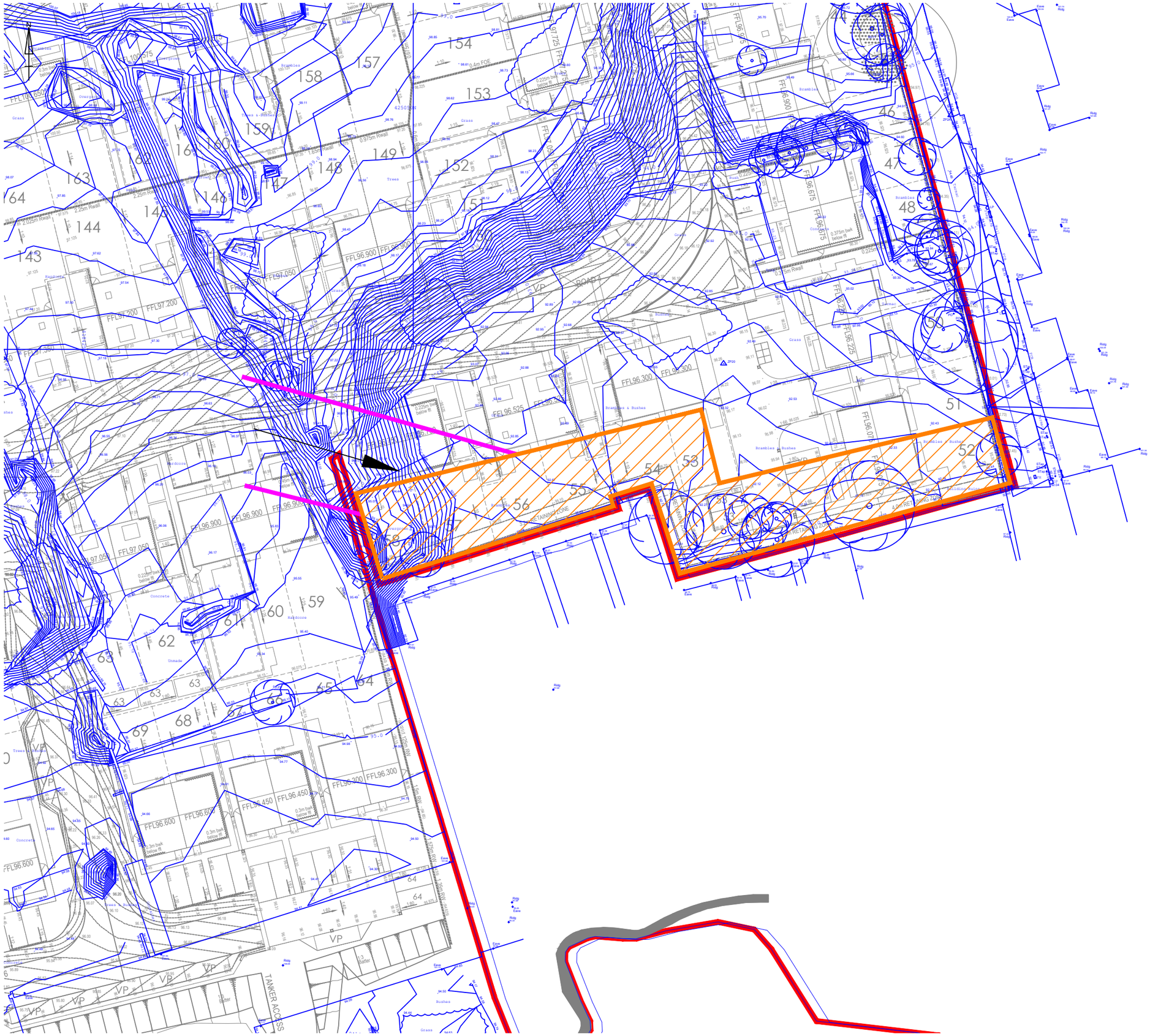
INDEX PAGE

***Click on the above links to navigate to the required section**



NOTES

- Site Boundary
- Access Ramp
- Working Platform

REVISION		BY	DATE
0	DRAFT	MF	27/03/25
A	>>	>>	>>
B	>>	>>	>>
C	>>	>>	>>
D	>>	>>	>>

SIRIUS
REMEDIATION LTD
4245 Park Approach,
Thorpe Park,
Leeds
LS15 8GB
www.thesiriusgroup.com
TEL: 0113 264 9960
FAX: 0113 264 9962

CLIENT

Strata Homes

SITE

**Westgate,
Cleckheaton**

DRAWING TITLE

**CMC Access Ramp and
Working Platform - DRAFT**

DRAWING NO.	REVISION NO.
SR3975/AR&WP/001	0

DRAWN BY	APPROVED BY
MF	MB

DATE	SCALE	PAPER SIZE
March 2025	1:500	A3

METHOD STATEMENT

Contract / Enquiry Name	Cleckheaton
Contract / Enquiry No.	241261-01
Method Statement for	Rigid Inclusions

Method Statement No.	Revision No	Revision Description

Initial	Name	Position	Date	Signature
Prepared by	Phil Hall	Operations Manager	31.03.25	
Reviewed by				
Client Acknowledgement by				

Distribution	
Copy No	Title
1	Sirius
2	
3	
4	
5	
6	

By signing this method statement, I confirm that I have been briefed on its contents and understand my personal responsibilities to work in accordance with the Method Statement/Risk Assessments

Print Name	Signature	Title

Method Statement Contents

1. Scope of Works

Approximately 338no, 320mm diameter Rigid Inclusions are to be installed beneath the proposed 234m retaining wall (see location below). C16/20 Concrete will be used for all Rigid inclusion positions. A Full working procedure on the installation of the rigid inclusions can be found in Appendix C of this Document.

