



## CONSTRUCTION MANAGEMENT PLAN

CLIENT	JLCC/Sherlock
CONTRACT TITLE	82 Fitzjohn's Avenue
SITE ADDRESS	82 Fitzjohn's Avenue , London, NW3 6NP

# Construction Management Plan For Spring Walk RC Retaining Wall Construction At 82 Fitzjohn's Avenue For JLCC/Sherlock.

KRK Contractors Ltd  
65 Bishop Ken Road  
Harrow, HA3 7HP

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<b>SIGN</b>	<b>Project Manager/Site Manager</b>	<b>Health and Safety Advisor</b>	<b>Directors</b>	<b>Approval required.</b>
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	<b>BREIFINGS TO BE CARRIED OUT BY</b>		<b>TO BE REVEIWED BY</b>	<b>APPROVED BY CLIENT (IF APPLICABLE)</b>

REV01	12-07-24	First Edition
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<b>REV</b>	<b>DATE</b>	<b>STATUS / DESCRIPTION OF CHANGES</b>

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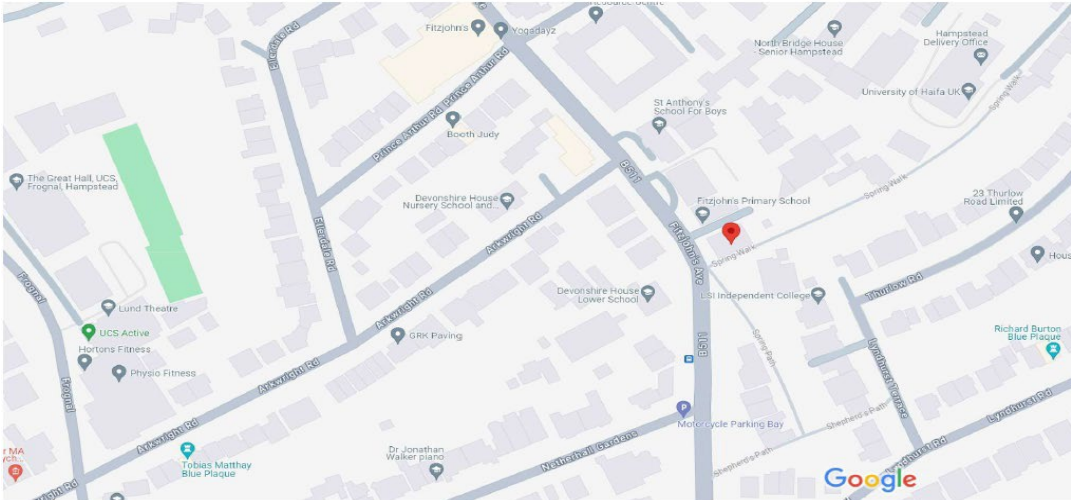
## APPENDICES / ASSOCIATED RISK ASSESSMENTS

- A Safety Risk Assessments (Issued separately)
- B COSHH Assessments (Issued separately)
- C Hand Arm Vibration Register ( book to be issued on site)

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## 1.0 Introduction & Scope of Works.

The existing development site is located within the Hampstead area, on 82 Fitzjohn's Avenue.



Map data ©2024 20 m



82 Fitzjohn's Ave



Plate 1 - Conservation Area and TPO Search (indicative site boundary in red) (Source: Camden Council, 26.06.23)

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KRK's scope of works consists of existing Spring walk brickwork wall removal, the new Spring Walk RC Retaining Wall Construction and brickwork installation.

This method statements explains the safe systems of work to be followed for the RC Retaining Wall Construction and brickwork installation.

Sherlock are the principal contractor on the project and KRK Contractors are the subcontractor on the project.

All operatives attending site will attend a site specific induction carried out by Sherlock.

Method statement being explained to the operatives by KRK Contractors site management. Operatives will sign the acknowledgement sheet

All of KRK Contractors plant and equipment will have up to date thorough examination certificates where required and will be issued to Sherlock before works commence.

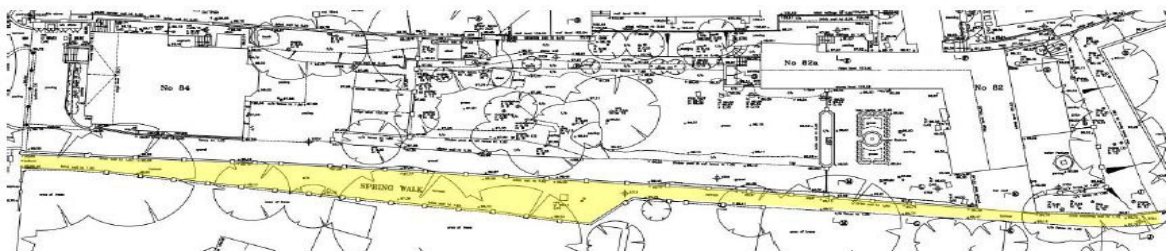
All KRK Contractors electrical equipment will have current up to date PAT certification which will be issued to Sherlock before works commence.

All work and lifting equipment will be inspected in line with PUWER/LOLER regulations and the KRK Contractors inspection regimes and copies issued to Sherlock weekly.

KRK Contractors will utilise waste segregation skips which will be placed in an agreed location and all waste licences will be issued to Sherlock.

## 2.0 Method of Works / Sequence of Events

The works comprise of the existing brickwork wall removal and the new RC Retaining Wall Construction with brickwork installation along the Spring Walk footpath.



Plan View of Spring Walk



Google Map View of Spring Walk

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Spring Walk is a pedestrian access route which connects the western Fitzjohn's Avenue to Shepherds Walk and Pilgrim's Place to the east



Photo of Wall along Spring Walk

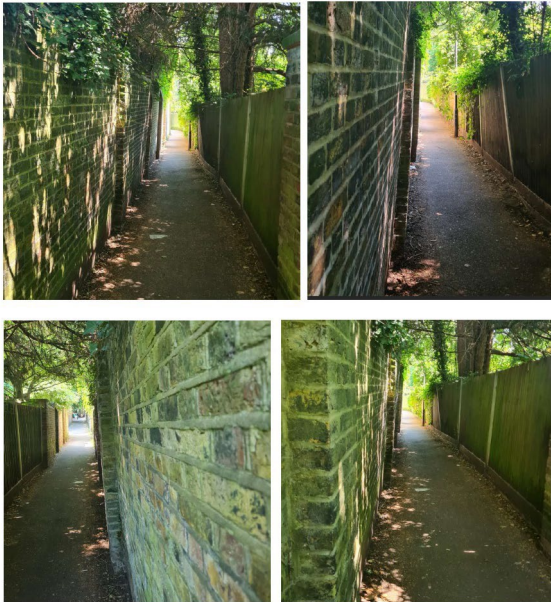
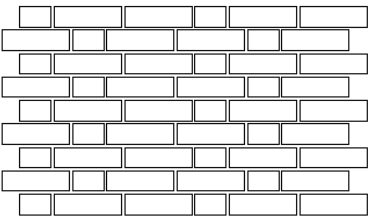
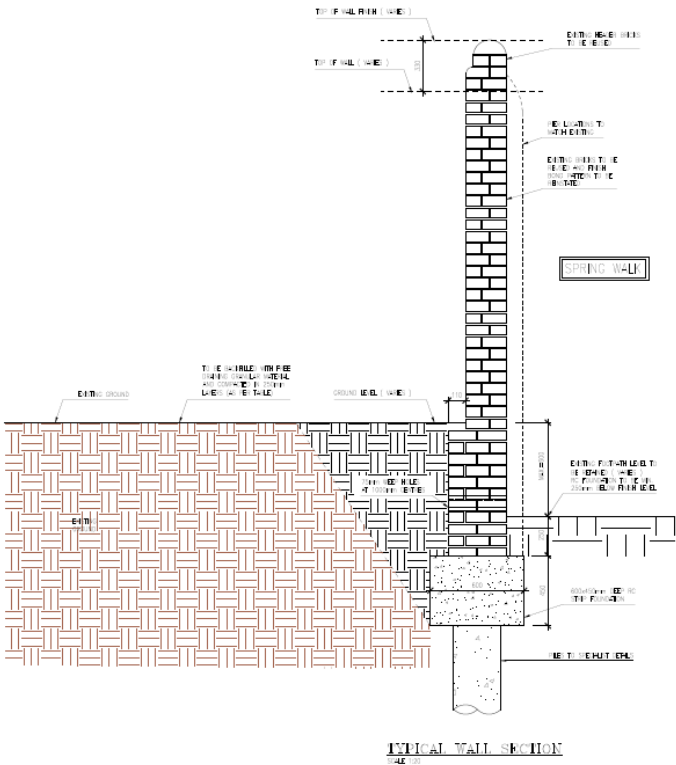
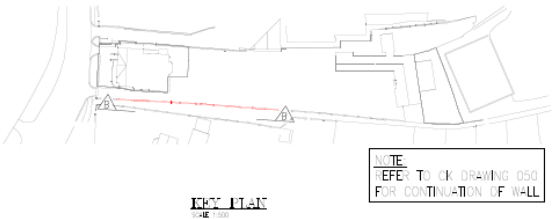


Photo Evidence of Wall leaning

The external and internal face of the new retaining wall structure will have a brick facade which will use the existing bricks, so that the wall will still have the same finish as it currently does.



CURRENT BRICKWORK PATTERN  
SIMILAR TO FINISH BOND  
(TO BE MATCHED)  
SCALE: 1/10



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- A temporary closure of the footpath alongside the failing retaining wall, will be required to ensure no public access within construction working zone for H&S reasons.



- A Temporary fixed gate will be installed with clear signage at each end of the footpath. Camden Building Licence, Road closure licence and structures approval are in place.



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- Once the closure is in place, the wall demolition will commence and will be carried out in 15m sections
- A no access zone will be placed along the first 15m section of wall, and will be 3m away from the inside face of the wall

KRK will supply a 360° excavator which will be used for the existing wall demolition and all the excavation works

Concrete will arrive on site in ready mixed trucks. We will be using 110V electric pokers to vibrate the concrete. Once cured, we will strike the shutters.

