

ORGANISATION DETAILS			
Principal contractor:	Brendan McKenna Earthmoving Pty Ltd	Contact number:	0417 710 806
Project manager or supervisor:		Contact number:	
Person completing the SWMS:	Brendan McKenna	Contact number:	0417 710 806
Position:	Site Manager	Reviewed by:	Ron Broadhurst
Date prepared:	18/05/26	Review date:	As required
PROJECT DETAILS			
Project	Vernon Conservation Park – Fireline Construction Works		
Project Reference	P263811		
What is the scope of the work?	Excavation, trenching and associated earthworks activities for drainage works, creek crossing works, fireline construction and associated civil works within Vernon Conservation Park.		
Who else was consulted/involved in preparing this SWMS?	This SWMS has been developed in consultation with relevant workers, supervisors and subject matter experts. Control measures will be monitored and reviewed where incidents occur, hazards are identified, or site conditions and work activities change.		
What high risk work activities are covered by this SWMS?	Excavation and earthworks activities including trenching, drainage construction, creek crossing works and associated mobile plant operations.		
References: Legislation, Australian Standards, Codes of Practice, MSDS and SOPs.	WHS Act 2011 (Qld) / WHS Regulation 2011 (Qld) / Excavation Work Code of Practice / Environmental Protection Act 1994 (Qld) / Biosecurity Act 2014 (Qld) / Dial Before You Dig (DBYD) requirements / QPWS Road Maintenance Manual / Project Scope of Works		
Plant involved in the scope of work:			
What high risk licence classes will be required to do the work?			

The following notes apply to the risk controls where relevant:

Personal Protective Equipment (PPE): The following PPE will need to be worn by workers at times on this project as directed:

☐ High Vis Garments ☐ Hearing protection ☐ Safety Glasses ☐ Hard Hats ☐ Gloves ☐ Safety Footwear ☐ Other

SAFETY MESSAGES

Excavation:

Do not assume you know where utility cables and pipes MIGHT be; you must contact underground service providers for prescribed information.
(DBYD – *Dial Before You Dig*).

Use all available methods to locate the services:

- Maps
- Cable avoidance tool (CAT)
- Pot holing with hand tools, shovels and trowels. (Insulated if working near electrical services.)
- Use of a Vac truck and/or service locator where required to positively identify underground services.

Plant must not be used until underground service information has been obtained and relevant services identified.

Support and shield exposed services where required (seek advice from the service authority).

Mark all exposed / identified services with flags, devices or mark with paint that can be readily seen; ensure all marked services continue to be visible for the duration of the work

Disturbance outside approved work areas is prohibited and environmental controls must be maintained during excavation activities.

When excavating, Employees (excepting the operator) MUST NOT be in physical contact with the excavating machine or equipment, in case it comes into contact with live electrical cables.

No one is to be in the excavation whilst any plant is in operation within the excavation.

Trenching:

Assess the stability of the site, and document the findings.

Ensure that the trench sides aren't loaded.

Stockpiles and spoil material shall not impact waterways, drainage paths, habitat areas or surrounding native vegetation.

Keep spoil piles to a minimum height and within approved work areas.

Where trenches pose a risk to the public, barricades and exclusion zones shall be implemented and only authorised personnel involved with the works may enter the area.

If there is an exposed gas main or fuel line, there must be continuous gas detection.

A Risk Assessment (*Record of Excavation Inspection Form*) must be completed whenever one of the following events occur:

- Before and during commencement of excavation. - Excavation reaches a depth where there is a possibility of an injury
- Reaching a depth of 1 meter. - Reaching a depth of 1.5 meters.
- Change of expected excavation dimensions. - Rain.
- Soil change. - After every break.

At trench depths greater than 1.5 m, or where there is a risk of collapse, if a worker intends entering a trench, then at least one of the following measures *MUST* be implemented:

- Shoring or shielding (approved by competent person).
- Benching – not higher than it is wide and no vertical face exceeding 1.0 m.
- Battering – angle not exceeding 45° and bottom vertical face not exceeding 1 m.

Approval in writing by a geo-technical engineer must be obtained stating that the trench is safe to work in for trenches > 3 m deep. The approval must be kept on site at all times.

Use a ladder to enter and exit the trench. (Ladders must not be more than 9 m apart and at least 1 m of the ladder must extend out of the trench.)

