

Revision: TBA – (Fill out base on project)

JSA No: TBA	Job Safety Environmental Analysis (JSEA) / Safe Work Method Statement (SWMS)		28 South Environmental
Date Prepared: XX/XX/XX			
Page 1 of X	<b>Participants:</b> 1. Wayne Moffitt (28 South Environmental Pty Ltd) 2. Mitch Taylor (28 South Environmental Pty Ltd) 3. Rebecca Freese (28 South Environmental Pty Ltd) 4. Justin Armstrong (28 South Environmental Pty Ltd)	Project Name: TBA – Example	
JSEA Reviewed by:		Project Address: TBA – Example	
Resp. Supervisor:		<b>Job Location &amp; Details:</b> <<< Example >>> Fauna and Flora Survey over XX Road Name, Road, Suburb, QLD 4XXX (LotXX on RPXXXXX)	

RISK MATRIX							
Consequences		Likelihood or Probability					
People	Environment	A	B	C	D	E	
		Almost Certain (expected)	Likely (will probably occur)	Moderate (might occur - has happened)	Unlikely (could occur - known to happen)	Rare (practically impossible)	
1	No Incident or First Aid Injury	Negligible Discharge	High 15	Medium 19	Low 22	Low 24	Low 25
2	Medical Treatment	Uncontrolled Discharges in Minor Quantities	High 10	High 14	Medium 18	Low 21	Low 23
3	Alternate Work or Lost Time Injury	Moderate Breach of Environmental Statutes	Extreme 6	High 9	High 13	Medium 17	Medium 20
4	Serious or Permanent Injury	Major Breach of Environmental Statutes	Extreme 3	Extreme 5	Extreme 8	High 12	High 16
5	Fatality	Shutdown of Project due to Environmental Breach	Extreme 1	Extreme 2	Extreme 4	Extreme 7	High 11

  

Risk Ranking	Risk Score	Risk Description
Low	21 - 25	Tolerable. Monitor, manage and carryout activity in accordance with identified controls.
Medium	17 - 20	Implement strict control measures reduce hazard to ALARP. <b>Activity must not commence without appropriate Supervision.</b>
High	9 - 16	Implement strict control measures reduce hazard to ALARP. <b>Activity must not commence without Workplace Manager or higher approval and appropriate Supervision present.</b> Review process.
Extreme	1 - 8	Intolerable. <b>Activity must not commence.</b> Eliminated hazard or introduce further controls to reduce to ALARP.

PERSONNEL DETAILS	EQUIPMENT DETAILS
<b>Occupations</b> <b>Trades/Skills/Work Teams</b> 1. Wayne Moffitt (28 South Environmental Pty Ltd) 2. Mitch Taylor (28 South Environmental Pty Ltd) 3. Rebecca Freese (28 South Environmental Pty Ltd) 4. Justin Armstrong (28 South Environmental Pty Ltd)	<b>Static Plant and Equipment</b> <ul style="list-style-type: none"> <li>&lt;&lt;&lt;Example&gt;&gt;&gt;</li> <li>Differential GPS (hand held)</li> <li>Fauna survey equipment including, Elliot, Cage and Pitfall traps; spotlights; mammal call playback facility; Anabat (electronic bat detector); and hair tubes. Spades used to sink pitfall traplines. Flagging tape used to provide semi-permanent identification of survey sites.</li> </ul>

