

Site	Proposed Dwelling, Adjacent to 65 Wharfdale Road, Barnsley, S75 2JY.		
Project/task	P3043 / 165 - Construction of 18 No. 220mm Steel Cased Piles.		
Client	Bo Homes (Yorkshire) Ltd		
WESTBUILD	Contracts Manager	Edward Tweed	Tel No. 01302 265856
contacts	Foreman	TBC	Tel No.
	Safety Manager	C2 Safety	Tel No.

Revision Status

Rev 0	Name	Position	Date	Signature
Prepared by:	Edward Tweed	Contracts Engineer	26/04/2021	<i>Edward w. Tweed</i>
Reviewed by:	C2 Safety	H&S Adviser	-	-
Accepted by:				

Rev No.	Revised by	Date:	Amendments

BRIEFING SHEET

This method statement MUST BE briefed to the foreman responsible for the works as part of the pre-start briefing. The Director is responsible for ensuring this is done. The foreman shall brief all site operatives and sub-contractors on site before commencing work. Everyone must sign the Method Statement Briefing Sheet to confirm that they have been briefed and that they understand the risks and controls, and their responsibilities.

Where work cannot be carried out in accordance with this method statement, the foreman shall stop work & discuss any concerns with his Manager & await further instruction. All parties shall then be briefed on any changes to the method of work.

Initial briefing given by:

[illegible]

1. Scope of Works

- Install 18 No. 220mm diameter steel cased piles, in accordance with Drawings: P3043-01.
- Site access via Wharfdale Road.
- Position of equipment and materials to be agreed (within 20m of work area).

2. Hazard Identification

All hazards identified must be assessed and control measures in place to reduce the risk to an acceptable level.

Site Access & egress	x	Material storage	x	Contaminated land	
Excavations		Ventilation / fumes		Concrete pumping / pouring	x
Underground services	x	Lighting		Working at heights	
Site security		Housekeeping	x	Confined space	
Overhead services	x	Gradients / sloping ground		Railways	
Dust generation from dry pack		Adjacent structures within 10m	x	Waterways	
Traffic management	x	Third parties		Traffic & highways	x
Deliveries	x	Public footpaths/areas	x	Others	
Open bores					

3. Method of work and control measures

3.1 Prior to work commencing

Member of Contracts shall ensure:

- A visit to site is carried out prior to work commencing & a copy of visit report to be provided to site.
 - Site specific hazards are identified and suitable control measures identified.
 - Noise & vibration monitoring requirements
 - Presence of cracks on any structure within 10m shall be recorded on site visit report.
 - Platform requirements are communicated to the client/main contractor.
- That crew deployed to site have necessary competencies

Piling Rig Operator	CPCS / NVQ Piling Operations
Banksman	In-house training
Telehandler	CPCS Telehandler

The Main Contractor / Client will be responsible for

- In accordance with HSE guidance HSG47, the location, identification and marking of underground services within the working area, and taking the necessary precautions to protect and avoid them. (eg isolation, diversion, shrouding etc).
- Providing a suitably maintained working platform.
- Advising on known or likely ground contamination.
- Signing the Westbuild 'Permit to Break Ground' to confirm the above has been completed.

The Foreman shall:

- Walk the work area & confirm that all hazards are adequately controlled prior to work commencing.
- Ensure that client/main contractor has provided a working platform that is adequately constructed and maintained so as to provide a stable base for the rig.
- Check that the client / main contractor has carried out checks / protection for underground services and sign off Contract Notes.
- Ensure that sufficient PPE provisions are available & that it is worn in accordance with Westbuild & Main Contractor requirements. Mandatory PPE is safety helmet, safety footwear, light eye protection and & hi-viz clothing. Other PPE in accordance with the Risk Assessment.
- Check that the rig, lifting accessories and other plant have in-date certification before use.
- Ensure that daily inspections are carried out on all plant and equipment & a record of inspection is completed. Any problems/defects must be reported to the Contracts Manager immediately. All machinery shall only be operated by trained & competent persons.
- Ensure that the 'Permit to Break Ground' is signed prior to work commencing.

3.2 Mobilisation to site

All vehicles will be supervised by a Banksman and enter site as per the designated route agreed at Pre-Start Meeting.

The foreman shall:

- Make sure any building, garden, driveway or footpath is protected before any unloading takes place.

