

PLUMBING (DRAINAGE) SAFE WORK METHOD STATEMENT (SWMS)

Business Contact: PHILIP KENNY	Phone #: 0427 847 927	Principal Contractor (PC):
Responsible person (for monitoring SWMS and work): PHILIP KENNY		PC Address:
Signature:	Date:	PC Phone #: Date SWMS provided to PC:
Contact Phone #: 0427 847 927		Job Site Address:

THIS WORK ACTIVITY INVOLVES THE FOLLOWING HAZARDOUS WORK AND ENVIRONMENTAL IMPACTS

<input checked="" type="checkbox"/> Electrical equipment	<input checked="" type="checkbox"/> Elevated levels	<input checked="" type="checkbox"/> Slips, trips and falls	<input checked="" type="checkbox"/> Hazardous substances	<input checked="" type="checkbox"/> Silica dust
<input type="checkbox"/> Hot Work	<input checked="" type="checkbox"/> Hazardous manual tasks	<input checked="" type="checkbox"/> Outdoor work	<input type="checkbox"/> Remotely &/or isolated work	<input type="checkbox"/> ?
<input checked="" type="checkbox"/> Noise and vibration	<input checked="" type="checkbox"/> Native vegetation & weeds	<input checked="" type="checkbox"/> Air quality	<input checked="" type="checkbox"/> Waste	<input checked="" type="checkbox"/> Vehicle movement
<input checked="" type="checkbox"/> Fuels, oils & chemicals	<input checked="" type="checkbox"/> Terrestrial fauna	<input checked="" type="checkbox"/> Waterways & soils	<input type="checkbox"/> Cultural heritage	<input type="checkbox"/> ?

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

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

FOOT PROTECTION	HEARING PROTECTION	HIGH VISIBILITY	HEAD PROTECTION	EYE PROTECTION	FACE PROTECTION	HAND PROTECTION	PROTECTIVE CLOTHING	BREATHING PROTECTION	SUN PROTECTION	SAFETY HARNESS	Do not wear rings, watches or jewellery that may become entangled. Long and loose hair must be tied back.
											
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Planning/Preparation	<ul style="list-style-type: none"> • Liaise with Principal Contractor to identify on-site safety systems and procedures • Establish supervisory and communication arrangements • Principal contractor to confirm emergency response procedures are in place.
Hold Points	<ul style="list-style-type: none"> • Hold points identified and signed off before continuing work. <i>Specify?</i>
Training/Licence	<ul style="list-style-type: none"> • All workers to have a General Construction Induction Card • Relevant workers have relevant certificates of competency, licenses, and training. • Trained First Aider on site • All workers trained in site-specific emergency and evacuation procedures, SWMS, safe work procedures, and safety data sheets • ⚠ Associated SWMS: <i>If working at a depth greater than 1.5m. Excavation & Working in Trenches and operating powered mobile plant, SWMS in place or additional controls added to this SWMS</i>
Worker duties and responsibilities	<ul style="list-style-type: none"> • Fit condition for work, i.e. no signs of fatigue, alcohol or drugs • Attend all site inductions/briefings • Comply with all site requirements, e.g. PPE, Traffic Management Plans (TMP) • Only carry out work related to the contract • Inspect completed work and report possible safety, environmental and quality matters to the supervisor.
Monitor/Review	<ul style="list-style-type: none"> • All persons involved in the task must have this SWMS communicated to them before work commences • SWMS to be reviewed and amended if necessary, in consultation with relevant persons after any near miss or incident • If additional site hazards identified, review this SWMS and amend control measures to suit • People, including workers, contractors and sub-contractors, affected by the revisions to this SWMS, must be informed ASAP • Give the principal contractor a copy of the revised SWMS • The site supervisor to monitor works against the controls stated in this SWMS • SWMS must be kept on-site and made available for inspection or review • Keep a record of this SWMS until the job is complete or for two years if involved in a notifiable incident • Regardless of any other factor, the person in control of the workplace must review this SWMS at least annually.

