

RISK ASSESSMENT

Site:	Single	Job Description:	Destination Public Artwork & Welcome Visitor Centre		
Location:	328 Lune River, Ida Bay, 7109	Project Number:	21-XXXX	RA Number:	3854
Date prepared:	XX/XX/21	Highest level of hierarchical control:		<i>Elimination</i>	
Relevant Legal and other requirements:	Work Health & Safety Act & Regs 2012 Construction Work How to Manage Work Health & Safety Risks COP Excavation Work COP Managing Risks of Hazardous Chemicals in the Workplace COP Management Risks of Plant in the Workplace COP Managing Noise and Preventing Hearing Loss at Work COP First Aid COP	Preparation Team:		Signatures:	

STEP ONE	Identify the Hazards and insert detail alongside the Hazard
STEP TWO	Consider all Controls for each hazard and list accordingly. Consider the amount of risk reduction that a proposed control would achieve (a costly control of risk is not appropriate if the risk reduction is not significant)
STEP THREE	Identify the hierarchical level of each control (As per Schedule 1). Always aim for higher-level controls
STEP FOUR	Using the HSE Risk Assessment Matrix (Schedule 2), calculate the residual risk and insert this score in the 'Risk Score' column
STEP FIVE	Assign a responsible person/s for the implementation of controls for each Job Step/Task
STEP SIX	Record any relevant statutory/legal requirements and/or guidelines
STEP SEVEN	Record the highest hierarchical control achieved

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Unauthorised site access (public)</i>	<ul style="list-style-type: none"> ▪ Site is secured (adequately fenced to prevent danger to life) ▪ Site supervision ▪ Site warning signage to be placed at all access points ▪ Work will cease if unauthorised visitors come to the site and will not recommence until the site is made safe ▪ After hours security 	Administration	D3 Moderate	Project Manager & Engineer/Project Supervisor/Operators	Work Health & Safety Act & Regulations

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Covid 19 (Coronavirus)- outbreak on-site – site shutdown, lack of staff</i>	<ul style="list-style-type: none"> ▪ Contract Provider Management of Covid 19 Procedures ▪ The site to be “deep cleaned” by a competent cleaner before workers returning ▪ Separate crew available to backfill if necessary 	Administrative	D3 Moderate	Project Manager/ Project Engineer/ HSE team	Work Health & Safety Act & Regulations
<i>Weed Transfer to/from site</i>	<ul style="list-style-type: none"> ▪ Environmental Instruction – Site Washdown of Machines ▪ Plant Washdown Register 	Isolation	D3 Moderate	Project Supervisor/ Operators	Tasmanian Washdown Guidelines for Weed and Disease Control
<i>Habitat Protection</i>	<ul style="list-style-type: none"> ▪ Pre-clearance survey prior to onsite works of wombat burrows. ▪ Pre-clearance survey prior to onsite works for threatened flora. 	Isolation	D3 High	Project Manager & Project Supervisor	Native Conservation Act EPBC Act
<i>Destruction of animal habitat including Tasmanian Devil</i>	<ul style="list-style-type: none"> ▪ Environmental Instruction – Management of Flora and Fauna ▪ Superintendent to be notified immediately if a potential den for Tasmanian Devils is identified. 	Administrative	D3 Moderate	Project Supervisor/ Operators	Native Conservation Act EPBC Act

