Cherrie Civil Engineering Pty Ltd

Construction Environmental Management Plan for Civil Works

813-913 Wallgrove Road, Horsley Park

26 October 2022

62654/144,067

JBS&G Australia Pty Ltd

www.jbsg.com.au

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Abbreviations

Term	Definition
ACHA	Aboriginal Heritage Assessment
ACHMP	Aboriginal Cultural Heritage Management Plan
bgs	below ground surface
CEMP	Construction Environmental Management Plan
CBD	Central Business District
CAQMP	Construction Air Quality Management Plan
CNMP	Construction Noise Management Plan
CTMP	Construction Traffic Management Plan
Council	Fairfield Council
DCAC	Darug Custodians Aboriginal Corporation
DP	Deposited Plan
DPE	Department of Planning and Environment
EMP	Environmental Management Plan
EPA	Environment Protection Authority
JBS&G	JBS&G Australia Pty Ltd
RAP	Registered Aboriginal Party
RFS	Rural Fire Service
SSD	State Significant Development
PPE	Personal Protective Equipment
VRMP	Vegetation and Riparian Management Plan

1. Introduction

JBS&G Australia Pty Ltd (JBS&G) was engaged by Cherrie Civil Engineering Pty Ltd (Cherrie) on behalf of Gazcorp Pty Ltd to prepare a Construction Environmental Management Plan (CEMP) for the proposed development of 813-913 Wallgrove Road, Horsley Park NSW 2175 (the site). The site is legally identified as Lot 5 in Deposited Plan (DP) 24094 and has an area of approximately 52.14 ha. The site location and layout are shown on **Figures 1** and **2**, respectively.

The site is situated approximately 30 km west of the Sydney CBD and approximately 2 km west of Prospect Reservoir.

The site is located on the western side of Wallgrove Road (westerly adjacent to the M7 motorway).

The site is predominately cleared land with some pockets of vegetation. The land is generally clear of structures with only a small dwelling located midway along the northern boundary and two dams (in the south-east and north-west corners).

The proposed development comprises of building 14 industrial units over 16 development lots. Stage 1 of the works will include:

- the clearing of vegetation
- construction of internal roads and utilities (water, sewer, telecommunications, and gas) and stormwater management devices
- construction of 45,225 m^2 warehouse and distribution building which includes 3,006 m^2 of office space (only part of the overall buildings planned for the site)
- intersection works in Wallgrove Road

These works were approved in 2019 within the development consent SSD 5248.

This development consent includes the following condition:

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

D2. The Applicant must prepare a Construction Environmental Management Plan (CEMP) in accordance with the requirements of Condition D1 and to the satisfaction of the Planning Secretary and in consultation with TfNSW and Council.

D3. As part of the CEMP required under Condition D2 of this consent, the Applicant must include the following:

(a) Construction Traffic Management Plan (CTMP) (see Condition C31);

(b) Erosion and Sediment Control Plan (see Condition C45);

(c) Construction Air Quality Management Plan (CAQMP) (see Condition C56);

(d) Construction Noise Management Plan (CNMP) (see Condition C60);

(e) Aboriginal Cultural Heritage Management Plan (ACHMP) (see Condition C70);

(f) Vegetation and Riparian Management Plan (VRMP) (see Condition C77);

(g) Unexpected Contamination Procedure (see Condition C93); and

(h) Community Consultation and Complaints Handling.

D4. The Applicant must:

(a) not commence construction of the Development until the CEMP is approved by the Planning Secretary; and

(b) carry out the construction of the Development in accordance with the CEMP approved by the Planning Secretary and as revised and approved by the Planning Secretary from time to time.

As such a Construction Environmental Management Plan (CEMP) is required to be prepared.

The CEMP provides procedures to control environmental aspects to ensure that soil, water and air emissions meet published regulatory guidelines. The CEMP also provides procedures to minimise impacts other potential environmental impacts at the site related to:

- Traffic during construction
- Noise
- Existing site vegetation associated with the riparian corridors (western side of site)
- Aboriginal heritage
- Potential for soil contamination

This CEMP relates to the civil aspects of the Stage 1 works described above. This includes the removal of vegetation, bulk earthmoving works as well as installation of utilities including water, sewer and stormwater.

1.1 Purpose

This CEMP has been designed to ensure, via the implementation of several ongoing monitoring and management measures pertaining to the proposed construction works on the site, that the risk to human populations in proximity of the site and the surrounding environment is acceptable. The construction works are being undertaken redevelop the site for a future industrial use.

This CEMP is not intended to replace or supersede other Environmental Management Plans and / or Health and Safety Plans provided for the site. Instead, the CEMP is to be considered as a supplement to these documents and particularly targeted to deal with issues unique to the construction works.

1.2 Responsibilities

The development of the site will be undertaken under the direction of the Principal Contractor (Cherrie). The Principal Contractor will be responsible for the implementation of the majority of procedures provided to the CEMP. It is noted that where the specific procedures are technical or complex in nature then the Principal Contractor may appoint appropriately qualified agents (i.e. environmental consultants) to fulfil the requirements of the procedure, or advise the appropriate implementation of the procedure.

A formal list of procedures is provided to the CEMP based on an assessment of potential environmental emissions from anticipated site works required for the construction works. Specific responsibilities are nominated for the implementation of these procedures.

1.3 Environmental Procedures

This CEMP includes several procedures to manage environmental aspects and mitigate potential impacts (as detailed in Section 7 and summarised in **Table 1.1**), as follows:

- EMP01 Dust and Airborne Hazard Control
- EMP02 Flora (including Riparian)
- EMP03 Heritage and Archaeological Impacts
- EMP04 Noise and Vibration Control
- EMP05 Traffic
- EMP06 Sediment and Erosion Control
- EMP07 Stockpiling
- EMP08 Unexpected Finds – Contamination
- EMP09 Emergency Response

- EMP10 Training
- EMP11 Non-Compliances with EMP
- EMP12 Incident Reporting
- EMP13 Record Keeping
- EMP14 CEMP Review

Table 1.1: Review of Potential Environmental Impacts

Activity	Environmental Considerations	Management Procedure
Removal of vegetation	Noise generation Dust generation Sediment migration	EMP01 Dust and Airborne Hazard Control EMP02 Flora (including Riparian) EMP03 Heritage and Archaeological Impacts EMP04 Noise and Vibration Control EMP05 Traffic EMP06 Sediment and Erosion Control EMP07 Stockpiling EMP08 Unexpected Finds – Contamination EMP09 Emergency Response EMP12 Incident Reporting
Earthmoving works	Noise generation Dust generation Sediment migration	EMP01 Dust and Airborne Hazard Control EMP02 Flora (including Riparian) EMP03 Heritage and Archaeological Impacts EMP04 Noise and Vibration Control EMP05 Traffic EMP06 Sediment and Erosion Control EMP07 Stockpiling EMP08 Unexpected Finds – Contamination EMP09 Emergency Response EMP12 Incident Reporting
Off-Site Disposal of Soils / Wastes	Noise generation Dust generation Sediment migration Traffic impacts	EMP01 Dust and Airborne Hazard Control EMP04 Noise and Vibration Control EMP05 Traffic EMP06 Sediment and Erosion Control EMP07 Stockpiling EMP09 Emergency Response EMP12 Incident Reporting
Storage of soils (i.e. during earthmoving works)	Noise generation Dust generation Sediment migration	EMP01 Dust and Airborne Hazard Control EMP02 Flora (including Riparian) EMP03 Heritage and Archaeological Impacts EMP04 Noise and Vibration Control EMP05 Traffic EMP06 Sediment and Erosion Control EMP07 Stockpiling EMP08 Unexpected Finds – Contamination EMP09 Emergency Response EMP12 Incident Reporting
Construction (i.e. landscaping and footpaths)	Noise generation Dust generation Traffic impacts	EMP01 Dust and Airborne Hazard Control EMP04 Noise and Vibration Control EMP05 Traffic EMP09 Emergency Response EMP12 Incident Reporting
Delivery of construction materials / removal of wastes	Noise generation Traffic impacts	EMP04 Noise and Vibration Control EMP05 Traffic

2. Summary of Site Condition

2.1 Site Details

The site is located in Wallgrove Road, Horsley Park NSW as shown on **Figure 1** and the proposed site layout is shown on **Figure 2**. The site details are summarised in **Table 2.1** and described further in **Section 2.2**.

Table 2.1: Summary of Site Details

Lot/DP (at time of writing)	Lot 5 in DP 24094 within the development consent (Lot 100 in DP1268340 in NSW planning portal)
Address	813 – 913 Wallgrove Road, Horsley Park NSW 2175
Local Government Authority	Fairfield City Council
MGA Coordinates (GDA 94 - MGA56) of approximate centre of the site	E: 300845 N: 6255355
Site Zoning	IN1 – General Industrial C2 - Environmental Conservation
Previous Use	Agricultural
Proposed Use	Commercial/industrial land use
Site Area	Approximately 52 ha

2.2 Site Condition

The site is located on the western side of Wallgrove Road (westerly adjacent to the M7 motorway).

The site is predominately cleared land with some pockets of vegetation. The land is generally clear of structures with only a small dwelling located midway along the northern boundary and two agricultural dams (in the south-east and north-west corners).

The surrounding area is described as follows:

- North: Prospect Reservoir pipeline immediately adjacent and then industrial units (including logistics and automotive repairers)
- East: Wallgrove Road and M7 motor way immediately adjacent and then Austral Bricks manufacturing plant and former Veolia Environmental waste tip (now closed).
- South: several residences and small farms.
- West: Austral Bricks quarry and manufacturing plant.

3. Application, Enforcement and Regulatory Requirements

3.1 Application of CEMP

This CEMP applies to civils phase of the development (i.e. earthmoving works) included in the Stage 1 approval. The construction of buildings and roads will need to be covered within a separate CEMP.

The requirements of the CEMP are intended to apply to Cherrie Civil Engineering's activities within the subject site which require/involve:

- Demolition and removal of existing structures and vegetation;
- Earthmoving works including installation of utilities and stormwater;
- Construction of roads, guttering and drainage within the internal areas of the site; and
- Transport of construction materials, wastes etc to and from the site.

For the purposes of this CEMP, the activities during the civils phase will be referred to as construction.

3.2 Enforcement of CEMP

The CEMP will be enforced and implemented by Cherrie as Principal Contractor for the civils works. Any other development works including construction of buildings or road will be covered under a separate CEMP by others.

3.3 Regulatory Requirements

Future activities on site will be required to be completed in accordance with several sections of environmental and occupational health and safety legislation and associated regulations. The primary Acts, Regulations and Guidelines are listed below with a brief summary of their applicability. Please note that this list is not intended to be a comprehensive listing of acts and regulations. The site owner and contractors are required to satisfy themselves that all applicable legislation is adhered to, relevant permits and licences have been obtained, and their conditions satisfied.

Regulations that are to be considered as part of this CEMP include the following:

Work Health and Safety Act 2011

The overarching Act for NSW setting law relating to employee health and safety and employer responsibilities.

Work Health and Safety Regulation 2017

Sets Regulations and details the duties for employers to achieve required employee health and safety performance.

Protection of the Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) is the key piece of environment protection legislation administered by the EPA.

***Waste Avoidance and Resource Recovery Act 2001* (*WARR Act*)**

The *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) replaced the *Waste Minimisation and Management Act 1995* and controls waste generation and waste reduction.