Plant and equipment operating near excavations shall be assessed and controlled to prevent collapse, hazardous atmospheres or unsafe interaction with personnel.

Emergency procedures shall be communicated during site induction and reinforced through toolbox talks before work commences.

In the event of a collapse:

Immediately contact Emergency Services by telephone (000) and your supervisor

Try and locate the victim looking for signs such as tools or a shovel, **but do not put yourself at risk.**

Clear all unnecessary employees and others on the worksite away from the area.

If possible, batter the sides of the trench in the collapsed area or insert shoring where possible to protect victim(s) and rescuers.

Do not attempt rescue activities that place personnel at additional risk. Emergency Services and trained responders shall be contacted immediately.

Do not allow anyone on top of the collapsed soil (this will increase the pressure on a victim).

If the excavation is over 1.5 m deep, rescuers must wear safety harnesses and life lines that extend to the surface.

When rescuers are near a victim, hands should be used to remove the soil if possible. If shovels have to be used, these must be used with extreme caution.

When a victim is located, clear soil from head and chest, and check for breathing and a pulse. If no signs of life are present, start Cardio-Pulmonary Resuscitation (CPR).

If a victim's chin is pressed onto their chest, tilt the head back as soon as possible so as to open up the airway to the lungs. This can be done while other rescuers are freeing the soil from the upper part of their body and before starting CPR.

Check for injuries and apply first aid where necessary.

DO NOT attempt to remove a victim by tying a rope around him/her and pulling on the rope.

Where possible, once a victim has been freed from the soil, leave them in the trench until the ambulance or qualified medical person arrives. This minimises unnecessary movement of the victim.

Reference should be made to applicable project SWMS including Mobile Plant Operations, Traffic Management, Confined Space Entry and other relevant SWMS associated with Vernon project activities.

Identify each task in order	Specify the hazards/risks you have identified	What are the risks to health and safety?	Who is responsible for implementing and monitoring controls?
Planning of site, identification of underground services	Hazard: not identifying some underground services Risk: Disconnecting a service, electrocution	Prescribed information (DBYD) must be obtained prior to any excavation work commencing. Don't rely on DBYD! Always conduct a comprehensive site inspection to identify services that will be affected by proposed works and location of proposed works and any nearby services. Consider all possible services such as phone and optical cables, water and sewerage, gas, electricity, stormwater drainage, irrigation and indirect services, survey marks and street lighting electric cables. Contact authorities for relevant information about the service (location, type, depth and restrictions to be followed) including maps and information from client/owner. All relevant prescribed information to be in writing and keep on site for the duration of the task. The relevant person must consider the information supplied, follow any reasonable restrictions and implement the necessary control measures. The information shall be kept on site at all times.	Site Manager or Supervisor
Arrival at worksite	Hazard: Vehicle Traffic Manual handling Risk: Struck by traffic Hazard: Obstructions Risk: Slips, trips, falls, falling from heights	Assess site risks: The following activities must be completed before work starts each day and at other times as appropriate: Induction to site. • Pre-start Site Risk Assessment. • 'Record of Excavation Inspection' form. • Check the condition of any barricading. • Ensure that all plant and equipment has been checked. Determine the exclusion zones around plant and areas to be potholed. Make sure workers on the worksite are informed and acknowledge understanding of these exclusion zones. Conduct a pre-start toolbox talk to ensure that all workers have been made fully aware of the scope of work to be performed.	Site Manager or Supervisor

		Essential PPE for the task must be used: • All authorised staff to wear safety helmets inside assessed machine exclusion zone at all times. • Safety helmets must be worn in areas where there is a risk of a person suffering a head injury from falling, flying or moving objects. • Steel cap safety boots. Protection for employees and others on the worksite and public from traffic and public interface hazards must be in accordance with the applicable Traffic Management SWMS and approved Traffic Guidance Scheme where required. Protection for employees and others on the worksite and public from falls must be by: • Barricading the job site when a risk assessment identifies the need. (Barricade must be min 900mm in height.)	
Locating the underground services	Hazard: Gas lines, electricity Risk: Contact with services, electrocution, explosion	Carry out a detailed site inspection and review the site against prescribed information and plans. Scan the site with a cable avoidance tool (CAT), if available. Potholing, using hand tools must be conducted (insulated equipment must be used if working near electrical services). Only use plant once you have identified where the relevant services are located (e.g. electricity, gas, telephone). All onsite workers must be advised of the location of the services, in particular the operator(s) of any plant working on the worksite.	Site Manager or Supervisor
Excavating around the located services	Hazard: Gas lines, electricity Risk: Contact with services, electrocution, explosion, struck by plant	Work parallel to any service(s) that is/are identified, use caution at all times. A trained observer must be onsite at all times to assist the plant operator(s) to maintain sight of the service(s). Support and protect exposed services where required (seek advice from the relevant service authority).	Site Manager or Supervisor