Concrete will be sampled from the truck mixer before discharge and slump tested to check the uniformity of the mix.

KRK Contractors are to:

- Issue workforce with correct PPE for tasks being undertaken
- Ensure all permits to be in place before any construction works to commence
- Ensure all operatives using plant and machinery are to be suitably trained and experienced. Evidence of their training is always to be retained on site and available for inspection
- Ensure all Temp Works Design Required is in place, as per Design Requirements if required
- RAMS have been approved and signed on to.

The time frames for the project will be determined by the actual start date.

Site management to contain working areas and access routes.

The works area and materials storage area will be identified and marked out, ensuring that crowd barriers fencing is erected to prevent unauthorised access to the working zone and that this barrier is maintained throughout the works to prevent unauthorised access.

Before materials and equipment are brought on to Site, arrangements are agreed with the PC to identify a designated laydown area.

Consultation is undertaken with Sherlock Project Management to ensure that deliveries of materials and equipment are planned prior to them arriving on site.

Where fuel is being stored, this is at a location agreed with Sherlock.

Where practicable all items over 20kg will be lifted and handled with suitable lifting aids where practicable.

Materials and equipment are sighted as close to the working area as is possible and safe.

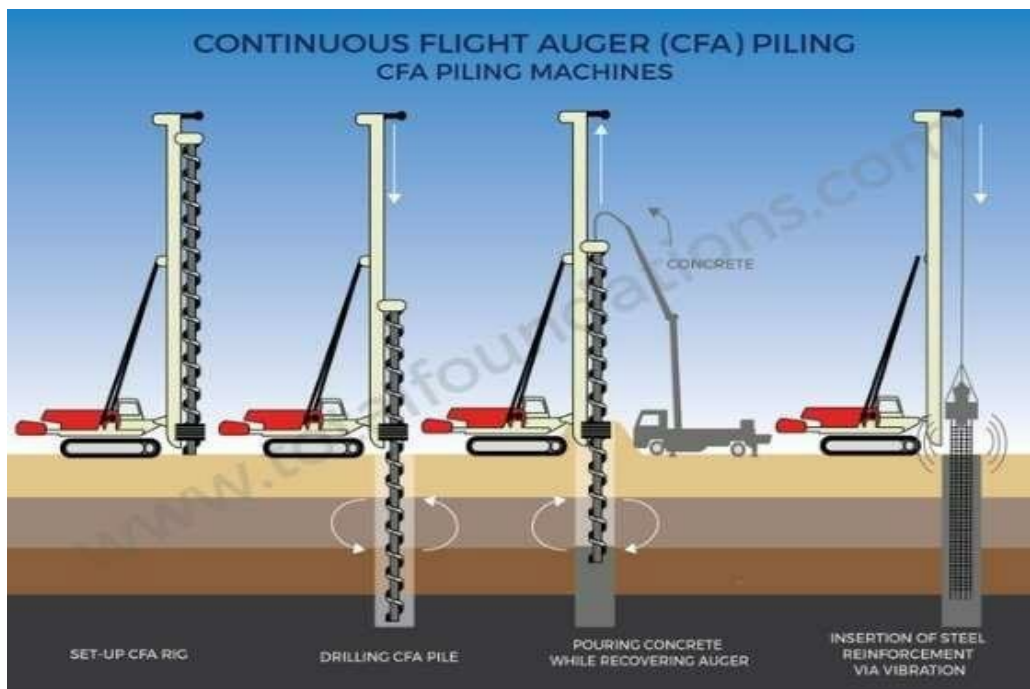
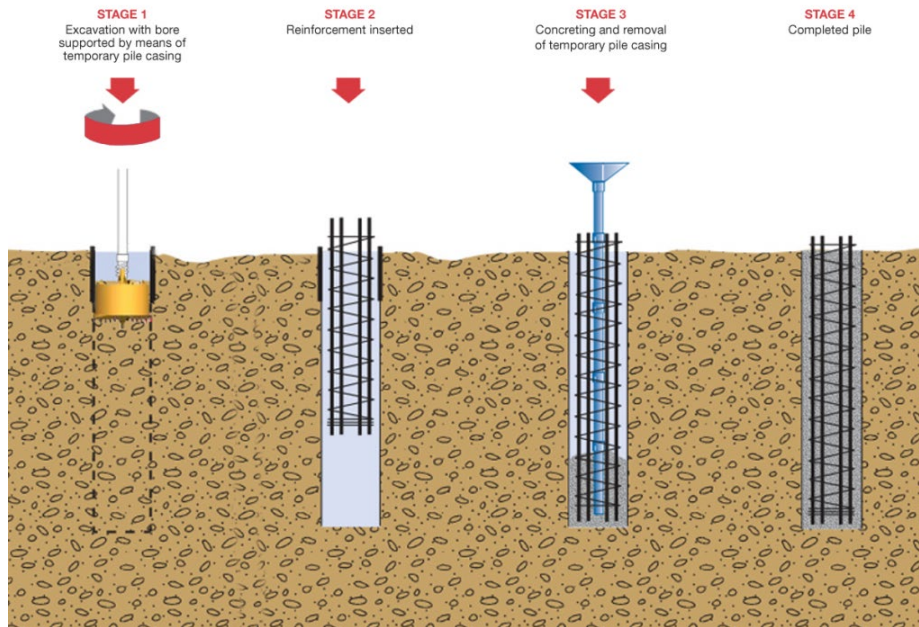
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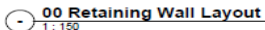
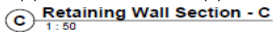
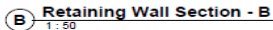
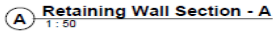
- Clear signage and a re-routed access route will be implemented, with a full time safety operative present at all times to ensure no public access.
- A 5T machine will be used, to gently and carefully pull the existing brickwork wall down, into the "3m no access zone"
- All brick work will then be handpicked, cleaned and stacked in pallets, with all damaged bricks, skipped
- As soon as 3 sections (45m) of the wall is demolished and cleared, the installation of the new wall will commence
- The ground is to be dug locally, to allow for the pile mat installation and micro pile construction works
- Every pile position is pre-surveyed in reference to the grid lines or the site boundary line. The micro pile position is pegged and indicated clearly using timber stake.
- Any obstructions that hindering piling works shall be removed or dismantled prior to commencement of pile installation.
- A working platform surrounding pile position to will be in place to facilitate the installation of micro piles, including excavation and backfill with suitable material. The condition of the working platform shall be suitable for micro pile rig. In any case, the platform shall be flat, dry and stable.
- A borehole of required diameter 150 to 300 mm is drilled by a rotary drilling equipment to stabilize the sides of the bore hole.
- A liner of full depth up to hard rock / strata is necessary. M.S. or HDP pipe liners are being used, MS liners are, however, preferable.
- Tor steel reinforcement cage of a bundle of large diameter rebars is provided as pile reinforcement.
- The piles will be poured using ready mix concrete to the required strength delivered to site in mini wagons due to narrow access.
- The piles are socketed adequately into the hard strata / rock necessary to develop the capacity which comes mainly in friction in the socket.

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- The piles will be installed in such a sequence that the load carrying capacity of the previously installed pile is not reduced. The sequence of piling shall be as per working drawings. In a pile group, the sequence of installation of piles normally be from the center to the periphery of the group or from one side to that the soil is restrained from the flowing out during operations.

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- All waste or slurry discharged from the borehole shall be cleared and stockpiled using sandbag for drying purpose before remove off-site.
- At least 7-days after the completion of piling, the pile cap excavation will commence to expose pile head with all necessary precaution taken. Required cut off level will be set out by KRK's engineer and marked on the exposed micro pile head. Manual breaker is then used to break the cement grout above the soffit of pile cap. Thereafter, oxy cutter will be used to cut the API pipe at the required cut off level and full weld to mild steel bearing plate with U-bar to receive the pilecap's/wall foundation main reinforcement.
- Once dug and a safe access is installed, blinding will be poured and the rebar fixed in situ
- The new RC retaining wall base will be shuttered and poured with a hanging kicker in place to allow trueness and straightness of the subsequent retaining wall
- Once the base is formed, the wall shuttering will be installed, using Aluminium Peri Panel system.

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## **Constraints to work**

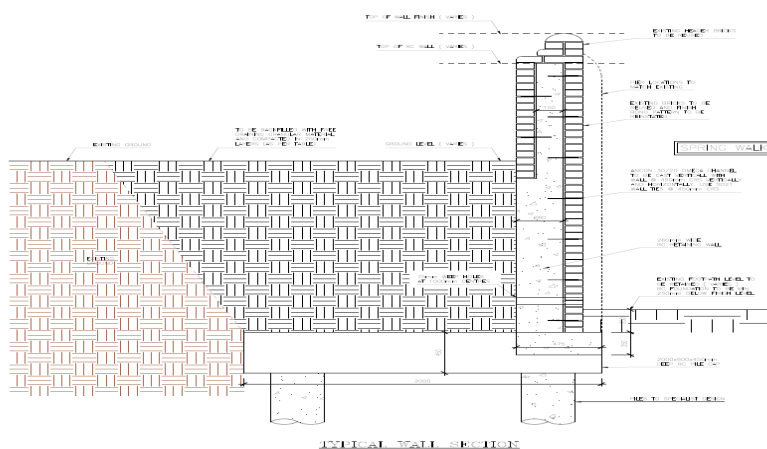
- Live services to be disconnected or diverted as required, before any intrusive work commences. Underground services drawings to be made available to site. The ground will be scanned for any live services, as an additional method of precaution.