- Assess the area designated for unloading & storage, taking into consideration surrounding buildings, other contractors, pedestrians, traffic routes etc. Safety barriers may need to be used to segregate the lift from other activities and/or pedestrians.
- Make sure that all loads are checked for security before unloading commences. In the event of a load having moved or become unstable in some way during transport, unloading will not continue until a safe means of unloading has been determined. Unstable loads should not be allowed to tip or fall to the ground unless there are no other safe options & only after advice has been sought from the Line Manager
- Agree a sequence of unloading with the delivery driver. The Banksman will take control of the unloading process & directing the HIAB operator.
- Any provisions for unloading that are already on site will be used to safeguard work at height. Where possible equipment & materials will be pre-slung to facilitate offloading. Access to trailers will be from a secured or footed ladder.

Avoid unloading rigs on inclines. The Banksman will position himself forward of the loading process so that all rig movements and the rig operator are clearly visible. NO ONE must be allowed to stand at the side or behind the vehicle being unloaded. All instructions to the rig operator must come from a single Banksman.

3.3 Loading / Unloading Rigs

A HIAB will be used to load/off-load the piling rigs.

OR

Piling Rigs will be delivered, loaded and off-loaded via a rigid flatbed truck, using ramps and a winch.

Avoid unloading rigs on inclines. The Banksman will position himself forward of the loading process so that all rig movements and the rig operator are clearly visible. NO ONE must be allowed to stand at the side or behind the vehicle being unloaded. All instructions to the rig operator must come from a single Banksman.

3.4 Site Set Up

The foreman will set up an exclusion zone to prevent third parties entering our work area.

All hoses will be kept tidy and positioned away from walkways. Any hose crossing a pedestrian walkway shall be protected with hose ramps

Fuels will be stored in double-skin fuel bowsters or Jerry Cans.

The crew shall maintain good housekeeping at all times to reduce slip/trip hazards.

Waste materials will be kept to a minimum & disposed of in accordance with the site's Waste Management Plan.

Noise levels from all plant will be reduced whenever reasonably practicable. All plant will be fitted with efficient silencers. All engines will be switched off when not in use.

3.5 Commencing piling – Drop Weight

The rig will be rigged up in accordance with the manufacturer's instructions.

BEFORE PILING COMMENCES all cracks on any structures within 10 m of the working area must be marked.

Cracks must be monitored for movement a minimum of twice per day. Should any movement be recorded, stop work and telephone your manager for instructions

When tracking the rig with the weight attached the mast must be laid back on the stops with the weight secure within the cradle. The weight must always be within the confines of the rig to prevent overbalancing. (Masts may be marked to show the limit of movement of the hammer when the mast is laid on the stops)

Piling must not commence until the rig is levelled & stabilised. All stabilisers (if fitted) must be used and fully extended at all times. Use spreader boards or plates to distribute the load. When working adjacent to a structure stabilisers must be extended as far as possible.

Mix drypack/hardcore in normal way taking all necessary precautions to avoid inhaling cement dust and dust coming into contact with skin. Hammer weight must be brought to ground level when adding drypack/hardcore.

Starter casings shall be added either by:

- Laying the mast back and securing the weight within the stops. A starter casing is then fed onto the bottom of the weight.
- The weight is slowly lowered to the ground and placed on wood to create pivot point for starter to be fed up the weight

Follow on casings will be added by:

- Supporting the weight at the top of the lead length casing with a retaining pin, uncoupling the weight and threading the wire rope through the next length of casing.
- The rope is then reconnected to the lifting eye of the weight. The new length of casing is lifted onto the lead length and the slack in the rope taken up before removing the retaining pin and lowering the weight to the bottom of the pile

Starter & follow on casings can be added with the weight suspended vertically when:

- Shorter weights or casings are being used,
- The mast has sufficient height to allow the weight to remain vertical.

Never swing the weight to add a length of casing.

At no time must the weight be lifted clear of the casing during the driving process.

Never work under a suspended load

Periodically inspect the wire rope for signs of damage

3.6 Welding

Ensure new length of casing is vertical before welding the joint making a strong water tight seal.

Visually inspect welding equipment; ensure all leads & connections are undamaged. The earthing clamp must be placed on the casings not any part of the rig.

Ensure the working area has sufficient ventilation. Remove all combustible materials from working area. 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.

Third parties must be protected from welding hazards with the use of screens.

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

On completion of the weld joint the casing continue driving the pile to the required depth or set using the same safe procedures to add additional lengths of steel casing.

