

# **OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN**



## **Smeaton Grange Recycling Facility**

**September 2019**

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## 1 INTRODUCTION

### 1.1 OVERVIEW

Benedict Recycling Pty Ltd (Benedict) is the operator of the Smeaton Grange waste recycling and transfer facility (the facility) at 52 Anderson Road, Smeaton Grange (the site).

This document is an operational environmental management plan (OEMP) for the facility required by Condition C4 of the Stage significant development (SSD) consent (Ref: SSD 7424) (the consent).

The consent was originally approved on 22 December 2017 for construction and operation of a resource recovery facility to process up to 140,000 tonnes per annum (tpa) of general solid waste (non-putrescible). A modification (MOD 1) to the consent was approved on 10 September 2018 to allow for modifications to boundary fencing and driveway access.

The facility has been developed to provide a range of services to the demolition and construction industries, including:

- receipt of waste;
- sorting of waste;
- processing of waste;
- recovery of recyclables;
- dispatch of recovered recyclables; and
- transfer and disposal of residuals.

This OEMP is the environmental management tool for the operation of the facility and includes detailed accompanying environmental management plans, as detailed in Section 1.4.

This OEMP is a live document. The management strategies and control measures detailed within this document and the accompanying environmental management plans will be reviewed and updated where necessary to reflect changes introduced by the facilities operational team, site specific outcomes, non-conformances and recommendations arising out of inspections, meetings and audits.

### 1.2 LOCATION

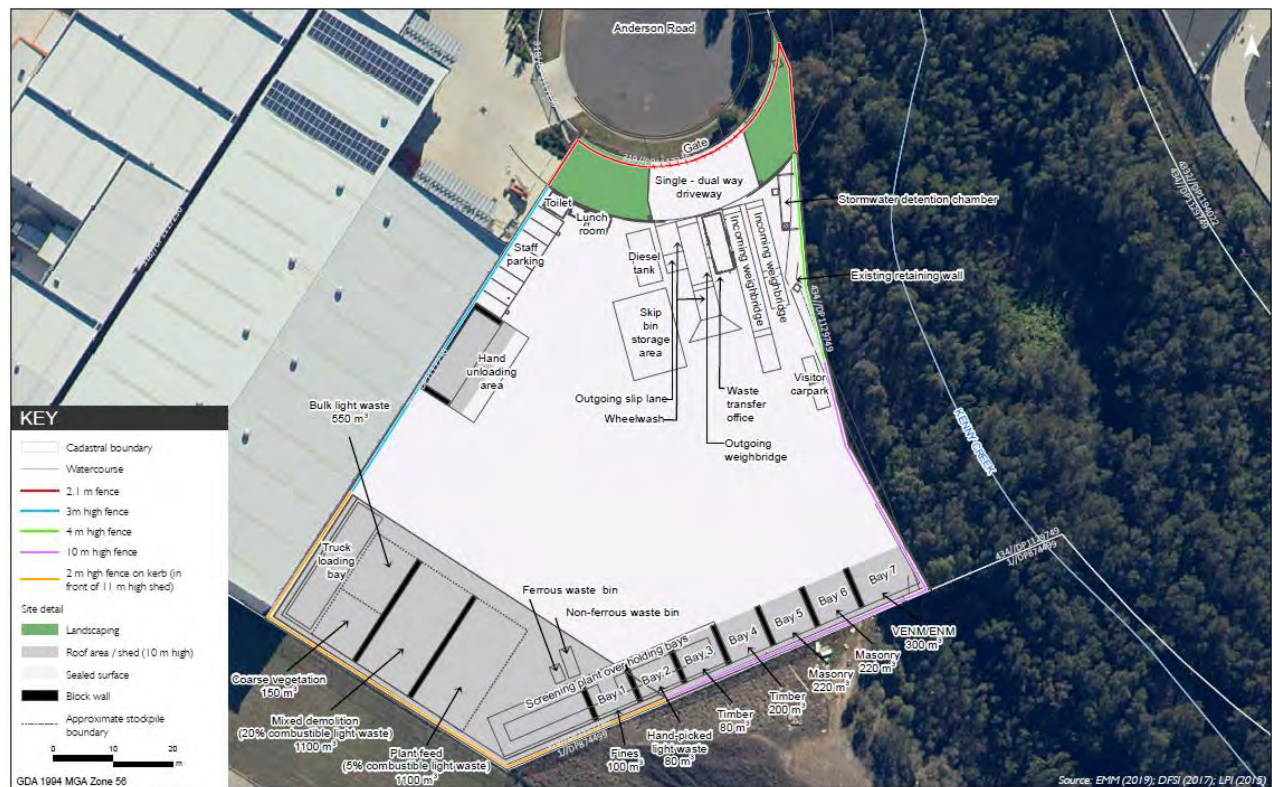
The site is in the local government area (LGA) of Camden, NSW. The legal description of the site is Lot 319 DP 1117230 and it is approximately 7,862 m<sup>2</sup> in size. The site is at the eastern edge of the Smeaton Grange industrial precinct.

A site location plan (Figure 1.1) and a site layout plan (Figure 1.2) are provided below.

Figure 1.1 – Site location plan



Figure 1.2 – Site layout plan



### 1.3 SCOPE OF THE OEMP

The purpose of this OEMP is to provide an overview of potential environmental impacts of the facility during its operational phase and describe the management and mitigation measures that will be implemented to minimise potential adverse impacts on the environment and sensitive receivers.

The operation of the facility is to be carried out in accordance with this OEMP as approved by the Secretary of the NSW Department of Planning, Industry and Environment (DPIE).

The OEMP is required by Condition C4 of the consent. The specific requirements of Condition C4 and the relevant sections where these requirements have been addressed in this OEMP are provided in Table 2.1 below.

**Table 2.1 OEMP consent requirements**

Requirement	Where addressed in OEMP
Provide the strategic framework for environmental management of the facility.	Section 1.1
Identify the statutory approvals that apply to the operation of the facility.	Chapter 2
Describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the facility.	Section 5.1
Incorporate measures to reduce energy consumption	Operational Procedures (OP1-OP12)
Describe the procedures that would be implemented to: <ul style="list-style-type: none"> <li>(i) keep the local community and relevant agencies informed about the operation and environmental performance of the facility;</li> <li>(ii) receive, handle, respond to, and record complaints;</li> <li>(iii) resolve any disputes that may arise;</li> <li>(iv) respond to any non-compliance; and</li> <li>(v) respond to emergencies.</li> </ul>	(i-iv) Section 5.3 and the Waste Management Plan (Appendix C)  (v) Section 5.5 and Emergency Management Plan (Appendix H)
Include the following environmental management plans: <ul style="list-style-type: none"> <li>(i) noise (as per Condition B9 of the consent);</li> <li>(ii) traffic (as per Condition B20 of the consent);</li> <li>(iii) air quality (as per Condition B23 of the consent); and</li> <li>(iv) water (as per condition B33 of the consent).</li> </ul>	(i) Noise and Vibration Plan (Appendix G) (ii) Traffic Management Plan (Appendix F) (iii) Air Quality Management Plan (Appendix E)  (iv) Water Management Plan (Appendix D)

### 1.4 SUPPORTING ENVIRONMENTAL MANAGEMENT PLANS

As required by Condition C4 of the consent, the following environmental management plans have been developed to accompany this OEMP:

- Operational Noise and Vibration Management Plan (Appendix G);
- Operational Traffic Management Plan (Appendix F);

- Air Quality Management Plan (Appendix E); and
- Water Management Plan (Appendix D).

In addition, the following environmental management plans have also been developed to support this OEMP:

- Waste Management Plan (Appendix C);
- Emergency Management Plan (Appendix H); and
- Landscape Management Plan (Appendix I).

In accordance with Condition C6 of the consent these environmental management plans have been prepared to include:

- a description of:
  - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
  - any relevant limits or performance measures/criteria; and
  - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the facility or any management measures;
- a description of the management measures that would be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria;
- a program to investigate and implements ways to improve the environmental performance of the facility over time;
- protocols for managing and reporting any:
  - incidents;
  - complaints;
  - non-compliances with statutory requirements; and
  - exceedances of the impact assessment criteria and/or performance criteria.
- protocols for periodic review of the plan.

## 2 STATUTORY CONSIDERATIONS

This chapter provides an overview of the environmental planning and statutory context for the operation of the facility.

### 2.1 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The NSW *Environmental Planning and Assessment Act 1979* (EP&A Act) and the NSW Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) provide the assessment and approvals framework in NSW. They are administered by the NSW Department of Planning, Industry and Environment (DPIE).

The facility was classified as State significant development (SSD) under Clause 23(3) of Schedule 1 of the NSW *State Environmental Planning Policy (State and Regional Development 2011)* (SRD SEPP) as it involves the development for the purposes of a resource recycling facility which handles more than 100,000 tonnes per annum (tpa) of waste.

The consent for the facility was approved by the (former) Planning and Assessment Commission (as delegate for the NSW Minister for Planning) on 22 December 2017.

Consent conditions relating to the operation of the facility and where they have been addressed in this OEMP are presented in the Compliance Register (Appendix A)

### 2.2 PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997 (POEO Act)

The NSW *Protection of the Environment Operations Act 1997* (POEO Act) relates to the management of pollution in NSW and is administered by the NSW Environment Protection Authority (EPA). Under Section 48 of the POEO Act, premise-based scheduled activities (as defined in Schedule 1 of the POEO Act) require an Environment Protection Licence (EPL). The operation of the facility is considered a premise based scheduled activity as a result of the following scheduled activities being carried out on site:

- handling more than 2,500 tonnes or 2,500 cubic metres of waste on site at any one time, or involves processing more than 12,000 tonnes of waste per year (Schedule 1 Clause 34 (Resource Recovery)); and
- receiving more than 12,000 tonnes of waste per annum from off site (Schedule 1 Clause 42 (Waste Storage)).

Benedict Recycling will seek to obtain an EPL prior to operation. It is noted that under Section 89K of the EP&A Act, an EPL cannot be refused if it is necessary for carrying out State significant development that is authorised by a development consent.

### 2.3 WASTE AVOIDANCE AND RESOURCE RECOVERY ACT 2001

The NSW *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) forms the basis of a framework for waste management in NSW. The WARR Act establishes a hierarchy to minimise the consumption of natural resources and final disposal of waste by encouraging waste avoidance, reuse and recycling.

The WARR Act promotes integrated waste and resource management planning, programs and service delivery on a state-wide basis to ensure that waste is managed to reduce environmental harm in



accordance with the principles of ecologically sustainable development and the objectives of the POEO Act.

The facility will deliver an alternative waste management technology solution and beneficial environmental outcome compared to land filling. In accordance with the WARR, wastes will be managed against the waste hierarchy of avoidance, resource recovery and then disposal.

## 2.4 WORK HEALTH AND SAFETY ACT

The NSW *Work Health and Safety Act 2011* (WHS Act) provides for a balanced and nationally consistent framework to secure the health and safety of workers and workplaces.

In accordance with the WHS, the operation of the facility will ensure that workers and other persons will, as is reasonably practicable, be given the highest level of protection against harm to their health, safety and welfare from hazards and risks arising from work or from specified types of substances or plant.

## 2.5 GUIDELINES

The facility design and the operating procedures documented have due regard to relevant guidelines and codes of practice, including:

- the EPA's *Waste Classification Guidelines – Part 1: Classifying Waste*;
- *Australian Standard AS1940-2004 The Storage and Handling of Flammable and Combustible Liquids*;
- the EPA's *Guidelines on Resource Recovery Orders and Resource Recovery Exemptions*; and
- the EPA's developed exemption structure *The Recovered Aggregate Order 2014*.

## 2.6 ENVIRONMENTAL APPROVALS

The relevant environmental approvals in place for the facility are summarised in Table 2.2.

**Table 2.6 Environmental approvals**

Consent	Consent Authority	Description	Date of approval
SSD 7424	Minister for Planning	State significant development consent for the construction and operation of a resource recovery facility to process up to 140,000 tonnes per annum of general solid waste (non-putrescible)	22 December 2017
SSD 7424 (MOD 1)	Minister for Planning	Modification to SSD 7424 to allow for modifications to boundary fencing and driveway access.	10 September 2018

### 3 RESOURCE RECOVERY FACILITY

Key features of the facility include:

- buildings, including site office and staff amenities;
- covered processing area;
- outdoor material sorting and storage area;
- weighbridge;
- surface water management system;
- dust management systems; and
- staff parking.

#### 3.1 OVERVIEW OF OPERATIONS

Waste will be transported by waste contractors to the site entrance located at the northern end of the site from Anderson Road. Vehicles will then proceed to a weighbridge complex to be weighed. The weighbridge complex will be fitted with CCTV, to monitor the front and rear of vehicles and their load characteristics.

Each load arriving at the facility will be inspected and classified prior to the material being deposited on site.

All waste accepted will be recorded on the facility's weighbridge system and a customer docket/receipt produced, as outlined in the Waste Management Plan (Appendix C). The information recorded will include:

- the date;
- vehicle registration number; and
- the type and weight of waste being delivered.

Incoming waste will be inspected at the weighbridge (and again after being tipped), see Section 4). Waste material that is unacceptable or specified prohibited from entering the site (see Appendix C) shall be refused entry and diverted to an appropriately licensed facility.

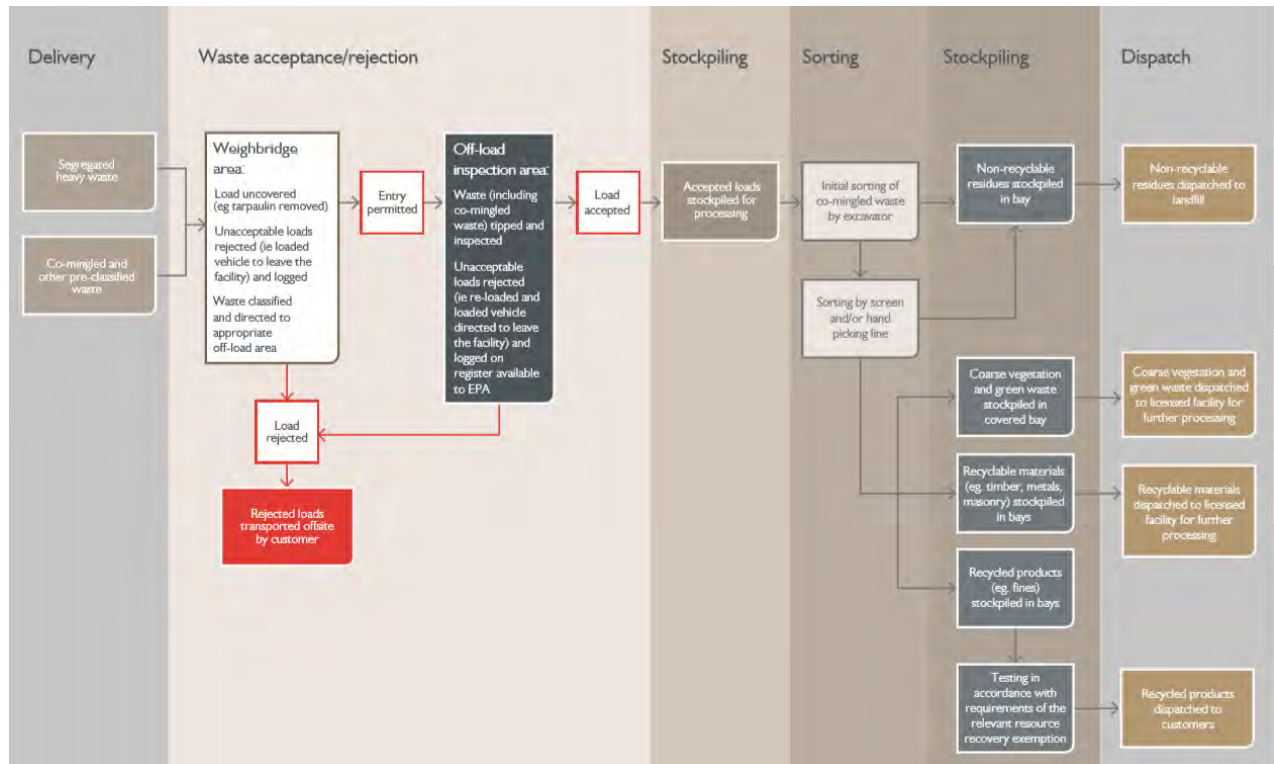
After leaving the weighbridge, each load will be directed to the appropriate storage area by the site staff. All waste will be unloaded within the designated unloading area and be stored wholly within the designated waste stockpile areas in accordance with Condition A7 of the consent. Wherever possible raw materials will be sorted at the source and directed into segregated stockpiles on-site.

Unsorted materials will be spread on the ground on-site, sorted into the various categories and formed into segregated stockpiles. The sorted waste material may be subject to processing depending on its category and presentation.

Processing on site may include screening and picking. The processed material will be stockpiled into its various processed categories for return to the market as product(s).

A flowchart outlining the key steps in the waste recycling and transfer process is provided in Figure 3.1 below.

**Figure 3.1 – Waste flowchart**



By recycling wastes instead of sending them to landfill, this facility conserves the energy that would be typically used to extract and transport natural resources from distant sources.

### 3.2 BUILDING STRUCTURES

The following permanent structures are located on the site:

- main processing and storage shed at south-western wall;
- storage bays with awnings at south-eastern wall; and
- hand-unloading bay with awning at western wall.

The following temporary structures are located on the site:

- site and weighbridge office at site entrance;
- staff amenities (toilets and break room) at north-western corner;
- weighbridges at site entrance; and
- 30,000 self-bunded diesel storage and dispensing tank at northern fence.



