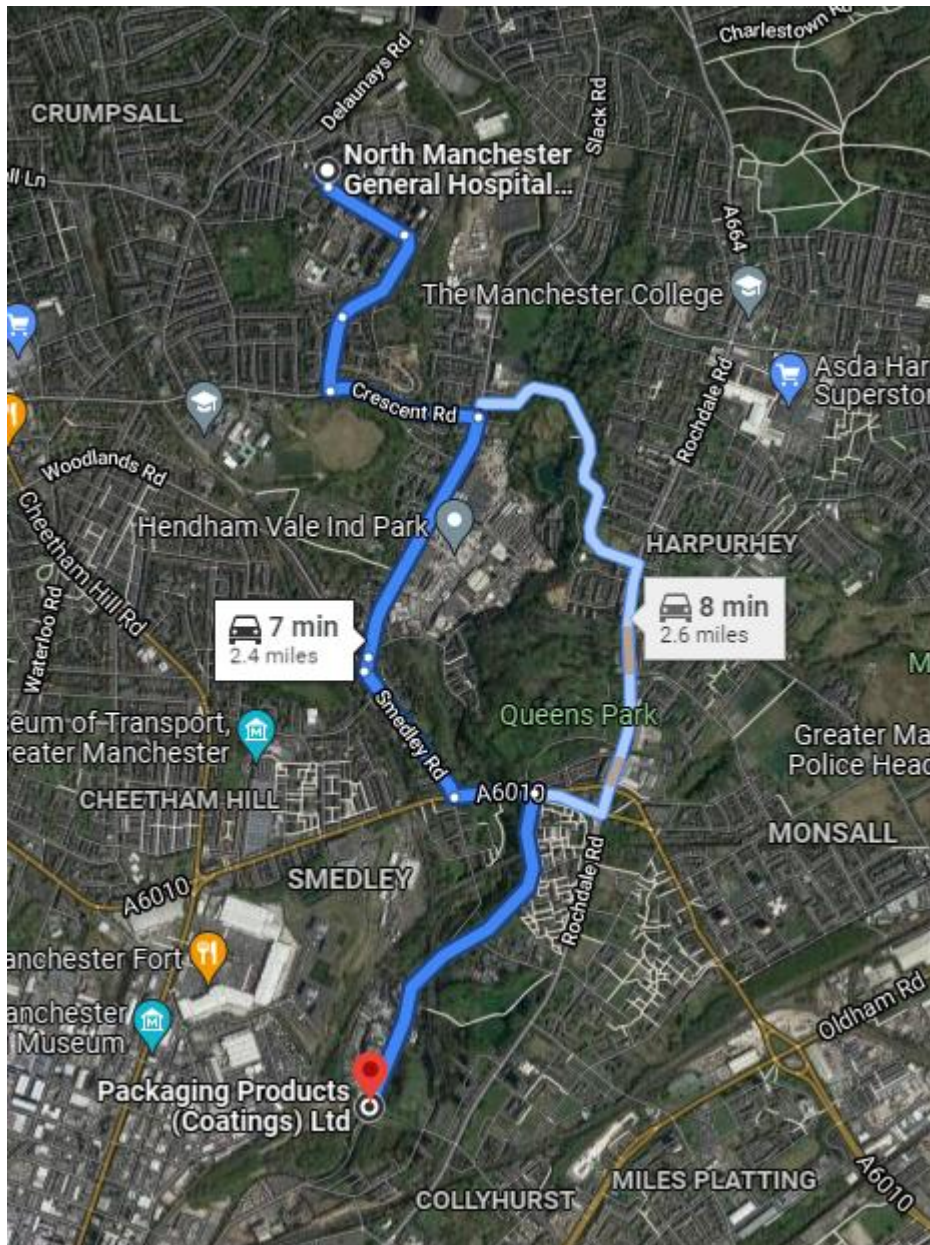
### North Manchester General Hospital

Address:- 151 Delaunays Road, Crumpsall, Manchester, M8 5RB

Telephone:- 0161 7954567

Opening Hours:- 24/7

Description:- Primary accident and emergency centre serving the project



### Ancoats Primary Care Centre

Address:- Old Mill Street, Manchester, M4 6EE

Opening Hours:- 0900 to 1500

Description:- Ancoats Primary Care Centre is a drop-in service for people who need URGENT care for minor injuries and illness. The centre should be used where you are unable to get an appointment with your own GP and where you need to be seen the same day. It is intended as an alternative to going to A&E - which is for emergencies only.

### Emergency procedure – fire

#### In the event of a fire in the site offices or other site accommodation:

- Alert all personnel of fire, evacuate all site offices and other units and assemble at the site compound assembly point.
- Do not stop to collect personal belongings.
- Contact the emergency services by dialling 999 or ensure that someone else does.
- Use appropriate fire extinguishers to contain or extinguish the fire **ONLY** if trained to do so.
- Do not put yourself or others at risk.
- Do not attempt to re-enter offices until approval is given by a senior member of staff.

#### In the event of a fire on site:

- Leave the area and assemble at the site compound assembly point.
- Notify a member of staff at the site offices.
- Use appropriate fire extinguishers to contain or extinguish the fire **ONLY** if trained to do so.
- Do not put yourself or others at risk.
- Do not return to the area of the fire until approval has been given by a senior member of staff.

#### The site office staff must:

- call the fire brigade by dialling 999 when informed of a fire
- ensure the access route is cleared
- arrange reception of fire brigade at the nearest public road
- direct emergency service to location

The site address is:

**BAM Nuttall,  
Site Office,  
Hargreaves Street  
Manchester,  
M4 4EJ**

What3words: ///mats.mental.post

Adjust or add to make site specific

## Emergency procedure – confined space rescue

### Prior to normal entry into a designated 'confined space' check:

- first aid and fire extinguisher readily available by entrance.
- underground and external communication systems available and operational
- names/numbers of persons entering/leaving confined space are logged
- atmospheric testing has indicated it is safe to enter
- each person entering confined space is wearing full body harness and carrying escape breathing apparatus set
- top man is in attendance
- permit to work certificate (SF 901) is complete
- safe means of access is available for emergency services

### If an emergency condition occurs:

- evacuate the confined space immediately
- do not attempt to rescue a collapsed person unless they can be moved to safety immediately
- ensure 'top man' summons fire brigade and ambulance by dialling 999 giving exact location and access route
- send a person to direct emergency services to location
- notify the agent

### ONLY if you have had the necessary training and if a rescue kit and breathing apparatus are available:

- re-enter to attempt a rescue
- use forced air ventilation system to improve atmosphere
- take drag sheets and lifeline(s) into confined space
- ensure two people are available to assist
- have resuscitator and first aid kit available

The site address is:

**BAM Nuttall,  
Site Office,  
Hargreaves Street  
Manchester,  
M4 4EJ**

What3words: ///mats.mental.post

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## Emergency procedure – pollution incident

In the event of an oil, fuel or silt pollution incident, take action to:

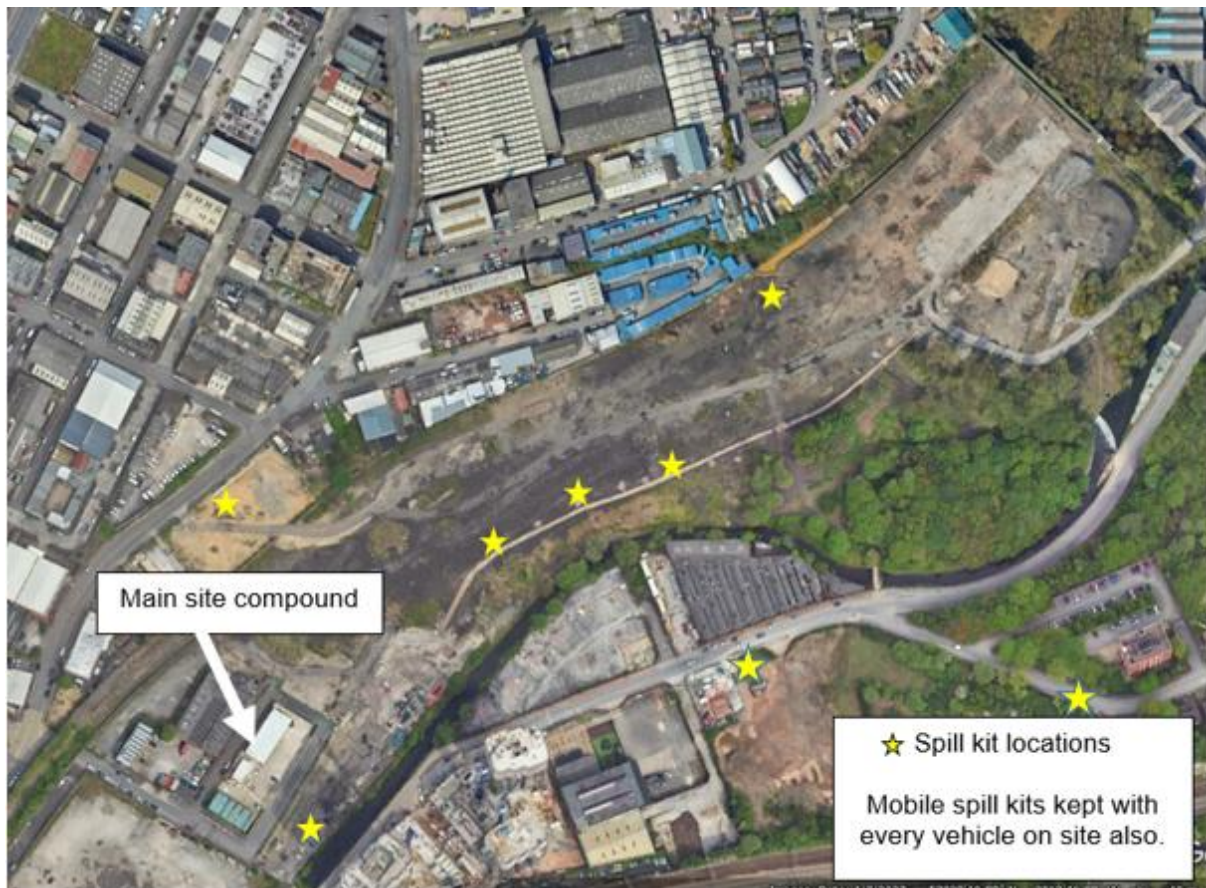
|                                          |                                                                                                                                                                            |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Raise the alarm</b>                   | you may need assistance                                                                                                                                                    |
| <b>Identify the source</b>               | what risks are involved, can you handle it yourself or are the emergency services required?                                                                                |
| <b>Protect yourself</b>                  | are you wearing the correct PPE to deal with the incident?                                                                                                                 |
| <b>Help any injured</b>                  | but do not put yourself or colleagues at further risk                                                                                                                      |
| <b>Stop the source</b>                   | prevent further pollution if safe to do so by plugging leaks, righting drums, closing valves or turning off pumps                                                          |
| <b>Contain the pollution</b>             | use emergency materials held on site and ensure that the pollution cannot escape by blocking drains, or creating a trench or bund to protect rivers and other watercourses |
| <b>Prevent spread</b>                    | if the pollution has already entered water, prevent its further spread downstream using booms for spills or silt fencing for silt                                          |
| <b>Notify your supervisor</b>            | as soon as it is possible to do so                                                                                                                                         |
| <b>Clean up</b>                          | using appropriate absorbent materials or skimmers                                                                                                                          |
| <b>Dispose of contaminated materials</b> | used clean up materials will be classed as 'hazardous' or 'special waste'                                                                                                  |
| <b>Restock</b>                           | emergency clean up materials should be replenished and restocked following their use                                                                                       |

**In the event of a major spillage to water (an incident that the project team cannot handle or contain) contact your environment advisor for further guidance and advice.**

Emergency spill kits and absorbent materials are located at:

- Creamline dairy entrance
- Plateau welfare
- Hargreaves Street compound
- Water treatment area.

Mobile spill kits also kept with all machines.



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## Emergency procedure – person in water

### In the event of a person falling into water:

- Raise the alarm by an appropriate means such as
  - shouting 'person in water'
  - sounding a klaxon
  - continuously sounding of a crane or vehicle horn
  - summoning the safety boat via site radio
- Keep the person in view.
- Make your way to the nearest lifebuoy station. Keeping hold of the end of the line, throw the buoy or grabline to the person in the water, if they can reach it. If not, let a loose lifebuoy float downstream with them.
- Provide assistance by drawing in the lifeline until the person is at a landing point. If the landing point is difficult, do not attempt to pull the person out – call for assistance.
- Once the person has been recovered from the water, keep them warm until transport is available to take him to the first aid station.
- Whilst giving priority to the rescue, send a message to the main office as soon as possible to enable coordinated support. Notify the office of:
  - the person's location
  - likely injuries, if any

Employees are advised not to make a rescue attempt by entering the water unless they have been trained in life-saving techniques.

**List of key personnel and organisations for emergency and liaison**

| Name                                 | Position                                              | Location                 | Tel. no. |
|--------------------------------------|-------------------------------------------------------|--------------------------|----------|
| G Farrier                            | Divisional director                                   | Newcastle                |          |
| David Bennett                        | Operations Manager                                    | Newcastle/Leeds          |          |
| Neil Peters                          | Contract Manager                                      | Manchester               |          |
| Alex Leahy                           | Design Manager                                        | Manchester               |          |
| Stephen Donaldson                    | General foreman                                       | Manchester               |          |
| Andrew Campbell                      | Snr Agent                                             | Manchester               |          |
| Liam Chambers                        | Snr Agent                                             | Manchester               |          |
| Mark Cullen                          | Health and safety advisor                             | Leeds                    |          |
| Scott McGuinness                     | Behavioural Safety Advisor                            | Calder Valley/Manchester |          |
| Michael Blakeledge                   | Works Manager                                         | Manchester               |          |
| Eddie Duncan                         | Environment advisor                                   | Leeds                    |          |
| Rebecca Stone                        | Project Stakeholder Engagement & Social Value Manager | Manchester               |          |
| Freya Jepson                         | Public relations                                      | Camberley                |          |
| <b>24HR emergency contact number</b> |                                                       |                          |          |

**Emergency liaison**

| Organisation          | Contact (name)                                                                                      |
|-----------------------|-----------------------------------------------------------------------------------------------------|
| Incident co-ordinator | Neil Peters                                                                                         |
| Client                | Matt Ralph                                                                                          |
| Principal designer    | Alex Leahy                                                                                          |
| Fire                  | N/A                                                                                                 |
| Police                | N/A                                                                                                 |
| Hospital              | Manchester Royal Infirmary Accident & Emergency Department, Upper Brook Street, Manchester, M13 9NZ |
| HSE                   | Merton Road, Bootle, L20 7HS                                                                        |
| EHO                   | Laura Miller                                                                                        |
| Environment Agency    | Andy Davies                                                                                         |
| Network Rail          | Andy Dalton                                                                                         |
| Local authority       | Matt Ralph                                                                                          |
| Gas supplier          | Cadent Gas                                                                                          |
| Electricity supplier  | Electricity Northwest                                                                               |
| Telecom               | BT                                                                                                  |
| Water                 | United Utilities                                                                                    |

### Schedule A8 Storage / Management of hazardous substances

COSHH Register and COSHH Assessments can be found on the SharePoint at the link below:

[COSHH](#)

#### **Excavated contaminated land storage area**

##### **HIF**

A designated area for the contaminated material excavated during the earthworks phase of the project will be established (in the RB05a shown below).

The area will be levelled off and an impermeable layer of material (visqueen) will be laid over the area. A bund of material will be created around 3 sides of the perimeter of the area, and the impermeable layer will be incorporated within the bund to create a sealed area. The fourth side will be created with a ramp for access to allow the tipping of material within the bunded area. This will ensure that no water runoff from the area can occur and prevents possible spreading of contaminated materials outside of the quarantined stockpile area.

Heras fence panels will be placed around the perimeter of the bunded area with an access gate for access and egress.

Spoil stored within the area will be covered with a waterproof sheeting (visqueen) to prevent/reduce water from ponding within the area and waterlogging the stored material.

#### **NT02-04**

Advance SI works will identify contamination types and extents. Waste streams will be grouped together. Excavation will be carried out across the site and materials will be stored in segregated stockpiles to be loaded away.

Depending on the contamination stockpiles will be managed as above.

Excavation programme will be managed to ensure excavated materials are exposed the minimum amount of time before loading away for off site processing.

**All stockpiles will have signage to ensure the materials and contamination are clear to all.**

#### **St Catherines Wood**

Material excavated from here will be stockpiled away from the watercourse ready for reuse or offsite processing.

#### **Managing Surface Water Runoff and Groundwater during works**

##### **HIF**

Any groundwater that may be discovered whilst excavating/stockpiling material of contamination will be tested, and either pumped across dry ground away from any receptors. Or if the sampling shows the water as containing contaminants or pollution as defined in the CWRA it will be pumped to a large holding tank ready for disposal via an authorised waste disposal facility.

Surface water runoff will be controlled using a series of temporary grips, and trenches that will prevent the water from picking up suspended solids, contaminants and remain 'clean'. The mitigation of this surface water may vary based on location and the water should be prevented from reaching the River Irk where possible. Prior to discharge to sewer, it may be necessary to pump the water to a settling Lagoon, or series of silt trap, where any suspended solids will drop out prior to discharging to sewer. Alternatively, during the drier summer months, the water may be used to suppress dust on the site and be used to condition dry materials and allow for better consolidation and compaction.

Any excess surface water will be discharged from site via a consented point within the site boundary to the sewer network. This temporary discharge consent has been granted on the proviso that it has been sampled and tested to the United Utilities thresholds as detailed in the temporary discharge consent obtained for the VNIF project.

Separate authorisation will follow from the Environment Agency if the water will be discharged via the permanent outfall to the River Irk as the permanent drainage is installed and commissioned.

### **NT02-04**

The majority of excavation works in NT plots is in made ground or above the water table.

Below ground excavation in the NT02 plot is expected to excavate 3m depth below ground level. At its lowest surface level of 31.4m AOD this would place the base of the excavation at 28.4m AOD.

From extensive BH information the water table is expected at 27m AOD so we should not expect to encounter it during the excavation phase.

There is no existing surface water drainage in the NT02 to 04 plots. Currently surface water run-off is absorbed into the open permeable materials. Excess from heavy rain currently runs freely over the ground to Dantzic Street highways drainage.

During our works the excess surface water will be channelled away from the highway's drainage to a low/sump point where it can be collected and allowed to percolate naturally. If required, the water can be pumped to a point at the rear of the site and allowed to flow back over the ground and allow for natural absorption.

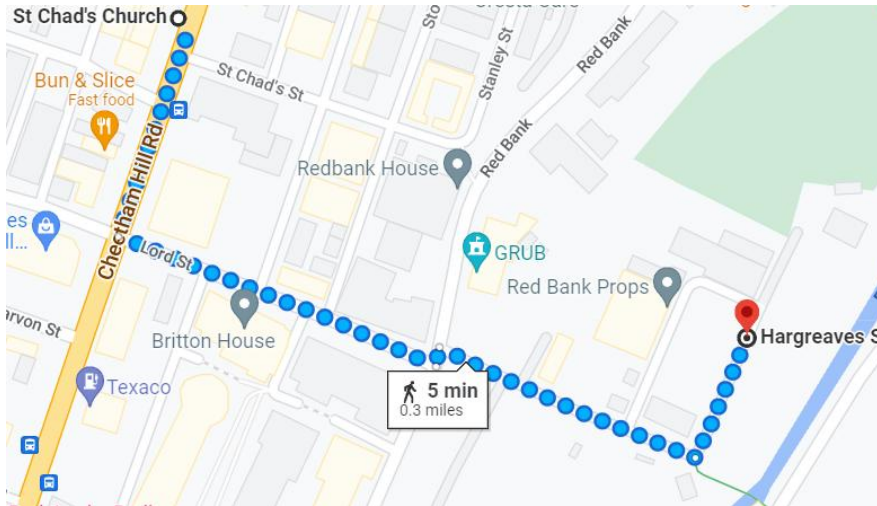
If required a silt trap will be brought to site and the water can be pumped to a settlement tank to remove particles before discharging to UU sewer (with consent)

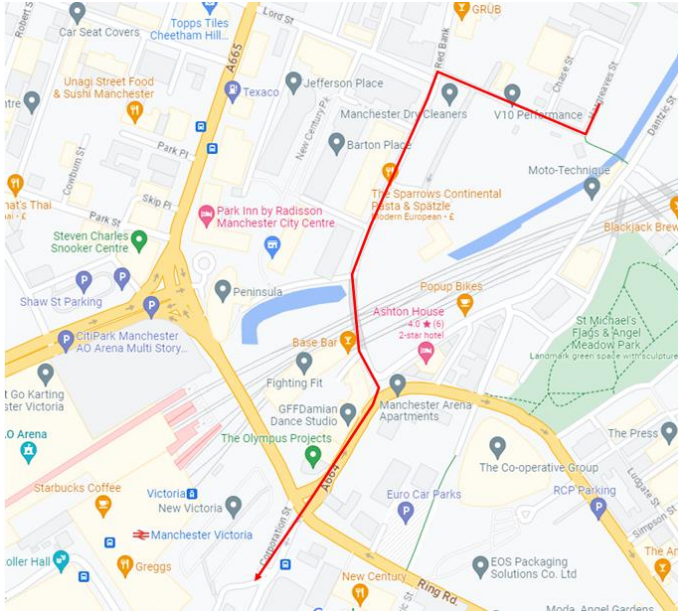
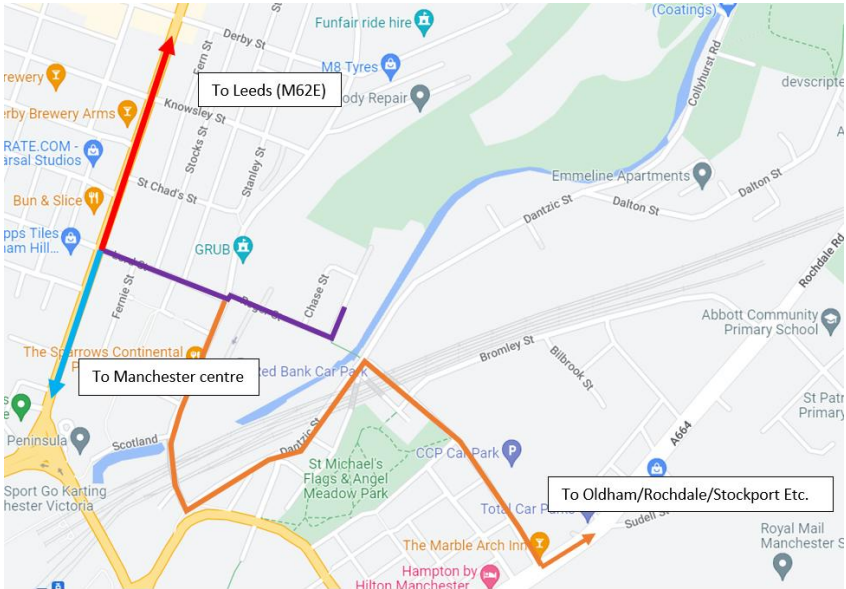
### **St Catherines Wood**

Surface water runoff and ground water will be managed in accordance with the Site Water Management plan.

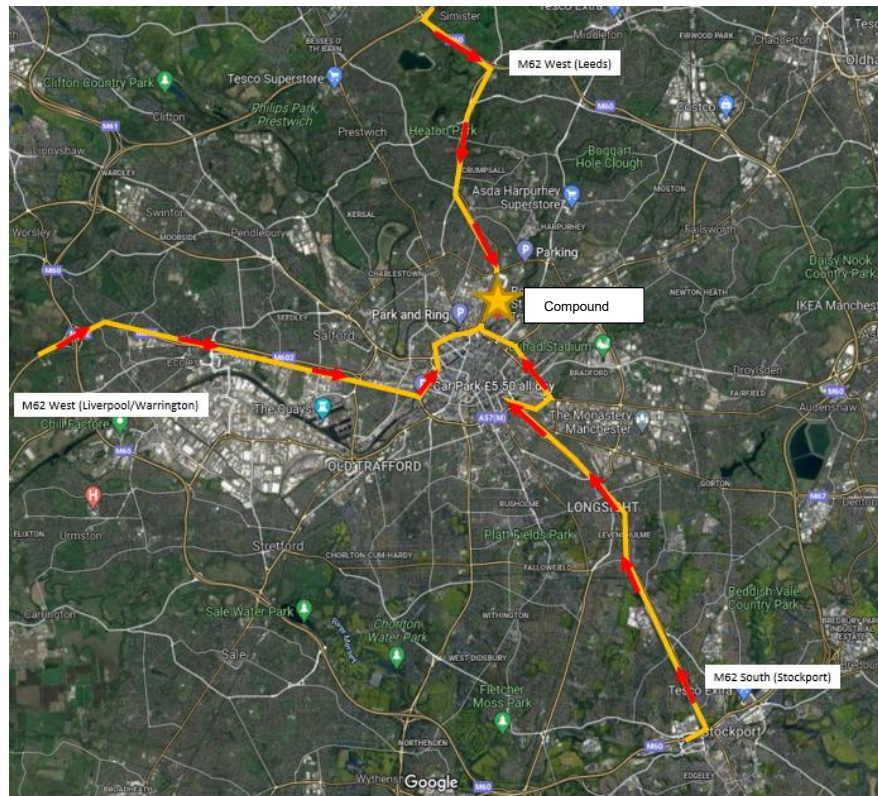


## Schedule A9 Works Transport Plan

|                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                           |                                                      |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------|
| <b>Project Title:</b>                                      | Red Bank Neighbourhood, Victoria North HIF Infrastructure Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Contract No:</b>                       | BAA.2210                                             |
| <b>Prepared By:</b>                                        | John Annett                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Date:</b>                              | 15 <sup>th</sup> August 2022                         |
| <b>BAM Project Manager:</b>                                | Neil Peters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>BAM Manager Contact No:</b>            | 07920231931                                          |
| <b>Local Traffic Authority:</b>                            | Manchester City Council                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Local Traffic Authority Contact No</b> | Paul Sant<br>07859009502/Roy McDonald<br>07506827326 |
| <b>Main Compound Address:</b>                              | BAM Nuttall, Site Office, Hargreaves Street, Manchester M4 4EJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Satellite Address</b>                  | N/A                                                  |
| <b>Main Office Establishment for Staff &amp; Visitors:</b> | BAM Nuttall, Site Office, Hargreaves Street, Manchester M4 4EJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                           |                                                      |
| <b>Site welfare Parking Rules:</b>                         | <p><b>The following Rules Apply When Visiting the Compound:</b></p> <ul style="list-style-type: none"> <li>○ All Vehicles to take care when driving to the site compound – Max 5mph</li> <li>○ No vehicles are to be left/parked on double yellow lines around the compound.</li> <li>○ Surrounding roads are to be kept clean at all times – Road Sweepers Used if Req'd.</li> <li>○ No delivery vehicles or HGVs to deliver to site before 8am or after 4pm</li> <li>○ All Vehicles to follow Signage</li> <li>○ All vehicles to use one way system</li> <li>○ All vehicles to reverse park</li> </ul> |                                           |                                                      |
| <b>Pedestrian Access &amp; Bus Routes:</b>                 |  <p><b>Pedestrian Route:</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                           |                                                      |

|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                         | <ul style="list-style-type: none"> <li>○ Multiple bus stops within 15-minute walk of the compound on Hargreaves Street</li> <li>○ Use existing public footpaths and crossing points</li> <li>○ Use pedestrian walkways within compound area</li> </ul>                                                                                                                                                                                                                                                  |
| <p><b>Pedestrian Access, Train and Tram routes:</b></p> |  <ul style="list-style-type: none"> <li>○ Use existing public footpaths and crossing points</li> <li>○ Trains to Liverpool and Leeds</li> <li>○ Trams across Manchester network</li> </ul>                                                                                                                                                                                                                            |
| <p><b>Vehicle Access Routes into Compound:</b></p>      |  <ul style="list-style-type: none"> <li>○ Access can be gained from Red Bank, down Roger Street and then left at the end on to Hargreaves Street.</li> <li>○ ALL vehicles must fully enter the secure compound area without blocking the gate or road.</li> <li>○ No parking on the double yellow lines.</li> <li>○ P&amp;P Bridge and other delivery routes are to be kept clean and clear at all times</li> </ul> |