<p><b>Qualifications</b> <b>Licenses/Qualifications/Permits</b></p>	<ul style="list-style-type: none"> <li>Wayne Moffitt - Blue Card generic safety induction, Open Drivers License; Scientific Survey license</li> <li>Mitch Taylor - Blue Card generic safety induction, Open Drivers License, Scientific Licenses, Animal Ethics Permit, Rehabilitation Permit, Coal Seam Surface Induction, Origin Gas field inductions, QGC Inductions, Arrow Inductions.</li> <li>Justin Armstrong - Blue Card generic safety induction, Open Drivers License, Rehabilitation Permit, Coal Seam Surface Induction, Origin Gas field inductions, QGC Inductions, Arrow Inductions.</li> <li>Rebecca Freese - Blue Card generic safety induction, Open Drivers License</li> </ul>	<p><b>Mobile Plant and Equipment</b></p>	<p>4WD vehicle</p>
<p><b>Training required</b></p>	<p>Wayne Moffitt and Mitch Taylor (having already visited the perimeter site) will manage and brief Justin and Rebecca on Site characteristics (provide aerial photos, site conditions and identify potential hazards and conduct a survey to ensure correct orientation) before the commencement of surveys. Hazard caused by vehicles entering and exiting the site will be critical, particularly with any night works. .</p>	<p><b>Safety/Emergency Equipment</b></p>	<ul style="list-style-type: none"> <li>First Aid Kit per person (including snake bite kit) complying with QLD risk assessment requirements;</li> <li>Staff to be briefed on location of closest medical facility before commencement of works. Map showing location and route to facility to be in the site vehicle at all times;</li> <li>Mobile Phone to be on and fully charged before each day's survey with back up battery packs and charges in cars;</li> <li>Two-way radio to be on and fully charged before each day's survey;</li> <li>Vehicle to be on-site at all times, and ready to convey injured personnel to treatment location if required.</li> <li>Staff to work with a buddy at all times;</li> </ul>
<p><b>Other Training required</b> <b>What, how many and by when</b></p>	<ul style="list-style-type: none"> <li>All staff are already familiar with use of 28 South Environmental survey equipment, and no further training in its use is considered necessary.</li> <li>Other training / site induction could be provided by DHA if deemed appropriate, although it should be noted there is no reason for the survey to undertake an induction as the site is greenfield and has no current operations occurring over it. .</li> </ul>	<p><b>Personal Protective Equipment &amp; Tools</b></p>	<p>Following items to be worn at all times;</p> <ul style="list-style-type: none"> <li>High vis PPE;</li> <li>Broad brim hat during diurnal periods;</li> <li>Sunscreen;</li> <li>Steel cap boots;</li> <li>At least two litres of water at all times and 10 liters in the on-site car person.</li> <li>Gloves for use of trapping equipment and handling fauna.</li> <li>Sun glasses for general work and safety glasses for any equipment management.</li> </ul>

JOB STEPS	HAZARD / RISK DESCRIPTION	Risk (Without Controls)		CONTROLS REQUIRED	Residual Risk		ACTION BY WHO	ACTION BY WHEN
		Risk Ranking	Risk Score		Risk Ranking	Risk Score		
<i>Example</i> Transport 50kg reo bars to work area	Heavy reo bars may cause back strain or sprain.	High	13	Two person(s) to transport 50 kg reo bars to work area.	Low	24		
Driving to and from the site.	Driver fatigue causing accident, possible injury or fatality (single vehicle; multiple vehicle; pedestrian). Risk is considered generally low as site is close to proposed resting locations in Brisbane. However, care will need to be taken after nocturnal surveys.	Extreme	17	<ul style="list-style-type: none"> <li>Ensure that all staff receive adequate rest during the day, and that the staff member(s) allocated to drive at night is sufficiently alert to do so (noting that it is expected that two - three staff will be on site at any period of the survey).</li> <li>Ensure that all drivers are aware of the route to and from the Site, and in particular are aware of potential hazards (intersections, corners with poor visibility).</li> <li>Staff to be briefed on location of closest medical facility before commencement of works. Map showing location and route to facility to be in the site vehicle at all times.</li> <li>Check in and check out protocol to be followed by field staff and project manger - all staff to contact project manager every 2 hours during field survey and, notify when leaving site and upon arrival home.</li> </ul>	Low	24	All team members	When driving to and from site
	Car accident due to vehicle fault/failure	Extreme	17	<ul style="list-style-type: none"> <li>Hire or private vehicles regularly serviced and maintained.</li> <li>Driver to check vehicle for obvious damage and fuel level before leaving accommodation.</li> <li>Driver to report any damage or faults to nominated person.</li> <li>Driver to stop driving and inspect vehicle or contact NRMA (or qualified</li> </ul>	Low	24	All team members	Checks to be completed before leaving accommodation and site.