Site-Specific Notes:	Act, Regulations, Codes of Practice References: <ul style="list-style-type: none"> • Work Health and Safety (Transitional and Consequential Provisions) Act 2011 • Work Health and Safety Act 2011 • Work Health and Safety Regulations 2011 • Work Health and Safety (First Aid in the Workplace) Code of Practice 2015 • Work Health and Safety (Work Health and Safety Consultation, Cooperation and Co-ordination) Code of Practice 2015 • Work Health and Safety (Work Health the Work Environment and Facilities) Code of Practice 2015 • Standards Australia 2001, – Occupational health and safety management systems - Specification with guidance for use, AS/NZS 4801: 2001 (Superseded by AS/NZS ISO 45001) • Standards Australia 2018, – Occupational health and safety management systems — Requirements with guidance for use, AS/NZS ISO 45001:2018 • Standards Australia 2016, – Environmental management systems - Requirements with guidance for use, AS/NZS ISO 14001:2016 • Standards Australia 2016, – Quality management systems – Requirements, AS/NZS ISO 9001:2016 • SafeWork NSW • NSW Work Health and Safety Act 2011 • NSW Work Health and Safety Regulation 2017
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LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	
ALMOST CERTAIN	3 - HIGH	3 - HIGH	4 - ACUTE	4 - ACUTE	4 - ACUTE			
LIKELY	2 - MODERATE	3 - HIGH	3 - HIGH	4 - ACUTE	4 - ACUTE	4A - ACUTE	DO NOT PROCEED.	
POSSIBLE	1 - LOW	2 - MODERATE	3 - HIGH	4 - ACUTE	4 - ACUTE	3H - HIGH	Review before commencing work.	
UNLIKELY	1 - LOW	1 - LOW	2 - MODERATE	3 - HIGH	4 - ACUTE	2M - MODERATE	Maintain control measures.	
RARE	1 - LOW	1 - LOW	2 - MODERATE	3 - HIGH	3 - HIGH	1L - Low	Record and monitor.	
HIERARCHY OF CONTROLS		MOST EFFECTIVE	<div>Elimination</div> <div>Substitution</div> <div>Isolation</div> <div>Engineering</div> <div>Administrative</div> <div>PPE</div>					LEAST EFFECTIVE
JOB TASK	HAZARDS	RISK	CONTROL MEASURES					RESPONSIBLE PERSON
1. Training	Exposure to respirable	3H	<div>• Training and information provided to workers on RCS should include:<div>• Information on the health effects associated with respirable crystalline silica dust (Provide</div></div>					Supervisor

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
	crystalline silica (RCS) – dust inhalation		<p>workers with a copy of 'Health Monitoring for Exposure to Hazardous Chemicals - Guide for workers': Safe Work Australia)</p> <ul style="list-style-type: none"> Identification of RCS dust through Safety Datasheet (SDS) or labels Dust exposure prevention Checking controls are working and using them When and how to use any respiratory protective equipment provided and what to do if something goes wrong (Including worker respirator fit and check processes). 	
	Powered mobile plant movement	4A	<ul style="list-style-type: none"> Groundworkers: <ul style="list-style-type: none"> Ensure an effective system of communication between the machine operator and ground workers established before work commences. Groundworkers are instructed not to approach the machine until the operator has agreed to their request to approach Ensure ground workers are instructed on set distances to maintain from the machine while in operation Groundworkers instructed made familiar with the blind spots of the machine. 	
2. Planning	Property damage	3H	<ul style="list-style-type: none"> Consider overall depth of the proposed excavation Potential impacts on an adjoining property, particularly for drainage or collapse Instability to adjoining or nearby structures Any excavation that is below the level of a footing of any structure including retaining walls that could affect the stability of the structure must be assessed by a competent person and secured by a suitable ground support system, which has been designed by a competent person (e.g. engineer). Suitable supports to brace the structure may also be required and identified by a competent person <p>Note: The soil must be examined by a competent person to ensure that the method of control (e.g. shoring /battering) when working at depths greater than 1.5 m.</p>	Supervisor
3. Arrival on-site & assess onsite conditions	Personal injury, property damage &/or environmental incident	3H	<ul style="list-style-type: none"> The vehicle should be positioned in a safe location, clear of traffic/vehicles/pedestrians during equipment delivery and materials removal (deploy physical barriers, caution signs as necessary) Do not park illegally Identify and obey all safety-related signage (check site entry requirements) Report to Site Supervisor Ensure site-specific induction undertaken Assess mobile phone reception The worksite is exactly as detailed in Terms of Agreement or contract 	Supervisor to check the site and conduct JSA where necessary

