

Construction Environmental Management Plan

Bourke Small Stock Abattoir

March 2017



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Table 1

Document Control				
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V8	30/3/17	Updated CEMP and CTMP following DP&E feedback	SB/JP	JP

This report has been prepared in accordance with the brief provided by the client and has relied upon the information collected at the time and under the conditions specified in the report. All findings, conclusions or recommendations contained in the report are based on the aforementioned circumstances. The report is for the use of the client and no responsibility will be taken for its use by other parties. The client may, at its discretion, use the report to inform regulators and the public.



Construction project site photograph

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1. Introduction

CAPRA Developments Pty Ltd (CAPRA) was granted development consent (SSD 7268) on 14 November 2016 for the construction and operation of a small stock abattoir approximately 14 km north of Bourke. Schedule D condition D1 of SSD 7268 requires the preparation of a Construction Environmental Management Plan (CEMP). Accordingly, this CEMP has been developed to outline the environmental practices and procedures to be followed during the construction of the abattoir (CAPRA Developments Construction Environmental Policy Statement is attached as **Appendix B**).

Plan objectives

The aim of the CEMP is to ensure compliance with the relevant conditions of development consent SSD 7268, as well as other relevant statutory requirements so that appropriate environmental management practices are implemented during the construction of the Bourke Small Stock Abattoir.

CAPRA Developments Pty Ltd recognises its moral and legal responsibility to minimise damage to the environment caused by work activities. This commitment extends to ensuring that the construction phase does not unnecessarily endanger flora, fauna, sensitive areas, sites of indigenous and non-indigenous cultural heritage importance or present concerns to members of the public and community.

CAPRA Developments will ensure the following commitments and expectations are communicated and met through the construction phases of the project.

The Construction Management Team (including CAPRA Developments Site Project Manager and Supervisors) is committed to:

- Integrating the CEMP into all aspects of CAPRA Developments Pty Ltd operations;
- Ensuring ongoing compliance with all relevant legislative requirements and co-operation with Regulatory bodies;
- Consulting with site employees and contractors and other parties to improve decision-making on environmental matters;
- Identification of environmental issues, assessment of risks and implementation of best practice controls to limit negative impacts to the environment;
- Development, implementation and review of written work procedures;
- Distribution and communication of information and work procedures;
- Training and supervision to workers, contractors, clients and visitors to ensure CEMP and written procedures to minimise environmental impacts are followed.

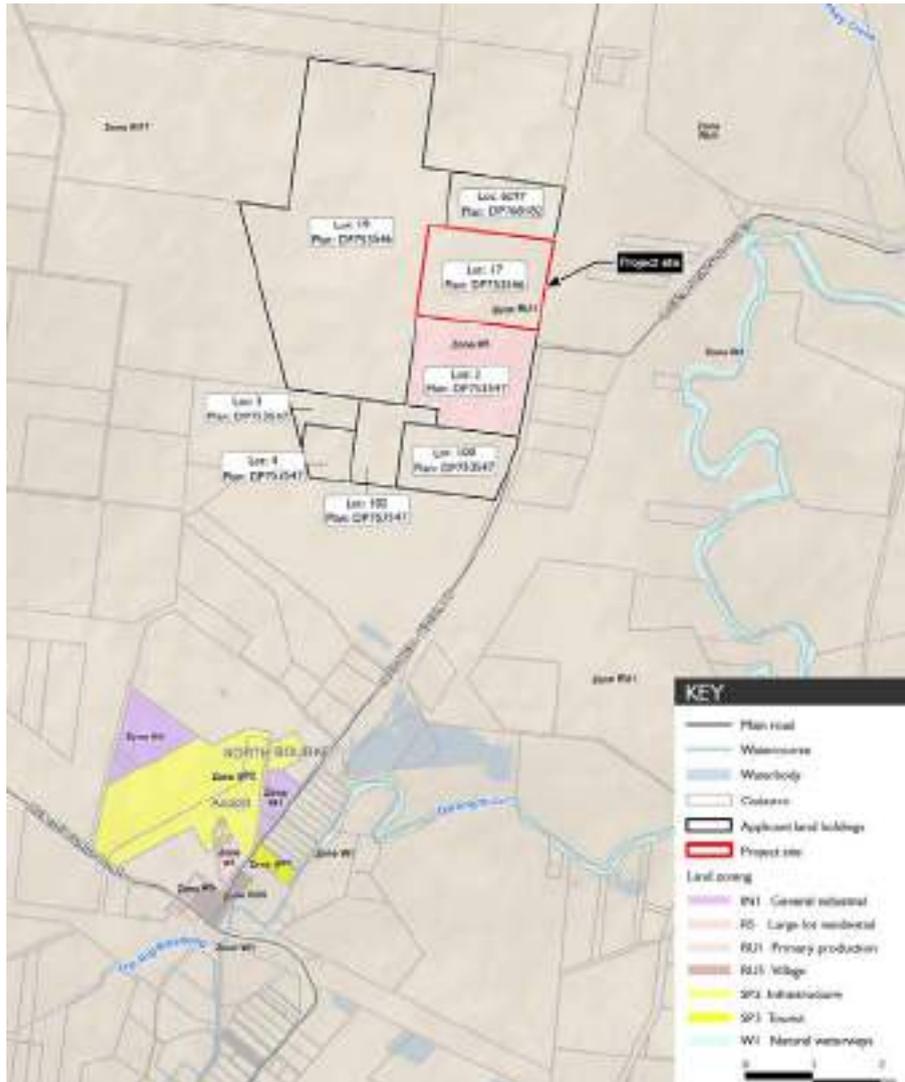
Employees and Contractors are expected to:

- Take reasonable care, and consideration, of environmental impacts while at work;
- Co-operate with CAPRA Developments Pty Ltd to enable compliance with legal obligations;
- Participate in consultative arrangements in relation to environmental matters; and
- Assist management to meet environmental targets/key performance indicators.

Approved Development

The abattoir site will be constructed within Lot 17 in Deposited Plan (DP) 753546, which comprises 246 hectares (ha) of rural land positioned off the Mitchell Highway (identified as the project site in Figure 1 and shown in more detail in Figure 2). The site has been significantly modified by historic land clearing and agricultural activities.

Figure 1 – location of project construction site



The key aspects of the approved development are:

- construction of an abattoir with the capacity to process up to 6,000 head per day, comprising goat, sheep and lambs;
- construction and provision of ancillary infrastructure to support the abattoir, including reticulation of power, water and telecommunication services, vehicular access off the Mitchell Highway, heavy vehicle manoeuvring and turning areas, livestock holding yards, car parking, administration office, staff amenities and a wastewater treatment system;
- construction of four water treatment ponds where wastewater will be treated via an aerobic and anaerobic ponding process, and then utilised for irrigation;

- meat products from the abattoir will be chilled to less than 7 degrees Celsius (oC) or frozen for transport;
- no rendering will take place on site with waste products to be transported off site for disposal at licensed facilities;
- employment of approximately 200 FTE personnel when fully operational; and
- operation 24 hours per day, 7 days per week.

2. Construction Stages

The abattoir will be construction in four construction stages that relate to key aspects of the project as follows:

Stage 1- Site preparation, establishment and bulk earthworks for the engineered pad to the slaughter building, yards and ancillary structures including skin shed, hay shed, gate house, on site carparking and truck manoeuvring areas. Site preparation and establishment will involve:

- surveying and clearly marking the disturbance footprint of the abattoir and ancillary facilities;
- clearing of vegetation within the disturbance footprint; and
- stripping of topsoil and stockpiling for later use in rehabilitation.

