
Site SWMS & Risk Assessments



QR Code	432698
Principal Contractor	RJG Builders
Date Provided to PC	19/06/2024
Revision Due	19/06/2025
Project	Heatly School Demolition
Construction Site Location / Address	321 Fulham Road, Heatly QLD 4814
Person Responsible for implementing SWMS onsite	James Berryman (07) 4775 7479
After Hours Contact	James Berryman 0401 279 997

1 Purpose

The purpose of this document is to clearly identify the Hazards and Risks associated in both the high-risk work activities as well as the general construction site tasks. This SWMS must be kept and be available for inspection until the high-risk construction work to which the SWMS relates is completed. If the SWMS is revised, all versions should be kept. If a notifiable incident occurs in relation to the high-risk construction work in this SWMS, the SWMS must be kept for at least 2 years from the date of the notifiable incident.

2 Evaluation

Evaluation of process effectiveness is carried out using internal audits and site safety inspections. This document in its entirety is relevant between the stated review dates, unless it has been identified that controls are potentially not effective, changes to the workplace has introduced new task(s), hazard(s)/risk(s) or in the event of a notifiable incident then SWMS will be reviewed and, if necessary, revised. Ultimately everyone is responsible for ensuring their duties are upheld with regards to safety in the workplace.

At the end of the SWMS there is a provision to add to or amend the SWMS, if these are used workers must notify James Berryman as soon as practical to ensure the changes are implemented. Once the SWMS are amended and controls are acceptable for the specified hazards all workers must re-sign onto the SWMS to ensure they are made aware of the changes.

3 Doc Control Details

PCBU Name:	Wentworth Electrical Pty Ltd	ABN:	66 897 448 203	
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4 Definitions:

High Risk Work (As defined by WH&S Qld):

Work carried out at a workplace deemed as high risk by WH&S Regulation 2011 (s291):

1. involves a risk of a person falling more than 2m; or
2. is carried out on a telecommunication tower; or
3. involves demolition of an element of a structure that is load bearing or otherwise related to the physical integrity of the structure; or
4. involves, or is likely to involve, the disturbance of asbestos; or
5. involves structural alterations or repairs that require temporary support to prevent collapse; or
6. is carried out in or near a confined space; or
7. is carried out in or nearby—
 - (i) a shaft or trench with an excavated depth greater than 1.5m; or
 - (ii) a tunnel; or
8. involves the use of explosives; or
9. is carried out on or near pressurised gas distribution mains or piping; or
10. is carried out on or near chemical, fuel, or refrigerant lines; or
11. is carried out on or near energised electrical installations or services; or
12. is carried out in an area that may have a contaminated or flammable atmosphere; or
13. involves tilt-up or precast concrete; or
14. is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians; or
15. is carried out in an area at a workplace in which there is any movement of powered mobile plant; or
16. is carried out in an area in which there are artificial extremes of temperature; or
17. is carried out in or near water or other liquid that involves a risk of drowning; or
18. involves diving work.

5 Legislation that relates to this Safe Work Method Statement

Legislation

- Work Health and Safety Act 2011
- Work Health and Safety Regulation 2011
- Electrical safety Act 2002
- Electrical Safety Regulation 2013

Current Codes of Practice – relevant to the task undertaken

<https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice>

- How to Manage Work Health and Safety Risks Code of Practice 2021
- Demolition Work Code of Practice 2021
- How to Manage and Control Asbestos in the Workplace Code of Practice 2021
- Managing Electrical Risks in the Workplace Code of Practice 2021
- Managing Risks of Plant in the Workplace Code of Practice 2021
- Managing the Risk of Falls at Workplaces Code of Practice 2021
- Work Health and Safety Consultation, Co-operation and Co-ordination Code of Practice 2021

6 PPE Requirements

PPE Requirements will be listed at the beginning of each activity with the recommended requirements using the below Pictograms:



Safety Glasses Medium Impact (Clear indoor use and tinted outdoor use.)



Safety footwear with a steel cap toe or composite toe.



Safety Gloves suitable for the task.



Ear Protection either Plugs or Muffs suitable to the task.



Hard Hat for all work where there is work overhead.



Hi Visibility Clothing, Reflective Tape is only recommended at nighttime.



Respiratory Protection (RPE), specific to the task & as shown on fit test certificate



Protective Clothing, long sleeves and long pants



Clear High impact visor



Wide brim hat or ring worn over Hard Hats.



Height Safety PPE specific to the task

7 Qualifications, Training Requirements

QBCC Licence – Electrical Contractor

Apprentice Training, if applicable

Industry White Card(s)

Supervision from James Berryman

Spotter for mobile plant, as required. Competently trained for the type of machinery with a full understanding of the tasks being conducted.

8 Hierarchy of Control Measures

Level 1	Level 2	Level 3
<ul style="list-style-type: none"> Eliminate the Hazard 	<ul style="list-style-type: none"> Substitute the Hazard Isolate the Hazard Engineer the Hazard out 	<ul style="list-style-type: none"> Administration Controls PPE

