

ELECTRICAL - CABLE LADDER, TRAY & CONDUIT INSTALLATION SAFE WORK METHOD STATEMENT (SWMS)

Business Contact: Ryan Martin

Phone #: 6559 8059

Principal Contractor (PC): N/A

Responsible person (for monitoring SWMS and work): Site Supervisor

Job address: All Sites

Revision Date: 10th of December 2023

PC Phone #: N/A

Date SWMS provided to PC: N/A

Contact Phone #: 6559 8059

Contact Phone #: N/A

THIS WORK ACTIVITY INVOLVES THE FOLLOWING HAZARDOUS WORK AND ENVIRONMENTAL IMPACTS

- | | | | | |
|---|--|--|--|--|
| ☒ Electrical equipment | ☒ Elevated levels | ☒ Slips, trips and falls | ☒ Hazardous substances | ☒ Silica dust |
| ☒ Hot Work | ☒ Hazardous manual tasks | ☐ Outdoor work | ☐ Remotely &/or isolated work | ☐ ? |
| ☒ Noise and vibration | ☐ Native vegetation & weeds | ☒ Air quality | ☒ Waste | ☒ Vehicle movement |
| ☒ Fuels, oils & chemicals | ☒ Terrestrial fauna | ☒ Waterways & soils | ☐ Cultural heritage | ☐ ? |

THIS WORK ACTIVITY INVOLVES THE FOLLOWING "HIGH-RISK CONSTRUCTION WORK" (HRCW - IDENTIFIED IN THE JOB TASK COLUMN)

- | | | | |
|---|---|--|---|
| ☐ Confined spaces | ☒ Mobile plant movement | ☐ Demolition of a load-bearing structure | ☐ Asbestos disturbance |
| ☐ Using explosives | ☐ Diving work | ☐ Artificial extremes of temperature | ☐ Tilt-up or pre-cast concrete |
| ☒ Pressurised gas distribution mains or piping chemical, fuel or refrigerant lines energised electrical installations or services | | | |
| ☐ Structures or buildings involving structural alterations or repairs that require temporary support to prevent collapse | | | |
| ☐ Involves a risk of a person falling from 2m or more, including work on telecommunications towers | | | |
| ☐ Working at depths greater than 1.5 Metres, including tunnels or mines | | ☒ Work in an area that may have a contaminated or flammable atmosphere | |
| ☐ Work carried out adjacent to a road, railway or shipping lane, traffic corridor | | ☐ In or near water or other liquid that involves the risk of drowning | |

FOOT PROTECTION	HEARING PROTECTION	HIGH VISIBILITY	HEAD PROTECTION	EYE PROTECTION	FACE PROTECTION	HAND PROTECTION	PROTECTIVE CLOTHING	BREATHING PROTECTION	SUN PROTECTION	SAFETY HARNESS	
											
☒	☐	☒	☒	☒	☐	☒	☐	☐	☐	☐	☒

Do not wear rings, watches or jewellery that may become entangled. Long and loose hair must be tied back.

Planning/Preparation	• Liaise with Principal Contractor to identify on-site safety systems and procedures • Establish supervisory and communication arrangements • Principal contractor to confirm emergency response procedures are in place.
Hold Points	• Hold points identified and signed off before continuing work.
Training/Licence	• All workers to have a General Construction Induction Card • Relevant workers have relevant certificates of competency, licenses, and training. • Trained First Aider on site • All workers trained in site-specific emergency and evacuation procedures, SWMS, safe work procedures, and safety data sheets • <i>If working on an EWP, or entering an identified Confined Space for this task, ensure there are separate, dedicated SWMS and that all workers have relevant training and licensing.</i>
Worker duties and responsibilities	• Fit condition for work, i.e. no signs of fatigue, alcohol or drugs • Attend all site inductions/briefings • Comply with all site requirements, e.g. PPE, Traffic Management Plans (TMP) • Only carry out work related to the contract • Inspect completed work and report possible safety, environmental and quality matters to the supervisor.
Monitor/Review	• All persons involved in the task must have this SWMS communicated to them before work commences • SWMS to be reviewed and amended if necessary, in consultation with relevant persons after any near miss or incident • If additional site hazards identified, review this SWMS and amend control measures to suit • People, including workers, contractors and sub-contractors, affected by the revisions to this SWMS, must be informed ASAP • Give the principal contractor a copy of the revised SWMS • The site supervisor to monitor works against the controls stated in this SWMS • SWMS must be kept on-site and made available for inspection or review • Keep a record of this SWMS until the job is complete or for two years if involved in a notifiable incident • Regardless of any other factor, the person in control of the workplace must review this SWMS at least annually.
Site-Specific Notes: Refer to Job Pack for details Act, Regulations, Codes of Practice References: ✓ Work Health and Safety Act ✓ Work Health and Safety Regulation ✓ First Aid in the workplace code of practice ✓ Hazardous manual tasks code of practice ✓ How to manage work health and safety risks code of practice ✓ Managing electrical risks in the workplace code of practice ✓ Managing noise and preventing hearing loss at work code of practice ✓ Managing the risk of falls at workplace code of practice ✓ Managing the work environment and facilities code of practice ✓ Managing risks of hazardous chemicals in the workplace code of practice ✓ Managing the risks of plant in the workplace code of practice ✓ Work health and safety consultation, co-ordination, and co-operation code of practice ✓ Construction work code of practice	

LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION		
ALMOST CERTAIN	3 - HIGH	3 - HIGH	4 - ACUTE	4 - ACUTE	4 - ACUTE				
LIKELY	2 - MODERATE	3 - HIGH	3 - HIGH	4 - ACUTE	4 - ACUTE	4A - ACUTE	DO NOT PROCEED.		
POSSIBLE	1 - Low	2 - MODERATE	3 - HIGH	4 - ACUTE	4 - ACUTE	3H - HIGH	Review before commencing work.		
UNLIKELY	1 - Low	1 - Low	2 - MODERATE	3 - HIGH	4 - ACUTE	2M - MODERATE	Maintain control measures.		
RARE	1 - Low	1 - Low	2 - MODERATE	3 - HIGH	3 - HIGH	1L - Low	Record and monitor.		
HIERARCHY OF CONTROLS		MOST EFFECTIVE	Elimination	Substitution	Isolation	Engineering	Administrative	PPE	LEAST EFFECTIVE
JOB TASK	HAZARDS	RISK	CONTROL MEASURES					RESPONSIBLE PERSON	
1. HRCW Arrival on-site, site assessment & unloading of materials/ equipment	Personal injury, property damage &/or environmental incident	3H	- The vehicle should be positioned in a safe location, clear of traffic/vehicles/pedestrians during equipment delivery and materials removal (deploy physical barriers, caution signs as necessary) - Do not park illegally - Identify and obey all safety-related signage (check site entry requirements) - Report to Site Supervisor - Ensure site-specific induction undertaken - Assess mobile phone reception - The worksite is exactly as detailed in Terms of Agreement or contract - Complete a JSA specifying the control measures of unanticipated hazards.					Supervisor to check the site and conduct JSA where necessary	
	Unsafe delivery location	3H	- Define a specific area for storage, identified with appropriate signage and free of hazards - Where possible, provide separate routes for pedestrians and vehicles - Design the layout of storage area to minimise risks of collisions between vehicles &/or mobile plant - Limit the height of storage stockpiles - Keep material and equipment storage areas tidy and well ordered - Ensure delivered and stored equipment and material does not present a hazard, e.g. trip hazards or falling objects. - Keep adequate access for installers and their equipment.						
2. HRCW Work area set-up	Unauthorised access to the work area	3H	- Erect barricades with adequate signage: - Erected before the commencement of work - Kept in position at all times until the work completed and it is safe to remove - Regularly inspected and maintained - Use lockout procedures to prevent unauthorised use of plant - Provide information to workers and other persons on-site advising them of the exclusion zones					Supervisors to check all controls in place and followed	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			- Delivery of goods, materials and equipment should only be made through the public areas during off-peak periods - Provide supervision so that no unauthorised person enters an exclusion zone.	Workers to follow controls and make supervisor aware of any issues
	Tray & ladder system collapse	4A	Check with engineer and design plans to ensure the structural integrity can support the weight of the cable system, including dead and imposed loads.	
3. HRCW Locate & isolate existing services	Contact with utilities/services	4A	⚠ Carry out a visual inspection to note the position of any electrical fittings - Ensure certificate of electrical safety obtained where hazards are identified - Ensure all electrical cables/equipment identified and marked - Ensure fixing points are clear of cables/equipment - Engage a qualified electrical contractor to eliminate or control the risk of electrical hazards - Use site drawings, scanners, or stud locators to identify concealed services in walls - Ensure the exact location of the cut or penetration of the structure is clearly marked - Ensure any services such as electricity, gas, and water are identified and clearly marked - Ensure water, gas, electricity is turned off to the property if required - Follow LOTO procedures and obtain advice from a licensed electrician that power is isolated - Discuss with site supervisor beforehand, so they are aware of the duration of time required without utilities. ⚡ If power cannot be isolated, ensure the location of any cables, pipes are identified and labelled before drilling.	Workers to follow controls and make supervisor aware of any issues
4. Environment	Environmental impact	3H	Noise & vibration - Be aware of maximum noise levels at the site - The plant is maintained to minimise noise - No noise produced outside council approved hours of operation - Engineering controls fitted to equipment (e.g. silencers) Air quality - Ensure dust suppressants methods are in place Waste - Place all wastes and rubbish in bins or other appropriate containers - Separate recycle waste from general waste - Do not mix waste with spoil Fuels, oils & chemicals - Minimum amounts of hazardous substances kept on site - Labelled and securely stored - Refuelling of vehicles/equipment to be undertaken at least 6m from drains and waterways - Follow SDS directions for disposal of chemicals in approved waste containers - A spill kit is available at all times & spills to be cleaned up immediately follow SDS directions Waterways & soils - Do not wash out plant, equipment or containers where residue can enter waterways or drains Vehicle movement - Follow the TMP, only travel on established tracks and roads - Use designated entry and exit points	Supervisor and workers to ensure control measures followed