**Main Routes  
from  
Motorway to  
compound:**



**M62 East (Leeds):**

- Leaving the M60 at J18, head South onto the M60
- Leave M60 at J19 East onto Middleton Road
- Continue south for approximately 1.5 miles where you come to a crossroads
- Turn left onto A665
- Continue for South for a further mile and turn left only Smedley Lane.
- Continue until you hit the T junction and turn right onto Smedley Road.
- Continue until you hit the T junction and turn left onto A6010.
- Continue 200m and turn right onto Collyhurst road.
- For specified deliveries, turn right onto P&P bridge and the Compound is on the left-hand side. For the offices, follow the road towards the city centre.
- Follow the road until it turns under the railway and then comes back on itself up Red Bank hill.
- Turn right down Roger Street and follow it to the end.
- Turn left on to Hargreaves Street and go through the compound gates.
- Turn into the compound and park your vehicle in the designate area – Parking or Deliveries
- All delivery vehicles must report to the welfare cabins for further direction, and all personnel must sign in
- Reverse Parking at all times

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | <p><b>M62 West (Liverpool)</b></p> <ul style="list-style-type: none"> <li>○ The M62 merges into the M602, continue on this road which will then merge into A57 Regent Road.</li> <li>○ Turn left onto Ordsall Lane, continue until you reach a T junction.</li> <li>○ Turn left at the junction and head north on the A6042/Ring Road.</li> <li>○ Continue until you reach another T Junction, with Manchester Arena on your right.</li> <li>○ Turn right and continue on the ring road.</li> <li>○ Turn left onto A664.</li> <li>○ Turn Left onto Dantzic street and continue veering right and proceed on Dantzic street.</li> <li>○ Continue around over the river and under the railway to Red Bank.</li> <li>○ Turn right down Roger Street and follow it to the end.</li> <li>○ Turn left on to Hargreaves Street and go through the compound gates.</li> <li>○ Park your vehicle in the designate area – Parking or Deliveries</li> <li>○ All delivery vehicles must report to the welfare cabins for further direction, and all personnel must sign in</li> <li>○ Reverse Parking at all times</li> </ul> <p><b>M60 South (Stockport)</b></p> <ul style="list-style-type: none"> <li>○ Come off the M60 at Junction 1</li> <li>○ Head North on the A6 Stockport Road for approximately 5 miles</li> <li>○ Turn right at the Stockport Road/Devonshire Street crossroads (McDonald's is on the right)</li> <li>○ Continue on the A665 Devonshire Street which merges onto Great Ancoats Street and then it merges to the ring road and finally it merges to Cheetham Hill Road.</li> <li>○ Turn right onto A664.</li> <li>○ Turn Left onto Dantzic street and continue veering right and proceed on Dantzic street.</li> <li>○ Continue around over the river and under the railway to Red Bank.</li> <li>○ Turn right down Roger Street and follow it to the end.</li> <li>○ Turn left on to Hargreaves Street and go through the compound gates.</li> <li>○ Park your vehicle in the designate area – Parking or Deliveries</li> <li>○ All delivery vehicles must report to the welfare cabins for further direction, and all personnel must sign in</li> <li>○ Reverse Parking at all times</li> </ul> |
| <b>Construction vehicles</b> | <ul style="list-style-type: none"> <li>○ All construction vehicles leaving site must have wheels checked for stones prior to existing site and entering onto the public highway.</li> <li>○ All loads to be sheeted prior to transit where possible.</li> <li>○ Load may be left unsheeted if the load will not blow off in transit, does not produce dust and the load does not need to stay dry.</li> <li>○ All Construction vehicles to be part of FORS.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                         |                                 |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
|                                                 |  <p>The Fleet Operator Recognition Scheme (FORS) is a voluntary accreditation scheme for fleet operators which aims to raise the level of quality within fleet operations, and to demonstrate which operators are achieving exemplary levels of best practice in safety, efficiency, and environmental protection.</p> |                                 |
|                                                 | <p><b>Note:</b></p> <p><b>A TM &amp; Delivery Plan MUST be Sent Out with Order to ALL Suppliers Prior to Delivery Taking Place</b></p>                                                                                                                                                                                                                                                                  |                                 |
| Opening/Closed Times and Dates (If Applicable): | Project Start Dates                                                                                                                                                                                                                                                                                                                                                                                     | 20 <sup>th</sup> September 2022 |
|                                                 | Project Completion Dates                                                                                                                                                                                                                                                                                                                                                                                | April 2026                      |
|                                                 | First Allowable Delivery Time                                                                                                                                                                                                                                                                                                                                                                           | 8am                             |
|                                                 | Last Allowable Delivery Time                                                                                                                                                                                                                                                                                                                                                                            | 4pm                             |
| Additional Information                          | Different delivery entrances to site may be used depending on the programme of works. Ensure an up-to-date delivery plan is sent with every order, even for repeat deliveries.                                                                                                                                                                                                                          |                                 |

## Section B Construction Phase Plan

### B1.0 Foreword

This section of the plan should be read with section A and with the current editions of the schedules for **Section A and B**. Together these documents define the arrangements for achieving health and safety standards on the project. They form the construction phase plan required under CDM Regulations.

### B2.0 Health and safety arrangements including welfare

#### B2.1 Fire safety - *SG11: Assessment of fire safety*

The fire safety co-ordinator gives attention to the prevention and limitation of the effects of fire by avoiding stocks of flammable materials and provision of adequate emergency instruction and arrangements.

On this project, the applicable arrangements for fire safety are detailed in **Table B2.1** below.

Fire alarm to be tested weekly

Fire Drill to be carried out as per A3.4

**Table B2.1: Fire safety arrangements**

|                      |                                                                                                                           |
|----------------------|---------------------------------------------------------------------------------------------------------------------------|
| Flammable substances | Fire extinguishers kept in site offices and vehicles<br>Keep fire extinguisher available during working                   |
| Banned activities    | Open fires on site                                                                                                        |
| Hot work permits     | Any activity that generates heat needs to be covered by a Permit                                                          |
| Smoking              | No smoking on site, or in site vehicles                                                                                   |
| Waste                | No combustible waste to be stored on site, and to be disposed of off-site at the end of each day to an appropriate point. |
| Fire points          | Manual and automatic alarm points various points through the Hargreaves St building to meet the Fire RA requirements      |
| Alarm                | See Emergency Procedure – Fire within section A6                                                                          |
| Emergency supply     | N/A                                                                                                                       |
| High risk premises   | No high-risk areas or premises identified                                                                                 |
| Accommodation        | Site welfare vehicles to contain fire extinguishers                                                                       |
| <b>Personnel</b>     |                                                                                                                           |
| Fire marshal         | <i>Joe Quinlan, Stuart Martin</i>                                                                                         |
| Fire co-ordinator    | <i>Stephen Donaldson</i>                                                                                                  |

## B2.2 First aid - SG03: First aid

The location of first aid equipment and names of first aiders are prominently displayed so that assistance can be obtained in the shortest possible time.

The specific arrangements for first aid are as detailed in **Table B2.2** below:

**Table B2.2: First aid arrangements**

| <b>Materials, equipment and facilities</b>     |                                                                                                                                                                                          |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First aid boxes                                | 2no in Site Offices – one upstairs and one downstairs.<br>1no on site in the water treatment plant container.<br>Kit kept in site-based welfare<br>2no in Welfare cabins over at NT02/04 |
| Travelling first aid kits                      | Kept within site vehicles. One per vehicle.                                                                                                                                              |
| First aid rooms                                | In the main compound offices, first room on the right from the front door.                                                                                                               |
| Defibrillators                                 | Defibrillator to be held within main first aid room & 2 in site vehicles                                                                                                                 |
| <b>Personnel</b>                               |                                                                                                                                                                                          |
| First aiders                                   | Stephen Donaldson, Neil Peters, Liam Chambers, Alex Cheregi, Joe Holmes                                                                                                                  |
| Management of first aid equipment and supplies | Stephen Donaldson                                                                                                                                                                        |

## B2.3 Site utility arrangements - SG20: Temporary electrical installations

This section describes the arrangements for planning site requirements for utilities to meet site requirements. Wherever practicable information on depths and location should be provided.

**Table B2.3: Site utilities**

| Utility                                       | Requirement | Inspection and Test Requirement                                          | Routine inspection                                | Supplier                   |
|-----------------------------------------------|-------------|--------------------------------------------------------------------------|---------------------------------------------------|----------------------------|
| <i>Electricity (mains)</i>                    | yes         | ----                                                                     | ----                                              | ENWL                       |
| <i>Electricity (generated)</i>                | Yes         | Generator serviced as per suppliers' instructions                        | Generator serviced as per suppliers' instructions | Nixon Hire                 |
| <i>Gas</i>                                    | No          | ----                                                                     | ----                                              | ----                       |
| <i>Water/Wastewater</i>                       | Yes         | Weekly Sample for Methane. Quarterly Sample for wider suite of materials | Monthly Readings                                  | UU                         |
| <i>Telecom</i>                                | Yes         | N/A                                                                      | ----                                              | Openreach                  |
| <i>Utility supply in emergency situations</i> | No          | Tested with fire alarm and electrical inspection                         | Quarterly inspection                              | Wingate/Bam site solutions |

## B2.4 Welfare arrangements - SG21: Welfare facilities

The agent ensures the provision of suitable facilities at all stages of the project and their maintenance to the highest possible standards of cleanliness and hygiene.

Outline arrangements are defined in **Table B2.4** below: and on a sketch inserted in **Schedule B1**

**Table B2.4: Outline welfare arrangements**

|                                       |                                                                                                                   |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Toilets</b>                        | Available in main compound P&P Access point, and NT02-04 Love Factory Site                                        |
| <b>Washing</b>                        | Main compound and NT02-04 Love Factory Site                                                                       |
| <b>Changing</b>                       | Main compound and NT02-04 Love Factory Site                                                                       |
| <b>Rest/food</b>                      | Main compound and NT02-04 Love Factory Site                                                                       |
| <b>Drinking water</b>                 | Main compound (additional locations may be implemented during exceptional heat) and in each satellite site set-up |
| <b>Waste segregation</b>              | Separate labelled waste skips, in plant compound.                                                                 |
| <b>Responsibility for maintenance</b> | BAM supervisor to arrange and coordinate.                                                                         |

### **B2.5 Zones – NS1.5: Zonal working**

Certain areas of the project will have no or restricted access throughout the project and will not be picked up any specific activity plan. This is due to Client requirements or the hazards in these areas. Areas with no access are exclusion zones. Areas of access limited to certain people are restricted zones.

Zonal areas not associated with a specific construction activity on this project are listed in **Table B2.5** below.

**Table: Project Zones**

| <b>Type of Zone</b>                                                  | <b>Description</b>                                                                                                                              |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Restricted Zone – Yellow                                             | Area of tree clearance                                                                                                                          |
| Exclusion Zone – Red                                                 | Area around chipping plant                                                                                                                      |
| Restricted Zone – Red                                                | Zone around remediation/excavation works                                                                                                        |
| Restricted Zone – Red                                                | Zone in area of earthworks activities                                                                                                           |
| Exclusion Zone – Red                                                 | Zone around invasive species                                                                                                                    |
| Exclusion Zone – Red                                                 | Slew area of excavators                                                                                                                         |
| Restricted Zone – Yellow                                             | Lifting Operations (not within the reached area)                                                                                                |
| Exclusion Zone – Red                                                 | Lifting Operations (slew radius of crane/piling/excavator)                                                                                      |
| Exclusion Zone – Red                                                 | Within 3m of the river                                                                                                                          |
| Exclusion Zone – Red                                                 | All haul roads/vehicle routes.                                                                                                                  |
| Exclusion zone - Red                                                 | Drainage excavations/confined spaces (before they have been deemed safe and an SF901 – Permit to enter (confined space) permit has been issued. |
| Restricted zone - yellow                                             | Drainage excavations/confined spaces (after they have been deemed safe and an SF901 – Permit to enter (confined space) permit has been issued.) |
| Restricted zone - yellow                                             | All work areas with plant movement. Entry to be authorised by banksman/supervisor.                                                              |
| Task specific exclusion zones to be specified in RAMS/Activity plans | Machine movements                                                                                                                               |
| Exclusion Zone - Red                                                 | Trade effluent water discharge area and pumping equipment.                                                                                      |
| Exclusion Zone – Red                                                 | Demolition Activities                                                                                                                           |

### B3.0 Health Management - NP1.17: Management of occupational health

The following hazards to health resulting from activities to be carried out on site are listed in **Tables B3.1** and **B3.2** below. Arrangement for health assessment and monitoring linked to the hazards identified are detailed in **Table B3.3** below:

#### B3.1 Noise - NP1.5: Control of occupational noise

**Table B3.1: Occupational Noise**

| Operation                                            | Anticipated noise level (dBA)           | Actual noise level (dBA) At 10m | Control                                  | Time Anticipated | PPE | Time Per day average (estimated) | Impacted Parties                                          |
|------------------------------------------------------|-----------------------------------------|---------------------------------|------------------------------------------|------------------|-----|----------------------------------|-----------------------------------------------------------|
| <b>Excavators</b> – General Excavation               | (outside) 99 dB(A)<br>(inside) 71db(A)  | 76dB(A)                         | Reviewed on Site and managed accordingly | 7:30 – 18:00     | No  | 4 Hours                          | Construction Workers<br>General Public at site perimeter. |
| <b>Excavators</b> – Loading Lorries                  | (outside) 99 dB(A)<br>(inside) 71db(A)  | 79dB(A)                         | Reviewed on Site and managed accordingly | 7:30 – 18:00     | No  | 1 Hour                           | Construction Workers<br>General Public at site perimeter. |
| <b>Excavators</b> – Breaking Up Concrete             | (outside) 99 dB(A)<br>(inside) 71db(A)  | 90dB(A)                         | PPE, restricted zone                     | 7:30 – 18:00     | Yes | 0.5 hours                        | Construction Workers<br>General Public at site perimeter. |
| <b>Hydraulic grab (attachment on excavator)</b>      | (outside) 99 dB(A)<br>(inside) 71db(A)  | 90dB(A)                         | Reviewed on Site and managed accordingly | 7:30 – 18:00     | Yes | 4 Hours                          | Construction Workers<br>General Public at site perimeter. |
| <b>Hydraulic shear (attachment on excavator)</b>     | (outside) 99 dB(A)<br>(inside) 71db(A)  | 90dB(A)                         | Reviewed on Site and managed accordingly | 7:30 – 18:00     | Yes | 4 Hours                          | Construction Workers<br>General Public at site perimeter. |
| <b>Compactors/rollers-</b><br>Compaction of material | Standard 84dba<br>Compacting 106dba     | 79dB(A)                         | Reviewed on Site and managed accordingly | 7:30 – 18:00     | No  | 1 hour                           | Construction Workers<br>General Public at site perimeter. |
| <b>Dumpers</b> – 25t Moxy Empty                      | (outside) 104 dB(A)<br>(inside) 73db(A) | 87dB(A)                         | PPE, restricted zone                     | 7:30 – 18:00     | Yes | 3 hours                          | Construction Workers<br>General Public at site perimeter. |
| <b>Dumpers</b> – 25t Moxy Tipping                    | (outside) 104 dB(A)<br>(inside) 73db(A) | 79dB(A)                         | Reviewed on Site and managed accordingly | 7:30 – 18:00     | No  | 3 hours                          | Construction Workers<br>General Public at site perimeter. |
| <b>Concrete Mixer Truck-</b><br>Discharging          | (outside) 104 dB(A)<br>(inside) 73db(A) | 75dB(A)                         | Reviewed on Site and managed accordingly | 7:30 – 18:00     | No  | 1 hour                           | Construction Workers<br>General Public at site perimeter. |
| <b>Generators</b>                                    | (outside) 75 dB(A)                      | 65dB(A)                         | Reviewed on Site and managed accordingly | 7:30 – 18:00     | No  | 10 hours                         | Construction Workers<br>General Public at site perimeter. |
| <b>Abrasive wheels</b> – Stihl Saw                   | (outside) 98 dB(A)                      | 91dB(A)                         | PPE, restricted zone                     | 7:30 – 18:00     |     | 0.5 hours                        | Construction Workers<br>General Public at site perimeter. |

|                        |                                              |         |                            |              |     |                                     |                                                                            |
|------------------------|----------------------------------------------|---------|----------------------------|--------------|-----|-------------------------------------|----------------------------------------------------------------------------|
| <b>Chainsaws</b>       | (outside)<br>106db (A)                       | 94dB(A) | PPE,<br>restricted<br>zone | 7:30 – 18:00 | Yes | 4 hours (at<br>start)               | Construction<br>Workers<br>General Public<br>at site perimeter.            |
| <b>Chippers</b>        | (outside)<br>125db (A)                       | 87dB(A) | PPE,<br>restricted<br>zone | 7:30 – 18:00 | Yes | 8 hours (at<br>start of<br>project) | Construction<br>Workers<br>General Public<br>at site perimeter.            |
| <b>Strimmer</b>        | (outside)<br>101db (A)                       | 91dB(A) | PPE,<br>restricted<br>zone | 7:30 – 18:00 | Yes | 2 hours (at<br>start of<br>project) | Construction<br>Workers<br>General Public<br>at site perimeter.            |
| <b>Blower</b>          | (outside)<br>100db (A)                       | 85dB(A) | PPE,<br>restricted<br>zone | 7:30 – 18:00 | Yes | 2 hours (at<br>start of<br>project) | Construction<br>Workers<br>General Public<br>at site perimeter.            |
| <b>Pole pruner</b>     | (outside) 93db<br>(A)                        | 91dB(A) | PPE,<br>restricted<br>zone | 7:30 – 18:00 | Yes | 2 hours (at<br>start of<br>project) | Construction<br>Workers<br>General Public<br>passing at site<br>perimeter. |
| <b>RH28 Piling Rig</b> | (outside)<br>99 dB(A)<br>(inside)<br>71db(A) | 90dB(A) | PPE,<br>restricted<br>zone | 7:30 – 18:00 | Yes | 4 Hours                             | Construction<br>Workers                                                    |

### B3.2 Vibration - SG08: Control of occupational vibration

**Table B3.2: Occupational Vibration**

| Operation                                 | Anticipated<br>vibration level<br>(m/s <sup>2</sup> ) | Tools used                  | Control                                                                      | Time<br>(minutes) |
|-------------------------------------------|-------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------|-------------------|
| Tree felling                              | 3.7                                                   | Chainsaw - Stihl<br>- MS261 | HAVS Assessment<br>completed<br>HAVS watch to be worn to<br>monitor exposure | 2hrs 40mins       |
| Tree felling                              | 3.7                                                   | Chainsaw - Stihl<br>- MS262 | HAVS Assessment<br>completed<br>HAVS watch to be worn to<br>monitor exposure | 2hrs 40mins       |
| Tree felling                              | 3.2                                                   | Chainsaw - Stihl<br>- 201tv | HAVS Assessment<br>completed<br>HAVS watch to be worn to<br>monitor exposure | 3hrs 35mins       |
| Tree felling                              | 3.5                                                   | Strimmer - Stihl -<br>FS460 | HAVS Assessment<br>completed<br>HAVS watch to be worn to<br>monitor exposure | 3hrs              |
| Tree felling                              | 3.5                                                   | Blower - Stihl -<br>BR600   | HAVS Assessment<br>completed<br>HAVS watch to be worn to<br>monitor exposure | 3hrs              |
| General cutting activities                | 4.2                                                   | Stihl saws                  | HAVS Assessment<br>completed<br>HAVS watch to be worn to<br>monitor exposure | 2hrs              |
| Compaction activities e.g., stone,<br>tar | TBC                                                   | Pneumatic<br>whacker plate  | HAVS Assessment<br>completed<br>HAVS watch to be worn to<br>monitor exposure | TBC               |
| Aerating concrete pours                   | TBC                                                   | Concrete pokers             | HAVS Assessment<br>completed<br>HAVS watch to be worn to<br>monitor exposure | TBC               |

### B3.3 Dermatitis

**Table B3.3: Dermatitis**

| Operation   | Hazard | Control                                                                                                                                    | PPE                                          |
|-------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Concreting/ | Cement | Low chromium VI<br>Avoid exposure<br>Briefings/training on the risk associated with cement exposure                                        | Full skin coverage with impermeable clothing |
| Diesel      |        | Outdoor use only, all containers kept closed when not in use, wash after exposure, all operatives briefed on COSHH Assessment prior to use | Full skin coverage with impermeable clothing |
| Petrol      |        | Outdoor use only, all containers kept closed when not in use, wash after exposure, all operatives briefed on COSHH Assessment prior to use | Full skin coverage with impermeable clothing |
| HVO fuels   |        | Outdoor use only, all containers kept closed when not in use, wash after exposure, all operatives briefed on COSHH Assessment prior to use | Full skin coverage with impermeable clothing |

### B3.4 Health assessment and monitoring arrangements - NP1.17 *Management of occupational health*

Health assessment monitoring arrangements for this project are defined in **Table B3.4** below:

**Table B3.4: Health assessment monitoring arrangements**

| Hazard    | By whom                                    | Frequency                                                                                                                        |
|-----------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Noise     | Competent person<br>Occupational hygienist | Baseline health assessment within 3 months of employment and then annually thereafter (More frequently for specific individuals) |
| Vibration | Competent person<br>Occupational hygienist | Baseline health assessment within 3 months of employment and then annually thereafter                                            |

|          |                              |                                            |
|----------|------------------------------|--------------------------------------------|
|          |                              | (More frequently for specific individuals) |
| Lead     | N/A                          | N/A                                        |
| Asbestos | Air Monitoring, during works | Each shift                                 |

### B3.5 Manual handling - SG22: Manual handling

Exposure to manual handling, and the associated risk of injury, particularly back injury must be controlled. Manual handling training is given to all personnel at risk, and the results of assessments are notified to those involved in the activity.

The activities listed in **Table 3.5** are likely to require a manual handling assessment.

**Table B3.5: Manual handling**

| Activity likely to require a manual handling assessment |
|---------------------------------------------------------|
| Site mobilisation and de-mobilisation                   |
| Handling Slung Loads                                    |
| Demolition works                                        |
| Tree clearance                                          |
| Drainage materials                                      |
| Ducting/chambers/lids                                   |
| Kerbing                                                 |
| Ironwork                                                |
| Edgings                                                 |
| Paving stones                                           |
| Bags of sand/aggregate/cement/topsoil                   |
| Block paving                                            |
|                                                         |
|                                                         |

### B3.6 COSHH (Chemical and biological hazards including dust and fumes) - NP1.18: COSHH SG18: COSHH

The COSHH coordinator, ensures that all reasonable steps are taken to ensure that exposure of employees and others to hazardous substances is assessed and prevented or at least controlled to within statutory limits.

On this project, arrangements for storage of hazardous substances are detailed in **Schedule A7**.

### B3.7 Temperature and weather protection for personnel on site

The following **Table B3.7** below details suitable and sufficient controls are in place to minimise the risks regardless of location.

**Table B3.7: Weather Protection**

| Temperature and weather hazards | Control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| High temperature                | Operatives to be reminded at morning briefings to hydrate during day. Drinking water supplies to be provided at all site office locations. Operatives to be supplied with drinking bottle to allow to carry around work site.<br>Where possible operatives to work in shaded areas and where possible additional shading to be created on static work areas to protect operatives.<br>If required additional breaks to be incorporated into workdays and working hours adjusted where practical. |
| Low temperature                 | Where temperatures reach points where ice and frost are formed operatives during the prestart briefings will be reminded of the                                                                                                                                                                                                                                                                                                                                                                  |

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | <p>risks of low temperatures. The Agent/ Foreman will carry out an assessment of the site. From this the works on site will be approved to commence or be suspended if required. Where necessary the site team will first clear paths and apply anti slip material (grit) to prevent slips trips and falls.</p> <p>Water supplies to cabins to be protected (lagged) to protect from freezing.</p>                                                                                                                                                                                                                                                                                                             |
| Poor visibility | <p>If visibility is poor prior to work commencing the Site Agent and Foreman will carry out an assessment of the site. From this the works on site will be approved to commence or be suspended until visibility improves.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Rain            | <p>Operatives will be reminded of potential slips trips and falls associated with wet weather during prestart briefings.</p> <p>Agent/Foreman to subscribe to the EA's flood warning service to allow advanced warning of heavy rainfall.</p> <p>For heavy rain Agent/Foreman will assess the site conditions and where necessary provide additional risk assessment or suspend works.</p> <p>Rain fall will also effect works within the culvert due to increased flows. Close monitoring of the weather forecast, and potential rain fall will be undertaken, and works will be planned taking consideration of potentially increased flows.</p>                                                             |
| Snow            | <p>In the event of snow fall all footpaths will be cleared. If continuous then the Site Agent and Foreman will review the planned operations and where necessary, provide additional risk assessment or suspend works.</p> <p>Drying room temperature to be maintained to allow cloths to dry out.</p> <p>Agents/foreman to subscribe to the EA's flood warning service to allow advanced warning of heavy snowfall.</p> <p>Melting snow will also effect works within the culvert due to increased flows.</p> <p>Close monitoring of the weather forecast, and potential snow fall will be undertaken, and works will be planned taking consideration of potentially increased flows due to melting snow.</p> |
| Humidity        | <p>Temperatures will be monitored, and additional breaks given to site team to allow intake of liquid. Operations will be monitored through their durations.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Wind            | <p>Wind speeds will be monitored in advance and the forecasts provided within the morning briefings. Any lifting operations will have risks associated with high wind speeds identified and suitable contingencies/guidance identified.</p> <p>For lifting operations winds speed of 12mps to be the cut off of operations.</p>                                                                                                                                                                                                                                                                                                                                                                                |
| UV protection   | <p>Factor 30 protection cream provided on site to provide UV protection. Operatives to be informed of daily UV levels in morning briefing and advised to apply protection cream. Full length arm sleeves advised to give additional protection.</p> <p>Where possible operatives to work in shaded areas and where possible additional shading to be created on static work areas to protect operatives.</p>                                                                                                                                                                                                                                                                                                   |

### B3.8 Fatigue

The planned working hours and monitoring regime on this site are given in the **Table B3.8** below.

**Table B3.8: Fatigue management**

|                                                                                  | Dayshift      |                                   | Nightshift               |        | Control to minimise fatigue                                                                                                                                                                                            |
|----------------------------------------------------------------------------------|---------------|-----------------------------------|--------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                  | Hours worked  | Breaks                            | Hours worked             | Breaks |                                                                                                                                                                                                                        |
| Monday to Friday                                                                 | 07:30 to 1800 | 1/2hr mid-morning and 1/2hr lunch | No night working planned |        | Regular breaks depending on work type. Task rotation.<br>Monitoring and recording of travel by all workforce no more than 14hrs door to door.<br>Monitoring of tasks and physical/mental demands paced on individuals. |
| Saturday – Only by Permission. Network Rail works will likely be off peak times. | 7:30-17:30    | 10:00-10:30 & 13:00-13:30         | Possible NR works        |        | Regular breaks depending on work type. Task rotation.<br>No less than 1 day's rest in any 7 consecutive days or 2 in any 14 days                                                                                       |
| Sunday – Only by Permission. Network Rail works will likely be off peak times.   | 7:30-17:30    | 10:00-10:30 & 13:00-13:30         | Possible NR works        |        | Regular breaks depending on work type. Task rotation.<br>No less than 1 day's rest in any 7 consecutive days or 2 in any 14 days                                                                                       |
| Weekly / fortnightly break arrangements                                          | N/A           |                                   |                          |        |                                                                                                                                                                                                                        |

Information in relation to travel and working time should be recorded for all personnel.

## B4.0 General arrangements that apply to the works

Other significant risks are covered in **Tables B4.1 to B4.20**. **Table B4.20** is provided to allow the agent to develop any customer requirements as defined in the pre-tender information, or other unusual risks that may be applicable to the works.