9 Parties responsible for implementation of Controls



SUPERVISOR

Supervisor



Worker

Worker



OPERATOR

Operator



ENGINEER

Engineer



MANAGEMENT

Management



SPOTTER

Spotter

10 Risk Calculator

HOW TO USE THIS RISK TABLE	Appendix B - Risk Calculator					
	RISK RATING CALCULATOR	Likelihood				
Step 1: Identify potential hazards.	Consequence What injury/damage could it cause?	Rare - 3 Could only happen once in 25 years	Unlikely - 2 Could happen, once in 5 years	Possible - 1 Could happen each year	Likely - 0 Could Happen more than once a year	Almost Certain - 0 Could happen anytime
Step 2: Decide what a possible Consequence could be.	Catastrophic - 0 Multiple Fatalities	3	2	1	0	0
Step 3: Decide How Likely? it is to happen	Major - 0 Death or serious disability	3	2	1	0	0
Step 4: Line up your choices in the table to get a number	Moderate - 1 Long term illness or serious injury	4	3	2	1	1
Step 5: Use the Priority table to the right.	Minor - 2 Medical attention & several days off work	5	4	3	2	2
	Insignificant - 3 First aid needed	6	5	4	3	3

Risk Rating	Prioritisation
0, 1 or 2	Action to rectify must be done immediately before work may commence
3	Consider control measure as necessary and implement further controls to reduce risk
4, 5, 6	Continue to use correct controls selected and maintain communication

11 Workers Sign on and Consultation of SWMS

By signing the below I:

- Acknowledge that I have had input into the development of the SWMS or have had opportunity to comment on the content
- Understand and agree to abide by all of the requirements stated within the SWMS
- Have appropriate certification, licences and/or training to competently undertake the task or, where permitted, will be directly supervised by persons with appropriate level of certification, licensing, training and competence
- Understand that where task changes or the controls stated are ineffective, that I will immediately notify my supervisor and cease work till the controls are modified and I re-sign an updated SWMS



First & Last Name:	Signature:	Date:





High Risk Work Activity: 3. Demolition



Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
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3A. Non-structural Demolition

PPE Recommended		Persons responsible for maintaining controls		
				
Plan to demo site structures	Hazard: Fall from height, falling objects, unknown services and structural stability, unexpected collapse, damage to services Risk: Injury	1	<ul style="list-style-type: none"> If appointed, consult with the engineer/principal contractor/client where reasonably practicable, to obtain a written report specifying the hazards associated with the design and the structure in the planning stage of the demolition work Specific hazards may be outlined in a demolition plan: <ul style="list-style-type: none"> Asbestos containing materials Lead in paint, old water pipes and other plumbing fittings, solders, etc 	4
Public protection	Hazard: Falling objects, struck by plant Risk: Injury	3	<ul style="list-style-type: none"> Wherever required, make sure the Principal Contractor has provided the following: <ul style="list-style-type: none"> A heavy-duty scaffold that is fully sheeted with shade cloth & mesh. In accordance with Australian Standards. Only certified personnel can erect scaffolds Signs installed at various locations on the barricades denoting: "Demolition in progress - Keep Out" Plant movement: <ul style="list-style-type: none"> Do not go beyond specified speed limits. Make sure the flashing light/beeper is on. Use a spotter wherever practical/available. Ensure high visibility PPE is always worn. Check the work area for other plant before commencing work/movement. 	5
Strip out of fixtures & fittings and non-fixed items	Hazard: Work at height, manual handling sharp edges Risk:	1	<ul style="list-style-type: none"> Use hand removal techniques for salvaging fixtures and fittings – use handheld tools and equipment. During this initial work phase, make sure no load bearing components of the structure are demolished. Wherever possible, provide access for workers above floor level by way of an approved internal staircase or a suitably restrained ladder. Strictly follow all procedures for working at heights. 	4

High Risk Work Activity: 3. Demolition				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Injury, lacerations, death			

High Risk Work Activity: 4. Asbestos				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
4A. Asbestos - Identification				
PPE Recommended				Persons responsible for maintaining controls  SUPERVISOR
Asbestos Identification	Hazard: Suspected asbestos material due for demolition or renovation or removal Risk: Asbestos removed without being identified/ asbestos exposure	1	<ul style="list-style-type: none"> All personnel involved in asbestos work, must have the required competencies and licences to complete the scope of works Where there is suspicion of the presence of asbestos a current asbestos register will be requested prior to commencing any work activities Areas which are identified as potential for containing asbestos will be tested with approved methods and verification will be sought before work commences. In most cases this will be conducted in the consultation process before the job ever begins applicable. If in doubt, always assume that asbestos is present For cases where potential asbestos is come upon and not foreseen prior to commencing works, all work will cease A qualified asbestos removalist will be engaged to complete the removal When working with asbestos, mandatory PPE must be available and used An exclusion zone must be clearly delineated and enforced Only once area has been cleared by a qualified professional by issuing a clearance certificate will normal work duties commence 	5





High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
11A. Electrical - Prior to Work (Isolation)				
PPE Recommended				Persons responsible for maintaining controls 
1. Pre-electrical 2. Pre-Plan 3. Pre-Start at Worksite	Hazard: Inadequate preparation lack of awareness faulty wiring, unidentified power source e.g. (solar/ battery) Risk: Electrocution, damage to equipment	1	<ul style="list-style-type: none"> • Prior to commencement of work ensure the following: <ul style="list-style-type: none"> ○ Locations have been confirmed with the client ○ All workers are competent to carry out work ○ Tools and equipment are suitable to carry out the work and within test date. • Ensure that prior to work commencing a pre-start is carried out that covers, as a minimum <ul style="list-style-type: none"> ○ Planned activities for the day ○ All hazards for the activities are identified and that control measures for each hazard eliminate the risk or reduce the risk to an acceptable level. ○ Always test prior to touching (THIS IS MANDATORY). The circuitry labelling MAY BE WRONG, do not take chances. 	4
Turning off power and Isolating prior to work.	Hazard: Inadequate preparation lack of awareness faulty wiring, unidentified power source e.g. (solar/ battery) Risk: Electrocution, damage to equipment	1	<ul style="list-style-type: none"> • The following lock-out process is use: <ul style="list-style-type: none"> ○ Shut down the machinery and equipment ○ Identify all energy sources and other hazards ○ Identify all isolation points ○ Isolate all energy sources ○ In the case of electrical equipment 'whole current isolation', such as the main isolator, should be used instead of 'control isolation' by way of the stop button on a control panel ○ Control or de-energise all stored energy ○ Lock-out all isolation points, using padlocks, multi- padlock hasps and danger tags ○ 'Danger tag' machinery controls, energy sources and other hazards. • 'TEST FOR 'DEAD' BEFORE YOU TOUCH' • Before commencing any electrical work: <ul style="list-style-type: none"> ○ Consult with management or person who has control of the workplace and notify any other affected persons as appropriate Identify circuit(s) requiring isolation. ○ All electrical cables and assemblies must be disconnected from all sources of electricity supply 	5