## **Other notes :**

- The site set up will include a static concrete pump being based on site with a line in place to the rig
- All wagons will need to be mini wagons of 4m3 due to tight access
- The piling contractor will supply a traffic Marshall to bank all vehicles carefully to the pump
- The rig, whilst working, will be fenced off at all times to protect all other trades on site
- The rebar cages will be prefabbed and stored in a designated area
- The cages will be dropped into each bored hole with precision and care
- All protruding rebar will be protected and demarcated with mushroom caps

## **RC Wall Base - Traditional timber formwork:**

- Where permanent shutters cannot be used, we anticipate the use of traditional timber shutters for construction of the bases/foundations of the walls
- Shutters will be built 'insitu' by the carpenters.
- When side shutters are erected these will be rigidly fixed into position by structural timber strut's being propped off the excavation wall (where possible)
- The new retaining wall base will be poured directly from the shoot of the concrete truck .
- When the required strength has been achieved in accordance with the engineer's specification the site supervisor will allow the striking of the shuttering.



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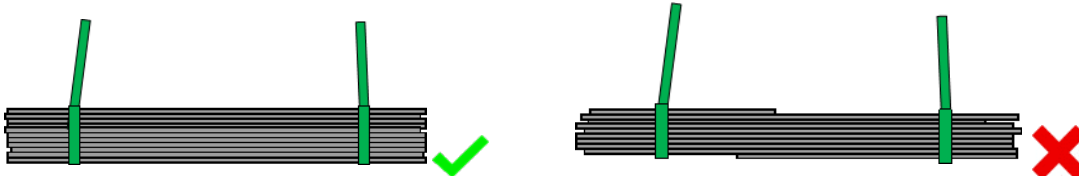




- The walls will be poured in 25m sections, using a 16m boom pump

## **Steel Reinforcement Fixing for the retaining wall bases and walls**

- Reinforcement will arrive on site to suit the work activity.
- A full inspection is to be carried out on all slings used for pre-slung loads on deliveries prior to slinging. Slingers must stand clear of the load and carry out a 1m test lift at which point from a safe distance they will visually check the underside of the bundle and the strops under the load. Only if the load is deemed to be safe will lifting be carried out.
- Reinforcement will be stored in designated storage areas on timber bytes ensuring clear walkways between bundles.
- Pre-slung slings must be taken out of use as soon as the load is landed and stored in a designated area for removal from site so that multiple lifting is eliminated.
- Wherever steel bundles are required to be re-lifted from one area to another I.e. from area of installation, these bundles are to be made up of reinforcement of similar lengths to ensure that all reinforcement in the bundles are double slung (the slinger slinging the load must additionally carry out a visual inspection of the bundle to ensure that no short lengths are within the bundle).
- Similarly, pre-slung deliveries should be assessed to ensure that reinforcement bundles are double slung. Should it be required additional slings/legs of chain set should be used and shortened as required.
- See detail below:



- Steel fixers will manually handle manageable amounts of reinforcement to area of installation – individual or team lift.

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- The spacers will give the cover required by the specification and will be manufactured from plastic or concrete.
- Whenever practicable steel fixers are to prefabricate reinforcement and lift into position with the crane according to the relevant Lift Plan and associated lift assessment contained in the Schedule of Common Lifts.
- Exposed reinforcement, which may cause injury, will have protective caps or Nevosafe Strips placed over them or in the case of walls, protected by a plywood box.

### **Horizontal foundation pad reinforcement**

- The Steel fixer foreman will inspect the foundation pad location to ensure it is ready for steel fixing.
  - Prior to any steel fixing works commence a polythene sheet is to be laid prior to installation of concrete footing to prevent contamination of soil outside of site boundary
  - Bundles of reinforcement will be carefully placed onto the work area ensuring the load is placed across adequate support members.
  - The lower matt reinforcement will be rolled out and spaced as per the specification, appropriate spaces fitted to meet cover requirements.
  - The upper matt reinforcement is rolled out at 90° to the lower matt and secured into place on spacer bars to form the slab thickness.
  - This process will continue until the base and wall is complete
  - The final activity will be to face the concrete retaining wall with the saved bricks, and any short fall are to be replaced with a similar brick
  - The higher level brick will be installed from a ready made scaffold, installed by a certified scaffolder
- **Access & Egress of Work area:**
- Generally safe access to each work-face will be achieved by utilising the Principal Contractors designated walkways onto and around site.

**We will establish and maintain a safe access routes across our work area**

### **Concrete Placement:**

- Concrete order will be made by site engineer.
- Concrete supply is as detailed below.
- Prior to pour, the following must be in place and completed:
  - Logistics plan for concrete wagon / pump to be submitted and briefed in daily activity to briefing to all parties involved in the operation.
  - Area of pour to be completed by construction team
  - Pre-pour check to be completed for area of pour
  - Permit to load with slab pour layout submitted.

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- Concrete Pump Permit to be completed when making use of mobile concrete pump for pour.
- Concrete operatives will be given notification to pour – mandatory PPE required – See attached PPE Visual Standard
- Concrete wagons will arrive to site and be guided into position by a trained and competent vehicle marshal and will discharge into the concrete skip or the hopper of the pump.
- Cube technician will carry out concrete sampling as per directly from wagon as per the attached Visual Standard on concrete sampling.
- Pumps will be operated by a CPCS carded operative,
- Concrete will be placed to required finish – communicated in daily briefing and as per pre- pour check sheet
- Once poured, area will be demobilised
- Concrete will be left to cure
- Concrete washout will be completed by washing out into a polythene lined skip unit set up on site.

#### **Mobile Concrete Pump:**

- Mobile concrete pump will be set up as per site logistics plan
- The mobile pump will be set up in a designated location segregated from the workforce using barriers and signage.
- The position of the concrete pump and placement of concrete delivery wagons will not obstruct the road for emergency vehicles. To ensure the road remains passable the pump will be parked as close to the work face as possible.
- The area around the hopper will be cordoned off using barriers to form a secure area.
- The area under the concrete pump hopper and a large surrounding area will be lined with plastic sheeting and a purpose-built timber drip tray lined with polythene to catch any drips or spillages directly under the discharge hopper
- A splash guard will be erected around the hopper to prevent spillages
- Outriggers will be deployed as required.
- Boom will be extended to the required position.

Wagon will be reversed to the pump under vehicle banksman/traffic marshal supervision and CPCS pump operator will pump to the required location

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### **Vibration of concrete:**

- Operatives will use electric pokers to sufficiently vibrate concrete. See below for HAV details.

EQUIPMENT	MODEL	IMAGE	A8 ms2	TRIGGER TIME	
				Action Level	Daily Limit
Wacker High Frequency 110V Vibration Pokers  	IRFUN 38, 45, 57		<2.5	8hr	>24hr

- All concrete operatives will be fully briefed on the concrete CoSHH assessment contained in a separate folder located in the site office or displayed in the CoSHH storage area.
- All concrete operatives will wear the following additional PPE:
  - Disposable overalls.
  - Impervious gloves
  - Wellington boots (overalls not to be tucked in boots).

### **Dust Suppression**

- Where required dust suppression will be used. Water suppression to be used for cutting or breaking of concrete and sweeping of floors
  - Dust will be dampened down using water to minimise airborne particles
- Operatives will also wear the correct PPE as per risk assessment attached

## **3.0. Work phases methodology**

### **Trafficking plant**

- Access & egress to site are as per project logistics plan & project Traffic management plan as prepared by the PC and within CPP.
- The scheme will reflect 'traffic' priorities, shared access routes, temporary diversions and signage, all of which will be undertaken and complied with.
- Follow HSE guidance for the safe reversing of vehicles (INDG48) onto site.
- All operatives and vehicle drivers must wear high visibility clothing at all times.
- Special attention will be given to the general access to site.
- All plant movements will be controlled & have a banksman at all times whilst in a pedestrian or public area. All reversing plant and large deliveries will also be controlled by qualified banksman.

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KRK will ensure vehicles leaving site are cleaned

Whenever possible all construction vehicles shall follow the site access and egress routes detailed below as per Sherlock Traffic Management Plan and shown in the following figures.

Whenever possible all construction vehicles shall follow the site access and egress routes detailed below and shown in the following figures.

**Site Access: Yellow Arrow (All Vehicles)**

1. Head in a northerly direction on Finchley Road (A41)
2. Continue into College Crescent (B511)
3. Continue along College Crescent (B511) in a northerly direction into Fitzjohn's Avenue (B511)
4. Continue along Fitzjohn's Avenue (B511) and turn right into the private site access road before entering site and turning within the designated turning area in order to leave site in a forward gear

**Site Egress: Blue Arrow (Large and Small Vehicles)**

5. Exit site in a forward gear via the private site access road and turn left onto Fitzjohn's Avenue (B511)
6. Continue on Fitzjohn's Avenue (B511) in a southerly direction and enter College Crescent (B511)
7. Continue along College Crescent (B511) in a northerly direction and enter Finchley Road (A41)

**Site Egress: Green Arrow (Small Vehicles)**

5. Exit site in a forward gear via the private site access road and turn right onto Fitzjohn's Avenue (B511)
6. Continue along Fitzjohn's Avenue (B511) in a northerly direction and enter Heath Street (B511)
7. Continue in a northerly direction on Heath Street (B511) and enter Heath Street (A502)

NB: Small vehicles are classed as less than 7.5 tonnes and large vehicles as greater than 7.5 tonnes.