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Native vegetation (trees & shrubs) disturbance</i></p> <p><i>Habitat disturbance</i></p> <p><i>Swift Parrot loss or disturbance</i></p>	<ul style="list-style-type: none"> ▪ Mark the location of known habitat features as 'no go' areas ▪ Avoid unnecessary clearance of vegetation ▪ Clearly mark boundaries of work zone ▪ Establish ancillary areas for materials & machinery 'laydown' in already cleared zones (where possible) ▪ Minimise disturbance/works during the (Swift Parrot) breeding season where possible. 	Isolation	E3 Moderate	Project Manager & Project Supervisor/ Operators/ Operations Manager	<p>Work Health & Safety Act & Regulations</p> <p>Managing Risks in the Workplace</p> <p>Native Conservation Act</p> <p>EPBC Act</p>
<p><i>Sediment and erosion control measures</i></p> <p><i>Landscape Rehabilitation</i></p>	<ul style="list-style-type: none"> ▪ Silt fencing should be placed downslope of works (to prevent sediment drainage impacts) ▪ Salvage site specific soil 	Engineering	E3 Moderate	Engineer & Project Supervisor	DPIPWE – Soil and Water Management on Sites
<i>Dangerous goods on site</i>	<ul style="list-style-type: none"> ▪ Store goods (i.e. fuels, oils) in a designated compound in an appropriate area. ▪ Always store securely ▪ Store appropriately (as per best practice for each good) 	Isolation	E3 High	Project Manager & Engineer / Project Supervisor/ Operators/ Operations Manager	<p>Work Health & Safety Act & Regulations</p> <p>Managing Risks in the Workplace</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Maintenance and works in proximity to Heritage Buildings</i>	<ul style="list-style-type: none"> ▪ Fabric investigation prior to works commencing ▪ Fabric investigation during demolition works ▪ Photographic extant recorded during demolition (prior to removal) 	Administrative	E3 Low	Project Manager& Project Supervisor/ Operators/ Operations Manager	Historic Cultural Heritage Act 1995
<i>Disturbance of archaeological artefacts and/or relics during excavation and site clearing</i>	<ul style="list-style-type: none"> ▪ Photographic extant recorded during demolition (prior to removal) ▪ Enact the <i>Unanticipated Discovery Plan</i> procedures for the management of unanticipated discoveries of Aboriginal relics in Tasmania 	Administrative	E3 Moderate	Project Manager& Project Supervisor/ Operators/ Operations Manager	Aboriginal Heritage Act 1975 Coroners Act 1995

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Vehicle – vehicle and/or Vehicle – pedestrian interaction during mobilisation/demobilisation</i></p>	<ul style="list-style-type: none"> ▪ Flashing lights ▪ Reverse alarms ▪ Safety signage ▪ UHF communications ▪ Licensed, experienced float drivers ▪ New Worksite Assessment ▪ Safe Work Method Statements ▪ Take 5 Risk Assessment ▪ Site Supervision 	<p>Engineering</p>	<p>E3 Moderate</p>	<p>Project Supervisor/Operators</p>	<p>Code of Practice - Managing Risks of Plant in the Workplace</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Site compound set up: lifting operations- collisions with other equipment/ buildings/ personnel</i></p>	<ul style="list-style-type: none"> ▪ Site Supervision ▪ Licensed, competent plant operators ▪ Use slide tray trailer to eliminate the need for lifting operations. Otherwise: <ul style="list-style-type: none"> • Tagged and tested lifting equipment • Pre-start checklists • Authorised and competent person to control lifting operations ▪ SWMS ▪ Positive communications ▪ Never work under a suspended load ▪ Tag line to be used if required ▪ Spotter to observe lifts and to maintain safe approach distances for electrical infrastructure ▪ Manual Handling Form ▪ Hard hats must be worn whilst working around plant and equipment 	<p>Elimination</p>	<p>D4 High</p>	<p>Operations Manager/ Project Manager& Engineer / Project Supervisor/ Operators</p>	<p>Code of Practice – Hazardous Manual Tasks Code of Practice – Managing Risks of Plant in the Workplace</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Overhead assets: Conductors and other electrical infrastructure</i></p>	<ul style="list-style-type: none"> ▪ WI-11 Operating Safely Near Power Lines ▪ Licensed/competent operators ▪ Trained operators and spotters where required ▪ New Worksite Assessment ▪ Site Inspection ▪ SWMS ▪ Operators (incl. truck drivers) & spotter to complete pre-start job briefing ▪ Check conductor height against machine working height and safe approach distances ▪ Always maintain the safe approach distances ▪ Always work the machine as low as practicable, minimise working the machine directly under the conductors 	<p>Administration</p>	<p>D3 Moderate</p>	<p>Project Manager & Engineer / Operator / HSE Team</p>	<p>Work Health & Safety Act & Regulations Code of Practice – Managing Risks of Plant in the Workplace</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
	<ul style="list-style-type: none"> ▪ The machine operated to minimise the likelihood of vegetation thrown towards overhead lines and other power assets ▪ Risk assess trees /vegetation too close to conductors and hand fell if required ▪ Spotter and operator to maintain positive communications at all times 				