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				mechanic) if fault is noticed while driving. <ul style="list-style-type: none"> <li>Mobile telephone communication available.</li> </ul>				
Completion of Site surveys	Sunburn	Medium	18	<ul style="list-style-type: none"> <li>Apply sunscreen liberally according to SPF rating</li> <li>Have sunscreen readily available onsite</li> <li>Must wear long sleeve shirts &amp; long trousers</li> <li>If possible, wear wide brims threaded through hard hats.</li> </ul>	Low	21	All team members	When in the field
	Dehydration	Medium	18	<ul style="list-style-type: none"> <li>Buddies to have at least two litres of drinking water available for immediate consumption at all times.</li> <li>At least 10 litres of drinking water to be maintained in the Site vehicle at all times.</li> <li>Staff to consume water on a regular basis and ensure that rest breaks are taken in a shaded area.</li> </ul>	Low	21	All team members	<ul style="list-style-type: none"> <li>Checks on water availability to be conducted before leaving accommodation for the day.</li> <li>Checks on personal water (that carried across job site) to be conducted before leaving the vehicle.</li> </ul>
	Snake bite	Extreme	7	<ul style="list-style-type: none"> <li>Carry snake bite kit; mobile phone; two-way radio; wear Personal Protective Equipment (PPE), be accompanied by buddy at all times;</li> <li>Carry dangerous critters toolbox;</li> <li>Complete pre-start checklist listing daily locations for each survey group;</li> <li>Staff to be briefed on location of closest medical facility before commencement of works. Map showing location and route to facility to be in the site vehicle at all times;</li> </ul>	Medium	17	All team members	Check that all PPE and dangerous critters toolbox are packed ready for use before departing accommodation.

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		Risk Ranking	Risk Score		Risk Ranking	Risk Score		
	Trips/Slips	Medium	18	<ul style="list-style-type: none"> <li>Wear appropriate footwear (safety boots), be accompanied by buddy at all times</li> <li>Must not climb any structures / trees</li> <li>Advise other members of survey team on hazards (eg obscured washouts etc)</li> </ul>	Low	22	All team members	<ul style="list-style-type: none"> <li>Check that all PPE is used prior to departing accommodation.</li> <li>Survey team to immediately advise other members when a hazard is located.</li> </ul>
	Struck by branch/ falling shrubs	medium	18	<ul style="list-style-type: none"> <li>Hard hats must be worn</li> </ul>	Low	22	All team members	<ul style="list-style-type: none"> <li>Before leaving Site vehicle.</li> </ul>
	Manual strain	Medium	18	<ul style="list-style-type: none"> <li>Manual handling training</li> <li>Job rotation</li> <li>No climbing structures / trees</li> <li>No undertaking of physical activity outside of general physical ability.</li> </ul>	Low	22	All team members	<ul style="list-style-type: none"> <li>Before the commencement of manual works.</li> </ul>
	Survey staff struck by passing vehicle (particularly on waste depot access road)	Extreme	7	<ul style="list-style-type: none"> <li>Nocturnal surveys to commence at the Site entry and work in defined traverse pathway – all traverses must be pre-determined and uploaded to Differential GPS which is to be used to define traverse.</li> <li>Site vehicle to be parked well off the road at all times.</li> </ul>	Low	22	All team members	<ul style="list-style-type: none"> <li>During site works.</li> </ul>
	Bites, scratches and injury from captured fauna.	Moderate	18	<ul style="list-style-type: none"> <li>All staff handling fauna to be appropriately trained and experienced (confirmed for all 28 South Environmental staff);</li> <li>Dangerous critters kit to be carried at all times;</li> <li>Staff to be briefed on location of closest medical facility before commencement of works. Map showing location and route to facility to be in the site vehicle at all times;</li> </ul>	Low	22	All team members	<ul style="list-style-type: none"> <li>During site works.</li> </ul>



Name :	Signature:	Date:	Position:
Wayne Moffitt		XX/XX/XXXX	Director and Principal Ecologist
Mitch Taylor		XX/XX/XXXX	Director and Manager
Justin Armstrong		XX/XX/XXXX	Ecologist
Rebecca Freese		XX/XX/XXXX	Ecologist

Awaiting Approval