### 3.3 SEALED/HARDSTAND MATERIAL SORTING AND STORAGE AREA

The entire site, apart from the 10 m vegetated buffer at Anderson Road, is sealed with hardstand. The floors of the sheds, bays and mounting areas for temporary structures are sealed with concrete for the handling, storage, loading and sorting of segregated waste materials and associated traffic movements.

### 3.4 SURFACE WATER SYSTEMS

The average annual runoff volume from the site under existing conditions has been estimated at approximately 1,847 m<sup>3</sup>.

Average annual rainfall for the site is about 769 mm. The estimated volume of runoff available following the development of the site is about 3,697 m<sup>3</sup> per year. Water used for dust suppression will reduce runoff from the site by 76% (or about 1,410 m<sup>3</sup> of runoff per year) and as such the average annual runoff volume from the site will be approximately 2,287m<sup>3</sup>.

Runoff water quality will be controlled across the site in accordance with industry best practice guidelines, the 'Blue Book'.

The site is graded so that all surface water flows overland to the onsite detention/sedimentation basin/control device in the north eastern corner. The sediment control basin will be utilised to control the quality of runoff water leaving the site. Discharge from the site will be controlled by the outlet chamber and pipeline in the sedimentation device.

As the site is completely bounded by a concrete kerb, water can only exit the site and enter the industrial precinct's stormwater scheme via the onsite detention/sedimentation basin/control device. The onsite detention/sedimentation basin/control device caters for flows up to the 10 year average return interval (ARI) storm, as required by relevant council guidelines. Flows from more severe storms will flow overland to the onsite detention/sedimentation basin/control device. Water stored in the onsite detention/sedimentation basin/control device will be reused onsite for dust suppression purposes.

### 3.5 OPERATING TIMES

Consent Condition B1 provides the hours of operation for the facility as detailed in Table 3.1 below.

**Table 3.1 Hours of work**

Activity	Day	Time
Accept waste deliveries and dispatch	Monday – Friday	6am to 10 pm
	Saturday	6 am to 5 pm
	Sunday	8 am to 4 pm
Waste processing	Monday – Friday	7 am to 6 pm
	Saturday	7 am to 4 pm

Conditions B2 of the consent outline the circumstances and requirements wherein operations may be conducted outside of the hours specified in Table 3.1 and summarised as follows:

- for the delivery or dispatch of materials as requested by the NSW Police Force or other public authorities for safety reasons; and

- where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.

### 3.6 OPERATIONAL PLANT AND EQUIPMENT

Condition A25 of the consent requires that only the plant and equipment listed in Table 3.1 below is used on site.

**Table 3.1 Hours of work**

Plant (or equivalent)	Number	Typical activities
<b>Equipment used across the site</b>		
Front end loader (e.g. Volvo L150 or equivalent)	1	Unloading and loading trucks Moving waste products
Trucks (customers)	5	Delivering waste and dispatching products Returning to / leaving the site
<b>Equipment used in the main shed</b>		
13 t excavator	1	Sorting waste using a variety of excavator attachments Loading trucks
Screening plant inside shed	1	Sorting co-mingled waste
Picking line	1	Sorting co-mingled waste from screening plant

### 3.7 SITE STAFFING

The Site Leading Hand/Supervisor and the Site Manager (or their delegated representatives) are to be present and on the site during operating hours of the facility. All site personal and their individual responsibilities are described in Section 5.1.

## 4 ENVIRONMENTAL MANAGEMENT OPERATIONAL PROCEDURES

Environmental goals and management procedures have been developed for all key environmental management issues.

Across all facets of environmental management operations at the facility, measures and considerations to reduce energy consumption are to be implemented. Benedict strives to conserve energy by recycling waste, removing the need for natural resource extraction and transportation from distant sources. Other specific methods of energy conservation are to be implemented at the site, as described in the supporting management plans, and include techniques such as:

- waste to be recycled at the facility be sorted to prevent cross-contamination, in order to maintain recycling efficiency and reduce potential wastage;
- energy saving devices and equipment to be utilised where possible;
- vehicles and equipment not to be left idling and turned off when not in use;
- on-site vehicles and machinery to be regularly maintained and serviced to ensure maximum efficiency;
- refuelling facilities are located on site to reduce overall vehicle movements; and
- refuelling facilities to be monitored to prevent spillage or waste.

New energy savings initiatives are collaborative and involve all employees, working from the bottom up to implement effective change.

Each environmental management issue and the related environmental goals and procedures are outlined in the following sections.

### 4.1 SITE MANAGEMENT

Environmental goals, activities and operational procedures (OPs) in relation to site management are set out in the following table.

SITE MANAGEMENT		OP 1
Primary environmental goal	Clearly identified primary activities and controls that assure the environmentally responsible operation of the facility.	
Related environmental goals	<ul style="list-style-type: none"> <li>• Ensure compliance with the consent and EPL.</li> <li>• Prevent unauthorised entry.</li> <li>• Assure the quality of operations.</li> <li>• Prevent the degradation of local amenity.</li> <li>• Provide adequate staffing and training.</li> <li>• Provide and maintain a safe work environment.</li> </ul>	
Primary activities	Primary activities carried out on the site are to include: <ul style="list-style-type: none"> <li>• receipt and storage of construction and demolition waste;</li> <li>• retrieval of recyclable resources and their redistribution;</li> <li>• processing, storage and transfer of received waste;</li> <li>• monitoring of waste movement and maintenance of records of that movement;</li> <li>• control of site aspects that may affect the environment in accordance with this OEMP; and</li> </ul>	

		<ul style="list-style-type: none"> <li>management of the facility to ensure the safety of public, the operators and the environment.</li> </ul>
<b>PROCEDURES</b>		
OP 1.1	Traffic control	<p>Vehicular and pedestrian traffic is to be directed to ensure the safety of all staff. This is to be noted as a condition of entry on the gate signage.</p> <p>Traffic control signage is to be erected as directed by the Site Leading Hand/Supervisor. The signage is to include:</p> <ul style="list-style-type: none"> <li>conditions of entry;</li> <li>hours of operation;</li> <li>acceptable and prohibited wastes signage;</li> <li>speed restriction signage;</li> <li>directional signage; and</li> <li>material drop off points signage.</li> </ul>
OP 1.2	Public and staff safety	<ul style="list-style-type: none"> <li>The safety of the public and staff is a prime consideration in all aspects of the facility.</li> <li>Operational plant and equipment is to be operated in such a way as to minimise risks to persons delivering, sorting, processing or loading recovered materials and waste for transfer.</li> <li>All information and directional signs and their locations are to be subject to approval of the Site Leading Hand/Supervisor.</li> </ul>
OP 1.3	Scavenging	<ul style="list-style-type: none"> <li>There are to be no scavenging arrangements.</li> <li>All resource recovery is to be undertaken by the facility.</li> </ul>
OP 1.4	Vehicle washing	<ul style="list-style-type: none"> <li>Waste delivery vehicles exiting the facility are to be subject to wheel washing when required.</li> </ul>
OP 1.5	Monitoring	<ul style="list-style-type: none"> <li>Monitoring of day to day operations is to be undertaken by the Site Leading Hand/Supervisor.</li> <li>Overall monitoring of the site is to be undertaken by the Site Manager.</li> </ul>
OP 1.6	Facility design management and mitigation measures	<ul style="list-style-type: none"> <li>The screening plant and External Bay 6 are to be covered with a roof (approximately 5 m off the ground) to minimise moisture entering the timber stockpile. The roof is to be within the site and adjacent to the 10 m tall fence so as not to be visible from offsite.</li> </ul> <p>To minimise dust and noise emissions:</p> <ul style="list-style-type: none"> <li>materials (waste, products and residues) are to be stockpiled in the shed or in a marked bay;</li> <li>wastes are to be processed in the shed or within the screening plant area (see Figure 3.3) and are not to be processed outside of these areas; and</li> <li>green waste is to only be stockpiled in the shed.</li> </ul>

## 4.2 WASTE MANGEMENT AND MONITORING

A Waste Management Plan (WMP) has been prepared and is provided as Appendix C. Key elements of this plan have informed the environmental goals and procedures in the table below for waste acceptance, processing, storage and transfer.

WASTE ACCEPTABANCE, PROCESSING AND TRANSFER			OP 2
Primary environmental goal		The receival, sorting, processing and transfer of waste and recyclables are to be managed and monitored to ensure the environmentally responsible operation of the facility	
Related environmental goals		<ul style="list-style-type: none"><li>• Ensure compliance with the consent and EPL.</li><li>• Conduct operations in accordance with the Waste Management Plan (refer Appendix C).</li><li>• Assure the quality of incoming waste by identifying and recording the wastes and recyclables received by the facility as not hazardous.</li><li>• Maximise recycling and reuse.</li><li>• Provide adequate staffing and training.</li><li>• Provide and maintain a safe work environment.</li></ul>	
Compliance		<p>Key consent requirements relevant to waste acceptance, sorting and processing are provided below.</p> <ul style="list-style-type: none"><li>• The facility is not to receive or process on site more than 140,000 tonnes per year of general solid waste (non-putrescible).</li><li>• A minimum recycling rate of 80% of all waste is to be achieved.</li><li>• All waste materials removed from the site is to be directed to a waste management facility or premises lawfully permitted to accept the materials.</li><li>• Waste generated outside the site is not to be received at the site for storage, treatment, processing, reprocessing, or disposal, except as expressly permitted by the EPL.</li><li>• The amount of waste received at the site is to be recorded on a daily basis.</li><li>• All sampling and waste classification data is to be retained for the life of the facility.</li><li>• No biochar production or storage is to be allowed on site.</li><li>• Loads predominately containing glass are not permitted to be crushed at the site.</li><li>• All liquid and non-liquid wastes are to be taken off site in accordance with the EPA's Waste Classification Guidelines Part 1: Classifying Waste, November 2014.</li><li>• All waste is to be stored wholly within the designated waste stockpile areas and loaded and unloaded within the designated loading and unloading areas.</li></ul>	
PROCEDURES			
OP 2.1	Control, monitoring and recording of incoming waste	The facilities' Site Leading Hand/Supervisor is to monitor the receival of waste to ensure it is inspected, not classified as hazardous waste and recorded.	

OP 2.2	Inspection of waste received	Each load presented at the facility is to be inspected prior to the material being deposited on site.
OP 2.3	Prohibited and unacceptable waste	Waste material that is unacceptable or specified prohibited from entering the site (see Appendix C) is to be refused entry and diverted to an appropriately licensed facility.
OP 2.4	Recording of waste	All waste accepted at the facility is to be recorded on the facilities' weighbridge system and a customer docket/receipt produced (see Appendix C). All weighbridge records, as required by the NSW POEO (Waste) Regulation, are to be retained for the life of the facility. The weighbridge records are to be made immediately available on request by the Secretary and/or the EPA.
OP 2.5	Storage of waste	<ul style="list-style-type: none"> <li>Each load presented at the facility is to be directed to the appropriate storage area by the Site Leading Hand/Supervisor.</li> <li>Wherever possible, raw materials are to be sorted at the source and directed into segregated stockpiles on-site.</li> <li>Unsorted materials are to be spread on the ground (undercover), sorted into the various categories and formed into segregated stockpiles.</li> <li>All sampling and waste classification data are to be retained for the life of the facility in accordance with the requirements of the EPA.</li> <li>No biochar production or storage is approved under the terms of the consent.</li> <li>All waste unloaded at the public hand unloading area is to be unloaded and stockpiled underneath the public unloading awning or within the main processing building.</li> <li>All waste is to be stored wholly within the designated waste stockpile areas and loaded and unloaded within the designated loading and unloading areas.</li> </ul>
OP 2.6	Processing of waste	<ul style="list-style-type: none"> <li>The sorted waste material may be subject to processing depending on its category and presentation.</li> </ul>
OP.2.7	Records	Sampling and waste classification dates are to be kept for the life of the facility in accordance with EPA requirements.
OP 2.8	Monitoring	The Waste Management Plan contained in Appendix C details the Waste Monitoring Program that is to be implemented during operations.

### 4.3 HAZARDOUS WASTE PREVENTION AND RESPONSE

Management of hazardous waste is detailed in the Waste Management Plan provided in Appendix C. Key elements of this plan have informed the environmental goals and procedures in relation to hazardous waste and response provided in the following table.

HAZARDOUS WASTE PREVENTION AND RESPONSE		OP 3
Primary environmental goal	Ensure no hazardous waste is present at the facility.	
Related environmental goals	<ul style="list-style-type: none"><li>• Ensure compliance with the consent and EPL.</li><li>• Assure the quality of operations.</li><li>• Prevent the degradation of local amenity.</li><li>• Provide adequate staffing and training.</li><li>• Provide and maintain a safe work environment.</li></ul>	
Compliance	<p>Key consent conditions relevant to hazardous waste prevention are set out below.</p> <ul style="list-style-type: none"><li>• Auditable procedures are to be implemented to ensure the site does not accept wastes that are prohibited.</li><li>• All waste types that are controlled under a tracking system are to have the appropriate documentation prior to acceptance at the site and all waste received at the site must be recorded in accordance with clause 27 of the POEO (Waste) Regulation.</li><li>• Details of the quantity, type and source of wastes received on the site are to be provided to the EPA and the Secretary when requested.</li><li>• Staff are to receive adequate training in order to be able to recognise and handle any hazardous or other prohibited waste including asbestos.</li></ul>	
PROCEDURES		
OP 3.1	Hazardous waste management	<ul style="list-style-type: none"><li>• Incoming waste is to be monitored and any hazardous waste detected is diverted in accordance with this procedure.</li><li>• Hazardous waste found on site it to be reported and managed as an environmental or safety incident.</li></ul>
OP 3.2	Waste acceptance	<ul style="list-style-type: none"><li>• Gates are to be locked and fences secured on days when the facility is not open to the public.</li><li>• Each load presenting at the facility is to be inspected for hazardous waste prior to the material being accepted on to the site.</li><li>• Waste material specifically prohibited from entering the site (see Appendix C) is to be refused entry and diverted where possible to the appropriate facility or alternatively directed to contact the EPA for advice (ph. 02 9995 5000).</li><li>• Waste that is refused entry is to be recorded in a register. The information recorded is to include:<ul style="list-style-type: none"><li>(a) date;</li><li>(b) carrier organisation;</li><li>(c) registration number of the vehicle; and</li><li>(d) type of waste.</li></ul></li></ul>

OP 3.3	Identification of prohibited waste	<ul style="list-style-type: none"> <li>Incoming waste will be inspected in two stages:               <ol style="list-style-type: none"> <li>a preliminary inspection of the incoming waste on the vehicle at the weighbridge; and</li> <li>an inspection of the incoming waste after it is tipped off but before it is added to the appropriate feed stockpile. The customer will be required to wait until the waste has passed the inspection.</li> </ol> </li> <li>Incoming waste loads that are suspected to contain contaminants (ie loads that contain wastes that are not listed the Waste Management Plan (Appendix C))</li> <li>Details of any non-conforming waste loads are to be captured on the 'Notification of Non-Conforming Waste Form' (refer Attachment D of the Waste Management Plan (Appendix C)) which is to be sent to the customer and filed on site.</li> <li>A log of all non-conforming loads is to be maintained in a central register that is available for EPA inspection.</li> </ul>
OP 3.4	Management of prohibited wastes	<ul style="list-style-type: none"> <li>The EPA is to be advised of any incident that poses a threat to the environment as soon as practical after the incident occurs.</li> <li>The incident is to be reported by telephoning:               <ul style="list-style-type: none"> <li>- EPA Sydney office: 02 9995 5000; or</li> <li>- EPA Pollution Hotline: 131 555.</li> </ul> </li> <li>Wastes identified as hazardous in the Waste Management Plan (Appendix C) are to be managed in accordance with "The Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Waste."</li> <li>Arrangements are to be made for the removal of the waste to an appropriately licensed facility.</li> </ul>
OP 3.5	Incident reports	Any incident relating to the identification of a prohibited waste on the site is to be reported in accordance with "OP 16- Incident Reporting" (refer Section 5.4)



#### 4.4 PRODUCT CONTROL, MONITORING AND MANAGEMENT

Environmental goals, activities and procedures in relation to product control, monitoring and management are set out in the following table.

PRODUCT CONTROL, MONITORING AND MANAGEMENT		OP 4
Primary environmental goal	Recovered material produced by the facility is not to adversely affect the environment.	
Related environmental goals	<ul style="list-style-type: none"><li>• Ensure compliance with the consent and EPL.</li><li>• Assure the quality of all products.</li><li>• Assure the quality of operations.</li><li>• Provide adequate staffing and training.</li></ul>	
PROCEDURES		
OP 4.1	Incoming waste	Waste receipt, management and prohibited material exclusion is to be in accordance with OP 2, OP 3 and the Waste Management Plan (Appendix C).
OP 4.2	Waste selection	<p>The following wastes are included for acceptance &amp; processing:</p> <ul style="list-style-type: none"><li>• brick and concrete;</li><li>• tiles and ceramics;</li><li>• asphalt (as engineered material but not containing coal tar);</li><li>• natural rock;</li><li>• vegetation and wood;</li><li>• glass (as co-mingled with other waste);</li><li>• rubber;</li><li>• sand, soil, clay excluding contaminated soil;</li><li>• excavated natural material (ENM);</li><li>• virgin excavated natural material (VENM); and</li><li>• commercial and industrial.</li></ul>
OP 4.3	Product sampling	<p>Post processing, the material is to be sampled for testing. The samples are to be selected from the processed stockpiles in accordance with Australian Standard 1141.</p> <p>The custody chain is to be formed and records maintained indicating:</p> <ul style="list-style-type: none"><li>• testing organisation;</li><li>• date;</li><li>• type of test;</li><li>• type of material; and</li><li>• batch number allocation.</li></ul>
OP 4.4	Monitoring	<p>Product quality and control is to be monitored by:</p> <ul style="list-style-type: none"><li>• routine and characterisation testing in line with EPA requirements; and</li><li>• product export details recording, declared use by consumer, quantity (m<sup>3</sup> or tonnes) and registration number of vehicles.</li></ul>
OP 4.5	Records	Records of product characterisation and routine testing and quantity of product and registration number of vehicles used to transport the product are to be kept in the facilities' record system for four years.