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Traffic Management:</i> <i>Vehicle to vehicle collision</i> <i>Vehicle to person collision</i> <i>Incorrect signage</i> <i>Long delays</i> <i>Unsealed sections</i> <i>Damaged or lost traffic management equipment</i> <i>Unauthorised access</i> <i>Inadequate training for personnel</i> <i>Incorrect TMP</i></p>	<ul style="list-style-type: none"> ▪ Site supervision ▪ License, competent plant operators ▪ SWMS ▪ Positive communications ▪ Approved traffic Management Plans ▪ Traffic Management risk Assessment ▪ Trained and competent Traffic Controllers ▪ Daily checks of Traffic Management Equipment Site Signage ▪ Mobile Traffic Lights & Variable Messaging Boards ▪ Traffic Movement Plan developed and implemented for the site compound ▪ Safety Bund installed to improve separation between HV/LV/Personnel ▪ Reduced traffic due to current travel restrictions. 	<p>Isolation</p>	<p>D3 Moderate</p>	<p>Project Manager & Engineer/Project Supervisor/Operators</p>	<p>Work Health & Safety Act & Regs Traffic Act Road Rules DSG Traffic Control for Works on Roads Project Specification AS1742</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Traffic Management:</i>	<ul style="list-style-type: none"> ▪ Stakeholder & Community Engagement Plan 	Engineering	D3 Moderate	Project Manager & Engineer/Project Supervisor	DSG Traffic Control for Works on Roads
<i>Wet, muddy or slippery ground conditions</i>	<ul style="list-style-type: none"> ▪ Licensed & competent operators ▪ Site supervision ▪ Daily toolbox meetings to increase awareness ▪ Track & site maintenance ▪ Take 5 	Administration	D2 Low	Project Manager & Engineer / Project Supervisor/ Operators	Work Health & Safety Act & Regulations

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Machine noise</i>	<ul style="list-style-type: none"> ▪ Pre-employment hearing test ▪ Sound minimising machine cabins ▪ Keep cabin doors shut ▪ Pre start checks ▪ Plant Operator Weekly Safety Checklist ▪ Hours of operation restricted to minimise nuisance to neighbours ▪ Hearing protection available ▪ Site supervision ▪ HSE audits ▪ Periodic hearing tests ▪ Public complaint protocols 	Engineering	E2 Low	Project Manager & Engineer / Project Supervisor / Operators / HSE	Work Health & Safety Act & Regulations Code of Practice – Managing Noise and Preventing Hearing Loss at Work

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Dust – decreased visibility and increased air borne particles</i></p> <p><i>Nuisance dust to adjacent properties</i></p> <p><i>Impact on site landscape elements</i></p>	<ul style="list-style-type: none"> ▪ Appropriate vehicle speed reductions (on-site) ▪ Dust proof machine cabins ▪ Site Supervision ▪ Daily minuted toolbox meetings ▪ Cabin windows and doors to be kept shut ▪ Stop work if dust prevents safe vision of the work site ▪ Public complaint protocols ▪ Water Cart/s available if required ▪ Water down working surfaces if required ▪ Minimize stockpiling of material 	<p>Isolation</p>	<p>C1 Low</p>	<p>Project Manager & Engineer / Project Supervisor/ Operators</p>	<p>Work Health & Safety Act & Regulations</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Plant operations & movement:</i> <i>Striking personnel or equipment damage</i> <i>Reduce (potential) operations impact on fauna</i></p>	<ul style="list-style-type: none"> ▪ Licensed & competent operators ▪ Machinery movement alarm & flashing light ▪ Seatbelts in all vehicles/plant ▪ SWMS ▪ Daily plant pre-start checklists ▪ Weekly Safety Checklist ▪ Keep plant doors shut ▪ Site supervision ▪ Daily Toolbox meetings ▪ Positive communications ▪ No person to be within the working radius of a machine unless they have the full attention of the operator ▪ Site warning signage informing others that machinery is in the area and the UHF channel ▪ Site speed limitations ▪ Beware of uneven ground ▪ PPE – high visibility clothing and hard hats 	<p>Administration</p>	<p>E3 Moderate</p>	<p>Project Supervisor/ Operators</p>	<p>Code of Practice – Managing Risks of Plant in the Workplace</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Uneven ground, unconsolidated fill, live edges – plant rollover</i></p>	<ul style="list-style-type: none"> ▪ Licensed & competent operators ▪ Seatbelts fitted and worn ▪ ROPS & FOPS ▪ SWMS ▪ Daily plant pre start checklists ▪ Weekly Safety Checklist ▪ Keep plant doors shut ▪ Site Supervision ▪ Daily Toolbox meetings ▪ Take 5 risk assessment ▪ Site speed limitations ▪ Beware of uneven ground ▪ Beware of unconsolidated fill ▪ Work at 45 degrees to the edges of steep banks and slopes if less than 1m from the edge ▪ Never roll closer than one-third of the drum width to an edge or slope on semi-compacted materials ▪ Work in a forward direction when rolling close to edges 	<p>Isolation</p>	<p>E3 Moderate</p>	<p>Project Supervisor/ Operators</p>	<p>Code of Practice – Managing Risks of Plant in the Workplace</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Excessively "crowned loads"</i>	<ul style="list-style-type: none"> ▪ Competent, licensed operators ▪ Excavator operator to ensure that loads are not excessive ▪ Excavator will not load over the cab of trucks at any time 	Administration	D2 Low	Project Supervisor/ Operators	Work Health & Safety Act & Regulations
<i>Inadequate communication between operators and/or Contractor base</i>	<ul style="list-style-type: none"> ▪ Competent, licensed operators ▪ Daily Toolbox meetings ▪ UHF Radios ▪ Mobile phones ▪ Regular job briefings between all stakeholders (in-person & via UHF) 	Administration	E2 Low	Project Manager & Engineer / Project Supervisor/ Operators	Work Health & Safety Act & Regulations