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Figure 6: Site Access and Egress Routes

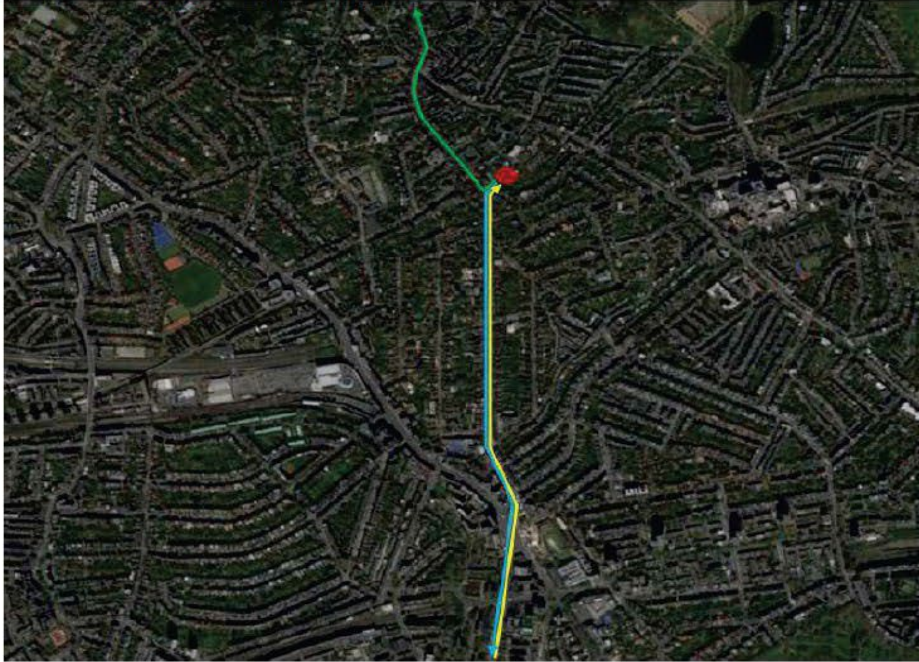


Figure 7: Site Access and Egress Routes (Site Entry)



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## Workface Access

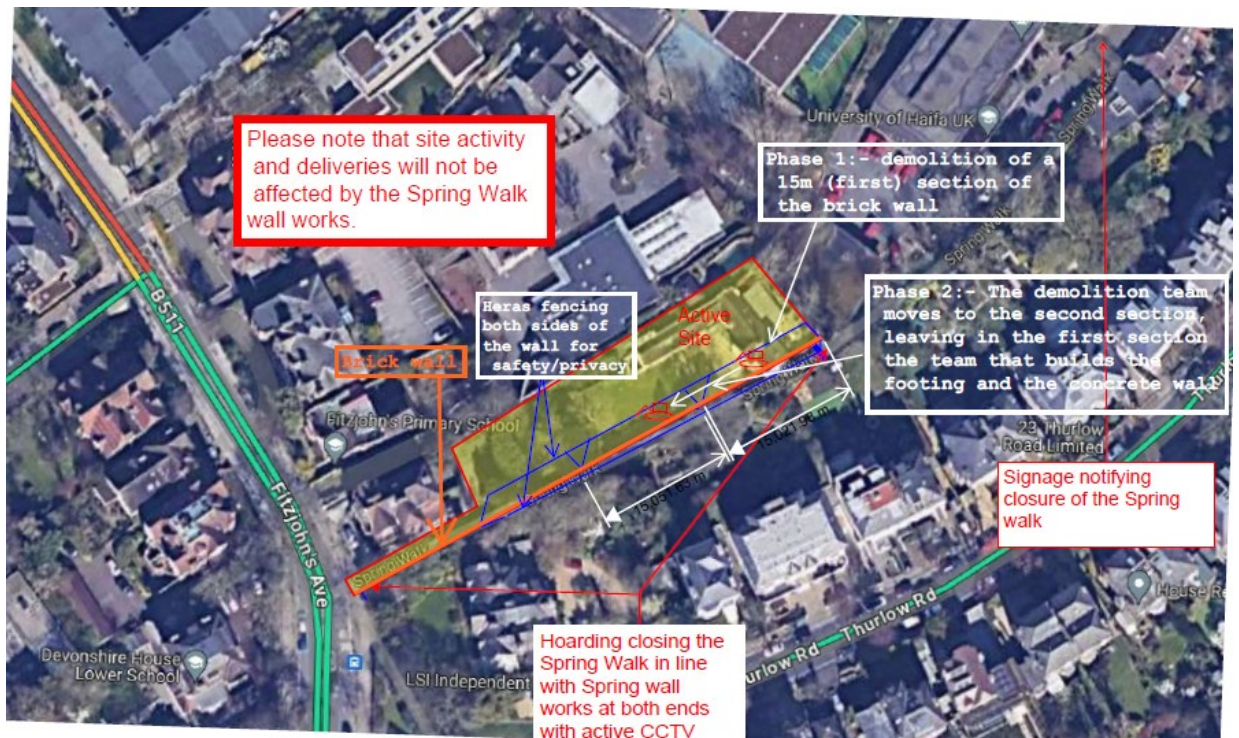
- Workforce and plant access will be through segregated route from Site Access Gate. This segregated route will connect to temporary welfare facilities located inside.



Image capture: Sept 2022 © 2024 Google

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## 1.2. - Logistic Plan

Site notice boards which will be including the details of the site management team (contact details – name, position, telephone number, email address) are displayed by Sherlock at Site Access.

### **Lifting Operations**

- KRK will be using 360° excavators.
- All lifting operations will be carried out in accordance with the lift plan.
- Tag lines will be used to maintain control of the load at all times.
- Loads will only be slung in accordance with the lifting plan dictation by trained and competent persons. All training certificates to be issued to Sherlock prior to lifting activities commencement.

### **General Prestart Work Procedures**

- Complete inductions, daily briefings and daily plant and site safety inspections.
- All operatives must report to the site manager upon entering and exiting the site

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so a sign in sign out record can be maintained.

- All Traffic / Pedestrian management shall be positioned as per the approved

Ensure environmental requirements have been considered.

Consideration should be also given to all protected trees and the Arboricultural Impact Assessment report should be followed at all times.

### **Manual handling arrangements**

- Wherever practicable the use of mechanical lifting equipment, excavators, hi-ab etc will be used to minimize the amount of manual handling to the lowest levels reasonably practicable, however the nature or the works will require some element of manual handling.
- To minimize the risks from manual handling the following approach has been taken:
  - Worker training and awareness of manual handling issues (ongoing tool box talks)
  - Schedule of known weights for bar size and length
  - Kinetic handling
  - General assessment

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- Multi person lifting – team lifting

Size	6mm	8mm	10mm	12mm	16mm	20mm	25mm	32mm	40mm
Area (mm²)	28.3	50.3	78.5	113.1	201.1	314.2	490.9	804.2	1256.6
Weight kg per m	0.222	0.395	0.616	0.888	1.579	2.466	3.854	6.313	9.864
Approx no. of 12m bars per tonne	375	211	135	94	53	34	22	13	8

## 4.0 Supervisor

A full time site manager will be on site to supervise the works Vasile Buga or Jozsef Sarossy who will monitor compliance with these RAMS, there will also be visiting Directors, Joe O'Neill and Andra Apostol and a visiting Safety Manager from All Day Safety.

## 5.0 Resources Materials

### Plant

5tonne excavator  
 2.8tonne excavator  
 Piling Rig  
 Slings and Chains (certified)  
 Suitable barriers  
 Hand Tools  
 Rebar  
 Aluminium Peri Panels  
 Timber various sizes  
 Plywood  
 Engineering instruments  
 Mobile Concrete Pump  
 Leads/spiders  
 All Plant certification will be issued to Sherlock prior to works commencing

## 6.0 Labour

Site supervisor, Site engineer , Machine driver and labour as required to satisfy the works.

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## 7.0 Personal Protective Equipment

Mandatory PPE	BSEN No.	Where	Training required	Notes
Hard hat	BS EN 397	All site	No	To prevent head injury
Safety Glasses	BS EN 166	All site	No	To prevent eye injury
Nitrile palmed gloves	BS EN 388	All site	No	To prevent hand injury. Cut type 1 suitable.
Steel toe cap boots with midsole	BS EN 345	All site	No	To prevent foot injury
Hi viz vest	BS EN 471	All site	No	To remain visible to others. Designated colours for different tradesmen as per induction.
Additional PPE	BSEN No.	Where	Training required	Notes
FFP3 Dust Masks	BS EN 149	Making good	Yes	Make use of suppression or extraction along with RPE. Face fit testing required.
High Impact Eye Protection	BS EN 166	Breaking concrete	No	To prevent eye injury.
Hearing protection	BS EN 352	Making use of power tools	No	To prevent hearing loss and tinnitus
Impervious Gloves	BS EN 388 BS EN 374	All site	No	Concrete Placement & Repair
Wellington Boots	BS EN 345	All site	No	Concrete Placement
White Overalls		All site	No	Concrete Placement

## 8.0 Emergency Procedures.

KRK Contractors will follow the Sherlock fire/emergency plan as normal. These will be briefed to all on the main induction.

First aid arrangements will be by principal contractor

KRK Contractors will have trained first aiders on site

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## 9.0 Environment

Consideration should be given to our neighbours at all times regarding noise & dust pollution.

Safe systems of work are to be complied with at all times.

The following environmental considerations need to be applied when undertaking the works, the controls detailed below will ensure that the environmental risk factors are properly managed.

• Item	• Control Methods
• <b>Diesel Bund</b>	• Drip Tray/Plant Nappy, Spill Kit, Fire Extinguisher
• <b>COSHH Items</b> • (Paints, cleaning products, etc.)	• CoSHH Store, Spill Bund (110% Capacity), Spill Kit
• <b>Fuel Barrels</b>	• Drip Tray/Plant Nappy, Spill Kit, Fire Extinguisher
• <b>Noise</b>	• Section 60/61 Work Hours, Hearing Protection Zone, Noise Monitoring
• <b>Construction Plant / Equipment</b>	• NRMM, Drip Tray/Plant Nappy, Spill Kit

Noise will be always kept to a minimum and consideration will be given when selection plant, the method of working to be adopted and hours worked.

We shall comply generally with BS5228 and sections 60 and 61 of the Control of Pollution Act 1974 with reference to the control of noise.

Music radios will not be used on site.

All static plant is to have a drip tray positioned beneath it at all times, in use or not. Typical waste is for general builder's waste only, no specific hazardous waste is anticipated. KRK will utilise a standard site skip for the majority of waste collection.