### B4.1 Underground and overhead services - NP1.3 Control of excavation in the vicinity of buried services

The following information has been taken from the pre-construction information, service providers, Linesearch ([www.linesearchbeforeudig.co.uk](http://www.linesearchbeforeudig.co.uk)) and site surveys.

Any known to exist in the vicinity of the site are listed in **Table B4.1** below. With specific details held in the services register **Schedule B3**.

**Table B4.1: Major underground / overhead assets**

| Identified major underground / overhead asset                                | Location          | Activities affected                     | Control                                                                            |
|------------------------------------------------------------------------------|-------------------|-----------------------------------------|------------------------------------------------------------------------------------|
| UU combined Sewer                                                            | Plateau/Avenue    | Digging, trade effluent water disposal. | Permit to dig in place prior to any breaking ground                                |
|                                                                              | Riverside pathway | Invasive species clearance              | Permit to dig in place, hand dig around the pipe. Detailed methodology in SC RAMS. |
| Historic sewer network – derelict but still live                             | Plateau/Avenue    | Digging                                 | Permit to dig in place prior to any breaking ground                                |
| 9 no. uncharted services crossing P&P bridge, easily disturbed by vibration. | P&P Access        | Deliveries                              | Delivery plan to specify no offloading on the bridge                               |
| None                                                                         | Ridge View        | None                                    | Permit to dig in place prior to any breaking ground                                |
| Private sewer leading to Hargreaves Street                                   | Red Bank Terrace  | Earth works                             | Permit to dig in place prior to any breaking ground                                |
| None                                                                         | Viaduct           | None                                    | Permit to dig in place prior to any breaking ground                                |

| Identified major underground / overhead asset                                                                                                               | Location          | Activities affected                                               | Control                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Various. Please see trial hole logs for TH03,04 & 05, services include CW sewers, 6kv cables, LV Electrics, BT, Gas, water main, Gas, 33kv cables, gas main | Roger Street      | Digging trial holes                                               | Permit to dig in place prior to any breaking ground, using safe method of excavation using a Vacuum Excavator |
| Various. Please see trial hole logs for TH01 a/b/c & TH02, services include Virgin media, LV Electrics, BT, Gas, water main, CW sewers, 6kv cables          | Red Bank          | Digging trial holes                                               | Permit to dig in place prior to any breaking ground, using safe method of excavation using a Vacuum Excavator |
| Various. Services include , LV Electrics, BT, Gas, water main, CW sewer                                                                                     | Hargreaves Street | Setting up new site compound                                      | Permit to dig in place prior to any breaking ground                                                           |
| Various. Please see trial hole log TH05, services include LV Electrics, BT, Gas, water main, CW sewer, 6kv cables                                           | Chase Street      | Digging trial holes                                               | Permit to dig in place prior to any breaking ground, using safe method of excavation using a Vacuum Excavator |
| HP Cadent Gas Main                                                                                                                                          | NT02              | Removal of "TCE plume"<br><br>Temp Works platform (loading above) | Permit to dig<br><br>Mark route above ground<br><br>Complete NT02 dig & replace before diverting gas.         |

| Identified major underground / overhead asset | Location                                          | Activities affected      | Control                                       |
|-----------------------------------------------|---------------------------------------------------|--------------------------|-----------------------------------------------|
| ENWL – various power cables                   | NT02, 03 and 04                                   | Demolition<br>Excavation | ENWL to cut at boundary before works commence |
| Openreach                                     | NT02 – Love Factory                               | Demolition               | Openreach to disconnect before demo           |
| Water – Water Plus                            | NT02 Love Factory<br>NT03 Concrete Batching Plant | Demolition               | UU to disconnect before demo                  |

Responsibility for ensuring arrangements for safety in the vicinity of overhead services in accordance with BAM Nuttall procedures is that of a **Buried and Overhead Services Coordinator**, appointed by the agent, whose duties are described in the BAM Nuttall health and safety policy booklet.

#### B4.1.1 Services, isolation points and diversion work

In association with these works the following services shall be disconnected / connected:

| Service   | Location of services and isolation point(s)    | Planned date for connection (c) or disconnection (d) |
|-----------|------------------------------------------------|------------------------------------------------------|
| BT        | Hargreaves Street compound                     | C Early December 2022                                |
| Electric  | Hargreaves Street compound                     | C Early March 2023                                   |
| Water     | Hargreaves Street compound                     | C January 2023                                       |
| Foul      | Hargreaves Street compound                     | C November 2022                                      |
| BT        | Love Factory boundary                          | disconnected                                         |
| ENWL      | Love Factory boundary                          | disconnected                                         |
| Cadent LP | Love Factory boundary                          | disconnected                                         |
| Water     | Love Factory buildings not boundary (pre demo) | disconnected                                         |
| Foul      | Love Factory buildings not boundary (pre demo) | disconnected                                         |
| ENWL      | SCW Bridge (OOC Cable)                         | D Planned October 2025                               |
| ENWL      | P&P Entrance (OOC Cable)                       | D Planned October 2025                               |

#### B4.2 Temporary works - NP19: Control of temporary works

A description of any erection sequences, temporary propping arrangement etc. taken from the pre-construction and designer information should be included here ensuring safe by design.

**Table B4.2: Temporary Works**

Live temporary works register can be found at the following link:

[Temporary Works](#)

**B4.3 Working at height - SG15: Working at height**  
**Table B4.3: Working at height**

| Activity                            | Height hazard                       | Controls                                                                         | Monitoring and inspection                                                                                                                                                                                                       |
|-------------------------------------|-------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Site cabin mobilisation             | Fall from height                    | Developed RAMS for works identifying procedures to be put in place and followed. | Before first use<br>After adverse weather conditions<br>Review and approval of RAMS (Activity plan). All persons to be briefed and Foreman to monitor works as they proceed to ensure compliance with documented plan of works. |
| Deep drainage excavation            | Fall from height                    | Developed RAMS for works identifying procedures to be put in place and followed. | Before first use<br>After adverse weather conditions<br>Review and approval of RAMS (Activity plan). All persons to be briefed and Foreman to monitor works as they proceed to ensure compliance with documented plan of works. |
| Honey Street retaining wall works   | Fall from height<br>Falling objects | Developed RAMS for works identifying procedures to be put in place and followed. | Before first use<br>After adverse weather conditions<br>Review and approval of RAMS (Activity plan). All persons to be briefed and Foreman to monitor works as they proceed to ensure compliance with documented plan of works. |
| New retaining wall                  | Fall from height<br>Falling objects | Developed RAMS for works identifying procedures to be put in place and followed. | Before first use<br>After adverse weather conditions<br>Review and approval of RAMS (Activity plan). All persons to be briefed and Foreman to monitor works as they proceed to ensure compliance with documented plan of works. |
| Demolition                          | Working from MEWP                   | Developed RAMS for works identifying procedures to be put in place and followed. | Only IPaf trained operations<br>SF605 lift plan in place                                                                                                                                                                        |
| Piling:<br>Rigging/de-rigging plant | Working from MEWP                   | Developed RAMS for works identifying procedures to be put in place and followed. | Only IPaf trained operations<br>SF605 lift plan in place                                                                                                                                                                        |

#### B4.4 Lifting - NP1.1: Management of lifting operations

All lifting operations are subject to a lift plan that describes a safe system of work. A schedule of lift plans is maintained. [04.3 Lift Plan](#)

Responsibility for ensuring the establishment of this safe system of work is that of an appointed person (lifting), appointed by the agent.

**Table B4.4: Lifting operations**

Lift plans to be added to lifting register on SharePoint at the link below:

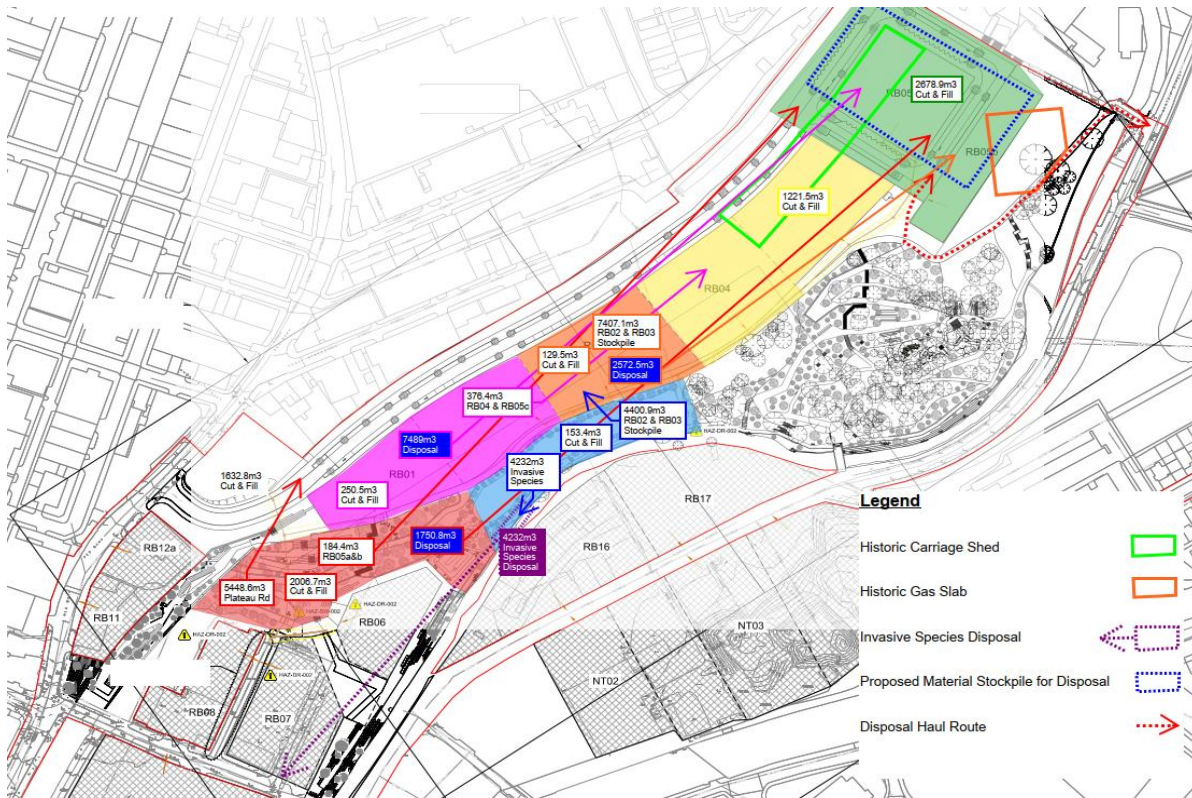
[Lifting](#)

#### B4.5 Excavation

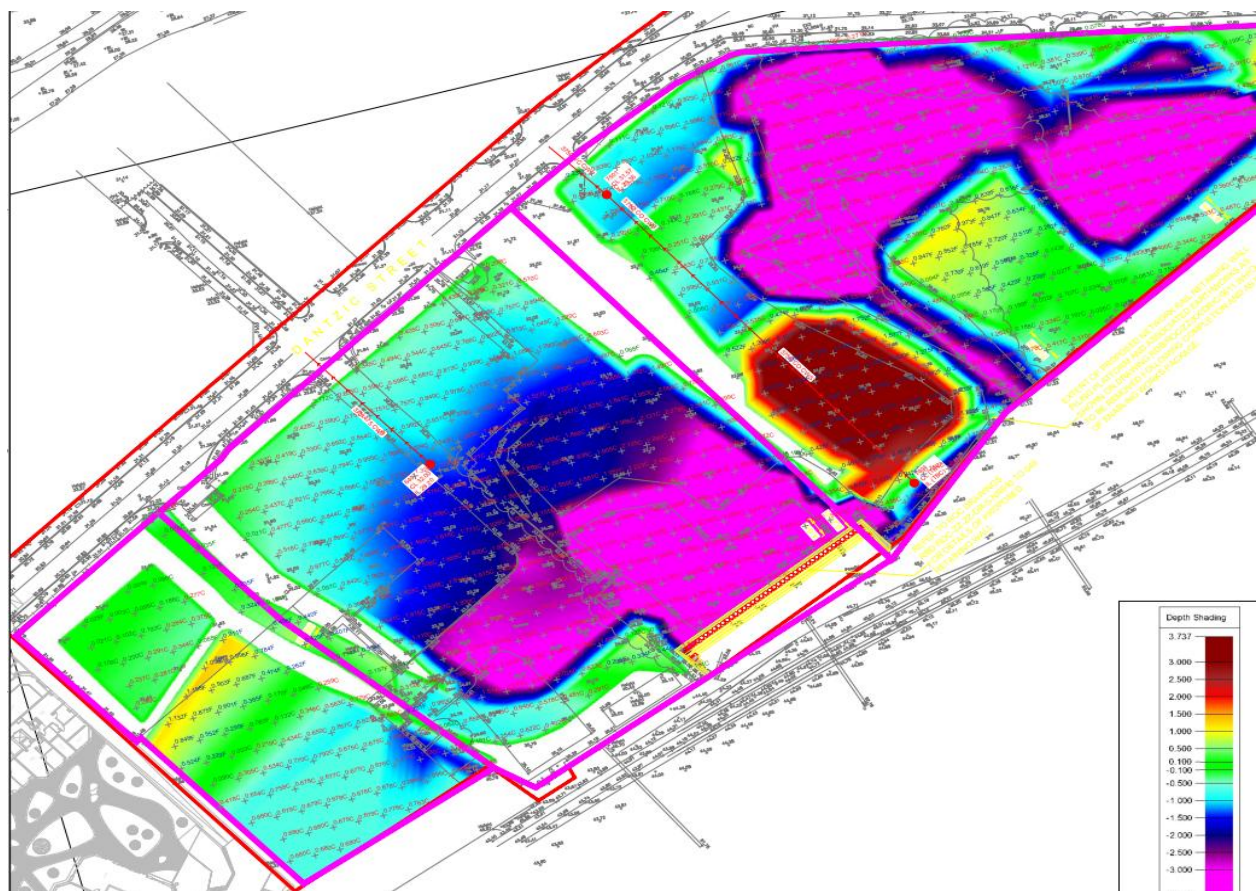
**Table B4.5: Excavation**

| Activity                 | Description                                                                                         | Controls / support arrangements                                                                  | Monitoring arrangements                                   |
|--------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| HIF Bulk earthworks      | Site wide cut and fill.                                                                             | Specific Activity plan developed for works                                                       | Include compliance monitoring and inspection arrangements |
| HIF Earthworks/clearance | Tree root clearance                                                                                 | Specific Activity plan developed for works                                                       | Include compliance monitoring and inspection arrangements |
| HIF Ducting              | Excavation                                                                                          | Specific Activity plan developed for works                                                       | Include compliance monitoring and inspection arrangements |
| NT02 & NT03 – TCE plume  | Removal of TCE contaminated materials                                                               | Specific Activity plan developed for works<br><br>SI works to determine extents of contamination | Include compliance monitoring and inspection arrangements |
| NT03 and NT04 Bulk       | CUT / FILL operation<br>Removal of unsuitable materials<br>Re-use on site in NT02, NT03 or TW works | Specific Activity plan developed for works<br><br>SI works to determine extents of contamination | Include compliance monitoring and inspection arrangements |
| Phase 2 Works            | Excavation                                                                                          | Specific Activity plan developed for works                                                       | Include compliance monitoring and inspection arrangements |

- HIF Bulk Earthworks are as per the below strategy; materials marked straight for disposal will be placed in the blue dotted areas ready for removal off site.



- CUT/FILL heat map of the NT Plots from existing to completion of enabling phase

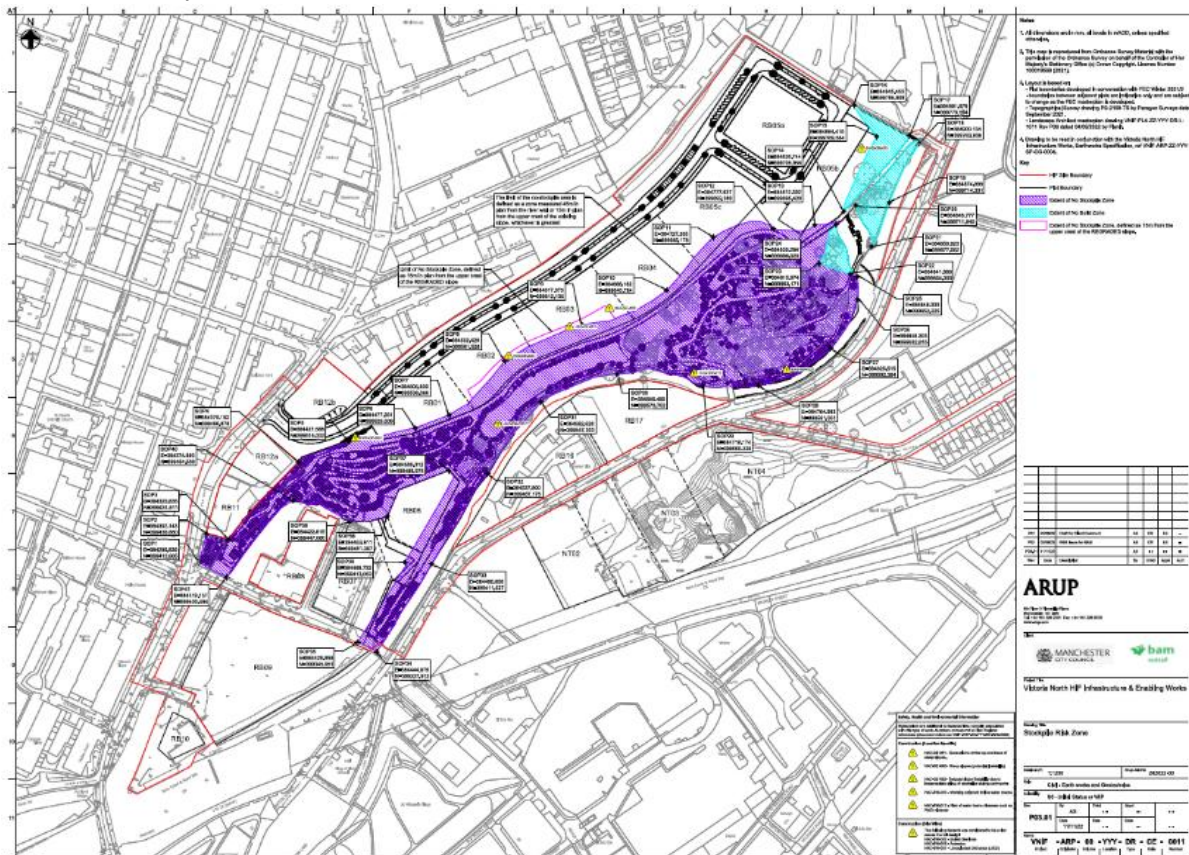


## B4.6 Ground stability

### Table B4.6: Ground Stability

| Activity                    | Stability issue            | Mitigation                                                                                         | Inspection |
|-----------------------------|----------------------------|----------------------------------------------------------------------------------------------------|------------|
| Works adjacent to riverbank | Potential for loose soils. | Visual inspection by competent operator prior to any plant being positioned close to the riverbank | Before use |
| Embankments                 | Potential for loose soils. | Visual inspection by competent operator prior to any traffic & plant working on embankments.       | Before use |
| Earth works cuts            | Potential for loose soils. | Visual inspection by competent operator prior to any plant working on embankments.                 | Before use |

## HIF Stockpile Risk Zone



#### B4.7 Stability of existing structures

**Table B4.7: Structural Integrity of existing structure**

| Activity and effect | Existing structure          | Type of inspection                                                                                                                             |
|---------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Haul road           | Honey Street Retaining wall | Structural inspection to determine load bearing capacity to ensure plant and equipment and personnel are working within safe acceptable limits |
| Access & Egress     | P&P Bridge                  | Structural inspection to determine load bearing capacity to ensure plant and equipment and personnel are working within safe acceptable limits |
| Access & Egress     | St Catherine's Wood Bridge  | 3t weight limit.                                                                                                                               |
| Viaduct             |                             | Vibration monitoring and sound monitoring<br>Movement monitoring with use of Total Station                                                     |
| NT03 Piling         | Network Rail Viaduct        | <del>track monitoring, vibration and positional</del>                                                                                          |
| NT03 Earthworks     | Network Rail Viaduct        | track monitoring, vibration and positional                                                                                                     |

#### B4.8 Contaminated land

BAM Nuttall will investigate, excavate and dispose of any potentially contaminated areas in accordance with contaminated land, environmental and health and safety legislation.

Several supplementary documents and reports have been written to assist with the Remediation of the contaminated land and limit the risk of exposure to subsequent land use and release to controlled waters.

These documents are:

| Document Title                                          | Revision | Date                            | PW Link                                                               | Comments                                  |
|---------------------------------------------------------|----------|---------------------------------|-----------------------------------------------------------------------|-------------------------------------------|
| Human Health Risk Assessment                            | P01      | 2023                            | <a href="#">VNIF-ARP-ZZ-YYY-RP-CG-0014</a>                            |                                           |
| Controlled Waters Detailed Quantitative Risk Assessment | P01      | 21 <sup>st</sup> August 2023    | <a href="#">VNIF-ARP-ZZ-YYY-RP-CG-1000 Main Text&amp;Drawings.pdf</a> |                                           |
| Remediation Strategy                                    | R6       | 27 <sup>th</sup> October 2023   | <a href="#">VNIF-BNL-ZZ-YYY-RP-Y-0001</a>                             | Reverted back to R6                       |
| Remediation Implementation and Verification Plan        | P01      | 27 <sup>th</sup> October 2023   | <a href="#">VNIF-ARP-ZZ-YYY-RP-CG-0019</a>                            | Cognisant of response from EA, as per MMP |
| Materials Management Plan                               | R1       | 13 <sup>th</sup> December 2023  | <a href="#">VNIF-BNL-ZZ-YYY-RC-CG-0002</a>                            | Cognisant of feedback from PF and QP      |
| Invasive Species Management Plan                        | 10       | 28 <sup>th</sup> September 2023 | <a href="#">VNIF-BNL-ZZ-YYY-MS-W-0003</a>                             | Approved for use.                         |

|                                                           |     |                              |                                                          |                               |
|-----------------------------------------------------------|-----|------------------------------|----------------------------------------------------------|-------------------------------|
| St Catherines Wood:<br>Combined<br>Remediation and<br>MMP | P03 | 31 <sup>st</sup> May 2024    | <a href="#">VNIF-ARP-ZZ-YYY-<br/>RP-CG-0020</a>          | Approved for<br>use           |
| Phase 2 RIP<br>Addendum                                   | P04 | 29 <sup>th</sup> August 2025 | <a href="#">VNIF-ARP-ZZ-<br/>YYY-RP-CG-<br/>0020.pdf</a> | Updated to<br>include phase 2 |

Prior to works starting all operatives will be briefed in the general contamination present on site, the risks to human health and the importance of following the remediation plan to prevent the spread of contaminants across site.

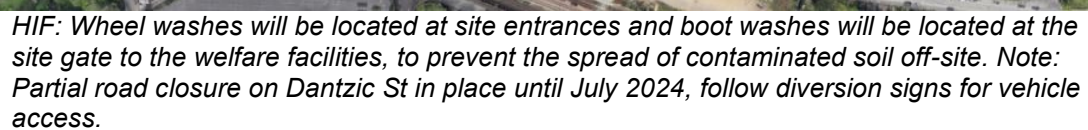
As each work area is released for remediation a new briefing will be delivered to the operatives to highlight the areas of concern along with a 3D model input into the excavators showing avoidance zones for the levels of contamination where special measures need to be introduced. Such as the Gas Works and Carriage shed areas where elevated levels of PFAS have been measured.

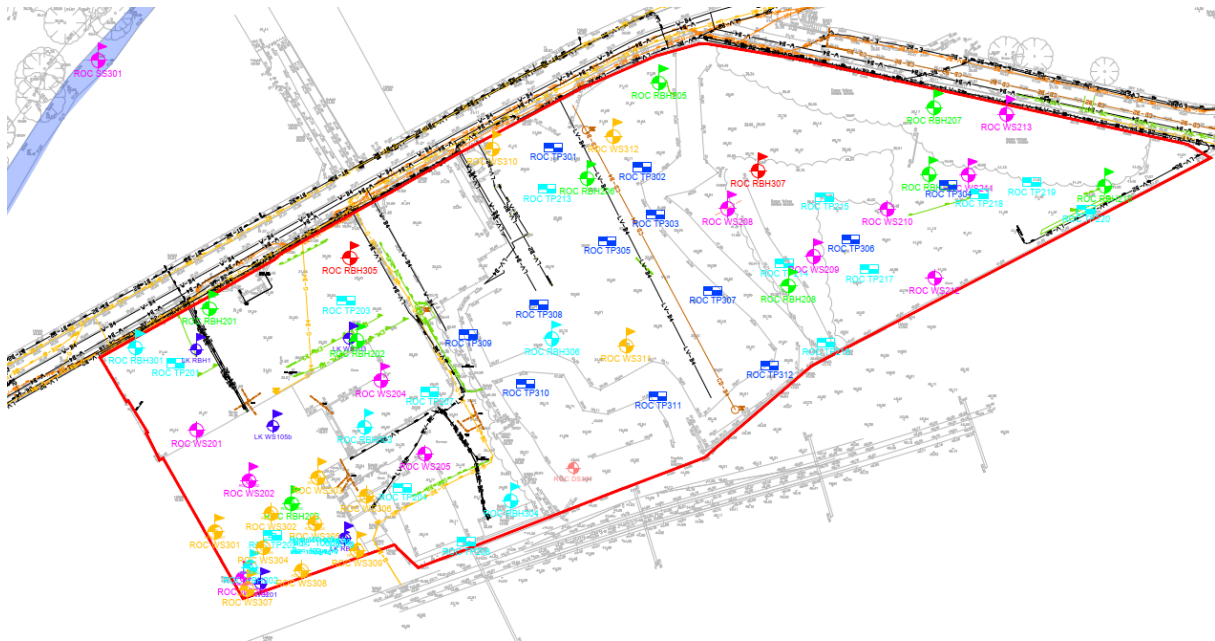
All excavated material will be tested and analysed before being removed from site. All contaminated material will be moved to a stockpile location, before being remediated on site or sent away for disposal. Materials handling and storage will need to be in line with the agreed materials management plan and associated Activity Plan covering the works methodology in detail.