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Large sections of materials striking persons and/or equipment</i></p>	<ul style="list-style-type: none"> ▪ Competent, licensed operators ▪ All cab doors are kept closed at all times during operation ▪ No one permitted outside the cab of their machines during loading operations unless otherwise advised ▪ Safe Work Method Statement ▪ Large sections are not to be placed on top of loads ▪ Keep clear of loaded trucks during break times/leg stretches etc. 	<p>Isolation</p>	<p>E3 Moderate</p>	<p>Project Supervisor/ Operators</p>	<p>Work Health & Safety Act & Regulations</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Persons being struck or equipment incident caused by material “hanging up” or jamming in tray</i></p>	<ul style="list-style-type: none"> ▪ Competent licensed truck drivers ▪ No persons allowed within 10 metres of truck when dumping material ▪ Truck not permitted to drive away until the tray has completely lowered unless running gravel on road surfaces ▪ Truck driver to regularly check tray and immediate area around the rear of the truck ▪ Safe Work Method Statement 	<p>Isolation</p>	<p>E2 Low</p>	<p>Project Supervisor/ Operators</p>	<p>Work Health & Safety Act & Regulations</p>
<p><i>Plant Fire</i></p>	<ul style="list-style-type: none"> ▪ Regular plant maintenance ▪ Pre start checks ▪ Plant Operator Weekly Safety Checks ▪ Fire extinguishers available in plant and site containers ▪ Emergency Management Plan 	<p>Administration</p>	<p>E3 Moderate</p>	<p>Project Supervisor/ Plant operators</p>	<p>Work Health & Safety Act & Regulations</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Manual handling injuries</i>	<ul style="list-style-type: none"> ▪ WI-02 Manual Handling ▪ Experienced operators ▪ Appropriate equipment ▪ Supervision ▪ Daily Toolbox meetings to maintain awareness ▪ Be aware of hazardous manual handling tasks e.g. carrying and tying steel, concreting and formwork ▪ Gloves when handling steel ▪ Cover exposed steel with protective caps ▪ Risk Assessment (provider-driven) 	Administration	D2 Low	Project Manager & Engineer / Project Supervisor/ Operators	Code of Practice – Hazardous Manual Tasks
<i>Underground assets – Telstra, electrical, water & gas</i>	<ul style="list-style-type: none"> ▪ Site Inspection ▪ Site Induction ▪ Safe Work Method Statement ▪ DBYD ▪ Establish alignment of buried connection lines before excavation 	Administration	D3 Moderate	Project Manager & Engineer / Project Supervisor/ Operators	Work Health & Safety Act & Regulations