The plant and equipment to be used will arrive on a low loader, hiab and flatbed trailer. Lift plans will be in place prior to mobilizing to site. The Van Elle site team will agree on and establish a laydown area prior to works commencing.
The concrete agitator, pump, compressor, storage container and jet wash bowser will be placed accordingly to allow access and completion of as many rigid inclusion positions as possible. A supply of water to the laydown area must be provided by The Main Contractor.

Figure 1 – Rigid Inclusion Treatment area

The working platform for the piles beneath the retaining wall must be the width of the rig plus a minimum of 4m either side. This would be approximately 11m.

Before works commence; an attendant excavator will be needed to set up the augers of the piling rig. A site-specific lift plan will be in place for the rigging and de-rigging of the augers using the attendant excavator.

The attendant driver of the excavator must sign onto the RAMS and complete the excavator driver checklist.

3no plate load test is to be carried out across a selection of the rigid inclusion positions.
1 set of 4no concrete cubes will be taken per working day and tested at 7, 28, 28 and 56 days.

Setting out of the rigid inclusion positions will be carried out by The Main Contractor, the setting out may be carried out in passes which will identified on sequence drawings/position layout drawings.

The project will be carried out in 1 visit, start date is currently awaiting confirmation. The full duration of the project will be approximately 2 weeks. Site hours will be 0730 – 1730.

2. Site Location, Access, and Boundaries

Site boundaries are to be maintained by the Main Contractor with suitable fencing to prevent unauthorised access / egress.

The rig will access the site via the designated site entrance. The rig is to be offloaded on the piling platform or an agreed area with suitable hardstand.

All operatives will access site through the main gate and the Main Contractor induction will be held in the site office. The rig, pump and all other auxiliary plant will access the site through the site entrance and be offloaded in accordance with the relevant procedure (found in Appendix C of this Document).

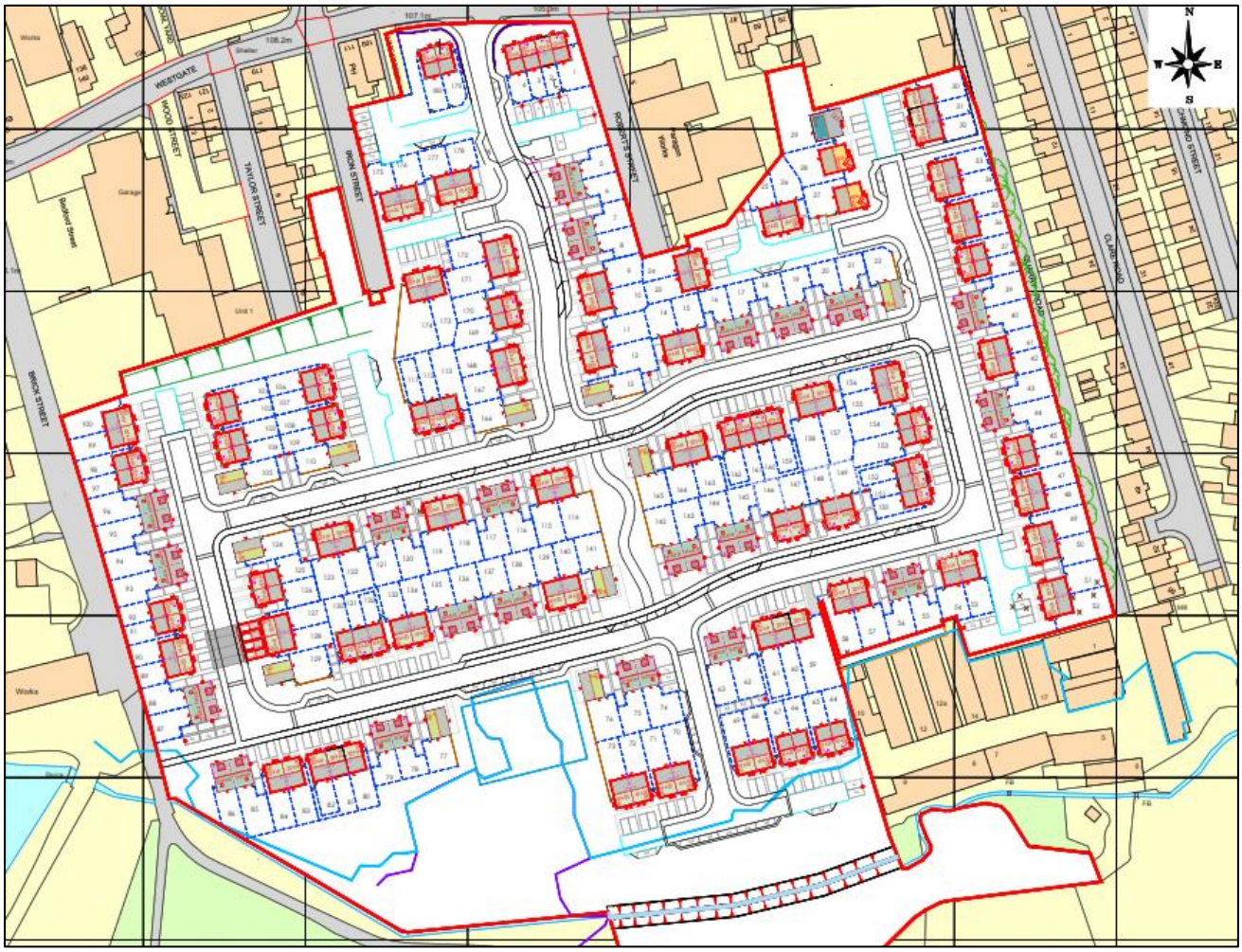


Figure 2 - Site Location Plan

3. Pre-commencement Requirements

3.1 Existing Services

The proposed piling area must be CAT scanned by Main Contractor/Others prior to works commencing, to ensure it is free of services.