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> ○ All live testing must be undertaken by a competent & licenced electrician. With an LVR trained person nearby. ○ Circuits must be proven to be de-energised by a competent & licenced electrician. ○ Fit DANGER TAGS and locks to ensure that circuits cannot be energised inadvertently ● Test for Dead (Must be undertaken by a competent & licenced electrician): ● Even if the electricity supply is believed to have been isolated, it must be assumed that all conductors and electrical components are energised until they have been proven de-energised. ● The testing method (including the testing equipment used must be safe and effective. ● Volt sticks or similar are not an acceptable testing device to confirm that power is OFF ● Equipment-mounted voltmeters should not be used as the only method of determining whether an electrical part is de-energised. ● Voltage testers are to be tested for correct operation immediately before use and again after use to confirm that the instrument is still working. 	
During electrical works (Exposed wires)	Hazard: Hanging wires, exposed wires, running wires Risk: Tripping, eye injury,	2	<ul style="list-style-type: none"> ● During works exposed wires that are left from shift to shift will be twisted and capped to prevent injury. In some cases where work is being conducted on a multitude of systems live power and deadlines will be clearly identified with tags along the lines ● Keep the leads and wires off the ground and out of the way of pedestrian traffic onsite. If this is not possible some form of barricading will be required to prevent other trades from interacting with the leads or wires. 	5
Turning power back on and removing isolation	Hazard: Missed wires, faulty leads Risk: Electrocution, damage to equipment.	1	<ul style="list-style-type: none"> ● Upon completion of all onsite electrical work, supervisor will identify all power sources effected prior to re-energizing a system ● A Trades Apprentice will never be solely responsible for re-energizing a system ● On completion of job: <ul style="list-style-type: none"> ○ Make safe - terminate and test all conductors before re-energising - must be undertaken by a competent & licenced electrician ○ Notify all workers working on the electrical equipment and other affected workers at the workplace that electricity is to be restored. ○ Remove tags and locks (each person removes their danger tag and/or lock). ○ Carry out a visual inspection to ensure tools, surplus materials and waste has been removed. 	5

High Risk Work Activity: 11. Electricity

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> Once electricity is restored tests must be carried out to confirm that polarity is correct (must be undertaken competent & licenced electrician), actives are switched and, where applicable, phase sequences are correct before electrical equipment is used. 	

11C. Electrical - Installation of Wiring and Fittings



PPE Recommended		Persons responsible for maintaining controls		
 		 		
<p>Accessing roof space to undertake works when power is live to the house</p>	<p>Hazard: Electric shock Risk: Electrocution</p>	<p>1</p>	<ul style="list-style-type: none"> For isolation process Refer to 11A Prior to Work – Isolation Prior to Accessing the Roof Space: <ul style="list-style-type: none"> Before starting any work, turn off all electricity to the property at the main switchboard (must be undertaken competent & licenced electrician) and take steps to prevent the electricity from being turned back on while work is in progress (tag/lock-out). Accessing Roof Space: <ul style="list-style-type: none"> Be aware that heat and humidity may cause heat stress, so make sure fluid intake is sufficient to ensure you do not become dehydrated. Avoid accessing roof space in hot weather conditions (early morning starts better on high temperature days). Take additional lighting (e.g., torch) with you as the lighting is generally poor in ceiling spaces. Take care accessing and traversing the work area, avoiding tripping over debris, material, and the ceiling trusses. Step carefully on ceiling joists or other beams – not the ceiling material (i.e., Gyprock sheeting). To avoid risk of falling or injury maintain three points of contact (foot on each truss and hand on girder). Be aware of the location of electrical cables, fittings and equipment and avoiding contact with them. Solar hot water piping can be very hot if not covered by the insulation. If the roof space is dusty wear a P2 dust mask. 	<p>4</p>
<p>Cable and ladder tray installation</p>	<p>Hazard: Exposed nails manual handling Risk: Personal injury</p>	<p>2</p>	<ul style="list-style-type: none"> Check layout and mark out Secure fixings and supports using correct size bolts and fixings Cut ladders or trays to fit using drop saw or 100mm angle grinder with guard attached Secure ladders or trays to support Ensure area walkways are clear Remove sharp edges and protruding fixings. 	<p>5</p>

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Installing light fittings	Hazard: Falling objects, manual handling, electricity, working at heights Risk: Personal injury	1	<ul style="list-style-type: none"> For isolation process Refer to 11A Prior to Work – Isolation Check layout and mark out Receive lights on site and confirm correct numbers and types Confirm cabling requirements Install light fitting base or bracket and terminate cabling or plug into lighting socket Complete the fitting of any other parts Confirm fitting is secure and installed to specifications Test and confirm cables before commencing work. Isolate and fit danger tags as appropriate Ensure power tools (if applicable) and leads are tagged. 	4
Installation of Switch boards	Hazard: Falling objects, manual handling, electric shock, explosion Risk: Personal injury	1	<ul style="list-style-type: none"> For isolation process Refer to 11A Prior to Work – Isolation Confirm installation specifications Prepare installation area and confirm adequate space including door swing for maintenance Arrange for crane or other mechanical handling equipment if needed Receive switchboard on site including test certificates Transfer switchboards to installation location Mark out location ensuring coordination with other services Install switchboard to manufactures and client’s specifications Commission switchboard. 	4
Installation of pyrotenax (mims) cable	Hazard: Exposed nails, working at height, sharp edges Risk: Personal injury	1	<ul style="list-style-type: none"> Check location to drawing and specification layout and mark out Confirm cable specification and condition Confirm cable supports on conduits have been installed to specifications Install rollers or other protection to client’s specifications Install cable stands to client’s specifications Install cable manually with rope or winch as appropriate to client’s specification Cut any excess cable and seal exposed ends to manufacturer’s recommendations Locate/dress cable to fix in position to client’s specification. 	4
Installation of lighting looms	Hazard: Falling object, sharp edges, electricity, unstable ladders	1	<ul style="list-style-type: none"> For isolation process Refer to 11A Prior to Work – Isolation Check drawings to confirm loom locations and specifications Receive cable and sockets bases on site and confirm correct types, sizes, and numbers Construct lighting looms to client’s specifications 	4



High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Risk: Personal injury		<ul style="list-style-type: none"> Label each loom with distribution board and circuit number Install looms to client's specifications Confirm socket locations and fixings to client's specification Install circuit feeds and switch wires to client's specifications. 	
Installation of cable supports	Hazard: Falling object, sharp edges, electricity, unstable ladders Risk: Personal injury	1	<ul style="list-style-type: none"> For isolation process Refer to 11A Prior to Work – Isolation Check location to drawing and specifications Receive cable supports on site confirming correct type, size, and number. Mark out route of cable supports to specifications confirming clearance of other services Install supports, as necessary, to client's specifications and using correct size bolts Confirm tightness of fixings Install cable supports. 	5
Installation of mains power	Hazard: Electricity, explosion, incorrect isolation Risk: Personal injury	1	<ul style="list-style-type: none"> Must be undertaken by a competent & licenced electrician Liaise with Supply Authority to coordinate to supply Obtain Supply Authority Certificates and check drawings Coordinate shutdowns with client For isolation process Refer to 11A Prior to Work – Isolation Receive mains on site Shut down and install 'DANGER TAGS' Remove existing mains terminations if applicable Install mains to specifications Terminate new mains to specifications Confirm DEAD and identify cables before commencing work Wear suitable gloves Confirm installation to drawings and specifications and ensure connections are tight Clean area Test installation Liaise with Supply Authority for inspection and test Remove 'DANGER TAGS' / locks (each person removes their danger tag and/or lock) Energise supply Install signs or labels as required. 	4

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Installation of switchboard connections	Hazard: Falling objects, manual handling, electric shock, explosion Risk: Personal injury	1	<ul style="list-style-type: none"> • Must be undertaken by a competent & licenced electrician • Confirm switchboard meets Australian Standards and has been installed to specifications • Confirm cables to be connected meet specifications and all cables have been installed. Check any specific requirements have been met • For isolation process Refer to 11A Prior to Work – Isolation • Group cables together as they enter switchboard and fix with cable ties • Separate cables into groups of like destination. Seal or plug any unused cable entries • Mark each conductor prior to removing any secondary insulation • Group conductors of like destinations and fix into a loom system • Align and terminate each conductor into its correct location • Check and tighten all terminations and connections • Confirm installations meet specifications • Install labels, signs or markings as required • Clean switchboard • Confirm all circuits have been completed and DANGER TAG any incomplete circuits • Test and commission switchboard using relevant procedures. Confirm phase rotation of all 3-phase equipment • Complete records. 	5
Installation of new work in existing switchboards	Hazard: Electricity, explosion, incorrect isolation Risk: Personal injury	1	<ul style="list-style-type: none"> • Must be undertaken by a competent & licenced electrician • Check drawings and specifications • For isolation process Refer to 11A Prior to Work – Isolation • Arrange isolation of section of, or complete switchboard with client • Isolate section of, or complete switchboard, install insulating barriers • Fit 'DANGER TAGS' to isolation devices • Test that works area has been safely isolated • Complete installations to client's specification • Check and tighten all terminations and connections • Confirm installation to client's specifications • Fit 'DANGER TAGS' to any incomplete work • Install labels, signs or markings as required • Clean work area • Test and commission new installation following relevant procedures. Confirm phase rotation of all 3-phase equipment 	4