Stage 2 - Construction of a steel framed mill type slaughter building with reinforced concrete foundations and ground slabs as well as a suspended reinforced concrete first floor slab. The building will house the bleed corridor, breasting area, dehairing room, evisceration room, quick chillers, offal processing areas, chillers, meat cutting room, staff amenities, AQIS rooms, laboratories as well as administration offices. The external cladding will be a combination of steel sheeting, concrete and light weight compressed cement sheets. The roofing will be colour bond trimdek. The yards will be steel framed with colour bond trimdek roofing complete with state of the art yard panelling for the storage and processing of livestock. The permanent access road to the Mitchell Highway is scheduled to start construction in June 2017 (subject to prior RMS approvals) refer CTMP.

Stage 3 – Construction of a waste water treatment facility (WWTF). The WWTF will include an anaerobic pond, aerobic pond and two finishing ponds. Wastewater from the process facility will be pumped to the WWTF storage tank from where it will be uniformly piped through a screening process and DAF plant (removes fats) before being discharged into the anaerobic pond for bacterial treatment. The ponds will be lined with an impervious liner to prevent ingress into the underlying foundation materials. Once operational the treated water will be used for irrigation.

Stage 4 – Construction of necessary site infrastructure including a new potable water pipe line originating from the Bourke Shire Council water treatment works, HV electricity to the site, construction of a LNG storage facility, site security fencing and an all-weather internal road system.

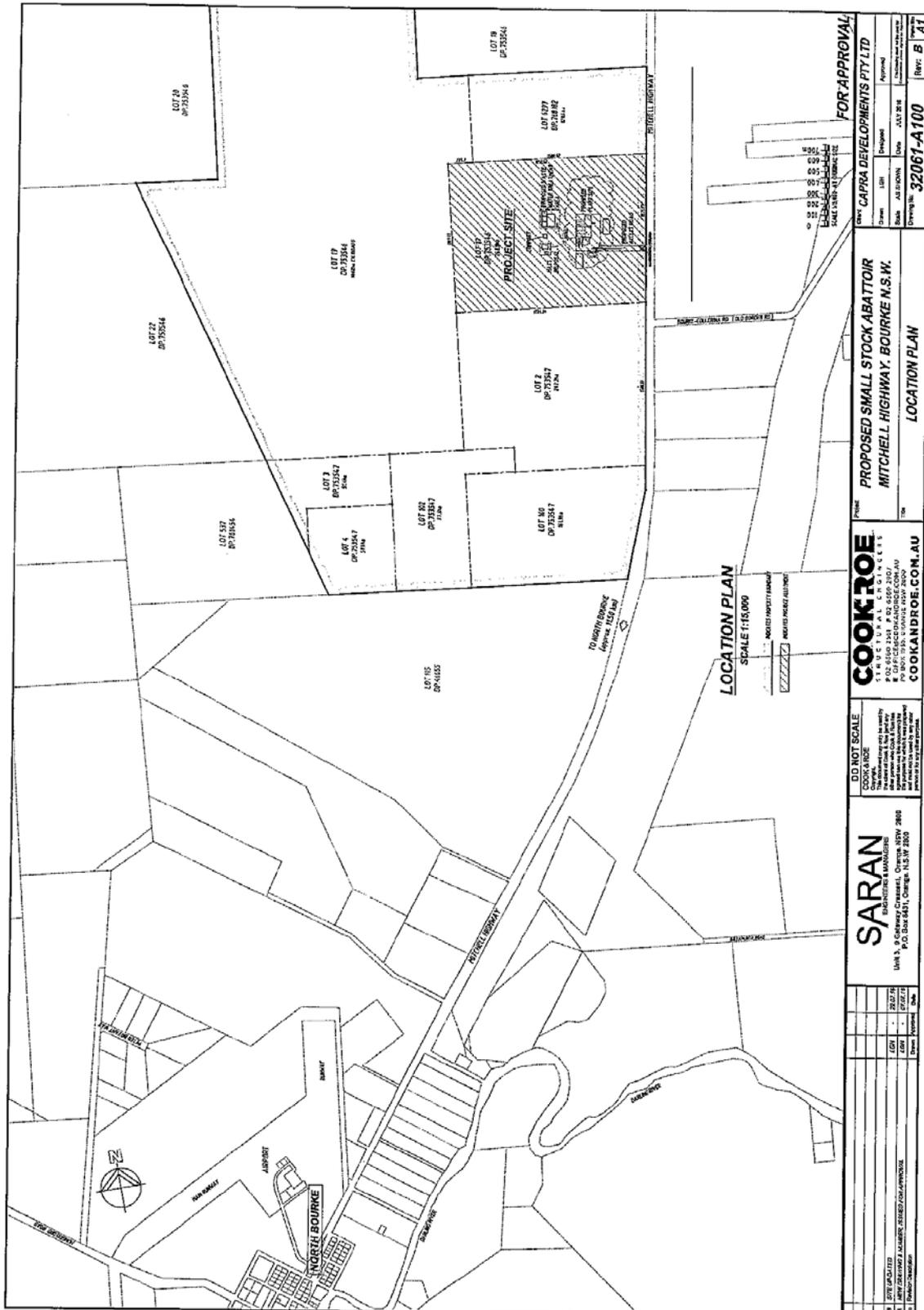


Figure 2 – proximity of construction site to North Bourke and further site detail

3. Development Consent Requirements

The CEMP has been developed in accordance with the relevant requirements of development consent SSD 7268. These conditions and where they are specifically addressed in the CEMP are detailed in the table below.

Relevant Consent Conditions	Where Addressed and Met
<p>D1 - Construction Environmental Management Plan</p> <p>The Applicant shall prepare a Construction Environmental Management Plan (CEMP) to the satisfaction of the Secretary. The CEMP shall:</p> <ul style="list-style-type: none"> a. be prepared by a suitably qualified and experienced person in consultation with Council; b. be approved by the Secretary prior to the commencement of construction; c. outline all environmental management practices and procedures to be followed during earthworks and construction, including: <ul style="list-style-type: none"> i. dust management; ii. traffic management as required by Condition C15; iii. noise management; iv. construction soil and water management as required by Condition C29; and v. community consultation and complaints handling; d. describe all activities to be undertaken on the site during earthworks and construction, including a clear indication of construction stages; e. detail how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts; and f. describe the roles and responsibilities of all relevant employees involved in earthworks and construction. 	<p>Prepared by JPAbusiness Pty Ltd with Carpenter, Collins and Craig (CCC), SARAN Engineers and Project Managers. In consultation with BSC Letter Appendix D</p> <p>Section 6.3 Appendix F Section 6.2 Section 6.4</p> <p>Section 8 Section 1 and Section 2</p> <p>Section 7</p> <p>Section 5</p>
<p>C3 - Dust Management:</p> <p>The Applicant shall carry out all reasonable and feasible measures to minimise dust generated by the Development.</p>	<p>Section 6.3</p>
<p>C4 - During construction and operation of the Development, the Applicant shall ensure that:</p> <p>All vehicles on site do not exceed a speed limit of 60 kilometers per hour</p> <p>All loaded vehicles entering or leaving the construction site have their loads covered</p> <p>all loaded vehicles leaving the site are cleaned of dirt, sand and other materials before they leave the site, to avoid tracking these materials on public roads; and.</p> <p>All heavy vehicles do not use engine brakes</p>	<p>CTMP Appendix F of CEMP</p>
<p>C15 - Construction Traffic Management Plan</p> <p>Prior to the commencement of construction, the Applicant shall prepare a Construction Traffic Management Plan for the Development. The plan shall form part of the CEMP required under Condition D1 and shall:</p> <ul style="list-style-type: none"> be prepared by a suitably qualified and experienced person/s in consultation with Council and the RMS; detail the management measures that would be implemented to ensure road safety, network efficiency and access during construction; 	<p>CTMP Appendix F of CEMP</p>

Relevant Consent Conditions	Where Addressed and Met
<p>contain a drivers code of conduct too: (i.) minimise the impacts of construction on the local and regional road network; and (ii.) minimise conflicts with other road users; detail heavy vehicle numbers, routes, site access and parking arrangements; and if necessary, detail procedures for notifying any nearby residents of any potential disruptions to routes.</p>	
<p>C24 -Hours of Work Earthworks and Construction Monday to Friday 7.00am to 6.00pm; Saturday 8.00am to 1.00pm.</p>	<p>Section 6.2 Hours of Work</p>
<p>C26 - Construction Noise Limits The Development shall be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (Department of Environment and Climate Change 2009). All feasible and reasonable noise mitigation measures shall be implemented and any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the CEMP.</p>	<p>Section 6.2</p>
<p>C29 -Construction Soil and Water Management Soil and water management measures consistent with Managing Urban Stormwater – Soils and Construction Vol 1. (Landcom, 2004) (the Blue Book) shall be employed during the construction of the Development to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.</p>	<p>Section 6.4 and Soil erosion sediment control management plan prepared by Carpenter, Collins and Craig (CCC) see Appendix C</p>
<p>C42 - Aboriginal Site Cards Prior to the commencement of construction and prior to any ground works within the irrigation area, the Applicant shall undertake Aboriginal heritage pre-clearance surveys within the irrigation area in accordance with the survey methodology outlined in the EIS.</p>	<p>Appendix E EMM site clearance letter</p>

4. Consultation Undertaken

CAPRA Developments Pty Ltd has undertaken the following consultation in development of this Plan:

Consultation	Feedback and Issues	Reference and Response
Bourke Shire Council	Council acknowledged receipt of the Plan as part of the CEMP and declined to provide any specific feedback. They were also provided with an updated and revised Plan V5 and also declined to provide any specific feedback. They reserve their right for future comments/feedback on issues and changes that may arise.	Evidence of consultation in letters dated 2 nd of February and 3 rd of March from Bourke Shire Council are in Appendix D . Noted.
EPA DP&E and RMS	Feedback indicating the requirement for a design plan of the sediment pond and the location of a discharge point and required monitoring Feedback relating to the proposed timing of the BAR/AUL roadworks construction Feedback relating to VMS sign received from RMS Feedback from DP&E received on 30/3/17 (meeting with JP and Robert Byrne and Joanna Bakopanos at 10am at DP&E Sydney) relating to clarity on the phase 1 and phase 2 site access and associated construction activities and traffic volume movements	Changes made to section 6.4 and drawing updated in Appendix C Changes made to section 2 to bring forward the timing from stage 4 to stage 2 Updated CTMP and TCP Changes made to Table 2 in section 2.0 of the CTMP to clarify that phase 1 access will apply to April and May 2017 with a mix of construction activities as outlined predominately in Stage 1 and 2 of the construction stages in the CEMP and the phase 2 site access (temporary access at the designated site access point) is planned to be activated during May 2017, subject to RMS requirements.

5. Management Structure and Responsibility

The principle responsibilities of CAPRA Developments employees and subcontractors with respect to implementing the practices and procedures outlined in this CEMP are described below. A matrix of specific site responsibilities is also set out in **Table 5.1**.

Roles and responsibilities for Environmental Management during the Construction Period

Role	Responsibility
Project Manager	The Project Manager is to ensure that this CEMP is effectively implemented and that adequate resources are provided to enable its implementation. The Project Manager is required to support the Site Supervisors and hold them accountable for their specific responsibilities. The Project Manager is responsible for taking prompt remedial action to address any non-compliance or identified potential environmental risks. The Project Manager is responsible to ensure that all employees and contractors are made aware of the CEMP and its relevant requirements.
Site Supervisor	The Site Supervisor is responsible for inducting all workers and subcontractors and directing site activities in accordance with this CEMP. The Site Supervisor is responsible for taking all practical measures to ensure the site is operating according to this CEMP, and without risks to the environment. The Site Supervisor is responsible for detecting any non-compliance or potential environmental risks and recommending remedial action to the Project Manager. Site Supervisors also have a responsibility to ensure that all employees and contractors are made aware of the CEMP and its relevant requirements.
Employees and Contractors	All employees and contractors are required to attend site inductions and follow the CEMP requirements. Employees are responsible for advising the Site Supervisor of any potential environmental issues. All subcontractors engaged to perform work for CAPRA Developments are required, as part of their contract, to comply with this CEMP and to comply with directions from the company's designated officers. Failure to comply will be considered a breach of the contract and sufficient grounds for termination of the contract.

Project Responsibility Matrix

CAPRA Developments and the site Project Manager is responsible for ensuring the following responsibility matrix is implemented and followed during the construction project.

Table 5.1 Project Environmental Roles & Responsibilities Matrix

TASK	Project Manager	Site Supervisor	Employees	Sub-contractors
Inducting workers and subcontractors and directing site activities in accordance with the CEMP.	2	1	2	2
Identifying, assessing and eliminating any non-compliance or environmentally risky conditions and documenting the risk controls implemented.	1	1	2	2
Promoting and maintaining good environmental management in accordance with the relevant environmental legislation, construction standards, regulations and laws.	1	1	2	2
Implementing practical measures to ensure the site complies with the CEMP and project specifications	2	1	2	2
Maintaining, providing updates and supplying this CEMP to relevant authorities and workers.	1	2	2	2
Monitoring and assessing subcontractors for the project to ensure environmental regulations are met and relate to the works undertaken	1	2	2	2
Provide and maintain a hazardous substances register for hazardous substances used and stored in the workplace	1	1	2	2
1 = has responsibility for the overall implementation and / or management of the process/procedure on the project 2 = has responsibility for complying with the process/procedure on the project				

6. Management Measures

6.1 Emergency Contacts and Response

This CEMP sets out CAPRA Developments management measures in the event of environmental emergencies during construction and including recording, displaying in prominent relevant locations and auctioning the following:

- The names of key emergency response personnel and contact details (including all-hours telephone numbers);
- Contact details for emergency services (e.g. ambulance, fire brigade, spill clean-up services);
- The location of on-site information on hazardous materials, including Material Safety Data Sheets (MSDS or SDS) and spill containment material;
- Steps to follow to minimise damage and control the emergency;
- Instructions and contact details for notifying the Project Manager, Site Supervisors, EPA, Bourke Shire Council, emergency services, nearby residents or the community if necessary: and
- The site induction process for all contractors and employees will describe the emergency procedure.

Key Emergency Response Personnel

The Project Manager will be the first point of contact when an incident or spill occurs. They can be contacted 24 hours a day. Contact details including emergency services are included in **Table 6.1**

Hazardous Substances

CAPRA Developments will maintain an up-to-date register at the main site office of Hazardous Substances and Material Safety Data Sheets (MSDS) for all materials used during construction (see **Appendix A**).

Updated copies of these MSDS will be readily available to the Project Manager and Site Supervisor and prominently displayed at the project worksite.

Emergency Response Procedures

The following procedures will be implemented for emergency situations:

Fire

Steps to manage a fire emergency:

- Call '000' as soon as possible. If '000' does not work on your mobile phone call '112';
- If safe to do so leave the work area. If unsafe to leave, seek refuge in a safe area immediately;
- Go to the designated Emergency Assembly Area or to a clear/open area;
- Make sure all workers are present and accounted for, do not return to the work area to locate any missing workers; and
- Notify the Site Supervisor and wait for instructions.

Gas Leak:

Steps to manage a gas leakage emergency:

- Call the Site Supervisor immediately, if deemed necessary call the Fire Brigade on '000'. If '000' does not work on your mobile phone call '112';

- Site Supervisor to immediately arrange to turn off the gas supply;
- Site Supervisor to turn off the site's electrical supply;
- If deemed necessary, notify all persons to evacuate the work area and assemble at the Emergency Assembly Area;
- Control the movement of people to the Emergency Assembly Area;
- Check all workers and others are in attendance; and
- Remain at the Emergency Assembly Area until notified that the area is safe to reoccupy.

Leak or Spill:

Steps to manage any Leak or Spill in a work site:

- identify the source of the problem;
- Stop goods leaking;
- Contain spilt material, using spills kit or sand (spill kits will be located in the Site Project Office);
- Notify officer or Site Supervisor;
- Remove spilt material and place in sealed container for disposal (if possible);
- Notify EPA of incident (call 131 555) if required (see incident response section below), complete information log, notify other emergency services if required
- Site Supervisor to record incident.

OR

As suggested on Safety Data Sheet (SDS)

Incident Response

CAPRA Developments first priority is to ensure the safety of all personnel on the site in the event of any incidents. Further impacts must then be prevented by stabilising the situation (e.g. containing a chemical or fuel spill) and then implementing other remedies and preventive measures.

Where a pollution incident occurs such that 'material harm' to the environment is caused or threatened, the EPA is to be notified of the incident (call 131 555), and an information log completed. Other emergency services will also be notified if required.

Specifically, Section 147 of the *Protection of the Environment Operations Act, 1997*, states that harm to the environment is material if:

- It involves actual or potential harm to the health or safety of human beings or to ecosystem that is not trivial; or
- It results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000.

The Project Manager will notify the EPA immediately of any spills or accidents on-site which are likely to cause a material harm to the environment.

Emergency Contact Details

As per earlier reference, the emergency contact detail in Table 6.1 below will be printed and displayed in prominent locations (including the site office and meal room) across the project site. The details will also be regularly updated where necessary.

Table 6.1 Emergency Response Contact Details	
Emergency Contact Details	
Emergency Services	
Ambulance, Fire or Police	000
Poisons Information	13 11 26
Utilities	
Water	1300 662 077
Electricity	13 13 88
Dial Before You Dig	1100
EPA (24 hour pollution line)	131 555
Bourke Shire Council	6830 8000
Project Manager	
Contact Name	Contact Number
Jim Saran	0429 909 262
Officer / Site Supervisor	
Contact Name	Contact Number
TBA	
Other Contacts	
Contact Name	Contact Number
TBA	

6.2 Construction Noise Management and Mitigation Measures

Introduction

The purpose of this section is to describe the procedures to be implemented to ensure noise levels associated with construction activities are below the relevant noise criteria and that no offsite impacts on sensitive receivers relating to noise occur. Wherever possible, all reasonable and practical measures to minimise the impact of noise from construction will be taken as described in this section.

Noise criteria and predicted noise levels

The Interim Construction Noise Guideline (ICNG) (EPA 2009) sets out noise management levels for residential and other noise-sensitive receivers and how they are to be applied. The policy suggests restrictions to the hours of construction that apply to activities that generate noise at residences above the 'highly affected' noise management level as applied to construction times in the section below.

The Environmental Impact Statement (EMM 2016) predicted construction noise emissions to be LAeq(15-min) 35 dB assuming all equipment operates simultaneously. In reality, it is unlikely that all assumed construction equipment will operate at the same time and so construction noise emission is likely to be less than LAeq(15-min) 35 dB for the majority of the time. The predicted construction noise level is below the relevant noise management level of 40 dB for standard construction hours and at or below the relevant noise management level of 35 dB for construction activity outside of standard hours.

Given the significant separation distance between the project site and the nearest noise-sensitive receptor (shown below in Figure 3), the potential noise impacts associated with construction of the project is predicted to be negligible. Notwithstanding CAPRA will implement management measures as detailed below.

Hours of Work

CAPRA Developments will conduct construction activities on the site as per the periods and hours outlined in Table 6.2 below.

Table 6.2: Hours of Work

Activity	Day	Time
Earthworks and Construction	Monday - Friday	7:00am - 6:00pm
	Saturday	8:00am - 1:00pm
	Sunday	Nil

These hours are in accordance with consent condition C24 (SSD 7268)

CAPRA Developments will aim to achieve construction noise management levels detailed in the ICNG (Department of Environment and Climate Change, 2009) as per consent condition C26 (SSD 7268).

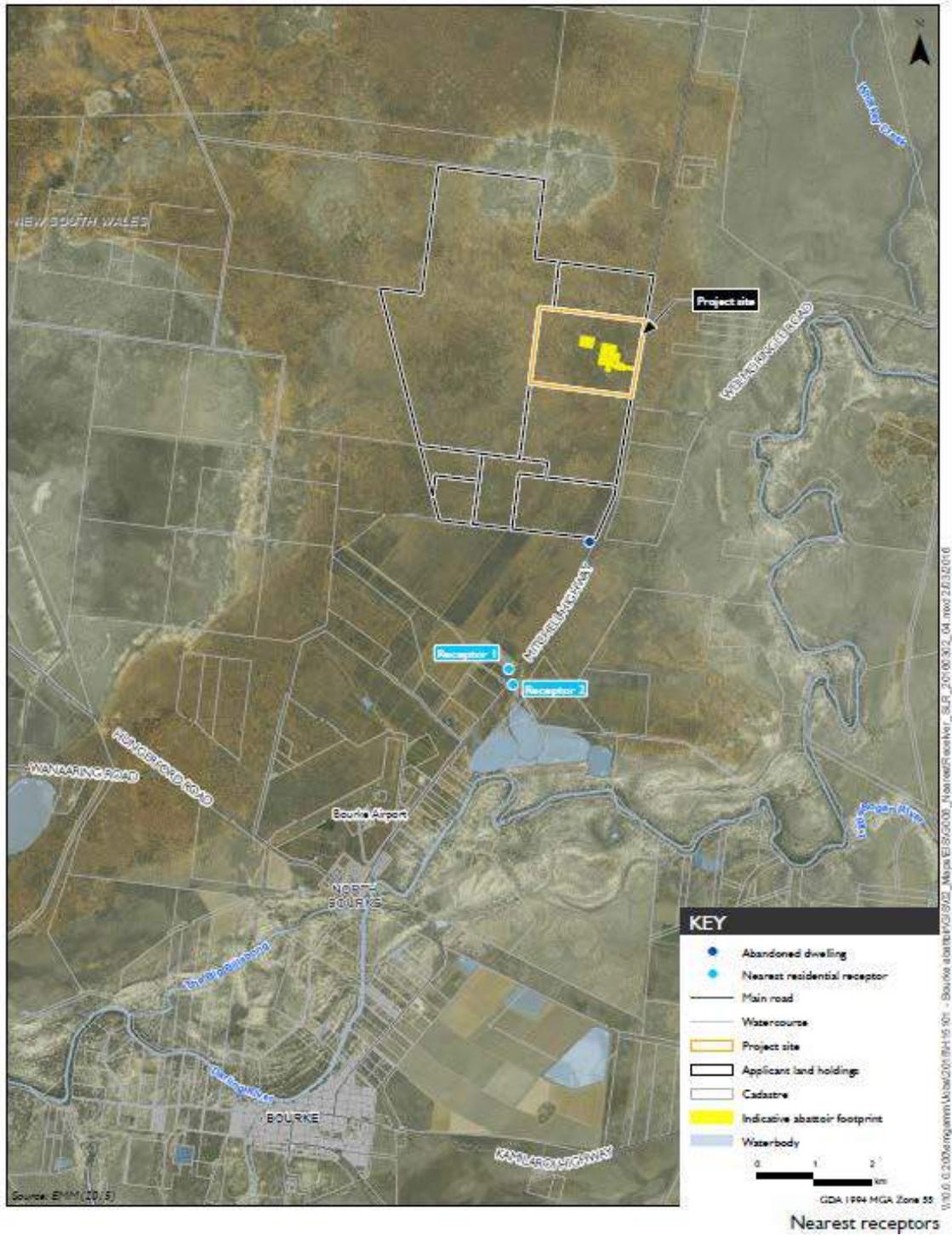
Noise Management Procedures

The procedures that will be adopted to mitigate the impact of noise on the environment for the construction phase are:

- Using adequately sound conditioned machinery and equipment;
- Enforcing a speed limit of 40km/hr for all project related vehicles whilst operating on site;
- Ensuring that project-related trucks do not use engine or compression braking systems upon approaching the site on the Mitchell Highway;

- Operators not to leave plant idling when not in use ;
- Educating employees and contractors about quieter work practices (this can be particularly useful with regard to limiting maximum noise levels). This will take place during the site induction or 'toolbox talks'.

Figure 3 below showing the proximity of the nearest receptors



Complaint and Incident Procedures

Protocols for receiving, recording and acting on complaints that specifically relate to noise, are provided below. The Project Manager shall respond to all landholder complaints regarding noise. CAPRA Developments will maintain a register of noise complaints for the duration of the construction project.

If a noise complaint is received, the following actions will be implemented:

- The complaint will be registered and reported on an Construction Environmental Complaint Form see **Appendix A**
- A CAPRA Developments representative will liaise with the complainant regarding the details and nature of the noise complaint (i.e. when, where, how long);
- On receipt of a noise complaint, the Project Manager or delegated representative will investigate the source of the noise and where justified or possible, will modify the operation to reduce noise levels.
- If the source is not able to be identified, monitoring by a suitably qualified person will be undertaken to determine noise levels at the nearest receiver and these results compared with relevant limits, and recommended actions identified and where possible implemented within 14 days.

6.3 Construction Dust Management and Control

Introduction

The purpose of this section is to address the environmental impacts associated with potential air contamination with particular focus on minimization of dust but also including particulates, smoke and odour that may emit from the project site during the construction phase. Construction activities will be managed to minimise the generation of air emissions and the impact on construction air quality.

Predicted air emissions during construction

The abattoir site is located in a remote area, removed from residential receptors. The nearest residences identified (receptors 1 and 2 on figure 3) are 5.3 kms and 5.8 kms away, respectively, from the project construction site. All residential receptors in the vicinity of the project site are therefore located greater than 350 m from the boundary of the site, are greater than 50 m from roads nominated for use by construction traffic, and are more than 500 m from the site entrance (the two closest receptors). According to the Institute of Air Quality Management (IAQM) document, *Guidance on the assessment of dust from demolition and construction* (IAQM, 2014), receptors that meet these screening criteria do not require further assessment. Further, the EIS (EMM 2016) determined that the risk of adverse air quality impacts occurring at these receptor locations even if no mitigation was to be applied will be negligible during the construction activities.

Notwithstanding, CAPRA will implement air quality management measures to further minimise the risk of offsite impacts relating to dust, as detailed below.

Dust management measures

Ambient dust emissions from wheel-generated dust, excavation, clearing and grading, truck loading and unloading, and wind erosion areas will be the primary focus of dust control during construction works at the Project site.

Typically, emissions from these processes will be minimised through the implementation of water spraying, particularly during periods of heavy on-site activity and low rainfall.

Dust management measures to be implemented throughout the construction phase include:

- Daily inspections will be undertaken by the Site Supervisor or Project Manager, which will include:
 - visual inspection of dust generation;
 - inspection of the erosion and sediment controls and removal of built up material if required;
 - ensure the Mitchell Highway in the vicinity of the site is kept free of soil, and soil tracking onto the road network is prevented.
- A water cart will be available on site at all times during the construction phase;
- All vehicles entering/exiting the site will be covered to prevent escape of materials during transport;
- Silt and other material will be regularly removed from around erosion and sediment control structures to ensure deposits do not become a dust source;
- A speed limit of 40 km/hr will be enforced within the project site to reduce wheel generated dust.
- Vehicle/plant will be switched off if unattended.
- Vehicles are to be cleaned of dirt, sand and other materials before they leave site, to avoid tracking these materials onto public roads.

Monitoring

As noted above, dust generation during construction will be monitored via daily inspections by the Site Supervisor or Project Manager. If required, remedial actions will be implemented as per the procedures described below.

Complaints and incident procedure

Where daily inspections indicate non-compliance with predicted outcomes, or where a dust related complaint is received, the following actions will be undertaken:

- Identify the activities that were occurring at the time of the inspection or complaint;
- Determine the activities that were most likely contributing to incident;
- Review the process and current controls in place for these activities; and
- Implement a best practice alternative to more adequately control dust generation.

The corrective action may involve modification of activities within the construction program to avoid any recurrence or minimise its adverse effects.

6.4 Construction Soil and Water Management

Introduction

The purpose of this section is to describe soil and water management measures and to present an erosion and sediment control plan to be implemented during construction. The aim of these measures is to prevent any offsite impacts relating to erosion and sedimentation from occurring.

Soil and Water Management Measures

Development consent condition C 29 (SSD 7268) requires soil and water management measures to be consistent with *Managing Urban Stormwater – Soils and Construction Vol 1*. (Landcom, 2004) (the Blue Book). Accordingly, soil and water management measures have been designed for the construction phase in accordance with the Blue Book to achieve the key objective of minimising soil erosion and the discharge of sediment and other pollutants to land and/or waters.

To achieve this, the following overarching principles have been adopted:

- Prevent surface water from disturbed areas from entering waterways by use of sediment fences, straw bales sediment traps or other controls as required as shown on Drawing No. 21156EN revision D in **Appendix C** figures ST1-ST4;
- Revegetate as soon as practically possible after construction activities on site; this will have the positive flow on effect of reducing dust as plants and vegetation gain a foothold and cover the disturbed construction area; and
- Ensure all controls are in place before work commences.

Erosion and Sediment Control Plan

An Erosion & Sediment Control Plan has been designed for the construction phase of the project by Carpenter, Collins, Craig, which is presented in **Appendix C**. The plan has been designed in accordance with the principles contained in the Blue Book with particular reference to the following sections:

- 1.6 General Principles of Soil and Water Management
- 2.2 Erosion and Sediment Control Plans
- 3.2 Site Erosion
- 4.1 to 4.4 Management of Soils
- 7.1 and 7.2 Site Stabilisation

Evidence from Carpenter, Collins and Craig (CCC) confirming the Blue Book was used in its design and that the plan is consistent with the consent requirements see **Appendix C**.

Implementation of the erosion and sediment control plan will include the following measures:

- Effective temporary erosion structures, such as hay bales, sediment traps and silt fencing, will be used to prevent soil loss and sediment-laden runoff from leaving the project site. These structures will be installed in accordance with the procedures outlined in the Blue Book and as shown on Drawing No. 21156EN revision D in **Appendix C** figures ST1-ST4 and the relevant sections of the Blue Book referred to above.
- A sediment dam to contain run off on site will be built which conforms to the Blue Book to capture all sediment from rainfall events. Given the topography of the site and minimal fall the design engineers consider the risk of discharge to be extremely low. In the event that a significant rainfall event occurs and the sediment dam is breached a discharge monitoring point (DMP1) see **Appendix C** drawing 21156EN will be located on the northern bank in the middle of the dam. This will be monitored if the dam is breached to ensure that a level of 50 ppm suspended solids is not exceeded. If this is exceeded the EPA

will be contacted immediately and it will be reported as an incident and the incident procedure followed.

- Temporary erosion and sediment control structures will be regularly inspected by the Project Manager and delegates and be properly maintained.
- Areas disturbed as part of construction activities that are not part of the final footprint of the project will be promptly revegetated.

Other Monitoring

The effectiveness and integrity of erosion and sediment control structures will be monitored via daily inspections by the Site Supervisor or Project Manager. If required, remedial actions will be implemented.

6.5 Construction Traffic Management Plan

In accordance with development consent condition C 15 a construction traffic management plan has been developed for the project. This plan is attached in **Appendix F**.

7. Monitoring, reporting and review

7.1 Environmental Inspections and Monitoring

The Project Manager will conduct scheduled inspections of the project activities against the requirements established in this CEMP and other relevant plans and referenced documents. Additional inspections will be programmed should a system non-conformance indicate significant areas of concern.

Non-conformance identified during inspections will be subject to the provisions of corrective action. Corrective action requests will be approved by the Project Manager and will be implemented in a timely manner. Follow up actions will be undertaken to verify implementation of approved corrective actions and its effectiveness in preventing recurrence. All corrective action requests whether in process or completed, will be reviewed during the monthly Construction Project Management Review (refer to Section 7.2).

The inspection and monitoring process during progress of the construction project will include:

- Works may be subject to an environmental audit(s) and/or inspections at any time in their duration;
- The Project Manager will undertake site inspections (*e.g.* erosion and sediment controls) weekly, and visual inspections for dust generation and carry of loose debris onto the Mitchell Highway daily;
- The Project Manager will conduct an overall check for compliance against the commitment objectives and measures in the CEMP at least monthly (see section 7.2 below). Records of all inspections should be maintained on site at all times; and
- Relevant forms are included in **Appendix A** and must be completed and retained as required.

7.2 Construction Project Management Reviews

The Project Manager or their delegate shall conduct regular reviews of construction environmental performance and adherence to the procedures documented in this CEMP, and when necessary initiate corrective actions.

The monthly review will, as a minimum, consider:

- Non-compliance arising from site inspections;
- Environmental issues arising from situations identified as non-conformances to construction and requirements noted by the Secretary of Department of Planning and Environment (DP&E) or delegate;
- Queries/complaints from the public and or employees and contractors;
- Subcontractor's (if involved) performance;

The review findings and recommendations will be recorded and implemented (if required) by the Project Manager. Where deficiencies are identified in the current version of the CEMP relevant sections or measures will be updated accordingly and lodged with DP&E for review and approval.

7.3 Document Control

CAPRA Developments will implement the measures outlined in this CEMP and monitor performance to the Plan.

The Project Manager will ensure control of all project construction environmental documentation and reports. Adequate records will be maintained to demonstrate conformance to specified construction requirements. The records to be maintained and kept at the Site Office for the abattoir will include, but not be limited to, the following:

- Inspection Checklists, non-conformance, corrective action and preventive action;
- Incident reports, Complaints management; and
- Training and induction records.

All environmental inspections and non-conformances will be recorded on the appropriate proformas as listed in **Appendix A**. Copies of each record (e.g. inspection, complaint, non-conformance etc..) will be completed by the person inspecting, and reviewed by the Project Manager before being actioned, documented, saved and kept at the Site Project Office.

For emergency and other site management and compliance purposes all visitors accessing site will be required to sign the Site Visitor book located in the Site office upon arrival stating the following:

- Their name
- Company represented
- Purpose of visit
- Time in; and
- Time out

This record of entry will be kept in the Site Project Office and made available upon request.

8. Communication

CAPRA Developments will undertake external and on-site communication in case of environmental incidents and emergencies, including communication with employees, subcontractors and the public. External communication will include informing nearby residents of proposed work, incidents and emergencies and contacting regulatory agencies if required.

Complaints

On receipt of a complaint, the person receiving the complaint will notify the Project Manager and the complaint will be recorded using the Environmental Complaint Form (see Appendix A). The Project Manager will follow up the complaint and take corrective action in a timely manner (within one month of receiving the complaint), including notifying the complainant of the corrective action (please refer section 6.2 and 6.3 for more specific procedures to be followed in the event of a noise or air quality related complaint respectively).

The complaint register will be maintained by the Project Manager and updated on site in the site office. Signage will be erected at the site entrance providing the contact details for lodging an enquiry or complaint.

Corrective Action

A non-conformance occurs when a procedure or environmental control is not followed, or does not perform as required by this CEMP. CAPRA Developments will monitor non-conformances to the CEMP and initiate corrective and preventive action where required. All non-conformances will be recorded on the Construction Non-Conformance Report Form (see **Appendix A**).

CAPRA Developments will undertake corrective action in case of incidents that have an environmental impact or works not carried out according to the required standard. Procedures for identifying corrective action include:

- Investigation into the causes of incidents and recording of the results; this can be internal or external.
- Evaluating further environmental risks.
- Determining remedies and the associated implementation plan: and
- Identifying any deficiencies in the CEMP or other management plans and procedures to be approved and update.

9. References

- EMM 2016, Bourke Small Stock Abattoir Environmental Impact Statement
- EPA - Protection of the Environment Operations Act, 1997
- Managing Urban Stormwater – Soils and Construction Vol 1. (Landcom, 2004) (the Blue Book)
- Interim Construction Noise Guideline (Department of Environment and Climate Change 2009)
- Institute of Air Quality Management (IAQM) document, Guidance on the assessment of dust from demolition and construction (IAQM, 2014)
- Consultation with SARAN Engineers and Project Managers and Carpenter, Collins and Craig Orange

Appendix A - Compliance Documents

1. Construction Environmental Complaint Form
2. Construction Non-Conformance Report Form
3. Hazardous Substances Register
4. Safety Data Sheets (SDS) Register
5. Construction Environmental Inspection Checklist

Construction Environmental Complaint Form			CAPRA Developments
Project Name	Bourke Small Stock Abattoir	CEC Number	
Address	Mitchell Highway Bourke	Date	
CEC issued to		CEC issued by	
Name		Address	
Position		Contact No	
Nature of Complaint – please circle			
Dust	Flora/fauna	Plant/machinery	
Noise	Heritage	Waste	
Water	Vibration	Erosion and sediment controls	
Pollution	Soil contamination	Other:	
Incident Details			
Location of incident			
Time		Date	
Description			
Site and weather conditions when complaint occurred			
Construction activity occurring on site at time of complaint			
Corrective or preventive action to be taken to fix the complaint	Responsible person	Date to be completed by	
Sign Off			
Corrective or preventive action is complete and dealt with by the responsible person noted above			
Name		Date	
Signature			

Construction Non-Conformance Report

CAPRA
Developments

Project	Bourke Small Stock Abattoir	CNCR Number	
Address	Mitchell Highway Bourke	Date	
NCR issued to		CNCR issued by	

Areas of Non-Conformance

Description of Non-Conformance

Outline the Evidence obtained for Non-Conformance

Corrective or preventive action to be taken to fix Non Conformance

Responsible Person

Date to be completed

Sign Off

Corrective or preventive action is complete and dealt with by the responsible person noted above

Name		Date	
Signature			

CAPRA Developments agrees corrective or preventative is complete

Name		Date	
Signature			

Weekly Construction Environmental Inspection Checklist			CAPRA Developments
Project	Bourke Small Stock Abattoir	Completed by	
Address	Mitchell Highway Bourke	Date	
Inspection to be undertaken	Are controls in place and effective yes/no	Can immediate rectification take place	
Air Quality			
Is dust being controlled to required levels?			
Sediment Control			
Are required sediment controls in place and effective? i.e. straw bales, sediment traps and silt fences			
Is there any sediment buildup requiring removal?			
Is clearance and disturbance limited to the approved disturbance areas?			
Waterways			
Are waterways free of blockages and contamination?			
Traffic			
Is traffic speed and traffic flow being managed by relevant and appropriate site signage?			
Check Mitchell Highway for loose debris, earthen material or dust on road			
Sign Off			
I have checked the above conditions and are satisfied of compliance to			
Name		Date	
Signature			
CAPRA Developments agrees rectification action if applicable is complete			
Name		Date	
Signature			

Appendix B - CAPRA Developments Construction Environmental Policy Statement

CAPRA Developments recognises its responsibility to the environment and is committed to the implementation of practices that will promote and support environmental sustainability throughout the construction phase.

To deliver on our commitment we will:

- Comply with all relevant environmental laws, regulations, statutory obligations and codes of practice that are applicable to this development;
- Communicate the CAPRA Developments construction environmental policy and procedures to all employees, subcontractors and suppliers;
- Conduct business with clients and contractors who have commitment to the values and objectives contained in this Construction Environmental Policy;
- Incorporate environmental best practice into our construction plans and procedures;
- Minimise negative impacts that we may have on the environment, through efficient use of resources throughout the construction process;

CAPRA Developments managers, supervisors and employees will be managed and made accountable for environmental performance in their area throughout project construction and everyone is expected to use their job skill and knowledge to protect the environment.