#### 4.5 WATER MANAGEMENT

A Water Management Plan, as required under Condition B33 of the consent, is provided in Appendix D. Key elements of this plan have informed the environmental goals and procedure below for surface water management as set out in the following table.

WATER MANAGEMENT		OP 5
Primary environmental goal	Stormwater gathered by the facility is not to adversely affect the site or its surrounds.	
Related environmental goals	<ul style="list-style-type: none"><li>• Ensure compliance with the consent and EPL.</li><li>• Assure the quality of operations.</li><li>• Prevent the degradation of local amenity.</li><li>• Provide adequate staffing and training.</li></ul>	
Compliance	<p>Key consent conditions relevant to surface water management:</p> <ul style="list-style-type: none"><li>• Overland flow is to be contained within the sealed areas of the site.</li><li>• Any spills are to be contained and disposed of at a licensed facility.</li><li>• Any servicing or repair work on motor vehicles or mobile plant is to be carried out within a sealed area that has environmental controls appropriate for servicing or repair work. This must include bunding where there this work could result in liquids being spilled.</li><li>• All excess water from the truck wash and wheel wash is to be discharged into suitable holding tanks and removed from the facility for treatment at an appropriately licensed facility or via trade waste.</li><li>• The surface water management system is to be operated and maintained for the duration of the facility.</li><li>• The surface water management system is to be maintained to minimise the infiltration of surface water to groundwater.</li><li>• The surface water detention basins on site are to be maintained with a minimum capacity to contain the 90th percentile rainfall over any consecutive 5-day period.</li><li>• Any amended surface water quality criteria and discharge limits identified in the EPL are to be complied with.</li></ul>	
PROCEDURES		
OP 5.1	Surface water	Stormwater gathered on site is to be managed to ensure it is not contaminated and limiting in sediment.
OP 5.2	Surface water management	<p>Surface water management is detailed in the Water Management Plan (refer Appendix D). Key measures that are to be implemented are set out below.</p> <ul style="list-style-type: none"><li>• The surface water management system is to be maintained to minimise the potential for surface water to infiltrate to ground water.</li><li>• Runoff on open paved areas is to be directed by the kerbs on the south western, southern and eastern boundaries to a concrete sediment settling and collection basin.</li></ul>

		<ul style="list-style-type: none"> <li>• The site is to be graded to the north eastern corner with runoff to flow overland to the sediment basin in the north eastern corner.</li> <li>• If necessary, the basin are to be dosed with a flocculant to assist sediment settling and to allow pump out of water to reinstate the storage volume in the basin two days after significant rainfall.</li> <li>• Excess water pumped from the basin is to have a total suspended solids (TSS) concentration less than 50mg/L. This TSS concentration limit is not to apply (as specified by the Blue Book) to overflows from the basin in storms which exceed the adopted design rainfall for the site and basin.</li> <li>• The sediment collecting in the base of the basin is to be removed each week using equipment that is to be used for the material handling on the site.</li> <li>• Sewage from the amenities is to be discharged to the sewer.</li> <li>• Captured runoff from the roofed areas is to be captured and used for dust suppression.</li> <li>• The existing shed is to be used to house the majority of the processing activities, preventing the generation of runoff.</li> </ul>
OP 5.3	Monitoring and recording	<p>A surface water monitoring program is to be implemented to provide ongoing validation of the effectiveness of the management measures and results are to be published on Benedict's website and records of any complaints are to be kept in the facilities' record system for at least four years.</p> <p>The monitoring and review of the surface water management system performance is to consist of:</p> <ul style="list-style-type: none"> <li>• monitoring of turbidity in the sediment settling and collection basin against the trigger to allow pumpout at 50mg/L TSS;</li> <li>• monitoring daily rainfall depth each day; and</li> <li>• noting each discharge event and daily rainfall for each event.</li> </ul>
OP 5.4	Mitigation	<ul style="list-style-type: none"> <li>• Fuel storage areas are to be bunded.</li> <li>• A runoff erosion and sediment control strategy to manage runoff which conforms to State Government authority best practise is to be implemented.</li> <li>• All material is to be handled and stored undercover.</li> <li>• Groundwater is not to be used.</li> <li>• Water is not to be used in the product processing other than for dust suppression.</li> <li>• A concrete perimeter kerb is to be provided to keep runoff from entering and leaving the site.</li> <li>• A connection to sewage systems for onsite personal amenities is to be provided.</li> </ul>
OP 5.5	Diesel spill prevention	<ul style="list-style-type: none"> <li>• Overfilling of tanks is to be prevented through gauging or monitoring of the tank's contents.</li> <li>• Tanks, vents and fittings are to be inspected regularly and valves are to be regularly overhauled (at periods not exceeding 10 years).</li> <li>• Hoses used for transfer of diesel are to be regularly inspected.</li> </ul>
OP 5.6	Diesel spill protection	<ul style="list-style-type: none"> <li>• The diesel tank is to be self-bunded. The bund is to be large enough to contain a spillage in accordance with the requirement of AS1940 para 5.8. The bund drain valve is to be kept closed and</li> </ul>

		<p>locked except during supervised drainage, and a sign is to be placed to display the need to keep the drain valve closed and locked.</p> <ul style="list-style-type: none"><li>• Provision is to be made to quickly shut off the flow of liquid from the storage tank to a consuming device in an emergency. The shut off valve is to comply with para 6.3.3 in AS1940, including resistance in a fire.</li><li>• Diesel pumps are to be designed such that the discharge pressure cannot exceed design limit of pump or piping in the case of dead heading. An emergency shut-off device is to be provided on each pump.</li><li>• There is to be a diesel spill kit stored at the bowser.</li></ul>
OP 5.7	Diesel spill detection	Regular inspections by site personnel are to be undertaken. Any liquid inside the bunded areas, such as rainwater or any spilt liquid is to be removed following established procedures.

#### 4.6 TRAFFIC MANAGEMENT

The Operational Traffic Management Plan (OTMP), required under the consent Condition B20, is provided in Appendix F. Key compliance considerations have informed the environmental goals and procedures for traffic management as set out in the table below.

TRAFFIC MANAGEMENT		OP 6
Primary environmental goal	Traffic is controlled to minimise any adverse effects caused by traffic entering, circulating and leaving the facility.	
Related Environmental goals	<ul style="list-style-type: none"><li>• Ensure compliance with the consent.</li><li>• Prevent degradation of local amenity.</li><li>• Provide adequate staffing and training.</li><li>• Provide and maintain a safe work environment.</li><li>• Ensure adherence to the most recent version of the OTMP approved by DPIE.</li></ul>	
Compliance	<p>Key consent conditions in relation to traffic management are provided below.</p> <ul style="list-style-type: none"><li>• Eight parking spaces for staff and 2 for visitors are to be provided on site and no parking is permitted elsewhere on the site except within the designated car spot.</li><li>• Internal roads, driveways and parking are to be developed and maintained in accordance with the latest version of AS 2890.1 and AS 2890.2.</li><li>• All vehicles are to enter the site in a forward direction.</li><li>• All trucks entering or leaving the site with loads are to have their loads covered and no dirt is to be tracked onto the public road network.</li><li>• A wheel wash is to be used if required to clean truck tyres to prevent mud or sediment being carried to and deposited on the access road (and public roads).</li></ul>	
PROCEDURES		
OP 6.1	Traffic management	<p>Traffic management measures for the following are to be carried out in accordance with the specific requirements in the OTMP:</p> <ul style="list-style-type: none"><li>• approved heavy vehicle routes;</li><li>• internal traffic management;</li><li>• driver code of conduct; and</li><li>• traffic control plans detailing control of truck movements and provisions to require traffic controllers.</li></ul>
OP 6.2	Traffic control signage	<p>Traffic control signage as described in the OTMP is to be provided for:</p> <ul style="list-style-type: none"><li>• hours of operation;</li><li>• ‘conditions of entry’, including the Site Operators authority to direct traffic and pedestrian movement within the facility;</li><li>• speed instruction signage (10km/h max.); and</li><li>• directional signage.</li></ul>
OP 6.3	Monitoring and mitigation	<ul style="list-style-type: none"><li>• Three-month interval monitoring is to be conducted to review the effectiveness of onsite traffic management measures and driver behaviour.</li></ul>

		<ul style="list-style-type: none"> <li>• Signs are to be erected at the facility requesting customers access the facility via Camden Valley Way via Anderson Road.</li> <li>• Signs are to be erected at the facility regarding drivers' legal obligation to ensure that waste is covered during transport.</li> <li>• Vehicles dispatching products or residue are to be covered prior to leaving the site.</li> </ul>
OP 6.4	Recording	<ul style="list-style-type: none"> <li>• Any traffic incidents with actual or potential significant offsite impacts are to be reported to DPIE within 7 days.</li> <li>• To assist in the orderly resolution of complaints, a register iteming all reported incidents relating to complaints in regard to heavy vehicle driver conduct external to the facility site is to be kept. The incident register is to include (where possible): <ul style="list-style-type: none"> <li>i. date;</li> <li>ii. location/s;</li> <li>iii. the driver/heavy vehicle details;</li> <li>iv. contact details of the person lodging the complaint;</li> <li>v. what/when actions were taken to resolve the issue; and</li> <li>vi. the reply to the person/organisation that made the complaint.</li> </ul> </li> <li>• Records of traffic complaints are to be kept in the facilities' record system for at least four years.</li> </ul>

#### 4.7 AIR QUALITY

The Air Quality Management Plan (AQMP), required under Condition B23 of the consent, is provided in Appendix E. Key elements of this plan have informed the environmental goals and procedures provided in the table below.

Air Quality		OP 7
Primary environmental goal	Operation of the facility is not to result in adverse air quality impacts to the general environment or nearby sensitive receivers.	
Related environmental goals	<ul style="list-style-type: none"> <li>• Ensure compliance with the consent.</li> <li>• Ensure adherence to the AQMP.</li> <li>• Assure the quality of operations.</li> <li>• Provide adequate staffing and training.</li> <li>• Provide and maintain a safe work environment.</li> </ul>	
Compliance	<p>Key consent conditions relevant to air quality management of the facility are as follows:</p> <ul style="list-style-type: none"> <li>• The AQMP is to be implemented for the duration of and during operation of the facility.</li> <li>• All reasonable steps are to be taken to minimise dust generated during all works authorised by this consent.</li> <li>• All on-site roads and car parking areas are to be sealed with concrete or asphalt.</li> <li>• All operating, storage, unloading and loading areas are to be sealed with concrete, asphalt or other impervious barrier(s) of the same or greater quality.</li> <li>• Dust suppressants are to be used to prevent particulate emissions from stockpiles and other dust generating sources.</li> <li>• Trucks and vehicles entering and leaving the site that are carrying loads of dust generating materials must have their loads covered at all times, except during loading and unloading.</li> <li>• All operations and activities occurring at the facility are to be carried out in a manner that minimises the emissions of air pollutants from the site.</li> <li>• Trucks associated with the facility are not to track dirt onto the public road network.</li> <li>• Public roads used by these trucks are to be kept clean.</li> <li>• The facility must not cause or permit the emission of any offensive odour.</li> </ul>	

PROCEDURES		
OP 7.1	Air quality management and mitigation	<p>Key management and mitigation measures from the AQMP are to be implemented as set out below.</p> <ul style="list-style-type: none"> <li>• Water sprays are to be used at stockpiles and during material handling as necessary.</li> <li>• A wheel wash is to be used if required to clean truck tyres to prevent mud or sediment being carried to and deposited on the access road (and public roads).</li> <li>• On site equipment is to be regularly maintained and served to maximise fuel efficiency.</li> <li>• Energy efficiency is to be progressively reviewed and implemented throughout the life of the facility.</li> </ul>
OP 7.2	Monitoring	<p>Dust generation is to be monitored by:</p> <ul style="list-style-type: none"> <li>• regular site monitoring by the Site Leading Hand/Supervisor;</li> <li>• dust complaints received; and</li> <li>• weekly inspection of wheel wash.</li> </ul> <p>Any dust complaints received are to be referred to the Site Leading Hand/Supervisor and to the Site Manager.</p>
OP 7.3	Recording	<p>Any complaint received by Benedict Recycling regarding dust impacts from the facility are to be acted on within 24-hours in the following manner:</p> <ul style="list-style-type: none"> <li>• details of the complaint (date, time, specifics, complainants contact details) to be noted;</li> <li>• activities occurring during the complaint period to be investigated;</li> <li>• findings of operations during the complaint period to be logged in the complaints register;</li> <li>• relevant management practices to be reviewed as necessary; and</li> <li>• respond to complainant with findings of the review.</li> </ul> <p>Records of air quality complaints are to be kept in the facilities' record system for at least four years.</p>



## 4.8 NOISE AND VIBRATION

An Operational Noise and Vibration Management Plan (ONVMP), required under Condition B9 of the consent, is provided in Appendix G.

Noise limits required under Condition B5 of the consent are presented in Table 4.1. Conditions concerning approved hours of operation are detailed in Section 3.5

**Table 4.1 Noise Criteria dB(A)**

Location	Day LAeq (15 minute)	Evening LAeq (15 minute)	Night LAeq (15 minute)
All residential receivers	40	40	40

*Note: Noise generated by the facility is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Refer to Figure 2.2 in the ONVMP (Appendix G) for the location of residential receivers.*

Key elements of the ONVMP have informed the environmental goals, compliance and procedures for noise and vibration control as set out in the table below.

NOISE AND VIBRATION CONTROL		OP 8
Primary environmental goal	Noise generated by the facility is not to adversely affect the site or its surrounds.	
Related environmental goals	<ul style="list-style-type: none"> <li>• Ensure compliance with the consent and EPL.</li> <li>• Assure the quality of operations.</li> <li>• Prevent the degradation of local amenity.</li> <li>• Provide adequate staffing and training.</li> <li>• Provide and maintain a safe working environment.</li> </ul>	
Compliance	<p>Key consent conditions relevant to noise and vibration management on the site are set out below.</p> <ul style="list-style-type: none"> <li>• Operation of the facility is to comply with the defined hours of work (refer Table 3.1).</li> <li>• Noise generated by operation of the facility is not to exceed the defined noise criteria (refer Table 4.1).</li> <li>• Best practice management measures are to be implemented, including all reasonable and feasible noise management and mitigation measures to minimise operational, low frequency and traffic noise generated by the facility.</li> <li>• Noise impacts are to be minimised during adverse meteorological conditions.</li> <li>• High noise generating operational activities are to be identified.</li> <li>• The effectiveness of any noise suppression equipment on plant is to be maintained at all times to ensure any defective plant is not operated.</li> <li>• Noise emissions are to be regularly assessed and operations relocated, modified and/or stopped as required to ensure compliance with the relevant conditions of the consent.</li> </ul>	

PROCEDURES		
OP 8.1	Noise management and mitigation	<p>Noise is to be controlled through the implementation of the below management measures.</p> <ul style="list-style-type: none"> <li>• Acoustic fencing and structures (shed) are to be constructed along the site boundaries to mitigate noise levels at the nearest residential receivers.</li> <li>• The facility is to operate in accordance with the hours specified in Table 3.1.</li> <li>• A driver code of conduct and induction training is to be prepared and implemented to minimise road traffic noise during operation.</li> <li>• Quieter plant and equipment is to be selected based on the optimal power and size to most efficiently perform the required tasks, including installing best-practice noise suppression equipment where possible.</li> <li>• All plant and equipment is to be regularly maintained in a proper and efficient condition and serviced in accordance with manufacturer specifications.</li> <li>• All plant and equipment is to be operated in a proper and efficient manner.</li> <li>• All plant and equipment is to be switched off when not in use.</li> <li>• All site vehicles are to be fitted with a broadband reversing alarm ("growlers").</li> <li>• Vehicle parking or queuing on public roads is to be minimised.</li> <li>• Loading and unloading of materials is to be carried out in on-site designated areas.</li> <li>• Material drop heights and dragging along the ground is to be minimised.</li> <li>• Site contact details are to be provided at the front of the site and on the Benedict Industries website.</li> <li>• A noise complaints management system is to be implemented to handle complaints promptly and is to include a complaint register.</li> <li>• Management actions are to be taken to address any exceedances of the criteria and a complaints register is to be maintained.</li> </ul>
OP 8.2	Monitoring	<ul style="list-style-type: none"> <li>• Noise monitoring is to be completed at the closest residences within 3, 6 and 12 months of the start of operations. Compliance noise monitoring is to be on-going and completed on a quarterly basis at representative monitoring locations.</li> </ul>
OP 8.3	Recording	<p>Records of noise monitoring are to consist of the following information:</p> <ul style="list-style-type: none"> <li>• summary of all attended noise monitoring results;</li> <li>• measured, calculated and/or operator estimated site LAeq,15min contributed noise levels for each monitoring location;</li> <li>• statement of compliance/non-compliance; and</li> <li>• details of any complaints relation to noise and their state of resolution.</li> </ul> <p>Records of noise complaints are to be kept in the facilities' record system for at least four years.</p>

#### 4.9 PEST, VERMIN AND NOXIOUS WEED MANAGMENT

Environmental goals, compliance and procedures in relation to pest, vermin and noxious weed management are set out in the following table.