Waste Classification Guidelines (EPA 2014)

All wastes generated and proposed to be disposed off-site shall be assessed, classified and managed in accordance with this guideline. Where wastes require immobilisation prior to off-site disposal an immobilisation approval shall be sought in accordance with Part 2 of this guideline.

***Contaminated Land Management Act 1997* (*CLM Act*)**

The *Contaminated Lands Management Act 1997* (CLM Act) controls the assessment of contamination and requirement of remediation of soils and groundwater. The act also contains guidance for the determination of whether a site presents a significant risk of harm and allows for accreditation of Site Auditors.

State Environmental Planning Policy (SEPP) 55 'Remediation of Land'

SEPP 55 relates to the decision-making process in undertaking remediation of land and making planning decisions in regard to contaminated and potentially contaminated land.

National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) (NEPC 2013)

National guidelines for the assessment of land contamination endorsed by NSW EPA. These guidelines include recommended soil and groundwater assessment criteria for a variety of land uses.

4. General Site Management

Key general site management requirements are outlined below.

4.1 Hours of Operation

As per the development consent (condition 57), all construction activities (including earthworks) will be carried out between the following times:

- Monday to Friday: 7:00am and 6:00pm
- Saturdays: 8:00am and 1:00pm
- Sundays: No work

Works outside of these hours are only permitted in the following circumstances:

- Works that are inaudible at the nearest sensitive receivers;
- For the delivery of materials required outside of these hours by the NSW Police Force or other authorities for safety reasons; or,
- Where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.

4.2 Site Induction

All personnel and contractors will complete a site induction upon arrival at the site, and prior to the commencement of any work tasks. The site induction will be facilitated by the Site Manager or delegate and include details of:

- General site and project orientation;
- Work tasks to be performed by the inductees and any special requirements or approvals;
- Key environmental risks and worker health and safety risks associated with the work tasks;
- Driver code of conduct to minimise vehicular traffic and noise impacts;
- Specific requirements and responsibilities under the Development Conditions of Consent; and
- Worker obligations and reporting requirements for with environmental incidents or near-misses.

This induction will ensure that the principles of the CEMP will be considered by all site personnel. A less detailed induction may be completed by site visitors who will not be undertaking work tasks.

5. Implementation and Operation of the Plan

The roles and responsibilities, training and communication mechanisms that underpin implementation of this plan are detailed in the following sections.

5.1 Role and Responsibilities

Effective management of environmental aspects and promoting environmental awareness during civils works of the Project is key to responsible project management. The roles and responsibilities of key personnel during the civils phase of the Project are outlined below in **Table 5.1**.

All personnel involved in civils phase of the Project are required to work in accordance with the CEMP.

Table 5.1 Roles and responsibility during civils phase

Role	Responsibilities
Executive Management	• Overarching responsibility for the Project • Licence holders and therefore hold overall responsibility for environmental management of the Project
Senior Project Engineer	• Directly responsible for the environmental management of the Project • Reports directly to Cherrie Executive Management • Managing the environmental approval process • Directly responsible for the overseeing and fulfilling the commitments contained in the CEMP • Coordinating management reviews, external and internal audits and reporting progress against environmental targets and objectives • Conducting incident investigations and performing environmental risk assessments • Providing general environmental support • Environmental incident investigation and reporting • Reports to the Site Manager
Site Manager	• Oversees CEMP implementation • Monitors the activities of contractors and assesses compliance with the CEMP • Coordinates Cherries environmental supervision of clear-and-grade and other key activities • Coordinates the monitoring and audit program • Represents the Project on environmental matters with stakeholders • Reports to Cherries Senior Project Manager
Subcontractors and other site workers	• Implement environmental controls as directed • Report any environmental issues • Reports to the Site Manager

5.2 Induction and Training

5.2.1 Training and competencies

Cherrie will develop, implement, monitor and review a documented process that controls and governs all aspects of the management of training and competency in accordance with all laws and good industry practice.

The process must apply to all contractors and sub-contractors engaged to work on the Project to ensure all workers are qualified, trained, certified, adequately experienced and appropriately licenced to undertake all tasks for their individual roles. The training and competencies component will address as a minimum:

- the operation of vehicles and mobile plant

- the operation of equipment and plant
- all activities that require Australian High-Risk Licences
- all specialist certification (e.g. working at heights, rescue activities, work in confined spaces or any other applicable activity).

Job-specific training relevant to roles will also be undertaken and records maintained of induction and attendees.

5.2.2 Site specific inductions

All Project personnel will undertake site specific induction training prior to the commencement of any construction works for the Project. Site specific inductions will address:

- background of the Project
- approval conditions and an overview of the CEMP requirements
- legislative requirements of the company and individuals
- key personnel and roles
- emergency response procedures including fire season education and associated risks and restrictions
- environmental issues within the Project area and relevant management plans and procedures including for cultural heritage
- community issues related to the Project and relevant management plans and procedures
- penalties for non-compliance with required plans and procedures
- hazard and incident reporting and management procedures
- any other site-specific issues.

The provision for delivering site specific induction will be the responsibility of the Subcontractor, with records of attendees maintained.

5.3 Emergency Preparedness and Response

Cherries Emergency Response Procedure provides the overarching framework for emergency response during operation.

An Emergency Response Management Plan specific to the Project will be developed prior to construction. The Emergency Response Management Plan will detail as a minimum:

- appropriate procedures to follow if an emergency occur during Project construction, such as fire, lightning strikes, chemical spill, explosion, flooding, wildlife injury, damage to existing infrastructure and personnel injury
- incident and corrective action records, which detail the procedures to record, document and follow up on environmental incidents and key personal that are to be involved
- bushfire and fire prevention, including the development and implementation of a Fire Hazard Management Plan for the Project in consultation with the Rural Fire Service (RFS) and other relevant stakeholders.

5.4 Environmental Inspections and Monitoring

A compliance monitoring inspection program must implemented during construction works in order to monitor compliance with the terms of the project approval.

The effectiveness of environmental protection measures described in this CEMP and sub plans will be assessed on a three monthly basis by the relevant team members. During which, the following activities will be undertaken:

- Provide a surveillance tool to ensure that safeguards are being implemented;
- Identify where problems might be occurring;
- Identify where sound environmental practices are not being implemented; and
- Facilitate the identification and early resolution of problems.

Weekly environmental inspections will monitor aspects including:

- Review of relevant works approvals and permits
- Erosion and sediment controls and review of associated plans
- Drainage/groundwater protection
- Air quality, odours, dust emissions and mitigating controls
- Heritage impacts
- Noise and vibration management including approved working hours, required respites and safe working distances
- Hazardous substances and dangerous goods (including fuels and chemicals)
- Waste management, recycling and recovery

Any non-conformances identified will be highlighted discussed at regular project meetings by the Site Manager where rectification actions are discussed with all site teams.

The checklist will remain 'open' until:

- The issue has been resolved;
- A new or revised procedure has been established and implemented; or
- Training has been provided to relevant personnel/ sub-contractors.

Regular inspections to assess environmental management will be undertaken and documented as appropriate.

5.5 Reporting and Compliance

Contractors will report all environmental and safety events to the Cherrie site manager (or their representative) within one hour of the incident occurring, or if not reasonably practicable, as soon as possible.

Cherrie will report to relevant government agencies as required by approval conditions and legislation.

5.6 Review of the CEMP

The CEMP is a working document that will be reviewed and updated as required during the construction phase of the Project to ensure that it reflects current best practice environmental management.

Review of the CEMP will include a process of adaptive management, whereby the effectiveness and performance of current controls and mitigation measures are assessed and improved to ensure robust environmental performance. The review process will examine at a minimum:

- the implemented mitigation and environmental management controls
- incident reporting and procedures for preventative actions
- complaints handling procedures
- emergency response procedures for environmental incidents.

These requirements are also included within **EMP14** CEMP Review procedures in Section 7.

6. Communications and complaint management

6.1 Site Communications

Communication during site works is critical to the safety and effectiveness of the work program. Pathways of communication include:

- Communication between site personnel, including Cherrie and the subcontractors;
- Communication between the Site Manager and all site personnel via daily prestart and toolbox meetings. This communication will establish the operational and environmental conditions for the day and for the following planned day ahead (at relevant prestart and toolbox meetings). These meetings will discuss the environmental controls and restrictions on work tasks to mitigate environmental impacts and will be documented in the daily field notes for the project;
- The Site Manager will report to the Project Manager information that encompasses all parameters required for the continued compliance to the CEMP. Communication will be via telephone or email, as the circumstances require; and
- The Site Manager with the assistance of the Project Engineer will report results and data collected over the course of site work to the Project Manager. This will be communicated via telephone/email daily summaries, which will be provided to SINSW (as required).

Prior to site works, the CEMP will be updated to contain a list of key persons and relevant stakeholders affiliated with activities at the site and their relevant contact information. In the event that a significant issue develops at the site, including, but not limited to, a chemical spill, or uncontrolled release to land, water or atmosphere; an unauthorised visitor; or a significant change in project scope, authorised persons can consult the CEMP for contact information and the timelines.

All contact information will be verified and updated as necessary during the works.

6.2 Community Engagement

It is planned that the site managers number and email address will be on the gates and hoarding of the site.

A complaints register shall be maintained by Cherrie.

6.2.1 Complaints and Feedback Protocol

If a complaint or feedback is received via the number or email address, the site manager will deal directly with the Complainant to investigate and resolve the complaint.

If a complaint is received face-to-face on/near the project site by a project team member the their supervisor is to be advised who will then email the site manager. The site manager is to then add this to the complaints register and contact the complainant.

All complaints are to be actioned immediately and closed out within five business days, unless escalation is required.

7. Environmental Management Procedures

This section outlines environmental objectives and mitigation and management controls for Project construction activities. These have been developed based on the impacts and management measures identified and assessed in the EIS.

Management strategies for the following matters are addressed in this CEMP:

- Dust and Airborne Hazard Control
- Flora (including Riparian)
- Heritage and Archaeological Impacts
- Noise and Vibration Control
- Traffic
- Sediment and Erosion Control
- Stockpiling
- Unexpected Finds – Contamination
- Emergency Response
- Training
- Non-Compliances with EMP
- Incident Reporting
- Record Keeping
- CEMP Review

Key legislative considerations and measures to be implemented in order to avoid and / or minimise environmental impacts are highlighted for each matter. The mitigation and management controls represent the minimum requirements that will be adopted during the construction phase.

In addition, specific management plans have been prepared and are appended to this CEMP:

- Air Quality Management Plan (Appendix A)
- Vegetation Management Plan (Appendix B)
- Aboriginal Cultural Heritage Assessment including Management Plan (Appendix C)
- Noise and Vibration Management Plan (Appendix D).
- Traffic management Plan (Appendix E)
- Sediment and Erosion Controls (Appendix F)

Dust and Airborne Hazard Control	EMP01
Responsibility:	Cherrie Civil Engineering
Frequency:	Continuous
Objective:	To minimise dust emissions from earthworks

Procedure

All operations on site are to be conducted so that concentrations of dust satisfy those stipulated in NSW EPA published and endorsed guidelines. These guidelines include:

- *Protection of the Environment and Operations Act 1997* (NSW)
- NEPC (1998) '*National Environment Protection Measure for Ambient Air Quality*' and
- Environmental criteria provided to NSW DEC (August 2005) '*Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*'.

Dust mitigation during construction is also required to address development consent conditions C54 and 55 (Dust Minimisation) and Condition 56 (air quality).

During the Stage 1 construction works, key potential sources of dust have been from the following sources:

- Dust emissions from earthworks activities (e.g. excavation and loading of soils to trucks);
- Wind-generated dust from disturbed surfaces and stockpiles;
- Wheel-generated dust and particulate matter emissions in diesel exhaust emissions from on-site plant and equipment and construction traffic movements; and
- Particulate matter associated with exhaust emissions from increased/congested traffic emissions due to road closures or diversions.

Based on a preliminary risk assessment, site activities that are likely to cause dust are summarised as follows (highest to lowest risk):

1. Earthworks
2. Construction
3. Track out

The following controls for dust generating activities shall be implemented:

<u>Earthworks</u>

- Where excessive dust events occur (i.e. prolonged visual dust in a particular area), additional watering of dust producing activities will be undertaken or activities temporarily halted until such times that the dust source is under control.
- All reasonable steps to minimise dust generated will be undertaken during construction including:
    - Exposed surfaces and stockpile will be suppressed by regular watering or use of approved dust suppressants.
    - Land stabilisation works will be carried out in such a way on site to minimise exposed surfaces
- Stockpiles that will be in place for more than 20 days and are not actively used as well as any stockpiles that are susceptible to wind or water erosion will be suitably protected from erosion within 10 days of the establishment of each stockpile.
- Rehabilitation of disturbed surfaces will be undertaken within 20 days of final construction levels.
- Sand and other aggregates will not be allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.

This is in line with **EMP06** Sediment Control

<u>Construction</u>

- Horsley Park Bureau of Meteorology station weather forecast will be reviewed daily (i.e. wind, rain) to inform site dust management procedures for the day.
- Dust generating activities in areas close to receptors will be closely monitored and additional mitigation

applied as required to best manage potential dust emissions (dust deposit gauges to be installed – refer to below)

- Site fencing and barriers will be kept clean using wet methods.
- Delivery trucks will switch off engines whilst undertaking a delivery on-site, if idling time is likely to exceed 5 minutes.
- Vehicle speed limit restrictions are implemented on site
- Truck queuing and unnecessary trips will be minimised through logistical planning and by the identification and use of specific park up/hold areas away from the Project.
- Only cutting, grinding or sawing equipment fitted with suitable dust suppression systems, such as water sprays will be used.
- Adequate water supply will be available on the site for effective dust/particulate matter suppression/ mitigation using a combination of potable and non-potable water sources (including use of water carts).
- No waste materials, timbers or any other combustible materials will be burnt on site.

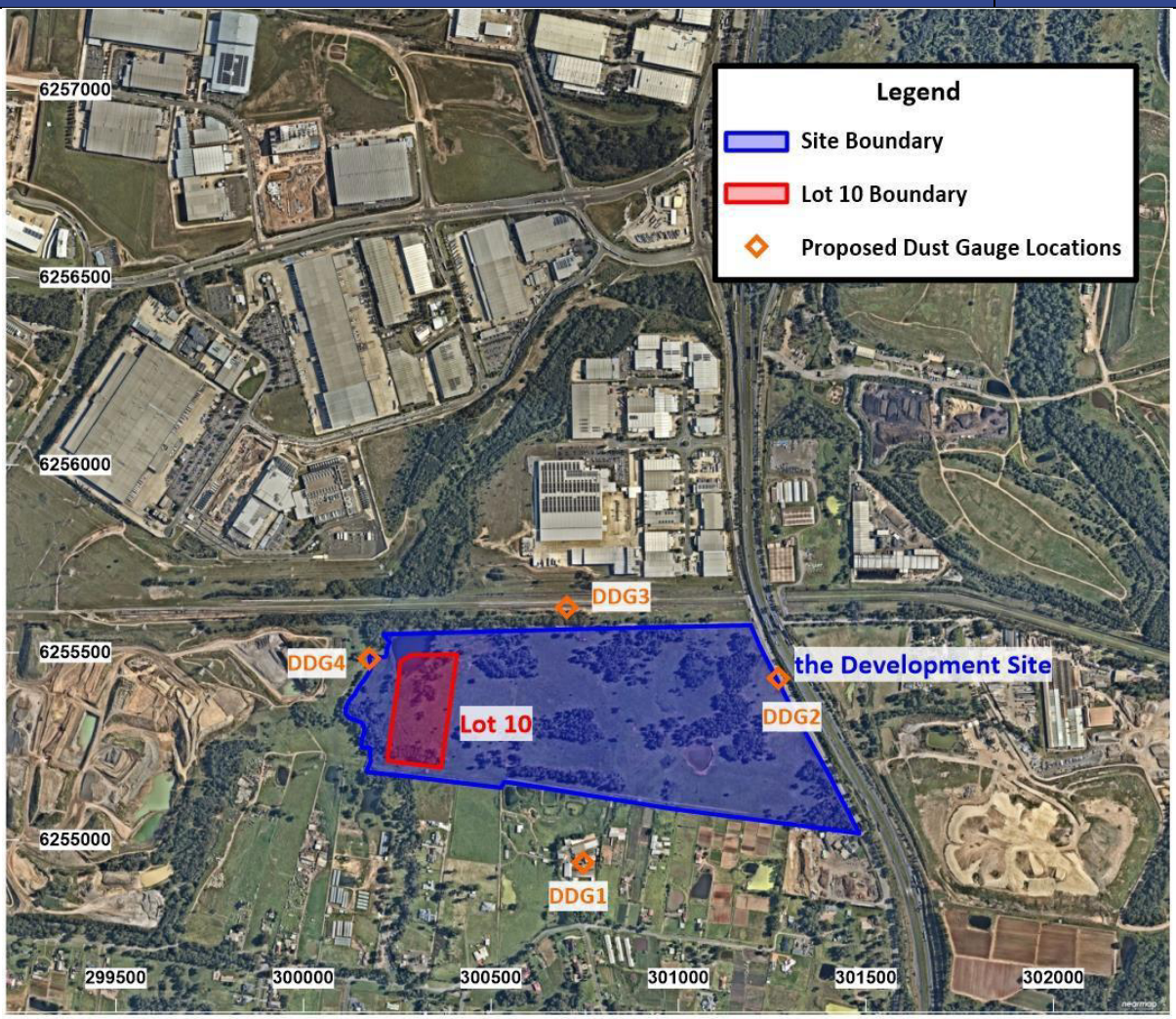
Track Out

- Trucks associated with Stage 1 constructions will not track dirt off site and onto the public road network.
- Project access roads used by delivery trucks will be kept clean.
- All on-road vehicles will comply with relevant vehicle emission standards (prescribed by the NSW RMS), where applicable, and will be maintained in good condition, in accordance with manufacturer's specifications and POEO Act.
- All trucks entering or leaving the Site will have their loads covered.
- Water-assisted road sweeper(s) will be used on an as required basis should any material be tracked out of the site.
- Record all regular inspections and maintenance undertaken of site haul routes and project related access roads in a site log book.
- A wheel washing system and/or cattle grid system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site) will be implemented.

An air quality monitoring program will be implemented via the installation of dust gauges in compliance with the AS/NZS 3580.1.1:2016 – location of these are as per Figure . These will be installed 3 months prior to the start of the works and then changed every 30 days. Results from these are to be compared to the NSW EPA criterion (annual average of 4 g/m2/month) and mitigation actions implemented to reduce dust levels when required.

Reference should also be made to the detailed Construction Air Quality Management Plan in ***Appendix A****.*

Location of Dust Guages	Fig 1-1



Flora (including Riparian)	EMP02
Responsibility:	Cherrie Civil Engineering
Frequency:	Continuous
Objective:	To eliminate potential impacts to potentially sensitive ecological receptors

Procedure

There are two streams located on the Western border of the site. These areas have riparian corridors and any disturbance or modifications need to be managed in accordance with the requirements of the Natural Resources Access Regulator (NRAR).

A Vegetation Management Plan (Narla, 2022) provides the management procedures for this area and is located in **Appendix B**.

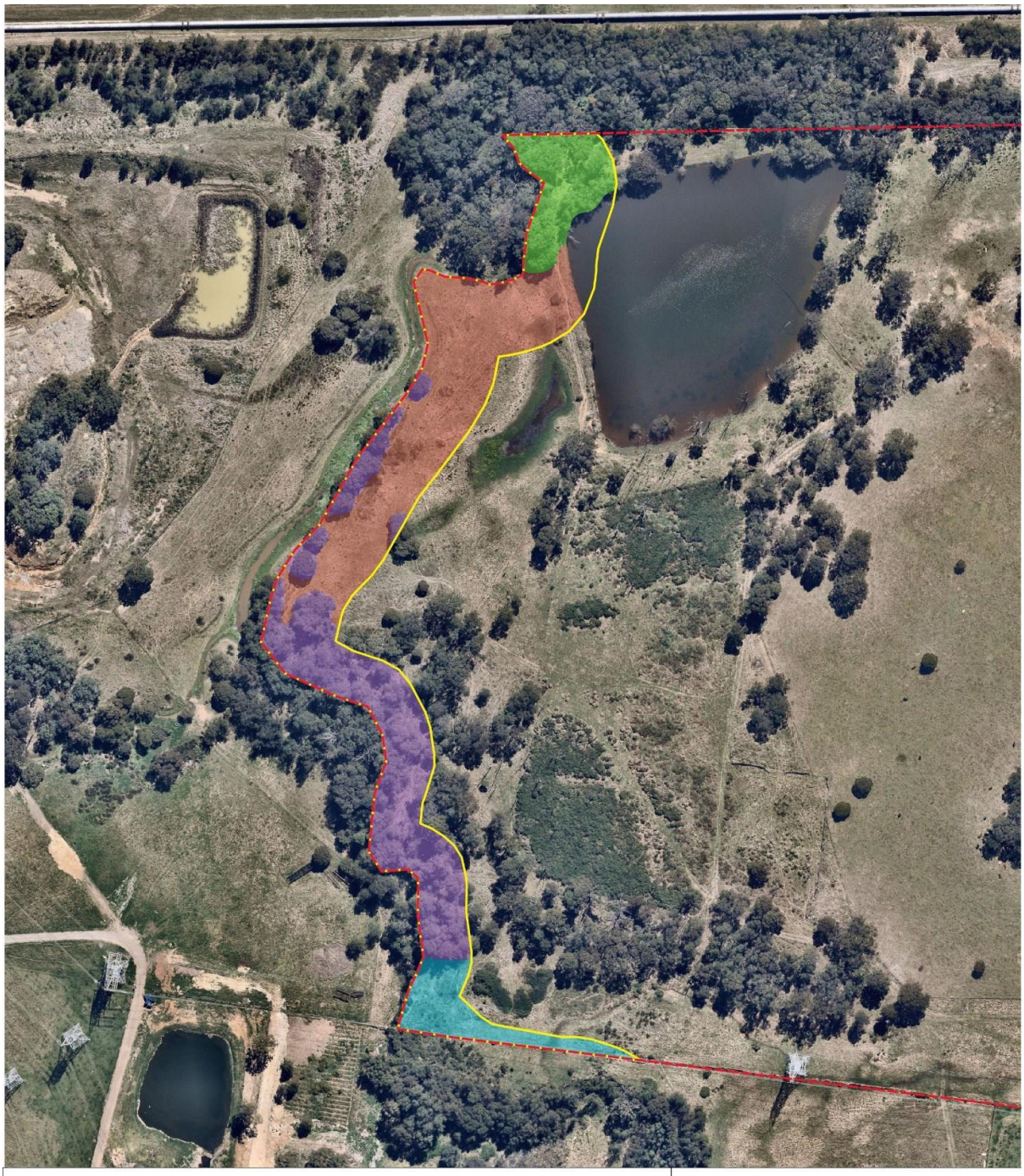
This Vegetation Management Plan identifies four management zones within the Subject Site:

- Zone 1: Alluvial Woodland - Restoration
- Zone 2: Alluvial Woodland (Casuarina dominant) - Restoration;
- Zone 3: Revegetation; and
- Zone 4: Powerline Easement Revegetation.

The location of these areas are provided in Figure 2-1 and management procedures to be implemented during the civils works are:

- Prior to commencement of any vegetation clearing, woody weed removal, or construction works within the Subject Property, a Project Ecologist must be assigned to oversee relevant works. They are to implement the requirements of the Vegetation Management Plan.
- Sediment fencing is to be installed and maintained where the riparian vegetation borders the proposed development site. This is to prevent damage to the riparian vegetation as a result of the development. Sediment fencing will be retained during construction.
- Preceding construction works, the 'Blue Book' (Landcom 2004) should be consulted to ensure any additional necessary erosion controls are adequately installed.
- High visibility exclusion fencing and signage will be installed where vegetation borders the proposed development site.
- Any old fences within the zone that are not required will be removed.

Vegetation Management Areas	Fig 2-1



Heritage and Archaeological Impacts	EMP03
Responsibility:	Cherrie Civil Engineering
Frequency:	Continuous
Objective:	To minimise harm to heritage and archaeological items

Procedure

Aboriginal Cultural Heritage Assessment (ACHA) was completed for the site (McCardle Cultural Heritage, 2020) which also includes the Aboriginal Cultural Heritage Management Plan (ACHMP) and forms **Appendix C**. The ACHA identified two highly disturbed surface sites and an area of potential archaeological sensitivity were located within the project area (as per the following figure).

Both WR1 and WR2 were low density artefact scatters that have been collected under the SSD and are no longer in the Project Area. The area of potential archaeological sensitivity was subject to test excavation and identified a background scatter of artefacts (representative of hunting and gathering activities). As these are well represented both locally and regionally and as such, protection/conservation was not required.

However, protocols for the management of unexpected cultural heritage objects during construction are required in case something of significance is present. The following heritage management protocols must be implemented for the civils works:

- Continued Aboriginal consultation with Darug Custodians Aboriginal Corporation (DCAC) who are the registered Aboriginal party for the project
- Aboriginal cultural heritage inductions for all personnel working on site before and during construction works;
- Unexpected finds protocol during the civils works (Aboriginal objects and human remains); and
- Storage of Aboriginal objects

These are defined in more detail as follows:

<u>Continued Aboriginal Consultation</u>

The following protocol will be followed with respect to consultation:

- The Land Manager will advise DCAC of the date of planned commencement of activities within the site;
- The land Manager will contact DCAC every 6 months to advise of the project's progress and all consultation will be documented;
- In the event that any possible archaeological sites are identified during works, the Land Manager will notify the Heritage Consultant and DCAC following the Unexpected Finds Procedure
- The effectiveness and value of the consultation will be periodically reviewed with DCAC. In the event there is agreement that the approach to consultation needs to change, the changed procedures would be

documented in the ACHMP.

Inductions

Aboriginal cultural heritage inductions, (referred to as an Aboriginal Cultural Education Program) forming part of the overall Induction Package, will be required for all on-site personnel and contractors involved in the construction activities on site prior to any works within the project area.

This includes installation of utilities or any other harm that may have the potential to harm Aboriginal objects. The induction program will be developed by the heritage consultant and DCAC. As a minimum this induction will include:

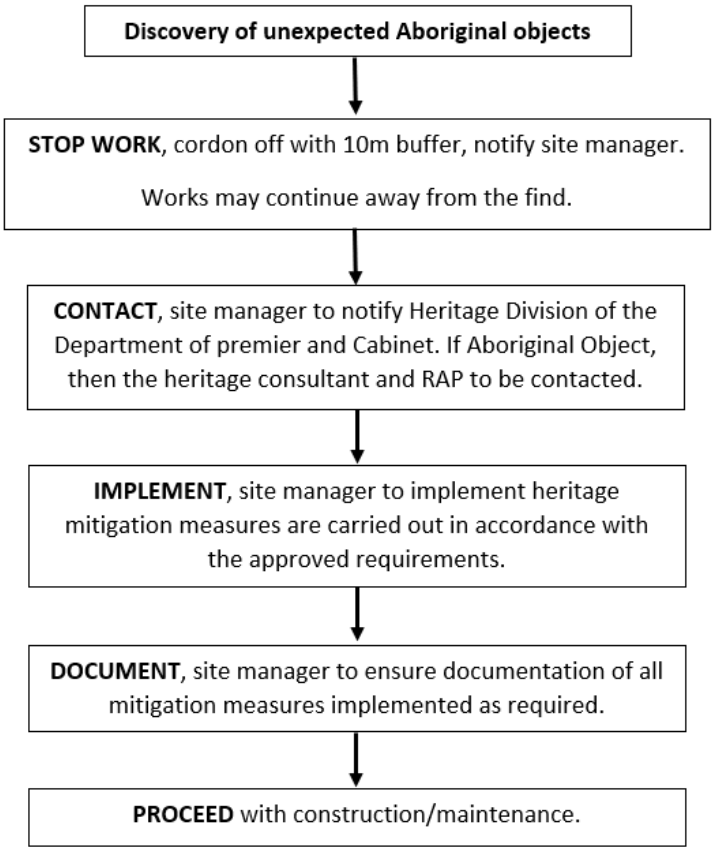
- summary of the contents of the ACHMP;
- NSW and Commonwealth legislative requirements; and
- Statement explaining what cultural significance is.

Unexpected Finds Protocol

Should unexpected Aboriginal objects be uncovered during any stage of the development (including isolated artefacts, artefact scatters, scarred trees and hearths) the following procedures are to be implemented:

- all work in the immediate vicinity of the suspected Aboriginal item, object or relic must cease immediately;
- a 10m wide buffer area around the suspected item or object must be cordoned off; and
- the Heritage Division of the Department of Premier and Cabinet, specifically DPE must be contacted immediately.
- the heritage consultant contacted who will then implement further actions

This protocol is summarised as follows:



Discover of human remains

Human skeletal remains are of the highest significance and importance to Aboriginal people, and all care, respect and dignity will be extended by all parties should human remains be uncovered.

Should any human remains or unidentifiable bone be found, work is to stop in that area immediately and an area of 15m cordoned off surrounding the remains/bone in high visibility fencing. The Land Manager is to be notified immediately.

The Land Manager will contact the heritage consultant and local NSW Police immediately, who will then contact the NSW Forensic Services who will determine further actions.

Storage of Aboriginal Objects

All aboriginal objects will be stored in an appropriate manner in a secure on-site keeping place to be agreed upon by all parties in consultation with DCAC.

Noise and Vibration Control	EMP04
Responsibility:	Cherrie Civil Engineering
Frequency:	Where activities are undertaken that may potentially cause noise or vibration Continuous
Objective:	To minimise impacts of noise and vibration on adjoining land users

Procedure

A Construction Noise and Vibration Management Plan (Acoustic Logic, 2022) has been written for the site and forms **Appendix D**. The Plans requirements are summarised as follows:

Noise

The activities on site that have the highest predicted noise levels are from concrete pumps and trucks, diesel mobile crane, excavator with bucket attachment and semi-trailer (all predicted to be 105dB).

The sensitive receivers include residential properties to the south and industrial workplaces to the north of the site – as shown in the following figure.

Recommendations to mitigate noise impacts to surrounding receivers are detailed as follows:

- Excavation is to be done using an excavator as much as possible with a bucket (as opposed to using hydraulic hammering).
- Stationed equipment shall be located as far as possible from residences as practicable and are to be screened by an enclosure.
- Vehicle Noise:
    - Truck movements will not commence prior to 7am.
    - Trucks must turn off their engines during idling to reduce impacts on nearby residential receivers (unless truck ignition needs to remain on during concrete pumping).
    - Avoid careless dropping of construction materials into empty trucks.
- Equipment shall be well maintained.

It is understood that hand tools would only be typically used sporadically. In the event they are used the following controls will be implemented:

- In the event of a complaint, the use of hand-held jackhammers, grinders, and electric saws will be screened from surrounding receiver locations with localised acoustic barriers such as an Eco Barrier or plywood hoarding fixed to temporary fencing.
- Time Control: Limit hammering, saw cutting and grinding activities to between 8am to 12pm and 2pm to 5pm Monday to Friday to provide respite to surrounding residents.

Additional task specific mitigation measures should be considered to mitigate noise – in particular if there are complaints.

Vibration

Proposed activities that have the potential to produce significant ground vibration include:

- Excavation Work; and
- Construction Work.

In the event that complaints are made from neighbouring properties regarding vibration impacts from the subject site, vibration monitors will be installed at the property boundaries of the neighbouring properties nearest to the subject site to monitor vibration levels.

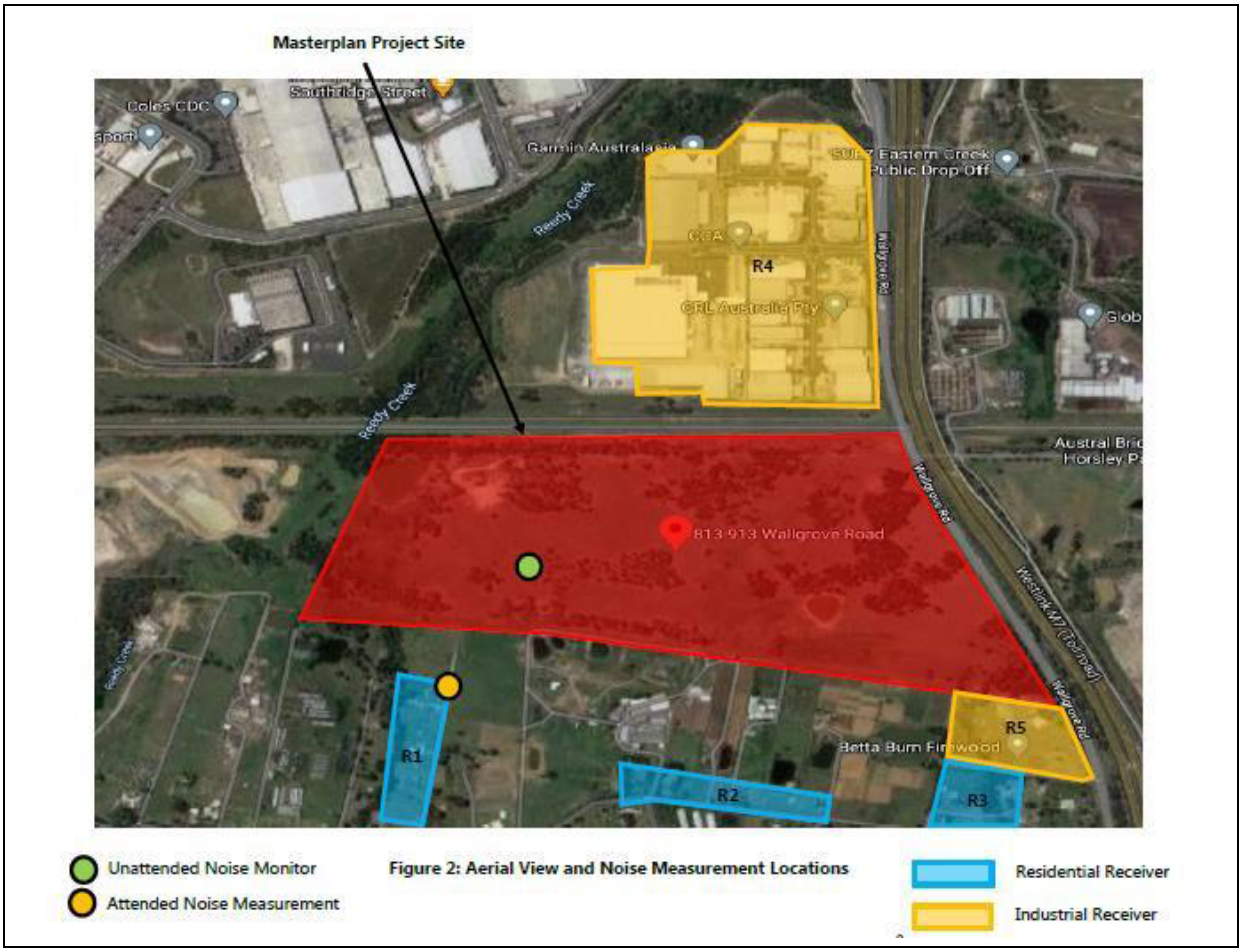


Figure 2: Aerial View and Noise Measurement Locations

Traffic		EMP05
Responsibility:	Cherrie Civil Engineering	
Frequency:	Heavy vehicle movements as generated by site works	
Objective:	To minimise impacts on local road network	

Procedure

The Traffic Management Plan (TMP) is provided in **Appendix E** which provides details of traffic staging, historical crash data, traffic risks and mitigation measures associated with the Momentum Industrial Estate Early Works.

The TMP incorporates the following strategies manage traffic during the work activities to ensure the safe and efficient movement of traffic around the work area:

- Ensuring delays are minimised as much as possible.
- Ensuring all road users are managed including motorists, pedestrians, cyclists, vulnerable road- users and people using public transport.
- Ensuring work activities are carried out sequentially to minimize adverse impacts.
- Ensuring appropriate controls are in place to provide a safe construction site for all workers.
- Provision will be made for works personnel to enter the work area in a safe manner in accordance with safety procedures.
- All entry and exit movements to and from traffic streams will be in accordance with the requirements of safe working practices.
- Site-specific Traffic Guidance Schemes (TGSs) have been developed that identify the traffic control measures to be implemented.

The TMP requires the following to be implemented for construction vehicles:

Any construction vehicles required to move around the construction site on a regular basis and throughout the works and will not be permitted to queue or park within the surrounding streets or work area unless permitted.

The arrival of trucks will be staggered to prevent the possibility of queuing of trucks at any time (also refer to note from TfNSW below). During mobilisation and de-mobilisation trucks will be able to queue in staged lane closures.

Dedicated construction vehicle routes will be developed with the objective of providing the shortest and safest distance to/from the work site. Truck movements to and from site shall be restricted to these designated routes and movements to ensure minimal impact on local streets within the vicinity of the site.

Access points and procedures shall be identified and clearly communicated to all drivers and suppliers prior to arriving to site. Information on the approved access routes and locations for all construction vehicles shall be provided through onsite toolbox talks, pre-start meetings and project inductions prior to work commencing

All work vehicles shall:

- Enter and leave site in a forward direction using an approved vehicle management plan (VMP).
- Decelerate slowly and signal their intention by indicator to leave the traffic stream.
- Activate the vehicles rotating beacon on approach to and departure from work site.
- Wait until there is a gap in traffic before leaving the construction site or until given clearance by traffic controllers to exit the work area.
- Radio ahead to advise of approach to ensure work site space is available.
- Not obstruct any pedestrian crossings or footpaths
- Not obstruct trafficable lanes without an approved ROL

As part of the overall assessment of the area construction vehicles will only be permitted to access areas including the proposed site compounds by left in and left out only, in a forward motion only.

This TMP has been accepted by Transport for NSW (TfNSW). In addition to the requirements within the TMP, TfNSW have also noted that:

- No changes will be needed to be made to the capacity of the function of Wallgrove Road (lane widths, lengths, speed limits etc) other than the creation of a gate to get to the internal works.
- Heavy vehicles shall be limited to no more than 10 per hour and will need to be co-ordinated to primarily come to site between 10am and 3pm
- Any requirements for temporary SZAs, lane closures or stop-slow must have an approved ROL.

Sediment and Erosion Control		EMP06
Responsibility:	Cherrie Civil Engineering	
Frequency:	Disturbance of soils or storage of exposed soils	
Objective:	To control potential sediment generation and migration	

Procedure

A Sediment and Erosion Plan has been produced for the site (Orion Consulting, 2022) which provides design and procedures of sediment control devices – this Plan forms **Appendix F**. This includes the following main aspects:

- Sediment fence around the entire site (as well as adjacent to internal roads when these have been constructed)
- Use of straw bale filters within the northern, south-eastern and south-western borders of the site
- Diversion swales on the western, south-eastern and north-eastern areas of the site to direct water into three sediment basins.
- Stabilised site access on the southern portion of the eastern boundary.
- Geotextile filters for constructed inlet drains

The Sediment and Erosion Plan requires the following requirements are to be implemented during the works:

General

- All erosion and sediment control measures, including revegetation and storage of soil and topsoil, shall be implemented to the requirements of the "Environment Protection Authority" and "Dept of Land and Water Conservation". Measures outlined in the Sediment & Erosion Control Plan must be implemented prior to and maintained during and after the construction works.
- Topsoil from all areas to be disturbed shall be stockpiled and later respread to aid revegetation in those areas.
- All drainage works shall be constructed and stabilised as early as possible during development.
- All tail-out drains shall be grassed and trapezoidal in section. Straw bales shall be placed as a sediment control device where required.
- Vehicular traffic shall be controlled during development confining access where possible to proposed or existing road alignments. Areas to be left undisturbed shall be marked off.
- Disturbance of vegetation shall be limited to fill areas, roadways and drainage lines. No lot grading shall be carried out in undisturbed areas without consultation with council's engineer.
- All disturbed areas shall be revegetated within 14 working days from the conclusion of land shaping.
- Minimise dust by watering when required.

Stockpiling

- Spoil and topsoil stockpiles shall be located away from drainage lines and areas where water may concentrate.
- If stockpiles are to be in place for longer than 14 days then they shall be stabilised by covering with a mulch, temporary vegetation, geofabric or polymer binder.
- Following construction, topsoil shall be respread to a minimum depth of 100mm on the bare soil surfaces and revegetate.
- All stockpiles to be (max) 2m high and protected with silt fence.

Sedimentation Control Devices

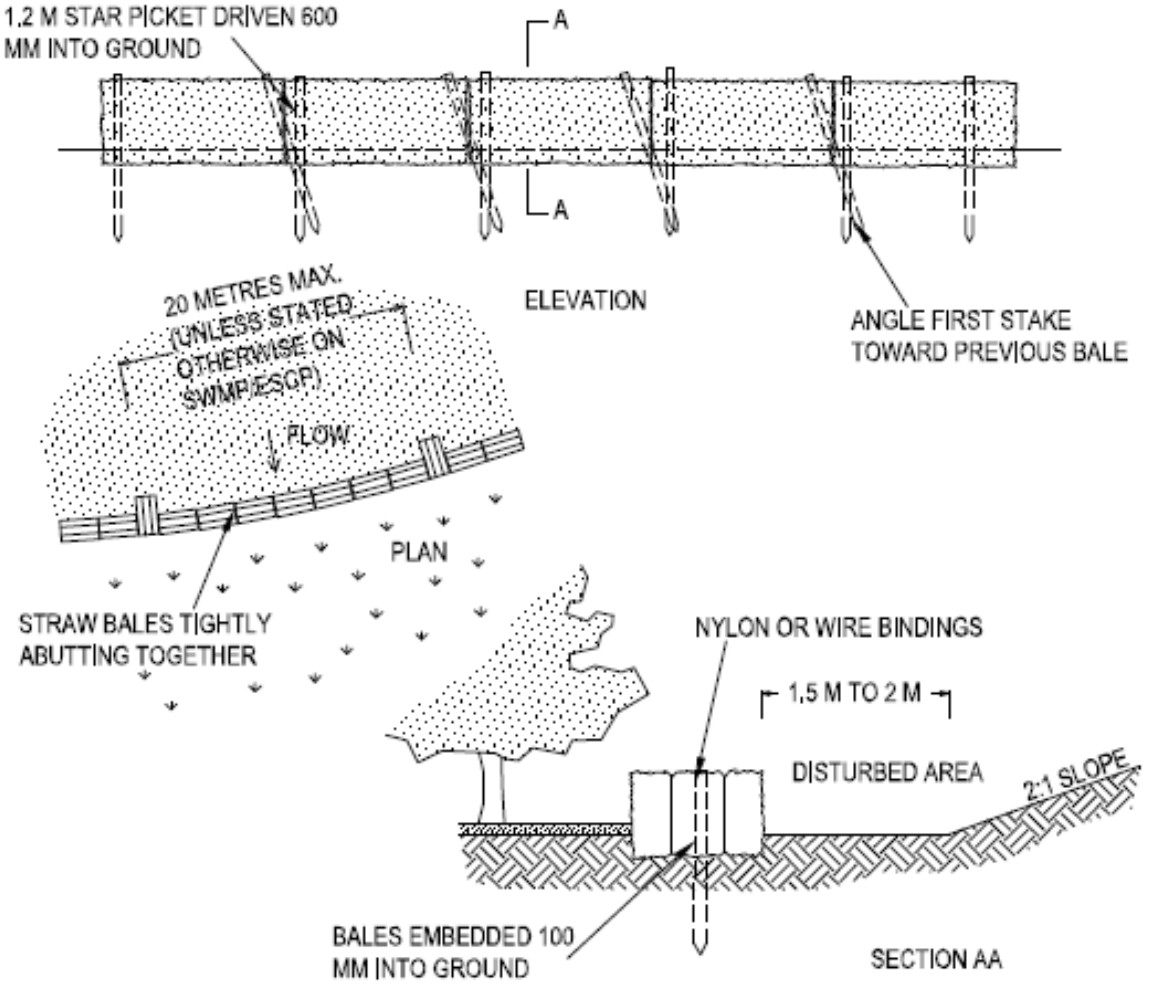
- All straw bales shall be bound with wire. Straw bales shall be placed end to end in a single row and embedded into the soil to a depth of 100mm. Each bale shall be securely anchored with two steel stakes driven 450mm into the ground and located on the bale centre line.
- Silt fences shall be constructed by stretching a filter fabric (propex or similar) between posts at a maximum of 2.5 m between centres. Fabric shall be buried 150mm along its lower edge.

Special Notes

- Location and extent of soil and water management devices is diagrammatic only and the actual requirements shall be confirmed on site.
- This plan is to be read in conjunction with the guidelines set out in “Managing Urban Stormwater Soils and Construction” -4th Edition and the accompanying road and drainage plans.
- Conformity with this plan shall in no way reduce the responsibility of the contractor to protect against water damage during the course of the contract.
- Management devices shall be maintained on a regular basis. Where cleaning is required, the sediment shall be removed to a point nominated by the engineer.
- Prior to the commencement of any earthworks, and after the road centrelines have been pegged and/or permanently marked, the site must be inspected by council’s representative and the applicant’s representative to identify and appropriately mark:-
    - The trees to be retained.
    - All trees to be left undisturbed and cordoned off.
    - No trees shall be removed without council’s clearance.
    - Management devices to remain until the end of the maintenance period.

The following figures provide the details of the sediment control devices to be used at the site.

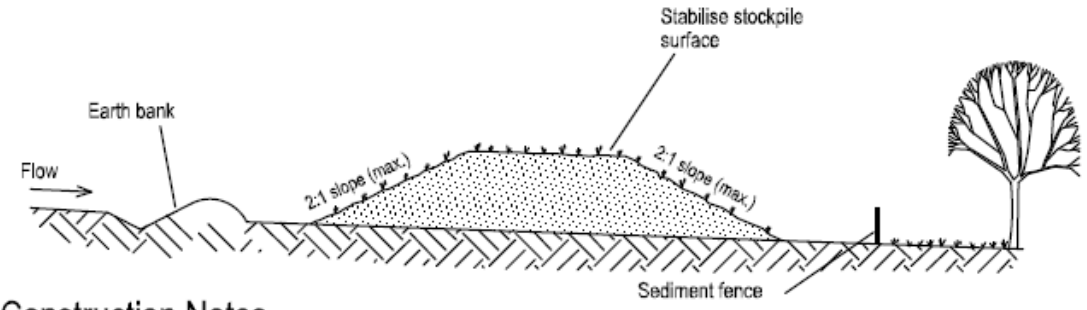
Sediment Control Devices – Straw Bale Filter	Fig 6-1



CONSTRUCTION NOTES:

1. CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE,
2. PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
3. ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
4. EMBED EACH BALE IN THE GROUND 75 mm TO 100 mm AND ANCHOR WITH TWO 1.2 METRE STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE,DRIVE THEM 600 mm INTO THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS,
5. WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1 TO 2 METRES DOWNSLOPE FROM THE TOE.
6. ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED – THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

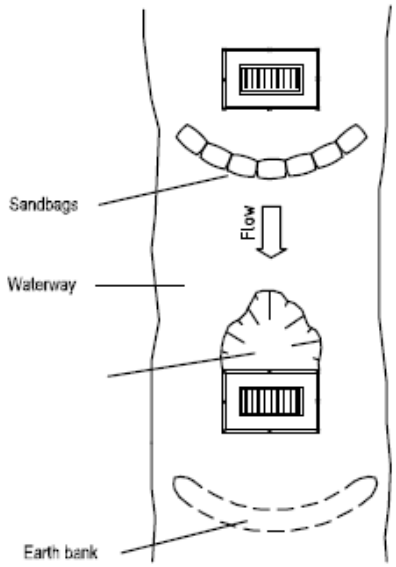
Sediment Control Devices – Stockpiles	Fig 6-2



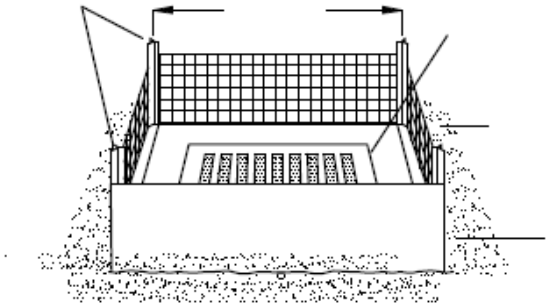
Construction Notes

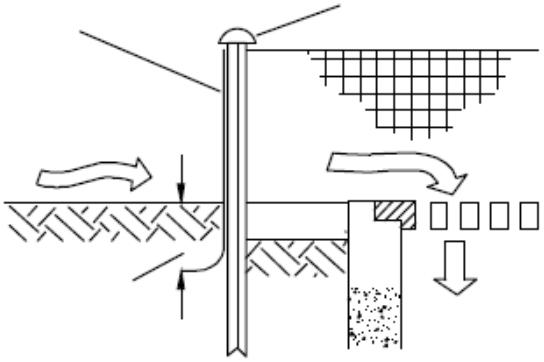
1. Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
2. Construct on the contour as low, flat, elongated mounds.
3. Where there is sufficient area, topsoil stockpiles shall be less than 2 metres in height.
4. Where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMP to reduce the C-factor to less than 0.10.
5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

Sediment Control Devices – Geotextile Inlet Filter	Fig 6-3



For drop inlets at non-sag points, sandbags, earth bank or excavation used to create artificial sag point

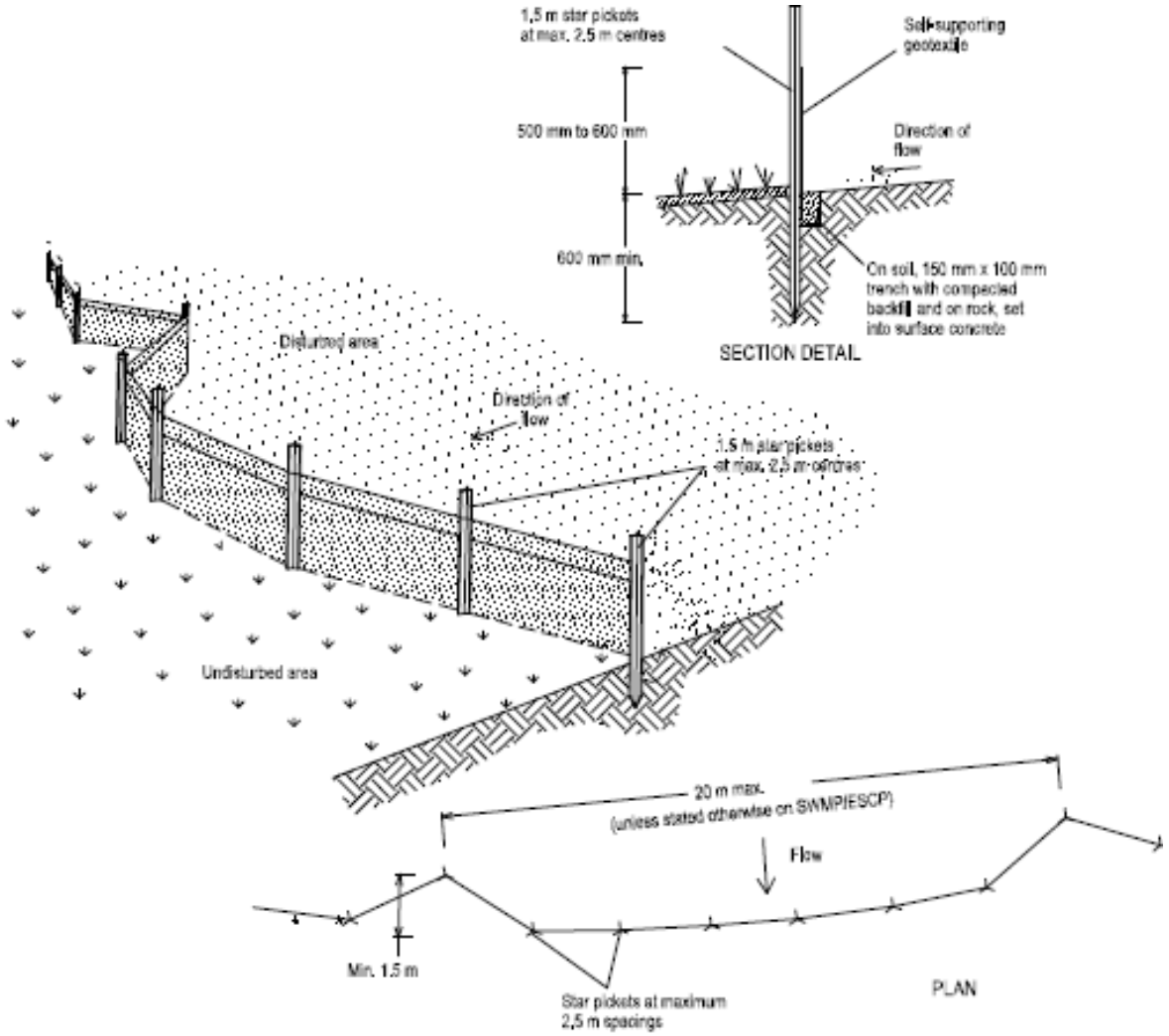




Construction Notes

1. Fabricate a sediment barrier made from geotextile or straw bales.
2. Follow Standard Drawing 6-8 for installation procedures for geofabric. Reduce the picket spacing to 1 metre centres.
3. In waterways, artificial sag points can be created with sandbags or earth banks as shown in the drawing.
4. Do not cover the inlet with geotextile unless the design is adequate to allow for all waters to bypass it.

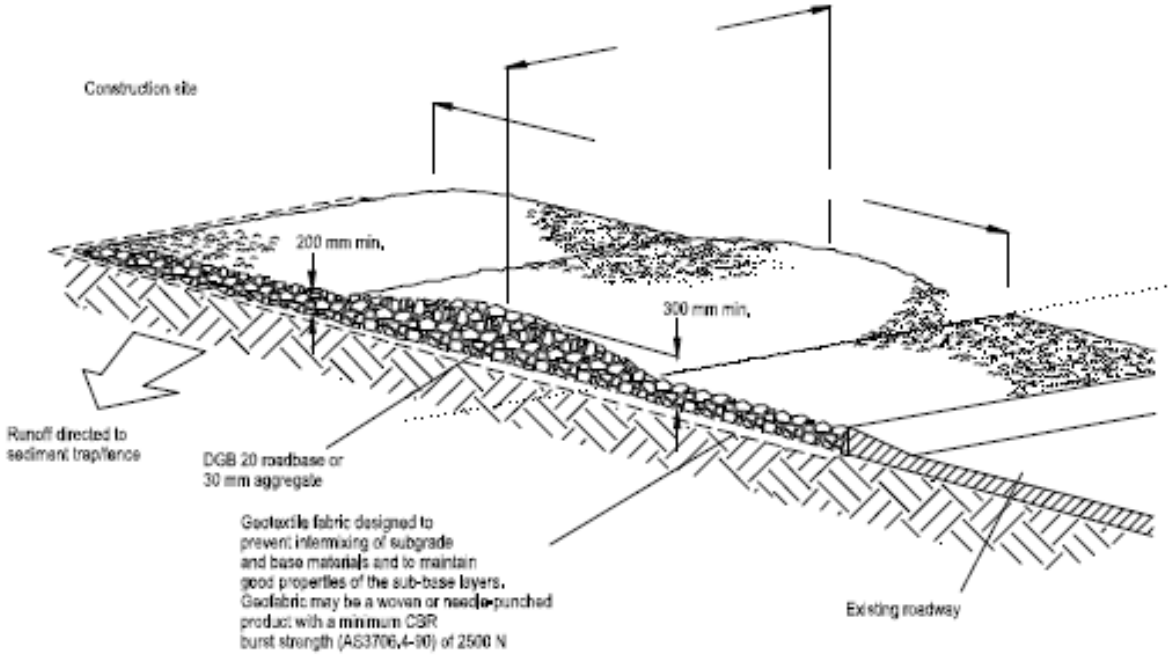
Sediment Control Devices – Sediment Fence	Fig 6-4



Construction Notes

1. Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in the drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water flow if concentrated at one point to 50 litres per second in the design storm event, usually the 10-year event.
2. Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
3. Drive 1.5 metre long star pickets into ground at 2,5 metre intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
4. Fix self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth for this purpose is not satisfactory.
5. Join sections of fabric at a support post with a 150-mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

Sediment Control Devices – Stabilised Site Access	Fig 6-5



Construction Notes

1. Strip the topsoil, level the site and compact the subgrade.
2. Cover the area with needle-punched geotextile.
3. Construct a 200 mm thick pad over the geotextile using road base or 30 mm aggregate.
4. Ensure the structure is at least 15 metres long or to building alignment and at least 3 metres wide.
5. Where a sediment fence joins onto the stabilised access, construct a hump in the stabilised access to divert water to the sediment fence

Stockpiling	EMP07
Responsibility:	Cherrie Civil Engineering
Frequency:	Continuous
Objective:	To ensure appropriate stockpile and contaminated material management (if present).