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> Complete records. 	
Installation of sub-mains	Hazard: Electricity explosion incorrect isolation Risk: Personal injury	1	<ul style="list-style-type: none"> Must be undertaken by a competent & licenced electrician For isolation process Refer to 11A Prior to Work – Isolation Check location to drawings and specification layout and mark out Plan installation to work towards the main switchboard Confirm cable specifications and condition Install cable to client’s specifications Terminate sub mains to specifications Clean area Test installation Remove ‘DANGER TAGS’ Energise main switchboard Install signs or labels are required. 	4
Installation of power and light cabling	Hazard: Falling objects, manual handling electric shock, explosion Risk: Personal injury	1	<ul style="list-style-type: none"> Must be undertaken by a competent & licenced electrician For isolation process Refer to 11A Prior to Work – Isolation. Check location to drawings and specification layout and mark out. Plan installation to work towards the main switchboard. Confirm cable specifications and condition. Install cable to client’s specifications. Terminate submains to specifications. Clean area. Test installation. Remove ‘DANGER TAGS’ (each person removes their danger tag and/or lock). Energise main switchboard. Install signs or labels are required. 	4
Installation of power points	Hazard: Electric shock, manual handling Risk: Personal injury	2	<ul style="list-style-type: none"> Must be undertaken by a competent & licenced electrician Check layout to drawings and specifications and confirm with client. Check walls, cavities and ceilings for other services and confirm location of any water pipes, gas lines, power, or telephone cables. Check equipment is tagged. 	4



High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> Fit power point mounting brackets as required. Tape or insulate ends of new cable to prevent electrical contact. Run cables. Connect power points. Confirm fittings are secure and installed to specifications. Clear area and remove Isolation or 'DANGER TAGS' (each person removes their danger tag and/or lock). 	
11GA. Electrical - Aircon Removal & Installation of Existing Units				
PPE Recommended				Persons responsible for maintaining controls 
Air conditioner replaced or to be relocated	Hazard: Leakage of refrigerant Risk: Affixation, skin irritation	2	<ul style="list-style-type: none"> Must be undertaken by a competent & licenced electrician. Before removal of the unit isolate the current system and remove all potentials of electrical supply. <ul style="list-style-type: none"> For isolation process Refer to 11A Prior to Work – Isolation. Must be undertaken by a worker who is competent & licenced in refrigerant handling. If done prior to power isolation: <ul style="list-style-type: none"> Switch air conditioner on (cooling). Reclaim all refrigerant from all parts of the system at the time of decommissioning. Ensure that receiving cylinder is appropriate for the pressure of the system and type of refrigerant and complies with Australian Standards. Inspect receiving cylinder for damage such as dents or corrosion before using and confirm that it is within certification date. Once reclaim process is complete clearly label cylinder. Reclaimed refrigerant to be recycled or returned to an authorised refrigerant supplier. 	5
Disconnect unit	Hazard: Possible gas (refrigerant) leakage Risk: Affixation, skin irritation, explosion	2	<ul style="list-style-type: none"> Visually check all fitting and hoses for damage. Leak test fittings and hoses prior to opening isolation valves at the ends of each hose. Follow the equipment manufacturer's instructions for evacuation and charging of a system, unless the instructions specify an action that would lead to refrigerant escaping from the system or contradicts Australian Standards and Regulations. Take outdoor unit dust caps off liquid line and suction line (use pressure gauge until pressure is negative value). Close liquid line. 	4

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> Close suction line. Switch air conditioner off 	
Remove unit from walls	Hazard: Awkward lift, working at heights, sharp edges Risk: Falls from heights, falling objects, electrocution	2	<ul style="list-style-type: none"> Must be undertaken by a competent & licenced electrician. Before removal of the unit isolate the current system and remove all potentials of electrical supply. <ul style="list-style-type: none"> For isolation process Refer to 11A Prior to Work – Isolation. Access external air conditioner position by scaffolding erected / barricades, using appropriate PPE & equipment. Switch power off at power source. Use electrical meter to ensure power off. Mark cabling (if air con being relocated) & disconnect cabling and copper pipes Replace dust caps Move air conditioner to required location / or dispose of air conditioner if required Be mindful of the presence of snakes or spiders 	5
Reinstallation of relocated air conditioners:	Hazard: Fire, leakage of refrigerant Risk: Burns, environmental damage, eye damage	1	<ul style="list-style-type: none"> Extend copper pipes, expand existing pipes, and neaten; braze copper piping together, ensuring that the hot work is monitored to ensure adequate cooling & inspect for faults. Extend cables – use junction box to connect extra cabling. Competent and licenced electrician to inspect for waterproofing and correct connections. Move outdoor unit to desired location and install on rubber feet, concrete slabs, or wall brackets (customer choice). Reconnect copper pipes and cables to outdoor unit. Use vacuum pump and gauge to evacuate lines to check for impurities and leaks. Wait 30 minutes to ensure vacuum holds. Slowly open liquid line. Slowly open suction line. Must be undertaken by a competent & licenced electrician. Turn air con on (cooling) in accordance with manufacturer’s instructions. Test air con. Check gas level. If necessary, re-gas air con using appropriate gas as per manufacturer specifications. 	5
Refrigerant handling	Hazard: Damage to cylinder,	2	<ul style="list-style-type: none"> Must be undertaken by a worker who is competent & licenced in refrigerant handling Ensure cylinders are kept secure and vertical. During transport firmly secure cylinders with strapping against a roll cage. 	5

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Transporting refrigerant	leaking refrigerant during charging of equipment Risk: Affixation, skin irritation, explosion		<ul style="list-style-type: none"> Ensure cylinders are kept away from heat sources, this includes the sun. When cylinders are in a vehicle secure them on side of vehicle that is in a cool, shady area. 	
11I. Electrical - Working Around Underground Services				
PPE Recommended				Persons responsible for maintaining controls
				