PEST AND VERMIN CONTROL		OP 9
Primary environmental goal	Pests, vermin and noxious weeds are not attracted or spread by the facility and do not to adversely affect the site or its surrounds.	
Related environmental goals	<ul style="list-style-type: none"><li>• Ensure compliance with the consent and the EPL.</li><li>• Assure the quality of all operations.</li><li>• Provide adequate staffing and training.</li><li>• Provide and maintain a safe working environment.</li></ul>	
Compliance	The facility is to implement suitable measures to manage pests, vermin and declared noxious weeds on the site. The site is to be inspected on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard or cause the loss of amenity in the surrounding area.	
PROCEDURES		
OP 9.1	Pest and vermin management	Pest, vermin and noxious weed management is to be controlled by: <ul style="list-style-type: none"><li>• removal of residual waste in a timely fashion;</li><li>• regular cleaning of the waste receival, stockpiling and processing areas;</li><li>• litter control and removal by fencing and by patrolling fencing lines and removing litter for disposal;</li><li>• surface drainage minimising ponding on the site; and</li><li>• populations being controlled as appropriate.</li></ul>
OP 9.2	Monitoring	The presence of pest, vermin and noxious weed are to be monitored by visual inspections on a weekly basis.
OP 9.3	Recording	Records of eradication programs undertaken are to be kept in the facilities' record system for at least four years.

#### 4.10 LITTER CONTROL

Environmental goals and procedures in relation to litter control are set out in the following table.

LITTER CONTROL		OP 10
Primary environmental goal	Litter generated by the facility is not to adversely affect the site or its surrounds.	
Related environmental goals	<ul style="list-style-type: none"><li>• Ensure compliance with the consent and EPL.</li><li>• Assure the quality of all operations.</li><li>• Prevent unauthorised site entry.</li></ul>	
PROCEDURES		
OP 10.1	Litter control	The site is monitored for litter and control activities implemented as required.
OP 10.2	Litter management	Litter is to be controlled by: <ul style="list-style-type: none"><li>• removing processed material and residual waste regularly;</li><li>• patrolling litter fences and fence lines on a weekly basis; and</li><li>• visually inspecting adjacent properties for litter and by organising its collection and disposal.</li></ul>
OP 10.3	Monitoring	Litter is to be monitored by: <ul style="list-style-type: none"><li>• regular site monitoring by the Site Leading Hand/Supervisor and Site Operator; and</li><li>• through any litter complaints received.</li></ul>
OP 10.4	Recording	Records of litter complaints are to be kept in the facilities' record system for at least four years.

#### 4.11 SITE SECURITY

Environmental goals and procedures in relation to the security of the site are set out in the following table.

SITE SECURITY		OP 11
Primary environmental goal	Prevent unauthorised entry to the facility.	
Related environmental goals	<ul style="list-style-type: none"><li>• Ensure compliance with the consent.</li><li>• Assure the quality of all incoming waste.</li><li>• Prevent the degradation of local amenity.</li><li>• Provide and maintain a safe working environment.</li></ul>	
Compliance	<p>The key consent conditions relevant to security on the site are provided below.</p> <ul style="list-style-type: none"><li>• At the sites frontage there will be a 2.1 m high metal palisade fence with automatic gates, also 2.1 m high.</li><li>• The 3 m high ‘colorbond’ perimeter fence along the southern boundary (extending approximately half way along the south-east boundary) is to be increased to a height of 10 m, except where the shed walls about the boundary (in these locations the existing 2 m high chain mesh fencing is to be retained).</li><li>• The security gates are to be locked whenever the site is not in operation or is unattended.</li></ul>	
PROCEDURES		
OP 11.1	Site security management	Access to the facility and its operations is managed to ensure there is no unauthorised entry or dumping at the facility or in its vicinity.
OP 11.2	Site security	<p>Site security is to be maintained on the site by ensuring:</p> <ul style="list-style-type: none"><li>• all fences, gates and facilities are maintained and locked when the facility is not open; and</li><li>• communication systems are available for staff working on site.</li></ul>

#### 4.12 FIRE AND BUSHFIRE MANAGEMENT

Environmental goals and procedures in relation to fire and bushfire management of the site are set out in the following table.

FIRE AND BUSHFIRE MANAGEMENT		OP 12
Primary environmental goal	Minimising the risk of fire damage to the facility and its surrounds.	
Related environmental goals	<ul style="list-style-type: none"> <li>• Ensure compliance with the consent.</li> <li>• Assure the quality of operations.</li> <li>• Prevent unauthorised entry.</li> <li>• Prevent degradation of local amenity.</li> <li>• Ensure adequate fire fighting capacity.</li> </ul>	
	<p>Key consent conditions relevant to fire management on the site are provided below.</p> <ul style="list-style-type: none"> <li>• The Emergency Response Plan (Appendix H) is to be kept on the premises at all times.</li> <li>• The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire).</li> <li>• The stockpile storage is to be limited in size to 4 m high and the maximum volume requirements in the consent (Condition A7 and as documented in the Waste Management Plan (Appendix C)) and arranged to minimise fire spread.</li> <li>• The fire hydrant system is to be installed, spaced, sized and pressured in accordance with SCA Clause E1.3. The system is to comply with Australian Standard AS 2419.1:2005.</li> <li>• Fire water run-off is to be contained on site with 180 m<sup>3</sup> of storage to be provided.</li> </ul>	

PROCEDURES		
OP 12.1	Fire and bushfire management	The facility is to be assessed for fire risk levels and preventative/minimisation activities are to be implemented as required.
OP 12.2	Fire and bushfire prevention and mitigation	<p>The potential for fires at the facility and as a result of is to be minimised by:</p> <ul style="list-style-type: none"> <li>• maintaining lockable gates;</li> <li>• ensuring access gates are locked at all times outside opening hours;</li> <li>• maintaining boundary fences;</li> <li>• accepting only permitted wastes;</li> <li>• regularly removing residual waste from the site;</li> <li>• conducting regular litter patrols;</li> <li>• maintaining machinery in good working order to minimise the risk of sparks;</li> <li>• maintaining fire fighting equipment;</li> <li>• consulting with the NSW Fire Brigade;</li> <li>• maintaining the quantities of dangerous goods stored and handled at the site below the threshold quantities listed in the Department of Planning's <i>Hazardous and Offensive Development Application Guidelines – Applying SEPP 33 at all times</i>;</li> <li>• maintaining asset protection zones (APZs) by maintaining the landscaping vegetation with a canopy cover kept less than 15 of total surface area and kept 2 m from the roof line of the building, garden beds and shrubs are not be located under trees and sited at least 10 m from any exposed window or door and lower limbs of trees up to 2 m above the ground are to be removed;</li> <li>• locating and installing services (including water, gas and electricity) in a manner that reduces potential fire hazards;</li> <li>• covering stockpiles with awnings and separating with block walls;</li> <li>• providing water for fire fighting from existing fire hydrants in Anderson Road;</li> <li>• providing fire hydrants on site capable of providing 50 L/s of firewater and providing extinguishers and fire hydrants at the office building;</li> <li>• ensuring above ground pipes external to structure in the APZ are metal including and up to taps;</li> <li>• shielding pumps in the APZs; and</li> <li>• installing the diesel tank in accordance with Australian Standard AS1940:2004 <i>The storage and Handling of Flammable and Combustible Liquids</i> to be fully enclosed in a 'colorbond' shed.</li> </ul>
OP 12.3	Fire and bushfire fighting	<p>Fire fighting is to be undertaken in association with the NSW Fire Brigade (contact: Emergency 000 and ask for Fire Brigade).</p> <p>Small fires are to be extinguished utilising the fire hoses and sprinkler systems provided on site in the first instance.</p>

OP 12.4	Recording	<p>Following containment of the fire the Site Manager in conjunction with the Site Leading Hand/Supervisor is responsible for preparing an Incident Report Form as per the procedure contained in OP13 (Section 5.4). This report is to be recorded on the facilities' records system and is to include:</p> <ul style="list-style-type: none"><li>• time and date of the start of the fire;</li><li>• cause of the fire (if known);</li><li>• time and date the fire was extinguished;</li><li>• location of the fire;</li><li>• weather conditions at the time of the fire;</li><li>• details and observation of the directions and dispersion rate of the smoke from the fire;</li><li>• details of any complaints from the public regarding the smoke; and</li><li>• actions that could be taken to prevent recurrence.</li></ul>
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#### 4.13 LANDSCAPE MANAGEMENT

A Landscape Management Plan (LMP), required under Condition B58 of the consent, is provided in Appendix I.

Environmental goals and procedures in relation to the landscape management of the site are set out in the following table.

LANDSCAPE MANAGEMENT		OP 11
Primary environmental goal	Prevent unauthorised entry to the facility.	
Related environmental goals	<ul style="list-style-type: none"><li>• Ensure compliance with the consent.</li><li>• Assure the quality of all incoming waste.</li><li>• Prevent the degradation of local amenity.</li></ul>	
Compliance	<p>The key consent conditions relevant to landscape management of the site are provided below.</p> <ul style="list-style-type: none"><li>• Detail the species to be planted on site.</li><li>• Describe the monitoring and maintenance regime for all landscaping components.</li></ul>	

PROCEDURES		
OP 11.1	Plant schedule and proposed works	<ul style="list-style-type: none"> <li>The plant schedule in Table 1 of the LMP is the accepted document for plant quantities and sizes.</li> <li>The following works are to be undertaken in the landscape area:               <ul style="list-style-type: none"> <li>provide masonry edge to landscaped area and road reserve to contain imported topsoil and mulch;</li> <li>remove weed species;</li> <li>provide species listed in Table 1 of the LMP and provide screening; and</li> <li>provide additional topsoil where required.</li> </ul> </li> </ul>
OP 11.2	Standards and sampling	<ul style="list-style-type: none"> <li>The following inspections are to be undertaken as applicable:               <ul style="list-style-type: none"> <li>plants available on-site for compliance inspection prior to planning;</li> <li>subgrades cultivated and/or prepared prior to placing topsoil;</li> <li>plant material set out before planting; and</li> <li>completion of planting establishment work.</li> </ul> </li> <li>Trees are to comply with Australian Standards (AS 2303:2015).</li> <li>One of eight trees is to be sampled for compliance purposes (12% sample).</li> <li>Roots are to be inspected by washing and exposing a small section of the rootball to establish the root development from the stem.</li> <li>Unsuitable trees may be rejected, with substitutes to be considered and approved by the Site Manager.</li> <li>Bulk materials are to be inspected via a 2 kg sample of each type.</li> </ul>
OP 11.3	Work activities	<ul style="list-style-type: none"> <li>Landscape works are to take place after completion of concreting works on site and establishment of front security fence to reduce potential exposure to runoff or drainage from construction activities.</li> <li>The landscape contractor is to review final engineering and infrastructure drawings prior to the establishment of the landscaping area in coordination with the Site Supervisor.</li> <li>Location of all services (i.e. stormwater drainage, water, telecommunications and electricity) are to be established prior to excavation and cultivation of the landscape area.</li> <li>Excavation within 1 m of underground services is to be undertaken by hand.</li> <li>Existing street trees are to be protected from damage.</li> <li>Materials are not to be placed against, under or near trees.</li> <li>Equipment is not to be attached to trees.</li> <li>Compaction of the ground under trees is to be avoided.</li> <li>Topsoil is not to be added or removed within tree drip lines.</li> <li>Where necessary to cut roots, cutting is not to unduly disturb the remaining root system.</li> <li>Any damage to trees to be retained is to be reported to DPIE and attended by a suitably qualified arborist who is to prepare a report covering rectification works.</li> <li>Remedial works are to be undertaken as required, including removal and replacement if so recommended.</li> </ul>

OP 11.4	Site preparation	<ul style="list-style-type: none"> <li>• Initial earthworks on the site are to involve clearing and stripping of the site.</li> <li>• The landscape area is to be cleared, along with existing weeds. This process is to include the: <ul style="list-style-type: none"> <li>- stripping and drubbing of all existing site vegetation and weeds, including roots and topsoil;</li> <li>- stockpiling and separation of all existing vegetation and vegetation impact soils from site earthworks;</li> <li>- mulching any larger material for potential reuse on site (if there are sufficient quantities); and</li> <li>- removing vegetated material from site to approval facilities as required.</li> </ul> </li> <li>• The following weed management measures are to be implemented: <ul style="list-style-type: none"> <li>- any remaining and re-established weeds are to be eradicated by low impact physical and chemical methods;</li> <li>- a non-residual glyphosate herbicide is to be applied, as per manufacturer's instructions; and</li> <li>- weeds and rubbish are to be removed, by hand, prior to subsoil preparation.</li> </ul> </li> <li>• The following measures in relation to subsoil preparation are to be implemented: <ul style="list-style-type: none"> <li>- planting holes and bases are to be cultivated to 150 mm;</li> <li>- augers are not to be used without cultivation of sides and base;</li> <li>- cultivation of soils near services or tree roots is to be done by hand;</li> <li>- cultivation of soils within 300 mm of paths or structures is to be done by hand;</li> <li>- stones exceeding 25 mm and clods of earth exceeding 50 mm are to be removed;</li> <li>- any weeds, rubbish or other unfavourable material uncovered during cultivation is to be removed;</li> <li>- any additives to topsoil placed in the landscape area are to be incorporated by cultivating through the topsoil prior to placement; and</li> <li>- the surface is to be trimmed to the required design levels after cultivation.</li> </ul> </li> <li>• The following measures in relation to soil type and quality are to be implemented: <ul style="list-style-type: none"> <li>- soils are to comply with Australian Standard (AS 4419-1998);</li> <li>- soils texture is to be 'Medium – (Sandy Loam)' or 'Coarse – (Sand Soil)';</li> <li>- soil for the landscaping works is to be certified as weed free, including onion weed, nut grass, clover, trad, bindii and oxalis;</li> <li>- soil is to be placed to all planting bed areas and individual tree locations as required; and</li> <li>- all spoil or excess soil excavated in the process of implementing the landscaping is to be removed by the landscaping contractor.</li> </ul> </li> <li>• The following measures in relation to soil placement are to be implemented:</li> </ul>
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		<ul style="list-style-type: none"> <li>- soil is to be placed on the prepared subsoil, with an even spread and grade (allowance is to be for compaction, with final levels allowing mulch to be placed to the top of paving and masonry edges); and</li> <li>- the soil service level is to be smooth and free from stones or lumps of soil, graded to drain freely without ponding to catchment point, graded evenly into adjoining ground surfaces and ready for planting.</li> <li>• The following measures in relation to compost and fertiliser are to be implemented: <ul style="list-style-type: none"> <li>- compost is to consist of well-rotted vegetative material, animal manure or other approved material and is to be free from harmful chemicals;</li> <li>- fertiliser is to be delivered to the site in sealed and labelled bags or containers, including recommended uses and application rates; and</li> <li>- fertiliser is to be used in accordance with the manufacturer's recommendations.</li> </ul> </li> <li>• The following measures in relation to mulching are to be implemented: <ul style="list-style-type: none"> <li>- mulch is to be placed with the tree drip lines and <i>Lomandra longolia</i> planted area and is to be free of deleterious and extraneous matter such as oil, weeds, stick and stones; and</li> <li>- mulch is to be clear of plant stems and raked to an even surface with the finished levels.</li> </ul> </li> <li>• The following measures in relation to site establishment and maintenance are to be implemented: <ul style="list-style-type: none"> <li>- a twelve-month establishment period is to commence upon occupation of the site;</li> <li>- a planning maintenance program is to be performed by the contractor on a quarterly basis;</li> <li>- maintenance work is to be recorded in a logbook noting the activities and materials that have been used;</li> <li>- following completion of the establishment maintenance period, Benedict Recycling is responsible for ongoing maintenance and monitoring in accordance with the LMP; and</li> <li>- all maintenance activities are outlined in Table 2 of the LMP.</li> </ul> </li> <li>• The following measures in relation to weed management are to be implemented: <ul style="list-style-type: none"> <li>- in the first instance, weeds are to be removed by hand, pulling the whole stem of each plant from the ground or digging out plants with a handheld tool; and</li> <li>- in the event that chemical control is required, the spot spraying of an appropriate herbicide is to be applied in the manner prescribed on the label.</li> </ul> </li> </ul>
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## **5 IMPLEMENTATION OF THE OEMP**

### **5.1 ROLES AND RESPONSIBILITIES**

#### **5.1.1 SITE MANAGER**

The facilities' Site Manager is responsible for:

- ensuring the facility complies with all relevant licences, approvals and applicable legislation;
- approving and implementing the OEMP;
- allocating project resources to managing environmental issues on site;
- taking action to resolve any non-compliances;
- ensuring site personnel receive appropriate environmental awareness training and supporting site personnel to comply with relevant consent and EPL conditions;
- reviewing the OEMP and accompanying environmental management plans; and
- reporting to senior management on the performance of the OEMP, environmental incidents/non compliances and improvement opportunities.

#### **5.1.2 SITE SUPERVISOR**

The facilities' Site Supervisor is responsible for:

- ensuring that the site complies with relevant licences, acts and regulations and notify the Site Manager of any contraventions;
- undertaking and/or co-ordinating environmental monitoring requirements specified in the consent and the EPL; and
- delivering environmental awareness training.

#### **5.1.2 ALL PERSONNEL**

All site personnel are responsible for the following:

- complying with relevant Acts, Regulations and Standards;
- complying with Benedict policies and procedures;
- complying with management/supervisory directions;
- promptly reporting any non-conformances and/or breaches to management; and
- participating in induction and training as directed.

## 5.2 TRAINING

All of the facility's employees and subcontractors (as necessary) are to receive environmental training, to ensure they are aware of their responsibilities and have the necessary knowledge and skills to carry out their work.

Environmental requirements are to be explained to employees as part of Benedict's corporate and site inductions. Training is to be ongoing as required. All inductions and ongoing training are to be recorded.