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

3.7 Completion of pile driving

When the pile casing has been driven to the required set/refusal, the machine shall be withdrawn for the pile position to commence the next pile.

Any excess pile casing left above ground will be cut off using an appropriate cutting disc to approx. 6"/150mm and the casing reused on the following piles.

3.8 Telehandlers

These will be driven by competent operators (eg. CPCS, NPORS). A banksman will be used in accordance with site rules, when reversing or when visibility is restricted. The operator will know the dimensions of the machine in operating & travel mode – relative to constraints of site, making sure you there is good all round visibility. The machine will be operated in accordance with Manufacturers safety instructions regarding its safe working limits. The operator will wear seat belts at all times.

3.9 Concreting

Concrete will be placed either directly from the concrete lorry or with a lorry mounted pump, dumper or barrow.

Concrete will be filled to initial cut off level or if requested and supervised to approximate cut off level. If Westbuild are undertaken piling only, final cut to level will be undertaken by others and care must be taken not to cut reinforcement reinforcing bar.

Access routes for concrete lorries will be agreed with the Main Contractor before work commences. All vehicles reversing will have a banksman in attendance

Where wheelbarrows are used the site will be kept clear of obstructions, and the wheelbarrows will not be overloaded. Impervious PPE will be worn to protect from concrete splashes

The site will be kept clear of trip hazards e.g. concrete hoses kept tidy and away from pedestrian areas.

Hoses should be moved mechanically wherever practicable. Manual handling to be avoided

3.10 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 & control arm covers if fitted.

3.11 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 items liable to roll MUST BE chocked & trailer posts in position.

All excessive spoil must be cleaned off the rig prior to loading onto trailers.

Before setting off, the driver must check that all loads are secure.

4. Communication and Liaison

Westbuild site operations will be under the full-time supervision of a competent and experienced Foreman. The Site Foreman for this project will be identified in due course upon specific request.

The Foreman will be responsible for daily routine operation; preparation and submission of all daily records; receiving and acting upon formal site instructions; and reporting site conditions which may require significant variations to this Method Statement.

The Foreman will report directly to the Contracts Manager / Director on a regular routine basis or on specific instances when necessary.

Site visits are carried out at regular intervals by our H&S Manager and Contract Management personnel.

5. Emergency plans

(Contact phone number, fire plans, accident/injury plan, defect/sub-standard condition reporting.

Main contractor will induct all site operatives into the site emergency arrangements.

Westbuild crews are equipped with a number of 2kg dry powder extinguishers and first aid provisions to complement the main contractors arrangements.

Emergency first aid & fire awareness training has been completed by the crew.

Spillage kits will be provided and our crews instructed in their use.

All accidents & near misses must be reported directly to the H&S Manager and the main contractor's site manager

Service strikes

Electric - Switch machine off & evacuate all personnel on the ground. Do not attempt to disengage the cable from the rig. Do not touch exposed cables.

Gas - Switch all machinery off & evacuate all personnel to safe distance. Extinguish all naked flames. No smoking. Gas emergency number is 0800 111 999

First aid information and emergency actions for COSHH substances

- Inhalation - Remove casualty from exposure ensuring your own safety whilst doing so. Keep casualty warm & at rest. Seek medical attention
- Eyes –Irrigate with plenty of water, if irritation persists seek medical attention.
- Skin – Wash with soap and water, remove contaminated clothing
- Ingestion - wash mouth / nose out with water, DO NOT induce vomiting. Seek medical attention

Spills

Eliminate sources of ignition. Contain spillage in booms or sand or absorbents. All contaminated items & oil must be returned to your office/depot & be disposed of at an authorised disposal facility.