Establish and complete excavation permit	Hazard: Incorrect information identified Incorrect scope of works Risk: Damage of services Death or serious injury	1	<ul style="list-style-type: none"> Do not dig unless necessary All reasonable steps will be taken to obtain current underground essential services information about any of the areas requiring excavation before directing or allowing the excavation work to commence Contact Dial Before You Dig to request information about the infrastructure networks at the planned project site <ul style="list-style-type: none"> Online via the Dial Before You Dig website www.1100.com.au Mobile website or iPhone app By phone call 1100 (toll free, during business hours) Use water pressure excavation over machines or shovels Never drive star pickets in without knowledge of what is below Plans to be attached to excavation permit if required Obtain all relevant services plans by calling Dial before you Dig (1100). Allow 2 working days for plans Examine Plans and assess all possible impacts on the services assets Book appointment for certified locator to meet on site Examples of services to consider: <ul style="list-style-type: none"> Oil, Gas, Water, Sewage, Electrical, Stormwater, Traffic Signals & Telecommunications All existing services to be potholed and marked for future reference Ensure all overhead services such as powerlines have been identified Select the appropriate machinery to use around services 	4
High voltage underground	Hazard:	1	<ul style="list-style-type: none"> Underground High Voltage Cables & Sub-Stations: 	4


High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
cables and sub-stations	Contact with electrical cable Risk: Electrocution Fire		<ul style="list-style-type: none"> ○ Most 'green field' work sites will not have underground services located on them. However, some sites which are located near electrical sub-stations or 'keys' do have areas which are covered by an exclusion zone which restrict excavation ○ On any site where a sub-station or 'kiosk' is located on the block or a neighboring block determine where the power cables from the sub-station are running. This can be achieved by contacting Dial Before You Dig ○ If excavation work is to occur within the exclusion zone, then a permit needs to be obtained from the relevant power authority. This permit to work needs to be communicated with the relevant trades and all trades need to review and abide by the permit prior to commencing works. To obtain written Safety Advice where it has been identified as being required, complete and submit or return by email the applicable Safety Advice Request Form which is accessible via the electricity entity website: https://www.ergon.com.au/network/safety/business-safety/the-outdoor-workplace/working-near-powerlines ● In some cases, it may be necessary to hand dig to identify the location of the cable and/or the protective covering. 	
Excavations and digging near underground power	Hazard: Contact with electrical cable Risk: Electrocution	1	<ul style="list-style-type: none"> ● Trades to inspect site plans prior to the commencement of digging ● Contact dial before you dig prior to undertaking excavation works on the nature strip and common areas of the site. Dial before you dig will only be able to identify power cables of the electrical distributor asset owner and are to be considered as a guide only ● Plans outlining the location of the underground power lines within residential construction site can be found in the meter box once installed ● Where underground power lines within a site cannot be identified the services of a cable locator will need to be engaged ● Prior to the commencement of any digging examine these plans & determine if the intended excavation will impact these underground lines ● Work can occur near live power lines if the powered mobile plant is 500mm from the underground power lines. Work in closer proximity should be undertaken via hand digging around the power lines if the cabling is live ● The location of underground power cables also has warning tape installed mid-way between the cable and the surface. If discovered the trade should cease all operations & contact is to be made with the site Supervisor 	4
Installing electrical conduit	Hazard: Contact with electrical cable Risk: Electrocution	1	<ul style="list-style-type: none"> ● Electrical companies installing electrical conduit must post a plan showing the location of underground cabling in the meter box of the site & identify distances to the underground conduit ● Electrical companies are required to install warning tape at approximately mid-way between the underground conduit and ground surface 	4

High Risk Work Activity: 11. Electricity				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> It is a requirement that the cable does not pass underneath the proposed location of the concrete slab. If site condition prevents this from occurring, contact must be made with the supervisor 	

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
15BA. Mobile Plant - Driving Work Vehicles Onsite				
PPE Recommended				Persons responsible for maintaining controls 
Driving work vehicles onto site	Hazard: Traffic Risk: Uncontrolled contact between vehicles and people	1	<ul style="list-style-type: none"> Driver is responsible for conducting prestart vehicle checks Only licensed drivers are permitted to drive vehicles Always drive according to road and weather conditions Driver to be aware of site instructions and any specific hazards/risks that may be relevant Flashing lights are always used on mobile plant and vehicles Adherence to site safety plan, exclusion zones, communication, consultation. Follow the site safety plan relating to traffic control safety Increase awareness of pedestrians if works are adjacent to the existing footpath All pedestrians to be diverted around work area 	5
Mobilising on site	Hazard: Obstruction Unauthorised access Risk: Crush death Inadequate PPE Crushing	2	<ul style="list-style-type: none"> Do not work within 3m of live traffic unless: <ul style="list-style-type: none"> A Traffic Management Plan is in place A Traffic Control system is in place – under the direction of ticketed traffic controllers There is a safety barrier in place (such as concrete new jersey curbs), water filled Triton barriers and or a shadow vehicle Remove obstructions or reposition equipment Ground condition and slope must be assessed prior to loading/unloading Do not continue if you cannot confirm the stability of the machinery Only those authorised may access site 	4