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			<ul style="list-style-type: none"> Complete a JSA specifying the control measures of unanticipated hazards. 	
4. Working outdoors	Extreme weather	3H	<ul style="list-style-type: none"> Check weather conditions – do not work in extreme conditions Reschedule works to work in more moderate temperatures. 	Supervisor to maintain awareness of weather conditions Operator to follow controls
	Hyperthermia Hypothermia	3H	<ul style="list-style-type: none"> Ensure workers trained to recognise the symptoms of hyperthermia and hypothermia <u>Hot conditions. Ensure:</u> <ul style="list-style-type: none"> Suitable protective clothing Sun brim on hard hats Safety glasses - UV rated Use 30+ sunscreen on exposed skin Adequate drinking water Access to shade on breaks Adequate breaks. <u>Cold conditions. Ensure:</u> <ul style="list-style-type: none"> Schedule warm-up breaks Hold breaks inside Dress warmly in layers Stay dry (wet clothing chills the body rapidly) Workers must get out of the cold as soon as they can if starting to feel symptoms Alcohol, cigarettes, caffeine and certain medications increase susceptibility to cold. 	
5. HRCW Work area set-up	Unauthorised access to the work area	3H	<ul style="list-style-type: none"> Erect secure impassable barricades with adequate signage: <ul style="list-style-type: none"> Erected before the commencement of work Kept in position at all times until the work is completed and it is safe to remove Regularly inspected and maintained Use lockout procedures to prevent unauthorised use of plant Provide information to workers and other persons on-site advising them of the exclusion zones Delivery of goods, materials and equipment should only be made through the public areas during off-peak periods Provide supervision so that no unauthorised person enters an exclusion zone. 	Supervisors to check all controls in place and followed Workers to follow controls and make supervisor aware of any issues
	Injury to public	3H	<ul style="list-style-type: none"> Pedestrian Access - If closing/modifying a vehicle lane, parking area or footpath, the following factors are considered in developing alternative pedestrian access: <ul style="list-style-type: none"> Travel speed of road traffic Traffic volumes Percentage of heavy vehicles The alignment of the road If an alternative route is immediately adjacent to the road, concrete or water-filled barriers to protect pedestrians from road traffic should be used Pedestrians directed by defined walking paths clearly marked with using appropriate measures (e.g. barriers, fencing hazard netting) 	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			<ul style="list-style-type: none"> Signage must be appropriate and easily seen Temporary pathways must have no trip hazards, and the ground/pavement should be free of holes, dips, mud or debris Mobility impaired, e.g. wheelchair access, pram ramps, handrails considered in respect to widths, surface and grade Barrier fencing or Hoarding erected to prevent the public from entering hazardous areas of the worksite Access monitored through a single-entry point. 	
6. Environment	Environmental impact	3H	<ul style="list-style-type: none"> Noise & vibration - Be aware of maximum noise levels at the site The plant is maintained to minimise noise No noise produced outside council approved hours of operation Engineering controls fitted to equipment (e.g. silencers) Air quality - Water sprays or dust suppressants methods are in place Where there is powered mobile plant movement generating dust use water spraying methods and cover loads on trucks while in transit Waste - Place all wastes and rubbish in bins or other appropriate containers Separate recycle waste from general waste Do not mix waste with spoil Fuels, oils & chemicals - Minimum amounts of hazardous substances kept on site Labelled and securely stored Refuelling of vehicles/equipment undertaken at least 6m from drains and waterways Follow SDS directions for disposal of chemicals in approved waste containers A spill kit is available at all times & spills cleaned up immediately follow SDS directions Waterways & soils - Do not wash out plant, equipment or containers where residue can enter waterways or drains Vehicle movement - Follow the TMP, only travel on established tracks and roads Use designated entry and exit points Terrestrial fauna - No domestic animals are to be taken on-site Ensure all food scraps placed in lidded bins. 	<p>Supervisors to check all controls in place and followed</p> <p>Workers to follow controls and make supervisor aware of any issues</p>
7. House keeping	<ul style="list-style-type: none"> Slips Trips Falls 	3H	<ul style="list-style-type: none"> Maintain housekeeping throughout the shift & clean-up Ensure sufficient lighting to detect changes in level (using temporary lighting as required) Do not jump from elevated edges >180mm, step carefully and use prepared access areas The work area is clean and uncluttered as possible Do not place equipment where it could become a trip hazard 	Supervisor and workers to ensure control measures

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			<ul style="list-style-type: none"> Check for stored items, corners or other obstructions that could cause tripping Ensure there is room to manoeuvre and no obstacles in the way Check the end destination is prepared correctly for placement of the materials/equipment Clean spills immediately Footwear is suitable. Snug-fitting shoes/boots with flat, non-slip soles, no loose soles, long laces, oily soles, or caked with mud or other contaminants. 	followed
8. Manual tasks	Musculoskeletal (MSD) injuries	3H	<ul style="list-style-type: none"> Materials/equipment placed as close to the work area as possible Weight of an object should be known; avoid lifting loads more than 1/4 of your body weight Do not use extreme force to move items Hold lifted items close to the body whenever possible: <ul style="list-style-type: none"> Keeping knees bent and back straight and lift, unload keeping knees bent Use team lifts and mechanical means for heavy items Schedule regular breaks and practice job rotation Avoid overreaching, long periods of repetitive movements, awkward and sustained positions, twisting and side-bending. 	Supervisor and workers to ensure control measures followed
9. HRCW Materials delivery	Truck rollover	4A	<ul style="list-style-type: none"> Ensure the ground is stable, the soil is compacted sufficiently Ensure truck does not operate or travel near the edge of a drop-off Do not allow truck turn on side slopes ⚠ Do not attempt to unload on soft, uneven ground, downgrades or cross falls (higher centre of gravity). 	Supervisors to check all controls in place and followed Workers to follow controls and make supervisor aware of any issues
	<ul style="list-style-type: none"> Struck by mobile plant Crush injuries Amputation Entanglement Fatality 	4A	<ul style="list-style-type: none"> Follow traffic management plan requirements Alertness at all times. Listen for reversing alarms/beepers and calls from Plant Operators Obey all safety/warning signs, spotters, traffic barriers Work positions should be in clear sight of plant operators Reversing trucks. Ensure: <ul style="list-style-type: none"> Never stand between a truck and another structure when the vehicle is reversing Always maintain visual contact with the driver's mirrors ⚠ Remember: if you can't see the driver – he can't see you! Use a spotter where practicable to direct trucks on site When unloading ensure: <ul style="list-style-type: none"> Within Safe working load (SWL) if using hoisting machinery Suitable ground and sufficient room for operation 	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			<ul style="list-style-type: none"> Unnecessary personnel cleared from the unloading zone area <ul style="list-style-type: none"> Persons do not stand on or beside delivery vehicle during unloading Loads kept stable and will not free-fall Use lifting equipment for larger packs Provide secure stockpile area for materials and equipment Unload and stack following the manufacturers' recommendations Wear High vis clothing 	
	<ul style="list-style-type: none"> Struck by vehicle Injury to public 	4A	<ul style="list-style-type: none"> Where delivering roadside or other public places, an alternative footpath provided, and protection fitted around the work area to prevent splash occurring to passers-by Where necessary, traffic control put in place to provide safe road use If setting up roadside – comply with local laws and permits Erect any barriers & signage necessary to keep others safe and aware Use a spotter to assist drivers reversing in the dark, low clearance or high traffic areas. 	
	Contact with electricity	4A	<ul style="list-style-type: none"> Work not conducted near to electrical power lines Identify the maximum range of equipment and how close equipment or load can come to the asset (known as design envelope) The following dimensions are taken from the closest point of an extended component of the machine, e.g. extended long reach boom. In general, for up to and including 132,000 volts: <ul style="list-style-type: none"> 3m above, either side and below power lines is No Go Zone. Between 3-6.4m of power lines, a Spotter is required. Further than 6.4m of power lines is an open area No work to be conducted within a 10m radius of SWER transformer. ⚠ No work conducted within 'Minimum Clearance Zones' without written permission from the utility owner 	
10. HRCW Working with powered & non-powered tools	<ul style="list-style-type: none"> Electrocution Injury Fire Asphyxiation 	4A	<ul style="list-style-type: none"> Use tools only for the purpose specified by the manufacturer Wear PPE as recommended by the manufacturer Pre-inspect and operate tools following the manufacturer's instructions. If damaged or unsuitable for the task do not use. Take out of service immediately and apply LOTO procedures The tool operations manual is available, read and understood Fire protection equipment accessible Use mechanical ventilation as required <u>Electrical:</u> <ul style="list-style-type: none"> All electric power tools and leads are Tested, Tagged and are current 	Supervisors to check all controls in place and followed Workers to follow controls and make


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			<ul style="list-style-type: none"> Use electrical sockets protected by RCD (safety-switches) or use portable RCD devices Switchboards have appropriately rated circuit breaker Always ensure that the tool is switched off and power isolated before a pre-start check, adjusting, changing set-ups or repairing Do not overload power outlets Diesel/petrol-powered tools - Do not run a diesel/petrol-powered tools inside a building (e.g. shed), or where ventilation is limited. 	supervisor aware of any issues
11. Working with cement & mortar	<ul style="list-style-type: none"> Cement burns Dermatitis Skin sensitivities 	3H	<ul style="list-style-type: none"> Follow directions of use for <i>(specify the substances/chemicals)</i> Consult SDS for the product Use PPE as per the SDS - <i>specify</i> Avoid bare skin contact with wet cement wherever possible Remove jewellery such as watches and rings as wet cement can be trapped under them Clothing that becomes saturated from contact with wet cement should be rinsed out as soon as possible with clear water to prevent continued contact with skin Wash off immediately should contact occur. Note: Barrier creams are generally ineffective as a form of protection against contact sensitivities with wet cement. Wear waterproof/alkali resistant gloves, gumboots or other waterproof boots are worn at all times to keep feet dry Where practicable, wear long pants and long sleeve shirt to avoid contact with wet cement <ul style="list-style-type: none"> DO NOT eat or drink when handling chemicals DO NOT eat or drink without washing hands thoroughly first DO NOT take food into the work area where chemicals are being used or stored DO NOT wear contaminated PPE in areas outside the work zone, such as eating areas. 	Supervisors to check all controls in place and followed Workers to follow controls and make supervisor aware of any issues
	Inhalation of silica dust	3H	<ul style="list-style-type: none"> Wear respiratory protection, e.g. P1/P2 when mixing (see SDS for flammable vapour / concrete dust). 	
	Struck by moving parts	3H	<ul style="list-style-type: none"> Cement mixers used as per manufacturer operational manual <ul style="list-style-type: none"> The ground surface where the mixer located – is level firm, free from obstructions Load the drum while it is stationary Stand clear of the rotating drum when in operation All guards are in place and secure. ⚠ Do not run a diesel/petrol-powered machine inside a building, or where ventilation is limited. 	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
12. HRCW Excavating & backfilling	Contact with underground services	4A	<ul style="list-style-type: none"> Ensure excavations do not damage utilities (gas, telecommunication, electrical, water or sewerage systems) Identify underground assets (location and type) using relevant plans, or Contact Dial before you Dig and Local Authorities to obtain utility maps of intended work areas Hand excavate using a shovel to locate services and mark out before any excavation works Mark all exposed services with flags or devices that can be readily seen Ensure all marked services continue to be visible for the duration of the work. 	Supervisors to check all controls in place and followed Workers to follow controls and make supervisor aware of any issues
	Crush injuries Entanglement	4A	<ul style="list-style-type: none"> Ensure additional SWMS for machine operation in place and controls followed Groundworkers. Ensure: <ul style="list-style-type: none"> High visibility clothing worn at all times Do not stand behind reversing vehicles Keep a safe distance from mobile plant during operation Alertness at all times. Listen for: <ul style="list-style-type: none"> Reversing alarms/beepers Calls from Plant Operators Work positions should be in clear sight of plant operators Prevent unauthorised persons or mobile plant from accessing the safety zone area Operator to maintain awareness of persons, mobile plant entering the operational zone and cease work immediately if the incursion is uncontrolled ⚠ Entrapment in any part of the machine could cause serious injury or death. Avoid close physical contact with the machine while in operation is avoided at all times. <ul style="list-style-type: none"> NEVER Assist the hand by hand when in operation NEVER Use tools (i.e. shovels) to help move dirt from around the excavation during operation NEVER Walk under a raised load NEVER Attempt to remove or clear spoil from the excavation with the machine in operation NEVER Push another person or engage in horseplay around operating machinery High visibility clothing, gloves and hard hats worn at all times. 	
	Musculoskeletal Disorder (MSD) injuries	3H	<ul style="list-style-type: none"> If digging with hand tools. Ensure: <ul style="list-style-type: none"> Follow correct lifting and turning technique when using shovels Crowbars and hand augers: <ul style="list-style-type: none"> Start hole at centre with the crowbar and work to the outside of hole breaking in towards the centre Continue until correct depth reached clearing spoil as you progress Use long-handled shovels when cleaning out the bottom of the excavation 	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			<ul style="list-style-type: none"> Face the direction the spoil is t shovelled to avoid excessive twisting. 	
	Hearing loss	3H	<ul style="list-style-type: none"> Hearing protection worn by workers throughout exposure to noise. 	
	Inhalation of silica dust	3H	<ul style="list-style-type: none"> Wear eye and respiratory protection with at least P1 filtration – fit-tested to a worker if half Wear disposable or washable protective clothing It is best to use a fine mist. The use of a jet of water can cause dust to become airborne. 	
13. HRCW Lifting & placing pipes, tanks & stormwater drains into the excavation	Unlicensed operators	4A	<ul style="list-style-type: none"> Ensure all dogmen, riggers, and lifting machine operators are licensed and competent to undertake the task and have separate site-specific SWMS Follow site-specific contractor SWMS for lifting work Remove all non-essential personnel For remaining personnel follow controls for working around powered mobile plant. 	Supervisors to check all controls in place and followed
	Loss of communication	3H	<ul style="list-style-type: none"> Ensure an effective system of communication between the machine operator and any pedestrian worker/s is established before work commences. E.g. dogman: <ul style="list-style-type: none"> Check radio communication, including dedicated radio frequency, equipment checks Mobile phone as a backup system (powered and turned on) Develop and implement clear communication and procedures for loss of signal Use hand signalling where appropriate. 	Workers to follow controls and make supervisor aware of any issues
	Hit by moving or falling objects object	4A	<ul style="list-style-type: none"> Hard hats, gloves & safety boots are worn Inspect each load before lifting. Ensure load is stable for travel Cease operation if persons enter the exclusion zone Never pass the load over a person or allow anyone to stand, work or walk under a raised load Do not allow people to be near stacked loads being loaded or unloaded Always travel with load in the lowest position available Do not drag or push load – always lift vertically. 	
	Hearing loss	3H	<ul style="list-style-type: none"> Wear hearing protection throughout exposure to noise. 	
14. HRCW Fixing pipework, tanks	Buried by collapsing ground	4A	<p>⚠ If working in an excavation or area that acts like a trench > 1.5m deep refer to the applicable site-specific SWMS for working in trenches.</p>	Supervisors to check all controls in place and followed
	Hazardous atmosphere Asphyxiation	4A	<ul style="list-style-type: none"> Ensure the atmosphere in a trench is monitored for contaminants as required. E.g.: <ul style="list-style-type: none"> Carbon monoxide can build up in trench from the operation of the plant nearby. Other gases may displace oxygen from sewer 	