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			• Terrestrial fauna - No domestic animals are to be taken on-site • Ensure all food scraps placed in lidded bins.	
5. House keeping	• Slips • Trips • Falls	3H	• Maintain housekeeping throughout the shift & clean-up • Ensure sufficient lighting to detect changes in level (using temporary lighting as required) • Do not jump from elevated edges >180mm, step carefully and use prepared access areas • The work area is clean and uncluttered as possible • Do not place equipment where it could become a trip hazard • Check for stored items, corners or other obstructions that could cause tripping • Ensure there is room to manoeuvre and no obstacles in the way • Check the end destination is prepared correctly for placement of the materials/equipment • Clean spills immediately • Footwear is suitable. Snug-fitting shoes/boots with flat, non-slip soles, no loose soles, long laces, oily soles, or caked with mud or other contaminants.	Supervisor and workers to ensure control measures followed
6. Manual tasks	Musculoskeletal (MSD) injuries	3H	• Materials/equipment placed as close to the work area as possible • Weight of an object should be known; avoid lifting loads more than 1/4 of your body weight • Do not use extreme force to move items • Hold lifted items close to the body whenever possible: ○ Keeping knees bent and back straight and lift, unload keeping knees bent • Use team lifts and mechanical means for heavy items • Schedule regular breaks and practice job rotation • Avoid overreaching, long periods of repetitive movements, awkward and sustained positions, twisting and side-bending.	Supervisor and workers to ensure control measures followed
7. HRCW Working with powered & non-powered tools	• Electrocution • Injury • Fire • Asphyxiation	4A	• Use tools only for the purpose specified by the manufacturer • Wear PPE as recommended by the manufacturer • Pre-inspect and operate tools following the manufacturer's instructions. If damaged or unsuitable for the task do not use. Take out of service immediately and apply LOTO procedures • The tool operations manual is available, read and understood • Fire protection equipment accessible • Use mechanical ventilation as required • <u>Electrical:</u> ○ All electric power tools and leads are Tested, Tagged and are current ○ Use electrical sockets protected by RCD (safety-switches) or use portable RCD devices ○ Switchboards have appropriately rated circuit breaker ○ Always ensure that the tool is switched off and power isolated before a pre-start check, adjusting, changing set-ups or repairing ○ Do not overload power outlets	Workers to follow controls and make supervisor aware of any issues