**Table B4.8: Contaminated Land**

| Signs of Contamination                   | Test Results<br><i>Actual Levels</i>              | Contamination Identified                                                         | Exposure Level<br>Health<br>Maximum Level                                                                                                            | Action Taken                                                                                                                                              |
|------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>Asbestos in stockpile @ CH200</del> | <del>Positive ACM material confirmed by lab</del> | <del>ACM Cement Bound Sheetting</del>                                            | <del>&lt;LOD</del>                                                                                                                                   | <del>Exclusion zone created. Material removed from site by specialist contractor Early 2023</del>                                                         |
| Trade effluent discharge area            | Elevated levels of dissolved methane, iron.       | Identified water source emanating from the ground at base of existing embankment | Dissolved Methane to be < 0.014mg/l on temporary discharge consent                                                                                   | Exclusion zone created. Temporary Treatment plant installed and Discharge agreement in place with UU Permanent Treatment facility in design and planning. |
| Contaminated Soils – general             | Elevated levels                                   | Identified during GI and visible during site clearance works                     | See: HHRA : <a href="#">VNIF-ARP-ZZ-YYY-RP-CG-0014</a> and DQRA <a href="#">VNIF-ARP-ZZ-YYY-RP-CG-1000 Main Text&amp;Drawings.pdf</a> for thresholds | Exclusion Zone currently created. No digging of sub soils until clearance from Site Management, Materials management plan and                             |

|                                                        |                            |                                                                     |                                                                                                                          |                                                                                                                                             |
|--------------------------------------------------------|----------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
|                                                        |                            |                                                                     |                                                                                                                          | Remediation strategy to be followed                                                                                                         |
| PFAS                                                   | Elevated levels            | PFAS identified in the gasworks and TP422/423 area during GI        | See: <a href="#">VNIF-ARP-ZZ-YYY-RP-CG-0014</a> – Human Health Risk Assessment<br><a href="#">VNIF-ARP-ZZ-YYY-RP-CG-</a> | Remediation in line with Remediation Strategy, Remediation Verification Plan, and in association with the agreed Materials Management Plan  |
| Visual/olfactory hydrocarbon evidence                  | Elevated levels            | Hydrocarbon contamination identified in the gasworks area during GI | See: <a href="#">VNIF-ARP-ZZ-YYY-RP-CG-1000 Main Text&amp;Drawings.pdf</a>                                               | Remediation in line with Remediation Strategy, Remediation Verification Plan, and in association with the agreed Materials Management Plan. |
| <del>NT02 – TCE contamination under Love factory</del> | <del>Elevated levels</del> | <del>Historic heavy oil contamination</del>                         | <del>Varies</del>                                                                                                        | <del>TCE “PLUME” to be removed for offsite remediation</del>                                                                                |
| NT03 & NT03 heavy metal contamination                  | Elevated levels            | Varies – from historic use and tipped materials                     | Varies                                                                                                                   | To be removed for offsite remediation                                                                                                       |
| NT03 & NT03 Hydro Carbon contamination                 | Elevated levels            | Varies – from historic use and tipped materials                     | Varies                                                                                                                   | To be removed for offsite remediation                                                                                                       |
|                                                        |                            |                                                                     |                                                                                                                          |                                                                                                                                             |





### NT PLOTS – SI TESTING LOCATIONS.

See - 4328-ROC-ZZ-XX-RP-ES-P2-101 FINAL R3 Combined for all chemical results

**B4.9 Working over or near water/drowning - SG16: Work over or near water**

**Table B4.9: Working over or near water / drowning**

| Activity                                                                                                                                                                                                                                                                                                                                               | Location                                  | Controls                                                                                                                                                                                                                             | Rescue Arrangements   | Drill arrangement                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------|
| Earthworks                                                                                                                                                                                                                                                                                                                                             | P&P access, Ridge View, Red Bank Terrace  | Visual inspection by competent operator prior to any plant being positioned close to the riverbank.<br>Specific Activity plan developed for works.<br>Exclusion zones in place to keep plant/people minimum 2m away from rivers edge | See Water Rescue Plan | Prior to works commencing & monthly thereafter |
| Hydroseeding                                                                                                                                                                                                                                                                                                                                           | Ridge View, Red Bank Terrace              | Visual inspection by competent operator prior to any plant being positioned close to the riverbank.<br>Specific Activity plan developed for works.<br>Exclusion zones in place to keep plant/people minimum 2m away from rivers edge | See Water Rescue Plan | Prior to works commencing & monthly thereafter |
| Invasive treatment                                                                                                                                                                                                                                                                                                                                     | Ridge View, Red Bank Terrace, Union Plaza | Visual inspection by competent operator prior to any plant being positioned close to the riverbank.<br>Specific Activity plan developed for works.<br>Exclusion zones in place to keep plant/people minimum 2m away from rivers edge | See Water Rescue Plan | Prior to works commencing & monthly thereafter |
| <p><i>Describe the location e.g., river or inland waterway (use the MCA guidance 1837(M) for this. Describe the rescue arrangements and training of the crew including information on the type of boat to be used contact the local MCA office for advice. Provide a description of the works and controls to be put in place to minimise risk</i></p> |                                           |                                                                                                                                                                                                                                      |                       |                                                |

An assessment of the whole body of water to be used has been carried out and this forms the basis of the Water Safety Management Plan. The Water Safety Management Plan is located in Schedule B4.

**B4.10 Piling****Table B4.10: Piling**

| Type of piling operation                                        | Piling platform design                      | Laydown areas           | Operational controls                                              |
|-----------------------------------------------------------------|---------------------------------------------|-------------------------|-------------------------------------------------------------------|
| <del>NT03 – Rotary bored piling</del> <b>COMPLETED FEB 2025</b> | <del>BAM Nuttall TW Dept to design</del>    | On platform and in NT03 | <del>Vibration and track monitoring on Network Rail viaduct</del> |
| <del>Temporary Sheet Piles/Manhole boxes</del>                  | <del>TBC</del>                              | TBC                     | <del>Segregation, noise, vibration, dust</del>                    |
| <del>CFA, Contiguous, Driven</del>                              | <del>Always required, provide details</del> |                         | <del>Segregation, noise, vibration, dust</del>                    |

**B4.11 Lighting**

**Table B4.13** describes the lighting arrangements for all aspects for the work. Arrangements should be designed to minimise glare and provide suitable and sufficient lighting to allow work to be carried out safely.

**Table B4.11: Lighting**

| Access                                                   | When required                    | Lighting arrangements                                                        |
|----------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------|
| Car park                                                 | Hours of darkness / poor weather | Lighting towers to show spacing arrangements and route to pedestrian walkway |
| Office                                                   | Hours of darkness / poor weather | Sensor lighting to allow safe access to office building                      |
| Traffic and pedestrian routes                            | Hours of darkness / poor weather | Lighting tower                                                               |
| Work area                                                | Hours of darkness / poor weather | Lighting tower                                                               |
| Work is planned to only take place during daylight hours | N/A                              | N / A                                                                        |

**B4.12 Demolition and assembly including prefabricated components****B4.12.1 Demolition****Table B4.12.1: Work involving demolition**

A description of demolition activities and associated check and control measures are stated in Tables B4.14.1a and B4.14.1b. Information in relation to temporary works is contained in section B4.2

| Demolition activity                                           | Information from demolition survey/ pre-construction information/designers | Temporary works required                   | Stability checks required in temporary and permanent condition | Operational controls to minimise risk           |
|---------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------|-------------------------------------------------|
| <del>Partial demolition of Honey Street retaining wall.</del> | <del>Structural survey<br/>Material Thickness</del>                        | <del>Scaffolding<br/>Edge protection</del> | <del>N/A<br/>dismantled is 1m sections</del>                   | <del>Exclusion Zone,<br/>Dust suppression</del> |

|                                                            |                                                                |                                 |                             |                                                           |
|------------------------------------------------------------|----------------------------------------------------------------|---------------------------------|-----------------------------|-----------------------------------------------------------|
| Removal of Street Lighting columns                         | Trial Pit to base of column. Service searches                  | Exclusion zone, safe excavation | N/A removed in one section  | Exclusion Zone                                            |
| Demolition of "Love Factory" and surrounding out buildings | Intrusive survey carried out. Asbestos located in out building | None                            | None, Sequential demolition | Utility disconnections, Exclusion zones, Dust suppression |

**Table B4.12.1b: Competent personnel undertaking demolition**

| Organisation/ personnel carrying out demolition— supplier or in-house personnel | Competence of personnel List names of managers, supervisors and operatives | Evidence of competencies and where the records are kept | Evidence of involvement on previous demolition schemes, of similar complexity |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------|
| P.P. O'Connor                                                                   | Paul Holohan, site manager                                                 | Induction Records                                       | SMSTS, black site manager CSCS card                                           |
| Jonathan White                                                                  | Project Manager S Evans & Son                                              | Induction Records                                       | SMSTS, black site manager CSCS card                                           |

#### B4.12.2 Assembly of prefabricated components

**Table B4.12.2: Assembly of prefabricated components**

| Activity              | Ground information for lifting operation  | Component information     | Method information                              |
|-----------------------|-------------------------------------------|---------------------------|-------------------------------------------------|
| Retaining wall        | Temporary Working Platform to be designed | From precast manufacturer | As per activity plan, Temporary platform design |
| U-Tube river crossing | Construction issue drawings               | See Quality File          | As per activity plan,                           |

#### B4.13 Asbestos - NP1.6: Control of asbestos at work

BAM Nuttall only undertakes work with asbestos in limited circumstances, i.e., contaminated land, the removal of asbestos cement sheets or pipework encountered in the course of excavation and as an incidental part of the works. BAM Nuttall manages those who undertake work with asbestos on its premises or sites in accordance with BAM Nuttall Procedure NP1.6: *Control of asbestos at work*.

Details of asbestos anticipated on this project are provided in **Table B4.13**

**Table B4.13: Asbestos**

|                                                                                               |
|-----------------------------------------------------------------------------------------------|
| Asbestos anticipated on the project                                                           |
| <i>Plateau CH180 – Notifiable asbestos</i>                                                    |
| Plateau mound @CH220 – Non-notifiable Asbestos                                                |
| <del>NT02 – asbestos in Love Factory &amp; outbuildings to be removed before demolition</del> |
| NT03 – asbestos is tipped material/stockpiles                                                 |
| NT03 – asbestos in Fly tipped materials                                                       |
| NT04 – asbestos is tipped material/stockpiles                                                 |
| NT04 – asbestos in Fly tipped materials                                                       |

#### B4.14 Highways

Highways works are carried out within traffic management. This traffic management will have been designed before works commence.

Operations involving work on highways on this project are listed in **Table 4.14**

**Table B4.14: Work on highways**

| Operation involving work on highways   |                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Highway connection to Red Bank         | <p><b>Approximate Dates March 2024-May2024</b></p> <p><b>Localised TM on Redbank near site entrance, in line with S278 Application</b></p> <p><a href="#">VNIF-BNL-ZZ-YYY-FM-CG-0001</a> Works Transport Plan</p> <p>See Drawing : <a href="#">VNIF-BNL-ZZ-YYY-SK-TO-0026</a> for TM arrangement at Red Bank Junction</p> |
| U-Tube Installation at Collyhurst Weir | <p><b>Lane Closure on Collyhurst road adjacent to Collyhurst Weir</b></p> <p>See Drawing <a href="#">VNIF-BNL-ZZ-YYY-SK-TO-0017</a></p>                                                                                                                                                                                   |
| HV duct installation                   | <p><del>Detail responsibility for traffic management design and layout.</del></p>                                                                                                                                                                                                                                         |

#### B4.15 Other significant hazards

Other unusual significant safety hazards are listed in **Table 4.15**, together with outline control measures.

**Table B4.15: Other significant safety hazards**

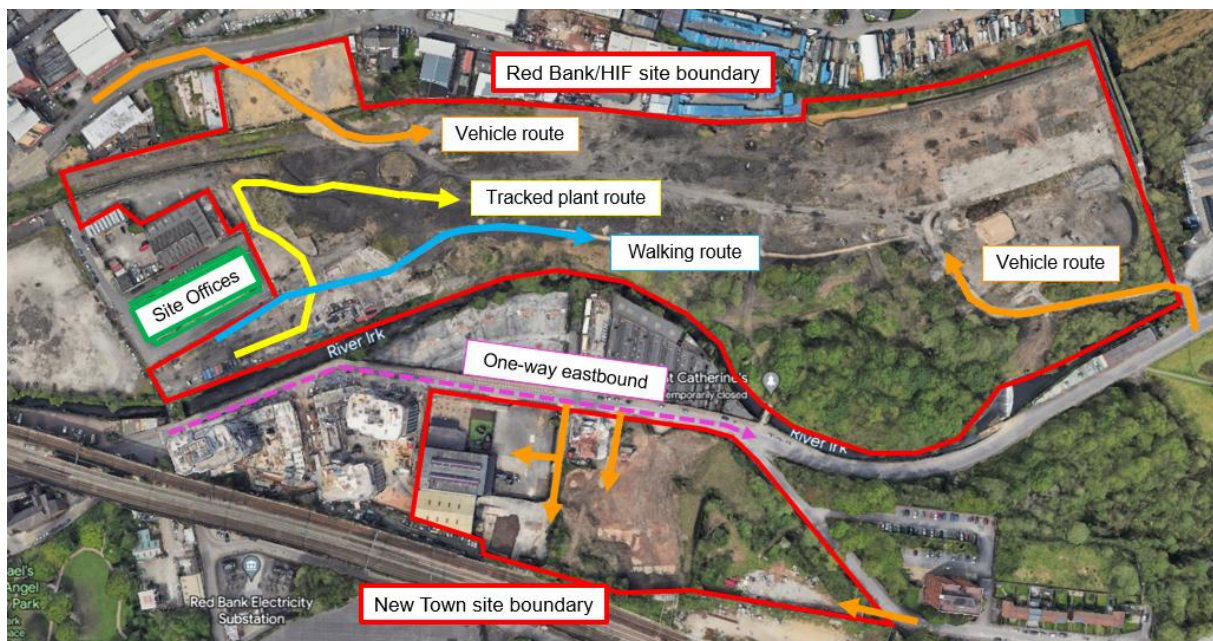
| Hazard                             | Activities affected                                      | Proposed control method                                                                                                                                                                                 |
|------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maintenance of plant and equipment | Misc.                                                    | In accordance with Nuttall Procedure NP4                                                                                                                                                                |
| Needle stick injuries              | All works in and around the site including site compound | Procedure to be drafted by BAM to deal with sharps. Designated team within the workforce briefed on the procedure and issued with PPE to remove sharps                                                  |
| Leptospirosis                      | All works within the site                                | Adequate welfare facilities provided. Adequate PPE provided.                                                                                                                                            |
| Fly tipped waste                   | All works in and around the site including site compound | Procedure to be drafted by BAM to remove fly tipped rubbish from site with adequate PPE. This could potentially require a specialist contractor to carry out the works under BAM to remove the rubbish. |
| Asbestos – stockpiles              | Avenue remediation                                       | This will need to be removed by a specialist licenced contractor who will remove and dispose of the asbestos in line with the control of asbestos regulation 2012.                                      |

## Schedule B1 Welfare Layout

Below is the main compound layout on Hargreaves Street, M4 4EJ

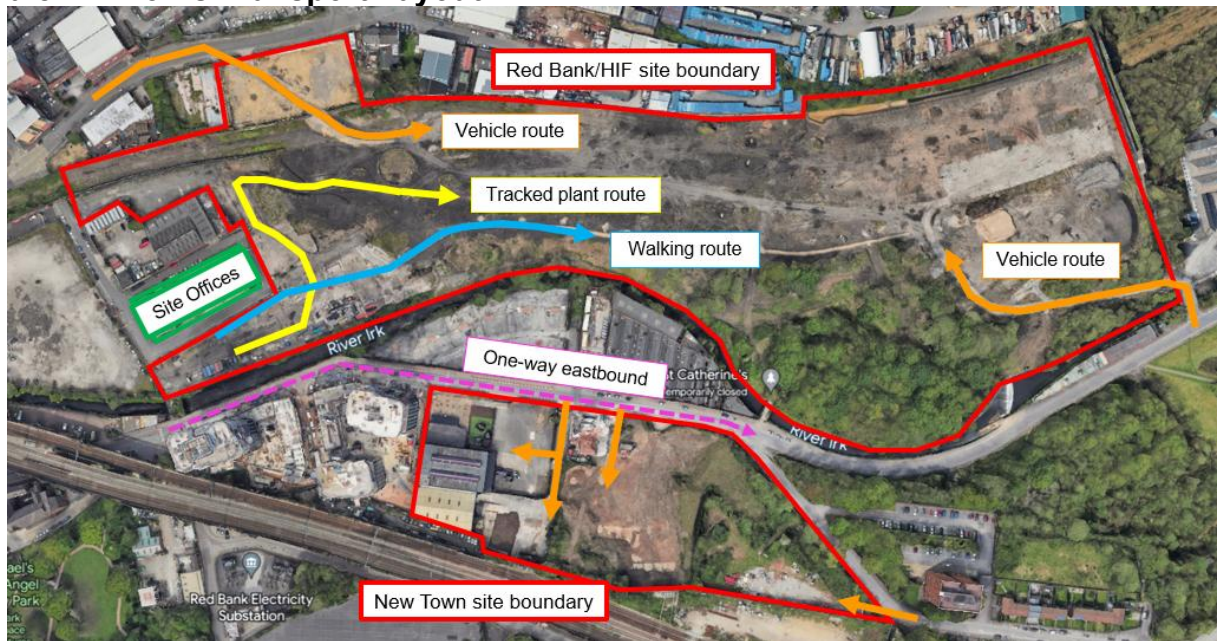


Below are the access routes to site from the compounds





## Schedule B2 Works Transport Layout



*Note: Temporary road closure in place on Dantzic St until July 2024. Pedestrian access not impacted.*



*NT Plots traffic management plan during Dantzic St Road closure.*

### Schedule B3 Register of Service Drawings

| Utility Type                                           | Drawing Reference                  | Issue Date | Date Received |
|--------------------------------------------------------|------------------------------------|------------|---------------|
| GPR Survey                                             | PUM-11943-U-DR-001                 | 08/12/2021 | 08/12/2021    |
| Master Services Model                                  | Arup issued – NO<br>Drawing number | ?          | 01/2020       |
| Landmark utilities report for<br>all service providers | Ref – LM /86247                    | 01/2020    |               |
| United Utilities Linesearch                            | Ref -97079, pages 1-4              | 22/06/22   | 22/06/22      |
| BT Linesearch                                          | Ref - C22511                       | 22/06/22   | 22/06/22      |
| Cadent Linesearch                                      | Ref – 24548845                     | 09/02/2022 | 09/02/2022    |
| Electricity Northwest<br>Linesearch                    | Ref – 24548845                     | 31/01/2022 | 31/01/2022    |

## Schedule B4 Water safety management plan

In summary:

**No works shall be carried out within 3m of the water's edge**

If works do need to be carried out in the channel. A specific activity plan and risk assessment will be prepared and appropriately trained resourced used to carry out the activity.

- Wear Life jackets within 3m of the water course, including rescue personnel
- Safety ring with rope to hand
- Do not enter watercourse alone.
- Monitoring of Weather Forecast
- Monitor Gauge and level Forecast
- EA's weather/flood alert system

## Water Rescue Procedure

|                    |                    |  |
|--------------------|--------------------|--|
| Project Name       | Victoria North HIF |  |
| Site Contact       | Steve Donaldson    |  |
| Component Reviewed | Liam Chambers      |  |
| Reviewed By        | Liam Chambers      |  |
|                    |                    |  |
|                    |                    |  |

### Procedure

- 1) **Raise the alarm via air horns and shout 'Person in river'.**
  - a. The first person to witness the incident happening is to sound the alarm.
- 2) **Keep the person in view.**
- 3) **Do not make a rescue attempt by diving into the water unless:**
  - a. **You are trained in live-saving techniques, and**
  - b. **The person in the water is unconscious, and**
  - c. **The rescuer has a safety line attached, and**
  - d. **Someone else is in attendance.**
- 4) **Any person who is not competent to assist with the rescue must leave the area.**
- 5) **Move to the nearest lifebuoy station and throw the buoy to the person in the river. Keep hold of the end of the lifeline.**
- 6) **Assess a convenient landing point and move to that location.**
- 7) **Provide assistance by drawing in the lifeline until the person is at the landing point.**
  - a. If the landing point is difficult (slippery, uneven, etc.), do not attempt to pull the person out. Wait for assistance.
- 8) **Once the person has been recovered from the water, keep them warm until transport is able to take them to the first aid station. First aid is to be given if safe and necessary.**
  - a. The current first aiders on the project are:
    - i. Stephen Donaldson – General Foreman

- ii. Dan King – Supervisor – 07557 185267
- iii. John Annett – Sub Agent - 07795 403153

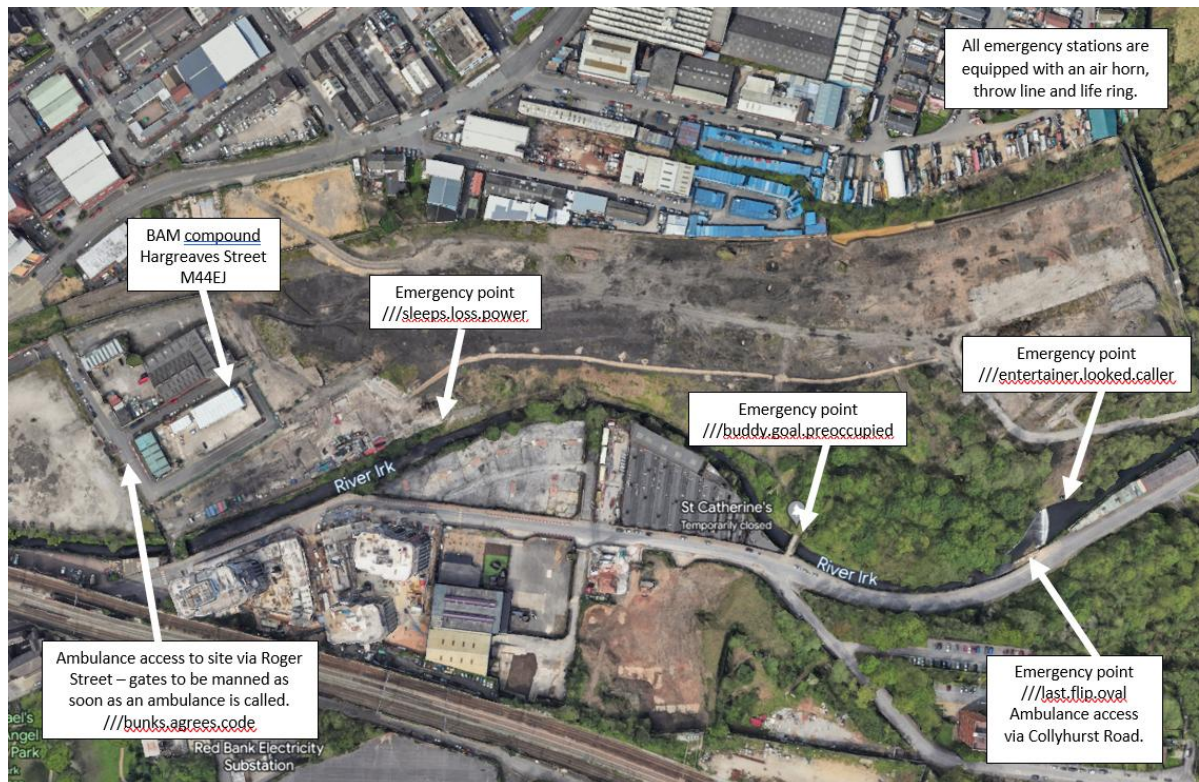
**9) Whilst priority must always be given to the rescue, a message should be sent to the office ASAP to enable co-ordinated support. Site management will assess whether the emergency services need to be called.**

- a. The people who would be involved with making this decision are:
  - i. Stephen Donaldson – General Foreman
  - ii. Liam Chambers – Site Agent
  - iii. Neil Peters – Project Manager

**10) Further action:**

- a. Neil Peters (project manager) will inform the relevant parties:
  - i. Manchester City Council (the client)
  - ii. The Environment Agency
  - iii. The Health and Safety Executive (if applicable)
  - iv. Mark Cullen (BAM health and safety advisor – 07818 537459)
- b. An incident report will be compiled by the site management for internal review.
- c. Work will stop until the methodology has been reviewed and changed where necessary, and conditions are made safe.

An internal investigation around the cause of the event will take place.



## **Section C Environmental Management Plan**

### **C1.0 Introduction**

This Environmental Management Plan (EMP) has been prepared to support the construction phase of Victoria North HIF Infrastructure Project. This is intended to be a high level EMP that outlines the general principles with additions made as information becomes available.

This plan should be read in conjunction with **Section A** of this Project Execution Plan.

### **C2.0 General Environment Requirements**

#### **C2.1 Environmental Aspects and Impacts Assessment**

An environmental risk assessment has been carried out which identifies the environmental risk associated with core construction activities. Impacts from these activities were assessed in terms of risks to: air quality; archaeology and cultural heritage; contaminated land; ecology; landscape; material use and waste; noise and vibration; water; and public highways. The risks were assessed in terms of the potential likelihood and severity of consequence (extent / reversibility / sensitivity). Where medium and high risks were encountered, outline actions have been recommended and the residual post mitigation risk assessed. This risk assessment is included in **Schedule C1: Aspects and Impacts** and **Schedule C2: Environment Constraints Map**.

#### **C2.2 Monitoring Arrangements**

Prior to works commencing and thereafter quarterly the agent and the appointed environmental advisor review environmental risks and opportunities of the project documented in **Environmental Form EF12: Project Environment Risk review**. They agree level of support and frequency of inspection by the appointed environmental advisor.

|   |                 |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|---------------------------------------|
| BAM Nuttall Management System                                                                                                                                         |                 |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| EF12: Project Environmental Risk Review                                                                                                                               |                 |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| Project Name:                                                                                                                                                         |                 | Victoria North HIF main works                                                                                                                                                                                                                                            |                                                                          | Environment Advisor:                                                                                                                                                                                                                                                                                |                   | Eddie Duncan |                                       |
| Project No:                                                                                                                                                           |                 | BAA2210                                                                                                                                                                                                                                                                  |                                                                          | Date:                                                                                                                                                                                                                                                                                               |                   | 17-03-23     |                                       |
| Site Agent:                                                                                                                                                           |                 | Neil Peters, Liam Chambers                                                                                                                                                                                                                                               |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| <b>1.0 Risk review</b>                                                                                                                                                |                 |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| Key receptors on the project?                                                                                                                                         | Threat Category | Comments                                                                                                                                                                                                                                                                 |                                                                          | Actions                                                                                                                                                                                                                                                                                             |                   | Owner        | Date of actions?                      |
| 1.1 Water                                                                                                                                                             | High            | Contaminated water present on site. Dewatering of site will be necessary for earthworks operations. If abstracting >20m3 of water per day an abstraction licence will be required. If discharging water to River Irk a discharge consent might be required, depending on |                                                                          | 1) Methane from historic landfill - Contaminated water to be treated prior to being discharged to UU sewer - awaiting instruction from client. 2) Infiltrated groundwater - Chemical analysis to be undertaken on water present within ground across site to inform options re: discharge to sewer. |                   | LC/ED        | Pre-construction / construction phase |
| 1.2 Nuisance                                                                                                                                                          | Medium          | Demolition activities to be undertaken. Background noise monitoring has been undertaken to discharge planning condition. Residential properties circa 500m away and commercial properties circa 250m from the demolition works location. Daytime works only.             |                                                                          | Noise and vibration monitoring to be undertaken where required.                                                                                                                                                                                                                                     |                   | LC           | Pre-construction / construction phase |
| 1.3 Contam land / waste management                                                                                                                                    | High            | Contaminated land present on site.                                                                                                                                                                                                                                       |                                                                          | CLAIRE DoW CoP materials management plan to be produced for the earthworks by Arup - this is to be in line with the Remediation Strategy requirements.                                                                                                                                              |                   | LC/ED        | Construction phase                    |
| 1.4 Ecology                                                                                                                                                           | Medium          | Invasive plant species present of site, namely JKW, Himalayan balsam and Giant Hogweed. Some treatment has already been undertaken in the form of spraying. Potential for bats in St Catherine's wood. Prelim ecology survey was undertaken by TEP                       |                                                                          | ISMP produced for the site. Earthworks to be undertaken in accordance with the requirements set out in the ISMP. Confirm if ecology surveys have been undertaken more recently than the Prelim Eco Survey done by TEP in May 2021.                                                                  |                   | LC           | Pre-construction / construction phase |
| 1.5 Heritage                                                                                                                                                          | Low             | Watching brief was undertaken during removal of the railway turn-table. Lowry steps also on site - these are on the site boundary.                                                                                                                                       |                                                                          | Archaeologist watching brief to be undertaken where necessary.                                                                                                                                                                                                                                      |                   | LC           | Pre-construction / construction phase |
| <b>2.0 Opportunities review</b>                                                                                                                                       |                 |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| Discussion item                                                                                                                                                       | Required        | Comments                                                                                                                                                                                                                                                                 |                                                                          | Actions                                                                                                                                                                                                                                                                                             |                   | By who?      | Date of actions?                      |
| 2.1 Training                                                                                                                                                          | Yes             | TB's to be delivered as required. Spill drills. Briefing on ISMP and MMP requirements.                                                                                                                                                                                   |                                                                          | Carry out training as required.                                                                                                                                                                                                                                                                     |                   | LC           | Construction phase                    |
| 2.2 Regulatory involvement                                                                                                                                            | Yes             | Comms with EA, LA - MCC, UU.                                                                                                                                                                                                                                             |                                                                          | Adhere to conditions set out within consents/licences/permissions.                                                                                                                                                                                                                                  |                   | LC           | Construction phase                    |
| 2.3 Audit proposals                                                                                                                                                   | Yes             | TBC for main works - likely to be BAM Site and NP27.3 waste/MP27.1 water                                                                                                                                                                                                 |                                                                          | ED to schedule.                                                                                                                                                                                                                                                                                     |                   | ED           | Construction phase                    |
| 2.4 Case study opportunity                                                                                                                                            | Yes             | TBC for main works                                                                                                                                                                                                                                                       |                                                                          | TBC                                                                                                                                                                                                                                                                                                 |                   |              |                                       |
| 2.5 Key Materials (resources)                                                                                                                                         | Yes             | Site won material for earthworks, imported type 1, concrete.                                                                                                                                                                                                             |                                                                          | N/A                                                                                                                                                                                                                                                                                                 |                   |              |                                       |
| 2.6 Energy requirements                                                                                                                                               | Yes             | Mains connection is planned for compound.                                                                                                                                                                                                                                |                                                                          | N/A                                                                                                                                                                                                                                                                                                 |                   |              |                                       |
| 2.7 Community investment                                                                                                                                              | No              |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| 2.8 Other support                                                                                                                                                     | No              |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| <b>3.0 Environmental Performance / Resources forecast</b>                                                                                                             |                 | <b>Resource forecast</b>                                                                                                                                                                                                                                                 |                                                                          | <b>2020 Company KPI's</b>                                                                                                                                                                                                                                                                           |                   | <b>Owner</b> | <b>Date of actions?</b>               |
| 3.1                                                                                                                                                                   |                 | Diesel / Gas oil (litres)                                                                                                                                                                                                                                                | 100000                                                                   | % Construction waste diverted from landfill: (80%)                                                                                                                                                                                                                                                  | 80                |              |                                       |
| 3.2                                                                                                                                                                   |                 | Electricity (Kwh)                                                                                                                                                                                                                                                        | 500000                                                                   | % Total waste diverted from landfill: (90%)                                                                                                                                                                                                                                                         | 90                |              |                                       |
| 3.3                                                                                                                                                                   |                 | Construction waste (tonnes)                                                                                                                                                                                                                                              | 10000                                                                    | % Sustainably sourced timber: (100%)                                                                                                                                                                                                                                                                | 100               |              |                                       |
| 3.4                                                                                                                                                                   |                 | Excavation waste (tonnes)                                                                                                                                                                                                                                                | 32000                                                                    | Water consumption / £1m turnover: (200m3)                                                                                                                                                                                                                                                           | 200               |              |                                       |
| 3.5                                                                                                                                                                   |                 | Demolition waste (tonnes)                                                                                                                                                                                                                                                | 2500                                                                     | Tonnes of CO2 emissions/£1m turnover: (36.9)                                                                                                                                                                                                                                                        | 36.9              |              |                                       |
| <b>4.0 Project appraisal</b>                                                                                                                                          |                 |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| 4.1 Appraisal rating                                                                                                                                                  | 70              |                                                                                                                                                                                                                                                                          | Frequency of inspection                                                  |                                                                                                                                                                                                                                                                                                     | 4 weeks           |              |                                       |
| 4.2 Any other risk from programme (key operations/dates)?                                                                                                             |                 |                                                                                                                                                                                                                                                                          | Agreed frequency of inspection if different from above and justification |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| 4.3 Next review date:                                                                                                                                                 | 17/06/2023      |                                                                                                                                                                                                                                                                          | Agreed next 2 dates of inspection (w/c)                                  |                                                                                                                                                                                                                                                                                                     | April and May TBC |              |                                       |
| 4.4 Additional comments                                                                                                                                               |                 |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| <b>Signed as agreed:</b>                                                                                                                                              |                 |                                                                                                                                                                                                                                                                          |                                                                          |                                                                                                                                                                                                                                                                                                     |                   |              |                                       |
| Site Agent:                                                                                                                                                           | Neil Peters     |                                                                                                                                                                                                                                                                          |                                                                          | Environment Advisor:                                                                                                                                                                                                                                                                                | Eddie Duncan      |              |                                       |