Any services that are within a 5m proximity of the nearest column position must be exposed/sprayed/ clearly marked out.

3.2 Working Platform Requirements

The Main Contractor will provide the VE crew with a firm and level hard standing and free draining working platform as specified, based upon the BRE load cases provided by VEL for the rig to be used.

As stated within the FPS Working Platform Certificate (WPC4D) guidance, attention needs to be given to the edges of working platforms: determine how near the edge of the platform plant can be permitted while avoiding instability. A minimum distance of 2 meters is recommended. Clear marking of the working area is essential.

Sites where there have been cut and fill operations, or where plant is required to operate near slopes or batters will need to be checked for slope stability with the additional loading of the plant in place. Sloping sites present particular problems for stability, which should be addressed in the design. – In general terms the rig will be able to access level changes based on the following gradients: -

- Rig in transported mode – Mast down 1 in 6
- Rig in all operational modes - Mast Up – 1 in 10

If the rig is operational (installing Rigid Inclusions) the working platform gradient will be specific to machine type and manufacture guidance.

The working platform will be maintained throughout the duration of the piling works. If obstructions are removed the mat must be properly reinstated in accordance with the original piling mat design.

The working platform, including ramps and accesses, is to be used only by plant for which it has been designed.

The Main contractor must provide visual demarcation to advise of the extent of the Certified Working Platform. This must also be accompanied by a copy of the Rigid Inclusion layout drawing denoting the certified area of platform. This is to be appended to the current signed Working Platform Certificate.

The working platform certificate must be signed before the commencement of any works on site. The Working Platform inspection register must be completed on a weekly basis and following any change or maintenance to the platform.

Any parts of the piling mat deemed unacceptable by the VE Foreman or Site Manager must be rectified straight away.

- The working platform level must be provided before any piling commences.
- The working Platform Certificate must be signed and issued by the Main contactor prior to raising the mast of the rig.

3.3 Setting Out of Rigid Inclusion Positions

The Main contractor will carry out the works using setting out using the most up to date construction issue drawings of the rigid inclusion layout detail. This is to be provided by the Main Contractor. A pin and mushroom cap must be used for specific rigid inclusion positions.

4. Resources

4.1 Materials

Item	Quantity
Concrete	As Required
Diesel	As Required

4.2 Plant

The following equipment items are envisaged to be used for piling operations: -

Item	Quantity
Piling Rig	1
Compressor	1
Excavator and Driver (Client attendant)	1
MEWP	1
Concrete Pump	1
Concrete Agitator	1
Jet wash bowser	1
Fuel Bowser	1
Concrete Wagons	As required
Plant and Equipment delivery vehicles	As required

All plant and equipment will be certified and maintained to PUWER 98 and where applicable, LOLER 98
All lifting equipment will be certified and maintained to LOLER 98.

4.3 Labour and Staff Contacts: -

The following manpower is envisaged to be used for piling operations:

Site Personnel	Competence
VEL Works Superintendent (Visiting)	SMSTS
Supervisor	SMSTS / SSSTS
Rig Operator	CPCS/NPORS rig operator bored Above 20tonnes
Frontman	CPCS / NPORS Slinger / Signaller CPCS / NPORS Rig Attendant.
Pumpman	CPCS / NPORS Concrete Pump.

The following Staff contacts are available for all other enquiries:

Office Contacts	Name	Contact Phone Number
Contracts Manager	Mustafa Elgalal	07864 606835
Operations Manager	Phil Hall	07704 311517
Safety Manager	Jim Davies	07834 800550

5. Methodology

All tasks involved with the Rigid Inclusion installation process will be carried out in accordance with VE working procedures.

Rigid Inclusion Installation

Installation of the rigid inclusions will be carried out in accordance with the VE working procedure for installation rigid inclusions.

Leaving site

The work area shall be left in a clean & tidy manner. The Foreman will make sure that the rig is configured for transport in accordance with the manufacturer's instructions, making sure all securing bolts & pins are correctly fitted and that the rig is safe to transport. All excessive spoil must be cleaned off the rig tracks.

Testing

Test will be set up as per Van Elle testing procedure unless otherwise specified in Clients/Main Contractor's specification.

Augers will be added / removed by either:

Mechanical lifting with attendant excavator.

- Augers are lifted with a single leg drop chain secured to the lifting point on the attendant excavator. All excavator movements will be supervised by the Piling Operative.
- The area around the front of the rig shall be clear of all personnel prior to lifting augers.
- Excavators must not move when the operative is in front of the rig or within the danger zone of the excavator.

Lifting with auxiliary winch

- Sections of auger shall be positioned close to the front of the rig to allow as vertical lift as possible and to prevent pendulum effect. A 6metre chain shall be used to allow the auxiliary winch to be uncoupled, without the need for work at height.
- Operatives must stand clear as the sections are lifted before moving in to guide the section onto the previous auger. Hands will be kept clear of the base of the auger to prevent trapping of hands

MEWP Operations

MEWPs will be operated by a competent operative wearing a work restraint harness. Plant movements will be controlled by the Rig Attendant. The excavator will lift sections of auger & remain stationary. Excavators will not move whilst cherry pickers are adjacent to the rig. An operative will be at ground level to operate the ground controls in the event of an emergency.

Concreting

Refer to VE Work Instruction for concrete pumping.

The concrete plant will be set up on a suitable platform, if a agitator is being used;

- Without a ramp using a drum fitted with change-over valves.

Concrete hoses will be positioned or buried to prevent damage from site vehicles. All sections will be coupled and secured with clamps & split pins. Additionally, whip-checks can be used on hose joints that are off ground.

Hoses will be moved around site using a short leg chain or strop on the excavator lift point. Hoses will not be lifted in excavator buckets.