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Operating close to steep drops/ unstable ground etc.</i></p>	<ul style="list-style-type: none"> ▪ Competent Operators ▪ Site Drawings ▪ Operator to conduct a walk around of sight before commencing works to familiarise themselves with the worksite ▪ Established clearance zones set up before operations begin ▪ Take 5 Risk Assessments 	<p>Administration</p>	<p>D3 Moderate</p>	<p>Operator/ Project Manager& Engineer / Site Supervisor</p>	<p>Work Health & Safety Act & Regulations</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Lifting operations & Pipe Laying</i></p>	<ul style="list-style-type: none"> ▪ New Worksite Assessment ▪ Never work under a suspended load ▪ Always maintain communication with the operator when helping to guide a suspended load ▪ Use of licenced crane operation Contractor with competent crane operators & doggers where required ▪ Tagged/tested Pipe Lifting Tool ▪ Sub-contractor SWMS ▪ Daily Toolbox meetings ▪ Take 5 ▪ Use tag lines if required ▪ Excavators with burst control 	<p>Substitution</p>	<p>E4 High</p>	<p>Project Manager & Engineer / Project Supervisor / Operators / HSE Team</p>	<p>Work Health & Safety Act & Regulations</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Personal injury, fatigue or dehydration</i></p>	<ul style="list-style-type: none"> ▪ Report all hazards, incidents and accidents ▪ Management Policies (of provider) ▪ Project Management and Supervision ▪ Employees are inducted as to their duty of care responsibilities (by provider) ▪ Trained First Aid officer on site ▪ Site PPE requirements – High visibility shirt or vest, safety footwear, hard hat, & safety glasses when required ▪ Adequate drinking water carried 	<p>Administration</p>	<p>D2 Low</p>	<p>Project Manager & Engineer / Operator / HSE Team</p>	<p>Work Health & Safety Act & Regulations Code of Practice - First Aid in the Workplace</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Incident/injury during power tool use</i>	<ul style="list-style-type: none"> ▪ All Power tools to be tagged and tested ▪ Tool maintenance ▪ Ear/eye/hand protection ▪ Competent person to check the condition of hand tools/associated equipment before use - powered and manually controlled 	PPE	E3 Moderate	Project Supervisor/ Operators/ HSE Team	Code of Practice – Hazardous Manual Tasks
<i>Poor Housekeeping – slip & trip hazards</i>	<ul style="list-style-type: none"> ▪ Clear demarcation of material storage areas ▪ Designated waste storage bins ▪ Supervision ▪ Regular attention to removing waste from the site ▪ Site HSE inspections 	Isolation	D2 Low	Project Manager & Engineer / Project Supervisor/ Operators/ HSE Team	Work Health & Safety Act & Regulations

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Inadequate Emergency Management procedures and training</i>	<ul style="list-style-type: none"> ▪ Project Management and Supervision ▪ Report all hazards, incidents and accidents ▪ Site-specific Emergency Response Plan displayed in site office and communicated via site Induction ▪ Minimum 1 Emergency Drill conducted ▪ Trained Emergency Control Officer nominated 	Administration	D3 Moderate	Project Manager & Engineer / Project Supervisor / Operators / HSE Team	Work Health & Safety Act & Regulations
<i>Inadequate First Aid Personnel / Supplies</i>	<ul style="list-style-type: none"> ▪ First Aid Risk Assessment conducted as part of the project start-up process ▪ Emergency Services Number and location in ERP (Emergency Response Plan) ▪ Trained First Aider on-site at all times ▪ 2 x Medium Risk First Aid Kits onsite and First Aid kits in LV's ▪ EAP designated and clearly signed 	Administration	D2 Low	Project Manager & Engineer / Project Supervisor / Operators / HSE Team	Code of Practice – First Aid in The Workplace

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Public Traffic</i>	<ul style="list-style-type: none"> ▪ New Worksite Assessment ▪ SWMS ▪ Competent/ trained personnel with Traffic Management qualifications ▪ Warning signage ▪ Traffic Management Plan ▪ Positive communications with machinery entering site ▪ Daily checks of Traffic Management Equipment 	Administration	E3 Moderate	Project Manager & Engineer / Project Supervisor	Work Health & Safety Act & Regulations
<i>Rock breaking/Blasting</i>	<ul style="list-style-type: none"> ▪ Licenced and competent operators ▪ Maintain safe clearance distance from breaking work ▪ Hearing protection ▪ Safe Work Method Statement ▪ Contractor Hydraulic Rock Breaking Operations ▪ Fit screen to protect from fly rock ▪ Barricades and bunting to maintain a safe distance ▪ Supervision 	Isolation	E3 Moderate	Project Manager & Engineer / Project Supervisor/ Operators	Work Health & Safety Act & Regulations Managing Noise and Preventing Hearing Loss at Work Code of Practice