Site operations are regularly monitored during the site environmental engineers and agents' weekly inspections to ensure overall environmental performance (legislative, client, and ISO 14001 and BAM Nuttall requirements) is maintained throughout the project duration. Compliance monitoring and frequency is detailed in **Schedule C3: Environmental Monitoring**

### C2.3 Review Arrangements

This EMP will be reviewed when there is a substantial change to the scope or method of work, or every 3 months, whichever is soonest.

### C2.4 Requirements and Consents

Consents, licences or permissions are required from a number of organisations including the Environment Agency, DEFRA, local water companies, local authority environmental health departments, local authority planning departments, Natural England and Natural Resource Wales etc.

These cover matters relating to work near water, disposal of waste, noise and vibration and ecology among others. Activities on this project assessed as requiring consent, licence or permission are listed in **Schedule C4: Consent licences and permissions**.

The BAM Nuttall Environmental Policy and key environmental information including poster campaigns will be displayed on notice boards at the project site offices.

## C3.0 Specific Environmental Impact Areas

### C3.1 Water (Resource) Management – *NP27.1: Water management* *NP27.2: Oil storage and refuelling*

A comprehensive assessment of the potential risks of water pollution as a result of work activities is made by the agent before each activity is carried out. Surface, ground and coastal waters are considered where appropriate. Activities likely to have an impact on controlled waters may be listed in **Table C3.1a**, together with appropriate control measures.

More information about **Site Water Management Plan: Controls for the prevention of pollution to water** can be found below

[VNIF-BNL-ZZ-YYY-RP-CD-0001](#)

**Table C3.1a: Water environmental controls**

| Location           | Activity | Controls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction Plant | General  | <p>Use of biofuels, spill kits available at all work areas, spill containment drills carried out.</p> <p>Stationary plant and equipment containing fuel/oil to be kept on plant nappies.</p> <p>All plant to be in good condition and regularly serviced.</p> <p>All site team to be trained in spill drills which will be regularly trained.</p> <p>TBT on spill and pollution to be issued on site to all site team.</p> <p>Spill kits to be always kept with items of plant.</p> <p>Refuelling of plant to be undertaken away from water's edge.</p> <p>Diesel storage to be held in site compound in double bunded bowsers on hard standing area.</p> <p>Generators to be used in accordance with EG02</p> |

| Location           | Activity                                                   | Controls                                                                                                                                                                                                                     |
|--------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Earthworks         | General                                                    | Establish bunds to control water                                                                                                                                                                                             |
| Concrete works     | General                                                    | Keep concrete away from the edge. Wash out into identified area's of control                                                                                                                                                 |
| Surface water      | General                                                    | Filter any water going down and Manholes (E.g. with hey/straw)                                                                                                                                                               |
| Plateau/RB04       | Trade effluent discharge over pumping into combined sewer. | <ul style="list-style-type: none"> <li>- Use of biofuel in the pumping equipment.</li> <li>- Daily inspections of the pipe.</li> <li>- Visqueen lining under the pipe to stop any leaks contaminating the ground?</li> </ul> |
| Riverside Footpath | Earthworks                                                 | - Comply with requirements in FRAP                                                                                                                                                                                           |

Control measures are summarised in **Schedule C1: Aspects and Impacts**, with environmental constraints detailed in **Schedule C2: Environment Constraints Map**.

Water usage is recorded and monitored by use of the BAM Site app. On this project, ways in which water use is being reduced are listed in **Table 3.1b**

**Table C3.1b: Water reduction measures**

| Activity                                                                                                            | Measures to be adopted to reduce use                                                                                            |
|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Site wide Dust suppression,<br>Vehicle wash down / wheel wash<br>Toilets and taps,<br>Damp down of demolition works | Good housekeeping<br>Water usage to be monitored and recorded on BAM Site app<br>Rainwater harvesting<br>Push taps and aerators |

### C3.1.1 Herbicide and Pesticide Application

If required, herbicide and pesticide application will be covered by a task specific activity plan/ WPP. If required, application will be by qualified experienced and registered sub-contractors only. Details of training records will be stored on-site or with the sub-contractor.

EA and MCC will be notified of all use of herbicides or pesticides within 10m of a watercourse.

### C3.2 Fuel Oils and Chemicals - NP27.2: Oil storage and refuelling

Consideration is given to the location and method of storing fuel, oils and chemicals within suitable site areas for refuelling plant. Details of storage and refuelling arrangements are provided in **Schedule A7 Hazardous substances**.

Personnel responsible for refuelling plant & equipment will receive a toolbox talk (Refuelling plant and equipment PP8) including site specific refuelling procedure including the emergency oil spill procedure, **Schedule A6** which will be displayed around site.

#### C3.2.1 COSHH (Chemical and biological hazards including dust and fumes)

The COSHH coordinator, ensures that all reasonable steps are taken to ensure that exposure of employees and others to hazardous substances is assessed and prevented or at least controlled to within statutory limits.

On this project, arrangements for storage of hazardous substances are detailed in Section B Construction phase plan **Section A Project Execution Plan**.

### C3.3 Waste (Resource) Management - NP27.3 : Waste management

Compliance with BAM Nuttall waste procedures and guidance ensures:

- compliance with relevant waste management legislation
- application of industry best practice
- identification of opportunities in waste minimisation/resource efficiency

The site waste management plan (SWMP) declaration, of **Schedule C5** identifies the waste streams generated with forecast quantities. The SWMP defines the selected waste management measures of prevention, reuse, recycling and recovery and, at the end of the project. This allows a comparison to be made between forecast and actual waste quantities.

Generation of waste material will be minimised at every stage of the project (design, procurement and construction), and reduction strategies will be implemented and detailed in the SWMP.

Quantities of waste, categorisation (inert, non-hazardous, and hazardous waste), are monitored by use of the BAM Site app. This is a live system which is reviewed and updated on a regular basis to ensure compliance and to track project waste performance. Copies of waste management contractors' certificates, permits, licences or exemptions used or validated in consultation with the Environmental Advisor and retained on site in accordance with the site documentation control procedures.

### C3.4 Contaminated Land

BAM Nuttall will investigate, assess remediation / disposal options of any potentially contaminated areas in accordance with contaminated land, environmental and health and safety legislation. Treatment / recovery / disposal options will be detailed in the relevant site waste management plan **Schedule C4** or Material management plan as required.

The controls for this should be informed by the Remediation Strategy. If we are remediating soils to be reused on site under CLAIRE code of practice, then we need to describe how we'll manage that risk.

Specific arrangement for contaminated land is as detailed in **Table C3.4** below:

**Table C3.4: Contaminated Land arrangement**

| Signs of Contamination | Test Results<br><i>Actual Levels</i>                  | Contamination Identified | Exposure Level<br>Environment<br>Maximum Level | Action Taken                                                                         |
|------------------------|-------------------------------------------------------|--------------------------|------------------------------------------------|--------------------------------------------------------------------------------------|
| Asbestos               | <i>Visible on the ground</i>                          | Yes                      |                                                | Isolate stockpiles and hire specialist subcontractors to dispose.                    |
| Oil                    | Oil in the ground-discovered during BAM Ritchies G.I. | Yes                      |                                                | Excavation treatment of oil. Bring a contamination unit on site and dispose of earth |
| Chemical Contaminants  | Discovered during GI works                            | Yes                      | As per re-use criteria in the CWRA             | Isolate hotspot areas, identify areas for immediate offsite                          |

|                          |                                                   |     |                                    |                                                                                                                              |
|--------------------------|---------------------------------------------------|-----|------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
|                          |                                                   |     |                                    | disposal, verify materials for reuse on site                                                                                 |
| Contaminated Groundwater | During excavation of known contamination hotspots | Yes | As per re-use criteria in the CWRA | Isolate hotspot areas, identify areas for immediate offsite disposal, verify groundwater for reuse on site/removal from site |

### C3.5 Nuisance - NP27.4 Control of site nuisance

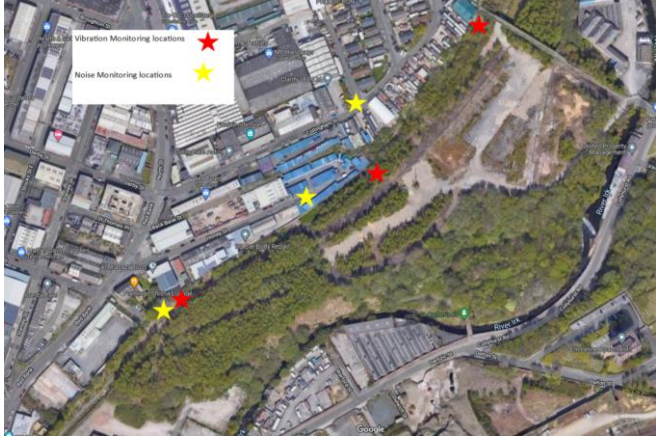
Construction activity has the potential to cause nuisance within the site, to site personnel, to local residents, site neighbour's and the general public in the form of noise, dust, mud, vibration smoke light and odour.

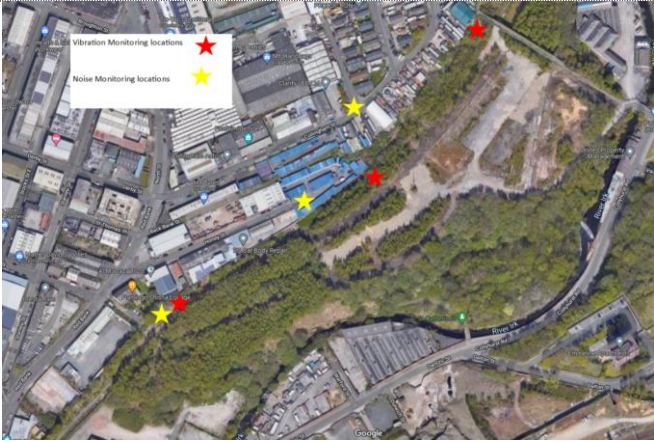
Activities likely to cause nuisance are identified by the agent, who selects appropriate control measures to avoid the nuisance or mitigate the effects if avoidance is impracticable.

Activities likely to cause nuisance are listed in **Table C3.5**, together with appropriate control measures.

**Table C3.5: Nuisance**

| Activity                               | Potential nuisance | Control measures                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction Works                     | Interference       | All work areas to be securely fenced to prevent public access to areas<br>All works to be carried out within site working hours Mon-Fri 07:30-18:00                                                                                                                                                                                                                                                                                   |
| Welfare accommodation                  | Lighting           | Lighting within welfare to have PIR to turn off lights when area not in use. All lighting required for compound to be directed away from any homes or buildings in the areas.                                                                                                                                                                                                                                                         |
| Welfare accommodation                  | Odour              | Regular emptying of waste bins                                                                                                                                                                                                                                                                                                                                                                                                        |
| Welfare / site area                    | Litter             | Provision of suitable waste containers, regular monitoring of issue, carry out litter sweeps of site perimeter etc. at close of each workday                                                                                                                                                                                                                                                                                          |
| General site works and plant operation | Noise              | Mitigation measure as highlighted in BS5228:2014 to be utilised where possible/practical as exemplified below. <ul style="list-style-type: none"> <li>• New efficient plant/equipment to be used on site with efficient exhaust sound reduction equipment fitted.</li> <li>• Manufactures enclosure panels to be kept closed during operation</li> </ul> Static items of plant to be housed within acoustic enclosure where practical |
| Earthworks                             | Noise              | <b>NT Plots</b><br>Works will only be carried out inside allowed site hours. No local residents or businesses are close enough to be disturbed by the noise of the planned plant use.                                                                                                                                                                                                                                                 |

| Activity | Potential nuisance | Control measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          |                    |  <p>Prior to works being undertaken base line readings will be taken using a Type 1 sound level meter to record the existing levels within the area at the locations shown in the above drawing.</p> <p>The earthworks element of the project is planned to take approximately 6 months to undertake and will be made up of the excavation, filling, compaction and movement of materials across the site areas.</p> <p>As can be seen in the above for this element of works there will be a number of local receptors which may be impacted by the works. The monitoring positions highlighted have been located to allow monitoring and impact of these businesses during the operations.</p> <p>During the earthworks operations regular readings will be undertaken and recorded.</p> <p>Peak trigger levels for earthworks to cease will be 85db at 10m from the point of work.</p> <p>Should operations breach these levels work will cease immediately. Acoustic barriers (Heras's fence mounted as shown below) will be erected along the boundary between the work area and the identified receptors. The barriers have a max noise reduction of up to 37db dependant on operation. Works will then recommence to allow noise level readings to be taken to confirm suitable mitigation has been put in place. Once readings confirm the mitigation is sufficient works will recommence with more regular noise readings taking place to confirm the trigger levels are not being breached. If still breaching noise limits work will cease and additional mitigation put in place e.g. exclusion zones</p> |

| Activity            | Potential nuisance | Control measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |                    |  <p>Example of fence mounted acoustic barriers</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Earthworks & Piling | Vibration          |  <p><b>HIF</b><br/>Vibration monitoring will be undertaken during the earthwork's operations.<br/>A Vibrock V900 Seismograph will be positioned (as shown on the above sketch) will be positioned at the appropriate location at the start of each day. The monitor once positioned provides continuous monitoring during the day. At the end of each day the recorded data will be downloaded and stored for inspection as required.<br/>A base line reading of 0.525mm/s has been recorded prior to works commencing and takes account of passing traffic etc. Trigger/threshold levels of 3.0mms at the point of work but should not exceed 1.0mm/s PPV at the boundary with receptors.</p> <p><b>NT 03 Plot</b><br/>As above</p> <p>During piling works vibration monitoring IS required at the Network Rail viaduct Structure.</p> <p>Location of kit and limit levels AGREED by NR</p> <p>Vibration will be too far from homes and businesses to be a disturbance.</p> <p>If exceedance is recorded works will be stopped and investigated.</p> |

| Activity                                         | Potential nuisance | Control measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Earthworks                                       | Dust               | <p>See Appendix #8 for extract</p> <p>For Full report: See - Air Quality and Dust Management Plan SRL</p> <p><a href="#">VNIF-BNL-ZZ-YYY-RP-ZZ-0001</a></p> <p>The earthworks are currently planned to be undertaken during the winter season which should provide some natural suppression whilst the works are underway.</p> <p>If required, the areas of haul road used to transport material around the site will be dampened down utilising a bowser and spreader bar.</p> <p>Additionally, areas will be sprayed with a jet wash to dampen down where required and where the bowser and spreader bar cannot be utilised.</p> <p>No dry sweeping will be undertaken across the site; all road sweeping will be water assisted and be carried out to the required distance from site to remove any deposited material tracked out from Site from the roads.</p> <p>All vehicles entering or leaving the site will be covered to prevent any escape of materials during transport.</p> <p>Haul road and access roads will be inspected daily, and a record of the inspection kept.</p> <p>Vehicles will be inspected prior to leaving site and any wash down required will be undertaken by operative using a jet wash on the hardstanding before entering the public road</p> <p>Hard surface maintained between site and public road for inspection and clean down.</p> <p>Compliance and monitoring for dust will be carried out by a specialist subcontractor.</p> |
| All Works (excavation, demolition, construction) | Contaminated Water | <p>See <a href="#">VNIF-BNL-ZZ-YYY-RP-CD-0001</a> for Site Water Management Plan</p> <p>Any groundwater that may be discovered whilst excavating/stockpiling material of contamination will be tested and pumped across dry ground away from any receptors. Or if the sampling shows the water as containing contaminants or pollution as defined in the CWRA it will be pumped to a large holding tank ready for disposal via an authorised waste disposal facility.</p> <p>Surface water runoff will be controlled using a series of temporary grips, and trenches that will prevent the water from picking up suspended solids, contaminants and remain 'clean'. The mitigation of this surface water may vary based on location and the water should be prevented from reaching the River Irk where possible.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| Activity              | Potential nuisance    | Control measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |                       | <p>Prior to discharge to sewer, it may be necessary to pump the water to a settling Lagoon, or series of silt trap, where any suspended solids will drop out prior to discharging to sewer. Alternatively, during the drier summer months, the water may be used to suppress dust on the site and be used to condition dry materials and allow for better consolidation and compaction.</p> <p>Any excess surface water will be discharged from site via a consented point within the site boundary to the sewer network. This temporary discharge consent has been granted on the proviso that it has been sampled and tested to the United Utilities thresholds as detailed in the temporary discharge consent obtained for the VNIF project.</p> <p>Separate authorisation will follow from the Environment Agency if the water will be discharged via the permanent outfall to the River Irk as the permanent drainage is installed and commissioned.</p> |
| Welfare accommodation | Vermin                | Employ specialist to install control measures. Enclosed bins and skips in welfare.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Earthworks            | Mud on roads          | Employ services of road sweep, regular monitoring of situation and utilising additional resources if required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Construction traffic  | Vehicle emissions     | <p>Minimise wagon movements, avoid idling of engines, and provide vehicle holding areas where wagons can park off the public road network. Regular maintenance regimes / servicing of site vehicles.</p> <p>Where possible the use of ECO plant will be utilised. If practical fully electric plant items will be utilised.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Construction traffic  | Interface with public | Production of a Traffic management Plan to detail measures to minimise disruption, off road parking to be made available for all vehicles, information packs to be provided to all suppliers and delivery drivers to ensure compliance with the projects Travel Plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Construction waste    | Odour/vermin          | Use of enclosed waste receptacles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

Control measures are summarised in **Schedule C1: Aspects and Impacts with potential receptors** detailed in the **Schedule C2: Environment Constraints Map**.

### C3.6 Ecology and biodiversity - NP27.5: Management of ecology and biodiversity EG09: Protected species

Where the project work disturbs, or has the potential to disturb, species of plants or wildlife, certain conditions may apply concerning timing of activities, exclusion areas and protective measures. The agent is responsible for identifying and putting in place appropriate control measures.

Activities restricted for ecological reasons and enhancements adopted on the project may be listed in **Table C3.6** below:

**Table C3.6: Constraints and enhancements**

| Ecological constraints  |                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Location/ activity      | Constraints and control                                                                                                                                                                                                                                                                                                                                                                                           |
| Site Wide               | Protected species - no species identified in Works Information, survey to be carried out specialist prior to commencement of construction activities to identify any new issues.                                                                                                                                                                                                                                  |
|                         | Invasive species (Himalayan balsam, Japanese knotweed, and giant hogweed) present, pre-works treatment regime carried out<br>Relevant TBT's to be issued to all site team to allow them to identify invasive species and understand the risks and the measures required in regard to Bio security.<br>Invasive species management plans have been produced to guide on the control of the works being undertaken. |
|                         | Prevention of spread of invasive species by use of Bio-security measures, including a) wheel washing of machinery/plant, b) washing of boots/shoes from site staff, c) use of caterpillar tracks rather than tyres to reduce material transfer off site, and d) ensure any site runoff from wash-down area is on hardstanding and directed to a public drain at least 10m from a water course.                    |
| Site Wide               | Potential Bat Roost in St Catherine's wood. Restrictions when clearing trees, watching brief required.                                                                                                                                                                                                                                                                                                            |
| River Works             | Presence of Signal Crayfish within water course, check clean dry policy to be implemented. Works in river to be under environmental permit.                                                                                                                                                                                                                                                                       |
| Ecological enhancements |                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Location                | Enhancements                                                                                                                                                                                                                                                                                                                                                                                                      |
| Site wide               | Tree and Vegetation planting SCW, Hydroseeding plateau, Proposed River clearance works                                                                                                                                                                                                                                                                                                                            |

Control measures are summaries in in **Schedule C1: Aspects and Impacts** with ecological sensitive areas identified in **Schedule C2: Environment constraints map**.

### C3.7 Built Heritage and Archaeology - NP27.6 Management of built heritage and archaeology

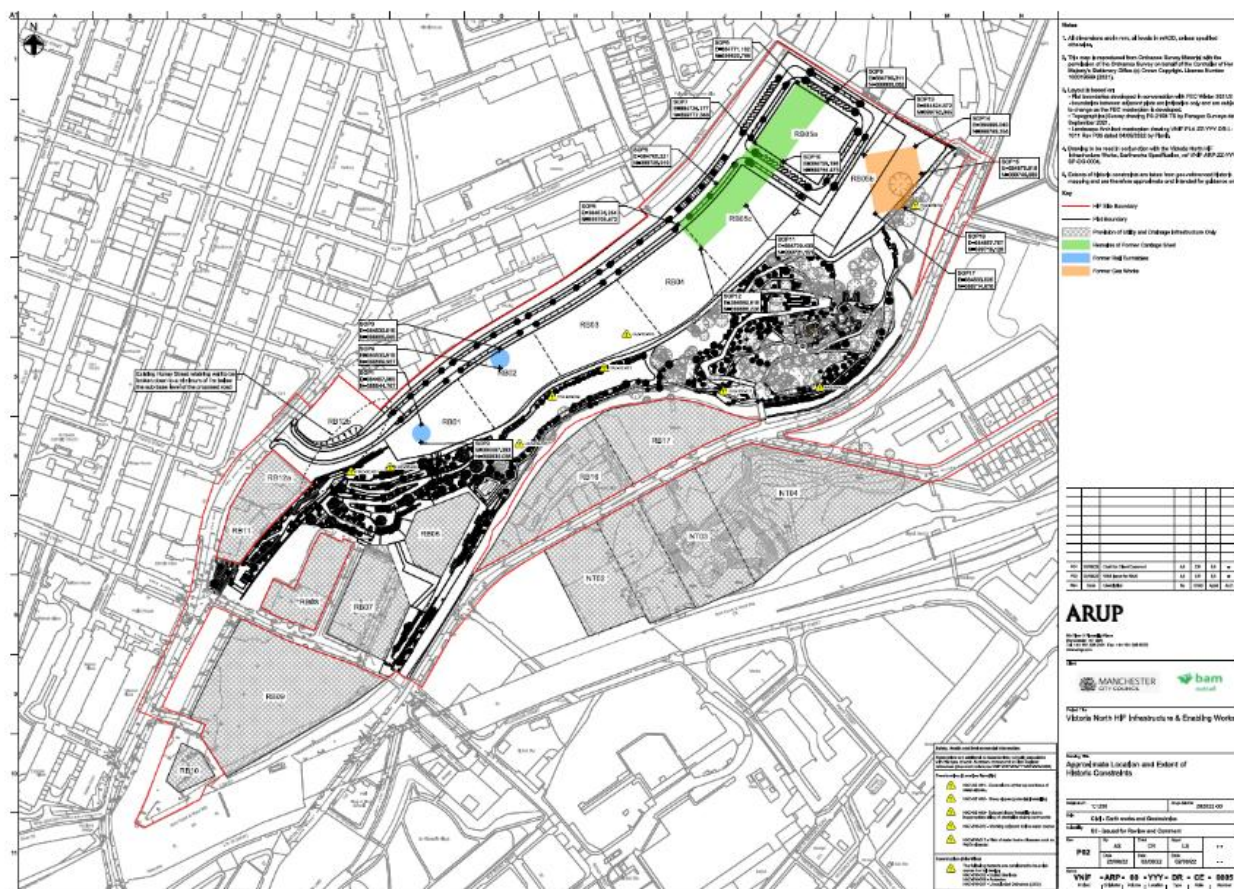
Arrangements are made for the identification and protection of areas of archaeological interest or listed structures and buildings. Any such areas identified during the undertaking of the project works will be immediately brought to the attention of the client and instructions sought. [List of archaeological and listed structures may be detailed in Table C3.7 below:](#)

**Table C3.7: Archaeology and listed structures**

| Areas of site subject to archaeological interest or with listed structures | Nature of interest, method of protection or other arrangements                                      |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Lowry steps                                                                | Area to be fenced off during all construction works and treated as an exclusion zone                |
| Turntable                                                                  | Area to be demolished under watching brief                                                          |
| Former Carriage Shed & Gas Works                                           | Area to be demolished under watching brief. Hard obstructions and soil contamination to be removed. |

#### NT Plots

Trial Pits and trenches are planned for completion in late 2023 – this document will be updated with any constraints that arise from the work



Activities restricted for as built environment are summarised in **Schedule C1: Aspects and Impacts** with ecological sensitive areas identified in **Schedule C2: Environment constraints map**.