The concrete wagon will be directed to the concrete plant under supervision of the Rig Attendant or Pump man. A suitable washout area agreed/provided by the main contractor (prior to starting works) will be used by concrete delivery wagons to prevent ground contamination.

Cleaning out hoses & clearing blockages

The cleaning out of hoses & clearing blockages will be carried out in accordance with the Working procedure for Pumping Concrete.

Lifting Operation

Lift plans will be in place prior to any lifts being carried out. These lifts shall be carried by competent and certified persons only. All LOLER certification will be in place and all equipment will be checked and recorded in accordance with procedures. Pre-use checks will be carried out daily and recorded as per procedure on a Van Elle SET09 document.

No persons are to stand under any loads during lifting operations.

Security

Foreman will make sure that adequate measures are taken to prevent the theft or unauthorised use of equipment/materials. This will include locking away all tools in the van or lock up, removing keys from plant & equipment where fitted, when not in use and left unattended & using cab guards if fitted.

Mobilisation to and from site

Mobilisation will be carried out in accordance with the VE mobilisation and set up procedure.

On site fabrication of augers etc

Note: - Client Hot Works Permit must be issued prior to any fabrication works commence.

On site fabrication of augers etc shall be carried out in a separate area free from combustible materials.

The area shall be surrounded by screens to protect others from arc-eye etc.

Gas cylinders shall be stored securely upright to prevent damage/accidentally being knocked over.

The fabricator shall wear the correct PPE: full face shield, long sleeve flame retardant overalls, leather gauntlets, safety boots and respiratory protection when required.

At least 1 no. 2kg extinguisher in proper working order must be kept in the immediate area of the work and used immediately smoke or smouldering or flames are detected.

The work area must be inspected approximately 60 minutes after the completion of work and immediate steps taken to extinguish any smouldering or flames.

6. Piling Restriction Zones

All piling operatives will follow the designated pedestrian footpaths to the perimeter of the piled structures or piling mat.
A Banksman/Traffic Marshall must be in attendance with the rig driver when operating or moving the rig.
Throughout the piling process, a minimum 10m exclusion zone around the rig will be safeguarded by physical barrier or policed by the Banksman to prevent access by other contractors. The piling area shall be dedicated to piling personnel; with other contractors excluded without permission to enter.
Signs will be posted on crowd barriers stated, "**PILING IN PROGRESS – KEEP OUT**".
As concrete is pumped into the pile position all personnel will maintain 5 metres clearance around the front of the rig to prevent injury from falling spoil being cleared by the auger cleaner. The rig driver is responsible for making sure that no spoil that could cause injury rides up the auger beyond the auger cleaner. A 5m exclusion zone for all non-piling related staff should be in place around the full length of the concrete hose. No one should be stood over, or step over a hose during pumping. Daily Plant Inspections for all moving plant to be carried out.
Banksman to maintain clear sight and be responsible of all moving plant within working area. If path of site is broken/obstructed, all works to stop immediately.
UNDER ANY CIRCUMSTANCES ARE UNAUTHORISED PERSSONEL ARE TO ENTER VE WORKING AREA. IF ANY UNAUTHORISED PERSSONEL ENTER, ALL WORKS TO STOP AND DOWN TOOLS IMMEDIATLEY.
The 'Piling Restricted Zone' requirements are detailed in 'Appendix B' of this document.

7. Description of the Works

7.1 General

Rigid Inclusions will be constructed with a diesel-powered track mounted Piling Rig.

- Workmanship will be consistent throughout the duration of the piling works.
- All VE crew and subcontractors will be focused on their work throughout the working day
- It is important that all VE staff take the breaks that they are entitled to throughout the day.
- The quality of work will be to a consistent high standard and this standard will not drop at any time i.e. end of shift / week / last day before holiday period etc.
- All staff will be deemed competent to carry out the task in hand.

7.2 Working Hours

Working hours will be as follows:
Monday to Friday: 0730 – 1730. Weekend working or work outside of these hours to be agreed with Main Contractor

7.3 Lighting

Task lighting as fitted to plant will be provided and maintained by VEL. General/safety lighting for the access and working area will be provided by the Main Contractor if necessary.

7.4 Rigging and De-rigging

The rigging and de-rigging process will take place in a designated area and be carried out by a trained and competent person.

7.5 Rigid Inclusion Installation Sequence

The installation sequence will be generally as per agreed with the Main Contractor during the pre-start phase.

7.6 Party Wall

The Main Contractor is responsible to have in place a procedure and protection piling works adjacent to party walls, adjacent structures, and site boundaries.

7.7 As-Built Drawing

The VE As-Built drawing will be included as part of the site file documentation. The As Built will also be submitted to the Client and the appointed Engineer for review and approval prior to site commencement.

8. Programme

The work will proceed generally in accordance with a programme and sequence agreed between the Main Contractor and VEL programme, as advised in the Tender Summary letter.

9. Health and Safety

9.1 The main risk associated with the piling operations are as follows: -

- Failure of piling rig.
- Items falling from height.
- Failure of piling platform.
- Open bores.
- Collision and crushing by piling equipment.

To overcome these potential risks, the following safety processes will be implemented to ensure a safe method of working.

9.2 Induction

All VEL personnel will attend the main contractor project induction prior to any works commencing.
All hazards and requirements particular to the project, along with details of the project first aider, fire wardens and nearest A&E facility will be briefed to the VEL workforce during this process.

9.3 Equipment Inspections

The nominated Site Supervisor shall complete checklists and working documents, which shall be checked by the Piling Project Manager for their completeness and accuracy. These are: -

- Pre-Use Rig Inspections – recorded daily.
- Pre-Use Plant and Machinery Inspections – recorded daily.
- Pre-Use Lifting Accessory Inspections – recorded weekly.