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Defect/fault/quality issue with works</i>	<ul style="list-style-type: none"> ▪ Project Management Plan ▪ Inspection and Test Plan ▪ Contractor’s Integrated Management System ▪ Regular site audits and inspection based on requirements of Project Management plan and contract specifications 	Administration	E2 Low	Project Manager / Project Engineer	Work Health & Safety Act & Regulations
<i>Machine fault</i>	<ul style="list-style-type: none"> ▪ All equipment to be approved for use by Project Supervisor ▪ All equipment used will be appropriate to undertake the work required ▪ All equipment on site will be within scheduled maintenance parameters ▪ Documented pre-starts will be completed daily ▪ Documented weekly safety checklists ▪ Sub-contractor plant safety checklists ▪ Systematic HSE Inspections 	Administration	C1 Low	Project Manager & Engineer / Project Supervisor / Operators / Operations Manager	Code of Practice – Managing Risks of Plant

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<i>Inadequate Audits and Inspections</i>	<ul style="list-style-type: none"> ▪ Project Management and Supervision ▪ Competent Operators ▪ Review of health and safety risks in project scope resulting in the need for: <ul style="list-style-type: none"> • Weekly Job Observations • Monthly Site HSE Inspections ▪ Monthly PMP Audits 	Administration	D2 Low	Project Manager & Engineer / Project Supervisor/ HSE Advisor	Work Health & Safety Act & Regulations

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Residual Design Risks</i></p>	<ul style="list-style-type: none"> ▪ Project Management and Supervision ▪ Competent Operators ▪ Daily toolbox Meetings ▪ Workplace Inspections ▪ Specific design hazards detailed in the DOSG specification to allow controls to be in place: <ul style="list-style-type: none"> • Traffic Management ▪ Working around overhead power lines 	<p>Administration</p>	<p>E3 Moderate</p>	<p>Project Manager/Project Engineer/ Project Supervisor/ Operators</p>	<p>Code of Practice – Managing the Risks of Plant in the Workplace</p> <p>Work Health & Safety Act & Regulations</p> <p>The Tasmanian Traffic Act</p> <p>The Tasmanian Traffic (Road Rules) Regulations</p> <p>DSG Traffic Control at Worksites</p> <p>Project Specification</p> <p>AS1742 Manual of Uniform Traffic Control Devices in particular AS1742.3 2009</p>