	Hazard: Gas lines, electricity Risk: Contact with services, electrocution, explosion, struck by plant	Mark all exposed services with flags or devices that can be readily seen. Excavation activities shall remain within approved work boundaries and environmental controls shall be maintained to prevent impacts to waterways, habitat areas and surrounding vegetation. NO EMPLOYEES (apart from operator) are to be in physical contact with any excavating machine or plant at any time whilst it is operating. (Do not touch plant!)	
Trenching	Hazard: loose soil, excavation; Risk: Trench collapse, falling objects, Hazard: Manual handling Risk: Personal injury Hazard: Solar radiation Risk: Heat stress Hazard: Environmental disturbance / fauna interaction Risk: Environmental harm, habitat disturbance, injury from wildlife interaction	Ensure trench sides aren't loaded. Keep spoil at least 1 m from the excavation and maintain spoil piles at a safe height within approved work areas only. Continuous gas monitoring shall be required if working in the vicinity of known gas lines or near a high traffic flow area. A Risk Assessment must be completed on the 'Record of Excavation Inspection' form, by a competent person when the trench or excavation reaches a depth of 1m and other occasions outlined on the form. Preventative actions must be taken if the risk assessment indicates there is a risk of collapse: eg. • Shoring or shielding (approved by competent person). • Benching – not higher than it is wide and no vertical face exceeding 1.0 metres. • Battering – angle not exceeding 45° and bottom vertical face not exceeding 1.0 metres. Approval in writing by a geo-technical engineer must be obtained stating that the trench is safe to work in for trenches > 3 m deep. The approval must be kept on site at all times. Use an industrial strength rated ladder to enter and exit the trench. Plant and equipment operating near excavations shall be assessed and controlled to prevent collapse, hazardous atmospheres or unsafe interaction with personnel. All tools and equipment shall be placed so that they cannot fall into the trench or excavation. Minimise the length of open trench by back-filling the trench or excavation as soon as possible. Proximity of plant (including vehicles/trucks) to the top of the trench or excavation shall be determined through a risk assessment. The risk assessment should take into account the weight of the plant or vehicle involved as well as the type of soil and weather conditions.	Site Manager or Supervisor

		Sediment and erosion controls shall be installed and maintained prior to and during excavation activities. Stockpiles and spoil material shall remain within approved work areas and not impact waterways, drainage paths, habitat areas or surrounding vegetation. Machinery hygiene and biosecurity controls shall be implemented prior to entering and leaving the worksite. Works shall cease where heavy rainfall, unstable ground conditions or environmental conditions create an unacceptable risk. If suspected cultural heritage items, human remains, protected fauna, habitat areas or contaminated material are identified, work must cease immediately and the Site Supervisor notified. Work only from inside shored areas or from on top of stable backfill. All workers must constantly monitor the stability of the trench or excavation walls. If a change of shift is required, the site supervisor will hold a handover meeting with incoming staff and supervisor to discuss the workplace and indicate any known hazards.	
Public and Pedestrian safety	Public: Falling into excavation	Barrier fencing OR Hoarding MUST be erected to prevent the public from entering hazardous areas of the work site. The height of the barrier fencing shall not be less than 900 mm, and shall not be more than 100 mm from ground level. Person in control of the job to control/monitor who enters the site and for what purpose through a single-entry point. Temporary rail trail access restrictions, signage and exclusion controls shall be maintained in accordance with approved project requirements and Traffic Guidance Schemes where applicable. Staff or traffic controllers to guide public alongside tracks or walkways where/when practicable.	Site Manager or Supervisor

Backfilling, site restoration	Manual handling, obstructions, public safety, falling	Ensure a risk assessment is completed after the site is restored to a high standard and is safe and clean, posing no risk to the public.	Site Manager or Supervisor
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This SWMS has been developed in consultation and has been read, understood and signed by all workers undertaking the scope of works:

Print Names:	Signatures:	Dates: