# **Site SWMS & Risk Assessments**



QR Code	934668
Principal Contractor	Hurst Construction
Date Provided to PC	22/07/2024
Revision Due	22/07/2025
Project	Plumbing & Drainage Works Wulguru Steel Admin Bldg
<b>Construction Site</b>	17 Doyle Court
Location / Address	Stuart, Qld 4811
Person Responsible for	Barry Davies
implementing SWMS onsite	0409 753 229
After Hours Contact	Barry Davies
After Hours Contact	0409 753 229



### 1 Purpose

The purpose of this document is to explicitly outline the Hazards and Risks associated with high-risk work activities and general construction site tasks. This Safe Work Method Statement (SWMS) must be maintained and accessible for inspection until the completion of the high-risk construction work it pertains to. In the event of a revision to the SWMS, all versions must be retained. Should a notifiable incident occur in relation to the high-risk construction work covered by this SWMS, it must be retained for a minimum of 2 years from the date of the incident.

#### 2 Evaluation

Process effectiveness is evaluated through internal audits and site safety inspections. This document remains relevant until the specified review dates, unless it is found that controls may not be effective, new tasks or hazards/risks are introduced due to changes in the workplace, or in the event of a notifiable incident. In such cases, the SWMS will be reviewed and, if necessary, revised. Ultimately, everyone is responsible for upholding their duties regarding workplace safety.

The SWMS includes a provision at the end for adding or amending it. If these changes are implemented, workers must promptly notify Barry Davies to ensure they are properly incorporated. Once the SWMS is amended and controls are deemed adequate for the identified hazards, all workers must re-sign the SWMS to confirm their awareness of the changes.

#### 3 Doc Control Details

PCBU Name:	All Plumbing NQ ABN: 11169623125					
PCBU Address:	35 Fleming Stre	eet, Aitkenvale QLD,		Contact Number:		0409 753 229
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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
- Excavation Work Code of Practice 2021
- Hazardous Manual Tasks Code of Practice 2021
- Managing Noise and Preventing Hearing Loss at Work Code of Practice 2021
- Managing Respirable Crystalline Silica Dust Exposure in Construction and Manufacturing of Construction Elements Code of Practice 2022
- Managing Risks of Hazardous Chemicals 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
- Working Near Overhead and Underground Electric Lines Electrical Safety Code of Practice 2020



#### **PPE Requirements** 6

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

## **Qualifications, Training Requirements**

QBCC Licence - Plumbing and Drainage

Apprentice Training, if applicable

Industry White Card(s)

Supervision from Barry Davies

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

#### **Hierarchy of Control Measures** 8

Level 1	Level 2	Level 3
Eliminate the Hazard	<ul><li>Substitute the Hazard</li><li>Isolate the Hazard</li><li>Engineer the Hazard out</li></ul>	<ul><li>Administration Controls</li><li>PPE</li></ul>

### Parties responsible for implementation of Controls



SUPERVISOR Supervisor



Worker



Operator



**Engineer** 



Management



**Spotter** 



## 10 Risk Calculator

HOW TO USE THIS RISK TABLE
Step 1: Identify potential hazards.
mazaras.
Step 2: Decide
what a possible
Consequence
could be.
Step 3: Decide
How Likely? it is
to happen
Step 4: Line up
your choices in
the table to get
a number
Step 5: Use the
Priority table to
the right.

Appendix B - Ris	Appendix B - Risk Calculator						
RISK RATING CALCULATOR			Likelihood				
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		
Catastrophic - 0 Multiple Fatalities	3	2	1	0	0		
Major - 0 Death or serious disability	3	2	1	0	0		
Moderate - 1 Long term illness or serious injury	4	3	2	1	1		
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	
0, 1 or 2	
3	
4, 5, 6	

Prioritisation
Action to rectify must be done immediately before work may commence
Consider control measure as necessary and implement further controls to reduce risk
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:



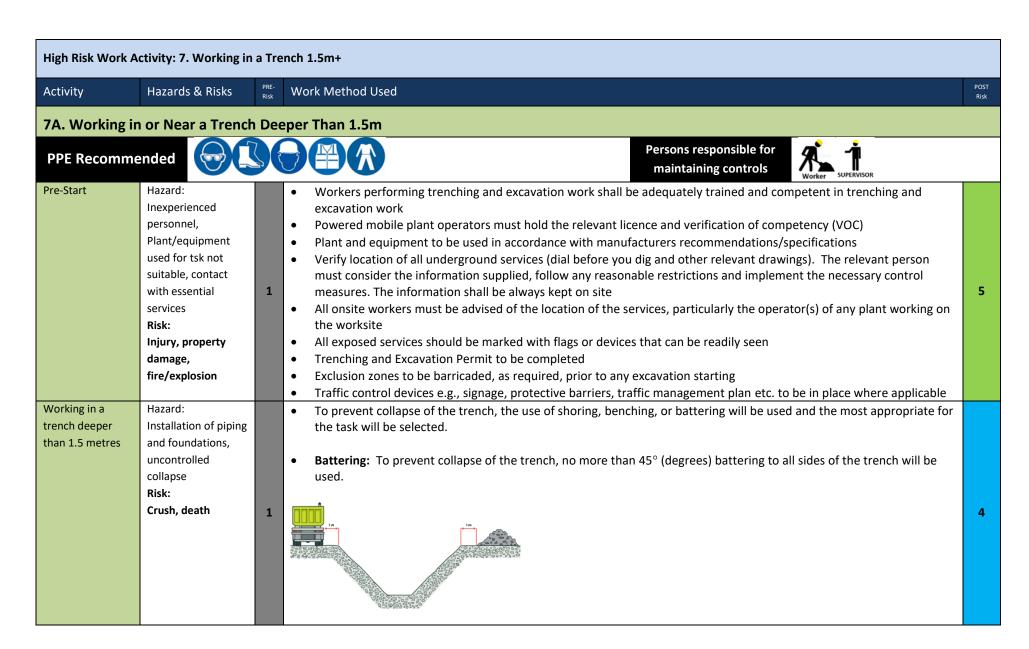
High Risk Wo	High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk	
1DA. Work	ing at Height – Lad	lders			
PPE Recon	nmended		Persons responsible for maintaining controls		
Performing construction work that involves a ladder	Hazard: Unstable ladder Risk: Injury / death	1	Single or Extension Ladders:  The ladder must be set up on firm and stable ground  Ladder must:  Be rated for industrial use  Comply with Australian Standards  Have a load rating of 120kg  Be the correct height for task to avoid reaching or stretching  Be no longer than:  Single ladder 6.1m  Extension ladders 7.5m  Extension ladder for electrical work 9.2m  For electrical work be an approved non-conductive ladder  Be maintained in a sound working condition and be appropriate for the task to be undertaken  Not be used to support a weight greater than load rating  Platform Ladders:  Ensure the ladder is rated for industrial use, is well maintained, and free of obvious visual defects  Ensure all locking devices on the ladder are secure  Never work where your feet are positioned above the 2 <sup>nd</sup> from top tread of the ladder  When working on the ladder, have 3 points of contact, both feet and one other point of contact i.e. hand, waist or upper torso	5	
	Hazard: Fall from height Risk: Personal injury	1	<ul> <li>Always maintain three points of contact when climbing or descending the ladder (i.e. two hands and one foot, or two feet and one hand on the ladder)</li> <li>Ensure combined weight of the person using the ladder and any items or tools should never exceed the working load limit of the ladder</li> <li>A person's feet should not be higher than 900mm from the top of a ladder</li> <li>Secure the ladder at the top or bottom (preferably both)</li> </ul>	5	

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
			<ul> <li>A pre-start inspection of the ladder is performed</li> <li>Tools requiring two handed operations, or a high degree of leverage force should not be used while on ladders</li> </ul>	
	Hazard: Falling objects Risk: Personal injury	1	<ul> <li>Platform Ladders</li> <li>Ensure ladder is rated weight of person and equipment tooling.         <ul> <li>Ensure ladder is set up on stable even surfaces.</li> </ul> </li> <li>All locking devices on the ladder are secure</li> <li>Never work where your feet are positioned above the 2<sup>nd</sup> from top tread of the ladder.</li> </ul>	5
	Hazard: Improper use of ladder Risk: Personal injury	1	<ul> <li>Platform Supported by Trestle Ladders</li> <li>The system (including planks) should be assembled according to the manufacturer's specifications using only compatible components</li> <li>Trestle ladders must be secured to prevent movement</li> <li>Edge protection must be erected along the complete outer edge of the platform</li> <li>The distance between the platform edge and working face of the structure must be less than 225mm unless there is a guardrail or mid-rail installed</li> <li>Planks must be at least:         <ul> <li>225mm wide for light work</li> <li>450mm wide if work is not light work</li> </ul> </li> </ul>	5
	at Height - Use of nmended	an EW	P (Knuckle Boom)  Persons responsible for maintaining controls  Persons responsible for maintaining controls	
Preparing to use knuckle poom, Assign a Spotter	Hazard: Pre-start not completed with potential to use faulty machine Risk: Personal injury	2	<ul> <li>Workers to be trained/instructed/competent in the safe operating procedures for the brand and type of knuckle boom, as well as safe work procedures to avoid crushing and electrical hazards</li> <li>Flashing Lights are always on when machine is in use</li> <li>Logbooks are in date and easily accessible</li> <li>Operators to be licenced/competent for that plant</li> <li>Ensure correct operation of movement alarms, emergency stop controls and emergency lowering controls</li> <li>Remove obstructions or reposition equipment</li> <li>Do not continue if you cannot confirm the stability of the machinery</li> </ul>	4

High Risk Work	High Risk Work Activity: 1. Working at Height 2m+				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk	
Prenaring ich	Hazard:		<ul> <li>Assign a Spotter to remain on the ground in visual contact at all times of the project. To assist when the knuckle boom makes any movements and keep area clean</li> <li>Never use the knuckle boom lift as a crane for lifting materials</li> <li>Never try to climb on, sit or stand on platform guard rails</li> <li>Spotter is responsible for:         <ul> <li>Monitoring activity from around the base of knuckle boom</li> <li>Activating emergency lowering mechanism if required</li> <li>Maintaining 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)</li> <li>Drop Zones</li> <li>Signage to keep unauthorized person out</li> </ul> </li> </ul>		
Preparing job site	Hazard: Unauthorised access Risk: Collision with other workers/ plant	2	<ul> <li>Only those authorised may access site</li> <li>Ensure relevant site personnel have been consulted and are familiar with plan of work for knuckle boom</li> <li>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.</li> <li>When using a knuckle boom for installing edge protection ensure:         <ul> <li>Poles/rails are secured individually to the boom</li> <li>Poles/rails are centrally located and evenly balanced</li> <li>Poles/rails are untied one item at a time</li> <li>Edge protection equipment must not exceed the SWL of the boom</li> <li>Any item that is stood up in the boom meets the above requirements.</li> </ul> </li> </ul>	4	
Working from a knuckle boom basket with under 11 metres reach	Hazard: Inexperienced operator with potential consequence of rollover/crushing/ falling objects Risk: Injury, death	1	<ul> <li>Although there is no high-risk work license to operate a knuckle boom under 11m, workers to be trained/instructed in the safe operation of that brand and type of machine and be supervised by an experienced person</li> <li>Workers to wear approved EWP safety harness and harness to be attached to the correct harness attachment point, as per manufacturer's specifications</li> <li>High visibility clothing to be worn</li> <li>Never get between lift and an immovable object</li> <li>Make sure there are no overhead obstructions or powerlines</li> <li>If there is an emergency in any situation release the dead man switch</li> </ul>	4	
Working from a knuckle	Hazard: Fall from height	1	High-risk work license to operate a knuckle boom 11m or greater is required, other workers inside the basket must be competent in working at heights	4	

High Risk Work	Activity: 1. Working	g at Hei	ght 2m+	
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
boom basket with 11 metres or greater reach	Risk: Injury, death		<ul> <li>Provided safety rails and self-closing gates must be in good working condition</li> <li>Workers to be trained/instructed in the safe operation of the plant, fall arrest equipment and emergency rescue procedures</li> <li>Workers to wear approved EWP safety harness and harness to be attached to the correct harness attachment point, as per manufacturer's specifications</li> <li>High visibility clothing to be worn</li> <li>Never get between lift and an immoveable object.</li> <li>Make sure there are no overhead obstructions or powerlines</li> <li>If there is an emergency in any situation release the dead man switch</li> <li>All operations shall be at a slow speed.</li> <li>Remove excess personnel from the work area while inspection is being undertaken.</li> </ul>	
Rescue of collapsed/injured/fallen operator	Hazard: Stuck at height while suspended in height safety harness Risk: Suspension trauma/injury	1	<ul> <li>Workers to be trained in emergency rescue procedures</li> <li>Clear area of all unnecessary persons</li> <li>Establish communication with operator if still conscious</li> <li>Check for hazards in or around the work area, i.e., power lines</li> <li>Competent person to lower knuckle boom using ground controls if disabled use hydraulic release valves</li> <li>In the case of operator suspended from harness, instruct operator to place legs into leg straps of harness and take weight off body</li> <li>If available, use 2<sup>nd</sup> EWP to retrieve the injured/fallen operator (in the basket)</li> <li>Once retrieved from harness, do not lay the conscious/unconscious person down. Support in sitting knees raised position to prevent suspension trauma for 30 to 40 minutes. Administer first aid if required</li> <li>Do no attempt to retrieve personnel if it is unsafe or other hazards exist. Contact rescue services immediately</li> </ul>	4
Contact With Powerlines	Hazard: Contacting powerlines Risk: Electrocution	1	<ul> <li>Stay calm</li> <li>Do not climb out of the machine, as it may be 'live'</li> <li>Warn others to keep clear</li> <li>Try to move the machine away from the powerlines, if possible</li> <li>If there is a danger of fire, jump clear from the machine onto dry ground and move away from the machine. Do not step down.</li> <li>Stay near the machine until help arrives</li> </ul>	4
Machine shut down	Hazard:	2	<ul> <li>Shut down machine as per manufacturer's specifications.</li> <li>Park equipment in designated area.</li> </ul>	4

High Risk Wor	k Activity: 1. Working	at Hei	ght 2m+	
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Incorrectly secured machine Risk: Plant obstructing other plant		Plant to be locked and demobilized at end of day with basket elevated and ground controls disabled	



# High Risk Work Activity: 7. Working in a Trench 1.5m+ Activity Work Method Used Hazards & Risks • Shoring: Will be used against all sides of the trench that protects by shielding. The shoring system will comply with applicable standards and manufacturers requirements. The shoring will be checked daily to ensure its continued effectiveness. Benching: To prevent collapse of the trench, apply benching to all sides of the trench. When I/we bench a trench, the vertical trench side, below the benched portion, will not exceed 1.5m in height. The benching will be checked at least daily to ensure its continued effectiveness. A geo-technical engineer will: Approve in writing that all the sides of the trench are safe from collapse State in writing how long the approval lasts if there is no stated natural occurrence that could affect the stability of the trench o State in writing the natural occurrence that could affect the stability of the trench Compliance with the requirements of the geo-technical engineer will be adhered to

Activity	Hazards & Risks	PRE- Risk	Work Method Used	POST Risk
			Safe means of access/egress provided into all excavations	
Managing fill stockpile	Hazard: Uneven surfaces unstable stockpile, uncontrolled collapse Risk: Crush, death	1	<ul> <li>Plan to stockpile materials in allotted positions</li> <li>Ensure all stockpiles / spoil is kept a safe distance away from the excavation</li> <li>Maintain in such a way as to prevent creation of unnecessary uneven surfaces in areas of work.</li> </ul>	5
Workers inside a trench working greater than 1.5m	Hazard: Worker collapse or injury preventing normal exiting via ladder Risk: Unable to obtain First Aid quickly, unable to exit excavation	2	<ul> <li>Workers will never work alone in trenches where risk dictates the access to be hindered for one person to exit quickly</li> <li>Steps will be constructed where practical in the earth</li> <li>Where it is not practical constructing earth steps multiple workers will be required, with a minimum of 2 personal always in the area</li> <li>Send someone immediately to telephone or radio for emergency services. Ensure that the person knows the location of, and how to use the communication equipment</li> <li>Clear all unwanted workers away from the area</li> <li>Appoint a worker to monitor the work area (i.e. an observer who is not involved in any rescue activities)</li> <li>Do not remove the victim unless there is a danger from flooding or dangerous gases are present or there is an imminent danger of collapse</li> <li>Do not remove the victim by tying a rope around him/her and pulling on the rope</li> <li>Where possible (and safe), leave the victim in the trench until the ambulance or a qualified medical person arrives</li> <li>If risk assessment indicates:         <ul> <li>A stretcher will be made available with a 4-man lift required to remove a person from the excavation</li> <li>Additional lifting straps may be required and attached to a lifting device rated for man use</li> <li>There are several configurations, however, the crane is a suitable source to lift casualty as long as a dedicated spotter is always appointed in direct eye contact with casualty being lifted and direct contact with crane operator.</li> </ul> </li> <li>Once the Worker has been removed normal First Aid treatment will apply.</li> </ul>	4

High Risk Work	Activity: 11. Electricit	у		
Activity	Hazards & Risks	PRE- Risk	Work Method Used	POST Risk
11I. Electrical	- Working Around	d Und	derground Services	
PPE Recomm	ended		Persons responsible for maintaining controls  Supervisor	
Establish and complete excavation permit	Hazard: Incorrect information identified Incorrect scope of works Risk: Damage of services Death or serious injury	1	<ul> <li>Do not dig unless necessary</li> <li>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</li> <li>Contact Dial Before You Dig to request information about the infrastructure networks at the planned project site         <ul> <li>Online via the Dial Before You Dig website <a href="www.1100.com.au">www.1100.com.au</a></li> <li>Mobile website or iPhone app</li> <li>By phone call 1100 (toll free, during business hours)</li> </ul> </li> <li>Use water pressure excavation over machines or shovels</li> <li>Never drive star pickets in without knowledge of what is below</li> <li>Plans to be attached to excavation permit if required</li> <li>Obtain all relevant services plans by calling Dial before you Dig (1100). Allow 2 working days for plans</li> <li>Examine Plans and assess all possible impacts on the services assets</li> <li>Book appointment for certified locator to meet on site</li> <li>Examples of services to consider:         <ul> <li>Oil, Gas, Water, Sewage, Electrical, Stormwater, Traffic Signals &amp; Telecommunications</li> <li>All existing services to be potholed and marked for future reference</li> <li>Ensure all overhead services such as powerlines have been identified</li> </ul> </li> <li>Select the appropriate machinery to use around services</li> </ul>	4
High voltage underground cables and sub- stations	Hazard: Contact with electrical cable Risk: Electrocution Fire	1	<ul> <li>Underground High Voltage Cables &amp; Sub-Stations:</li> <li>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</li> <li>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</li> </ul>	4