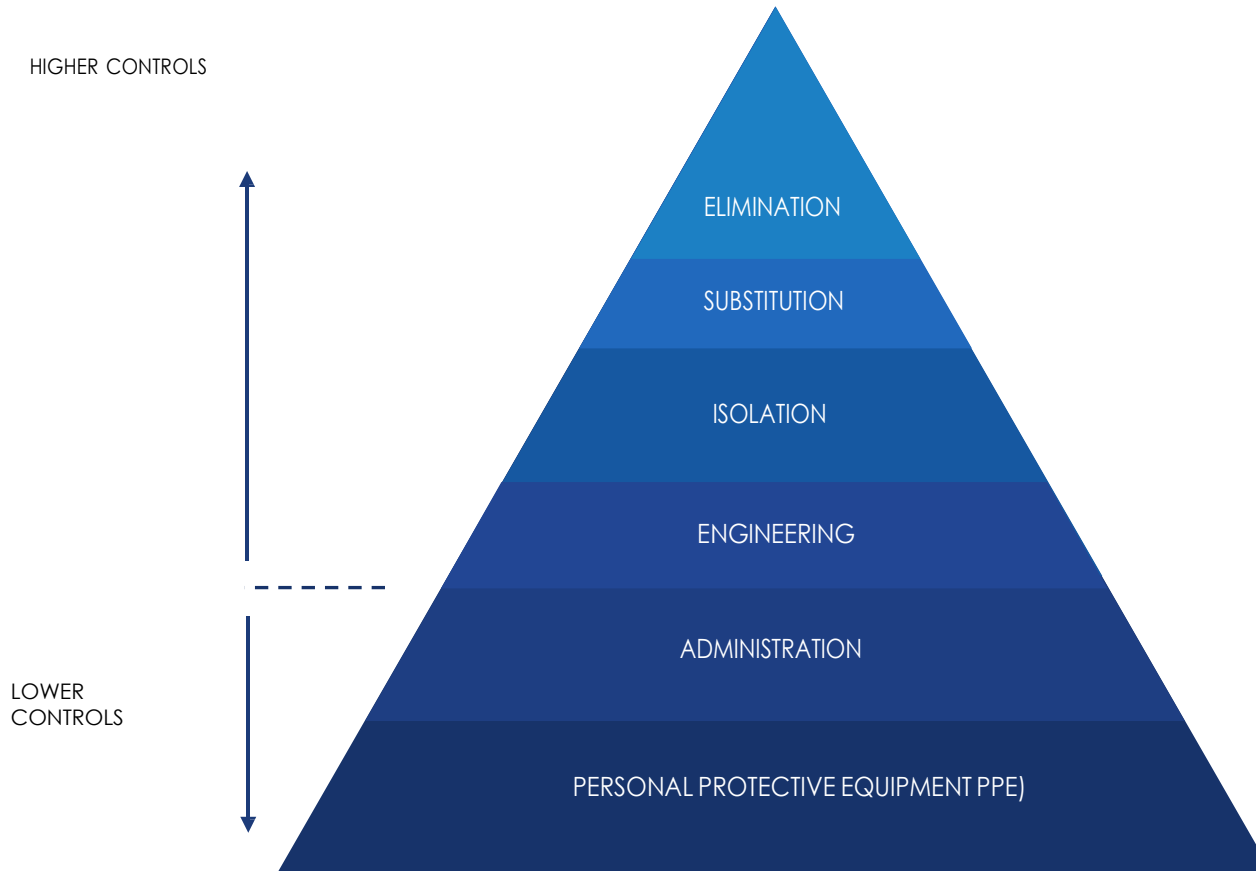
Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Excavated edges/trenches collapsing – equipment or personnel damage</i></p>	<ul style="list-style-type: none"> ▪ Site Supervision ▪ Experienced Operators ▪ Safe Work Method Statement ▪ Clearance Zones established as per Code of Practice ▪ Operators to exercise caution around trench edges ▪ Benching of all trenches deeper than 1.5 metres. Benching to commence at 1 metre if trench >1.5 metres ▪ No personnel permitted to go into un benched excavations > 1.5m ▪ All “live edges”, steep drops, soft/unstable ground & high faces to be barricaded with appropriate fencing or bunting 	<p>Isolation</p>	<p>E3 Moderate</p>	<p>Project Engineer /Project Supervisor/ Operators</p>	<p>Code of Practice – Excavation Work</p>

Hazards	Controls	Hierarchical level of control	Residual Risk Score	Responsible Persons	Relevant Legal/ Statutory guidelines
<p><i>Contractor Management – unsafe practices/poor Workmanship/inadequate resources</i></p>	<ul style="list-style-type: none"> ▪ Contractor on-boarding process / conditions of engagement/service brief /contractor registration / contractor induction ▪ Engagement of contractors with 'acceptable' level of risk as per assessments ▪ Provision of relevant PMP and other technical project information to contractors before work commences ▪ Historical understanding of contractors capabilities due to previous works they have undertaken ▪ Project progress meetings – internal and external ▪ Audits and inspections ▪ Site Supervision 	<p>Administration</p>	<p>D3 Moderate</p>	<p>Project Manager/ Project Engineer/ HSE team</p>	<p>Contractor Management Project Start Up Questionnaire</p>

RISK ASSESSMENT REVIEW

PRINT NAME	JOB TITLE	DETAILS OF REVIEW/ FINDINGS	SIGNATURE	DATE

SCHEDULE 1 – HIERARCHY OF CONTROL



ELIMINATION of a hazard entirely from the workplace is more effective than



SUBSTITUTION of the hazardous plant, item, or process with a less hazardous one is more effective than



ISOLATION by creating a mechanical barrier or other method to prevent the hazard from impacting on personnel, property or the environment is more effective than



ENGINEERING means as a way of minimising the risk is more effective than



ADMINISTRATIVE (PROCEDURAL) MEASURES to control the behaviour or work practices intended to prevent the hazard causing harm is more effective than