Employees and contractors are to receive training in the following areas:

- the requirements of the OEMP;
- EPL and consent condition compliance;
- significant environmental risks, impacts and controls;
- pollution incident response management plan;
- emergency response management; and
- understanding their legal obligations.

## 5.3 ANNUAL REVIEW

In accordance with Condition C8, within 12 months from the commencement of operation, and each year thereafter, unless otherwise agreed by the Secretary, the environmental performance of the facility is to be reviewed to the satisfaction of the Secretary. This review must:

(a) describe the operation of the facility that was carried out in the previous reporting period, and the operations that are proposed to be carried out over the next reporting period;

(b) include a comprehensive review of the monitoring results and complaints records of the operation of the facility over the previous reporting period, which includes a comparison of these results against the:

- i. relevant statutory requirements, limits or performance measures/criteria;
- ii. requirements of any plan or program required under this consent; and
- iii. monitoring results of previous reporting periods.

(c) identify any non-compliance over the last reporting period, and describe what actions were (or are being) taken to ensure compliance;

(d) identify any trends in the monitoring data over the life of the facility;

(e) identify any discrepancies between the predicted and actual impacts of the facility, and analyse the potential cause of any significant discrepancies; and

(f) describe what measures are to be implemented over the next reporting period to improve the environmental performance of the facility.

Environmental goals and procedures in relation to staff training requirements are set out in the following table.

STAFF TRAINING REQUIREMENTS		OP 14
Primary environmental goals	<ul style="list-style-type: none"><li>• Staff are to be adequately trained to ensure the protection of the environment.</li><li>• Staff and contractors (and their sub-contractors) are to be made aware of and instructed to comply with the conditions of the consent and the EPL relevant to activities they carry out on site.</li></ul>	
Related environmental goals	<ul style="list-style-type: none"><li>• Assure the quality of all operations.</li><li>• Provide adequate staffing and training.</li><li>• Provide and maintain a safe working environment.</li></ul>	
PROCEDURES		
OP 14.1	Staff Training	<p>All staff are to undertake training to enable them to competently and safely carry out their assigned duties. Specifically:</p> <ul style="list-style-type: none"><li>• all staff employed at the facility are to be trained in the requirements and operational procedures of the OEMP;</li><li>• operators of equipment must be trained and skilled at undertaking the task allocated to them; and</li><li>• staff must be capable of identifying wastes that are not permitted to be disposed of at the facility.</li></ul>
OP 14.2	Monitoring	<p>Staff competency is to be monitored through:</p> <ul style="list-style-type: none"><li>• site audits;</li><li>• annual staff competency assessments;</li><li>• customer complaints received; and</li><li>• incident reports.</li></ul>
OP 14.3	Responsibility	<p>The Site Operator is responsible for:</p> <ul style="list-style-type: none"><li>• carrying out tasks in a safe manner and in accordance with the procedures in which he/she have been trained.</li></ul> <p>The Site Leading Hand/Supervisor is responsible for:</p> <ul style="list-style-type: none"><li>• carrying out tasks in a safe manner and in accordance with the procedures in which he/she has been trained.</li></ul> <p>The Site Manager is responsible for:</p> <ul style="list-style-type: none"><li>• implementing this procedure;</li><li>• arranging for staff competency assessments and training to ensure that all staff working at the facility are able to perform their duties in a safe and competent manner; and</li><li>• ensuring that the nominated officers have been trained in the requirements of this procedure.</li></ul>

### 5.3 COMMUNITY CONSULTATION AND COMPLAINTS HANDLING

Environmental goals, compliance and procedures in relation to community consultation and complaints handling are set out in the following table.

COMMUNITY CONSULTATION AND COMPLAINTS HANDLING		OP 15
Primary environmental goals	<ul style="list-style-type: none"><li>• Notifying stakeholders regarding key aspects of the operations on site.</li><li>• Identifying environmental issues and ensuring complaints are investigated and acted upon as required.</li></ul>	
Related environmental goals	<ul style="list-style-type: none"><li>• Understanding any concerns of local community groups.</li><li>• Preventing degradation of local amenity.</li><li>• Providing adequate staffing and training.</li></ul>	
Compliance	<p>Key consent conditions relevant to community consultation and complaints handling on the site are set out below.</p> <ul style="list-style-type: none"><li>• Ensure the local community and relevant agencies are kept informed about the operations and environmental performance of the facility.</li><li>• Receive, handle, respond to and record complaints.</li><li>• Resolve any disputes that arise.</li><li>• Ensure lighting associated with the facility complies with the Australian Standard <i>AS 4282 (INT) Control of Obtrusive Effects of Outdoor Lighting</i>.</li><li>• Ensure lighting is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network including at night.</li></ul>	
PROCEDURES		
OP15.1	Consultation	<p>Community consultation activities to be undertaken include:</p> <ul style="list-style-type: none"><li>• a dedicated Benedict webpage; and</li><li>• a community telephone line to provide a central point of contact for community enquiries.</li></ul>
OP15.2	Website	<p>The following are to be published on the website:</p> <ul style="list-style-type: none"><li>• all relevant statutory approvals for the facility;</li><li>• the OEMP, including accompanying environmental management plans;</li><li>• a summary of all monitoring results;</li><li>• a complaints register updated on a monthly basis; and</li><li>• annual reviews and independent environmental audits.</li></ul>
OP 15.3	Complaints reporting	<p>Complaints received from an outside party are to be reported immediately to the Site Leading Hand/Supervisor and the Site Manager.</p>
OP 15.4	Investigations	<p>Any complaint received is to be investigated, including identification of the:</p> <ul style="list-style-type: none"><li>• cause of the complaint;</li><li>• climatic conditions at the time of the incident;</li><li>• date and time the incident took place; and</li><li>• occurrence of similar complaints in the past.</li></ul>



OP 15.5	Recording	Details of any complaints received are to be recorded on the facilities' corporate records system and kept for at least four years.
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## 5.4 INCIDENT REPORTING

Environmental goals and procedures in relation to incident reporting are set out in the following table.

INCIDENT REPORTING		OP 16
Primary environmental goal		Reporting incidents so that potential environmental hazards are identified.
Related environmental goals		<ul style="list-style-type: none"> <li>• Ensure compliance with the consent and the EPL.</li> <li>• Prevent pollution of water.</li> <li>• Manage stormwater.</li> <li>• Manage wastewater.</li> <li>• Prevent the degradation of local amenity.</li> <li>• Prevent unauthorised entry.</li> <li>• Provide adequate fire fighting capacity.</li> <li>• Provide adequate staffing and training.</li> <li>• Provide and maintain a safe working environment.</li> </ul>
PROCEDURES		
OP 16.1	Internal reporting	In all cases where an incident or accident occurs which has the potential to harm the environment the incident is to be reported immediately to the Site Leading Hand/Supervisor.
OP 16.2	External reporting	<p>The EPA is to be advised of any incident that poses a threat to the environment as soon as practical after the incident occurs. The incident is to be reported by telephoning:</p> <ul style="list-style-type: none"> <li>• <b>EPA Sydney office: 02 9995 5000</b></li> <li>• <b>EPA Pollution Hotline: 131 555</b></li> </ul> <p>Formal written advice of the incident is to be forwarded to the EPA within 14 days of the incident.</p> <p><b>NOTE: The external reporting requirement does not apply when the harm or potential for harm is permitted for the site.</b></p>
OP 16.3	Reportable incidents	<p>Reportable incidents include:</p> <ul style="list-style-type: none"> <li>• Dumping of a prohibited waste on site.</li> <li>• Failure of the sediment pond.</li> <li>• Any other incident or observation that could pose an immediate environmental hazard that is not characteristic of the normal operations of the facility.</li> </ul>
OP 16.4	Incident reports	<p>Following containment and/or amelioration of the incident, an incident report is to be prepared. This report is to be recorded on the facilities' record system and is to include the:</p> <ul style="list-style-type: none"> <li>• time and date the incident occurred;</li> <li>• party recording the incident;</li> <li>• nature, details, location and cause of the incident;</li> <li>• duration of the incident;</li> <li>• actions to be taken to contain and/or ameliorate the effects of the incident;</li> </ul>

		<ul style="list-style-type: none"> <li>• name, addresses and telephone numbers of witnesses to the incident; and</li> <li>• actions that could be taken to minimise the risk of such incident recurring.</li> </ul> <p>Records of the incident are to be kept for at least four years.</p>
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## 5.5 EMERGENCY RESPONSE MANAGEMENT

The following are priorities if an emergency situation occurs at the facility:

- the protection of human life and welfare;
- the protection of the environment; and
- the protection of Benedict's assets.

An Emergency Management Plan (Appendix H) has been developed by Benedict as a means of identifying potential emergency situations and identifying the appropriate response that should be followed when dealing with an emergency. The Emergency Management Plan is included as Appendix H and includes details of:

- emergency control organisation;
- fire safety equipment and systems;
- the evacuation plan;
- the Fire Hydrant Block Plan;
- the Fire Sprinkler Block Plan; and
- emergency procedures for:
  - fire or explosion;
  - medical Emergency;
  - phone threat;
  - severe storms;
  - gas leaks and airborne contaminants;
  - civil disturbance; and
  - stockpile fire management.

## 5.6 DOCUMENT CONTROL

To ensure this OEMP and accompanying environmental management plans are updated on a regular basis and to incorporate additional management measures (as required), this OEMP is to be reviewed and revised (if necessary) within three months of the following (in accordance with Condition C7):

- DPIE approval of an annual review;
- approval of a modification;
- submission of an incident report;
- completion of an audit; and/or
- installation/upgrades to fire safety equipment and systems.

All revisions to the OEMP are to be approved by DPIE prior to implementation.

This OEMP is to be distributed to all appropriate staff involved in the operation and management of the facility. Revised and updated versions of this OEMP and accompanying management plans, once approved, supersede earlier versions must be issued to all registered holders of this OEMP with a memo summarising the changes.

A register is to be maintained detailing the new version number and the date of issue.

## 6 COMPLIANCE REPORTING

Compliance reporting is required to provide a systematic review of the environmental performance of the facility in accordance with legislative requirements. The reports required are summarised in Table 6.1.

**Table 6.1 Required reporting**

Type of report	Frequency	Distribution	Report inclusions
Incident reporting	Notify immediately and report within 7 days	DPIE and EPA	Written report detailing the date, time, nature, cause of the incident and preventative /corrective actions.
Annual review	Yearly	DPIE	Written report, including: <ul style="list-style-type: none"> <li>• conditions compliance report;</li> <li>• review of complaints;</li> <li>• review of monitoring results including a comparison of these against the relevant statutory requirements;</li> <li>• identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</li> <li>• identify any trends in the monitoring data over the life of the facility;</li> <li>• identify any discrepancies between the predicted and actual impacts of the facility, and analyse the potential cause of any significant discrepancies; and</li> <li>• describe what measures are to be implemented over the next year to improve the environmental performance of the facility.</li> </ul>
Annual return	Yearly	EPA	Online form submission.
Independent environmental audit	Within 1 year of commencement of expanded operations and every 3 years thereafter	DPIE	<p>The environmental audit is to be conducted by an independent party endorsed by DPIE and is to include:</p> <ul style="list-style-type: none"> <li>• consultation with relevant agencies;</li> <li>• an assessment of the environmental performance of the facility and compliance with relevant approvals; and</li> <li>• recommend measures or actions to improve performance.</li> </ul> <p>Within 3 months of commissioning an audit a copy of the audit report, including a timetable for the implementation of recommendations, is to be submitted to the Secretary.</p>

**APPENDIX A – COMPLIANCE REGISTER**



## Compliance Register

Condition	Requirement	Where Addressed in OEMP
<b>PART A: ADMINISTRATIVE CONDITIONS</b>		
<b>OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</b>		
<b>A1</b>	In addition to meeting the specific performance measures and criteria in this consent, all reasonable and feasible measures must be implemented to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the development, and any rehabilitation required under this consent.	Management measures documented in Chapter 4.
<b>TERMS OF CONSENT</b>		
<b>A2 (as per MOD 1)</b>	The Development may only be carried out in: (a) compliance with the conditions of this consent; (b) accordance with the directions of the Secretary; (e) accordance with the EIS and RTS; (d) accordance with development layout plans and drawings dated 10 May 2017 (Revision H) (see Appendix A1); and (e) accordance with the Management and Mitigation Measures (see Appendix B1).	The management measures documented in Chapter 4 reflect the requirements of all relevant consent requirements.
<b>A3</b>	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.	Noted
<b>A4</b>	The Applicant must comply with all 'Millen requirement(s) of the Secretary arising from the Department's assessment of: (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with the is consent (including any stages of these documents); and (b) the implementation of any actions or measures contained within thin these documents.	Noted
<b>LIMITS OF CONSENT</b>		
<b>A5</b>	This consent lapses five years after the date from which it was granted, unless the Development has physically commenced on the land to which the consent applies before the date on which the consent would otherwise lapse under section 95 of the EP&A Act.	Noted

<b>A6</b>	The Applicant must not receive or process on site more than 140,000 tonnes per year of general solid waste (non-putrescible).	Section 4.2 and the Waste Management Plan (Appendix C)																																													
<b>A7</b>	<p>The Applicant must not exceed the following maximum stockpile volumes detailed in the table below on the site at any time, unless otherwise agreed in writing by the Secretary.</p> <table border="1"> <thead> <tr> <th>Stockpile</th><th>Waste Type</th><th>Maximum Volume</th></tr> </thead> <tbody> <tr> <td>Bay 1</td><td>Fines (particles of less than 8 mm diameter)</td><td>100 m<sup>3</sup></td></tr> <tr> <td>Bay 2</td><td>Hand-picked light waste</td><td>80 m<sup>3</sup></td></tr> <tr> <td>Bay 3</td><td>Timber</td><td>80 m<sup>3</sup></td></tr> <tr> <td>Bay 4</td><td>Masonry</td><td>220 m<sup>3</sup></td></tr> <tr> <td>Bay 5</td><td>Masonry</td><td>220 m<sup>3</sup></td></tr> <tr> <td>Bay 6</td><td>Timber</td><td>200 m<sup>3</sup></td></tr> <tr> <td>Bay 7</td><td>VENM/ENM</td><td>300 m<sup>3</sup></td></tr> <tr> <td>Skip Bin adjacent Bay 1</td><td>Ferrous waste</td><td>9 m<sup>3</sup></td></tr> <tr> <td>Skip Bin adjacent Bay 1</td><td>Non-ferrous waste</td><td>2 m<sup>3</sup></td></tr> <tr> <td>Processing shed - west</td><td>Bulk light waste</td><td>550 m<sup>3</sup></td></tr> <tr> <td>Processing shed - west</td><td>Coarse vegetation</td><td>150 m<sup>3</sup></td></tr> <tr> <td>Processing shed - central</td><td>Mixed demolition with a 20% combustible light weight component</td><td>1,100 m<sup>3</sup></td></tr> <tr> <td>Processing shed - east</td><td>Plant feed with a 5% combustible light waste component</td><td>1,100 m<sup>3</sup></td></tr> <tr> <td>Total</td><td></td><td>4,141 m<sup>3</sup></td></tr> </tbody> </table>	Stockpile	Waste Type	Maximum Volume	Bay 1	Fines (particles of less than 8 mm diameter)	100 m <sup>3</sup>	Bay 2	Hand-picked light waste	80 m <sup>3</sup>	Bay 3	Timber	80 m <sup>3</sup>	Bay 4	Masonry	220 m <sup>3</sup>	Bay 5	Masonry	220 m <sup>3</sup>	Bay 6	Timber	200 m <sup>3</sup>	Bay 7	VENM/ENM	300 m <sup>3</sup>	Skip Bin adjacent Bay 1	Ferrous waste	9 m <sup>3</sup>	Skip Bin adjacent Bay 1	Non-ferrous waste	2 m <sup>3</sup>	Processing shed - west	Bulk light waste	550 m <sup>3</sup>	Processing shed - west	Coarse vegetation	150 m <sup>3</sup>	Processing shed - central	Mixed demolition with a 20% combustible light weight component	1,100 m <sup>3</sup>	Processing shed - east	Plant feed with a 5% combustible light waste component	1,100 m <sup>3</sup>	Total		4,141 m <sup>3</sup>	Section 4.5 and the Waste Management Plan (Appendix C)
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<b>A8</b>	The maximum height of all structures and buildings on site must be no more than 11 m from natural ground level.	Noted																																													
<b>STAGED SUBMISSION OF PLANS OR PROGRAMS</b>																																															
<b>A9</b>	<p>With the approval of the Secretary the Applicant may:</p> <p>(a) submit any strategy, plan or program required by this consent on a progressive basis: and/or</p> <p>(b) combine any strategy, plan or program required by this consent.</p>	Noted																																													



<b>A10</b>	If the submission of any strategy, plan or program is to be staged. then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program. A clear relationship between the strategy, plan or program that is to be combined must be demonstrated.	Noted
<b>REQUEST FOR INFORMATION</b>		
<b>A11</b>	The Applicant must retain all weighbridge records as required by the POEO (waste) Regulation and for the life of the development. The weighbridge records must be made immediately available on request by the Secretary and/or the EPA.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>A12</b>	The Applicant must retain waste classification records for all wastes received on the site and waste disposed from the site for the life of the development. The waste classification records must be made immediately available on request by the EPA and/or the Secretary.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>EVIDENCE OF CONSULTATION</b>		
<b>A13</b>	Where consultation with any public authority is required by the conditions of this consent, the Applicant must: (a) consult with the relevant public authority prior to submitting the required documentation to the Secretary or the certifying authority for approval; (b) submit evidence of such consultation as part of the relevant documentation required by the conditions of this consent (c) describe how matters raised by the public authority have been addressed and identify matters that have not been resolved; and (d) include the details of any outstanding issues raised by the relevant public authority and an explanation of disagreement between any public authority and the Applicant.	Section 5.3 and the Waste Management Plan (Appendix C)
<b>STATUTORY REQUIREMENTS</b>		
<b>A14</b>	The Applicant must ensure that all licences, permits and approval/consents are obtained as required by law and maintained as required throughout the life of the Development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approval/consents.	Noted
<b>EXTERNAL WALLS AND CLADDING FLAMMABILITY</b>		
<b>A15</b>	The Applicant must ensure all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the BCA.	Noted