Activity	Hazards & Risks	PRE- Risk	Work Method Used	POST Risk
			<ul> <li>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         </li> <li>In some cases, it may be necessary to hand dig to identify the location of the cable and/or the protective covering.</li> </ul>	
Excavations and digging near underground power	Hazard: Contact with electrical cable Risk: Electrocution	1	<ul> <li>Trades to inspect site plans prior to the commencement of digging</li> <li>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</li> <li>Plans outlining the location of the underground power lines within residential construction site can be found in the meter box once installed</li> <li>Where underground power lines within a site cannot be identified the services of a cable locator will need to be engaged</li> </ul>	4
			<ul> <li>Prior to the commencement of any digging examine these plans &amp; determine if the intended excavation will impact these underground lines</li> <li>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</li> </ul>	
			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	
Installing electrical conduit	Hazard: Contact with electrical cable Risk: Electrocution	1	<ul> <li>Electrical companies installing electrical conduit must post a plan showing the location of underground cabling in the meter box of the site &amp; identify distances to the underground conduit</li> <li>Electrical companies are required to install warning tape at approximately mid-way between the underground conduit and ground surface</li> <li>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</li> </ul>	4

#### High Risk Work Activity: 12. Contaminated or Flammable Atmosphere Activity Hazards & Risks Work Method Used 12E. Hazardous Substances Used Onsite Persons responsible for **PPE Recommended** maintaining controls Ensure workers are trained in the safe use of the hazardous substances they are to handle Hazardous Hazard: substances used Untrained Before using hazardous substances, ensure SDS is current, read the SDS and comply with the requirements within workers. Make sure containers have clearly marked warning labels indicating the hazards of the substance inappropriate Where required, make sure exhaust ventilation is operational at the point where the substance is being used selection, access Visual risk assessment will be conducted prior to commencing work activity & egress, Choose the most suitable substance approved for the purpose with the least toxicity and risk unknown Screen the work area to protect workers and others from exposure, so far as is reasonably practicable substances Use warning signs, barricaded or restrict access and provide an alternative route when required Risk: Check and eliminate all potential sources of ignition (including spark producing switches, electrical equipment, open Personal injury flames, pilot lights) within and near the work area 5 Identify and take specific precautions if using solvents in confined spaces such as wearing adequate RPE and providing ventilation Only prepare enough chemical to do the job Never decant chemicals into food or drinking containers Never use chemicals that are in unmarked containers Ensure spill kit available and follow manufacturer's instructions when managing spills Always wash hands thoroughly after using hazardous substances and before eating, drinking, smoking or going to the toilet All hazardous chemicals and their containers are to be disposed of as per SDS requirements Hazardous Hazard: No substances to be brought on site by subcontractors without notification provided to PC Unknown substances Hazardous substances register and SDS to be readily available brought to site hazardous Discussion with other trades: If other trades are present on site, notify them of the hazardous substances being used by other trades substances obtain from them details of any hazardous substances they are using. Risk: **Personal Injury**

High Risk Work	Activity: 15. Mobile	Plant		
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
15BA. Mobil	e Plant - Driving \	Vork \	/ehicles Onsite	
PPE Recomm	mended		Persons responsible for maintaining controls  Operator	
Driving work vehicles onto site	Hazard: Traffic Risk: Uncontrolled contact between vehicles and people	1	<ul> <li>Driver is responsible for conducting prestart vehicle checks</li> <li>Only licensed drivers are permitted to drive vehicles</li> <li>Always drive according to road and weather conditions</li> <li>Driver to be aware of site instructions and any specific hazards/risks that may be relevant</li> <li>Flashing lights are always used on mobile plant and vehicles</li> <li>Adherence to site safety plan, exclusion zones, communication, consultation.</li> <li>Follow the site safety plan relating to traffic control safety</li> <li>Increase awareness of pedestrians if works are adjacent to the existing footpath</li> <li>All pedestrians to be diverted around work area</li> </ul>	5
Mobilising on site	Hazard: Obstruction Unauthorised access Risk: Crush death Inadequate PPE Crushing	2	<ul> <li>Do not work within 3m of live traffic unless:         <ul> <li>A Traffic Management Plan is in place</li> <li>A Traffic Control system is in place – under the direction of ticketed traffic controllers</li> <li>There is a safety barrier in place (such as concrete new jersey curbs), water filled Triton barriers and or a shadow vehicle</li> </ul> </li> <li>Remove obstructions or reposition equipment</li> <li>Ground condition and slope must be assessed prior to loading/unloading</li> <li>Do not continue if you cannot confirm the stability of the machinery</li> <li>Only those authorised may access site</li> <li>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</li> <li>High visibility clothing to be always worn</li> <li>Transport driver shall be responsible for tie down of load and removing tie downs, straps etc</li> <li>Maintain visual contact between plant operators and other personnel at all times. Spotters to be used where required for reversing operations, tight areas etc.</li> <li>Avoid unloading/loading plant under power lines</li> </ul>	4