RISK ASSESSMENT				
Significant hazards	Initial risk	Control Measures	Residual risk	Responsibility
Site wide risks	Medium	- Site visit by contracts. - Site induction. - Mandatory PPE at all times – safety helmet, high visibility clothing, protective footwear, eye protection, gloves	Low	All
Contact with underground services	High	Permit to Work (SD8) to be signed by the Clients senior representative on site or by a senior manager employed by Westbuild prior to any drilling work commencing. In accordance with our Permit to Work System, if for any reason the following cannot be achieved, the office will be notified before work commences. - Drawings shall be available on site for utility providers - The working area and 5 m surrounding the working area has been scanned with Cable Avoidance Tool used by a competent person - Any services within the working area and 5 m surrounding have been exposed and their location marked clearly across the whole of the working area - Drilling rigs must not be operated within 1000mm of a service - Underground Services will always be assumed to be live	Low	All
Working platform Overturning rig or machinery due to poor design, poor installation & maintenance, Removal of obstructions	High	- Qualify working platform requirements and responsibilities prior to work commencing. - Maintenance of working platform in accordance with the contractual requirements throughout the contract. - Correct reinstatement of platform disturbances to the original specification. - WESTBUILD Foreman not to enter on to piling platform until completed. Foreman to monitor during our operations & report to Main Contractor / WESTBUILD Contracts Manager	Low	Contracts Manager Foreman
Plant & vehicle movements - Obstruction of footpaths at site access and egress points; - Other road / site traffic movements, - Collision with surrounding structures or plant/equipment during rig movements	High	Access routes for lorries will be agreed with the Main Contractor before work commences	Low	Contracts
		- Site speed restrictions will be adhered to - Consideration for room required for maneuvering the machine. Check for obvious hazards such as soft ground, narrow gaps, limited head-room, gradients and excavations		Driver / Machine operator
		All reversing vehicles & rig/plant movements will be directed by a Banksman		Banksman
Unloading piling rigs - Damage to road surfaces / pavements - Plant or equipment falling from transport vehicle - Slips, trips falls - Environmental conditions - poor visibility, heavy rain, high winds, snow & ice	High	At pre-start meetings, identify what provisions/requirements the MC has, such as dedicated unloading areas, platforms &/or air mats that must be used	Low	Contracts
		- Establish suitable safety zone. Warn people not involved in the mobilisation to stay clear. Safety barriers may need to be used to segregate the lift from other activities and/or pedestrians. Vehicle warning beacons will be used in public areas - Load/unload on level and stable ground. - Check security of loads & agree sequence of unloading. - Plant & machinery offloaded by lorry mounted winches shall be secured by swaged ends or Thimbles & bulldog grips with a D-shackle. Open hooks must not be used under any circumstances - All loading & unloading will be conducted under the direction of a trained Slinger/Signaller (CPCS) - Protection of roadways and footpaths when rig/plant equipment is being loaded/unloaded on the highway.		Foreman

		- Trailer posts or kingposts used down the trailer edge to prevent items rolling off. Items that are liable to roll will also be chocked if they do not already have them. - Inspect trailer bed for signs of damage or spills to ensure it is safe to walk on. Report missing or damaged equipment / boards on vehicles & trailers. - Track mats will be used where there is steel on steel e.g. steel tracks on a steel trailer bed, this will prevent the rig/plant equipment from sliding off the side of the low loader		Driver
		- No one will be allowed to stand at the side of the vehicle being loaded/unloaded including the slinger/signaller. - The ramp (if fitted) will be used to access the vehicle or trailer. (Access will not be allowed via the side bars) Climbing up the sides of trailers is not permitted. No-one should ever jump onto or off a vehicle – always use steps & handholds.		All Staff
Fall from Height. - Whilst accessing trailer. - Struck by moving or falling loads	High	- Where possible, avoid work at height by using tele-handlers or pre-slinging of loads. - Prevent falls by using edge protection fitted to the sides of trailers. Where edge protection is not fitted, minimise injury from falls by the provision of soft landing systems.	Low	Foreman
		- Safe access and egress from trailer in the form of a proprietary ladder or step system that forms part of the lorry, or a properly secured ladder. Inspect ladders for signs of damage & be free from mud or grease. Extend ladders past the trailer bed to enable you to step off whilst still having 3 points of contact - LOOKING where you're going - DO NOT walk backwards whilst on the trailer. DO NOT RUSH! DO NOT USE A MOBILE PHONE - Where possible, the physical unloading should take place without anybody being on the vehicle. When this is unavoidable: - Keep the number of persons on the lorry to a minimum - only those who need access to the vehicle for unloading should be allowed onto it. - Ensure that the person on the deck/trailer bed is well out of the way when the load is being lifted. - The initial instruction to lift the load must be given by the person on the deck/trailer bed		All Staff
Lorry mounted crane operations - Overturning of the crane may occur through the following; - Ground conditions. - Tampering with safety devices. - Lifting of loads above the Safe Working Limit. - Collision with surrounding structure - Failure of lifting equipment - Damage or injury to passing vehicles & pedestrians by the position of outriggers, crane or load movements or when visibility is restricted	High	All crane movements & lifts will be completed under the direction of a Banksman	Low	Foreman
		- The crane, lifting accessories and all safety devices to be inspected daily & the daily check sheet completed. All lifting equipment is subject to a thorough examinations/testing in accordance with LOLER 1998. - Fully extended outriggers will be used at all times. Outriggers must not be positioned where the ground could collapse e.g. on soft ground, at the edge of excavations, on or over manholes, etc. - Outrigger mats must be placed under outriggers on all lifts. Scaffold boards or other off-cuts of wood found on site are not acceptable alternatives. - Where a HIAB has factory-fitted remote controls, these must be used at all times to allow the operator to stand in a position of safety - A test lift to be conducted to make sure the lift can be carried out safely e.g. to check levels, outriggers don't sink, load is stable etc. - No loads will be left suspended. - Lifting points on loads shall be checked for signs of damage prior to being lifted. - Only recognised slinging techniques will be used; Tag lines will be used when necessary.		Crane Operator
		- Crane operator & Slinger signaller to ensure they are aware of the safe working load before the lift commences. Do not overload SWL of crane or lifting accessories - Stand clear of side of the vehicle being loaded/unloaded including the slinger/signaller		All Staff