## 10 Permits

Permit to break Ground

Permit to Load

Permit to Pour

Hot works Permit

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## **11 Training**

Only trained, competent and experienced operatives will be used on these works  
CSCS cards will be available to view with the operatives, all plant operatives will hold current CPCS/CITB cards.

All training certificates will be issued to Sherlock prior to works commencing.  
Cherry Picker trained operatives.

## **12 Fuel & Fire**

All diesel will be stored in double bunded tanks with 110l spill kits on site. Petrol will be kept in 5l plastic containers maximum of 3 on site and will be locked away when not in use.

A mock spill response drill will be carried out every two months to ensure compliance and records maintained

Drip trays/plant nappies will be used under all static plant and when refuelling takes place.

Diesel Fuelling station to be separated from combustible material by 3 m, protected from vehicular traffic, locked and vented. Fuel storage location will be 10m away from drains. Area to have 120 litre oil spill kit, Drip trays, signage in place and portable extinguisher near storage and work areas. Diesel tanks to be double bunded. See COSHH assessments for PPE requirements and specific method statements below for location of fuelling station area during various stages of the project.

## **13 Traffic Management**

### **Trafficking plant**

- Access & egress to site are as per project logistics plan & project Traffic management plan as prepared by the PC and within CPP.
- The scheme will reflect 'traffic' priorities, shared access routes, temporary diversions and signage, all of which will be undertaken and complied with.
- Follow HSE guidance for the safe reversing of vehicles (INDG48) onto site.
- All operatives and vehicle drivers must wear high visibility clothing at all times.
- KRK will ensure vehicles leaving site are cleaned.

### **Storage of materials**

We will work to the traffic management plan prepared by the principal contractor and will follow it fully .Sherlock/KRK will have fully trained traffic marshals present to direct deliveries.

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All materials will be stored within agreed locations as designated by the PC Site Manager and in accordance with the environmental requirements detailed within the Construction Phase H& S Plan. All KRK equipment and materials will either:

Fuel stored in self-contained double skinned tanks. Spill kit kept with all fuel storage.

In the event of spillage, firstly the spill kit will be fetched and placed in order to Contain the spillage. The KRK supervisor and PC Site Management will then be Notified immediately to give further instruction in line with the Coshh Assessment.

#### **14     Occupational Health**

HAVS- please see HAVS risk assessment  
Noise – Please see Noise Risk assessment  
Dust –Please see Risk assessment

#### **15     Waste Management**

The site waste management plan will be followed at all times  
Segregated skips will be placed at the working area to segregate materials and be transported off site  
All documentation for the segregation of the skips will be issued to Sherlock.

#### **16     Lifting Operations**

KRK Contractors operatives that form part of the lifting team on the project will be briefed on the lifting plan safe system of work and sign to confirm understanding and compliance. KRK Contractors will supply the banksman for all lifting operations .  
KRK will be using 360deg excavators for lifting operations.

#### **17. Visual Standards - HAVS**

The following visual standards detail general control measures arising from works undertaken. The visual standards can be used in daily briefings, Toolbox Talks or further displayed on site to overcome potential language barriers.

Title
PPE Standard
Power Tool Safe Use
Abrasive Wheels Safe Use
Scissor Lift Safe Use

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## 1 Standard PPE

## VISUAL STANDARDS

Standard PPE	Concreting PPE
	
	
	
	
	

### HARD HATS (BS EN 397)

All employees must wear appropriately colour hard hat.

### EYEWEAR (BS EN 166)

All employees must wear appropriate eyewear according to task. Safety goggles should be used for any high-risk activities.

### HI VISIBILITY CLOTHING (BS EN 471)

All employees must wear clothing appropriate to the building site environment, without any loose items attached.

Concrete operatives must wear paper suits and wellington boots when concreting.

### GLOVES (BS EN 388)

All employees must wear safety gloves appropriate to task.

Concrete operatives should wear impervious gloves.

### FOOTWEAR (BS EN 345)

All employees must wear safety footwear appropriate to task, steel toe caps and midsoles or wellington boots for concrete operatives.

### ADDITIONAL PPE

Additional PPE may be required as identified through risk assessment. These may include: FFP3 Dust Masks to BS EN 149 and Hearing Protection to BS EN 352

## 10 Power Tools Safe Use

## VISUAL STANDARDS

### GOOD PRACTICE



Always store your power tool in the correct manner (saw of stands etc.)



Read the HAV assessment for the tool. Know the action level and do not exceed it.



Always use a suitable cutting surface such as a cutting bench. Never risk putting your limbs in harms way.



Hearing protection must be worn for circular saws and breakers airline blowers Petrol saws etc.

### BAD PRACTICE



Do not discard tools on the ground. This does not only present trip hazards but also can allow the tool to become damaged.



Always ensure that tools are not discarded and stored in a way that protects them from adverse weather conditions.



Clean tool at end of use of any excessive dust or concrete.

**Never remove guards or modify tools in anyway!**

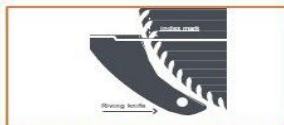
### INSPECTION



Ensure guard operates correctly and springs back to the closed position.



If cables or plugs are damaged in any way STOP. Return the tool to the site stores and report the fault.



The riving knife prevents the timber biting the blade and causing kick back. Ensure that this knife is in place and secure. NEVER remove the riving knife to achieve a plunge cut. Use a specific saw to carry out.



Ensure tools are pat tested and the date of the next inspection is either displayed on a sticker or a tag. If PAT is out of date STOP and return tool to stores for replacement.

**REMEMBER! REPORT ALL FAULTS!**

### INSPECTION HOT TOPICS

Always ensure...

- A tool has a portable appliance test (PAT test) and that the run out date is displayed on the tool
- To carry out a visual inspection of the tool for any cracks or breaks on the body or outer casing
- The plug is in good order with no cracks in the casing or exposed wires
- The cable is in good order with no breaks in the outer sheave or exposed wires
- The guard is correctly fitted and operates correctly (not stuck if adjustable)
- If additional PPE is required get this when you take the tool from the stores
- Any additional handles are fitted and do not remove
- The blade or drill bit is not excessively worn or damaged
- Riving knife is fitted
- Starting tool correctly operates
- Look for:
  - a) Any sticking of the trigger mechanism and
  - b) correct rotation of the blade/drill bit.

**REPORT ALL FAULTS**





## 14 Podium Steps Safe Use

## VISUAL STANDARDS

### GOOD PRACTICE



Ensure brakes are fully applied prior to use



Always close gate when working on platform and ensure that the gate's locking latch is fully engaged.



Always ensure that you are situated on firm stable ground and outriggers are fully deployed and locked into position.

### BAD PRACTICE



Never use a system when the breaks are not applied.



Never use a system that does not display a valid scaff tag.



Never work with open gated platform



Never work on an unstable platform or outriggers not deployed.

### INSPECTION



Check all catches, latches and fixings for secure correct locking and for any damage.



Check all welds and components for any breaks, bends, dents or any signs of fractures and damage



Clean all equipment of excess concrete waste at the end of use. Do not allow concrete to go off, as this will make it difficult to see any potential faults.

### INSPECTION HOT TOPICS

- you are sited on firm level ground.
- scarf tag is displayed and has been inspected within the last seven days.
- all operatives must inspect equipment prior to each use.
- to check all catches, latches and securing points. Ensure that they are fully functional and not damaged.
- to check all welds for any signs of fracture or breaks.
- to carry out a visual check of all components including decking units and access steps for any bends, dents or cracks.
- brakes are operational and wheels are not damaged or seized.
- gates or trapdoors open and close correctly.
- there is no damage to any outriggers and that they deploy and lock in place correctly.
- at the end of the task to clean of the system from any debris and concrete residue before it is allowed to go off.

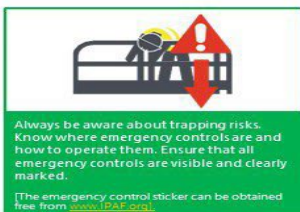
### REPORT ALL FAULTS

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## 27 Scissor Lift Safe Use

## VISUAL STANDARDS

### GOOD PRACTICE

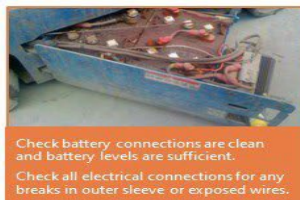
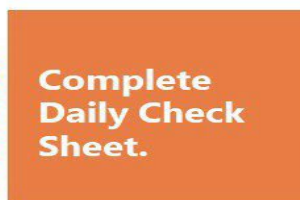


### BAD PRACTICE



**Always ensure that a LOLER cert is in place and up-to-date.**

### INSPECTION



### INSPECTION HOT TOPICS

- Always ensure...
- you are familiar with the type of scissor lift and are qualified to use it.
  - you complete the daily inspection checklist prior to starting works.
  - to carry out a functionality test ensuring that all controls operate correctly. This must include the emergency stops and lowering controls.
  - To check all pins and securing bolts are in place (never use alternatives such as nails or tie wire).
  - To check the condition of wheels and where applicable any tyres and tyre pressures (this is mainly on larger rough terrain models).
  - to check all wires for exposed sections and ensure all connections correctly join.
  - to check battery connections and battery levels.
  - to check recharging plugs for condition and any cracks in casing.
  - to check for any visible damage to platform or bodywork.
  - to entry gate and platform extensions operate correctly and lock in place.
  - for diesel powered machines check oil, coolant, any hydraulic levels and for any leaks.
  - machine free from concrete spillages.