High Risk Work	Activity: 15. Mobile	Plant		
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Unloading of plant	Hazard: Plant and equipment falling off deck uneven ground Risk: Damaged equipment, crush death	1	<ul> <li>Qualified and competent operator to always unload vehicle</li> <li>Warning signage and exclusion zones installed indicating hazard</li> <li>Align machinery with ramps prior to unloading</li> <li>Using a spotter when reversing</li> <li>Adjust ramps to suit wheel width</li> <li>Use winch cable and remote where possible</li> <li>Remove excess personnel from the work area</li> <li>Unloading to be done on level ground</li> </ul>	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> <li>Remove obstructions or reposition equipment</li> <li>Do not continue if you cannot confirm the stability of the machinery</li> <li>Check all electrical systems are operational</li> <li>Check all warning systems and devices are operational</li> <li>Only authorised personnel shall carry out maintenance checks</li> <li>Only qualified person shall carry out repairs and maintenance</li> <li>Check tyre tread and pressure are satisfactory (where applicable)</li> <li>Provide tilt alarm system to advise operator of machine operating beyond safe working angles</li> <li>Ensure the machine is an "outdoor rated" machine if operating where there is a risk of external wind</li> <li>Operator is responsible to not exceed the safe working load and wind rating of the plant</li> <li>Operator to be trained and competent in the safe operation of the plant</li> </ul>	5
Stationary equipment	Hazard: Accidental movement of plant Risk: Crush death	1	<ul> <li>Ensure tools and equipment are stored appropriately</li> <li>Ensure emergency stop switch is pushed in when equipment function completed and work to commence</li> <li>Ensure shutdown procedures are followed as per the manufacture's manual</li> </ul>	5
Refueling with diesel or petrol	Hazard: Spills, exposure to hazardous substances Risk:	1	<ul> <li>Use a designated refuelling point where practical</li> <li>Ensure machine is turned off before refuelling</li> <li>Fire extinguisher to be available in mobile plant. Extinguisher to be maintained according to Australian Standard</li> <li>and training in the correct use of extinguisher has been undertaken</li> <li>Refuelling of portable containers must be done on the ground</li> </ul>	5

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Fire, skin irritation, ground contamination		<ul> <li>All hot work or sources of ignition will be kept away while refuelling takes place</li> <li>Appropriate size spill kits are to be available to implement if required</li> <li>All workers will wash their hands and arms with water when finished handling diesel/petrol</li> <li>Any contaminated clothing will be removed</li> <li>All workers will read the Safety Data Sheet prior to use</li> </ul>	
5BB. Worki	ng Near Onsite M	obile	Plant	
PPE Recomn	nended	3	Persons responsible for maintaining controls	
Vorking near onsite mobile olant. (Under or oeside)	Hazard: Road traffic Risk: Contact between persons and vehicles	2	<ul> <li>When establishing work areas consider mobile plant onsite has right of way</li> <li>All personnel to have undergone site specific familiarisation</li> <li>Erect any barriers &amp; signage necessary to keep others safe and aware of the work being undertaken</li> <li>Designated pedestrian routes to be established where required</li> <li>Personnel not to enter the swing zone of equipment without positive communications with operator</li> <li>Restrict access to work area. Ensure:         <ul> <li>Exclusion zones surrounding work area using barricades and signage is in place</li> <li>Any other workers within the exclusion zones are wearing PPE as required</li> <li>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</li> </ul> </li> <li>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</li> <li>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.</li> <li>Never work under a load being lifted by any type of crane.</li> </ul>	5