<b>A16</b>	The external walls of the building including attachments must comply with the relevant requirements of the NCC. Prior to the issue of a Construction Certificate and Occupation Certificate the Certifying Authority must: (a) be satisfied that suitable evidence is provided to demonstrate that the products and systems proposed for use or used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the relevant requirements of the NCC; and (b) ensure that the documentation relied upon in the approval processes include an appropriate level of detail to demonstrate compliance with the NCC as proposed and as built.	Noted
<b>A17</b>	A copy of the documentation required under (b) must be provided to the Secretary within 7 days of being accepted by the Certifying Authority.	Noted
<b>UTILITIES AND SERVICES</b>		
<b>A18</b>	Prior to the construction of any utility works associated with the Development. the Applicant must obtain relevant approvals from service providers.	Not applicable for the OEMP
<b>A19</b>	Prior to the commencement of construction, all approved plans must be submitted to the Sydney Water "Tap In" service to determine if the development will have any impacts on Sydney Water assets.	Not Applicable for the OEMP
<b>A20</b>	Prior to the operation of the Development, the Applicant must obtain a Compliance Certificate for water and sewerage infrastructure servicing of the site under section 73 of the Sydney Water Act 1994.	Noted
<b>PROTECTION OF PUBLIC INFRASTRUCTURE</b>		
<b>A21</b>	Prior to the commencement of construction, the Applicant must: (a) consult with the relevant owner and/or provider of services that are likely to be affected by the Development to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure; (b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and (c) submit a copy of this report to the Secretary and Council.	Not applicable for the OEMP
<b>A22</b>	Unless the Applicant and the applicable authority agree otherwise, the Applicant must: (a) repair, or pay the full costs associated with repairing any public infrastructure that is damaged by the Development; and (b) relocate, or pay the full costs associated with re locating any infrastructure that needs to be relocated due to the Development.	Noted

<b>COMPLIANCE</b>		
<b>A23</b>	The Applicant must ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	Sections 5.1 and 5.2
<b>WORKS-AS-EXECUTED PLANS</b>		
<b>A24</b>	Prior to the issue of the final Occupation Certificate, works-as-executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved, must be submitted to the PCA.	Noted
<b>OPERATION OF PLANT AND EQUIPMENT</b>		
<b>A25</b>	The Applicant must ensure that only the plant and equipment listed in the table below is used on site.	
	<b>Plant (or equivalent)</b>	<b>Number</b>
	<b>Typical activities</b>	
	<b>Equipment used across the site</b>	
	Front end loader (e.g. Volvo L150 or equivalent)	1
	Trucks (customers)	5
	<b>Equipment used in main shed</b>	
	13 t excavator	1
	Screening plant inside shed	1
	Picking line	1
<b>A26</b>	The Applicant must ensure that all plant and equipment used for the Development is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Noted

<b>PART B: ENVIRONMENTAL PERFORMANCE AND MANAGEMENT</b>			
<b>NOISE</b>			
<b>Hours of Work</b>			
<b>B1</b>	The Applicant must comply with the hours of work detailed in the following table unless otherwise agreed in writing by the Secretary.		Section 3.5
	<b>Activity</b>	<b>Day</b>	
	Accept waste deliveries and dispatch	Monday to Friday Saturday Sunday	
	Waste Processing	Monday to Friday	6 am to 10 pm
		Saturday	6 am to 5 pm
		Sunday	8 am to 4 pm
		Monday to Friday	7 am to 6 pm
		Saturday	7 am to 4 pm
<b>B2</b>	Works outside of the hours identified in Condition 81 may be undertaken in the following circumstances: (a) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or (b) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.		Section 3.5

Construction Noise Management Plan												
B3	Prior to the commencement of construction, the Applicant must prepare a Construction Noise and Vibration Management Plan (CNVMP) for the development to manage high noise generating works to the satisfaction of the Secretary. The CNVMP shall form part of the CEMP required by Condition C1 and must: (a) be prepared by a suitably qualified and experienced noise expert; (b) be approved by the Secretary prior to the commencement of construction the Development; (c) describe the management and mitigation measures and procedures for achieving the noise management levels in the EPA's Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009); (d) identify high emission generating construction activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities; (e) include strategies that have been developed with the community for managing high noise generating works; (f) describe the community consultation undertaken to develop the strategies in (e) above; and (g) include a complaints management system that would be implemented for the duration of the Development.			Not applicable for the OEMP								
B4	The Applicant must: (a) not commence construction until the CNVMP required by Condition 83 is approved by the Secretary; and (b) The Applicant must ensure the CNVMP (as required and approved by the Secretary from time to time) is implemented during construction of the Development.			Not applicable for the OEMP								
Operational Noise Criteria												
B5	The Applicant must ensure that noise generated by operation of the Development does not exceed the noise criteria in the table below: <table><tr><th>Location</th><th>Day LAeq(15 minute)</th><th>Evening LAeq(15 minute)</th><th>Night LAeq(15 minute)</th></tr><tr><td>All residential receivers</td><td>40</td><td>40</td><td>40</td></tr></table>			Location	Day LAeq(15 minute)	Evening LAeq(15 minute)	Night LAeq(15 minute)	All residential receivers	40	40	40	Section 4.8 and the Operational Noise and Vibration Management Plan (Appendix G)
Location	Day LAeq(15 minute)	Evening LAeq(15 minute)	Night LAeq(15 minute)									
All residential receivers	40	40	40									

<b>Acoustic Fencing</b>		
<b>B6 (as per MOD 1)</b>	The Applicant must construct the fencing shown in Appendix A1 prior to the commencement of construction of any part of the Development.	Noted
<b>B7</b>	To ensure the external appearance of the development is suitable and contributes to the visual character of the surrounding area, the boundary fencing shall be of a visually attractive material and colour that has been agreed to by the Secretary.	Noted
<b>B8 (as per MOD 1)</b>	Detailed drawings and further details of the boundary fencing shown in Appendix A1 shall be submitted to and be approved in writing by the Secretary prior to commencement of construction of any part of the Development. The detail thereby approved must be carried out in accordance with that approval.	Noted
<b>Operational Noise and Vibration Management Plan</b>		
<b>B9</b>	<p>Prior to the commencement of operation, the Applicant must prepare an Operational Noise and vibration Management Plan (ONVMP) for the Development to the satisfaction of the Secretary. The ONVMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The ONVMP must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified and experienced noise expert;</li> <li>(b) describe all noise sources from the Development;</li> <li>(c) describe the measures that will be implemented to minimise the noise emissions in the area including; <ul style="list-style-type: none"> <li>(i) the management and mitigation measures to be employed on site;</li> <li>(ii) how the noise impacts of the Development will be minimised during any adverse meteorological conditions or extraordinary events;</li> <li>(iii) identification of high emission generating operational activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities; and</li> </ul> </li> <li>(d) until the Secretary directs otherwise, include a quarterly monitoring program that evaluates and reports on; <ul style="list-style-type: none"> <li>(i) compliance with the noise criteria specified in Condition B5;</li> <li>(ii) the management actions to be taken to address any exceedances of the criteria specified in Condition B5; and</li> <li>(iii) the contingency measures that will be implemented in the event management actions are not effective in reducing noise levels to an acceptable level;</li> </ul> </li> <li>(e) identify the control measures that will be implemented for each emission source; and</li> <li>(f) defines what constitutes a noise incident and includes a protocol for identifying noise incidents and notifying the Department and relevant stakeholders of any such incident.</li> </ul>	Section 4.8 and the Operational Noise and Vibration Management Plan (Appendix G)

<b>B10</b>	If in the opinion of the Secretary the monitoring program required by Condition B9(d) demonstrates systemic exceedances of the noise criteria in Condition B5, the Applicant shall not be permitted to operate on the site between the hours of 10 pm and 7 am.	Noted
<b>B11</b>	The Applicant must: (a) not commence operation until the ONVMP required by Condition B9 is approved by the Secretary; and (b) ensure the ONVMP (as required and approved by the Secretary from time 10 time) is implemented for the operational life of the Development.	Noted
<b>Road Traffic Noise</b>		
<b>B12</b>	Prior to the commencement of construction, the Applicant must prepare a Driver Code of Conduct and induction training for the Development to minimise road traffic noise. The Applicant must update the Driver Code of Conduct and induction training for construction and operation and must implement the Code of Conduct for the life of the Development.	Section 4.6 and the Operational Traffic Management Plan (Appendix F)
<b>B13</b>	The Applicant must ensure that all its vehicles are fitted with a broadband reversing alarm.	Noted
<b>VIBRATION</b>		
<b>Vibration criteria</b>		
<b>B14</b>	Vibration caused by construction at any residence or structure outside the site must be limited to; (a) for structural damage, German Standard DIN 4150 Part 3 Structural Vibration in Buildings. Effects on Structures; and (b) for human exposure, the acceptable vibration values set out in the Environmental Noise Management Assessing Vibration: a technical guideline (Department of Environment and Conservation, 2006).	Section 4.8 and the Operational Noise and Vibration Management Plan (Appendix G)
<b>B15</b>	The vibration limits in Condition B14 apply unless an alternative is outlined in a Construction Noise and Vibration Management Plan, approved as part of the CEMP required by Condition C1 of this consent.	Section 4.8 and the Operational Noise and Vibration Management Plan (Appendix G)
<b>TRAFFIC AND ACCESS</b>		
<b>Parking</b>		
<b>B16</b>	Prior to the commencement of operation, the Applicant must provide 8 parking spaces for staff and 2 parking spaces for visitors on site (including one accessible parking space) to ensure that traffic associated with the Development does not utilise public and residential streets or public parking facilities. Parking areas must be constructed in accordance with the latest version of AS 2890.	Section 4.6 and the Operational Traffic Management Plan (Appendix F)
<b>B17</b>	No parking is not permitted elsewhere on the site except within the designated parking spaces.	Section 4.6 and the Operational Traffic

		Management Plan (Appendix F)
<b>Operating Conditions</b>		
<b>B18</b>	<p>The Applicant must ensure:</p> <ul style="list-style-type: none"> <li>(a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the Development are constructed and maintained in accordance with the latest version of AS 2890.1 and AS 2890.2;</li> <li>(b) the swept path of the longest vehicle entering and exiting the site, as well as manoeuvrability through the site, is in accordance with the relevant AUSTRROADS guidelines;</li> <li>(c) the Development does not result in any vehicles parking or queuing on the public road network;</li> <li>(d) all vehicles enter and exit the site in a forward direction;</li> <li>(e) heavy vehicles and bins associated with the Development are not parked on local roads or footpaths near the site;</li> <li>(f) all vehicles are wholly contained on site before being required to stop;</li> <li>(g) all loading and unloading of materials is carried out on-site in designated areas;</li> <li>(h) all trucks entering or leaving the site with loads have their loads covered and do not track dirt onto the public road network; and</li> <li>(i) vehicle manoeuvring areas must always be kept clear of any obstacles, including parked cars.</li> </ul>	Section 4.6 and the Operational Traffic Management Plan (Appendix F)
<b>B19</b>	All trucks leaving the site must depart via a wheel wash facility to prevent mud, dust or debris from being deposited on Council roads. The wheel wash facility must be designed and constructed in consultation with Council and to the satisfaction of the Secretary prior to commencement of operation.	Section 4.6 and the Operational Traffic Management Plan (Appendix F)



<b>Operational Traffic Management Plan</b>		
<b>B20</b>	<p>Prior to the commencement of operation, the Applicant must prepare an Operational Traffic Management Plan (OTMP) for the Development to the satisfaction of the Secretary. The plan must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The OTMP must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified and experienced person(s);</li> <li>(b) be prepared in consultation with Council;</li> <li>(c) detail the measures that are to be implemented to ensure road safety and network efficiency including restricting queuing or parking of vehicles on Anderson Road;</li> <li>(d) detail heavy vehicle routes, access and parking arrangements;</li> <li>(e) include a Driver Code of Conduct to: <ul style="list-style-type: none"> <li>i. minimise the impacts on the local and regional road network;</li> <li>ii. minimise conflicts with other road users;</li> <li>iii. minimise road traffic noise;</li> <li>iv. ensure truck drivers use specified routes; and</li> <li>v. include a program to monitor the effectiveness of these measures.</li> </ul> </li> <li>(f) include a Traffic Control Plan (TCP) detailing: <ul style="list-style-type: none"> <li>i. the on-site measures to be implemented to control the movement of trucks in and out of the site, as well as onsite; and</li> <li>ii. provisions for requiring the traffic controller to stop exiting trucks to allow an entering truck to manoeuvre into the site unhindered.</li> </ul> </li> </ul>	Section 4.6 and the Operational Traffic Management Plan (Appendix F)
<b>B21</b>	<p>The Applicant must:</p> <ul style="list-style-type: none"> <li>(a) not commence operation until the OTMP required by Condition B20 is approved by the Secretary; and</li> <li>(b) The Applicant must ensure the OTMP (as required and approved by the Secretary from time to time) is implemented for the operational life of the Development.</li> </ul>	Noted
<b>AIR QUALITY</b>		
<b>Dust Minimisation</b>		
<b>B22</b>	<p>During construction, the Applicant must ensure that:</p> <ul style="list-style-type: none"> <li>(a) exposed surfaces and stockpiles are suppressed by regular watering;</li> <li>(b) all trucks entering or leaving the site with loads have their loads covered;</li> <li>(c) trucks associated with the Development do not track dirt onto the public road network; and</li> <li>(d) public roads used by these trucks are kept clean.</li> </ul>	Note applicable to the OEMP

<b>Operational Air Quality Management Plan</b>		
<b>B23</b>	<p>Prior to the commencement of operation. the Applicant must prepare an Air Quality Management Plan (AQMP) to the satisfaction of the Secretary. The AQMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The AQMP must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified and experienced person(s);</li> <li>(b) detail and rank all emissions from all sources of the Development, including particulate emissions and odour;</li> <li>(c) describe the measures that will be implemented to minimise the potential risks to adverse air quality in the area including: <ul style="list-style-type: none"> <li>• the management and mitigation measures to be employed on site;</li> <li>• plant and equipment being maintained to ensure that it is in good order;</li> <li>• how the air quality impacts of the development will be minimised during any adverse meteorological conditions or extraordinary events;</li> <li>• identification of high emission generating operational activities. including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities; and</li> <li>• compliance with the relevant conditions of this consent including Condition 825; and</li> </ul> </li> <li>(d) identify the control measures that that will be implemented for each emission source.</li> <li>(e) defines what constitutes an air quality incident and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.</li> </ul>	Section 4.7 and the Air Quality Management Plan (Appendix E)
<b>B24</b>	<p>The Applicant must:</p> <ul style="list-style-type: none"> <li>(a) not commence operation until the AQMP required by Condition 823 is approved by the Secretary; and</li> <li>(b) The Applicant must ensure the AQMP (as required and approved by the Secretary from time to time) is implemented for the operational life of the Development.</li> </ul>	Section 4.7 and the Air Quality Management Plan (Appendix E)
<b>Odour Management</b>		
<b>B25</b>	The Applicant must ensure the Development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).	Section 4.7 and the Air Quality Management Plan (Appendix E)

<b>SIOLS, WATER QUALITY AND HYDROLOGY</b>		
<b>Erosion and Sediment Control</b>		
<b>B26</b>	Prior to the commencement of construction, the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements in the latest version of the Managing Urban Stormwater: Soils and Construction Guideline and the Erosion and Sediment Control Plan included in the CEMP required by Condition C1.	Section 4.5 and the Water Management Plan (Appendix D)
<b>Stormwater Management System</b>		
<b>B27</b>	Prior to the commencement of operation, the Applicant must design and install a stormwater management system for the Development. The system must: (a) be designed by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Secretary; (b) be generally in accordance with the conceptual design in the EIS; (c) include a storage tank with bunding to capture leachate from the main shed and waste stockpile areas for offsite disposal and treatment; (d) be designed in accordance with applicable Australian standards; (e) demonstrate that discharge limits can meet those in the WSUD Guideline; (f) ensure that the system capacity has been designed in accordance with Australian Rainfall and Runoff (Engineers Australia, 2016) and Managing Urban Stormwater: Council Handbook (EPA, 1997) guidelines (as may be updated or replaced from time to time); (g) direct all sediment laden water in overland now away from the leachate management system; and (h) prevent cross-contamination of clean and sediment or leachate laden water.	Section 4.5 and the Water Management Plan (Appendix D)
<b>B28</b>	Prior to the issue of a Construction Certificate, a certificate must be submitted to the Certifying Authority certifying that: (a) satisfactory arrangements have been made for the disposal of stormwater; (b) the proposed development and alterations to the natural surface contours will not impede or divert natural surface water runoff so as to cause a nuisance to adjoining properties; and (c) the piped drainage system has been designed to Council's Stormwater Drainage Policy.	Not applicable for the OEMP
<b>B29</b>	Prior to the issue of the Final Occupation Certificate. Works-As-Executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved must be submitted to the Certifying Authority.	Noted
<b>B30</b>	The stormwater drainage generated from the development must be directed to: (a) the drainage easement; and (b) Council's street kerb and gutter.	Section 4.5 and Appendix D