		- Do not allow the load to swing over or into live traffic lanes or over people - Lifting equipment will not be used for towing or pulling		
Piling rig operations - Collapse or overturning of rig when moving around site, rigging/de-rigging or during piling - Entanglement with rotating winch - Unsafe storage of pile casings - Adding dry pack - Hit by falling hammer - Wear, tear and damage to wire rope. - Noise - Hydraulic fluid / air injection from burst hoses/ disconnections - Contact /entanglement with moving parts of rig (eg track) - Collision with people, surrounding structures or plant/equipment during rig movements - Slips, trips & falls including hoses and completed piles	High	- Rig must have a current Thorough Examination. Certificate must be available on site. - Trained & competent operators of piling rig. (CPCS) Trainees can operate rig under direct supervision of experienced rig operator.	Low	Contracts
		- Rig to be inspected on a daily basis before use and during use by the rig operator. Record of inspection to be maintained. - Winch drums must be suitably guarded - Any signs of wear and tear on the rope must be dealt with according to procedure. The correct number of bulldog grips must be used according to the width of the rope. - The Safe Working Load (SWL) of the winches will not be exceeded. The SWL will clearly be displayed - Piling must not commence until the rig is levelled & stabilised. All stabilisers must be used, with boards / plates positioned underneath to distribute the load - Rig controls – isolation; Two functions to release winch brake. Safety devices must not be by-passed, but will not be relied upon by the operator. - All rig movements will be completed under the direction of a trained and competent banksman. (A minimum of two persons at all times when moving or handling the rig) - Dropweights must be secured whilst travelling. The machine/rig will not travel distances with the dropweight suspended. - Route hydraulic hoses, cables or pipes so that they are not across gangways or in a position where they may be damaged. Hoses etc which cross walkways to be covered with ramps & warning notices displayed		Foreman
		- All non-piling personnel to be kept at least 10metres away from the rig during operations. - Noise - operatives to wear ear protection when in the work area during piling. - Operatives must stay clear of the mast when it is being raised or lowered - Never swing the hammer weight to add a new length of casing. Never work under a suspended weight. - Auxiliary winch/hoist hook will be kept away from the hammer when not in use. - Ensure area is clear before operation of the hammer. - All completed piles to be clearly marked to prevent trip hazards		All staff
Telehandlers - Falling load due to uneven ground, overloading or unbalanced loading. - Machine overturning due to unstable ground conditions, Working on steep inclines, overloading, falling into excavations or down bankings - Driver falling or being thrown from machine	High	- Maintenance certificate to be provided by the hire company. Conduct pre-use checks & complete the Daily Inspection Sheet. Do not attempt to operate the machine if faults are found - Only specifically trained & competent operators to be driving the machine. (CPCS) - Passengers must not be carried. Telehandlers must not be used to lift people without prior consultation with H&S Dept.	Low	Foreman
		- Even distribution of the load will be achieved by spreading the forks of the telehandler to its maximum. Loads will be positioned centrally on the forks to maintain balance - Transport loads as close to ground level as possible to minimise the distance loads can fall and to increase stability of telehandler - Ensure visibility is not impaired when travelling. Where impaired visibility cannot be avoided, banksmen must be used - The machine operator will know the lift capacity of the machine, to prevent the possibility of a tip-over.		All staff