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			<ul style="list-style-type: none"> ○ Solvents from PVC piping ○ Gases from surrounding land and water • Do not use any plant that uses a combustion engine (for example air compressors, electrical generators) in an excavation if workers are present • Ensure adequate ventilation (either natural or mechanical) before any person enters the excavation. <p>⚠ The build-up of exhaust gases in the excavation, particularly carbon monoxide, can lead to asphyxiation</p>	Workers to follow controls and make supervisor aware of any issues
	Falls	3H	<ul style="list-style-type: none"> • Install effective barriers or barricades to prevent falls into an excavation • Footwear is suitable. Snug-fitting shoes/boots with flat, non-slip soles, no loose soles, long laces, oily soles, or caked with mud or other contaminants. 	
	Cuts, abrasions	3H	<ul style="list-style-type: none"> • Wear gloves when handling sharp tools, rocks and other materials • Cutting PVC pipe to length. Ensure: <ul style="list-style-type: none"> ○ Use hand saws where possible ○ Sound surface and stable footing ○ Secure the workpiece before cutting • When using high speed power cutting tools: Ensure: <ul style="list-style-type: none"> ○ The switch is in the "off" position before plugging it in ○ When starting saw it does not touch material before it is at full RPM ○ Guide gently and steadily using both hands on the saw. Do not force movement or over-reach ○ Use caution with large off-cuts as these can affect the stability of the cut 	
	<ul style="list-style-type: none"> • Biohazards • Disease 	3H	<ul style="list-style-type: none"> • Tapping into a sewer system. Ensure: <ul style="list-style-type: none"> ○ Waterproof gloves are worn ○ Safety glasses with splash protection or face shield is worn ○ Clean water, soap, towel, nail brushes sterile wipes and dressings are available. 	
	<ul style="list-style-type: none"> • Hazardous fumes • Skin sensitivities 	3H	<ul style="list-style-type: none"> • Follow directions of use for <i>(specify the substances/chemicals)</i> • Consult SDS for the product • Use PPE as per the SDS - <i>specify</i> • Use with adequate ventilation • Chemical resistant gloves for prolonged exposure ✱ DO NOT eat or drink when handling chemicals 	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			<ul style="list-style-type: none"> ✗ <i>DO NOT eat or drink without washing hands thoroughly first</i> ✗ <i>DO NOT take food into the work area where chemicals are being used or stored</i> ✗ <i>DO NOT wear contaminated PPE in areas outside the work zone, such as eating areas</i> • Priming fluid and Solvent cement. Ensure: <ul style="list-style-type: none"> ○ Only glues recommended by the pipe manufacturer ○ Use only in a well-ventilated area ○ FLAMMABLE LIQUID- Do not use near sources of ignition • Working with cement, e.g. rapid set concrete or mortar: <ul style="list-style-type: none"> ○ Remove jewellery, i.e. watches and rings as wet cement can be trapped under them ○ Ensure gumboots or other waterproof boots are worn at all times to keep feet dry ○ Wear waterproof/alkali resistant gloves when directly handling wet cement ○ Where practicable, wear long pants & long sleeve shirt ○ Clothing that becomes saturated from contact with wet cement should be rinsed out as soon as possible with clear water to prevent continued contact with skin ○ Avoid bare skin contact with wet cement wherever possible: <ul style="list-style-type: none"> ▪ Wash off immediately & frequently with pH-neutral soap & clean water ▪ Note: <i>Barrier creams are generally ineffective as a form of protection against contact sensitivities with wet cement.</i> 	
	<ul style="list-style-type: none"> • Laser use • Eye trauma 	3H	<ul style="list-style-type: none"> • Do not look directly at the laser beam • Using laser levels - ensure all persons operating laser have been trained and are competent. 	
15. Polyethylene Pipe Welding (PPW)	Fire	4A	<ul style="list-style-type: none"> • Complete Hot Work Permit where required • Follow safety precautions on Hot Work Permit • Note: Do not conduct work not listed on the Hot Work Permit. If other Hot Works are required, obtain separate Hot Work Permit for that task 	Supervisors to check all controls in place and followed Workers to follow controls and make supervisor aware of any issues
	Poor weather	3H	<ul style="list-style-type: none"> • Select a suitable operation area • Install protection tent or other equipment to protect the welding zone against the elements 	
	Burns	3H	<ul style="list-style-type: none"> • Heater: <ul style="list-style-type: none"> ○ Always use gloves when handling a hot plate ○ Use the extension cord that has a high melting point outer sheath ○ Never use a standard appliance cord with low melting point PVC sheath ○ Stand the hot plate so that the temperature controller handle is not vertically above the hot plate 	