<b>B31</b>	The stormwater management system must be operated and maintained for the duration of the Development.	Noted
<b>Discharge limits</b>		
<b>B32</b>	The Development must comply with section 120 of the POEO Act, which prohibits the pollution of waters, except as expressly provided for in an EPL.	Section 4.5 and the Water Management Plan (Appendix D)
<b>Water Management Plan</b>		
<b>B33</b>	<p>Prior to the commencement of construction, the Applicant must prepare a Water Management Plan to the satisfaction of the Secretary. The water management plan must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The WMP must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with the CL&amp;W;</li> <li>(b) detail water use, metering, disposal and management on-site;</li> <li>(c) detail the management of wastewater streams on site;</li> <li>(d) verify the likely groundwater dewatering requirements;</li> <li>(e) contain a Surface Water Management Plan, including: <ul style="list-style-type: none"> <li>i. a program to monitor: <ul style="list-style-type: none"> <li>• surface water flows and quality;</li> <li>• surface water storage and use;</li> <li>• discharge limits;</li> <li>• sediment basin operation;</li> </ul> </li> <li>ii. sediment and erosion control plans;</li> <li>iii. surface water impact assessment criteria, including trigger levels for investigating and potential adverse surface water impacts; and</li> <li>iv. a protocol for the investigation and mitigation of identified exceedances of the surface water impact assessment criteria.</li> </ul> </li> </ul>	Section 4.5 and the Water Management Plan (Appendix D)
<b>B34</b>	<p>The Applicant must:</p> <ul style="list-style-type: none"> <li>(a) not commence construction until the water management plan required by Condition B33 is approved by the Secretary; and</li> <li>(b) The Applicant must ensure the water management plan (as required and approved by the Secretary from time to time) is implemented for the life of the Development.</li> </ul>	Section 4.5 and the Water Management Plan (Appendix D)

<b>Groundwater</b>		
<b>B35</b>	In the event that groundwater is intersected during construction the Applicant shall: (a) obtain the necessary water licences or approvals from CL&W; (b) develop a Groundwater Management Plan for the testing, dewatering, storage, movement and treatment of any groundwater to the satisfaction of CL&W.	Section 4.5 and the Water Management Plan (Appendix D)
<b>Soil Salinity Verification</b>		
<b>B36</b>	Prior to the commencement of construction, the Applicant must undertake a soil salinity verification study at the site in consultation with Council. The salinity verification study must be undertaken: (a) by a suitably qualified and experienced person(s); (b) in accordance with the Office of Environment and Heritage (OEH) document Site Investigations for urban salinity (2002) or other relevant guideline; and (c) to the satisfaction of PCA prior to the issue of an Occupation Certificate.	Not applicable for the OEMP
<b>HAZARDS AND RISK</b>		
<b>Dangerous Goods</b>		
<b>B37</b>	The quantities of dangerous goods stored and handled at the site must be below the threshold quantities listed in the Department of Planning's Hazardous and Offensive Development Application Guidelines - Applying SEPP 33 at all times.	Section 4.3 and the Waste Management Plan (Appendix C)
<b>B38</b>	Dangerous goods as defined by the Australian Dangerous Goods Code, must be stored and handled strictly in accordance with: (a) all relevant Australian Standards; (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and (c) the Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin (EPA1997). In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement must prevail to the extent of the inconsistency.	Section 4.3 and the Waste Management Plan (Appendix C)
<b>Bunding</b>		
<b>B39</b>	The Applicant must store all chemicals, fuels and oils used on-site in appropriately banded areas in accordance with the requirements of all relevant Australian Standards, and/or the EPA's <i>Storing and Handling of Liquids: Environmental Protection - Participants Handbook</i> .	Section 4.5

<b>FIRE SAFETY</b>		
<b>Fire Safety System</b>		
<b>B40</b>	The fire hydrant system must be installed in accordance with SCA Clause E1.3 (to buildings and open yard). The system shall comply with AS 2419.1 :2005 except that the minimum now rate shall be 50L/s in lieu of that detailed in Table 2.1.	Section 4.12
<b>B41</b>	The final design of the fire hydrant system must be prepared by a suitably qualified fire services engineer and submitted to the Principal Certifying Authority prior to issue of the Construction Certificate.	Section 4.12
<b>B42</b>	To provide for storage and collection of contaminated fire water, 180 m3 of storage is to be provided on the site. A design prepared by a suitably qualified engineer is to be submitted to the Principal Certifying Authority prior to issue of the Construction Certificate.	Section 4.12
<b>Bushfire Protection</b>		
<b>B43</b>	The Applicant shall incorporate appropriate bush fire protection measures into the detailed design of the Development in accordance with Planning for Bush Fire Protection Guideline (RFS 2006) to the satisfaction of the RFS.	Section 4.12
<b>WASTE MANAGMENT</b>		
<b>Statutory Requirements</b>		
<b>B44</b>	All waste removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the waste.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>B45</b>	Waste generated outside the site must not be received at the site for storage, treatment, processing, reprocessing, or disposal, except as expressly permitted by an EPL.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>B46</b>	The Applicant must record the amount of waste (in tonnes) received at the site on a daily basis.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>B47</b>	The Applicant must retain all sampling and waste classification data for the life of the development and keep it readily available for inspection by the EPA and the Secretary.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>Receipt, Storage and Handling of Waste</b>		
<b>B48</b>	The Applicant shall only receive waste on site that is authorised for receipt by an EPL.	Section 4.2 and the Waste Management Plan (Appendix C)

<b>B49</b>	The Applicant shall ensure any waste generated on the site during construction is classified in accordance with the EPA's Waste Classification Guidelines, 2014 or its latest version, and disposed of to a facility that may lawfully accept the waste.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>B50</b>	<p>The Applicant shall:</p> <p>(a) implement auditable procedures to:</p> <ul style="list-style-type: none"> <li>i. ensure the site does not accept wastes that are prohibited;</li> <li>ii. screen incoming waste loads; and</li> </ul> <p>(b) ensure that:</p> <ul style="list-style-type: none"> <li>i. all waste types that are controlled under a tracking system have the appropriate documentation prior to acceptance at the site;</li> <li>ii. all waste received at the site must be recorded in accordance with clause 27 of the POEO (Waste) Regulation;</li> <li>iii. details of the quantity, type and source of wastes received on the site must be provided to the EPA and the Secretary when requested; and</li> <li>iv. staff receive adequate training to be able to recognise and handle any hazardous or other prohibited waste including asbestos.</li> </ul>	Section 4.2 and the Waste Management Plan (Appendix C)
<b>B51</b>	The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the EPA's Waste Classification Guidelines Part 1: Classifying Waste, November 2014, or its latest version and dispose of all wastes to a facility that may lawfully accept the waste.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>B52</b>	All waste must be stored wholly within the designated waste stockpile areas.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>B53</b>	All waste must be unloaded undercover within the designated unloading areas in the main shed.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>B54</b>	The Applicant must maintain the site in a clean and tidy state at all times.	Section 4.2 and the Waste Management Plan (Appendix C)
<b>B55</b>	All residual waste that is removed from the site must be dispatched outside of peak traffic hours.	Section 4.2 and the Waste Management Plan (Appendix C)

<b>Waste Monitoring Program</b>		
<b>B56</b>	<p>From the commencement of operation, the Applicant must implement a Waste Monitoring Program for the Development. The program must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified and experienced person(s) prior to the commencement of operation;</li> <li>(b) include suitable provision to monitor the: <ul style="list-style-type: none"> <li>quantity, type and source of waste received on site; and</li> <li>quantity, type and quality of the outputs produced on site; and</li> </ul> </li> <li>(c) ensure that: <ul style="list-style-type: none"> <li>i. all waste that is controlled under a tracking system has the appropriate documentation prior to acceptance at the site; and</li> <li>ii. staff receive adequate training to be able to recognise and handle any hazardous or other prohibited waste including asbestos.</li> </ul> </li> </ul>	Section 4.2 and the Waste Management Plan (Appendix C)
<b>Pests, Vermin and Noxious Weed Management</b>		
<b>B57</b>	<p>The Applicant must:</p> <ul style="list-style-type: none"> <li>(a) implement suitable measures to manage pests, vermin and declared noxious weeds on the site; and</li> <li>(b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in the surrounding area.</li> </ul> <p><i>Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.</i></p>	Section 4.9
<b>VISUAL AMENITY</b>		
<b>Landscaping</b>		
<b>B58 (as per MOD 1)</b>	<p>Prior to the commencement of operation, the Applicant must prepare a Landscape Management Plan for the site in consultation with Council to the satisfaction of the Secretary. The plan must form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The plan must:</p> <ul style="list-style-type: none"> <li>(a) detail the species to be planted on-site;</li> <li>(b) describe the monitoring and maintenance regime for all landscaping components; and</li> <li>(c) be consistent with the Applicant's Management and Mitigation Measures at Appendix B1.</li> </ul>	Section 4.13 and the Landscape Management Plan (Appendix I)
<b>B59</b>	<p>The Applicant must:</p> <ul style="list-style-type: none"> <li>(a) not commence operation until the Landscape Management Plan is approved by the Secretary;</li> <li>(b) implement the most recent version of the Landscape Management Plan approved by the Secretary;</li> </ul> <p>and</p>	Section 4.13 and the Landscape Management Plan (Appendix I)



	(c) maintain the landscaping and vegetation on the site in accordance with the approved Landscape Management Plan required by Condition B58 for the duration of the development.	
<b>Lighting</b>		
<b>B60</b>	The Applicant must ensure the lighting associated with the Development: (a) complies with the latest version of <i>AS 4282 (INT) - Control of Obtrusive Effects of Outdoor Lighting</i> ; and (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network inducting at night.	Section 4.13 and the Landscape Management Plan (Appendix I)
<b>PART C: ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING</b>		
<b>CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN</b>		
<b>C1</b>	The Applicant must prepare a Construction Environmental Management Plan (CEMP) to the satisfaction of the Secretary. The CEMP must: (a) be approved by the Secretary prior to the commencement of construction; (b) identify the statutory approvals that apply to the Development; (c) outline all environmental management practices and procedures to be followed during construction works associated with the Development; (d) include an unexpected finds protocol for heritage items and contaminated material; (e) describe all activities to be undertaken on the site during construction of the Development, including a clear indication of construction stages; (f) detail how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts; (g) incorporate measures to reduce energy consumption; (h) describe the roles and responsibilities for all relevant employees involved in construction works associated with the Development; and (i) include the management plans required under Condition C2 of this consent.	Not applicable for the OEMP
<b>C2</b>	As part of the CEMP required under Condition C1 of this consent, the Applicant must include the following: (a) a Construction Noise and Vibration Management Plan (see Condition B3); and (b) an Erosion and Sediment Control Plan (see Condition B26).	Not applicable for the OEMP
<b>C3</b>	The Applicant must: (a) not commence construction of the Development until the CEMP is approved by the Secretary; and (b) carry out the construction of the Development in accordance with the CEMP approved by the Secretary (and as revised and approved by the Secretary from time to time).	Not applicable for the OEMP
<b>OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN</b>		

<b>C4</b>	<p>The Applicant must prepare an Operational Environmental Management Plan (OEMP) to the satisfaction of the Secretary. The OEMP must:</p> <ul style="list-style-type: none"> <li>(a) be submitted to the Secretary for approval prior to the commencement of operation;</li> <li>(b) be prepared by a suitably qualified and experienced expert;</li> <li>(c) provide the strategic framework for environmental management of the Development;</li> <li>(d) identify the statutory approvals that apply to the Development;</li> <li>(e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Development;</li> <li>(f) incorporate measures to reduce energy consumption;</li> <li>(g) describe the procedures that would be implemented to: <ul style="list-style-type: none"> <li>i. keep the local community and relevant agencies informed about the operation and environmental performances of the Development;</li> <li>ii. receive, handle, respond to, and record complaints;</li> <li>iii. resolve any disputes that may arise;</li> <li>iv. respond to any non-compliance;</li> <li>v. respond to emergencies (including landowner notification); and</li> </ul> </li> <li>(h) include the following environmental management plans: <ul style="list-style-type: none"> <li>i. Noise (see Condition 89);</li> <li>ii. Traffic (see Condition 820);</li> <li>iii. Air Quality (see Condition 823); and</li> <li>iv. Water (see Condition 833).</li> </ul> </li> </ul>	All Chapters and Appendices
<b>C5</b>	<p>The Applicant must:</p> <ul style="list-style-type: none"> <li>(a) not commence operation of the Development until the OEMP is approved by the Secretary; and</li> <li>(b) operate the Development in accordance with the OEMP approved by the Secretary (and as revised and approved by the Secretary from time to time).</li> </ul>	Noted

<b>MANAGEMENT PLAN REQUIREMENTS</b>		
<b>C6</b>	<p>The Applicant must ensure that the environmental management plans required under Condition C4 of this consent are prepared by a suitably qualified person or persons in accordance with best practice and include:</p> <ul style="list-style-type: none"> <li>(a) detailed baseline data;</li> <li>(b) a description of: <ul style="list-style-type: none"> <li>i. the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>ii. any relevant limits or performance measures/criteria; and</li> <li>iii. the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Development or any management measures;</li> </ul> </li> <li>(c) a description of the management measures that would be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria;</li> <li>(d) a program to monitor and report on the: <ul style="list-style-type: none"> <li>i. impacts and environmental performance of the Development; and</li> <li>ii. effectiveness of any management measures (see (c) above);</li> </ul> </li> <li>(e) a contingency plan to manage any unpredicted impacts and their consequences;</li> <li>(f) a program to investigate and implement ways to improve the environmental performance of the Development over time;</li> <li>(g) a protocol for managing and reporting any: <ul style="list-style-type: none"> <li>i. incidents;</li> <li>ii. complaints;</li> <li>iii. non-compliances with statutory requirements; and</li> <li>iv. exceedances of the impact assessment criteria and/or performance criteria; and</li> </ul> </li> <li>(h) a protocol for periodic review of the plan.</li> </ul>	All accompanying environmental management plans (Appendices C-I)
<b>Revision of Strategies, Plans and Programs</b>		

C7	<p>Within three months of:</p> <ul style="list-style-type: none"> <li>(a) approval of a modification;</li> <li>(b) approval of an annual review under Condition C8;</li> <li>(c) submission of an incident report under Condition C9; or</li> <li>(d) completion of an audit under Condition C12,</li> </ul> <p>the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.</p> <p><b>Note:</b> <i>This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Development.</i></p>	Section 5.6
<b>ANNUAL REVIEW</b>		
C8	<p>Within 12 months from the commencement of operation, and each year thereafter, unless otherwise agreed by the Secretary, the Applicant must review the environmental performance of the Development to the satisfaction of the Secretary. This review must:</p> <ul style="list-style-type: none"> <li>(a) describe the development that was carried out in the previous reporting period, and the Development that is proposed to be carried out over the next reporting period;</li> <li>(b) include a comprehensive review of the monitoring results and complaints records of the Development over the previous reporting period, which includes a comparison of these results against the: <ul style="list-style-type: none"> <li>iv. the relevant statutory requirements, limits or performance measures/criteria;</li> <li>v. requirements of any plan or program required under this consent;</li> <li>vi. the monitoring results of previous reporting periods; and</li> <li>vii. the relevant predictions in the EIS;</li> </ul> </li> <li>(c) identify any non-compliance over the last reporting period, and describe what actions were (or are being) taken to ensure compliance;</li> <li>(d) identify any trends in the monitoring data over the life of the Development;</li> <li>(e) identify any discrepancies between the predicted and actual impacts of the Development, and analyse the potential cause of any significant discrepancies; and</li> <li>(f) describe what measures will be implemented over the next reporting period to improve the environmental performance of the Development.</li> </ul>	Section 5.3 and Chapter 6
<b>REPORTING</b>		
<b>Incident Reporting</b>		

<b>C9</b>	Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report must be supplied to the Department outlining the basic facts. A further detailed report must be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to the Secretary no later than 14 days after the incident or potential incident.	Section 5.4 and the Waste Management Plan (Appendix C)
<b>C10</b>	The Applicant must maintain a register of accidents, incidents and potential incidents. The register must be made available for inspection at any time by the independent Hazard Auditor and the Department.	Section 5.4 and the Waste Management Plan (Appendix C)
<b>C11</b>	The Applicant must provide regular reporting on the environmental performance of the Development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	Section 5.4 and the Waste Management Plan (Appendix C)
<b>AUDITING</b>		
<b>C12</b>	<p>Within one year of the commencement of operation, and every three years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (audit) of the Development. Division 28 of Part 6 of the EP&amp;A Act applies to these audits, which are for the purposes of ascertaining information in relation to the environmental performance of the Development and the adequacy of strategies, plans and programs. Audits must:</p> <ul style="list-style-type: none"> <li>(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;</li> <li>(b) include consultation with the relevant agencies;</li> <li>(c) assess the environmental performance of the Development and assess whether it is complying with the requirements in this consent, and any other relevant approvals, relevant EPL(s) (including any assessment, plan or program required under these approvals);</li> <li>(d) review the adequacy of any approved strategy, plan or program required under the abovementioned consents; and</li> <li>(e) recommend measures or actions to improve the environmental performance of the Development, and/or any strategy, plan or program required under these consents.</li> </ul> <p>Note: This audit team must be led by a suitably qualified auditor and include relevant experts in any other fields specified by the Secretary.</p>	Chapter 6
<b>C13</b>	Within three months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the	Section 5.6 and Chapter 6

	recommendations. The Applicant must implement these recommendations to the satisfaction of the Secretary.	
<b>ACCESS TO INFORMATION</b>		
<b>C14</b>	<p>Prior to the commencement of construction and for the duration of the Development, the Applicant must:</p> <p>(a) make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> <li>i. the documents referred to in Condition A2;</li> <li>ii. all current statutory approvals for the Development;</li> <li>iii. all approved strategies, plans and programs required under the conditions of this consent;</li> <li>iv. a summary of the monitoring results of the Development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;</li> <li>v. a complaints register updated on a quarterly basis;</li> <li>vi. the annual reviews of the Development;</li> <li>vii. any independent environmental audit of the Development and the Applicant's response to the recommendations in any audit;</li> <li>viii. any other matter required by the Secretary; and</li> </ul> <p>(b) keep this information up to date, to the satisfaction of the Secretary</p>	Noted.