PERSONAL PROTECTIVE EQUIPMENT to be worn by personnel to ensure that they are protected if they do become exposed to the hazard, which is the least effective control measure

SCHEDULE 2 - HSE RISK ASSESSMENT MATRIX

STEP 1 – Clearly identify the hazard to be assessed

STEP 2 –Establish a measure of the likely impact/consequence

STEP 3 – Establish a measure of probability/likelihood

STEP 4 – Establish the level of risk using the matrix

STEP 5 – Implement actions appropriate to the level of risk

			MEASURE OF IMPACT/CONSEQUENCE				
			INSIGNIFICANT (1)	MINOR (2)	MODERATE (3)	MAJOR (4)	CATASTROPHIC (5)
MEASURE OF PROBABILITY/ PROBABILITY/	ALMOST CERTAIN	(A)	HIGH	HIGH	EXTREME	EXTREME	EXTREME
	LIKELY	(B)	MODERATE	HIGH	HIGH	EXTREME	EXTREME
	POSSIBLE	(C)	LOW	MODERATE	HIGH	EXTREME	EXTREME
	UNLIKELY	(D)	LOW	LOW	MODERATE	HIGH	EXTREME
	RARE	(E)	LOW	LOW	MODERATE	HIGH	HIGH

NOTE: - This matrix can be used to rank hazards or determine the level of risk of an actual incident/accident. When determining the outcome of a hazard, use this matrix in the “potential situation. When determining the outcome of an accident, incident or illness, use this matrix in the “actual situation.

PROBABILITY	QUALITATIVE DESCRIPTION
Almost Certain	Event is expected to occur in most circumstances.
Likely	Event can be expected to occur more than once a year, including continuous emissions.
Possible	Event is likely to occur during the project lifecycle.
Unlikely	Event could occur at some time, but is not likely here within the project lifetime.
Rare	Event may occur only in exceptional circumstances.

EXTREME	Task must not proceed until additional controls have been implemented to reduce the impact/consequence below extreme and as low as reasonably practicable
HIGH	Management review required before proceeding. Implement cost effective risk control measures
MODERATE	Implement effective risk control measures
LOW	Manage by routine procedures.

IMPACT/CONSEQUENCE

		CATEGORY OF CONSEQUENCE				
		INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC
QUALITATIVE DESCRIPTION		<ul style="list-style-type: none"> No injuries, low financial loss No human injuries or health effects Possible incidental impacts to flora & fauna in a locally affected environmental setting No ecological consequences No measurable impacts or financial losses to commercial resources 	<ul style="list-style-type: none"> First aid treatment, medium financial loss Incidental injury or health effects requiring only first aid treatment or an employee returning to work after a consultation with a doctor. Normally a reversible injury or damage to health Infrequent environmental nuisance to the affected community. Reduction of the abundance/biomass of flora & fauna in the affected environmental setting No changes to biodiversity or the exposed ecological system Incidental financial losses to commercial resources 	<ul style="list-style-type: none"> Medical treatment required high financial loss Injury or damage to health that may require ongoing medical treatment Ongoing, sustained environmental nuisance to the affected community. Reduction of abundance/biomass in the affected environmental setting. Limited impact to local biodiversity without a significant loss of pre-impact ecological functioning Temporary financial loss involving a portion of a commercial resource operation (e.g. a set-back of days to weeks, with a rapid return to pre-exposure profitability) 	<ul style="list-style-type: none"> Extensive injuries, loss of production capability, major financial loss Normally a Lost Time Injury or damage to health, which may require prolonged medical treatment and rehabilitation. This injury may have resulted in a permanent disability Substantial reduction of abundance/biomass in the affected environmental setting. Significant impact to biodiversity and ecological functioning. Eventual recovery of ecological systems possible, but not necessarily to the same pre-impact conditions Significant financial loss to a business unit of a commercial resource operation (e.g. a set-back of months, with long term loss of profitability) 	<ul style="list-style-type: none"> Death, huge financial loss Injuries or health effects resulting in death or severe permanent disability to one or more persons Irreversible & irrecoverable changes to abundance/biomass in the affected environmental setting. Loss of biodiversity on a regional scale. Loss of ecological functioning with little prospect of recovery to pre-spill conditions Complete and irreversible loss of a commercial resource operation