• Impaired visibility • Crush injuries adjusting forks		• Telehandlers may only be used as a crane if they are equipped to do so. Lifting accessories must only be shackled to a lifting eye. Chains should not be wrapped around the forks. Check that the load does not exceed the lifting capacity of the machine • Always use the seatbelt. • Never jump down from the cab. When climbing in and out of the cab always use the steps and grab rails. • When adjusting forks, tilt fork frame forward so that the forks swing freely away from the frame		
Welding • Fire, explosion & burns caused by sparks or hot material, • Respiratory problems from inhaling gases & toxic fumes, • Shock and electrocution, • Arc eye & exposure to infra-red or UV radiation, • Trips & falls over cables	Medium	• The appropriate protective clothing - welding mask, flame retardant overalls, leather gloves or gauntlets and safety boots must be supplied & worn at all times. Ensure metal objects such as watch straps or rings are covered • Equipment shall be maintained and inspected. Ensure that the cables, including the component earth cable, are adequate to take the current and are securely connected. Welding lead shall be adequately insulated. All damaged or defective equipment must be reported • Screens must be used to protect other people in the vicinity • Remove all combustible materials from the immediate area. Before applying heat, ensure that no residue of flammable substances is on the metal. 2kg dry powder extinguisher to be readily available • Turn welding equipment off when not in use • Ensure adequate ventilation is available to remove fumes & vapours. Use mechanical ventilation or where this is not practical, air-fed respiratory protective equipment • Route cables hoses so that they are not across gangways or where they cause trip hazards or be damaged.	Low	All staff
Concreting piles • Movement of concrete lorries • Burns & irritation from contact with wet concrete Slips, trips and falls including barrow movements		• Access routes for vehicles will be agreed with the Main Contractor before work commences. All vehicles / plant reversing will have a banksman in attendance. • Site will be cleared of obstructions, and the wheelbarrows will not be overloaded • Impervious PPE to be worn i.e. safety glasses, gloves, high visibility clothing, boots/wellingtons, overalls. (Shorts will not be allowed) and arms and legs will be covered.		
Petrol cut-off saws • Fire, • Injury from wheel bursts & kickbacks • Contact with rotating wheel or disk, • Clothing/hair entanglement with moving parts, • Inhalation of dust / fumes,	High	• Only authorised and trained operatives to use abrasive wheels. (trained to change abrasive disks) • Inspect saw & discs for damage prior to use. Ensure operating speed is indicated. • Loose clothing will not be worn by operators; Long hair to be tied back. • Stand to one side of saw when cutting – do not stand in line • Keep all persons clear of areas where sparks or dust is directed. Shield work area where possible; refuel at least 5 metres from cutting area • Users will not use undue pressure, and will use the right disc/wheel. • Additional PPE: Hearing protection, overalls, goggles, and gloves. • The operator will make sure that guards are fitted. Guards will not be removed except for maintenance purposes only	Low	All staff
Security • Unauthorised use of plant by other contractors or trespassers • 3rd party damage • Theft of plant, equipment and materials	Medium	• Reduce risk of theft of plant & equipment by: ○ Taking steps such as removing one wheel or fitting wheel clamps, chaining plant equipment to a fixed object; removing batteries, ○ Fitting control arm covers. ○ Locking small tools that are on hire in the property or van or secure store every night	Low	All staff