### C3.8 Energy Management

BAM Nuttall seeks to reduce the emissions of greenhouse gases from the construction process on its projects and consequently looks for ways in which to reduce energy use. Sources of greenhouse gases contributing to the BAM Nuttall 'carbon footprint' include:

- Electricity and gas supply for heating, lighting and services to site accommodation
- Gas oil typically used in site plant and site generators
- Petrol and diesel used for commuting and business travel including transport of plant and materials
- Water supply and wastewater treatment

Every effort is made to obtain grid supplied electricity to reduce the use of generators. Where this is not possible, a generator is used with consideration given to a setup which achieves the most optimum efficiency.

On this project, ways in which energy use is being reduced or alternative energy sources utilised are listed in **Table C3.8** below:

**Table C3.8: Energy reduction measures**

| Carbon emission sources                    | Measures to be adopted to reduce use                                                                                                       |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Main site compound - Electricity           | Low energy lighting, PIR sensors for lighting, and main connection to main compound. Eco hybrid welfare units                              |
| Gas oil                                    | Use of HVO fuels                                                                                                                           |
| Petrol and diesel for commuting            | Car sharing / use of public transport to be encouraged. Use of electric vehicles to be encourage. On site charging points to be installed. |
| Petrol and diesel for business travel      | Use of digital platforms to minimise travel for meetings                                                                                   |
| Plant usage                                | Hybrid/Eco plant to be utilised. Where possible the use of electric plant to be prioritised.                                               |
| Main site compound - Water supply          | Rainwater harvesting to be adopted at welfare facilities to be used for dust suppression activities                                        |
| Main site compound - Waste water treatment | Connect welfare toilets etc. to mains sewage.                                                                                              |
| Mobile welfare                             | Use of HVO fuel instead of diesel<br>Use of units with Hybrid solar battery capability                                                     |

Where non vendor accord supplier are used for the supply of fuel and energy, the agent ensures that consumption data is collated and entered on BAM Site app for monitoring purposes.

### C3.9 Resource Sustainability

BAM Nuttall is aware of the global impact of the use of limited natural resources and of the need to reduce waste. Consequently, every attempt is made to reduce the use of primary aggregates and unsustainable products and materials wherever possible. Where practicable, commercially acceptable and in accordance with specification and regulatory requirements, use is made of waste or recycled material, or products containing recycled material.

Consideration is also given to the environmental impact caused during the lifecycle of the product within the scope of which BAM Nuttall can control or influence.

In accordance with the BAM Nuttall sustainability and environmental policies, every effort is made to use timber obtained from certified legal and sustainable sources.

Opportunities for the use of sustainable products and material have been identified as listed in **Table C3.9** below and will be pursued during the undertaking of the project works.

**Table C3.9: Sustainable products and material**

| <b>Opportunities for the use of sustainable products and material</b> |                                                                  |
|-----------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Product</b>                                                        | <b>Sustainable specification</b>                                 |
| Timber                                                                | 100% sustainable timber FSC or PEFC certified                    |
| Aggregate                                                             | 50% recycle content                                              |
| Metal                                                                 | 90% recycle content                                              |
| Concrete                                                              | Design specification – low cement content                        |
| Products certified under BES 6001.                                    |                                                                  |
| Training                                                              | TBT on sustainable timber deliveries to be presented by Env Dept |
| <b>Alternative chemicals and products</b>                             |                                                                  |
| <b>Product</b>                                                        | <b>Substitute</b>                                                |
| N/A                                                                   |                                                                  |

### C3.9.1 Life cycle considerations

Within the scope of the design and construction of the project the following life cycle considerations have been taken into account as summarised in **Table C.3.9.1** below:

**Table C3.9.1: Life cycle considerations**

|              | <b>Life cycle stage</b> | <b>Considerations</b>                                                                                                                                       | <b>Outcome</b> |
|--------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Design       | Design                  | Design optimised to reduce construction time and duration of works where possible                                                                           |                |
|              |                         | Off-site prefabrication methods (e.g., precast concrete) to be employed where possible to minimise environmental footprint on site                          |                |
|              | Raw materials           | TBC                                                                                                                                                         |                |
| Construction | Production              | TBC                                                                                                                                                         |                |
|              | Delivery of materials   | Locally sourced where practical, bulk transport where possible, combined types of material from same supplier thus minimising number of trips / part loads. |                |
|              |                         |                                                                                                                                                             |                |
| Use          | Life of the structure   | Minimum maintenance design adopted where possible                                                                                                           |                |

### C3.10 Landscape/ Restoration

On completion of the works the agent ensures that the works areas are restored as required by the planning authority and client.

The individual character, quality and value of the working area will be restored taking into consideration the wider landscape, biodiversity and historical context of the area as listed in **Table C3.10** below, or if required by planning consent or in the restoration plan provided by the customer.

**Table C3.10: Restoration requirements**

| Planning/ client requirements | Arrangements for restoration                                                          |
|-------------------------------|---------------------------------------------------------------------------------------|
| Honey St Wall repointing      | To be repointed, Asset owner to be allowed to inspect structure post demolition works |
|                               |                                                                                       |

## Schedule C1 Environmental aspects and impacts assessment for construction works

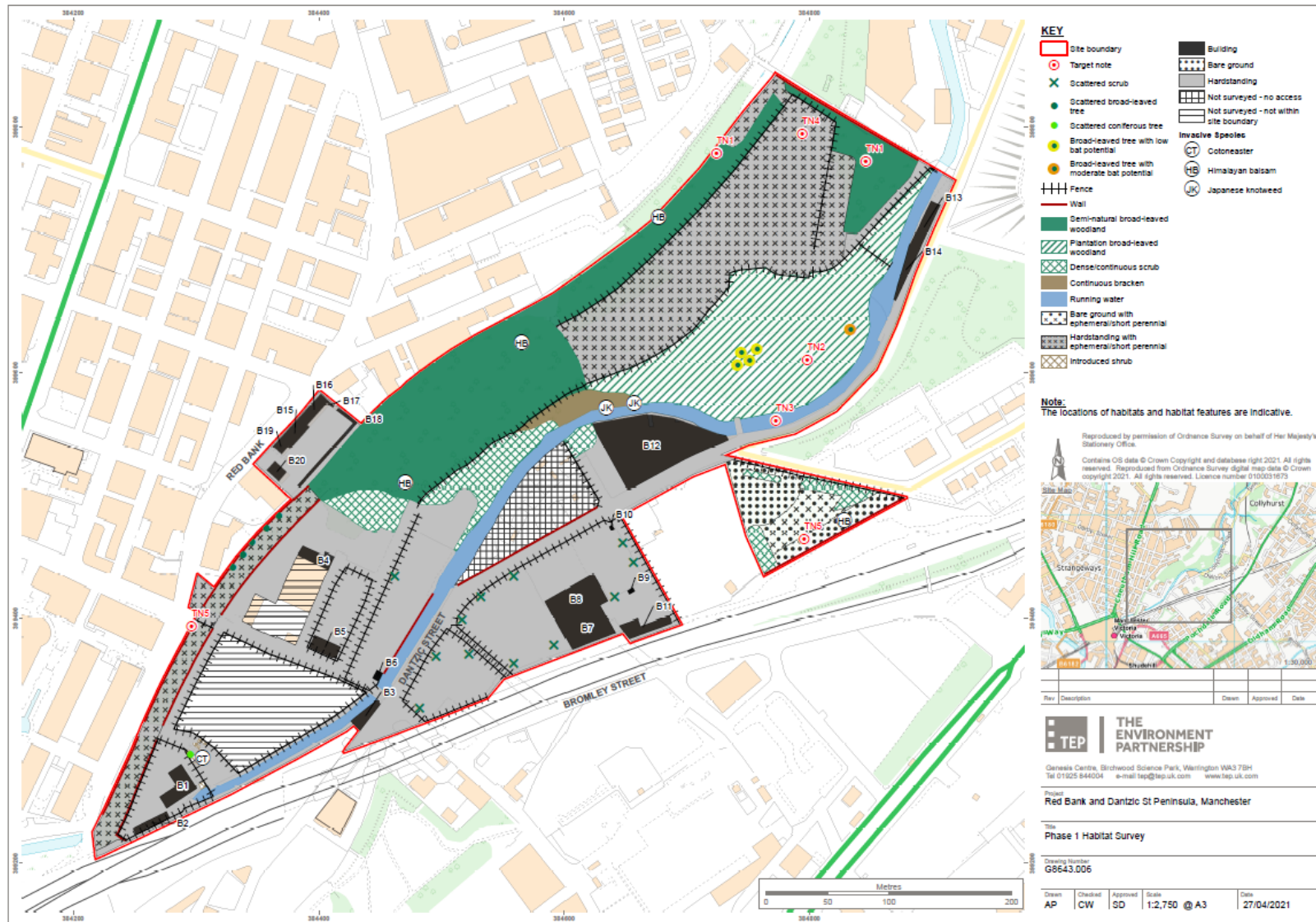
[VNIF-BNL-ZZ-YYY-RC-YE-0001](#)

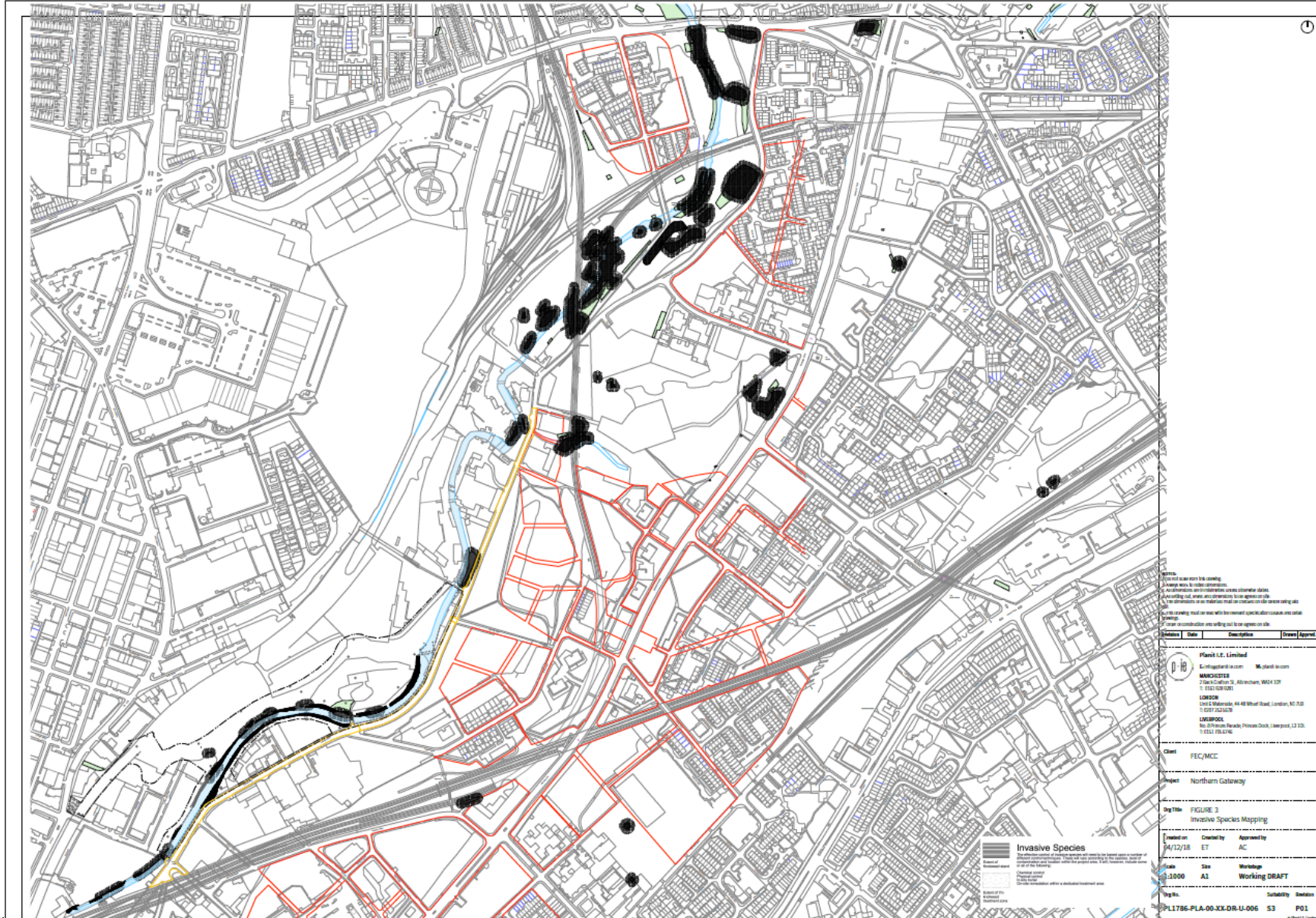
Project reference: Victoria North HIF BAA.2210  
Environmental Social Aspects and Impacts Assessment



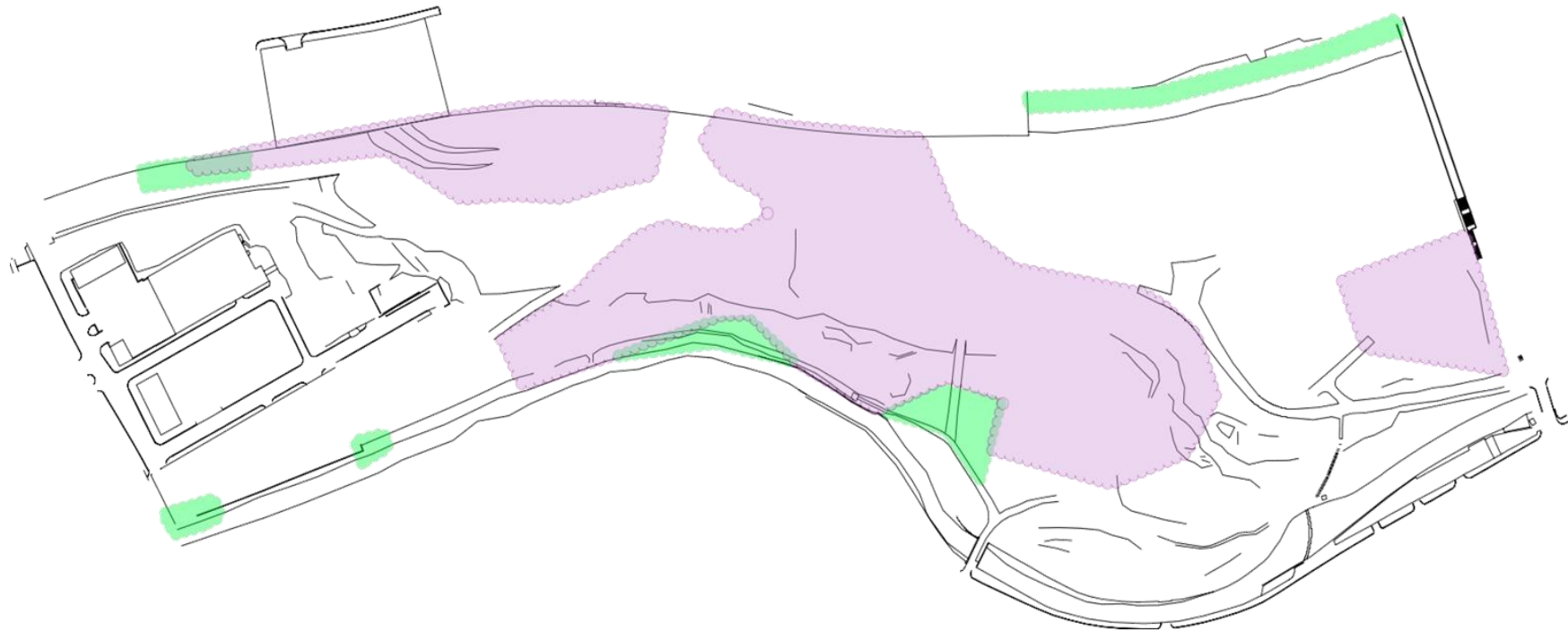
| Activity                            | Aspect (Receptor)              | Environment & Social (Risks and opportunities)                                                                           | Normal or Abnormal Operations? |                               |                                                                      | What is the significance of each impact pre mitigation? |                                                              |                            | Environmental & Social Actions (Press Alt and Enter for a new line in cell)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | What is the significance of residual impacts post mitigation? |                                                              |                            | BAM Nuttall procedure | Other procedure |
|-------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|----------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------|----------------------------|-----------------------|-----------------|
|                                     |                                |                                                                                                                          | Positive or negative impact    | Impact Under Normal Operation | Impact Due to Accident and / or Emergency and/or abnormal conditions | What is the likelihood of the impact occurring (A)      | What is the severity of consequence if the impact occurs (B) | Significance Rating (Ax B) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | What is the likelihood of the impact occurring (A)            | What is the severity of consequence if the impact occurs (B) | Significance Rating (Ax B) |                       |                 |
| Site Clearance                      | Ecology & biodiversity         | Risk of disturbing protected species that may be present on site.                                                        | Negative                       | ✓                             |                                                                      | Medium                                                  | Medium                                                       | Medium                     | Precondition surveys have been carried out by the client and ARLUP to search for evidence of any protected species in the locality of the works. We are currently awaiting the outcome of those surveys and an update EAP which will include any mitigation measures if there are any.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Low                                                           | Low                                                          | Low                        | NP27.5                |                 |
| Site Clearance                      | Ecology & biodiversity         | Risk of disturbing nesting birds during tree clearance.                                                                  | Negative                       | ✓                             |                                                                      | High                                                    | Medium                                                       | High                       | Clearance works are to be made to carry out all tree clearance works outside of nesting season. If this is not possible a watching brief is to occur while removing trees. If an active bird nest is identified works will be stopped and advice sought from an ecologist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Low                                                           | Low                                                          | Low                        | NP27.5                |                 |
| Site Clearance and subsequent works | Ecology & biodiversity         | Potential for invasive species to be present on site or close to it.                                                     | Negative                       | ✓                             |                                                                      | Medium                                                  | Medium                                                       | Medium                     | Invasive species have been identified on site. Spraying to take place twice yearly. Fencing and signage to be installed to prevent the spread of the invasive species.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Low                                                           | Low                                                          | Low                        | NP27.5                |                 |
| Demolition                          | Contaminated land              | Asbestos present in lease. Potential to cause harm to the workforce and have a negative impact on the local environment. | Negative                       | ✓                             |                                                                      | High                                                    | High                                                         | High                       | A suitably certified and qualified contractor will be appointed to carry out the demolition and remove and dispose of the asbestos properly under licence prior to any demolition work taking place.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Low                                                           | Medium                                                       | Medium                     | NP27.3                |                 |
| All works                           | Waste                          | Used sharps disposed of all over the site                                                                                | Negative                       | ✓                             |                                                                      | Medium                                                  | High                                                         | High                       | Yield box talk to be briefed to full site team and all sub-contractors prior to works commencing on site. Initial site sweep will take place prior to works commencing. Only competent persons to dispose of sharps.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Low                                                           | Medium                                                       | Medium                     | NP27.3                |                 |
| Excavation                          | Contaminated land              | Fly tipped rubbish has been deposited all over the site                                                                  | Negative                       | ✓                             |                                                                      | High                                                    | High                                                         | High                       | No further information is known about the contents of the fly tipped rubbish. An instruction will come from the client to carry out further investigation, as to the contents of the fly tipped rubbish. Any contamination will be sampled to determine what is and mitigation measures adopted accordingly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Medium                                                        | Low                                                          | Medium                     | NP27.3                |                 |
| All works                           | Water environment              | Potential to contaminate local water courses during the works.                                                           | Negative                       | ✓                             |                                                                      | Medium                                                  | Medium                                                       | Medium                     | All refuelling is to be carried out by a nominated and trained refueller more than 10m from a watercourse. All plant is to have bio oil and carry a spill kit at all times in case of a spillage. Any areas of potential surface water run off are to have a silt net erected to prevent solids from entering the water courses. Designated concrete wash out is to be used at all times and positioned more than 10m from a water course or surface water drain. Follow the Environment Agency pollution prevention guidance at all times. Relevant permits/consents to be obtained and adhere to where necessary, i.e. abstraction/discharge activities. FROD conditions to be adhered to. Agent and Foreman to sign up to EA flood warning system and flood response procedure to be in place. | Low                                                           | Low                                                          | Low                        | NP27.1                |                 |
| All works                           | Nuisance                       | Disturbance to local residents and businesses.                                                                           | Negative                       | ✓                             |                                                                      | Medium                                                  | Medium                                                       | Medium                     | Client to inform the local businesses and residents in advance of the works. On going public consultation to take place and advance warning of noisy works to take place. Where required activity plans will address specific measures in certain locations. NCC environmental health to be consulted and kept informed as the works progress.                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Low                                                           | Low                                                          | Low                        | NP27.4                |                 |
| All works                           | Built heritage and archaeology | Damage to Lowrey Steps                                                                                                   | Negative                       | ✓                             |                                                                      | Low                                                     | Medium                                                       | Medium                     | Damage to the steps is highly unlikely as we are 25m or more away from it with our works. No vibrating compaction equipment will be used within 60m of it. Watching brief to be in place where required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Low                                                           | Low                                                          | Low                        | NP27.6                |                 |
| All works                           | Landscape and visual amenity   | Damage to existing trees                                                                                                 | Negative                       | ✓                             |                                                                      | Medium                                                  | Medium                                                       | Medium                     | An arboricultural assessment has been carried out pre-construction and the outcome, along with any mitigation measures will be sent out with the updated EAP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Low                                                           | Low                                                          | Low                        | NP27.5                |                 |
| Waste management                    | Nuisance, Waste                | Increase in litter, vermin and odour                                                                                     | Negative                       | ✓                             |                                                                      | Medium                                                  | Medium                                                       | Medium                     | <ul style="list-style-type: none"> <li>Prohibit prevent, reduce, reuse, recycle</li> <li>All waste to be kept in secure waste receptacles</li> <li>Waste bins/skips to be covered at all times to prevent contents becoming airborne and reduce risk of rodent/ bird activity</li> <li>Daily litter inspections to be carried out</li> <li>Comply with waste duty of care, obtain and check with environment regulator treatment facilities have appropriate licences prior to waste removal off site.</li> <li>Ensure suppliers take away packaging associated with deliveries, where possible</li> </ul>                                                                                                                                                                                        | Low                                                           | Low                                                          | Low                        | NP27.3                |                 |

## Schedule C2 Environmental Constraints Map





## MT19: Project Execution Plan



Green – Japanese Knotweed  
Purple – Himalayan Balsam

## MT19: Project Execution Plan

### Schedule C3 Environmental monitoring

| Environmental aspect           | Method of monitoring                                                                                           | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Responsibility (name/job title) or subcontractor | Records                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------|
| Discharge to watercourse/Sewer | Visual inspection, sampling and analysis or otherwise as defined in consent from UU/Environment Agency Permit  | Weekly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Site engineer or laboratory                      | Test results/ EF01/ EF03<br>Complaints log                   |
| Noise                          | Noise assessments<br>Noise monitoring to be undertaken in accordance with BAM Environmental Guidance note EG06 | Base line recordings to be undertaken and recorded ahead of operations commencing<br>Readings to be taken at intervals throughout the day only during key demolition and earthworks operations with a minimum of 4 per day being undertaken whilst key operations take place. The readings will be taken to specifically target the elements of the demolition works and compaction operations on haul road<br>If works are not in danger of breaching limits noise monitoring frequency reduced or stopped<br><br>If an exceedance occurs a period of continual monitoring will be carried out to ensure that mitigation has been effective | Site engineer                                    | Noise assessments/ (EF02)<br>Monitoring data/ Complaints log |

## MT19: Project Execution Plan

| Environmental aspect                          | Method of monitoring                                                                             | Frequency                                                                                                           | Responsibility (name/job title) or subcontractor          | Records                                                                                 |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Dust                                          | Visual inspection of site-by-site supervisor (foreman) and Demolition subcontractor's supervisor | Daily, and before commencement of operations.                                                                       | BAM Site Supervisor and Demolition contractors Supervisor | As per Air quality Monitoring Plan EC01/ Site diary/ monitoring records/ Complaints log |
| Vibration                                     | Vibration monitoring, Use of Vibrock V900 seismic monitoring unit.                               | Daily( equipment monitors continually during the day) as demolition and haul road construction works are undertaken | Site engineer                                             | EC01/ Site diary/monitoring records/ Complaints log                                     |
| Ecology                                       |                                                                                                  |                                                                                                                     |                                                           |                                                                                         |
| Condition of plant and equipment              | Inspection/walkover survey/watching brief (as defined in contract conditions)                    | As required                                                                                                         | Consultant                                                | Survey/inspection reports/EF04 Eco-permit                                               |
| Fuel/chemical storage area                    | Plant maintenance and inspection<br>Visual inspections of plant                                  | Daily                                                                                                               | Plant dept. fitter<br>Plant operator/foremen              | Plant inspection sheet/<br>Foreman's diary                                              |
| Waste disposal                                | Visual inspection/checklist                                                                      | Daily                                                                                                               | Foremen/site environmental engineer                       | Completed checklists EC01/<br>Site diary                                                |
| Emergency spill kits                          | Visual inspections on site<br>Inspection/maintenance of records                                  | Weekly                                                                                                              | Foreman/Agent                                             | Checklist/ Waste transfer records                                                       |
| Emergency arrangements – e.g. practice drills | Visual inspection                                                                                | Weekly                                                                                                              | Foremen/site environmental engineer                       | Recorded inspections (EC01)                                                             |
| Other                                         | Practice drill                                                                                   | Monthly                                                                                                             | Foremen/site environmental engineer                       | Record of drill/site training. (SF513)                                                  |

## Schedule C4 Consents licences and permissions

The following consents, licences and permissions are required.