George Tanos
Director, CAPRA Developments Pty Ltd
23/02/17

DRAINAGE NOTES:

- ROAD DRAINAGE PIPES SHALL BE SPIGOT & SOCKET R/RJ CONCRETE CLASS 3, UNO.
- DRAINAGE PITS SHALL HAVE INTERNAL DIMENSIONS OF (MINIMUM) 900MM X 900MM AND BE CONSTRUCTED IN CONCRETE.
- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH BOURKE COUNCIL'S CIVIL CONSTRUCTION GUIDELINES AND OR THE RELEVANT AUSTRALIAN STANDARDS.
- SCOUR PROTECTION DOWN STREAM OF PIPE DISCHARGE REQUIRED. TO BE 5M IN LENGTH 2M WIDE.
 - GEOTEXTILE UNDERLAY
 - COVERED BY MINIMUM 200MM NO BUCK, 2 LAYERS.

GENERAL NOTES:

- ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH BOURKE COUNCIL'S CIVIL CONSTRUCTION GUIDELINES AND THE RELEVANT AUSTRALIAN STANDARDS.
- THE CONTRACTOR IS TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS & MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE OR ADJUST THE SERVICE IF NECESSARY. WHERE POTENTIAL CONFLICT MAY OCCUR THE CONTRACTOR IS TO LIAISE WITH THE SUPERVISING ENGINEER/SURVEYOR PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
- COUNCILS OR OTHER AUTHORITIES TREE PRESERVATION ORDER MUST BE OBSERVED & NO TREE OUTSIDE THE WORKS AFFECTED AREA IS TO BE FELLED, LOPPED OR REMOVED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE GOVERNING AUTHORITY.
- THE CONTRACTOR IS TO CLEAR THE SITE BY REMOVING ALL POLES, RUBBISH, FENCES, OUT HOUSES, CAR BODIES, DESIGNATED RETAINING WALLS & DEBRIS ETC.
- ALL SITE REGRADING AREAS ARE TO BE GRADED TO THE SATISFACTION OF THE SITE MANAGER.
- TOPSOIL IS TO BE STRIPPED & STOCKPILED ON SITE WITH EROSION CONTROL MEASURES PROVIDED AS DETAILED. UPON COMPLETION OF WORKS THE TOPSOIL IS TO BE RESPREAD AS DIRECTED.
- SURPLUS EXCAVATED MATERIAL IS TO BE PLACED ON SITE, OR REMOVED FROM THE SITE AS DIRECTED.
- REMOVE ANY EXISTING UNCONTROLLED FILL MATERIAL FROM ROADWAYS AND SITE REGRADING AREAS AND REPLACE WITH APPROVED FILL MATERIAL PLACED IN MAXIMUM 250mm# THICK LAYERS IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S REQUIREMENTS. EXISTING MATERIAL MAY BE REUSED IF FOUND SUITABLE BY THE GEOTECHNICAL ENGINEER.
- ON SITE FILLING AREAS THE CONTRACTOR IS TO TAKE LEVELS ON THE STRIPPED SURFACE PRIOR TO THE PLACEMENT OF ANY FILL MATERIAL. LEVELS ARE TO BE MADE AVAILABLE TO THE ENGINEER/SURVEYOR.
- ALL SITE FILLING IS TO BE COMPACTED TO 95% STANDARD COMPACTION & IS TO BE CONTROLLED BY A GEOTECHNICAL ENGINEER. A COPY OF THE RESULTS IS TO BE MADE AVAILABLE TO SITE ENGINEER.
- ALL NEW WORK IS TO MAKE A SMOOTH JUNCTION WITH ALL EXISTING CONDITIONS.
- NO WORK IS TO BE CARRIED OUT ON ADJOINING PROPERTIES WITHOUT THE PRIOR WRITTEN CONSENT OF THE PROPERTY OWNER.
- DRAINAGE BENCHES ARE TO BE BACKFILLED WITH SHARP SAND OR 10-12mm# METAL DUST & A 3m LONG SUBSOIL PIPELINE WRAPPED IN AN APPROVED FILTER SOCK IS TO BE INSTALLED & DISCHARGED INTO THE ADJACENT DOWNSTREAM PIT.
- THIS PLAN DOES NOT DEFINE BOUNDARIES ALL LOT DIMENSIONS AREAS AND EASEMENT POSITIONS PROPOSED ONLY.

SOIL EROSION & SEDIMENT CONTROL

- ERECT & MAINTAIN SEDIMENT CONTROL WHERE SHOWN
- STRIP & STOCKPILE TOPSOIL TO DUMPS CLEAR OF CUT & FILL BATTERS
- TOPSOIL STOCK PILE HEIGHTS TO BE KEPT LOW TO AVOID PARTICLE MOVEMENT BY THE WIND - SUGGEST 1.2M HIGH
- PLACE SEDIMENT CONTROL MEASURES ON EXISTING DOWN STREAM CULVERTS OR PITS.
- REPLACE TOPSOIL ON ALL DISTURBED AREAS TO MIN. 100mm DEPTH
- PRIMARY REVEGETATION - SOW DISTURBED AREAS WITH APPROVED SEED/FERTILISER MIXTURE THAT HAS SPECIES SUITABLE FOR THE BURKE ENVIRONMENT.
- GUIDE CONSTRUCTION SITE RUN OFF TO PROPOSED DAMS
- SEDIMENT AND EROSION CONTROL TO BE MAINTAINED BY THE DEVELOPER UNTIL SUITABLE NATURAL COVER IS ESTABLISHED.
- SECONDARY REVEGETATION - AT THE COMPLETION OF CONSTRUCTION, AREAS DISTURBED OUTSIDE THE OPERATING PLANT SITE, SHOULD BE SEEDS WITH NATIVE PLANTS & SHRUBS.
- FURTHER SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED BY CONTRACTOR DURING AND AFTER CONSTRUCTION TO ENSURE COMPLIANCE WITH THE RELEVANT LEGISLATION AND COUNCIL REQUIREMENTS.

DUST MANAGEMENT

- GROUND DISTURBANCE IS TO BE MINIMIZED AND ALL SITE VEHICLE MOVEMENTS ARE TO BE MAINTAINED WITHIN THE DESIGNATED HAULAGE TRACKS & OR ROADS.
- ALL SITE TRAFFIC SPEEDS ARE TO BE KEPT TO A MINIMUM. MAXIMUM SPEED 10 K/HR.
- ALL TOPSOIL, ROAD BASES AND AGGREGATE ETC STOCK PILES TO BE KEPT LOW (1.2m) TO AVOID PARTICLE MOVEMENT BY THE WIND.
- WATER TANKERS ARE TO BE KEPT ON SITE FOR THE DURATION OF WORKS AND UNTIL SEEDS ARE CONSIDERED STABILIZED OR WHEN GROUND COVER ACHIEVES 70% PLANT DENSITY TO AT LEAST 100mm IN HEIGHT.
- THE CONTRACTOR WILL ENSURE THAT HAUL ROADS AND ALL DENUDED AREAS ARE WATERED AS REQUIRED. & A TRACKIFIER SUCH AS CROSOSOL MAY BE REQUIRED.
- IN THE EVENT THAT DUST BECOMES A NUISANCE COUNCIL MAY INSTRUCT THE CONTRACTOR TO CEASE ALL WORK UNTIL SATISFACTORY CONTROL HAS BEEN REACHED.