High Risk Wor	k Activity: 15. Mobile	Plant		
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
15C. Mobile	Plant - Track Exca	avator	Slew Excavator or Skid-Steer	
PPE Recom	mended	3	Persons responsible for maintaining controls  SUPERVISOR SPOTTER	
Use of track excavator, slew excavator or skid-steer on site	Hazard: Untrained or incompetent operators used Risk: Personnel struck/crushed by excavator or attachments	1	<ul> <li>Flashing Lights are always on when machine is in use</li> <li>Logbooks are in date and easily accessible</li> <li>Exclusion zones established. Depending on the height 45 degree from the top point down to the ground or 3m from edge of machine, whichever is greater</li> <li>Operators to be certificate holders for that plant</li> <li>Ensure correct operation of movement alarms on excavator</li> <li>Where possible exclude personnel from the swing area of the machine</li> <li>Arrange for a worker to act as a spotter</li> <li>Spotter to maintain a safe distance from the machine, making sure the operator can see spotter</li> <li>The operator is always to be aware of spotter's location and maintain a safe distance</li> <li>Workers to wear PPE as outlined</li> <li>Workers to be aware of plant movements</li> <li>Workers to have eye contact with operator when working close by</li> <li>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.</li> <li>As required, contact Dial Before You Dig to request information about the infrastructure networks at the planned project site         <ul> <li>Online via the Dial Before You Dig website www.1100.com.au</li> <li>Mobile website or iPhone app</li> <li>By phone call 1100 (toll free, during business hours)</li> </ul> </li> </ul>	4
Use of attachments	Hazard: Attachments wear or damage	1	<ul> <li>Inspect attachments for wear, damage, or loose or missing parts</li> <li>Ensure that attachments are securely fitted, and safety pins or clips fitted</li> <li>Check arms and connections for excessive wear</li> <li>Inspect hoses and connections for splits, bulges, leaks or fractures</li> <li>Test all hydraulic operations before applying load</li> <li>Check rams, hoses and connections for splits, leaks or fractures</li> </ul>	4

High Risk Work	High Risk Work Activity: 15. Mobile Plant						
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk			
			Test operation by raising and lowering attachment				
Operation of machine	Hazard: Overturning / Stability Risk: Personal injury		<ul> <li>Do not travel at speeds which may cause control to be lost over bumps, etc.</li> <li>Avoid driving over obstacles, ditches, drains, etc which could affect control</li> <li>Do not attempt to lift load in excess of working load limit of loader</li> <li>Reduce speed when travelling with load on front attachment</li> <li>Carry load close to ground and racked back for stability and visibility</li> <li>Do not raise load until ready to deposit</li> </ul>				

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Manual Hand	ling	<u>'</u>		
PPE Recom	mended	<b>M</b>	Persons responsible for maintaining controls	
Manual Handling	Hazard: Locations of the loads and distances to be moved Risk: Musculoskeletal strain, Fatigue	3	<ul> <li>Use mechanical handling equipment where possible</li> <li>Correct lifting technics will be used whenever a lift is required</li> <li>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</li> <li>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</li> <li>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</li> <li>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</li> <li>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)</li> <li>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</li> <li>Keep the load close to you: During the lift, keep the arms as straight as possible, and the elbows into the side. Don't change your grip while carrying and directly face the spot on which the load will rest. Never combine lifting with the twisting of your body. If you must turn, do it by moving your feet. Twisting causes the worst type of back injuries</li> <li>When a team lift is required, good communication will be used to co-ordinate the lift. Whenever team lifting is used, it</li></ul>	5

Site Risk As	sessments – Li	sted A	Iphabetically by Non-High-Risk Activities	
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Plumbing				
PPE Recomm	ended		Persons responsible for maintaining controls  Worker Supervisor	
Fitting pipes	Hazard: Personnel being struck or cut by sharp edges Risk: Loud Noises, Electrocution. Cuts/abrasions	2	<ul> <li>Ensure pipes are not LIVE before ever cutting or connecting (Earth Pipes if required.)</li> <li>If not sure earth both sides of pipe before cutting</li> <li>Ensure that no people, other than those workers directly involved in the plumbing operation, are in the area</li> <li>All workers to be familiar with the tools</li> <li>All guards used for grinders</li> </ul>	4
Dismantle Removal of old Pipes	Hazard: Incorrect procedure followed Risk: Personal injury Cut/abrasions	2	<ul> <li>Visual inspection</li> <li>Plumbing should be inspected prior to dismantling</li> <li>Check for unacceptable:         <ul> <li>Warping</li> <li>Cracks</li> <li>Live Power</li> <li>Snakes or other animals</li> </ul> </li> </ul>	4
Use of Hand and	l Power Tools			
PPE Recomm	ended		Persons responsible for maintaining controls	
Prestart check at site	Hazard: Site hazards may impair works Risk: Personal injury	3	<ul> <li>Undertake pre-site inspection verify conditions on site will enable works to be carried out in accordance with the SWMS.</li> <li>Discuss site specific works with the Site Supervisor reviewing site signage, Safety Management Plan, for site specific hazards</li> <li>Ensure all employees are made aware of any site specific hazards to works and these SWMS</li> <li>Construction Inducted employees are only allowed to undertake construction works</li> </ul>	5
			Ensure all leads tagging & testing are up to date, if applicable	