9.4 PPE

Correct types of PPE for all site personnel shall be worn as required, they include:

- Hard hats, mandatory
- Hi-visibility upper garment, mandatory.
- Hi-visibility trousers, mandatory.
- Safety Footwear with ankle and mid sole protection, mandatory.
- Eye protection appropriate to task, mandatory.
- Gloves, appropriate to task mandatory
- Hearing protection, mandatory/appropriate to task
- Full Flame-retardant overalls, when carrying out hot works.
- Any other PPE deemed applicable to the task.

Additional items of PPE may be required for specific operations. Those items will be identified, and a briefing given as required. All PPE will to be fit for purpose.

9.5 Records

A copy of the full SHES package will be retained on site for inspection and will be briefed to all site personnel, by the VE Project Manager or Site Foreman.
A record of all briefings will be kept on site in the SHES file.

9.6 Fire Extinguishers/First Aid

Fire extinguishers will be located in the piling rig and job box they must be in date and serviced.
First aid kits and Eye wash located in the job box.

9.7 Risk Assessment

Ref:	Title:
RA001	Working at height.
RA002	Lifting Operations.
RA004	Vehicle Movements.
RA005	Loading & Unloading plant.
RA008	Manual Handling.
RA009	MEWP

RA010	Compressor
RA014	Security
RA015	Pressure Washer
RA016	Overhead services.
RA018	Underground Services.
RA019	Working Platform
RA020	Attendant excavator driver
RA024	Rig Operations.
RA025	Hose Burst/Steels/Clamps
RA026	Concrete blockage ground hoses.
RA027	Blowing out concrete.
RA028	Concrete Pumping
RA029	Refuelling Plant and Machinery
RA030	Concrete block pump hopper.
RA032	Concrete block Augers.
RA033	Concrete block Rig Mast Steel Pipes.
RA034	Concrete block Drop hose/Swan Neck.
RA035	Rigging & Derigging.
RA042	Abrasive Wheels.

Please note –
Any amendments and information no matter how basic can be captured in the Point of Work Risk Assessment (POWRA)

The VE supervisor or his representative will complete POWRA prior to works commencing. The POWRA will briefly outline the works taking place, document number and revision of the RAMS being worked to, Permit number and any isolation requirements, along with task PPE requirements and any task and control measures not included with the main project RAMS or Task Briefing Sheets.
These documents will be briefed to and signed by all VEL personnel (inclusive of agency staff) in the work area and also attendant excavator operators, crane operators and engineering staff.

9.8 Security
Project security arrangements will be advised the Main Contractor.

9.9 Welfare Facilities
Site welfare facilities will be provided by the Main Contractor and will be fully compliant with CDM Regs 2015.

9.10 Emergency Plan
Communication and emergency plans will be drawn up in line with Main Contractor requirements and advised during the project induction.

In the event of an emergency, the Site Manager will be informed immediately, followed by the SHES Manager.

- First aid arrangements will be provided by the Main Contractor and VEL personnel.
- Emergency Contact for Environment Agency (0800) 80 70 60
- The Main Contractor's representative
- If talking to the Emergency Services, the site is at – **Include details from three little words app.**
- Nearest Hospital with Casualty Department as follows: –

What three words for the works location are XXX/XXX/XXX

Details and Map to be included here

10. Environment

- The main contactor as responsible for the removal of waste produced by VEL in the course of their works, inclusive of general waste, by a licence waste carrier to an appropriately licence waste facility.
- Concrete washout facilities will be provided by the Main Contractor
- Wheel washing arrangements will be provided and managed by the Main Contractor.
- Water via mains connect or bowsers will be provided by the Main Contractor.
- Piling operations will take place only within the specified working hours unless prior approval is sought and granted by the Main Contractor.
- General waste shall be deposited into designated skips or another appropriate receptacle.
- Vehicle idling is not permitted.
- Engines shall be turned off when not in use.
- Fuel / oil spills shall be prevented.
- Spill containment and emergency spill kits shall be used to catch and clean the spills / leaks.
- Should an environmental incident occur VEL will follow the procedure prescribed within the main contactor induction and also follow guidance from Environmental Handbook.
- VEL supervisor will notify the Main Contactors representative of any incidents.

10.1 Fuel Spillage

VEL will have a minimum of 2 spill kits on site per rig to deal with any fuel or oil spills.
In the event of a spill the area will be segregated off and the spill kits positioned to minimise the risk of the spillage spreading.
Plant nappies/drip trays or Enviro Pad are to be used where possible.
The Main Contractor's representative and the VEL Project Manager will be made aware immediately.

11. Network Rail

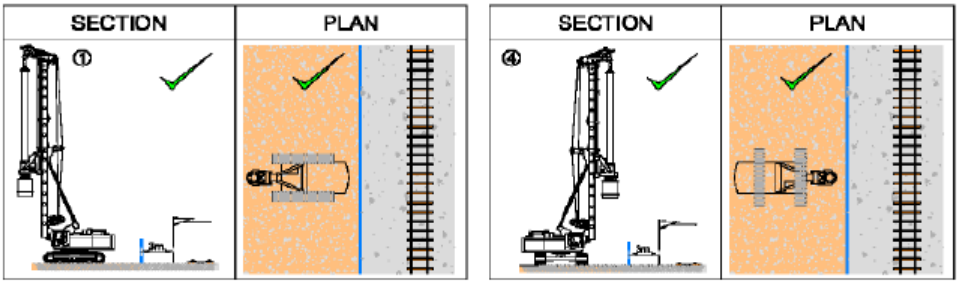
- The largest rig on site will be up to _____m in height.

- At the end of the piling shift, the rig will be moved away from the site boundary as an additional safety measure.

- The site is located adjacent to NR infrastructure, therefore for coverage and consideration of Rig Collapse Radius the implementation of the piling works is to be formatted to NR restrictions. All safeguarding and management of the NR infrastructure is to be managed and provided to VE by the Main Contractor. Any works that may be adjacent to Rail Infrastructure will be carried out as per the procedures and sketches included within this document and in accordance with the Network Rail guidance Ref: NR/L3/CIV/CP0063.