**REPORT ALL FAULTS**

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<b>HAVS ASSESSMENT</b> <b>*WBV whole body vibration</b> <b>**Exposure action value</b> <b>***Exposure limit value</b> <b>A(8) = in an 8 hour shift</b>	Type of Plant	Vibration Magnitude M/s <sup>2</sup>	**EAV 2.5 A(8)	***ELV.5 A(8)	Risk Factor	dB Noise Level
	Vibrating Poker	4.5m/s <sup>2</sup>	3hrs 4mins	>8hrs	Low	101dB
	Circular Saw	3m/s <sup>2</sup>	5hrs 33mins	>8hrs	Low	106dB
	Petrol Saw TS410	4.5m/s <sup>2</sup>	2hrs 28mins	>8hrs	Low	119dB
	SDS + Drill Wood/Hammer Drill	2.5m/s <sup>2</sup> -15m/s <sup>2</sup>	8hrs 13mins	N/A 53mins	Low	111dB
	SDS Max Drill	12.5m/s <sup>2</sup>	19mins	1hr 17mins	High	111dB
	Pole Scabbler	14m/s <sup>2</sup>	5mins	21mins	High	85dB
<p>Where practicable, eliminate the need for using Vibrating Power Tools by adopting another practice.            If avoidance is not practicable, choose a tool that offers the least vibration level.            Identify the vibration levels of the tools to be used and calculate the maximum daily exposure time (trigger time) permitted for that tool.            Where necessary, rotate workers to reduce the risk of over exposure.            Implement an 'Exposure Register', using the HAVS Record Sheet, to log operator's exposure times.            Identify persons who have experienced symptoms before, these are not be allowed to carry out the work.            If persons experience the symptoms during work, they should stop and inform their supervisor who must arrange for a health assessment to be carried out.            All work equipment to be checked by the operator prior to use and by a competent person at least weekly Evidence of this will given to the PC at the end of each week.</p>						

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Making a sensible judgement about the risk from a hazard involves considering (at least) two elements;

1. Frequency (the probability (likelihood) of the harm occurring).
2. Consequence (the likely severity of the harm to a person resulting either from an accident or ill-health due to the hazard).

By using the following levels:

**Frequency:**

1. Unlikely
2. Possible
3. Likely
4. Probable
5. Imminent

**Severity:**

1. Slight (minor injury, first aid required).
2. Moderate (minor injury, first aid/medical attention).
3. Serious (injury, medical attention, hospitalisation (3 day)).
4. Major (serious injury/death).
5. Catastrophic (number of casualties/deaths).

Multiply the **FREQUENCY** by the **SEVERITY** to determine the **RISK RAT**

5	10	15	20	25
4	8	12	16	20
3	6	9	12	15
2	4	6	8	10
1	2	3	4	5

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## RISK ASSESSMENTS

Project Title:	<b>82 Fitzjohn's Avenue</b>				Project No:	<b>MS/FA/002</b>	Sheet No:	<b>1</b>			
Activity / Operation:	<b>Spring Walk RC Retaining Wall Construction</b>				Prepared by:	<b>Andra Apostol</b>	Date:	<b>12-07-24</b>			
Type of Assessment (tick as appropriate):	Site Specific:		<input checked="" type="checkbox"/>	Generic Assessment:			Routine Operation:				
Who may be harmed:											
Employees	<input checked="" type="checkbox"/>	Sub-contractors	<input checked="" type="checkbox"/>	Tenants		General Public		Visitors	<input checked="" type="checkbox"/>	Others	
Task	Hazard	Risk/Consequence	Assessment			Control Measures	Residual Rating				
			F	S	R		F	S	R		
Occupational Health	Dust Noise HAVS Leptospirosis	Breathlessness Chronic lung disease Hearing difficulties Tinnitus Possible Deafness Numbness of fingers and hands Vibration white finger Flu like systems/possible death	4	4	High	Dust suppression (water) to be used to dampen down dust Masks to be worn (FFP3 min) Noise protection zones to be implemented Ear protectors to be worn at all times due to the constant noise HAVS assessments to be carried out Trigger times to be adhered to 15 minute intervals for each operative Operatives to wear gloves when working in live manholes No food allowed to be eaten on site. Only in the canteen. Good hygiene/good welfare facilities	1	4	Low		
Slips trips and falls	Waste Materials Greasy or Slippery Surfaces Voids, barriers and handrails left open Slippery Surfaces caused by ice, frost and snow	Falls of persons at height Falls of persons at ground level Minor cuts and scrapes and Major Injury and possible death Fractured arms/wrists/knees	4	3	High	Good Housekeeping All spillages to be cleaned up immediately if cannot then must be signed and cordoned off All voids to be securely covered over Access routes must be kept clear of obstacles at all times Work areas to be kept clean and tidy All Alloy towers must be erected correctly by a competent	1	3	Low		

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						person No persons to erect or alter the alloy towers unless trained to do so Keep up to date with the forecast, monitor temperatures. Early greeting needed using rock salt that can stop ice forming and cause existing ice or snow to melt. The best times are early in evening before the frost settles and/or early in the morning before employees arrive. Access is to be limited/restricted to some walkways, working areas (on decking/top of rebar), all staff is to be informed and signage in place to warn about dangerous conditions.			
Tools	Use of Hand and Power Tools	Injury from use of hand tools and power tools	3	4	High	All operatives to be competent and familiar with the tools used Tools to be used from a firm level surface. Visually inspect tools before use to ensure they are safe to use and have valid PAT test where required. Use designated grips and handles on the too Follow trigger time guidance. Do not exceed trigger time. Ensure HAVS log is completed where required Follow visual standard on safe use of power tools attached to this MS	3	1	Low
Drilling into concrete	Drilling into concrete	Noise Silica  Dust	3	4	High	Avoid need to create dust. Suppress using water (500ml/minute) or use local extraction and use FFP3 dust mask. Rotate workers to minimize RCS inhalation. Cordon off areas from others. FFP3 type dust mask to be used at all times even when supressing or extracting dust. Face fit testing mandatory prior to using dust mask and every 6 months or sooner with considerable change in weight. Ear protection is to be worn when drilling, scabbling, sanding, grinding and breaking out.	3	1	Low

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						Exclusion zone to be setup at 3m with signage displayed stating hearing protection to be worn, no unauthorised access.			
Mobile plant	Movements of mobile plant Working on sloping or uneven ground Unattended machinery Working in buildings	Contact with other machinery, structures or people Overturning of Mobile Equipment Unauthorised start up and movement Build up of noxious gases	3	4	High	Mobile plant is only to be operated by competent authorised persons. Personnel are only to operate categories of equipment for which they hold a relevant certificate of competence e.g. CPCS. Machinery must only be operated in accordance with safety procedures. Pedestrian routes to be segregated from plant / vehicle routes. Persons not to stand between machine or the load and any fixed object to prevent being crushed. Never approach a machine until you have made the driver aware of your presence and you get a clear signal to approach. Always be alert to moving plant/equipment and take the view that the driver hasn't seen you. Always keep clear of the turning circle of excavators. Roll over protection systems (ROPS) to be in place. Seat belts to be worn at all times. Reversing operations only to be carried out under the directions of a banksman unless all round vision is available. All machines to have an amber flashing light operating unless otherwise specified by your supervisor. All persons on foot to wear high visibility clothing. Machinery not to be left unattended unless key removed and machine secured. Machines working in buildings must have some form of ventilation ie suction push fans or exhaust	1	4	Low
All works	Slips, trips and falls		4	2	High	Suitable access and task lighting to be provided.  Work areas to be kept tidy at all times with clear blue routes which are to be maintained.  Dedicated areas for storage of materials with walkways	1	3	Low

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						<p>between materials.</p> <p>Eliminate trailing cables/hoses by running overhead, or employing box overs (or similar).</p> <p>Suitable access and edge protection to be provided to operatives for placing/vibrating of concrete</p> <p>Making good within stair cores is to be undertaken from mobile stair towers.</p> <p>Emergency access routes are not to be obstructed during making good in stair cores.</p> <p>Ensure Ply on steel reinforcement mats prior to concrete placement</p>			
Manual Handling	Lifting Placing Putting down Pushing Pulling	Sprains and strains Bad backs Damage to hands and feet	3	4	High	<p>Use mechanical lifting where possible</p> <p>Break down the loads into more manageable sizes Use Team lifting when objects are heavier than 25kg Only lift what the person is capable of lifting</p> <p>Use kinetic lifting techniques</p> <p>Person to be manual handling trained Ensure route is clear of obstacles</p> <p>Shutters not to be manually handled (exception of small shutters in line with the above)</p> <p>No operative to lift more than capable.</p>	1	4	Low
Abrasive Wheels Cutting Equipment	Abrasive wheels or disc cutters moving at high speeds Flying particles Sharp, hot edges on materials	Bursting of abrasive wheel or disc Contact with wheel or disc Entanglement with moving parts Inhalation of dusts Exposure to high noise levels	2	4	High	<p>The correct wheels are to be used for the work being carried out and the materials to be worked on.</p> <p>All flammable materials in the vicinity to be moved or adequately covered with fire resistant materials.</p> <p>Where practicable, work is to be carried out at a comfortable</p>	1	4	Low

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	Sparks Manual handling Inhalation hazard – dust Occupational – HAVS, Noise – prolonged exposure	Fire Poor posture during use Operator injury due to misuse, cuts , abrasions or due to defective equipment				level to prevent the need for bending or stooping. Hot works permits to be obtained. Suitable fire extinguishers to be within 1m of work area.A minimum of 2 fire extinguishers required during hot work operations. Loose clothing or jewelry not to be worn by operatives. Long hair to be tied back. Equipment to be checked by user before use and by a competent person weekly. Wheels and discs to be stored correctly (i.e. laying on a clean, flat surface). All operatives involved to be briefed on the task specific Method Statement and Risk Assessments and records kept of all briefings. Certificate of training for blade exchange/installation/selection is required.(abrasive wheel training) Inspect tool before any use to ensure is in good working order – DO NOT USE if damage or defective, missing guard etc. ALWAYS wear suitable eye protection to BS EN166b impact grade goggles, hearing protection and gloves. Ensure tool is switched off when re-fuelling or during blade installation. Beware of cutting sparks etc. keep all others away from cutting area. Use for short duration, intermittent use only to minimise HAVS and Noise Exposure.			
Lifting Operations	Overloading of the excavator due to failure to estimate loads or by incorrect use. Unsafe methods of erection, alteration or dismantling. Unsafe Slings Insecure loads Incorrect Signals or messages	Falls of Materials Failure of lifting equipment Contact Damage	3	4	High	Only trained slingers/signallers to CPCS standards are to sling loads All loose loads to be secured The correct lifting equipment is to be used Excavator to be fitted with RCI to prevent damage All lifting equipment must be marked up with the SWL/WLL All lifting equipment to have an up to date Thorough Examination Certificate All lifting equipment to be inspected on a regular basis	1	4	Low

