

Risk Assessment

Project: **Admiralty Arch**

RA Ref No. **RA 057**

Work Area: North Core

Completed By: Macdara Woods

Date: 12/05/2021

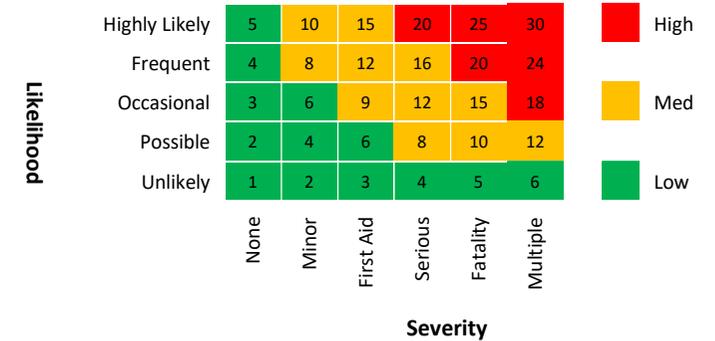
Reviewed By: Paul West

Review Date*:

Task/ Activity: **North Core Construction**

To be created and read in conjunction with a Method Statement

RAMS Ref No. MS 057 Rev 00



| Hazards | Initial Risk Rating Score Likelihood x Severity = | | | All Persons Affected | Control Measures <i>(Company procedures, controls already in place, equipment available, competency of personnel e.g. CPCS card holder, contract requirements, company permit systems e.g. Hot Works Cert. etc.)</i> | Residual Risk Rating | Further Controls <i>(Method Statement, additional Permit to Work system, Task Briefing, specific PPE, Training needed etc.)</i> | Action By | Final Residual Risk Rating |
|---------|--|-------------|---------|----------------------|---|----------------------|---|-------------|----------------------------|
| | HIGH 18-30 | MEDIUM 8-16 | LOW 1-6 | | | | | | |
| Dust | | | 6 | All | Damp down when working in dry conditions using the tractor and bowser with power sprayer. Drive vehicles slowly to reduce dust migration. | 4 | Daily briefings and toolbox talks | Supervisors | 2 |
| Noise | | | 10 | All | Operatives to wear appropriate hearing protection | 5 | Toolbox Talks and reinforced DABs before works | Supervisor | 2 |
| Havs | | | 15 | All | Supervisor to record all the HAVS exposure teams | 8 | Operatives to be made fully aware through DABS about exposure limits. Ensure that the correct tools required for the job are identified and used to minimise vibration. | Supervisor | 6 |

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| | | | | | | | Details of tools to be provided along with associated trigger times | | |
| Flying Particles | | 9 | All | Suitable exclusion zone to place around the work area | 6 | Watching brief to ensure no approaches the work area and works to cease if this is the case. Impact goggles to be worn by all operatives involved in the breaking | Supervisor | 3 | |
| COSHH | | 12 | All | COSHH assessment to be done once the material is procured. Supervisor to brief operatives on the COSHH assessment before using. Copy of COSHH assessment to be attached to the method statement to be available for inspection on site | 6 | Supervisor to ensure that a designated area is set up for works with COSHH material | Supervisor | 4 | |
| Use of Hand tools | | 12 | All | Only trained operatives to use any power tools and proper PPE for task to be worn | 6 | Operatives to carry out pre inspections of the tools before using | Supervisor | 4 | |
| Ground Water Pollution | | 4 | All | Fuel to be located good distance away from any water course. Spill kits to be available. Concrete delivery vehicles to wash out in designated areas ONLY | 2 | Daily briefings and toolbox talks | Supervisors | 1 | |
| Storage of COSHH items. | | 12 | All | Spill kits to be available. Fuel tank to be double skinned and always padlocked to control access. | 6 | Daily briefings and COSHH briefings | Store man | 3 | |
| Manual Handling | | 8 | Operatives | The need for manual handling will be reduced by mechanical means wherever possible but where necessary all operatives will follow manual handling procedure. | 6 | Supervisor to assess the load and manage works | Supervisors | 4 | |