Please include references and dates for all consents, licences and permissions, i.e. planning application details, sewer discharge consent details, reference to CLAIRE code of practice for onsite reuse of contaminated soils, crusher Part B permit and local authority notification.

|         | Site process                                                                                                                                                                                                                                                                                                                                  | Documentation consent/permits /licences                                                                                                                                                                                                                                                             | Controlling regulations                                                                                  | Issuing authority                                                | Date Submitted to Issuing authority | Approval Period                   | Date Consent Approved    | Consent / permit / licence ref no.  | Surrender Date |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------|-----------------------------------|--------------------------|-------------------------------------|----------------|
| General | Undertaking construction works                                                                                                                                                                                                                                                                                                                | Planning permission                                                                                                                                                                                                                                                                                 | Town and Country Planning Act                                                                            | Local authority                                                  | 14/07/2022                          | Approx. 16weeks                   | 20/09/2022               | 133143/VO/2022                      |                |
|         | Undertaking building works                                                                                                                                                                                                                                                                                                                    | Building control approval                                                                                                                                                                                                                                                                           | The Building Act                                                                                         | Local authority                                                  | N/A                                 |                                   |                          |                                     |                |
| Water   | Discharging water to a river, stream, ditch<br>Installation/operation of septic tanks.                                                                                                                                                                                                                                                        | Discharge consent to controlled water                                                                                                                                                                                                                                                               | Water Resources Act<br>Groundwater Regulations<br>Environmental Permitting (England & Wales Regulations) | Environment Agency<br>Natural Resources Wales                    | N/A                                 |                                   |                          |                                     |                |
|         | Site set-up sewage discharge                                                                                                                                                                                                                                                                                                                  | Permission to discharge trade effluent to sewer.                                                                                                                                                                                                                                                    | Water Industry Act                                                                                       | Local water company                                              | 10/10/2022                          | 1 week                            | 17/10/2022               |                                     | 16/04/2022     |
|         | Temporary/permanent works over and in a main river.<br><b>Works within 8m of a main river, note the distance may vary between EA regions.</b><br>Raising ground levels in the floodplain beside a main river.<br>Construction of a culvert or flow control structure (such as a weir) on any ordinary watercourse.                            | Flood defence consent (formerly known as land drainage consent/ works affecting watercourses consent)                                                                                                                                                                                               | Water Resources Act<br>Land Drainage Act<br>Local Byelaws                                                | Environment Agency<br>Natural Resources Wales                    | 26/02/2024<br><b>16/07/2025</b>     | 8 weeks<br><b>Approx 16 Weeks</b> | 12/04/2024<br><b>TBC</b> | EPR/AB3252GB<br><b>EPR/ZB3742MC</b> |                |
|         | Works on flood plains                                                                                                                                                                                                                                                                                                                         | Prior permission                                                                                                                                                                                                                                                                                    | Water Resources Act<br>Land Drainage Act                                                                 | Environment Agency<br>Natural Resources Wales                    | N/A                                 |                                   |                          |                                     |                |
|         | Works on flood defence structures                                                                                                                                                                                                                                                                                                             | Prior permission                                                                                                                                                                                                                                                                                    | Local Byelaws                                                                                            | Environment Agency<br>Natural Resources Wales                    | N/A                                 |                                   |                          |                                     |                |
|         | Abstracting or taking water from rivers, streams, lakes, ponds, tidal waters or groundwater.<br>Constructing or altering any impounding works in rivers, streams, ponds or tidal waters.<br>Dewatering activities may require a licence.<br>Note: licence is not required for abstraction for any purpose of less than 20 cubic metres a day. | Abstraction licence:<br>• Full licence — applicable to most abstractions over 20m <sup>3</sup> a day.<br>• Transfer licence — moving water from one location to another with no intervening use.<br>Temporary licence — over 20m <sup>3</sup> a day over a period of less than 28 consecutive days. | Water Resources Act                                                                                      | Environment Agency<br>Natural Resources Wales                    | N/A                                 |                                   |                          |                                     |                |
|         | Use herbicides near water                                                                                                                                                                                                                                                                                                                     | Prior permission                                                                                                                                                                                                                                                                                    | Food and Environmental Protection Act (Control of Pesticides Regulations)                                | Environment Agency<br>Natural Resources Wales                    | N/A                                 |                                   |                          |                                     |                |
|         | Construction works (temp & perm) on the seabed/within tidal waters/harbour area.                                                                                                                                                                                                                                                              | Marine licence — online pre-application and application process                                                                                                                                                                                                                                     | Marine and Coastal Access Act                                                                            | Marine Management Organisation                                   | N/A                                 |                                   |                          |                                     |                |
|         | Transfer/disposal of controlled waste                                                                                                                                                                                                                                                                                                         | Controlled waste transfer notes                                                                                                                                                                                                                                                                     | Environmental Protection Act Waste (England and Wales) Regulations                                       | Producer<br>Haulier                                              | <b>Covered under MMP</b>            |                                   |                          |                                     |                |
| Waste   | Transfer/disposal of hazardous waste (England & Wales)                                                                                                                                                                                                                                                                                        | Registration as a hazardous waste producer (Wales only)                                                                                                                                                                                                                                             | Hazardous Waste Regulations                                                                              | Producer<br>Haulier                                              | N/A                                 |                                   |                          |                                     |                |
|         |                                                                                                                                                                                                                                                                                                                                               | Hazardous waste consignment notes                                                                                                                                                                                                                                                                   |                                                                                                          |                                                                  |                                     |                                   |                          |                                     |                |
|         | Carrying waste other than your own (controlled or hazardous)                                                                                                                                                                                                                                                                                  | Waste carriers' registration certificate                                                                                                                                                                                                                                                            | Waste (England and Wales) Regulations                                                                    | Environment Agency<br>Natural Resources Wales                    | N/A                                 |                                   |                          |                                     |                |
|         | Keep, treat and dispose of waste                                                                                                                                                                                                                                                                                                              | Environmental permit<br>May need planning permission                                                                                                                                                                                                                                                | Environmental Permitting (England & Wales) Regulations<br>Town and Country Planning Act                  | Environment Agency<br>Natural Resources Wales<br>Local authority |                                     |                                   |                          |                                     |                |

|                 | Site process                                                                                                                                                        | Documentation consent/permits /licences                                                         | Controlling regulations                                                                                                                                | Issuing authority                                                                        | Date Submitted to Issuing authority | Approval Period | Date Consent Approved | Consent / permit / licence ref no. | Surrender Date |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------|-----------------|-----------------------|------------------------------------|----------------|
|                 | Reuse waste materials off site                                                                                                                                      | Environmental permit or exemption from Environmental Permitting regulations                     | Environmental Permitting (England & Wales) Regulations                                                                                                 | Environment Agency<br>Natural Resources Wales                                            | 17/10/2023                          | 2 months        | 21/12/2023            | 133143/VO/2022                     |                |
| Waste Continued | Treatment of contaminated land and water                                                                                                                            | Materials Management Plan                                                                       | Environmental Permitting (England & Wales) Regulations<br>Contaminated Land (England) (Amendment) Regulations<br>Contaminated Land (Wales) Regulations | Environment Agency<br>Natural Resources Wales                                            | 2023-12-12                          | 1 week          | 2023-12-22            | 133143/VO/2022                     | 2024/12/20     |
|                 | Handling asbestos                                                                                                                                                   | Licence for work with asbestos from HSE Asbestos licensing unit                                 | Control of Asbestos Regulations                                                                                                                        | HSE Asbestos Licences Unit                                                               | N/A                                 |                 |                       |                                    |                |
|                 | Manufacturing of aggregates and soils from demolition, construction, tunnelling and excavation wastes or waste ash, slag, clinker or rock, e.g. screening of soils. | Exemption from waste management licensing                                                       | Environmental Permitting (England & Wales) Regulations                                                                                                 | Environment Agency<br>Natural Resources Wales                                            | N/A                                 |                 |                       |                                    |                |
| Nuisance        | Crushing and screening operations<br>Blacktop batching plants                                                                                                       | Environmental permit or exemption (T5/T7) Authorisation to operate a part B prescribed process. | Environmental Permitting (England & Wales) Regulations<br>Pollution Prevention and Control (England & Wales) Regulations                               | Local authority<br>environmental health<br>Environment Agency<br>Natural Resources Wales | Yes (Lancashire Crushers)           |                 | 27/09/2022            | PCC110/2022                        |                |
|                 | Managing noise and vibration levels                                                                                                                                 | Prior consent under Section 61 (optional)                                                       | Control of Pollution Act                                                                                                                               | Local authority<br>environmental health                                                  | Yes                                 |                 |                       |                                    |                |
| Wildlife        | Cutting, topping or uprooting protected trees                                                                                                                       | Prior consent                                                                                   | The Town and Country Planning (Tree Preservation) (England) Regulations<br>Town and Country Planning (Trees Amendment) (Wales)                         | Local authority planning dept                                                            | 21/01/2022                          |                 | 27/03/2022            | 133143/VO/2022                     |                |
|                 | Works affecting hedgerows                                                                                                                                           | Prior consent                                                                                   | Hedgerow Regulations                                                                                                                                   | Local authority planning dept                                                            |                                     |                 |                       |                                    |                |
|                 | Works affecting designated areas i.e. SSSIs, AONB                                                                                                                   | Prior consent                                                                                   | Wildlife and Countryside Act<br>Habitat Regulations<br>Countryside and Rights of Way Act                                                               | Natural England<br>Natural Resources Wales                                               |                                     |                 |                       |                                    |                |
|                 | Works near badger setts                                                                                                                                             | Prior consent                                                                                   | Protection of Badgers Act                                                                                                                              | Natural England<br>Natural Resources Wales                                               | N/A                                 |                 |                       |                                    |                |
|                 | Move/handle protected species (esp. bats, badgers and newts)                                                                                                        | Licence                                                                                         | Wildlife and Countryside Act<br>Habitat Regulations as amended                                                                                         | Natural England<br>Welsh Assembly /Natural Resources Wales                               | N/A                                 |                 |                       |                                    |                |
|                 | Removal and/or introduction of fish with inland waters                                                                                                              | Prior consent                                                                                   | Salmon and Freshwater Fisheries Act                                                                                                                    | Environment Agency<br>Natural Resources Wales                                            | N/A                                 |                 |                       |                                    |                |
|                 | Treatment of Japanese knotweed —burning on site                                                                                                                     | Prior consent                                                                                   | Wildlife and Countryside Act<br>Clean Air Act<br>Environmental Permitting (England & Wales) Regulations                                                | Environment Agency<br>Natural Resources Wales<br>Local authority<br>environmental health | N/A                                 |                 |                       |                                    |                |
|                 | Treatment of Japanese knotweed —burial                                                                                                                              | Formal notification                                                                             | Wildlife and Countryside Act<br>Environmental Permitting (England & Wales) Regulations                                                                 | Environment Agency<br>Natural Resources Wales                                            | N/A                                 |                 |                       |                                    |                |
| Archaeology     | Demolition or alteration of a listed building and historic structures within its grounds.                                                                           | Planning Permission & Scheduled monument consent                                                | Planning (Listed Buildings and Conservation Areas) Act                                                                                                 | Local planning authority                                                                 | N/A                                 |                 |                       |                                    |                |
|                 | Works on/near scheduled ancient monuments (SAM's)                                                                                                                   | Planning Permission & Listed building consent                                                   | Town and Country Planning Act<br>Ancient Monuments and Archaeological Areas Act                                                                        | Local planning authority<br>English Heritage<br>Welsh historic monuments                 | N/A                                 |                 |                       |                                    |                |
|                 | Demolition of an unlisted building in a conservation area.                                                                                                          | Planning Permission & Conservation area consent                                                 | Planning (Listed Buildings and Conservation Areas) Act                                                                                                 | Local planning authority                                                                 | N/A                                 |                 |                       | 133143/VO/2022                     |                |



Schedule C5 **Site Waste Management Plan**

**This declaration is to be used in conjunction with BAM Smart – the web-based sustainability monitoring and reporting tool / BAM Site app. (delete as appropriate)**

|                                               |                                                             |
|-----------------------------------------------|-------------------------------------------------------------|
| Project reference                             | BAA2210                                                     |
| Project title                                 | Victoria North HIF Infrastructure Project                   |
| Client                                        | Manchester City Council                                     |
| Principal contractor                          | BAM Nuttall Ltd                                             |
| Site waste coordinator / Environment engineer |                                                             |
| Contract value                                | £48 million                                                 |
| Address/location                              | BAM Compound,<br>Hargreaves Street,<br>Manchester<br>M4 4EJ |
| Project description                           | Infrastructure works for residential developments.          |
| Document prepared by                          | N Peters                                                    |

|                                                                                                                                                                                                                                                                                                                                             |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| <b>Declaration:</b><br>We the client and principal contractor confirm that all reasonable steps will be taken to ensure that:<br>a) all waste from the site is dealt with in accordance with the duty of care in section 34 of the Environmental Protection Act<br>b) materials will be handled efficiently and waste managed appropriately |         |
| <b>Client:</b>                                                                                                                                                                                                                                                                                                                              | Signed: |
| <b>Principal contractor:</b>                                                                                                                                                                                                                                                                                                                | Signed: |
| <b>Key subcontractor(s):</b>                                                                                                                                                                                                                                                                                                                | Signed: |

This plan is reviewed at least every three months by the site waste coordinator and updated as necessary to ensure that waste management practices are in accordance with this plan.

| Reviewed by | Date | Rev no. | Revision details (where applicable) |
|-------------|------|---------|-------------------------------------|
|             |      |         |                                     |
|             |      |         |                                     |

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### Introduction

This site waste management plan identifies and monitors:

- reuse of materials on the project e.g. cut and fill, site won materials
- waste minimisation implemented on the project
- waste management options for waste generated during the works including waste generated by subcontractors
- any cost savings achieved through waste minimisation

Materials identified within this SWMP are not necessarily statutory waste as they do not fall within the legal definition of waste i.e., 'any substance or object which the holder discards intends to discard or is required to discard.' There is no intention to discard materials such as:

- site won excavated materials
- aggregates crushed in accordance with the WRAP Quality Protocol (on or off site)
- pre-planned use of materials

All materials whether they are imported, reused 'as is' on site, recycled (on or off site) or sent off site for disposal are identified within the plan.

(See Appendix 1 for roles and responsibilities.)

## Materials resource efficiency

The following waste reduction and reuse measures have been included in the design and/or specification for this project:

|                                 |                      |
|---------------------------------|----------------------|
| <i>Design specifications</i>    | Soils to be retained |
| <i>Choice of materials</i>      | Varying subsoils     |
| <i>Methods of construction</i>  | Bulk Earthworks      |
| <i>Pre-fabrication off site</i> | N/A                  |
|                                 |                      |
|                                 |                      |

## Forecast of the types and quantities of waste

It is estimated that this site will produce the following types and quantities of waste:

| Source and type of waste                           | EW Code  | Estimated quantity of waste (tonnes) | Proposed waste management action (reuse, recycle, etc) |
|----------------------------------------------------|----------|--------------------------------------|--------------------------------------------------------|
| <b>Excavation waste</b>                            |          |                                      |                                                        |
| Hazardous for Heavy Metals/Asbestos                | 17 05 03 | 1000                                 | 1000                                                   |
| Hazardous for TPH Treatment                        | 17 05 03 | 35000                                | 35000                                                  |
| Non-hazardous soil and stones (invasives)          | 17 05 04 | 8900                                 | 8900                                                   |
| Non-hazardous soil and stones (PFAS/General Waste) | 17 05 04 | 3800                                 | 3800                                                   |
| Inert soil and stones                              | 17 05 04 | 10000                                | 10000                                                  |
|                                                    |          |                                      |                                                        |
| <b>Construction (skip) waste</b>                   |          |                                      |                                                        |
| Concrete                                           | 17 01 01 | 50                                   | 50                                                     |
| Mixed hardcore                                     | 17 01 07 | 50                                   | 50                                                     |
| Timber                                             | 17 02 01 | 50                                   | 50                                                     |
| Glass                                              | 17 02 02 | 1                                    | 1                                                      |
| Plastic                                            | 17 02 03 | 3                                    | 3                                                      |
| Mixed metals                                       | 17 04 07 | 100                                  | 100                                                    |
| Other mixed construction waste                     | 17 09 04 | 10                                   | 10                                                     |
| Hazardous construction waste                       | Various  | 1                                    | 1                                                      |
| Mixed municipal waste                              | 20 03 01 | 260                                  | 260                                                    |
|                                                    |          |                                      |                                                        |
| <b>Demolition waste</b>                            |          |                                      |                                                        |
| Concrete                                           | 17 01 01 | 100                                  | 100                                                    |
| Bricks                                             | 17 01 02 | 500                                  | 500                                                    |
| Mixed hardcore                                     | 17 01 07 | 250                                  | 250                                                    |
| Timber                                             | 17 02 01 | 0                                    | 0                                                      |
| Glass                                              | 17 02 02 | 1                                    | 1                                                      |
| Plastic                                            | 17 02 03 | 0                                    | 0                                                      |
| Mixed metals                                       | 17 04 07 | 20                                   | 20                                                     |
| Other mixed demolition waste                       | 17 09 04 | 20                                   | 20                                                     |
|                                                    |          |                                      |                                                        |
|                                                    | Totals   | 60116                                | 60116                                                  |

## MT19: Project Execution Plan

### Management of waste

The production of waste material on this site during the construction phase is avoided wherever possible by following the 'reduce, reuse, recycle, recover' measures outlined below. Only where these options have been exhausted is waste sent for disposal.

### Reduction and reuse measures

The following measures will be employed to reduce and reuse waste on this site:

| General                                                                                                                                 |                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reduction measures                                                                                                                      | Reuse measures                                                                                                                                            |
| <ul style="list-style-type: none"> <li>Designed elements to use standard module sizes of available materials</li> </ul>                 | <ul style="list-style-type: none"> <li>Rainwater from accommodation roofs to be harvested for use in dust suppression measures</li> </ul>                 |
| <ul style="list-style-type: none"> <li>Accurate measurement, and minimal wastage will be allowed when ordering materials</li> </ul>     | <ul style="list-style-type: none"> <li>Wood chippings to be reused on site</li> </ul>                                                                     |
| <ul style="list-style-type: none"> <li>Materials are to be delivered just in time for the work package</li> </ul>                       | <ul style="list-style-type: none"> <li>Site won soils to be reused on site subject to grading criteria and to remedial targets set by the CWRA</li> </ul> |
| <ul style="list-style-type: none"> <li>Materials are to be stored and transported correctly so as to avoid damage</li> </ul>            | <ul style="list-style-type: none"> <li><i>Materials from demolition for Love Factory are segregated to be recycled</i></li> </ul>                         |
| <ul style="list-style-type: none"> <li>Materials are to be kept off the ground by the use of pallets or timber bites</li> </ul>         | <ul style="list-style-type: none"> <li></li> </ul>                                                                                                        |
| <ul style="list-style-type: none"> <li>The following components are to be prefabricated:<br/>(Insert any relevant materials)</li> </ul> | <ul style="list-style-type: none"> <li></li> </ul>                                                                                                        |
| <ul style="list-style-type: none"> <li>All operatives are to receive training on the agreed reduction measures</li> </ul>               | <ul style="list-style-type: none"> <li></li> </ul>                                                                                                        |
| <ul style="list-style-type: none"> <li>(Any other measures)</li> </ul>                                                                  | <ul style="list-style-type: none"> <li></li> </ul>                                                                                                        |
| Concrete and hardcore                                                                                                                   |                                                                                                                                                           |
| Reduction measures                                                                                                                      | Reuse measures                                                                                                                                            |
| <ul style="list-style-type: none"> <li>Suspended GF slab to be designed to eliminate the requirement for extra fill</li> </ul>          | <ul style="list-style-type: none"> <li>900 tonnes of hardcore from demolition is to be crushed and reused as aggregate</li> </ul>                         |
| <ul style="list-style-type: none"> <li>Teram to be used under temporary roads to reduce wastage through settlement</li> </ul>           | <ul style="list-style-type: none"> <li>Remaining hardcore from demolition to be crushed and used as fill to excavations</li> </ul>                        |
| <ul style="list-style-type: none"> <li>Concrete orders to be as accurate as possible to reduce possibility of waste</li> </ul>          | <ul style="list-style-type: none"> <li>Excess concrete from pours is to be used to create temporary paths around the site</li> </ul>                      |
| <ul style="list-style-type: none"> <li>(Any other measures)</li> </ul>                                                                  | <ul style="list-style-type: none"> <li><i>Materials from demolition for Love Factory are segregated to be recycled</i></li> </ul>                         |
| <ul style="list-style-type: none"> <li><i>Buried Brick and Stone as found, to be segregated and crushed for re-use</i></li> </ul>       | <ul style="list-style-type: none"> <li><i>Circa 10000 tonnes have been recovered across the site and put to re-use</i></li> </ul>                         |

## MT19: Project Execution Plan

| Excavated material (soil & stones)                                                                 |                                                                                                   |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Reduction measures                                                                                 | Reuse measures                                                                                    |
| • Formation level to be raised to reduce excavation waste                                          | • A cut and fill exercise has been carried out to minimise waste off site                         |
| • Soil stabilisation to be used to minimise reduced level dig                                      | • Arisings from excavations to be used as follows:                                                |
| • Displacement piling to be used in lieu of CFA to reduce spoil                                    | • 2000 tonnes to be used as backfill to excavations                                               |
| • Mini piles to be used in lieu of pad foundations                                                 | • 850 tonnes to be used within landscape bunds                                                    |
| • Reinforced pad foundation to be used, backfilled with excavated material, in lieu of mass pads   | • Avoid materials to tip by considering off site remediation                                      |
| • Permanent formwork to be used to pile caps and ground beams to eliminate excavated working space | • Remediation strategy to advise on Reuse criteria for on-site win with NT02 and NT03 Fill areas  |
| • Drainage levels to be raised, and backdropped into manholes, to reduce excavation depths         | •                                                                                                 |
| • Trenches to be sheeted rather than battered to reduce excavated material                         | •                                                                                                 |
| • (Any other measures)                                                                             | •                                                                                                 |
| Timber                                                                                             |                                                                                                   |
| Reduction measures                                                                                 | Reuse measures                                                                                    |
| • Reusable plastic pallets to be used                                                              | • Reusable shuttering systems to be employed wherever practicable                                 |
| • System shuttering to be used wherever practicable                                                | • Off-cuts of plywood to be saved and used to cover holes, and as protection to fragile materials |
| • Reusable plastic/metal hoardings to be used                                                      | • Designated area for waste timber to be set up for free reuse by others                          |
| • (Any other measures)                                                                             | • Materials from demolition for Love Factory are segregated to be recycled                        |
| Metals                                                                                             |                                                                                                   |
| Reduction measures                                                                                 | Reuse measures                                                                                    |
| • (Any other measures)                                                                             | • Off-cuts from long pipe work runs are to be stored for reuse in small runs                      |
|                                                                                                    | Materials from demolition for Love Factory are segregated to be recycled                          |

## MT19: Project Execution Plan

### Recycle and recovery measures

The following waste streams are to be segregated for recycling/ recovery off site:

| Waste stream          | EWC code | Storage option | Management option      |
|-----------------------|----------|----------------|------------------------|
| • Paper and cardboard | 20 01 01 | labelled bins  | Recycling within works |
| • Excavation waste    | 17 05 04 |                |                        |
| • Packaging           | 15 01 06 | labelled bins  |                        |
| • Plastic             | 20 01 39 | labelled bins  |                        |
| • Timber              | 17 02 01 | labelled bins  |                        |
| • Mixed Metals        | 17 04 07 | labelled bins  |                        |
| • Mixed waste         | 17 09 04 | labelled bins  |                        |

## Project close-out review

This section of the plan is completed prior to the project close-out review and discussed as part of the review meeting. The estimated quantities are drawn from the table in section 2 and reconciled against the actual quantities removed from site as detailed in BAM SMaRT / BAM Site app (delete as appropriate).

### Comparison of estimated and actual quantities

| Source and type of waste         | EW Code    | Estimated quantity of waste (tonnes) | Actual quantity of waste (tonnes) |
|----------------------------------|------------|--------------------------------------|-----------------------------------|
| <b>Excavation waste</b>          |            |                                      |                                   |
| Hazardous excavated material     | 17 05 03*  | 19800                                | 21554                             |
| Non-hazardous soil and stones    | 17 05 04   | 20700                                | 10902                             |
| Inert soil and stones            | 17 05 04   | 0                                    | 0                                 |
| <b>Construction (skip) waste</b> |            |                                      |                                   |
| Concrete                         | 17 01 01   |                                      | 0                                 |
| Mixed hardcore                   | 17 01 07   |                                      | 0                                 |
| Timber                           | 17 02 01   | 2                                    | 2                                 |
| Glass                            | 17 02 02   | 0                                    | 0                                 |
| Plastic                          | 17 02 03   | 0                                    | 0                                 |
| Mixed metals                     | 17 04 07   | 0                                    | 0                                 |
| Other mixed construction waste   | 17 09 04   | 300                                  | 200                               |
| Hazardous construction waste     | Various    | 0                                    | 0                                 |
| Mixed municipal waste            | 20 03 01   | 300                                  | 260                               |
| <b>Demolition waste</b>          |            |                                      |                                   |
| Concrete                         | 17 01 01   | 100                                  | 100                               |
| Bricks                           | 17 01 02   | 500                                  | 500                               |
| Mixed hardcore                   | 17 01 07   | 500                                  | 500                               |
| Timber                           | 17 02 01   | 0                                    | 0                                 |
| Glass                            | 17 02 02   | 0                                    | 0                                 |
| Plastic                          | 17 02 03   | 0                                    | 0                                 |
| Mixed metals                     | 17 04 07   | 500                                  | 300                               |
| Other mixed demolition waste     | 17 09 04   | 500                                  | 400                               |
|                                  | Totals     | 43202                                | 34718                             |
|                                  | Difference |                                      | -8484                             |

Delete / add waste streams as appropriate by double clicking on this table.

### Explanation of any deviation from the original plan

### Appendix 1 Roles and responsibilities

#### The Clients Representative will:

- Appoint a Principal Contractor
- Provide the Principal Contractor with details of all decisions taken before the site waste management plan was drafted on the nature of the project, its design, construction method or materials employed in order to minimise the quantity of waste produced on site
- Ensure a construction phase SWMP is produced

#### The agent for the Principal Contractor will:

- Ensure the SWMP for the construction phase is produced, and distributed to all staff and subcontractors
- Ensure that within three months of project completion:
  - that the plan has been monitored on a regular basis
  - section 5.1 is completed comparing estimated quantities with actual
  - section 5.2 is completed to explain any deviation from the plan
  - section 5.3 is completed to estimate the cost saving that have been achieved
- Keep a copy of the SWMP for a minimum of two years after project completion

#### The site waste co-ordinator / environmental engineer for the Principal Contractor will:

- Produce the construction phase SWMP prior to works starting on site
- Obtain from the client details of all decisions taken before the site waste management plan was drafted on the nature of the project, its design, construction method or materials employed in order to minimise the quantity of waste produced on site, for inclusion in the construction phase SWMP
- Keep a copy of the SWMP on site and display in suitable locations for information
- Review the plan monthly and update where necessary to accurately reflect progress
- Ensure the following waste data is recorded within BAM Site app when any waste is removed from site:
  - a description of the waste, including the 6 figure EWC code
  - the name of the company collecting the waste (waste carrier)
  - the site where the waste is being taken to (waste destination)
  - the quantity of the waste and whether it was.
  - reused on site
  - taken for reuse at an exempt or standard permit site
  - taken to a transfer station for segregation and onward recycling
  - taken to a dedicated recycling facility
  - sent to landfill (only if all other options have been discounted)
- Ensure details of recycling figures for the transfer stations used within the region are obtained and entered onto BAM Site app on a quarterly basis
- Ensure details of all waste carrier registration numbers, environmental permit numbers and exemption references for the carriers and disposal sites used within the region are verified in consultation with the Environmental Advisor and retained on site in accordance with the site documentation control procedure.

## Schedule C6 Refuelling procedure

- No refuelling to be undertaken in close proximity of surface waters, drains, open excavations, grips
- Only trained nominated personnel to carry out refuelling operations

### Prior to refuelling, ensure.

- You are in a safe position (i.e., no moving plant with free access to refuelling point)
- A suitable spill kit is available
- Check condition of hoses, nozzle for defects
- Deploy plant nappy at refuelling point

### During refuelling, ensure.

- Correct refuelling cap is removed (i.e., not a water tank)
- Funnels to be used at all times when refuelling containers
- Refuelling operations are supervised at all times
- Due care and attention are paid to prevent drips and spills
- Return fuel hose to its hook and that lids/caps are replaced on fuel containers/plant
- Fuel tanks are secured after use, and drums are stored upright in an area where they will not be knocked over or damaged

| Nominated refuellers |                   |                          |
|----------------------|-------------------|--------------------------|
| Name                 | Position          | Toolbox talk PP8 Briefed |
| Stephen Donaldson    | General Foreman   | Completed                |
| Michael Blakeledge   | Works Manager     | Completed                |
| Mark Case            | Ganger            | Completed                |
| Joe Quinlan          | General Operative | Completed                |
| Kieran Walters       | Ganger            | Completed                |
| Sam Philpot          | Machine Operator  | Completed                |

**Report all spills, leaking fuel lines, hoses or tanks to your supervisor**

## Section D Quality

### D1.0 Introduction

This quality plan is applicable to the process of undertaking the project works at Victoria North for the provision of services in accordance with the contract and specification as described in **Section A, Table 1.1** of this document.

It defines the managerial arrangements required to meet and exceed the requirements of the project and Manchester City Council. It is prepared as a result of the project start up review, by **the agent** taking account of particular project requirements.

This quality plan together with Section A documents the necessary information required to effectively manage project quality from project planning to project delivery. It makes use of subsidiary documents such as BAM Nuttall procedures, project specific procedures, activity plans, task instructions, risk assessments and records that are used to control the works.

This plan, together with section A of this project execution plan, activity plans and associated inspection and test plans meet the requirements of ISO 10005 *Quality management guidelines for quality plans*. A compliance schedule detailing relevant sections of this project execution plan in relation to ISO10005 is contained in Appendix 2.

### D2.0 Quality Plan

#### D2.1 Project quality requirements - *NP25: Technical and engineering delivery*

Delivery of the quality, technical and engineering requirements of the project is managed primarily by ensuring an understanding of these requirements, use of a team of suitable and competent personnel and the undertaking of adequate planning.

#### D2.2 Quality programme - *NP24: Activity plans*

The overall manner in which quality hazards are controlled is set out in the project quality programme of **Schedule D1**. This high-level plan defines the programmed task and identifies the documents to manage and demonstrate quality in relation to the specific activity. Sub-contract work is included within the quality programme.