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Use of drills, saws, planner, sander, hand tools	Hazard: Untrained workers Risk: Personal injury	3	<ul> <li>Workers are to use the right type and right size of tool for the job</li> <li>Workers to follow the correct procedure for using every tool</li> <li>Worker to check the condition of tool prior to use</li> <li>Always carry pointed tools by your side with the points and heavy ends down</li> <li>Never carry tools in your pockets</li> <li>Keep cutting tools sharp and in good condition</li> <li>Cut away from yourself when using chisels and other edged tools</li> <li>Handle sharp-edged and pointed tools with care</li> <li>Handles must have no sharp edges or areas that dig into the fingers or palm of the hand</li> <li>Do not use tools which are loose or cracked</li> <li>When power tools are used follow the manufacturer's instructions for the correct PPE to be worn and the safe use instructions</li> <li>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</li> <li>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</li> <li>If there is a risk of injury to the head by falling objects then wear hard hats</li> </ul>	5
	Hazard: Contaminated atmosphere Risk: Respiratory illness	3	<ul> <li>If you don't know or you suspect area being worked on may contain crystalline silica, STOP work and talk to supervisor for further directives</li> <li>Assess whether to wet down areas to reduce dust emission from works conducted</li> <li>Where the risk of dust production, worker will wear appropriate PPE</li> </ul>	5
	Hazard: Flying debris Risk: Personal injury	3	<ul> <li>Guards on tools and equipment will be maintained and working effectively before being used on site</li> <li>Guarding on tools will not be removed to perform any work activity</li> <li>All tools and equipment will be inspected prior to work activity for any faults or defects</li> <li>If a fault or defect is found the item will be removed from services and reported to the supervisor as soon as practicable</li> <li>All persons performing work where there is a risk of a foreign object striking the eye, eye protection must be worn</li> </ul>	5

Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
	Hazard: Poorly maintained electrical tools Risk: Electrocution	3	<ul> <li>All corded tools will be tested and tagged in accordance with current legislation and conducted every three months on construction sites</li> <li>All corded tools will be connected directly to an RCD switch box which is also inspected and tagged in accordance with current legislation</li> </ul>	5
Powered tools with discs: grinders  Working With La	Hazard: Incorrect disc or fragmented disc resulting in flying parts striking people Risk: Personal injury	3	<ul> <li>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</li> <li>Grinders will always be inspected before use</li> <li>If a cutting or grinding disk has been left on, carefully inspect disc prior to use</li> <li>If damage to disc is noted, swap out for a new one</li> <li>Never change any type of disk on a grinder without unplugging or removing battery</li> <li>Checking for dead is also essential to prevent accidental operation during disk change</li> <li>Never over tighten disk as this may also damage them</li> <li>Guards are always manditory on a grinder. If the guard is in the way, the grinder is the wrong tool for the job</li> <li>Do not remove guards for any reason while grinder is in use</li> </ul>	4
PPE Recomm			Persons responsible for maintaining controls	
Using Class 1, 2, 3 3B restricted lasers	Hazard: Exposure to lasers Risk: Eye injuries	4	<ul> <li>Users trained in safe lases use in accordance with AS 2397 (Safe use of lasers in the building and construction industry)</li> <li>Use Class 1 laser where possible</li> <li>Erect laser warning signs if pedestrians are in proximity</li> <li>Isolate persons from laser beam if possible</li> <li>Ensure the laser is not set up at eye level</li> <li>If using the laser above ground, use a beam stop</li> <li>Do not stare directly into beam</li> <li>Avoid specular reflection (laser beam shining off metal surfaces.)</li> <li>If working close to beam use appropriate safety glasses rated (ANSI Z136 and CE Certified Laser Safety Glasses)</li> <li>Continually monitor the work.</li> </ul>	6

Site Risk As	sessments – Lis	ted A	Iphabetically by Non-High-Risk Activities	
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
End of Shift				<u> </u>
PPE Recomm	nended		Persons responsible for maintaining controls	
Clean up and re-packing.	Hazard: Loading vehicle Risk: Muscular strains	3	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> <li>When leaving site, make sure to take away any of the left-over materials</li> <li>When cleaning ensure that all environmentally sensitive products are disposed of correctly</li> <li>Any leftover hazardous substances will be taken off site and disposed at the correct facility</li> </ul>	5

Site Risk Assessments – Additional Tasks or Activities to be Added				
Activity	Hazards & Risks	PRE-Risk	Work Method Used	POST Risk
Additional Ta	sks to Add to Job			
Task 1:	Hazard:		What did you do to make it safe?	
	Risk:	0-6		4-6
Task 2:	Hazard:		What did you do to make it safe?	
	Risk:	0-6		4-6
Task 3:	Hazard:		What did you do to make it safe?	
	Risk:	0-6		4-6