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON
			<ul style="list-style-type: none"> Do not touch pipe ends <ul style="list-style-type: none"> Note: Keep body parts clear of the heating plate Use only a clean non-synthetic cloth such as a cotton cloth to clean the heater plates Adhere to changeover times 	
	<ul style="list-style-type: none"> Facer use Lacerations 	3H	<ul style="list-style-type: none"> Use caution - The facing machine is powerful, and the cutting blades sharp Do not wear loose clothing or jewellery Place securely in the pipe cutting position Ensure correct pipe alignment  <i>Never attempt to remove shavings while facer is running. Disconnect power from the facer, and remove the facer blades before attempting any maintenance or adjustment</i> Keep body parts clear of hydraulic jaws – check alignment with a straight edge (level) – not fingers Attach heating plate and melt pipe ends as per manufacturers instruction/agreed methodology for times/ and required bead height. 	
16. HRCW Pressure testing pipework	Struck by objects under pressure	3H	<ul style="list-style-type: none"> Before installation, all lengths of pipe and fittings thoroughly inspected for cuts, fractures, buckling or any other flaws created during manufacture, shipping or unloading of the pipes or other components Joining to existing systems: <ul style="list-style-type: none"> Ensure any adjacent stop valves are operational/closed Relieve pressure in the system before cutting/accessing the existing system Testing a new system: <ul style="list-style-type: none"> Only a competent person to perform the pressure testing task Ensure connections are adequately secured Adequate support where a change in direction or reduction occurs The test pressure applied should not exceed: <ul style="list-style-type: none"> Designed maximum operating pressures The designed pressure rating of the pipe The designed pressure rating of any system component, whichever is lowest. 	<p>Supervisors to check all controls in place and followed</p> <p>Workers to follow controls and make supervisor aware of any issues</p>
17. HRCW On completion	Unauthorised access Contact with electricity	3H 3H	<ul style="list-style-type: none"> If acceptable, remove or add barricades. Disconnect power tool/extension leads from power point before winding, to avoid shock if the lead is damaged 	<p>Supervisor to confirm all workers have signed out</p>