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Concreting	Movement of vehicles Moving parts of machinery Vibrating equipment Noisy equipment Pouring of concrete Concrete constituents Working at heights In situ reinforcing bar Binding wire laying around	Personnel being struck by vehicles Vehicles colliding with each other Entanglement Prolonged exposure to vibration Prolonged exposure to noise Splashes from concrete Contact with concrete Falls from height Being impaled on reinforcing bar Tripping over	3	4	High	Plant siting and traffic management schemes to be developed. All moving / reversing vehicles to be under the guidance of a competent Banksman. Concrete should not be poured too quickly. Safety glasses to be worn by anyone in the vicinity of the pouring operation. The ends of all re-bar which will be left protruding are to be capped. All excess binding wire to be frequent cleared away to prevent trips. Personnel involved in the concreting operation to wear long trousers, keep arms covered and wear gloves. Suitable footwear to be worn if persons need to stand in wet concrete. Suitable low vibration equipment to be purchased where practical. A vibration assessment is to be carried out on all vibrating equipment and trigger times marked. A noise assessment to be carried out by a competent person where there is a risk of personnel being exposed to high levels of noise. A suitable work at height plan to be developed for any activities which involve working at height. All edges (including excavations) or voids in floors are to be protected by suitable, physical, barriers. Where access to a leading edge is required a suitable fall restraint / fall arrest system is to be used (additional risk assessment required). Suitable washing facilities to be provided to allow personnel to wash / shower. All work equipment to be checked before use with any defects reported to a supervisor immediately A COSHH assessment to be carried out for the concrete and any findings communicated.	1	4	Low
Concreting	Placing concrete to walls / beams/ slabs	Bursting Shutters Falsework failure	3	3	Med	All formwork to be inspected and signed off on pre pour	3	1	Low

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						<p>checksheet/permit to load prior to pour by competent person in accordance with TW design.</p> <p>Specified rate of pour not to be exceeded</p>			
CosHH	Application of shutter oil	Use of chemicals – chemical burns	3	4	High	Follow COSHH assessment	3	1	Low
Construction of rebar cages (steel fixing)	<p>Use &amp; storage of reinforcing bar</p> <p>Use &amp; storage of reinforcing mesh</p> <p>Use of tie-wire</p> <p>Movement of materials</p> <p>Cutting of steel with disc cutter</p>	<p>Tripping over materials</p> <p>Falling onto re-bar.</p> <p>Reinforcing mesh falling on to people</p> <p>Manual handling injuries</p> <p>Eye injuries</p> <p>Hot surfaces</p> <p>The production of sparks</p>	3	4	High	<p>A suitable exclusion zone around the work area is to be established.</p> <p>Bundles of re-bar (loose or mesh) are to be moved by mechanical means (separate risk assessment and lifting plan required).</p> <p>Individual pieces / sheets of re-bar to be moved by at least 2 people (separate manual handling assessment required).</p> <p>Suitable gloves to be worn when handling re-bar / reinforcing mesh.</p> <p>Loose pieces of re-bar to be stored in secured bundles on a suitable number of blocks for the length.</p> <p>Reinforcing mesh to be stored flat, on blocks, and not left leaning against walls or structures.</p> <p>Suitable access to be left around stored material allowing them to be reached safely.</p> <p>Tie wire to be kept coiled and belt rolls used to prevent off-cuts being left lying around. All waste to be placed in bins.</p> <p>Safety glasses to be worn when cutting tie wire.</p> <p>Cutting of re-bar only to be carried out by competent person (see separate risk assessment)</p> <p>All flammable materials to be moved or covered.</p> <p>Ensure all protruding rebar ends are covered over, where necessary, by plastic stop ends or plywood.</p> <p>Ensure there is a suitable working platform capable of accepting the load.</p> <p>Lift column cages from approx. 1/3 down, the lifting chains will go down the inside of the cage, come out, and be attached to bars fixed to the outside. This system allows for remote release</p>	1	4	Low

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**COSHH Risk Assessment Record**
**Assessment Ref: KRK/COSHH/001**




<b>Project/Site:</b> 82 Fitzjohn's Avenue	<b>Company:</b> KRK Contractors Ltd
<b>Substance:</b> Diesel	<b>Hazardous Contents:</b> Distillate hydrocarbons

					
Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> X	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> X	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> X	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
<b>TOXIC (T)</b>	<b>IRRITANT (Xi)</b>	<b>CORROSIVE (C)</b>	<b>HARMFUL (XN)</b>	<b>FLAMMABLE (F+)</b>	<b>DANGEROUS TO THE ENVIRONMENT(N)</b>

Process: For use for plant and equipment	Activity: Refueling of plant
Location: Fuelling area	Personnel at Risk: Plant operatives, delivery drivers
<b>Risk To Health:</b>	
Injection under the skin may have serious medical effects. Inhalation of fumes may cause drowsiness leading to a lack of consciousness. Contact with the eyes will cause irritation and redness. Prolonged and repeated contact with skin may cause dermatitis which could lead to irreversible skin disorders. Risk of fire. Diesel spillages will cause surfaces to become slippery	
Risk Phrases: : R12, R45, R66, R38, R67, R51/53,	Safety Phrases: S2, S23, S24, S29, S43, S45, S53, S61, S62
<b>Control Measures:</b>	
Gloves and eye protection must be used when handling diesel. Wash skin thoroughly after use. Do not use near open flames or on hot plant. Treat any spillage as a fire hazard clean up with absorbent materials contained within spill kit. Store in a separate container on a bund within the environmental stores.	









Storage: Drums must be stored on a bunded area within a lockable container.	Disposal: Avoid any discharge into waterways or public sewerage system. Diesel will cause harm to environment.
Spillage: Clean up with absorbent materials. Diesel spillage will make surfaces very slippery.	Fire Information: Do not use near open flames or heat sources. Extinguish any fire with Dry powder, or Co2. The flash point of diesel is 60 degrees C
First Aid	
Eye Contact: Wash out thoroughly with large amounts of water. If irritation or redness continues seek medical assistance.	Inhalation: Remove to fresh air and seek medical assistance.





Skin Contact: Wash skin as soon as possible with plenty of soap and water. Change contaminated clothing.		Ingestion: Do not induce vomiting. Wash out mouth with water. Drink plenty of water. If a large amount has been swallowed seek medical assistance.	
<b>PPE</b>			
			
<b>Other Controls</b>			
Monitoring:		Not Applicable	X
Health Surveillance:		Not Applicable	X
<b>Training/Instructions Required</b>			
Verbal Instructions: Toolbox Talks		Written Instruction: Follow manufacturers instructions	
Assessment Carried Out By: Andra Apostol		Date: 04/02/24	

<b>COSHH Risk Assessment Record</b>	<b>Assessment Ref: KRK/COSHH/004</b>
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<b>Project/Site:</b> 82 Fitzjohn's Avenue	<b>Company:</b> KRKContractors Ltd
<b>Substance:</b> Concrete/ wet and dry	<b>Hazardous Contents:</b> Alkali Content, Silica particles







					
Yes:    No:	Yes:X   No:	Yes:    No:	Yes:X   No:	Yes:    No:	Yes:X   No:
<b>TOXIC (T)</b>	<b>IRRITANT (Xi)</b>	<b>CORROSIVE (C)</b>	<b>HARMFUL (XN)</b>	<b>FLAMMABLE (F+)</b>	<b>DANGEROUS TO THE ENVIRONMENT(N)</b>

Process: Placing and working with Wet or Dry Concrete Mixes	Activity: Placing, Vibrating concrete
Location: Columns, Walls, Slabs and stairs	Personnel at Risk: Operatives, Pump operator, drivers.
<b>Risk To Health:</b>	
Respiratory damage risk when cutting cured concrete due to content of silica particles. Contact with eyes may cause severe irritation and / or alkali burns. Allergic contact dermatitis may be caused by individual sensitisation	

Risk Phrases: R20, R21, R22, R43, R48.		Safety Phrases: S22, S24, S28, S29, S36, S37, S39.	
<b>Control Measures:</b>			
<p>PVC gloves wellingtons , long sleeved clothing, pants and eye protection to be worn at all times while working with wet concrete or dry mix. Wet cut to minimise dust release and respiratory dust mask to be worn by operatives.</p> <p>Adequate and sufficient welfare facilities must be in place by Principal contractor to ensure skin can be washed after working with concrete.</p> <p>Tool box talk on working with concrete to be communicated as an awareness or the risk of working with Concrete.</p>			
Storage:		Disposal: Non Hazardous disposal subject to local Authority requirements.	
Spillage: Do not allow spillages to enter water course. Spillage presents a slip/trip hazard clean up as you go		Fire Information: Not Flammable	
<b>First Aid</b>			
Eye Contact: Wash immediately with plenty of clean water for at least 10 minutes. Seek medical attention particularly with wet mixes		Inhalation: Remove from dusty area and clear airways. If symptoms persist seek medical attention	
Skin Contact: Remove heavily contaminated clothes. Wash with plenty of clean water. Seek medical attention for persistent redness, irritation or burning of the skin		Ingestion: Drink plenty of water. Do not induce vomiting. Seek medical attention	
<b>PPE</b>			
			
<b>Other Controls</b>			
Monitoring: Records Attached		Not Applicable	X
Health Surveillance: Records Attached		Not Applicable	X
<b>Training/Instructions Required</b>			
Verbal Instructions: Toolbox Talks		Written Instruction: N/A	
Assessment Carried Out By: Andra Apostol		Date: 04/02/24	

**COSHH Risk Assessment Record**
**Assessment Ref: KRK/COSHH/002**

<b>Project: 82 Fitzjohn's Avenue</b>	<b>Company: KRK Contractors Ltd</b>
<b>Substance: Petrol</b>	<b>Hazardous Contents: Distillate hydrocarbons:</b>

					
Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
TOXIC	IRRITANT	CORROSIVE	HARMFUL	FLAMMABLE	DANGEROUS TO THE ENVIRONMENT

Process: Plant/Tools refueling	Activity: using petrol Saws
Location: Various areas	Personnel at Risk: Operatives, Third parties

**Risk To Health:**

Injection under the skin may have serious medical effects . Inhalation of fumes may cause drowsiness leading to a lack of consciousness. Contact with the eyes will cause irritation and redness. Prolonged and repeated contact with skin may cause dermatitis which could lead to irreversible skin disorders. Risk of fire. Petrol spillages will cause surfaces to become slippery. Contaminated material will remain flammable.