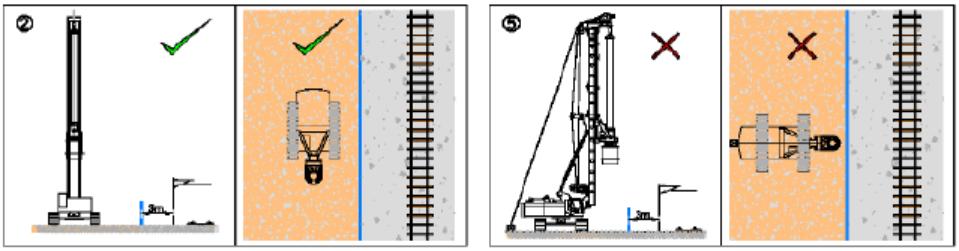
See below Figure 2 – showing orientation of piling rigs when piling adjacent to railway infrastructure.

ORIENTATION OF PILING RIG ADJACENT TO THE RAILWAY INFRASTRUCTURE DURING NORMAL RAILWAY OPERATIONS.



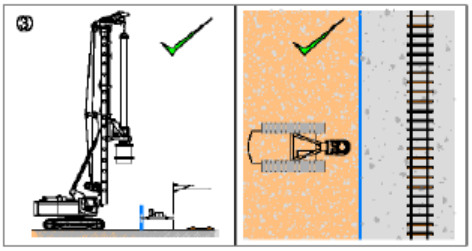
RIG MAY SIT AT THIS ORIENTATION

RIG MAY SIT AT THIS ORIENTATION (SUBJECT TO MANUFACTURERS SPECIFICATION)



RIG MAY SIT AT THIS ORIENTATION

INDEPENDENT TIE BACKS OR ANY OTHER ARTIFICIAL STABILITY AIDS MUST NOT BE UTILISED



RIG MAY SIT AT THIS ORIENTATION

NOTE :-

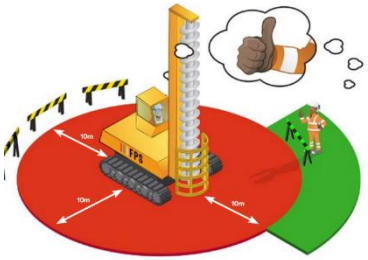
1.) IN ALL CASES APPROPRIATE MITIGATION MEASURES SHOULD BE IMPLEMENTED - PARTICULARLY WITH REGARD TO THE PILING PLATFORM CONSTRUCTION.

2.) PLATFORM TO BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATION.

3.) NO ARTIFICIAL AIDS ALLOWED TO INCREASE STABILITY - REFER TO DIAGRAM 5.

Appendix A

CFA/RIGID INCLUSIONS
RESTRICTED ZONE



Red Zone: The Rig Operator must ensure the rig is placed in a safe condition before an Authorised Person enters the Red Zone. The operator must give a 'Thumbs up' to the Authorised Person wanting access confirming it is safe to enter before they enter the Red Zone.

Green Zone: Rig Operators sight line (safe approach), optimum Rig Attendant position.

Note: People entering the Red Zone must be aware of and consider the increased risk of falling objects and plant movements from other plant such as excavators and dumper trucks.

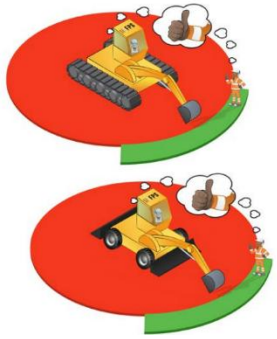
Due to the worksite layout, it might not be possible to maintain a 10m barrier distance behind the counterweight of the rig. In these situations a minimum distance of 2m must be established at all times.

CONCRETE PUMP
RESTRICTED ZONE

Red Zone: Authorised Person only (pump operator) - this zone must include barriers to demarcate the area. 2m controlled zone from the outer edge of the concrete vehicle when reversing.

Green Zone: Always signal 'Thumbs up' to the pump operator and or concrete delivery driver and receive a positive 'Thumbs up' response before entering. Keep in driver's line of site when reversing the truck, always get the 'Thumbs up' before entering Red Zone.

360° EXCAVATOR
(TRACKED OR WHEELED)
RESTRICTED ZONE



Red Zone: To be determined by the boom length and slew radius. No personnel to enter area unless the attachment is on the ground and the machine is placed in a safe condition.

Green Zone: Safe area - Plant Operators line of sight. Always signal 'Thumbs up' to the Plant Operator and receive a positive 'Thumbs up' response before entering Red Zone.

Note: The slew radius of the machine will vary dependant on the machine type and size.

MEWP (BOOM)
RESTRICTED ZONE

Red Zone: Keep out of this area at all times. Except in emergency situations.

Green Zone: Always signal a 'Thumbs up' to the Plant Operator and receive a positive 'Thumbs up' response before entering Red Zone.

Appendix B

Always

Make sure you are fit for work

STOP if anything changes

Ensure exclusion zones are in place around all plant and machinery

Have a daily briefing and diligently follow the method statement, lifting plan or permit

Never

Use plant or equipment that is unfit for purpose

Stand in a position of potential danger

Walk by and ignore a hazard or unsafe act

Undertake a task for which you are not trained or competent

1. INTRODUCTION

To define the requirements for installing Rigid Inclusions using a tracked rig and concrete pump. The procedure also outlines best practise with regards to the use of concrete and the correct personnel and plant required to carry out the installation process safely and efficiently. Rigid Inclusions can be used to increase the overall ground bearing capacity and reduce settlements to allow the construction of foundations to support new structures.