		- Remove keys from plant & equipment when not in use and left unattended. Hydraulic pressure to be relieved on control levers - Materials will be safely stacked and stored e.g. pallets of cement stored at one level only to prevent them toppling over if kids climb on them. Diesel bowsers to be locked - Where Westbuild are responsible for the site, adequate security fencing and sufficient number of construction/mandatory warning signs will be deployed						
Refuelling plant & machinery - Fire & burns - Irritation of skin through prolonged contact. - Irritation of respiratory tract	Medium	- Engines to be switched off prior to refuelling; Re-fuel in well ventilated area. - No smoking/no naked flames when refuelling; Mobile phones must not be used. Fire extinguishers to be available in vicinity. Practice good hygiene; Wear impervious gloves. - Do not overfill tanks.	Low	All staff				
Manual Handling of steel tube, hammer weight, To be moved from stock to the piling position & lifted vertically into position. Potential for injury as a result of - Lifting tube from below knee height with trunk bent forward - Trunk twisting or bending sideways whilst carrying tube - Lack of handholds - Uneven ground conditions & obstacles en route - Individual capabilities - Poor coordination of lift	Medium	- Manual handling operations to be mechanised where possible, to avoid / reduce manual handling risks. Eg Use mechanical means such as a Tele-handler to move banded packs of steel tube around site. Use of winches on rigs coupled with webbing sling or passing hammer rope through sections of larger sections of tube to lift vertically. - Tube Weights<table border="1"><tr><td>152mm = 9.2kg/metre</td><td>219mm = 16kg/metre</td><td>273mm = 26.5kg/metre</td><td>323mm = 31.5kg/metre</td></tr></table> - Reduce carrying distances through positioning / storage of materials adjacent to work area - Ensuring Working Platform is kept firm & level to minimise trip hazards - Ensure area is well lit. Take into consideration the weather conditions (ice etc) - Manual handling training; using good lifting techniques - Handling of light – medium weight loads subject to on-site assessment by foreman & operatives considering the weight of the load, presence of handholds, its stability & centre of gravity & each individual's fitness & capabilities - Reduce impact on individuals through team lifting - one person will take charge & coordinate the lift. A minimum of two persons at all times when moving or handling the hammer weight or large tubes	152mm = 9.2kg/metre	219mm = 16kg/metre	273mm = 26.5kg/metre	323mm = 31.5kg/metre	Low	All staff
152mm = 9.2kg/metre	219mm = 16kg/metre	273mm = 26.5kg/metre	323mm = 31.5kg/metre					

Environmental Assessment

Aspect / Impact	Risk rating	Control Measures	Residual risk
Mobilisation & deliveries - Delays caused by blocking roads. Potential for noise & disruption to local community, especially during early deliveries. - Contamination of highways & surface drains if vehicles or plant being transported are not cleaned prior to leaving site. - Fuel consumption & exhaust emissions	High	- Considerate driving & parking - large vehicles parked up clear of site and only brought in when vehicle can be accommodated on site - Neighbour notifications & planning around busy times - Wheel washes & cleaning down plant prior to transport if required - Use low emission fuels, ADBLUE. Switching vehicles off when not in use	Low
Mobile plant operations - Exhaust emissions; Black smoke if machine is poorly maintained - rigs use large volume of fuel during operations - Noise & vibration nuisance when working in urban areas,	Medium	- Servicing of machinery - Reducing noise levels from all plant whenever possible; switching off plant when not in use; All plant will be fitted with efficient silencers - Restricted hours of operation - Noise & vibration monitoring	Low
Storage & use of fuels & oils	High	Store fuel in secure, vandal proof bunded tanks (at least 10m away from watercourses) Carry out refuelling safely & prevent spills.	Low

Pollution of water courses, drains & sewers through accidental spills, hose bursts and poor storage		Spill kits are available on site with personnel instructed in their use.	
Poor storage & handling waste - Waste being mixed or sent to incorrect landfill - Leaching into ground and entering drains & watercourses. - Damage to plants/animals, unsightly windblown rubbish	Medium	- Segregation of waste & recycling; - site waste management plans, use of licensed disposal routes; - Provision of suitable waste containers. - Housekeeping	Low
Handling of materials, over ordering & stock control - Excess waste going to landfill, - Materials becoming damaged & unusable;	Medium	- Order correct amounts of materials; avoid accepting incorrect deliveries; avoid double handling; - Re-use/recycling materials, segregation of waste	Low

COSHH ASSESSMENT

Minimal risk associated with these substances during normal use/operations. The controls that have been identified are adequate for the type of work & the quantity / nature of the substances encountered. Products are generally used outdoors or in areas where good ventilation is not a problem, therefore it is unlikely that exposure limits will be exceeded during normal use, or in the event of an accidental release. **Where products are being used in a manner different from the way described, a separate risk assessment will be needed**