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| Lifting Accessories | 20 | | All | Slings and chains should have the appropriate certification, be in good safe condition and suitable for the job. DO NOT improvise. All lifting accessories tested within the last 6 months. Weekly recorded inspections to be carried out on all lifting accessories. | 10 | Supervisors to enforce | Plant operators and Supervisor | 5 |
| Slips, trips and falls | | 10 | All | Create clear walkways through the storage area. Do not walk on any rebar or materials. Returning plant and materials to be placed in a safe area pre final storage. | 6 | Supervisors and store man to enforce | MGL Supervisor | 2 |
| Falls into excavations or pits | | 12 | All | Edge protection to be in place always, do not tamper with or remove. Use proprietary staircase only. | 8 | | | 4 |
| Asphyxiation due to oxygen depletion | 24 | | Miners / Rescue team | Gas detection equipment will be in place prior to entry. Maintain equipment. Ensure calibration certificate accompanies gas detector. Atmospheric monitoring results to be recorded before each entry. Those involved in the rescue of persons in the confined space are to be instructed in the Rescue Plan Safe System of Work prior to entry into the excavation. | 12 | If Gas detector sounds, no one is to enter enclosed space unless fitted with Breathing Apparatus equipment. Run LEV for longer until air returns to normal. Carry out investigation as to why alarm sounded. | Miner/rescue co-ordinator/safety advisor | 6 |
| Falls from height | 20 | | Miners/Top man/ Site management | An exclusion zone around each caisson accessible by authorised only will be formed prior the installation of the first ring. The exclusion zone will be accessible via a single scaffold gate. | 5 | Supervisor to ensure fall protection methods are suitable for the works and regularly inspected. | Supervisor | 5 |

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| | | | | <p>Inside the exclusion zone all operatives are required to wear full PPE and they must be tether to the safety line or provided Inertia reels when not connected to the Glideloc system.</p> <p>Inside the exclusion zone all operatives are required to wear full PPE and they must be tether to the safety line or provided Inertia reels.</p> | | | | |
| Poison by toxic substance/Fumes entering enclosed space | 24 | | Miners / Rescue team | <p>Detection equipment must be used and checked before entry for at least 5 minutes. Personal gas monitors to be always held near the miner. In built safety feature will alert any loss of movement to the top man with rescue plan implemented thereafter.</p> <p>Compressors and generators positioned topside with extended hose connections. Monitor air quality on a regular basis.</p> <p>Entry to enclosed space to essential 'trained' personnel only.</p> <p>Purge excavations with clean air with 300mm flexi duct to be used and placed within the shaft and headings.</p> | 12 | Ensure regular maintenance of the plant to limit toxic fumes emitted. | Miner/ rescue co-ordinator /top man | 6 |
| Fire/explosion | 24 | | Miners / Rescue team | <p>No Smoking permitted or hot works permitted within CS. Use gas-detection equipment prior to entry. Warning signals to alarm when set levels are exceeded and immediately evacuate. Extinguishers will be available. Personnel to be made aware of emergency escape routes/plan and muster points.</p> | 12 | Changes to escape routes will be relayed in the morning DAB's. | Supervisor | 6 |

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| | | | | | Remove all flammable material from the work area. | | | | |
| Diseases e.g. Weils Disease, Tetanus, Leptospirosis, micro-organisms, animal wastes, infected materials, fungal infections | 18 | | | Miners / Rescue team | All PPE to be worn, wear impervious gloves. Respiratory protection to be worn where deemed necessary. Operatives are to ensure high standards of hygiene are maintained upon exiting the CS using the washing facilities provided. Report any hygiene issues immediately to site management. | 12 | Workforce will be briefed on good hygiene practices | Supervisor/ miner | 5 |
| Lack of appreciation or clear understanding of the dangers of working in enclosed space s | 24 | | | Miners / Rescue team | All risks associated with this work <u>must</u> be explained to the whole team. Emphasise need to work as a team and follow the Method Statement, Risk Assessments and the Permit to Work system. Explain the mandatory need for all the required PPE. Practice emergency procedures. All safety documentation and procedures as listed in the Enclosed space Rescue Plan must be carried out to its full. <u>Personal Protective Equipment</u> Head, eye, hand, foot protection and harnesses Gas and oxygen monitoring equipment | 12 | Site Team is to Monitor daily for compliance with the safety controls in place. Sign in/out system for enclosed space entry to be adhered to. | Project Manager / Site Supervisors / Safety Advisor | 6 |