High Risk Work Activity: 15. Mobile Plant

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> Ensure work area is barricaded and signed to allow adequate exclusion zones. Depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater High visibility clothing to be always worn Transport driver shall be responsible for tie down of load and removing tie downs, straps etc Maintain visual contact between plant operators and other personnel at all times. Spotters to be used where required for reversing operations, tight areas etc. Avoid unloading/loading plant under power lines 	
Unloading of plant	Hazard: Plant and equipment falling off deck uneven ground Risk: Damaged equipment, crush death	1	<ul style="list-style-type: none"> Qualified and competent operator to always unload vehicle Align machinery with ramps prior to unloading Using a spotter when reversing Adjust ramps to suit wheel width Use winch cable and remote where possible Remove excess personnel from the work area Always choose suitable surface to unload on level ground 	4
Moving machinery around site	Hazard: Obstruction (Overhead, at ground level or underground), faulty equipment, plant tipping or rolling over Risk: Crush death	1	<ul style="list-style-type: none"> Remove obstructions or reposition equipment Do not continue if you cannot confirm the stability of the machinery Check all electrical systems are operational Check all warning systems and devices are operational Only authorised personnel shall carry out maintenance checks Only qualified person shall carry out repairs and maintenance Check tyre tread and pressure are satisfactory (where applicable) Provide tilt alarm system to advise operator of machine operating beyond safe working angles Ensure the machine is an "outdoor rated" machine if operating where there is a risk of external wind Operator is responsible to not exceed the safe working load and wind rating of the plant Operator to be trained and competent in the safe operation of the plant 	5
Stationary equipment	Hazard: Accidental movement of plant	1	<ul style="list-style-type: none"> Ensure tools and equipment are stored appropriately Ensure emergency stop switch is pushed in when equipment function completed and work to commence Ensure shutdown procedures are followed as per the manufacture's manual 	5

High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Risk: Crush death			
Refueling with diesel or petrol	Hazard: Spills, exposure to hazardous substances Risk: Fire, skin irritation, ground contamination	1	<ul style="list-style-type: none"> • Use a designated refuelling point where practical • Ensure machine is turned off before refuelling • Fire extinguisher to be available in mobile plant. Extinguisher to be maintained according to Australian Standard and training in the correct use of extinguisher has been undertaken • Refuelling of portable containers must be done on the ground • All hot work or sources of ignition will be kept away while refuelling takes place • Appropriate size spill kits are to be available to implement if required • All workers will wash their hands and arms with water when finished handling diesel/petrol • Any contaminated clothing will be removed • All workers will read the Safety Data Sheet prior to use 	5
15BB. Working Near Onsite Mobile Plant				
PPE Recommended				Persons responsible for maintaining controls
Working near onsite mobile plant. (Under or beside)	Hazard: Road traffic Risk: Contact between persons and vehicles	2	<ul style="list-style-type: none"> • When establishing work areas consider mobile plant onsite has right of way • All personnel to have undergone site specific familiarisation • Erect any barriers & signage necessary to keep others safe and aware of the work being undertaken • Designated pedestrian routes to be established where required • Personnel not to enter the swing zone of equipment without positive communications with operator • Restrict access to work area. Ensure: <ul style="list-style-type: none"> ○ Exclusion zones surrounding work area using barricades and signage is in place ○ Any other workers within the exclusion zones are wearing PPE as required ○ Communicate with onsite mobile plant operators to get an understanding of their tasks and areas they need to access as well as times they operate. Work in with onsite operators and ensure tools, equipment and work doesn't unnecessarily block their work areas or travel paths • When new workers come to site ensure they understand the movements of onsite mobile plant as it may not be consistent and start up without notice 	5





High Risk Work Activity: 15. Mobile Plant				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> Mobile phones or personal entertainment devices (PEDS) are not to be used while working around mobile plant. If necessary to use such a device, move to a safe area. Never work under a load being lifted by any type of crane. 	

High Risk Work Activity: 16. Artificial Extreme Temperatures				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
16BA. Hot Work - Grinding				
PPE Recommended				Persons responsible for maintaining controls
Preparing to use a grinder to cut or grind steel	Hazard: Slips, trips and falls Risk: Personal injury	2	<ul style="list-style-type: none"> Ensure only competent & trained personnel use a grinder Never leave an inexperienced worker alone to use a grinder Notify anyone nearby who may be affected by the work Ensure valid hot work permit is in place Remove flammable materials from areas Ensure tool is in good repair and tagged in date All hose and equipment to be checked for defects prior to commencing work. Any defects noted equipment must not be used Always ensure blades are correctly fitted Check work is properly supported and won't slide or move. Check cut will be clear of supports 	5
Using a grinder to cut or grind Steel	Hazard: Hot sparks, loose pieces of material Risk: Personal injury	2	<ul style="list-style-type: none"> All hose and equipment to be checked for defects prior to commencing work. Any defects noted equipment must not be used Always ensure blades are correctly fitted Control sparks and other ignition sources from hot works by using barriers and screens where practical. Always secure material in a vice or clamp. Never hold the object you are using the grinder on. Maintain 2 hands on grinder 	5



High Risk Work Activity: 16. Artificial Extreme Temperatures

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> • Ensure all guards are left on grinder, (if the guard is in the way of the task, re-think and use a different tool as this means the grinder is not suitable) • Check cut-off will fall safely or will be supported • NEVER leave hot work unattended 	