Risk Phrases: R12, R45, R66, R38, R67, R51/53,

Safety Phrases: S2, S23, S24, S29, S43, S45, S53, S61, S62

**Control Measures:**

Gloves and eye protection must be used when handling petrol. Wash skin thoroughly after use. Do not use near open flames or on hot plant. Treat any spillage as a fire hazard clean up with absorbent materials contained within spill kit. Store in a separate container on a bund within the environmental stores.

Storage: Drums must be stored on a bunded area within a lockable container. Transport around site in Jerry cans

Disposal: Avoid any discharge into waterways or public sewerage system. Petrol will cause harm to environment.




Spillage: Clean with absorbent materials. Petrol spillage will make surfaces very slippery. Contaminated clean up material will remain very flammable store and dispose in the same manner as petrol itself. The spillage area will pose a high fire risk

Fire Information: Do not use near open flames or heat sources petrol is extremely flammable. Extinguish any fire with dry powder or Co2. Allow hot plant and equipment to cool down before Re-fuelling.

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due to vapor release. Area must be left to ventilate.			
<b>First Aid</b>			
Eye Contact: Wash out thoroughly with large amounts of water. If irritation or redness continues seek medical assistance.		Inhalation: Remove to fresh air and seek medical assistance immediately. If unconscious put in recovery position.	
Skin Contact: Wash skin as soon as possible with plenty of soap and water. Change contaminated clothing.		Ingestion: Do not induce vomiting. Wash out mouth with water. Drink plenty of water. If a large amount has been swallowed seek medical assistance.	
<b>PPE</b>			
			
<b>Other Controls</b>			
Monitoring: Attached	Records	Not Applicable	
Health Surveillance: Attached	Records	Not Applicable	
<b>Training/Instructions Required</b>			
Verbal Instructions: Toolbox Talks on environmental precautions		Written Instruction:	
Assessment Carried out By: Andra Apostol		Date: 04/02/24	

<b>COSHH Risk Assessment Record</b>	<b>Assessment Ref: KRK/COSHH/012</b>
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<b>Project/Site: 82 Fitzjohn's Avenue</b>	<b>Company: KRK Contractors Ltd</b>
<b>Substance: Line Marker Spray Paint</b>	<b>Hazardous Contents: Propane, Butane, Acetone, Naptha, Butoxyethonol and Methoxy-2-propanol</b>




					
Yes:   No:	Yes:X   No:	Yes:   No:	Yes:   No:	Yes:X   No:	Yes:X   No:
TOXIC (T)	IRRITANT (Xi)	CORROSIVE (C)	HARMFUL (XN)	FLAMMABLE (F+)	DANGEROUS TO THE ENVIRONMENT(N)



Exposure Time: TWA – 8hrs	WEL: Methoxy-2-Propanol -100ppm/375mg/m <sup>3</sup> Butoxyethanol -25ppm/ Acetone 500ppm/1210mg/m <sup>3</sup> Butane 600ppm/1450mg/m <sup>3</sup> Propane – asphyxiating Naptha - 600mg/m <sup>3</sup>
Process: Marker Spray	Activity: To mark lines out for measurements and identification
Location: Drainage marking	Personnel at Risk: Operatives, Engineers
<b>Risk To Health:</b>	
Extremely flammable. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness. Irritating to eyes Harmful to the environment	
Risk Phrases: R12, R36, R52/53, R66, R67	Safety Phrases: S2, S9, S16, S23, S25/26, S37, S51, S56
Assessment of Risk: (before control measures are put into place)	
Severity: 4	Likelihood: 3
Rating: High	
<b>Control Measures:</b>	
Do not smoke whilst using this product Use in well ventilated areas Do not burn or puncture this product Dispose of under local guidelines. Treat as hazardous waste when disposing of.	
Storage: Keep away from heat or ignition sources Store in moderate temperatures and dry, well ventilated areas. Must not be exposed to direct sunlight or temperatures above 50°C	Disposal: Do not puncture or incinerate even when empty. Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding. Dispose of as hazardous waste.
Spillage: Do not allow to enter drains, sewer or water courses. Extinguish all ignition sources, avoid sparks and flames. Absorb spillage with non combustible absorbent material. Keep out of confined spaces, explosion risk.	Fire Information: Highly Flammable, extinguish with foam, carbon dioxide, dry powder or water fog. Water spray should be used to cool down containers. Self contained breathing apparatus and full protective clothing must be worn in case of fire.
Assessment of Risk ( after control measures are put in place)	
Severity: 4	Likelihood: 1







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Rating: Low			
First Aid			
Eye Contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide. Seek medical attention.		Inhalation: Move person to fresh air and keep at rest. Perform artificial respiration if breathing has stopped, keep the affected person warm. Get prompt medical help.	
Skin Contact: Wash contaminated skin with soap or mild detergent and water. Remove contaminated clothing and wash as above. Do not use solvents or thinners.		Ingestion: Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.	
PPE			
			
Other Controls			
Monitoring: Attached	Records	Not Applicable	X
Health Surveillance: Attached	Records	Not Applicable	X
Training/Instructions Required			
Verbal Instructions: Toolbox Talks		Written Instruction: Manufactures instructions	
Assessment Carried Out By: Andra Apostol		Date: 04/02/24	

<b>COSHH Risk Assessment Record</b>	<b>Assessment Ref: KRK/COSHH/007</b>
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<b>Project/Site:</b> 82 Fitzjohn's Avenue	<b>Company:</b> KRK Contractors Ltd
<b>Substance:</b> Mould Oil	<b>Hazardous Contents:</b> Mesitylene, Trimethylbenzene, Kerosene solvent naptha.

					
Yes: No:	Yes:X No:	Yes: No:	Yes:X No:	Yes:X No:	Yes:X No:
<b>TOXIC (T)</b>	<b>IRRITANT (Xi)</b>	<b>CORROSIVE (C)</b>	<b>HARMFUL (XN)</b>	<b>FLAMMABLE (F+)</b>	<b>DANGEROUS TO THE</b>



					ENVIRONMENT(N)
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<b>Exposure Time:</b> 8hrs TWA	<b>WEL:</b> 8hrs TWAMesitylene 25ppm 8hrs TWA Trimethylbenzene 20ppm
<b>Process:</b> Concrete Chemical release agent	<b>Activity:</b> Sprayed on shutters wood/metal to aid release of shutters from the concrete.
<b>Location:</b> all shutter locations	Personnel at Risk: Operatives, slingers, supervisors.

#### Risk To Health:

Harmful to aquatic organisms,  
May cause long term adverse effects in the aquatic environment, May  
cause lung damage if swallowed

<b>Risk Phrases:</b> R10, 20, 36, 37, 38, 51, 53, 65	<b>Safety Phrases:</b> S61, 62
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Assessment of Risk: (before control measures are put into place)

<b>Severity:</b> 3	<b>Likelihood:</b> 2	<b>Rating:</b> Medium
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#### Control Measures:

Ensure there is sufficient ventilation of the area,  
Respiratory protection is unnecessary, provided the concentration of vapour, mists or fumes is adequately controlled,  
If operations are such that it generates excessive amounts of vapour, mists and fumes then respiratory protection must be worn  
Store in its original container in a well ventilated area Store  
in a bunded container

<b>Storage:</b> Store under cover away from heat or sources of ignition Store in its original container in a bunded cage	<b>Disposal:</b> Dispose of via an authorised person/licensed waste carrier and in accordance with local and national regulations
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<b>Spillage:</b> Absorb into dry earth, sand or vermiculite, and dispose of as hazardous waste	<b>Fire Information:</b> Dry chemical powder, alcohol or polymer foam, carbon dioxide, water fog. Do not use water. In combustion it emits toxic fumes. Wear self contained breathing apparatus
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Assessment of Risk ( after control measures are put in place)

<b>Severity:</b> 3	<b>Likelihood:</b> 1	<b>Rating:</b> Low
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#### First Aid

<b>Eye Contact:</b> There may be mild irritation and redness. Wash eyes with clean water for 15 minutes ensuring the eye lids are held open. Obtain medical advice if irritation persists.	<b>Inhalation:</b> Inhalation of fumes or vapour may cause irritation of the nose or throat or coughing. Remove to fresh air. If symptoms persist obtain medical advice
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<b>Skin Contact:</b> There may be mild	<b>Ingestion:</b> There may be irritation to the throat. Wash
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irritation at the site of contact. Wash skin with soap and water as soon as reasonably practical, remove heavily contaminated clothing and wash underlying skin

out with water. The ingestion of large amounts is unlikely however should this occur, do not induce vomiting. Seek medical advice immediately.

## PPE



## Other Controls

**Monitoring:**

Records

Not Applicable

Attached

**Health Surveillance:**

Records

Not Applicable

Attached

## Training/Instructions Required

**Verbal Instructions:**

Toolbox Talks

**Written Instruction:**

Read manufacturer's instructions

**Assessment Carried Out By:** Andra

Apostol

**Date:** 04/02/24