QUANTITIES

TOPSOIL COLLECTED [200MM DEEP]	
STOCK YARD BUILDING	5800 M2
PROCESS BUILDING	4600
ROADS + HARDSTANDS + CAR PARK	23000
SKIN SHED + HAY SHED + TREATMENT PLANT ROOM	330
DAMS - SITE RUN OFF	3600
PROCESSING DAMS	
MANURE DISPOSAL	2900
MANURE COMPOST	1300
PONDS 1-4	15940
TOTAL	57470 M2
VOLUME = AREA X 0.2 DEEP	11494 M3
CUT	
SITE RUN OFF PONDS	7130 M3
MANURE DISPOSAL	4040
PONDS 1 - 4	26250
MANURE COMPOST	780
SKIN SHED + HAY SHED + TREATMENT PLANT ROOM	330
TOTAL	38530 M3
FILL	
HARD STANDS + ROADS (23000 X 0.5)	11500 M3
MANURE DISPOSAL	1870
PONDS 1 - 4	4650
MANURE COMPOST	980
SKIN SHED + HAY SHED + TREATMENT PLANT ROOM	330
TOTAL	19310 M3
PAVEMENT BASE 300MM THICK	
HARDSTANDS + ROADS [23000m2 X 0.3]	6900 M3
TOPSOIL REQUIRED	
LANDSCAPED AREAS 7920 +2615+ 4560 +1840 +500	17435 M2
VOLUME = AREA X 0.6	10460 M3
1:10 BATTER ON ROADS + HARD STANDS	1780 M
VOLUME = L X 1.012	1800 M3
HOLDING HARDS	3600 M3
TOTAL TOPSOIL	16860 M3

PIPES

- 300MM CLASS 3 RCP - 174M
- 375MM CLASS 3 RCP - 68M
- 450MM CLASS 3 RCP - 51M
- Precast 900MM SQUARE CONCRETE PITS AND GRATES - 4
- Precast Concrete Headwalls - 8
- Pipe bedding material -Crusher dust or sand- 102m3

Down stream scour protection [each 5m x 2m = 10m2] 6 outlets = 60m2

NOTE

BACK FILL MATERIAL REQUIRED UNDER PROCESS & STOCK YARD BUILDINGS NOT CONSIDERED

REVISIONS NO. DESCRIPTION DATE	A	DISCLAIMER ADDED	HP	27.06.19	CLIENT: M J SARAN ADDRESS: C/O CAPRA DEVELOPMENTS PTY LTD P.O. Box 663, Orange, NSW 2800 Telephone: (02) 6362 1211 Facsimile: (02) 6361 2847 email: admin@capra.com.au	SURVEYOR D.C. DATE 27.06.2019 CHECKED BY AND DRAWN BY ENGINEER AND DESIGNER REGISTERED SURVEYOR CROSBY APPROVED SCALE AS SHOWN	PROPOSED BOURKE SMALL STOCK ABATTOIR MITCHELL HIGHWAY - BOURKE ENGINEERING DESIGN PLANS CONSTRUCTION NOTES & QUANTITIES	DO NOT SCALE BOX No. 21156 DWG No. 21156EN SHEET 14 OF 15 A1
	C	VOLUME SCHEDULE ADDED	DC	15.12.18				
	D		DC	24.1.17				

Appendix C - Blue Book Letter from Carpenter, Collins, Craig.



CARPENTER, COLLINS & CRAIG

CONSULTING SURVEYORS AND CIVIL DESIGN
SUBDIVISION DESIGN AND MANAGEMENT

ABN 28 291 738 790

11 McNamara Street

P.O. Box 685 Orange NSW 2800

Telephone (02) 6363 1111 Facsimile (02) 6361 3647 Email: admin@cccsurvey.com.au

TIM COLLINS PTY LTD

ACN 069 932 912

ABN 32 069 932 912

DAVID CRAIG PTY LTD

ACN 119 577 249

ABN 94 584 377 479

Tim Collins BSurv MIS Aust

David Craig BSurv MIS Aust,
BET Civil

OUR REF: 21156 TC:TC

YOUR REF:

DATE: 23 Feb, 2017

CAPRA Developments Pty Ltd
PO BOX 16
BLAYNEY NSW 2799

Attention: Mr. George Tanos

Dear Sir,

**RE: BOURKE SMALL STOCK ABATTOIR
MITCHELL HIGHWAY NORTH BOURKE 2840
CIVIL ENGINEERING CERTIFICATE**

We confirm that we have designed sediment and erosion control component of the civil drawings in consultation with the publication by Landcom known as the Blue Book..

It is our opinion the main sections from the publication relevant to this particular site are;

- 1.6 General Principals of Soil and Water Management.
- 2.2 Erosion and Sediment Control Plans
- 3.2 Site Constraints
- 4.1 to 4.4 Management of Soils
- 7.1-7.2 Site Stabilisation

This certification shall not be construed as relieving any other party of their responsibilities, liabilities or contractual obligations.

We trust that this information meets your requirements. Please do not hesitate to contact the undersigned should you require any further information.

Yours faithfully

CARPENTER COLLINS & CRAIG

David Craig

Registered Surveyor & Civil Engineer

Appendix D – Letters from Bourke Shire Council confirming consultation

The Council of The Shire of Bourke

29 Mitchell St, Bourke, N.S.W. 2840
P.O. Box 21, Bourke, N.S.W. 2840
Telephone (02) 6830 8000 Fax (02) 6872 3030
Email: bourkeshire@bourke.nsw.gov.au
Web: <http://www.bourke.nsw.gov.au>



Our Ref: RE-17XHD-03.17

3rd March 2017

James Price
CAPRA Developments
Suite 7
Level 2
113 Byng Street
Orange NSW 2800

Dear James,

Re: *Revised Construction Environment Management Plan - Small Stock Abattoir Bourke SSD7268*

Council has received a copy of the Revised Construction Environment Management Plan (CEMP), that has been prepared in respect of SSD-7268 being the construction of a Small Stock Abattoir in Bourke.

Council will reference the document if required.

Council also understands that the CEMP may be subject to amendment throughout the project with any such changes to be approved by the Secretary of the Department of Planning. Council would appreciate being made aware of those changes if and when they occur.

Should you have any queries please contact the undersigned

Yours Sincerely



Ross Earl
General Manager

Appendix E – Site clearance letter from EMM



23 January 2017

Jim Saran
Saran (NSW) Pty Ltd
Unit 3/9 Gateway Crescent
Crescent Orange NSW 2800

Ground Floor, Suite 01, 20 Chandos Street
St Leonards, NSW, 2065
PO Box 21
St Leonards, NSW, 1590
T +61 2 9493 9500
F +61 2 9493 9599
E info@emmconsulting.com.au
www.emmconsulting.com.au

Re: Bourke Small Stock Abattoir - completion of salvage collection and submissions of AHIMS site forms

Dear Jim,

In accordance with Condition C42 of Development Consent SSD 7268 for the Bourke Small Stock Abattoir, EMM archaeologists have completed a pre-clearance artefact collection survey of the construction footprint and irrigation area with registered Aboriginal party (RAP) involvement. At the conclusion of the collection survey, the artefacts were delivered to RAP representative Phil Sullivan in Bourke for storage in a temporary keeping place within the National Parks and Wildlife Services' facilities within Gundabooka National Park, situated approximately 50 km south-west of Bourke.

Subsequently, in accordance with Condition C41 of the Development Consent, AHIMS site cards were completed for 15 newly recorded sites and AHIMS site impact recording forms were completed for ten previously recorded sites and the 15 newly recorded sites. These forms were submitted to AHIMS on 23 January 2017.

The archaeological salvage report is pending and will be lodged with the Department of Planning and Environment and the Office of Environment and Heritage once completed.

As such, there are no further Aboriginal heritage conditions required before the commencement of construction.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ryan Desic', written over a light blue horizontal line.

Ryan Desic | Senior Archaeologist

T 02 9493 9500 | D 02 9493 9541 | M 0411 329 712 | F 02 9493 9599 | E rdesic@emmconsulting.com.au

Appendix F - Construction Traffic Management Plan