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Ladders – Under 2m				
PPE Recommended				Persons responsible for maintaining controls 
Using Ladders	Hazard: Using Ladders Risk: Falling	3	<ul style="list-style-type: none"> Tie offs, base support, gutter anchors, levelers to be considered All ladders used on site will be rated 'Industrial' with 120kg (minimum) load rating Persons using the ladder must have 3 points of contact always (i.e., 2 hands and 1 foot or 2 feet and 1 hand or be holding a stable object e.g., gutter, wall frame) Ladders are to be maintained in a sound working condition and be appropriate for the task to be undertaken Tools requiring two handed operations, or a high degree of leverage force should not be used while on ladders A ladder is not a work platform. 	5
Manual Handling				
PPE Recommended				Persons responsible for maintaining controls 
Manual Handling	Hazard: Locations of the loads and distances to be moved Risk: Musculoskeletal strain, Fatigue	3	<ul style="list-style-type: none"> Use mechanical handling equipment where possible Correct lifting technics learnt in their construction induction will be used whenever a lift is required Preparation: The first step in any lifting operation is preparation. Plan how you will carry out the lift and clear away any obstacles. By visualising the lift, you will automatically make your stomach muscles contract. These muscles brace your back and will significantly contribute to injury prevention Size up to load: By moving the load sideways and forwards you will be able to ascertain whether it is within your capacity. Always imagine that the object you are about to lift is much heavier than it is Proper foot position: As a general rule the front foot should be beside the object. The back foot should be slightly behind and be hip width from the front foot. This achieves a stable base and allows for even distribution of weight Proper hold: Ideally with the proper hold the hands should be diagonally opposite for security and comfort. Use the full length of the fingers and where possible the palms to avoid fatigue Bend at the knees: Bend your knees to get down to the load and use the legs to lift it. This way thigh and leg muscles are used, and these are the strongest part of your body (your back muscles are only for bracing) Straight back: Keep your back as near to straight as possible, raise your head, keeping your chin in. This will keep your spine straight and enable you to see where you are going 	5



Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Use of Hand and Power Tools				
PPE Recommended				
			Persons responsible for maintaining controls	 <small>Worker</small>
Prestart check at site	Hazard: Site hazards may impair works Risk: Personal injury	3	<ul style="list-style-type: none"> Undertake pre-site inspection verify conditions on site will enable works to be carried out in accordance with the SWMS. Discuss site specific works with the Site Supervisor reviewing site signage, Safety Management Plan, for site specific hazards Ensure all employees are made aware of any site specific hazards to works and these SWMS Construction Inducted employees are only allowed to undertake construction works Ensure all leads tagging & testing are up to date, if applicable 	5
Use of drills, saws, planner, sander, hand tools	Hazard: Untrained workers Risk: Personal injury	3	<ul style="list-style-type: none"> Workers are to use the right type and right size of tool for the job Workers to follow the correct procedure for using every tool Worker to check the condition of tool prior to use Always carry pointed tools by your side with the points and heavy ends down Never carry tools in your pockets Keep cutting tools sharp and in good condition Cut away from yourself when using chisels and other edged tools Handle sharp-edged and pointed tools with care Handles must have no sharp edges or areas that dig into the fingers or palm of the hand Do not use tools which are loose or cracked 	5

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul style="list-style-type: none"> When power tools are used follow the manufacturer’s instructions for the correct PPE to be worn and the safe use instructions Workers to be competent in the use of the PPE and risk assessments must be undertaken prior to using PPE to show that the hierarchy of control was used in determining if to use PPE If an item of plant or equipment creates excessive noise, that is where you need to raise your voice to talk, wear appropriate hearing protection If there is a risk of injury to the head by falling objects then wear hard hats 	
	Hazard: Contaminated atmosphere Risk: Respiratory illness	3	<ul style="list-style-type: none"> If worker doesn’t know or suspects area being worked on may contain crystalline silica, then follow the steps listed in the crystalline silica component of this SWMS for specific controls of respirable crystalline silica Assess whether to wet down areas to reduce dust emission from works conducted Where the risk of dust production, worker will wear appropriate PPE 	5
	Hazard: Flying debris Risk: Personal injury	3	<ul style="list-style-type: none"> Guards on tools and equipment will be maintained and working effectively before being used on site Guarding on tools will not be removed to perform any work activity All tools and equipment will be inspected prior to work activity for any faults or defects If a fault or defect is found the item will be removed from services and reported to the supervisor as soon as practicable All persons performing work where there is a risk of a foreign object striking the eye, eye protection must be worn 	5
	Hazard: Poorly maintained electrical tools Risk: Electrocution	3	<ul style="list-style-type: none"> All corded tools will be tested and tagged in accordance with current legislation and conducted every three months on construction sites All corded tools will be connected directly to an RCD switch box which is also inspected and tagged in accordance with current legislation 	5
Powered tools with discs: grinders	Hazard: Incorrect disc or fragmented disc resulting in flying parts striking people Risk:	3	<ul style="list-style-type: none"> If worker doesn’t know or suspects area being worked on may contain silica then follow the steps listed in the crystalline silica component of this SWMS for specific controls of respirable crystalline silica Grinders will always be inspected before use If a cutting or grinding disk has been left on, carefully inspect disc prior to use If damage to disc is noted, swap out for a new one Never change any type of disk on a grinder without unplugging or removing battery Checking for dead is also essential to prevent accidental operation during disk change 	4

Site Risk Assessments – Listed Alphabetically by Non-High-Risk Activities

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
End of Shift				
PPE Recommended				
Persons responsible for maintaining controls				
Clean up and re-packing.	Hazard: Loading vehicle Risk: Muscular strains	3	<ul style="list-style-type: none"> When cleaning up and repacking good manual handling techniques will be used, e.g., such as bending the knees and not the back, team lifts where possible and avoid carrying very heavy items 	5
Leaving Site	Hazard: Environmental Risk: Environmental damage	4	<ul style="list-style-type: none"> When leaving site, make sure to take away any of the left-over materials When cleaning ensure that all environmentally sensitive products are disposed of correctly Any leftover hazardous substances will be taken off site and disposed at the correct facility 	5

Site Risk Assessments – Additional Tasks or Activities to be Added

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Additional Tasks to Add to Job				
Task 1:	Hazard: Risk:	0-6	What did you do to make it safe?	4-6
Task 2:	Hazard: Risk:	0-6	What did you do to make it safe?	4-6
Task 3:	Hazard: Risk:	0-6	What did you do to make it safe?	4-6