Procedure

All materials requiring excavation and stockpiling on site will be managed by Cherrie.

Unique numbers will be provided for each stockpile, the source of the stockpile, its estimated volume, material characterisation and its location onsite (via GPS) will also be recorded in a Material Tracking Plan.

The following procedures will be implemented by to manage these stockpiles including if contaminated soil is identified:

- No stockpiles of soil or other materials shall be placed on footpaths or nature strips unless prior Council approval has been obtained;
- All stockpiles of soil or other materials shall be placed away from drainage lines gutters or stormwater pits or inlets;
- All stockpiles of soil or other materials likely to generate dust or odours shall be covered;
- All stockpiles of chemically contaminated soil shall be stored in a secure area and be covered if remaining more than 24 hours; and
- If present, all stockpiles of asbestos contaminated soils shall be kept damp and covered to minimise potential fibre release, and if left for more than 24 hours, be stored in a secure area.

Appropriate sediment controls surrounding the stockpiles will be implemented in accordance with **EMP06** Sediment and Erosion Control.

Stockpiled materials will require testing prior to offsite disposal in accordance with the requirements of NSW EPA *Waste Classification Guidelines Part 1*: *Classifying Waste* (2014).

Unexpected Finds – Contamination		EMP08
Responsibility:	Cherrie Civil Engineering	
Frequency:	On identification of unanticipated site conditions	
Objective:	To ensure environmental controls to all conditions as occur with the site works	

Procedure

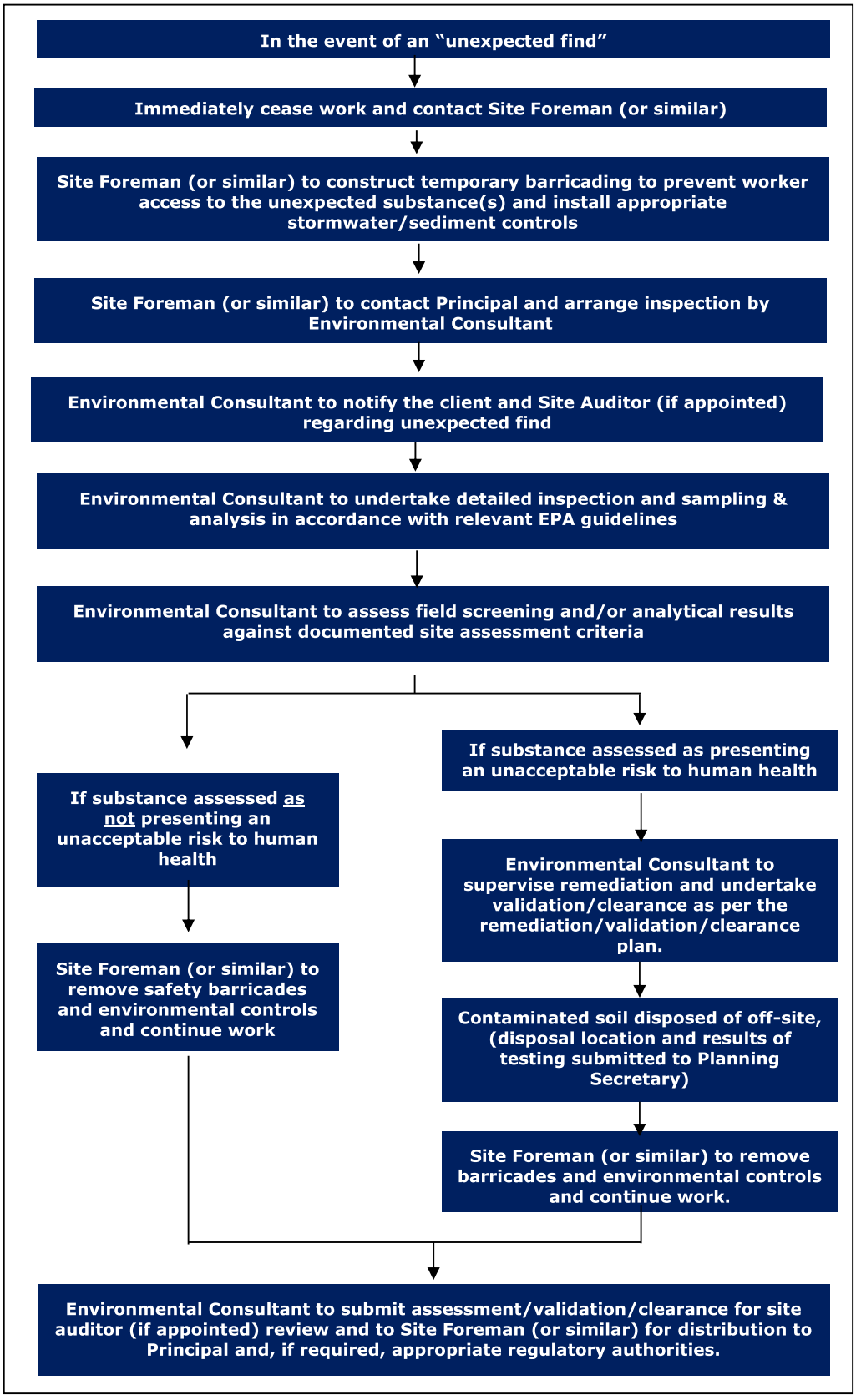
There remains the possibility that additional hazards including contaminated soil may be identified during soil movement works. Sources of these could include:

- Contaminated soil from fly tipping, previous use of low quality fill or poor demolition practices.
- Redundant services that have not previously been located or identified on “dial before you dig” searches.
- Demolition of existing structures (including buildings and utilities)

As a precautionary measure to ensure the protection of the workforce and surrounding community, should any of the abovementioned substances (or any other unexpected potentially hazardous substance) be identified during earthworks, the unexpected finds protocol (UFP) shall implemented.

This process is provided in **Figure 8-1**.

Unexpected Finds Protocol	Fig 8-1



Emergency Response		EMP09
Responsibility:	Cherrie Civil Engineering	
Frequency:	Where uncontrolled releases of potential environmental pollutants occur	
Objective:	To minimise environmental impacts of all incidents on site	

Procedure

Environmental incidents on the site which would require potential emergency response would relate to a spill of hazardous liquid or material on soils on the site, or in proximity of stormwater discharge point, or relating to a release of potential asbestos affected materials.

For spills on land, the following shall be undertaken:

- Identify source of spill and stop when / if safe to do so;
- Identify area of spill and clear area of all personnel;
- Notify Fairfield Council (within 24hrs), and environmental manager of spill;
- Construct earthen bunding using earthmoving equipment available on site to contain spill;
- Environmental manager to coordinate the pumping of liquid waste out of the containment structure and disposal to a licensed waste facility;
- If solid waste, environmental consultant coordinates the excavation and removal of the hazardous material to a secure area; and
- Assess soils in vicinity of environmental incident for contamination and conduct remediation works where contamination has occurred.

For spills in proximity of the stormwater outlets from the site, the following shall be undertaken:

- Identify source of spill and stop when / if safe to do so;
- Identify circumference of spill and clear area of all personnel (where onshore area present);
- Notify Fairfield Council and environmental manager of spill with 24 hours;
- Environmental consultant instructs containment of area of spill in water by placement of temporary absorbent beams (available on site) to create 'coffer dam' around stormwater outlet to prevent discharge of spilt material;
- Environmental manager coordinates a liquid waste tanker to be bought onto site and pump directly from water contained within the impacted area until visual evidence of spill removed;
- Conduct chemical testing of water in the stormwater system as potentially affected by the spill to validate removal of contamination; and
- Subject to validation results, remove coffer dam.

All emergency responses will be followed up with **EMP12** Incident Reporting and **EMP14** CEMP Review.

Training		EMP10
Responsibility:	Cherrie Civil Engineering	
Frequency:	As required	
Objective:	Suitably trained personnel will be available to implement the requirements of the CEMP	

Procedure

Cherrie shall ensure that any personnel engaged in the implementation of nominated tasks within the CEMP have been provided with adequate training to manage environmental aspects during site ground disturbance activities. This will include inductions and other task specific training as required.

Cherrie shall maintain records of personnel engaged in the nominated tasks and their relevant training/qualifications for the period of three years in accordance with **EMP13** Record Keeping.

Non-Compliances with EMP		EMP11
Responsibility:	Cherrie Civil Engineering	
Frequency:	As required	
Objective:	To ensure the CEMP is implemented as intended.	

Procedure

Non-compliances with the intent and procedures of the CEMP may occur during the implementation of the CEMP. Such non-compliances may include events such as failure to maintain sediment and erosion controls, accidental spills from machinery etc.

Where a non-compliance is identified by a responsible organisation, they shall inform the affected organisations of the non-compliance in writing. Where a non-compliance with the CEMP is identified by another organisation (in the activities of an alternate organisation), then they shall have the responsibility of informing the non-complying party in writing of the non-compliance. The non-complying party will be required to rectify the non-conformity as soon as possible, as per the requirements of the relevant procedure(s) where non-compliance has occurred.

The non-compliance shall be detailed as per the requirements of **EMP12** Incident Reporting to record the incident and to inform relevant follow up / review actions.

Detail of the action taken to rectify the non-compliance shall be provided to each of the affected organisations in writing. Where a non-compliance cannot be rectified, then the CEMP will require to be reviewed as per the requirements of **EMP14** CEMP Review.

Incident Reporting		EMP12
Responsibility:	Cherrie Civil Engineering	
Frequency:	As required in response to environmental incidents and/or non-compliance with EMP	
Objective:	To ensure the CEMP is implemented as intended.	
Procedure The Principal Contractor (Cherrie) shall facilitate the completion of environmental incident forms for any environmental incident that occurs on the site. The Site Manager shall review all incident forms. Fairfield Council shall be notified of any incidents requiring emergency response within 24 hours of that incident. The Cherrie Incident Investigation Report is provided as follows.		

FORM No. SA-18-FR-01

☒	WHS	☐	Environmental	☐	Near Miss	☒	Plant or Equipment Damage

1. SITE DETAILS			
Project:			
Address:			
Supervisor / Manager			
Incident Date		**Incident Report No.**	
Incident Time:			

2. DETAILS OF INJURED PERSON (If Applicable)							
☐	Lost Time Injury	☐	Medical Treatment Injury	☐	First Aid	☐	Report Only – No Treatment

Company Name:	N/A				
Name of Injured Person:	N/A				
Company Address: (For private individuals list the residential address)	_____ _____				
Tel:	N/A	**Mobile:**	N/A	**DOB:**	N/A

3. INVESTIGATION
What Happened?
Where:
Why:
Actions Taken:

IMMEDIATE CAUSES (Substandard Conditions)		
☐ Inadequate guards/ safety devices	☐ Poor housekeeping/ disorder	☐ High or Low Temperature
☐ Inadequate/ improper protective equipment	☐ Hazardous environment	☐ Fire/ explosion hazard
☐ Defective tools, equipment, or material	☐ Noise Exposure	☐ Inadequate lighting
☐ Congestion or restricted action	☐ Radiation Exposure	☒ No unsafe condition identified
☐ Inadequate warning systems	☐ Other, Explain:	
Description:		

IMMEDIATE CAUSES (Substandard Practice)		
☐ Operating Equipment Without Authority	☐ Removed safety devices	☐ Improper placement
☐ Failure to Warn	☐ Used defective equipment	☐ Improper lifting
☐ Failure to Secure	☐ Used equipment improperly	☐ Servicing operating
☐ Operating at improper speed	☐ Did not use PPE properly	☐ Horseplay
☐ Damaged safety devices	☐ Improper loading	☐ Drug/ alcohol affected
☐ No unsafe actions determined	☐ Other, Explain:	
Description:		

4. NOTIFICATIONS

Has SafeWork NSW / EPA been notified of this Injury / Incident? YES ☐ NO ☒

If Yes attach Safe Work NSW / EPA Confirmation Notification Form to this Report.

Time: _____ Date: _____ Reference: _____

Have Police / Ambulance / Fire Brigade been notified / attend this injury / incident? YES ☐ NO ☒

If Yes attach documentation to this report. Police/Ambulance/Fire Event No.: _____

5. ATTACHMENTS (Photos must be in colour)

Item No.	**Description of Attachments**	**No. Of Pages**

6. CORRECTIVE ACTION(S) REQUIRED

Corrective action #	Action	Responsible Person	Due Date	Close Out Date

EFFECTIVENESS OF ACTIONS TAKEN (To be reviewed following confirmation of no further incidents of this type following this incident – in a day, a week, a month) Project Manager Comments:

REVIEW & CLOSE OUT					
Is a Safety Alert required? YES ☐ NO ☒ Have all Corrective Actions been Closed Out and Reviewed? YES ☒ NO ☐ (if NO please provide information in comments area)					
Comments (Include root causes and effectiveness of actions):					
Name (PM):		Signature:		Date:	
Name (Director):		Signature:		Date	

Record Keeping		EMP12
Responsibility:	Cherrie Civil Engineering	
Frequency:	As required	
Objective:	Records of the implementation of the CEMP require to be retained.	

Procedure

The Site Manager (or person nominated by the site manager) shall be responsible for the maintenance of all documents relating to the implementation of the CEMP. This shall include any additional assessment undertaken, registers for the maintenance of the CEMP (site inspection forms, works approval checklists, revised plans, *etc.*).

All records shall be retained by Cherrie throughout the time of implementation of the CEMP. In the event that the role of Cherrie is transferred from one organisation to another, control of all relevant (historical and current) documents will be transferred for safe keeping to the current Responsible Person.

CEMP Review		EMP15
Responsibility:	Cherrie Civil Engineering	
Frequency:	As required in response to revisions to supporting documents or in response to non-compliances with CEMP	
Objective:	The CEMP requires review to ensure its continued appropriateness to be used on the site	

Procedure

A review of the CEMP shall be undertaken yearly by an appropriately qualified contractor/consultant in conjunction with the Site Manager in response to a non-compliance with the CEMP. This review shall consider:

- Any non-compliances with the CEMP that have been unable to be resolved;
- Where an incident is reported as occurring under the control of CEMP as per **EMP12** Incident Reporting;
- Practicalities and efficiencies of management measures and whether there are more effective ways to improve environmental compliance;
- Any changes in state or national environmental protection legislation or guidelines that impact any part of the CEMP; or
- Any proposed changes in land-use of the site or adjoining sites which may impact upon exposure pathways.

In the event that Cherrie cease to be recognised as the Principal Contractor, a complete review of the CEMP document and compliance measures will be necessary to identify suitable replacement CEMP compliance mechanisms.

In addition, where a review identifies items which are required to be modified, or added to the CEMP, then a revision of the CEMP shall be prepared by a suitably qualified person.

8. Limitations

This report has been prepared for use by the client who has commissioned the works in accordance with the project brief only, and has been based in part on information obtained from the client and other parties.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

JBS&G accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced without prior approval by the client, or amended in any way without prior approval by JBS&G, and should not be relied upon by other parties, who should make their own enquires.

Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements.

Limited sampling and laboratory analyses were undertaken as part of the investigations undertaken, as described herein. Ground conditions between sampling locations and media may vary, and this should be considered when extrapolating between sampling points. Chemical analytes are based on the information detailed in the site history. Further chemicals or categories of chemicals may exist at the site, which were not identified in the site history and which may not be expected at the site.

Changes to the subsurface conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS&G reserves the right to review the report in the context of the additional information.

Figures

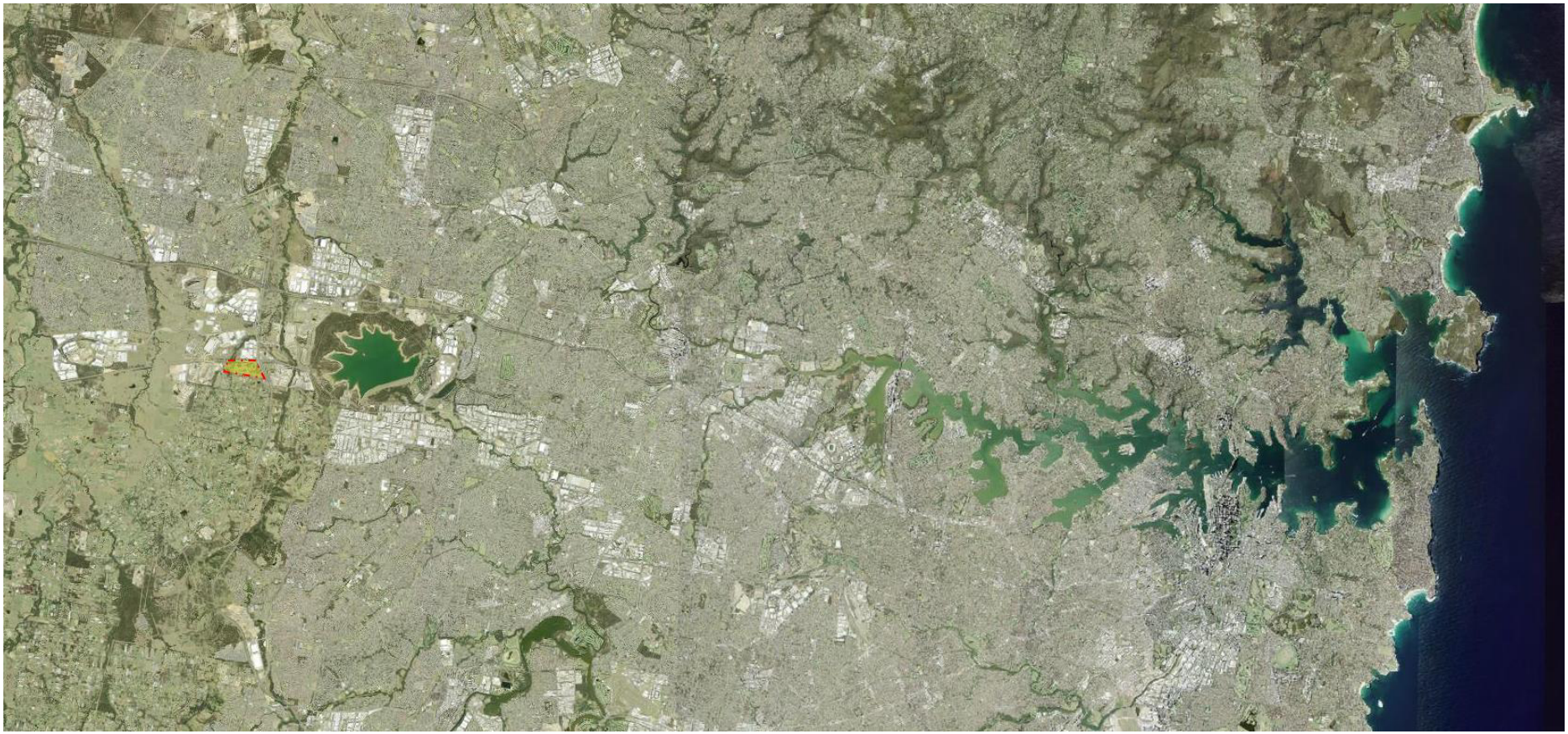


Figure 1: Site Location (marked in yellow)

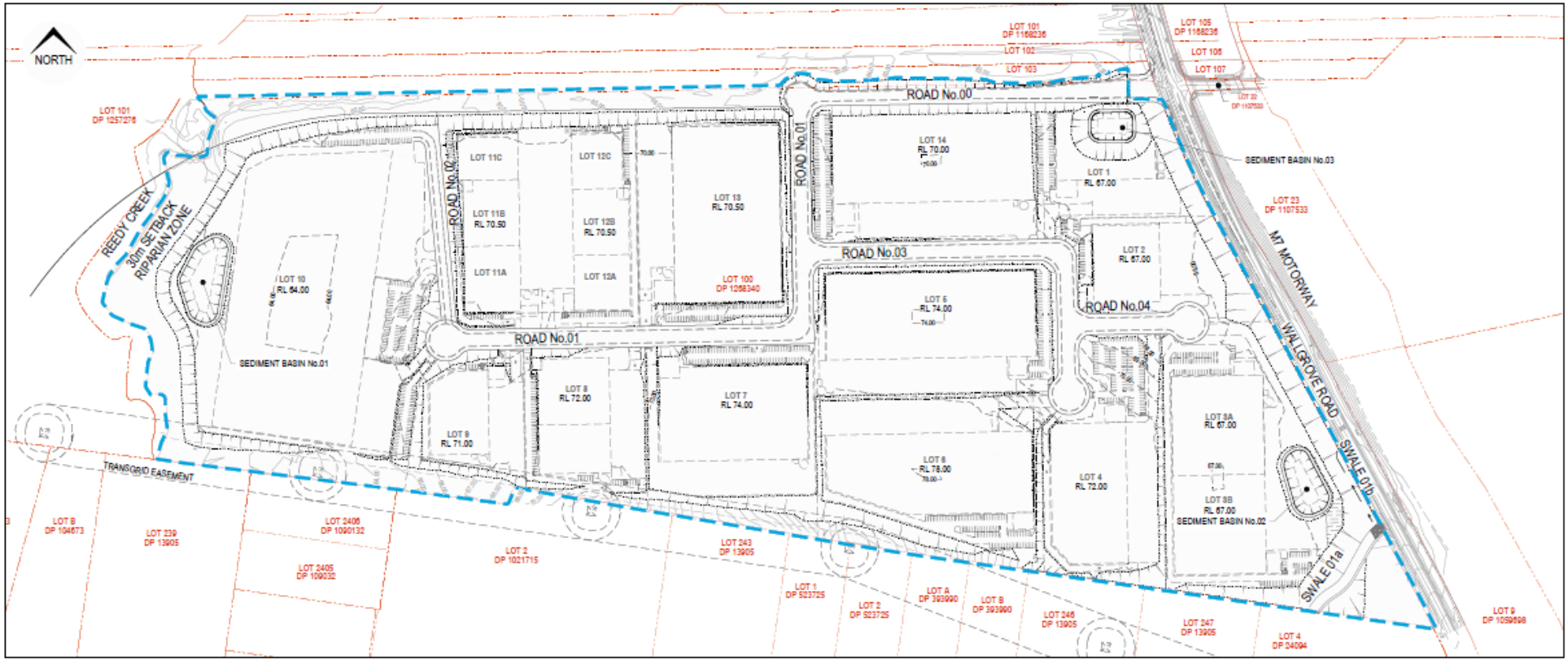


Figure 2: Proposed Site Layout