2. SCOPE

This procedure applies to all company projects, offices, and facilities where the Company Management System has been adopted by the Board. Where the Company is required to operate another party's Management System then an assessment of the third-party's management system must be carried out to establish that its validity, suitability and standard to ensure it is comparable to the IMS.

3. PROCEDURAL REQUIREMENTS

The Concrete Pump, Agitator and Lines to the rig will be set up in accordance with the concrete pumping procedure. The Concrete pumpman shall check the concrete deliveries tickets before accepting discharge of the concrete. He will then visually inspect and confirm the satisfactory condition of the concrete in each concrete wagon prior to pumping. The requirements set out within the agreed works specification must be followed. I.e., slump tests and concrete cubes.

A slump test must be carried out on every load of concrete which is delivered to site. Slump testing shall be undertaken by a competent person, as per the required procedure (appendix B of OPS-RM-CON006c BRMCA Ready Mixed Concrete Practical guide July 2020). The results of the slump testing is then to be recorded on the OPS-FM-CON006a Record of Testing Fresh Concrete. The quantities and delivery ticket numbers of the concrete must be recorded on the Ground Improvement Materials Received sheet GI-FM-VI001c.

Concrete Cubes must be completed by the pumpman (or other competent person) in accordance with the VE procedure (Site Cube Manufacture and Consistency Testing OPS-PR-CON006) and recorded on the OPS-FM-CON006b Concrete Test Cube Request Sheet prior to being collected and tested by the cube testing contractor. The amount of cube tests required will be determined prior to works commencing, however this will usually be 1 set per day per rig, or 1 set per every 75m3 of concrete used per day.

For anyone other than the rig attendant or Banksman; A 10m exclusion zone must always be in place around the piling rig. If the rig operator is not able to see the rig attendant or banksman, he must not track or slew the piling rig. The attendant excavator may need to enter the exclusion zone at certain points of the process. This must be done under the instruction of a competent banksman and plant interfaces must be supervised.

A 5metre exclusion zone for all non-piling related staff should be in place around the full length of the concrete hoses. No one should be stood over, or step over a hose during pumping.

The rig shall be manoeuvred to the starting location with the aid of a banksman/rig attendant. The auger gates on the rig will be securely closed. The Rig Attendant and rig operator shall check that the mast is vertical in both directions. If augers with no intergrated concrete flaps is being used; a cap can be placed inside the mouth of the auger at this point by the rig attendant/banksman.

The auger now can be lowered so the tip can be accurately placed over the centre pin denoting the rigid inclusion position. If the rig has a mast foot; this can now be lowered firmly onto the ground. A second check to verify that the mast is vertical, and the auger is accurately positioned over the Inclusion centre pin is necessary at this stage.
In order to reduce "kick off" due to minor near surface obstructions, the gates will remain closed throughout the piling process.

The auger will bore into the ground and displace the in-situ soils, until the required design depth has been achieved. The auger shall not be raised until the full pre-charge concrete volume has been placed. Once pre-charge has been achieved the withdrawal of the auger may gradually commence. If it is necessary to lift the auger before initiating the flow of concrete, the auger must be returned to the maximum bored depth to ensure a competent base to the Inclusion. The maximum distance auger can be lifted is 100mm. Once the concrete is flowing from the auger tip; reference should be made to the depth of the auger in relation to the maximum bored depth.

When the auger tip is within 0.5m of the piling platform level; pumping shall be halted, and the auger withdrawn. If excessive amounts of concrete exist at the top of the inclusion following extraction; the levels of oversupply are to be reviewed by the supervisor and the depth in which the concrete pumping is halted is to be modified. Any alterations are to be recorded.

The specific rigid inclusion reference number, depth achieved, concrete used, pump strokes and any other comments can be record on the Rigid Inclusion Daily Log (GI-FM-RI001a). This is to be signed by the rig operator/foreman once completed or at the end of the shift.

On completion, the rig will track off the pile position under the supervision of the Rig Attendant/Banksman. The top of the inclusion shall be checked for contamination. The rig will then move to the next pile position. This should be a sufficient distance away so as not to disturb recently formed piles. installed inclusion positions shall be marked off the reference drawing to maintain pre-planned installation sequencing.

The Oslo hose and subsequent hoses will sit at the front of the rig and lead to the concrete pump as per the manufacturers design. If the hose needs moving at any point, the attendant excavator must do so with a suitable lifting strap, under instruction from a slinger/signaller. Manual handling of the concrete hoses when under pressure is prohibited.

Scraping up of the platform and digging out of the rigid inclusion positions by must only be carried out in front of the piling rig (not behind or to the sides) and must keep 15m from the piling rig operation. The piling mat should be inspected to make sure that the attendant excavator has not reduced the thickness whilst clearing up.

4. COMPETENCIES

The Foreman/Rig Operator must hold CPCS or NPORS driven piling rig qualification above 15 tonnes, SSSTS / SMSTS and NVQ Level 3 Occupational work supervision.

The Rig attendant must hold CPCS Rig Attendant ticket and a CPCS Slinger/Signaller qualification.

The Pumpman must hold CPCS Concrete Pump Trailer Mounted ticket.

At least one of the crew members must have first aid certification.

1. INTRODUCTION

Loading and unloading of the plant and equipment shall be carried out in accordance with this document and the manufacturer's instructions for de-rigging.

Piling rigs and ancillary plant and equipment will be transported to and from site using a range of transport equipment including hiab. Different rigs within the ground improvement fleet have specific weights, dimensions, and transport requirements. When possible, the piling rig and ancillary equipment will arrive to site at staggered intervals.

2. SCOPE

This procedure applies to all company projects, offices, and facilities where the Company Management System has been adopted by the Board. Where the Company is required to operate another party's Management System then an assessment of the third-party's management system must be carried out to establish that its validity, suitability and standard to ensure it is comparable to the IMS.