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			• <u>Diesel/petrol-powered tools</u> - Do not run a diesel/petrol-powered tools inside a building (e.g. shed), or where ventilation is limited.	
8. Hazardous substance /chemical use	Contact with hazardous substance /chemical	3H	• Follow directions of use • Consult SDS for the product • Use PPE as per the SDS • Use with adequate ventilation • Chemical resistant gloves for prolonged exposure • ⚠ DO NOT: ✦ Eat or drink when handling chemicals ✦ Eat or drink without washing hands thoroughly first ✦ Take food into the work area where chemicals are being used or stored ✦ Wear contaminated PPE in areas outside the work zone, such as eating areas.	Workers to ensure control measures followed
9. HRCW Working at height on ladders, trestles & mobile scaffold	• Fall from height • Falling objects • Impact injuries • Fatality	4A	• Perform as much of the task as possible on the ground or a solid structure • Protect all edges where a person can fall • Erect and inspect all height access equipment following manufacturers' instructions • If damaged or unsuitable for the task do not use. Take out of service immediately and apply LOTO procedures • <u>Trestle scaffold:</u> ○ Guardrails, toe board sides & ends are in place ○ Purpose-designed pins ○ Min 2 planks or 450mm wide ○ A suitable span of planks (based on thickness). Example: Thickness of 38mm = 1.5m span, thickness of 50mm = 2m span, thickness of 63mm = 2.5m span) • <u>Mobile scaffold:</u> ○ Level, plumb ○ Casters locked before accessing, not moved when persons on a scaffold ○ Accessed by internal ladder only, do not climb on the scaffold ○ Clear of penetrations or floor edges (by at least 1metre where possible) • Maintain awareness of other people on scaffold • Guards kept in position on scaffold lifts • Waste materials removed from scaffolding and placed in the provided waste receptacle • Do not exceed the specified Safe Working Load of the scaffold • Stack items to prevent sliding or toppling • Keep tools and other equipment away from edges • Determine where items may fall (in case of uncontrolled release) and ensure all personnel are clear of that area • Never work directly below other workers or where unsecured equipment is located above	Supervisor and workers to ensure control measures followed