Substance	Hazard classification	Risks to health & environment	Precautions
Readymix Concrete		- Irritant and corrosive properties, towards the skin & eyes. - Prolonged & repeated exposure may also lead to dermatitis developing. - Prolonged & repeated exposure to cement dust may lead to chronic productive cough (bronchitis).	- Employ good hygiene practices – regularly washing the skin with warm water and soap, and drying the skin afterwards. Use facilities for drying clothes and change clothes regularly. - Contact with skin and eye should be avoided by wearing impervious protective clothing, including overalls with long sleeves and long trousers. Safety glasses must be worn to protect from splashes. - Gauntlets will help protect skin but staff must ensure that concrete does not become trapped between the glove & the skin.
Linemarker Paint		- Can cause asphyxiation, and irritation to respiratory system, skin and eyes when used in areas with poor ventilation. - Repeated & prolonged exposure of the skin to the propellant can result in the de-fatting of the skin - This substance poses more of a fire risk than a health risk - Highly toxic acidic fumes may evolve if aerosol is exposed to fire.	Pressurised containers - Do not use or store in close proximity to sources of ignition. - Wear gloves to prevent paint coming into contact with skin. - Do not inhale aerosol mist
Diesel & Exhaust fumes		- Inhalation of vapours and exhaust fumes can cause irritation of your eyes & respiratory tract; headaches and convulsions. Generally short term and should disappear when away from the source of exposure. - Prolonged or repeated contact with your skin can cause de-fatting & in some cases, dermatitis. - Prolonged exposure to exhaust fumes, in particular blue or black smoke, could lead to coughing, chestiness and breathlessness. - Ingestion will lead to irritation of the mucous membranes, throat and stomach, nausea and vomiting. Liver and kidney damage is possible.	- Turn off engines when not required; - Do not breathe vapours- all re-fuelling to be carried out in well-ventilated areas- preferably outdoors and away from sources of ignition. Funnels should be used - Store in well ventilated areas away from naked lights & heat sources. - Store in bunded bowsters or jerry cans. Drums must be stored upright in a bunded area. Do not allow to enter water supplies or soil. - Employ good hygiene practices; - Site powerpacks in well ventilated areas. Use mechanical ventilation &/or tail pipe filters within poorly ventilated areas. Look to achieve 10 air changes per hour.
Engine Oil	Not classed as hazardous	- Negligible hazard at ambient temperatures if inhaled; Hot oil may produce irritant fumes. Negligible hazard if ingested - Prolonged or repeated exposure may lead to mild skin irritation	- Follow manufacturers instructions and always read the label - Always store in original containers

		- Slightly irritating but does not injure eye tissue Used oil - Chronic (long-term repeated) exposure may lead to the production of skin tumours.	- Keep away from heat sources, open flames & other sources of ignition. - Spill kits & drip trays should be accessible & used. Funnel to be used when decanting - Prevent oil especially waste oil from contacting the skin. Vinyl or nitrile gloves must be worn when handling oil. - Oily rags should not be placed in pockets - Employ good hygiene practices – regularly washing the skin with warm water and soap, and drying the skin afterwards. - DO Not pour waste oils down drains
Hydraulic oil	Not classed as hazardous	- Minor risks associated with normal use. Inhalation of mists may cause irritation. - Risk of injection injuries when pressurised hydraulic system leaks or bursts.	
Various Greases		Continuous & prolonged exposure to grease may cause irritation of the skin	

Guideline on Inspection

Rope inspection guidelines, wire rope bulldog grips must be fitted in accordance with the following standards:-

Wire Rope and Bulldog Grips

Where wire rope is used make sure the correct amount of Bulldog Grips are used for the size of wire. Also make sure they are fitted correctly.

For example:-

- 10mm wire rope 4 Bulldog grips must be used
- 12mm wire rope 4 Bulldog grips must be used

Bulldog Grips must be fitted with the "U" bolt on the dead or tail end of the rope (non load bearing) There must be no deviation from this practice. SEE DIAGRAM BELOW.



- Visually inspect the frame mast and stabilisers for any damage or missing parts likely to effect the stability strength and integrity of the rig. Check all welded joints for cracks. Make sure all other fixings pins, nuts, bolts etc. are in place and secure. Inspect all guards and guides to ensure they are in place and free from damage. All pulleys must spin freely and be greased.
- When inspecting the wire rope it must be run off the drum to its full length. The rope must be supplied with an up to date test certificate or a copy of the certificate.
- The rope must be securely fastened to the winch drum.
- There must be enough rope to ensure there remains a minimum of 3 complete wraps of wire rope on the winch drum at all times when operating. Visually check the complete length of the rope for any kinks, crushed or broken wires. If there are any kinks or crushes the rope must be changed. If there are any broken wires there should be no more than 5% of rope broken on any length of rope measuring 10 x the diameter e.g. on 12 mm rope constructed with 6 strands each containing 19 wires gives a total of 114 wires. Therefore you can have no more than 5 wires broken within any length of 120 mm.
- The shackle also requires an up to date test certificate. The identification number on the shackle must match the identification number on the test certificate