3. PROCEDURAL REQUIREMENTS; MOBILISATION

A pre-start visit shall be carried out prior to mobilisation of plant and equipment to site.

Prior to the equipment being loaded; a briefing must be carried out between all parties involved in the process, confirming the location and position of the wagons, methodology of loading, specific roles during the operation and site-specific requirements.

The unloading process must be carried out on flat even ground, free of obstructions and with a maximum gradient of 5%.

A position of safety for wagon drivers must be agreed with site foreman prior to mobilisation and de-mobilisation of the plant and equipment. No persons must be allowed to stand at the side or behind the vehicle being loaded. Safety barriers may need to be used to segregate the lift from other activities and/or pedestrians. The tracks of the rig must be clean, and the slewing pins must be in place on all items of plant that have slewing locks. The movement of the rig from the low loader/ramp semi must be carried out under the instruction and supervision of a competent banksman/rig attendant.

Items of ancillary plant that will require lifting from the trailer bed will include concrete hoses and fittings, blow out chamber, stores container, auger stems and auger leads, compressor, concrete pump, and concrete agitator (drum). Additional items of plant and equipment may be required depending on project specifics. Lift plans must be in place, prior to mobilisation for all items of plant which are to be lifted from the trailers by means of a hiab or attendant excavator. A pre-start meeting on site shall determine the required laydown area which will be relayed to the site team during a project handover and within the project specific Method Statement.

Where possible, loads must be pre-slung to avoid accessing the bed of the trailer. No persons are to stand underneath or in the path of items being unloaded.

4. PROCEDURAL REQUIREMENTS; RIGGING UP

Rigging up of the piling rig shall be carried out in accordance with the manufacturer's guidelines.

Prior to rigging up; the Attendant Excavator / Driver Checklist must be completed by the excavator and the VE foreman/supervisor. The site-specific lift plan must be briefed and signed by all persons involved with the rigging up process.

All excavator movements will be supervised by a competent slinger signaller. The area around the front of the rig shall be clear of all personnel prior to lifting.

When attaching the augers; the first auger stem section shall be lifted from one end with a nylon strop. The rig may be required to slew or track slightly towards the auger under supervision of a banksman, until it is positioned close enough to close the auger gates around the bottom of the auger to help support it.

The drive head will be lowered on to the top end of the auger and the head may need to be rotated slightly to align correctly before fitting in place. The excavator must then be isolated with the deadmans handle, before operatives can approach the rig. The MEWP/Cherry picker will be used to reach the top of the auger/drive head and insert the auger pins. Auger pins must be used at all times. Once the pins are in place, the lifting strop can be removed from the auger by the operative in the MEWP/cherry picker. The MEWP shall then be withdrawn before the excavator is instructed to move clear.

Excavators must not move when the operative is in front of the rig or within the danger zone of the excavator, or when operatives are working at height in a MEWP.

The drive head with the fitted auger can now be raised and the next section of either auger stem or lead auger can be lifted into position below it, by following the above steps until the correct auger length is achieved.

When de-rigging; the process will be carried out in reverse order.

5. COMPETENCIES

The Foreman/Rig Operator must hold CPCS or NPORS driven piling rig qualification above 15 tonnes, SSSTS / SMSTS and NVQ Level 3 Occupational work supervision, CPCS Lift Supervisor qualification.

The Rig attendant must hold CPCS Rig Attendant ticket.

Slinger/signaller must hold CPCS Slinger/Signaller qualification or similar.

At least one of the crew members must have first aid certification.

The table below details the environmental impact of noise, dust & vibration and the mitigations we will have in place to keep those impacts to a minimum.

Monitoring will take place at the site boundary and if required, outside affected properties. This monitoring will be carried out using a Casella Guardian 2 or similar. The Guardian 2 is designed to help you remain compliant with site emission levels, using remote monitoring and reporting of noise, dust, windspeed and direction & vibration.

The Guardian 2 is fitted with an e-sim which will send emails or text messages "real time" to pre-selected individuals if limits are approached.

Environmental Impact	Mitigation measures taken
Noise Impact on Properties	**Noise Risk Assessment:** Conducted before the project to identify potential sources and impacts, guiding effective control measures. **Monitoring:** Regular noise and dust level monitoring per The Control of Noise at Work Regulations 2005 and COSHH Regulations. The requirements of BS 5228:2009 'Noise and vibration control on construction sites' will be adhered to at all times. **Control Measures:** Use of noise barriers/screens is not deemed necessary at this stage, equipment will be fitted with silencers. **Background levels:** Measure and record noise and dust levels to ensure compliance. Mandatory hearing protection zones are established where levels exceed 85dBa. **Community Engagement:** Residents informed of exceptional activities. Designated site contact for addressing complaints. No significant external work outside normal hours without authority. **Equipment:** Use of modern, quieter plant with factory noise reduction systems. **Site boundaries:** Fenced with timber or Heras fencing.
Noise Disturbance to Ecology/Neighbours	**Silencers**: Use of equipment with effective silencers. **Complaints Handling**: Designated site contact for noise-related issues. **Operational Hours**: No work outside normal hours
Dust Emissions.	**Environmental Risk Assessment:** Assess impacts of noise, dust, vibration, and odour. **Dust Control:** Follow BRE Guidance on dust control. **Site Cleaning:** Regular cleaning of on-site roads, use of wheel washers, and minimising material handling. **Water Sprays:** Applied if dust becomes an issue.
Dust from Traffic	**Vehicle Dust Control**: Sheet lorries carrying dusty loads and provide wheel washing for heavy vehicles. Sheeting of lorries carrying dusty loads

Dust Mobilisation	**Work Limitations**: Restrict dust-producing work during high winds.
Effect of vibration on neighbouring properties	Vibration will be monitored at the site boundary and outside affected buildings and work will be suspended immediately if levels of vibration are above those recommended in BS5228