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			- Kickboards are installed on elevated work areas to prevent items from falling off <u>Ladders:</u> - Ladders set up on a level area on a firm footing - Correct size and length for the job - Load rating of at least 120kg - Extension ladders: - Set up with the base located approximately a quarter of the vertical height of the ladder from the wall - The ladder extends at least 1 m above the place of landing - Secured against movement (base & top) - ONLY use extension ladders for access, ALWAYS use platform ladders for working on, ensure the base is fully open and the spreaders are locked 3 points of contact on the ladder at all times - Always maintain the majority of your bodyweight inside the perimeter of the platform or stiles - When on a ladder, do not over-reach. Descend ladder & re-position as required - Do not carry materials when ascending/descending a ladder - Always face the ladder when using <u>Falls in openings:</u> - All holes or openings are protected/closed from falls (e.g. platform ladder hatches) - Covers are secured to prevent movement - Use signage or another marked hazard alert to identify the hazard - Wear tool belts, use tool lanyards to pass tools to persons at height and use tethers on tools/equipment where appropriate - All workers must wear a hard hat and high visibility clothing - Ensure that footwear is suitable. Snug-fitting shoes/boots with flat, non-slip soles, no loose soles, long laces, soles that are oily, or caked with mud or other contaminants.	
10. HRCW Securing fixings, supports, fitting trays, ladders & conduit	Tray & ladder system collapse	3H	- Install tray and ladder cable system as per manufacturers' instructions and design - Only use manufacturers approved fixtures.	Supervisors to check all controls in place and followed Workers to follow controls and make supervisor
	Inhalation of hazardous fumes	3H	- Ensure current Safety Data Sheets (SDS) obtained for all hazardous substances and accessible on-site - Chemical contact - joining - solvent cementing: - Avoid contact with eyes - Prevent contact with the skin as much as possible - Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and windows to ensure airflow and air changes.	
	• Fire	4A	Cutting and grinding:	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
	Burns		- Remove any flammable substances from the work area - Fire extinguisher on hand and easily accessible - If hot works permit is required: - Seek hot work permit for the task - Follow safety precautions on the Hot Work Permit - Note: Do not conduct work not listed on a Hot Work Permit. If other Hot Works are required, obtain a separate Hot Work Permit for that task - Conduit: - Do not use an open flame to heat the conduit. <i>Use only a flameless heat source such as a heat gun</i> - Heat the conduit evenly - Once the conduit is heated, bend to the desired angle - After bending, immediately fix conduit with saddles or other supports - Do not touch hot conduit with bare hands.	aware of any issues
	Inhalation of silica dust – drilling	4A	- Local exhaust extraction is provided (if required by a risk assessment) - Vacuum attachment/bag fitted - Wear eye and breathing protection: - Be fitted and used according to manufacturer's written instructions - Fit tightly. Check the tightness of the headbands & the operation of the one-way valve - Be replaced as required. Facemask life depends on the amount of air-born dust & usage.	
	- Cuts - Lacerations	3H	- Cutting conduit to length. Ensure: - Use conduit cutters where possible - The workpiece secured before cutting - Wear gloves - Maintain visual contact with workpiece/tools - Direct cuts away from the body - Ensure grip and footing is secure - Tools not carried in pockets or clothing (use sheaths, tool belts) - Tool handles: - Non-slip, good grip - No sharp edges - Guards or stoppers - Clean, grease-free grips/handles.	
11. HRCW On completion	Unauthorised access	3H	- If acceptable, remove or add barricades - Ensure machine is parked in a safe, level area, clear of unstable or sloping ground - Store the key in a safe place (restrict unauthorised access).	Supervisor to confirm all workers have signed out
	Inhalation of silica	3H	Clean the work areas regularly by scraping, vacuuming or sweeping as appropriate. Lightly dampen the area before sweeping	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON	
			- Sweepings that contain dusty material should be placed in disposable bags & tied off before placement in waste containers. - Wash face and hands with soapy water. Pay attention to under the fingernails.	Workers to comply with controls	
	Contact with electricity	4A	- Disconnect power tool/extension leads from power point before winding up so that you don't get a shock if the lead is damaged - Inspect leads and power equipment for damage - If safe to do so, remove isolation locks/tags and test appliance for function.		
	Security breach	3H	All personnel sign-out on Site Register.		
	Vehicle/people impact	4A	- Stay to designated access and egress routes - Maintain awareness of surroundings at all times.		
12. HRCW Emergency response	- Injury - Fatality - Environmental damage	4A	For police, fire or ambulance call '000.' - Follow site emergency and evacuation procedures - A communication system is available, e.g. a mobile phone or radio - Check for dangers to self before helping others - Maintain control of the area and stabilise the situation - Apply first aid to the injured worker - Complete an incident report.	Refer to your SWMS implementing instructions for further specific emergency responses.	Supervisors and workers ensure controls followed
OVERALL RISK RATING AFTER CONTROLS			☐ 1 - Low ☒ 2 - MODERATE ☐ 3 - High ☐ 4 - ACUTE		
PERMITS ☒ Not applicable ☐ Hot Work ☐ Confined Space ☐ Local council ☐ _____ ☐ _____					
SITE MANAGEMENT PLAN		Is the work associated with a Construction Project? ☐ Yes ☒ No <i>If yes – This SWMS must align with requirements of the Site Management Plan in place for the Construction Project.</i>			
PLANT & EQUIPMENT		HAZARDOUS SUBSTANCES		SUPERVISORY ARRANGEMENTS	
☒ Electrical tools and leads	Tested and tagged quarterly	1. Refer to Job Pack for details		☒ Audits ☒ Spot Checks ☒ Reporting systems ☒ Suitably qualified supervisors for job ☐ Direct on-site supervision ☐ Remote site: communication systems/schedule	
☒ Hand tools - Meet AS/NZS	Regular visual inspection				
☒ Ladders - Meet AS/NZS	Inspected and tagged out if damaged				
☐ Mobile plant	Inspected and tagged out if damaged				
☐ _____					
☐ _____					

SWMS SIGN-OFF

This SWMS developed in consultation and cooperation with workers and relevant organisation representatives. I have read the above SWMS, and I understand its contents. I confirm that I have the skills and training, including relevant certification, to conduct the task as described. I agree to comply with safety requirements within this SWMS, including risk control measures, safe work instructions and PPE described.

WORKERS' NAME	JOB ROLE / POSITION E.G. SUPERVISOR, WORKER, TRAINEE	LICENCES, COMPETENCIES & QUALIFICATIONS <i>(add as applicable)</i>			DATE	SIGNATURE
		TYPE / DESCRIPTION	CLASS	NUMBER		
		Construction Card				
		Construction Card				
		Construction Card				
		Construction Card				
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