This constitutes the development of activity plans from a quality perspective. Activity Plans are prepared. A list of activity plans for programmed activities for this project is referenced in schedule **D1 Quality programme**.

#### D2.3 Verification of requirements - *NP25: Technical and engineering delivery*

To verify that this planning is successful in controlling quality, the work is monitored closely and verified as it progresses. Verification is normally carried out by sampling, inspection and testing. Work which cannot be verified by final inspection or test (special processes) is controlled by monitoring that the work activity is undertaken in accordance with the agreed procedure.

These verification arrangements are set out in the inspection and test plans, or checklists prepared for the programmed activity. If BAM Nuttall is contractually responsible for certification of the works under a rigorous self-certifying system based on checklists for each item of work, this is indicated in the quality programme.

Inspection and test plans or checklists define the means of demonstrating that specified requirements are met. They list inspection/test procedures, frequency of testing, witness/approvals, responsibility for test and record requirements.

The extent to which checklists are prepared and completed for items of work is dependent on the risk of nonconformity. This risk is a function of the complexity of the work activity, the competence of the resources undertaking it and the consequences of failure. A list of inspection and test plans or checklists is contained in **schedule D2** to this plan.

### D3.0 Preservation of product

#### D3.1 Weather dependent work

Some work which is sensitive to temperature or moisture can only be carried out at certain times of the year unless additional controls such as protection from the elements are introduced. Activities which are weather dependent are listed in **Table D3.1** with details of the controls to be used if any.

**Table D3.1: Weather dependent work**

| Activity                     | Control measure                                                       |
|------------------------------|-----------------------------------------------------------------------|
| Concrete work                | Ensure batching plant has heated water facility<br>Use frost blankets |
| Blacktop                     | Comply with specification temperature limits                          |
| Structural steelwork welding | Provide protective shelter                                            |
| Earthworks                   | Limited in wet weather                                                |
| Lifting Operations           | Approved Lift plan, not to be carried out in high winds               |
| Tree felling                 | No works to be completed in high winds                                |

#### D3.2 Preservation of work

Some items of work are susceptible to damage from following activities unless protective measures are introduced. Work elements for which such measures will be taken are listed in **Table 3.2** together with outline details of the protection to be provided.

**Table D3.2: Preservation of work**

| Work element         | Protective measures                                                                                                                                                                                         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Earthworks           | Compacted or sealed to prevent saturation/excessive moisture loss/dust                                                                                                                                      |
| Drainage             | Ensure ample cover, use road plates where heavy vehicles will go over the pipes                                                                                                                             |
| Ducting              | Ensure ample cover, use plates/concrete capping where heavy vehicles will go                                                                                                                                |
| Highway construction | Restrict vehicle access whilst each layer is trimmed.<br>Block access when it is wet.<br>Leave the surface to cool/cure before driving on it.<br>No machines with metal tracks to use newly paved surfaces. |
| Hydroseeding         | Restrict access to seeded areas with barrier.<br>Inform the workforce of these areas in the briefings.                                                                                                      |
| Block paving         | No heavy vehicles over the blocks.<br>No muddy wheels over the blocks.                                                                                                                                      |

[illegible]

BAM Nuttall management system  
Management template MT19: Project Execution Plan  
Revision date: 27.04.22

## MT19: Project Execution Plan

### Schedule D1.2 Register of project procedures

| Reference     | Title                         | Author  | Rev | Review Date |
|---------------|-------------------------------|---------|-----|-------------|
| XXX.000. P001 | Document management procedure | J Blogs | 00  | Jan 2017    |
|               |                               |         |     |             |
|               |                               |         |     |             |

Use this sheet as part of the PEP to list project specific procedures

Alternatively, state here that this schedule will be maintained as part of the project document management system and updated from time to time as procedures are identified as being necessary.

### Schedule D1.3 Register of activity plans and inspection and test plans / checklists

## Activity Plans & Risk Assessments

[illegible]

## Appendix 1: Construction Design & Management Regulations 2015 (CDM) compliance schedule

| CDM Appendix 3 Reference |                                                                                                                                                                                                                                                                             | Relevant Section of the PEP |                              |                                                                                                                                                                    |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                          |                                                                                                                                                                                                                                                                             | Schedule                    | Section                      | Title                                                                                                                                                              |
| 5(a)                     | Description of the project                                                                                                                                                                                                                                                  |                             | A2.1                         | The project works                                                                                                                                                  |
|                          | Programme and key dates                                                                                                                                                                                                                                                     |                             | A4.4                         | Project programme                                                                                                                                                  |
|                          | Key members of the team<br>(Management structure and responsibility)                                                                                                                                                                                                        | A1                          | A2.5.1,<br>A2.5.3            | Organisation and responsibilities<br>Client and other stakeholder communication<br>The project works                                                               |
|                          | Extent and location of existing records and plans that are relevant to health and safety on site<br>(Pre-construction information)                                                                                                                                          |                             | A3.2                         | Inputs into the plan<br>Project design<br>Risk and opportunities                                                                                                   |
| 5(b)                     | The management of the work                                                                                                                                                                                                                                                  |                             |                              |                                                                                                                                                                    |
|                          | Health and safety aims for the project.                                                                                                                                                                                                                                     |                             | A2.4                         | Project objectives                                                                                                                                                 |
|                          | <b>Site rules (cover but not be limited to)</b><br>PPE<br>Parking<br>Use of radios, mobile phones<br>Smoking, restricted areas<br>Hot works<br>Emergency arrangements<br>(Brought to the attention of everybody on site) <i>Also translation of site rules if required.</i> | A5<br>A6                    | A5.6                         | Induction<br>Workforce engagement<br>Co-ordination of contractors<br>Drugs and alcohol<br>Incident and Emergency arrangements<br>PPE<br>Workplace transport        |
|                          | Arrangement to ensure co-operation between project team members and co-ordination of their work<br>(Site meetings)                                                                                                                                                          |                             | A5.1<br>A5.2<br>A5.3<br>A5.4 | Client communication<br>Workforce engagement<br>Management of sub-contractors<br>Co-ordination of contractors<br>Project review (meetings)<br>Project verification |
|                          | Arrangements for involving workers                                                                                                                                                                                                                                          |                             | A5.5                         | Workforce consultation<br>Project verification                                                                                                                     |
|                          | Site induction                                                                                                                                                                                                                                                              | A5                          | A5.6                         | Site induction                                                                                                                                                     |
|                          | Welfare facilities and first aid                                                                                                                                                                                                                                            | B1                          | B2.4                         | Welfare facilities<br>First aid                                                                                                                                    |
|                          | Fire and emergency procedures                                                                                                                                                                                                                                               | A6                          | B2.1                         | Fire safety<br>Incident and emergency arrangements                                                                                                                 |
|                          | Control of any specific site risks listed in schedule 3 where they are relevant to the work involved.                                                                                                                                                                       |                             |                              |                                                                                                                                                                    |
| 5(c)                     | Burial under earth-falls                                                                                                                                                                                                                                                    |                             | B4.5<br>B4.6<br>B4.7         | Excavations<br>Other significant risks                                                                                                                             |
|                          | Engulfment in swampland                                                                                                                                                                                                                                                     |                             | B4.6                         | Excavations<br>Other significant risks                                                                                                                             |
|                          | Falling from height                                                                                                                                                                                                                                                         |                             | B4.3                         | Work at height                                                                                                                                                     |
|                          | Chemical or biological substances, legal requirement for health monitoring                                                                                                                                                                                                  |                             | B3.6                         | Asbestos<br>Contaminated land<br>Hazardous substances                                                                                                              |
|                          |                                                                                                                                                                                                                                                                             |                             |                              |                                                                                                                                                                    |

| CDM Appendix 3 Reference |                                                                                                                                           | Relevant Section of the PEP |                |                                                                |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------|----------------------------------------------------------------|
|                          |                                                                                                                                           | Schedule                    | Section        | Title                                                          |
|                          |                                                                                                                                           |                             |                | Other significant risks<br>Health surveillance<br>UV radiation |
|                          | Work with ionising radiation<br>(Designation of controlled or supervised areas under regulation 16 of the Ionising Radiation Regulations) |                             | B4.15          | Ionising radiation                                             |
|                          | Work near high voltage lines                                                                                                              |                             | B4.1           | Overhead services                                              |
|                          | Control of any specific site risks listed in schedule 3 where they are relevant to the work involved.                                     |                             |                |                                                                |
| 5(c)                     | Work exposing workers to the risk of drowning                                                                                             |                             | B4.10          | Work over or near water                                        |
|                          | Work on wells, underground earthworks and tunnels                                                                                         |                             | B4.9<br>B4.9.1 | Confined spaces<br>Other significant risks                     |
|                          | Work carried out by divers having a system of air supply                                                                                  |                             | B4.11          | Other significant risks                                        |
|                          | Work carried out in caissons with a compressed air atmosphere                                                                             |                             | B4.9           | Other significant risks                                        |
|                          | Work involving the use of explosives                                                                                                      |                             | B4.16          | Explosives                                                     |
|                          | Work involving the assembly or dismantling of heavy prefabricated components                                                              |                             | B4.14          | Other significant risks                                        |
|                          |                                                                                                                                           |                             |                |                                                                |

## Appendix 2: BS ISO 10005 compliance schedule

| BS ISO 10005:2018 reference |                                                               | Relevant section of project execution plan |                                                                                                                                                        |
|-----------------------------|---------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.2                         | Scope of the quality plan                                     | A1<br>A2.1                                 | Introduction<br>The project works                                                                                                                      |
| 6.3                         | Quality plan inputs                                           | A1.1.3                                     | Inputs to the plan                                                                                                                                     |
| 6.4                         | Quality objectives                                            | A2.4                                       | Project objectives and targets                                                                                                                         |
| 6.5                         | Quality plan responsibilities                                 | A1.1<br>A2.5<br>A5<br>A6.2<br>Schd A1      | Project execution plan administration<br>Management arrangements<br>Communication<br>Audits<br>Organisation chart                                      |
| 6.6                         | Control of documented information                             | A5.7                                       | Project documented information                                                                                                                         |
| 6.7                         | Resources                                                     | A4.3                                       | Project planning                                                                                                                                       |
| 6.7.1                       | Provision of resources                                        | A4.3                                       | Project planning                                                                                                                                       |
| 6.7.2                       | Materials, products and services                              | A2.6.1                                     | Procurement of goods and services for the project                                                                                                      |
| 6.7.3                       | People                                                        | A2.5.1<br>A2.5.2                           | Project organisation<br>Personnel selection                                                                                                            |
| 6.7.4                       | Infrastructure and environment for the operation of processes | A3.3<br><br>D3.0                           | Health, safety, quality and environmental risk - construction phase<br>Preservation of work                                                            |
| 6.7.5                       | Monitoring and measuring resources                            | A2.5.1<br>A2.5.2<br>D2.3                   | Project organisation<br>Personnel selection<br>Verification of requirements                                                                            |
| 6.8                         | Customers and other interested parties' communication         | A2.1<br>A5                                 | The project works<br>Communication                                                                                                                     |
| 6.9                         | Design and development                                        | A4                                         | Project design, planning and programming                                                                                                               |
| 6.9.1                       | Design and development process                                | A4.1                                       | Project design                                                                                                                                         |
| 6.9.2                       | Control of design and development changes                     | A4.1                                       | Project design                                                                                                                                         |
| 6.10                        | Externally provided processes, products and services          | A2.6                                       | Supply chain management                                                                                                                                |
| 6.11                        | Production and service provision                              | D2.1                                       | Project quality requirements                                                                                                                           |
| 6.12                        | Identification and traceability                               | A2.7                                       | Product traceability                                                                                                                                   |
| 6.13                        | Property belonging to customers or external providers         | A2.6.1<br><br>A2.7<br>A6.1.1<br>D2.3       | Procurement of goods and services for the project<br>Product traceability<br>Quality non-conformity<br>Verification of requirements                    |
| 6.14                        | Preservation of outputs                                       | D3                                         | Preservation of work                                                                                                                                   |
| 6.15                        | Control of nonconforming outputs                              | A6.1.1                                     | Quality non-conformity                                                                                                                                 |
| 6.16                        | Monitoring and measurement                                    | D2.3                                       | Verification of requirements                                                                                                                           |
| 6.17                        | Audits                                                        | A6.2                                       | Audit and inspection                                                                                                                                   |
| 7.1                         | Review and acceptance of the quality plan                     | A1.1<br>A2.5                               | Project execution plan administration<br>Management arrangements                                                                                       |
| 7.2                         | Implementation and monitoring of the quality plan             | A1.1<br>A2.5.2<br><br>A6.2<br>A6.3<br>D2.2 | Project execution plan administration<br>Personnel selection (competence, knowledge, awareness)<br>Audit and inspection<br>Review<br>Quality programme |
| 7.3                         | Revision of the quality plan                                  | A1.1                                       | Project execution plan administration                                                                                                                  |
| 7.4                         | Feedback and improvement                                      | A6.3<br>A6.4                               | Review<br>Improvement                                                                                                                                  |

### Appendix 3: Compliance Matrix for NR/L2/ENV/015 Contract Requirements Environment (Mandatory Requirements)

| Network Rail: NR/L2/ENV/015 |                                                       | BAM Nuttall Compliance             |
|-----------------------------|-------------------------------------------------------|------------------------------------|
| Clause Ref:                 | Title                                                 | PEP Section                        |
| 7.1                         | Requirement and consents                              | C6.4<br>Schedule C3.4              |
| 7.2                         | Objectives and targets                                | A2.4                               |
| 7.3                         | Roles and Responsibilities                            | A2.5.3                             |
| 7.4                         | Competence, training and awareness                    | A2.5.2                             |
| 7.4.1                       | Internal Communication                                | A5                                 |
| 7.5                         | External Communication & Managing lineside Neighbours | A5.1<br>A5.4<br>Schedule A3        |
| 7.6                         | Records and Documentation                             | A5.7                               |
| 9.1                         | General Environmental Management (Works Contract)     | C6<br>Schedule C1<br>Schedule C2   |
| 9.2                         | Air Quality (Works Contract)                          | C7.5<br>Schedule C1                |
| 9.3                         | Archaeology and Culture Heritage (Works Contract)     | C7.7<br>Schedule C1<br>Schedule C2 |
| 9.4                         | Contaminated Land (Works Contract)                    | C7.4<br>Schedule C4                |
| 9.5                         | Ecology (Work Contract)                               | C7.6<br>Schedule C1<br>Schedule C2 |
| 9.6                         | Energy (Works Contract)                               | C7.8                               |
| 9.7                         | Herbicide and Pesticides Application (Work Contract)  | C7.1.1                             |
| 9.8                         | Landscape (Works Contract)                            | C7.10                              |
| 9.9                         | Lighting (Works Contract)                             | C7.5<br>Schedule C1<br>Schedule C2 |
| 9.10                        | Materials (Works Contract)                            | C7.9                               |
| 9.11                        | Noise and Vibration (Works Contract)                  | C7.5<br>Schedule C1<br>Schedule C2 |
| 9.12                        | Public Highways (Works Contract)                      | C6.1<br>Schedule C1<br>Schedule C2 |

| Network Rail: NR/L2/ENV/015 |                                         | BAM Nuttall Compliance             |
|-----------------------------|-----------------------------------------|------------------------------------|
| Clause Ref:                 | Title                                   | PEP Section                        |
| 9.13                        | Waste (Works Contract)                  | C7.3<br>Schedule C5                |
| 9.14                        | Water (Works Contract)                  | C7.1<br>Schedule C1<br>Schedule C2 |
| 11.1                        | Incident Response Plan (Works Contract) | A5.6<br>Schedule A6                |
| 11.2                        | Incident Reporting (Works Contract)     | A5.6<br>Schedule A6<br>Schedule C6 |
| 11.3                        | Incident Investigation (Works Contract) | A6.1.3                             |

#### Appendix 4: Compliance Matrix for NR/L3/INI/CP0028 Issue 3 Contract Requirements Quality (Mandatory Requirements)

| Network Rail: NR/L3/INI/CP0028 |                                                   | BAM Nuttall Compliance                                       |
|--------------------------------|---------------------------------------------------|--------------------------------------------------------------|
| Clause Ref:                    | Clause & Title of requirement                     | PEP Section                                                  |
| 6.1                            | Scope                                             | A2.1                                                         |
| 6.2                            | Quality Objectives                                | A2.4<br>A2.6<br>A4.1                                         |
| 6.3                            | Management Responsibilities                       | A2.5.<br>Schedule A1                                         |
| 6.3.1                          | Project Team Roles & Responsibilities for Quality | A2.5.3<br>A6.2<br>A6.3<br>Schedule A1<br>Schedule A4<br>D2.1 |
| 6.3.2                          | Contractor's Quality Representative               | A2.5.3<br>Schedule A1                                        |
| 6.3.3                          | Authorised Signatories                            | A2.5.3                                                       |
| 6.4                            | Documentation                                     | A5.7                                                         |
| 6.4.1                          | Internal and External Standards                   | A5.7<br>Sectional rail standards                             |
| 6.4.2                          | Document Control                                  | A5.7                                                         |
| 7.1                            | Quality Reports                                   | D2.1                                                         |
| 7.2                            | Records                                           | A5.7                                                         |
| 7.3                            | Resources                                         | A2.4                                                         |
| 7.3.1                          | Human Resources                                   | A2.4                                                         |
| 7.3.2                          | Infrastructure & Work Environment                 | D2.1                                                         |
| 7.4                            | Customer Specifications                           | A1.1.3                                                       |
| 7.4.1                          | Process Potential Studies                         | A6.1<br>A6.2                                                 |
| 7.4.2                          | Process Control Plans                             | D2.2                                                         |
| 7.5                            | Customer Communication                            | A5.1                                                         |
| 7.6                            | Design & Development                              | A4.1                                                         |
| 7.6.1                          | Design & Development Verification                 | A4.1                                                         |

| Network Rail: NR/L3/INI/CP0028 |                                             | BAM Nuttall Compliance |
|--------------------------------|---------------------------------------------|------------------------|
| Clause Ref:                    | Clause & Title of requirement               | PEP Section            |
| 7.6.2                          | Design & Development Validation             | A4.1.1                 |
| 7.7                            | Change Management                           | A5.7.2                 |
| 7.8                            | Storage & Handling                          | A2.6<br>D3             |
| 7.8.1                          | Identification & Traceability               | D2.3                   |
| 7.8.2                          | Customer Supplied Product                   | A2.6.1                 |
| 7.9                            | Monitoring & Measurement                    | A6<br>D2.3             |
| 7.9.1                          | Statistical Process Control                 | A6<br>A6.4             |
| 7.9.2                          | Initial Sample Submission                   | A2.6                   |
| 7.9.3                          | Failure Mode and Effects Analysis           | A3.1<br>A4.3           |
| 7.10                           | Control of Monitoring & Measuring Equipment | A2.7                   |
| 7.11                           | Inspection and Test Plans                   | D2.3                   |
| 7.12                           | Audit                                       | A6.2                   |
| 7.13                           | Non-conformance Management                  | A6.1.1                 |

### Appendix 5: Work Package Planning Process

Work Package Plan/s will be submitted to Network rail to cover permanent and temporary works as agreed with Network Rail's Designated Project Engineer

1. De-veg requiring on track possession and isolation
2. TBC
3. TBC

## Appendix 6: Compliance Matrix for NR/L2/OHS/0044/F01 Construction Phase Plan

| Network Rail NR/L2/OHS/0044/F01 |                                                   | BAM Nuttall Compliance (Section) |
|---------------------------------|---------------------------------------------------|----------------------------------|
| 1                               | Introduction                                      | A1                               |
| 1.1                             | Purpose of the construction phase plan            | A1                               |
| <b>2</b>                        | <b>Planning for the construction phase</b>        | A4.3                             |
| 2.1                             | Project specific health and safety goals          | A2.4                             |
| 2.2                             | Project description and programme details         | A2.1                             |
| 2.3                             | Services and isolation points                     | B4.1.1                           |
| 2.4                             | Access restrictions                               | A4.5<br>Schedule A8              |
| 2.5                             | Asbestos                                          | B3.4<br>B4.17                    |
| 2.6                             | Any line open operations                          | B4.18                            |
| 2.7                             | Temporary works                                   | B4.2                             |
| 2.8                             | Construction phase plan review                    | A6.3.1                           |
| <b>3</b>                        | <b>Working together</b>                           | A2.5.1<br>A6.3.1<br>Schedule A1  |
| 3.1                             | Changes to key personnel                          | A2.5.2<br>A6.3.1<br>Schedule A4  |
| 3.2                             | CDM appointments                                  | A2.5.2<br>A6.3.1<br>Schedule A4  |
| 3.3                             | Network Rail project organisation                 | A2.5.1<br>A5.1<br>Schedule A1    |
| 3.4                             | Principal Contractor's delivery organisation      | A2.5.1<br>A2.5.2                 |
| 3.5                             | Communication during the construction phase       | A5                               |
| 3.6                             | Exchange of design information                    | A2.1<br>A5.2                     |
| 3.7                             | Changes to design                                 | A4.1<br>A5.7.2                   |
| <b>4</b>                        | <b>Hazard management</b>                          | A3.2                             |
| 4.1                             | Work involving particular risks                   | A3.2<br>A3.3                     |
| 4.2                             | Significant construction health and safety risks  | A3.2<br>A3.3                     |
| <b>5</b>                        | <b>Organise</b>                                   | D3.2                             |
| 5.1                             | Brief outline of work methodology                 | D3.2                             |
| 5.2                             | Management of work package plans                  | D3.2                             |
| 5.3                             | Schedule for the production of work package plans | A4.4<br>D2.3<br>Schedule D2      |
| 5.4                             | Site emergency arrangements                       | A3.4                             |
| 5.4.1                           | First aid arrangements                            | B2.2                             |
| 5.4.2                           | Evacuation procedure                              | A3.4<br>Schedule A6              |
| 5.4.3                           | Fire safety                                       | B2.1                             |
| 5.4.4                           | Security                                          | A2.3                             |
| 5.4.5                           | Summoning emergency services                      | A3.4<br>Schedule A6              |

| Network Rail NR/L2/OHS/0044/F01 |                                                        | BAM Nuttall Compliance (Section) |
|---------------------------------|--------------------------------------------------------|----------------------------------|
| 5.4.6                           | Railway emergency (trains and electrical)              | A2.1<br>Schedule A6              |
| 5.4.7                           | Asbestos                                               | B3.4<br>B4.1                     |
| 5.4.8                           | Utilities                                              | B2.3<br>B4.1                     |
| 5.4.9                           | Other emergency arrangements                           | A3.4<br>Schedule A6              |
| 5.5                             | Safety and environmental event reporting and recording | A6.2.2                           |
| 5.6                             | Site Specific Rules                                    | A5.6<br>Schedule A5              |
| 5.7                             | Induction                                              | A5.6<br>Schedule A5              |
| 5.8                             | Welfare                                                | B2.4<br>Schedule B1              |
| 5.9                             | Monitoring arrangements                                | A6.2                             |
| 5.10                            | Management reporting arrangements                      | A6.1.2                           |
| <b>6</b>                        | <b>Health and safety file</b>                          | A5.7.1.1                         |
| 6.1                             | H&S File                                               | A5.7.1.1                         |
| Appendices                      | Supporting information                                 | Connect<br>Documents manual      |

### Appendix 7: BIM execution plan

Located here:

[VNIF-BNL-ZZ-YYY-SP-W-0001](#)

## Appendix 8: Air Quality Plan – Extract for CI 12.137

### Additional Mitigation / Enhancement Measures (Application 4)

#### Demolition and Construction

- 12.137 Based on the assessment results, mitigation will be required. Recommended mitigation measures appropriate to the identified levels of risk are summarised below and should be implemented by the appointed contractor as part of a Construction Environmental Management Plan (CEMP) or similar, which it is likely will be secured by planning condition.

#### General Communication

- A stakeholder communications plan that includes community engagement before work commences on site should be developed and implemented.
- The name and contact details of person(s) accountable for air quality and dust issues should be displayed on the site boundary. This may be the environment manager/engineer or the site manager. The head or regional office contact information should also be displayed.

#### General Dust Management

- A Dust Management Plan (DMP) or CEMP, which may include measures to control other emissions, in addition to the dust and PM<sub>10</sub> mitigation measures given in this report, should be developed and implemented, and approved by the Local Authority.

#### Site Management

- All dust and air quality complaints should be recorded, and causes identified. Appropriate remedial action should be taken in a timely manner with a record kept of actions taken including of any additional measures put in-place to avoid reoccurrence.
- The complaints log should be made available to the local authority on request.
- Any exceptional incidents that cause dust and/or air emissions, either on- or offsite should be recorded, and then the action taken to resolve the situation recorded in the log-book.
- Regular liaison meetings with other high risk construction sites within 500m of the site boundary should be held, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport/ deliveries which might be using the same strategic road network routes.

#### Monitoring

- Daily on-site and off-site visual inspections should be undertaken, where receptors (including roads) are nearby, to monitor dust. The inspection results should be recorded and made available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and windowsills within 100m of site boundary, with cleaning to be provided if necessary.

- It is recommended that at least one visual inspection be undertaken per day. However, the frequency of site inspections should be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- The need or otherwise for site specific monitoring (e.g. dust deposition, dust flux, or real-time PM<sub>10</sub> continuous monitoring) should be discussed and agreed with the Local Authority. If required, baseline monitoring may also need to be undertaken up to three months before work commences on site.

### Preparing and maintaining the site

- Plan the site layout so that machinery and dust causing activities are located away from receptors, as far as is practicable.
- Where practicable, erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.
- Where practicable, fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.
- Avoid site runoff of water or mud.
- Keep site fencing, barriers and scaffolding clean using wet methods.
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover appropriately.
- Where practicable, cover, seed or fence stockpiles to prevent wind whipping.

### Operations

- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
- Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
- Use enclosed chutes and conveyors and covered skips.
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
- Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

### Waste management

- Avoid bonfires and burning of waste materials.

### Measures Specific to Demolition

- Where possible, soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).
- Ensure effective water suppression is used during demolition operations. Hand-held sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition, high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground.
- Avoid explosive blasting, using appropriate manual or mechanical alternatives.
- Bag and remove any biological debris or damp down such material before demolition.

### Measures Specific to Earthworks

- Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.
  - Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable.
  - Where practicable, only remove the cover in small areas during work and not all at once.
  - Stockpile surface areas should be minimised (subject to health and safety and visual constraints regarding slope gradients and visual intrusion) to reduce area of surfaces exposed to wind pick-up.
  - Where practicable, windbreak netting/screening should be positioned around material stockpiles and vehicle loading/unloading areas, as well as exposed excavation and material handling operations, to provide a physical barrier between the Application Site and the surroundings.
  - Where practicable, stockpiles of soils and materials should be located as far as possible from sensitive properties, taking account of the prevailing wind direction.
  - During dry or windy weather, material stockpiles and exposed surfaces should be dampened down using a water spray to minimise the potential for wind pick-up.
- Measures Specific to Construction
- Avoid scabbling (roughening of concrete surfaces) if possible.
  - Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
  - Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.
  - For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.

- All construction plant and equipment should be maintained in good working order and not left running when not in use.

### Measures Specific to Trackout

- Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being in frequent use.
- Avoid dry sweeping of large areas.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
- Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable. Record all inspections of haul routes and any subsequent action in a site log book.
- Where practicable, hard surfaced haul routes should be installed, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.
- Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).
- Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.
- Access gates to be located at least 10m from receptors where possible.

### Operating vehicle/machinery, construction traffic and sustainable travel

- Ensure all vehicle operators switch off engines when stationary - no idling vehicles.
- Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.
- A maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas should be imposed (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).
- Identified routes for construction traffic should be agreed with the local authority prior to the commencement of works to reduce the likelihood of construction vehicles passing along sensitive roads.
- A Construction Traffic Management Plan (CTMP) and/or a Construction Logistics Plan (CLP) will be produced to manage construction traffic and the sustainable delivery of goods and materials.
- In addition, an Employee Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing) should be developed and implemented.
- Timing of large-scale vehicle movements to avoid peak hours on the local road network would also be beneficial.