JOB TASK	HAZARDS	RISK	CONTROL MEASURES	RESPONSIBLE PERSON	
			<ul style="list-style-type: none">Inspect leads and power equipment for damage.	Workers to comply with controls	
	Inhalation of silica	3H	<ul style="list-style-type: none">Use, maintain and store any respiratory protective equipment provided following manufacturers instructions.		
	Security breach	3H	<ul style="list-style-type: none">All personnel sign-out on Site Register.		
	Vehicle/people impact	4A	<ul style="list-style-type: none">Stay to designated access and egress routesMaintain awareness of surroundings at all times.		
18. Emergency response	<ul style="list-style-type: none">InjuryFatalityEnvironmental damage	4A	<ul style="list-style-type: none">For police, fire or ambulance call '000.'Follow site emergency and evacuation proceduresA communication system is available, e.g. a mobile phone or radioCheck for dangers to self before helping othersMaintain control of the area and stabilise the situationApply first aid to the injured workerComplete an incident report.	<ul style="list-style-type: none">Refer to your SWMS implementing instructions for further specific emergency responses.	Supervisors and workers ensure controls followed
OVERALL RISK RATING AFTER CONTROLS			<div><div><input type="checkbox"/> 1 - Low</div><div><input checked="" type="checkbox"/> 2 - MODERATE</div><div><input type="checkbox"/> 3 - High</div><div><input type="checkbox"/> 4 - ACUTE</div></div>		

PERMITS	<input type="checkbox"/> Not applicable <input type="checkbox"/> Hot Work <input type="checkbox"/> Confined Space <input type="checkbox"/> Local council <input type="checkbox"/> ? <input type="checkbox"/> ?		
SITE MANAGEMENT PLAN	Is the work associated with a Construction Project? <input type="checkbox"/> Yes <input type="checkbox"/> No		If yes – This SWMS must align with requirements of the Site Management Plan in place for the Construction Project.
PLANT & EQUIPMENT	HAZARDOUS SUBSTANCES	SUPERVISORY ARRANGEMENTS	
<input type="checkbox"/> Hand tools - Meet AS/NZS Regular visual inspection			
<input type="checkbox"/> Ladders - Meet AS/NZS Inspected and tagged out if damaged			
<input type="checkbox"/> Mobile plant- <i>specify</i> Inspected and tagged out if damaged			
<input type="checkbox"/> ?			

Staff Information will be supplied upon
request via email from a
WHS Officer or supervisor.