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| | | | | | Breathing apparatus (Drager escape kit) on standby And normal PPE applies. Defibrillator, and stretcher to be held with Top man. | | | | |
| Collapse of structure | 18 | | | Miners | Works will be carried out to the specified drawings and by experienced minors. Competency cards will be checked at induction and quality of works throughout by the supervisor. Lead minor to make assessment on safe entry to shaft /heading each day. Report any safety issues immediately to site management. | 6 | A quality check will be carried out each day to ensure works are carried out to the specified drawings. Safety issues to be discussed each morning in the DAB's safety controls agreed. | TW Engineer/ Supervisor/ Lead miner | 6 |
| Ingress of water | 18 | | | Miners | Water ingress will be controlled through the vacuum dewatering system, commissioned by WJ Groundwater specialists. Additional well points have been installed around the caissons to locally maximise the water drawdown. | 6 | Lead miner is to monitor throughout the working day | Lead miner | 6 |
| Lifting operations | 20 | | | Miners | Electric hoist, Davitt Arm, and any lifting accessories to be inspected before each use. Competent slinger/signaller only to sling loads. Stand clear of load when hoist is in use. Report any defects immediately to the crane supervisor and quarantine equipment. | 5 | Weekly recorded inspections of all lifting gear to be carried out by competent person. Certificates of examination to be held in the site office. | Slinger/Top man/Supervisor | 5 |

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| Physical damage including back strain, injury to feet or hands, hernia and long-term incapacity | 12 | Miners | Where possible, use mechanical means and avoid manual handling. Mechanical means will be employed for lifting of heavy materials. Supervisors to oversee manual handling operations. Persons carrying out manual handling operations will be trained, physically fit and willing to undertake the task. Operatives to have received training in kinetic lifting techniques. Appropriate PPE i.e. head, foot, and hand and eye protection to be provided and used. Ensure adequate numbers of personnel are available to undertake the task safely. Encourage personnel to ask for help and use team-lifting techniques where possible. | 8 | Manual Handling assessments to be carried out where necessary. Health questionnaires to be filled in at induction. Operatives to be asked during DAB's if they are physically fit to work. | Site Supervisor | 3 |
| Contact with hazardous materials | 12 | Miners | Provide COSHH assessments and inform workforce of hazards before work starts. Avoid contact with hazardous substances. Provide PPE as per COSHH assessment. Provide clean water for splash removal. Ensure safe storage of COSHH. Provide COSHH bins and bunds and spill kits. Emergency spills training to be provided. | 4 | Supervisor to brief workforce and monitor for compliance. Limit exposure to unnecessary hazardous substances. | Supervisor | 4 |
| Defective equipment failure | 15 | Miners | Equipment (PUWER/LOLER) will be subject to daily visual inspections and weekly recorded inspections. Defects will be reported immediately, the offending item taped up and quarantined ready for off hire. Ensure all equipment receives NFC tag. | 5 | Competent persons only to carry out weekly recorded check. Supervisor to ensure relevant certs are in place for all equipment. PAT and T/E. | Supervisor/ operator | 5 |

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| Exposure to vibration inducing equipment resulting in injury or disease | | 12 | | Miners | Select equipment with reduced vibration magnitude. Supervisor to monitor and record exposure. Do not allow operatives to exceed exposure limits. Make operative aware of exposure limits and the effects of HAV's. | 4 | Supervisor to keep record of HAV's monitoring. HAV's questionnaire to be filled in at induction. Health concerns such as white finger or similar must be highlighted to the safety department immediately. | Supervisor | 4 |
| Pumping | 20 | | | Miners | Gauge to be installed at the end of the lance to monitor pressure | 8 | Operatives pump for 30 secs and hold to monitor any changes | Supervisor | 4 |
| Working Platforms | 25 | | | All | If a scaffold deck, then the Scaffolders will carry out their weekly checks. If an Alley tower, then the PASMA trained ops will carry out their weekly checks. No climbing up vertical elements of reinforcement is permitted. | 12 | Training, RAM's briefings and TBT's | All | 4 |
| Piling Operations | 20 | | | All | An Exclusion zone is to set up around the piling zone with strict admittance only to the piling personnel | 8 | Operatives to ensure that that are in complete view of the piling rig supervisors and piling rig operator at all times | All | 3 |

All persons undertaking activities identified on this risk assessment must be made fully aware of its contents

**Completions and review/revision must be undertaken with members of the workforce either from MGL or suppliers involved with the operation.*

Review and/or revision of this document MUST be carried out when any change of condition, circumstances, scope and management occurs. Link to MP15 Hazard Identification, Risk assessment and Controls: <http://mcgeenet.mcgee.co.uk/Livelink/livelink.exe/Open/954652>

****Completed document must be uploaded into the specific Project Workspace on Livelink.**