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**APPENDIX B – THE CONSENT (SSD 7424)**

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# Development Consent

## Section 89E of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning under delegation executed on 14 September 2011, the Planning Assessment Commission (the Commission) of New South Wales, approves the Development Application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the Development.



**Ms Lynelle Briggs AO (Chair)**  
Member of the Commission



**Dr Maurice Evans**  
Member of the Commission



**Mr Roger Fisher**  
Member of the Commission

Sydney

22 December 2017

### SCHEDULE 1

Application No:	SSD 7424
Applicant:	Benedict Industries Pty Ltd
Consent Authority:	Minister for Planning
Site:	Lot 319 DP 1117230 52 Anderson Road, Smeaton Grange
Development:	Construction and operation of a resource recovery facility to process up to 140,000 tpa of general solid waste (non-putrescible)

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## DEFINITIONS

Applicant	Benedict Industries Pty Ltd, or any other person(s) authorised to carry out any development to which this consent applies
AS	Australian Standard
Blue Book	Managing Urban Stormwater: Soils and Construction Volumes 1 and 2 (Landcom 2004)
BCA	Building Code of Australia
CEMP	Construction Environmental Management Plan
Certifying Authority	A person who is authorised by or under section 109D of the EP&A Act to issue Part 4A certificates
Construction	The demolition of buildings or works, the carrying out of works, including earthworks, and erection of buildings and other infrastructure permitted by this consent
Council	Camden Council
CL&W	Crown Lands and Water
Day	The period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays
Demolition	The removal of buildings, sheds and other structures on the site
Department	Department of Planning and Environment
Development	The development as described in the EIS and RTS, and as generally depicted in Appendix A
DPI	NSW Department of Primary Industries
Earthworks	Bulk earthworks, site levelling, import and compaction of fill material, excavation for installation of drainage and services, to prepare the site for construction
EIS	Environmental Impact Statement titled <i>Environmental Impact Statement Smeaton Grange Waste Recycling and Transfer Facility</i> , prepared by EMM dated June 2016
ENM	Excavated Natural Material
EPA	NSW Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued by the EPA under the POEO Act
Evening	The period from 6 pm to 10 pm
FRNSW	Fire and Rescue NSW
General solid waste (non-putrescible)	As defined in Part 3 Schedule 1 of the POEO Act
Heavy vehicle	Any vehicle with a gross vehicle mass of 4.5 tonnes or more
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement
Heritage Item	An item as defined under the <i>Heritage Act 1977</i> , and assessed as being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i>
Incident	A set of circumstances causing or threatening material harm to the environment, and/or an exceedance of the limits or performance criteria in this consent
Land	In general, the definition of land is consistent with the definition in the EP&A Act
Management & Mitigation Measures	The Applicant's management and mitigation measures included in Appendix B
Material harm to the environment	Harm to the environment is material if it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning (or delegate)
Mitigation	Activities associated with reducing the impacts of the development prior to or during those impacts occurring
Night	The period from 10 pm to 7 am on Monday to Saturday, and 10 pm to 8 am on Sundays and Public Holidays
OEH	Office of Environment and Heritage
OEMP	Operational Environmental Management Plan
Operation	The receipt, sorting, separating, processing and removal of waste
Peak traffic hours	From 8:00 am to 9:00 am and from 3:45 to 4:45 pm
PCA	Principal Certifying Authority authorised under section 109D of the EP&A Act
POEO Act	<i>Protection of the Environment Operations Act 1997</i>

RMS	Roads and Maritime Services
RFS	NSW Rural Fire Service
tpa	Tonnes per annum
RTS	Response to Submissions titled <i>Response to Submissions Smeaton Grange Waste Recycling and Transfer Facility</i> , prepared by EMM, dated January 2017
Secretary	Secretary of the Department (or nominee)
Sensitive Receivers	A location where people are likely to work or reside, this may include a dwelling, school, hospital, office or public recreational area
Site	The land listed in Schedule 1
SSD 7424	The development as described in Schedule 1, the EIS and the RTS
tpa	Tonnes per annum
VENM	Virgin Excavated Natural Material as defined by the POEO Act
Waste	Has the same meaning as the definition of the term in the dictionary to the POEO Act
WRTF	Waste Recycling and Transfer Facility
WUSD Guideline	Water Sensitive Urban Design Policy Book 1 (Landcom 2009)



## SCHEDULE 2

### PART A: ADMINISTRATIVE CONDITIONS

#### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

- A1. In addition to meeting the specific performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the Development.

#### TERMS OF CONSENT

- A2. The Development may only be carried out in:
- (a) in compliance with the conditions of this consent;
  - (b) in accordance with the directions of the Secretary;
  - (c) in accordance with the EIS and RTS;
  - (d) in accordance with development layout plans and drawings dated 28 April 2017 (Revision F) (see Appendix A); and
  - (e) in accordance with the Management and Mitigation Measures (see Appendix B).
- A3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
- A4. The Applicant must comply with all written requirement(s) of the Secretary arising from the Department's assessment of:
- (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents); and
  - (b) the implementation of any actions or measures contained within these documents.

#### LIMITS OF CONSENT

- A5. This consent lapses five years after the date from which it was granted, unless the Development has physically commenced on the land to which the consent applies before the date on which the consent would otherwise lapse under section 95 of the EP&A Act.
- A6. The Applicant must not receive or process on site more than 140,000 tpa of general solid waste (non-putrescible).
- A7. The Applicant must not exceed the following maximum stockpile volumes detailed in Table 1 on the site at any time, unless otherwise agreed in writing by the Secretary.

**Table 1: Maximum Stockpile Sizes**

Stockpile	Waste Type	Maximum Volume
Bay 1	Fines (particles of less than 8 mm diameter)	100 m <sup>3</sup>
Bay 2	Hand-picked light waste	80 m <sup>3</sup>
Bay 3	Timber	80 m <sup>3</sup>
Bay 4	Masonry	220 m <sup>3</sup>
Bay 5	Masonry	220 m <sup>3</sup>
Bay 6	Timber	200 m <sup>3</sup>
Bay 7	VENM/ENM	300 m <sup>3</sup>
Skip Bin adjacent Bay 1	Ferrous waste	9 m <sup>3</sup>
Skip Bin adjacent Bay 1	Non-ferrous waste	2 m <sup>3</sup>
Processing shed – west	Bulk light waste	550 m <sup>3</sup>
Processing shed – west	Coarse vegetation	150 m <sup>3</sup>
Processing shed – central	Mixed demolition with a 20% combustible light weight component	1,100 m <sup>3</sup>
Processing shed – east	Plant feed with a 5% combustible light waste component	1,100 m <sup>3</sup>
Total		4,141 m <sup>3</sup>



- A8. The maximum height of all structures and buildings on site must be no more than 11 m from natural ground level.

#### **STAGED SUBMISSION OF PLANS OR PROGRAMS**

- A9. With the approval of the Secretary, the Applicant may:
- (a) submit any strategy, plan or program required by this consent on a progressive basis; and/or
  - (b) combine any strategy, plan or program required by this consent.
- A10. If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program. A clear relationship between the strategy, plan or program that is to be combined must be demonstrated.

#### **REQUEST FOR INFORMATION**

- A11. The Applicant must retain all weighbridge records as required by the POEO (Waste) Regulation and for the life of the development. The weighbridge records must be made immediately available on request by the Secretary and/or the EPA.
- A12. The Applicant must retain waste classification records for all wastes received on the site and waste disposed from the site for the life of the development. The waste classification records must be made immediately available on request by the EPA and/or the Secretary.

#### **EVIDENCE OF CONSULTATION**

- A13. Where consultation with any public authority is required by the conditions of this consent, the Applicant must:
- (a) consult with the relevant public authority prior to submitting the required documentation to the Secretary or the certifying authority for approval;
  - (b) submit evidence of such consultation as part of the relevant documentation required by the conditions of this consent;
  - (c) describe how matters raised by the public authority have been addressed and identify matters that have not been resolved; and
  - (d) include the details of any outstanding issues raised by the relevant public authority and an explanation of disagreement between any public authority and the Applicant.

#### **STATUTORY REQUIREMENTS**

- A14. The Applicant must ensure that all licences, permits and approval/consents are obtained as required by law and maintained as required throughout the life of the Development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approval/consents.

#### **STRUCTURAL ADEQUACY AND CERTIFICATION**

- A15. The Applicant must ensure all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the BCA.

*Note: Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works. Part 8 of the EP&A Regulation sets out the requirements for the certification of the Development.*

#### **EXTERNAL WALLS AND CLADDING FLAMMABILITY**

- A16. The external walls of the building including attachments must comply with the relevant requirements of the NCC. Prior to the issue of a Construction Certificate and Occupation Certificate the Certifying Authority must:
- (a) be satisfied that suitable evidence is provided to demonstrate that the products and systems proposed for use or used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the relevant requirements of the NCC; and
  - (b) ensure that the documentation relied upon in the approval processes include an appropriate level of detail to demonstrate compliance with the NCC as proposed and as built.
- A17. A copy of the documentation required under (b) must be provided to the Secretary within 7 days of being accepted by the Certifying Authority.



## UTILITIES AND SERVICES

- A18. Prior to the construction of any utility works associated with the Development, the Applicant must obtain relevant approvals from service providers.
- A19. Prior to the commencement of construction, all approved plans must be submitted to the Sydney Water "Tap In" service to determine if the development will have any impacts on Sydney Water assets.
- A20. Prior to operation of the Development, the Applicant must obtain a Compliance Certificate for water and sewerage infrastructure servicing of the site under section 73 of the *Sydney Water Act 1994*.

## PROTECTION OF PUBLIC INFRASTRUCTURE

- A21. Prior to the commencement of construction, the Applicant must:
- (a) consult with the relevant owner and/or provider of services that are likely to be affected by the Development to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure;
  - (b) prepare a dilapidation report identifying the condition of all public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and
  - (c) submit a copy of this report to the Secretary and Council.
- A22. Unless the Applicant and the applicable authority agree otherwise, the Applicant must:
- (a) repair, or pay the full costs associated with repairing any public infrastructure that is damaged by the Development; and
  - (b) relocate, or pay the full costs associated with relocating any infrastructure that needs to be relocated due to the Development.

## COMPLIANCE

- A23. The Applicant must ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.

## WORKS-AS-EXECUTED PLANS

- A24. Prior to the issue of the final Occupation Certificate, works-as-executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved, must be submitted to the PCA.

## OPERATION OF PLANT AND EQUIPMENT

- A25. The Applicant must ensure that only the plant and equipment listed in Table 2 is used on site.

**Table 2: Equipment and Activities**

Plant (or equivalent)	Number	Typical activities
<b>Equipment used across the site</b>		
Front end loader (e.g. Volvo L150 or equivalent)	1	Unloading and loading trucks Moving waste and products
Trucks (customers)	5	Delivering waste and dispatching products Returning to/leaving the site
<b>Equipment used in main shed</b>		
13 t excavator	1	Sorting waste using a variety of excavator attachments Loading trucks
Screening plant inside shed	1	Sorting co-mingled waste
Picking line	1	Sorting co-mingled waste from screening plant

- A26. The Applicant must ensure that all plant and equipment used for the Development is:
- (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.



## PART B: ENVIRONMENTAL PERFORMANCE AND MANAGEMENT

### NOISE

#### Hours of Work

- B1. The Applicant must comply with the hours of work detailed in Table 3 unless otherwise agreed in writing by the Secretary.

**Table 3: Hours of Work**

Activity	Day	Time
Accept waste deliveries and dispatch	Monday – Friday	6 am to 10 pm
	Saturday	6 am to 5 pm
	Sunday	8 am to 4 pm
Waste processing	Monday – Friday	7 am to 6 pm
	Saturday	7 am to 4 pm

- B2. Works outside of the hours identified in Condition B1 may be undertaken in the following circumstances:
- (a) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
  - (b) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.

#### Construction Noise Management Plan

- B3. Prior to the commencement of construction, the Applicant must prepare a Construction Noise and Vibration Management Plan (CNVMP) for the development to manage high noise generating works to the satisfaction of the Secretary. The CNVMP shall form part of the CEMP required by Condition C1 and must:
- (a) be prepared by a suitably qualified and experienced noise expert;
  - (b) be approved by the Secretary prior to the commencement of construction the Development;
  - (c) describe the management and mitigation measures and procedures for achieving the noise management levels in the EPA's *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009);
  - (d) identify high emission generating construction activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities;
  - (e) include strategies that have been developed with the community for managing high noise generating works;
  - (f) describe the community consultation undertaken to develop the strategies in (e) above; and
  - (g) include a complaints management system that would be implemented for the duration of the Development.
- B4. The Applicant must:
- (a) not commence construction until the CNVMP required by Condition B3 is approved by the Secretary; and
  - (b) The Applicant must ensure the CNVMP (as required and approved by the Secretary from time to time) is implemented during construction of the Development.

#### Operational Noise Criteria

- B5. The Applicant must ensure that noise generated by operation of the Development does not exceed the noise criteria in Table 4.

**Table 4: Noise Criteria dB(A)**

Location	Day L <sub>Aeq</sub> (15 minute)	Evening L <sub>Aeq</sub> (15 minute)	Night L <sub>Aeq</sub> (15 minute)
All residential receivers	40	40	40

*Note: Noise generated by the Development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Refer to the plan in Appendix C for the location of residential receivers.*

#### Acoustic Fencing

- B6. The Applicant must construct the fencing shown in Appendix A prior to the commencement of construction of any part of the Development.



- B7. To ensure the external appearance of the development is suitable and contributes to the visual character of the surrounding area, the boundary fencing shall be of a visually attractive material and colour that has been agreed to by the Secretary.
- B8. Detailed drawings and further details of the boundary fencing shown in Appendix A shall be submitted to and be approved in writing by the Secretary prior to commencement of construction of any part of the Development. The detail thereby approved must be carried out in accordance with that approval.

#### **Operational Noise and Vibration Management Plan**

- B9. Prior to the commencement of operation, the Applicant must prepare an Operational Noise Management Plan (ONVMP) for the Development to the satisfaction of the Secretary. The ONVMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The ONVMP must:
- (a) be prepared by a suitably qualified and experienced noise expert;
  - (b) describe all noise sources from the Development;
  - (c) describe the measures that will be implemented to minimise the noise emissions in the area including:
    - (i) the management and mitigation measures to be employed on site;
    - (ii) how the noise impacts of the Development will be minimised during any adverse meteorological conditions or extraordinary events;
    - (iii) identification of high emission generating operational activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities; and
  - (d) until the Secretary directs otherwise, include a quarterly monitoring program that evaluates and reports on:
    - (i) compliance with the noise criteria specified in Condition B5;
    - (ii) the management actions to be taken to address any exceedances of the criteria specified in Condition B5; and
    - (iii) the contingency measures that will be implemented in the event management actions are not effective in reducing noise levels to an acceptable level;
  - (e) identify the control measures that will be implemented for each emission source; and
  - (f) defines what constitutes a noise incident, and includes a protocol for identifying noise incidents and notifying the Department and relevant stakeholders of any such incident.
- B10. If in the opinion of the Secretary the monitoring program required by Condition B9(d) demonstrates systemic exceedances of the noise criteria in Condition B5, the Applicant shall not be permitted to operate on the site between the hours of 10 pm and 7 am.
- B11. The Applicant must:
- (a) not commence operation until the ONVMP required by Condition B9 is approved by the Secretary; and
  - (b) ensure the ONVMP (as required and approved by the Secretary from time to time) is implemented for the operational life of the Development.

#### **Road Traffic Noise**

- B12. Prior to the commencement of construction, the Applicant must prepare a Driver Code of Conduct and induction training for the Development to minimise road traffic noise. The Applicant must update the Driver Code of Conduct and induction training for construction and operation and must implement the Code of Conduct for the life of the Development.
- B13. The Applicant must ensure that all its vehicles are fitted with a broadband reversing alarm.

#### **VIBRATION**

##### **Vibration Criteria**

- B14. Vibration caused by construction at any residence or structure outside the site must be limited to:
- (a) for structural damage, German Standard *DIN 4150 Part 3 Structural Vibration in Buildings. Effects on Structures*; and
  - (b) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: a technical guideline* (Department of Environment and Conservation, 2006).
- B15. The vibration limits in Condition B14 apply unless an alternative is outlined in a Construction Noise and Vibration Management Plan, approved as part of the CEMP required by Condition C1 of this consent.



## **TRAFFIC AND ACCESS**

### **Parking**

- B16. Prior to the commencement of operation, the Applicant must provide 8 parking spaces for staff and 2 parking spaces for visitors on site (including one accessible parking space) to ensure that traffic associated with the Development does not utilise public and residential streets or public parking facilities. Parking areas must be constructed in accordance with the latest version of AS 2890.
- B17. No parking is not permitted elsewhere on the site except within the designated parking spaces.

### **Operating Conditions**

- B18. The Applicant must ensure:
- (a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the Development are constructed and maintained in accordance with the latest version of AS 2890.1 and AS 2890.2;
  - (b) the swept path of the longest vehicle entering and exiting the site, as well as manoeuvrability through the site, is in accordance with the relevant AUSTROADS guidelines;
  - (c) the Development does not result in any vehicles parking or queuing on the public road network;
  - (d) all vehicles enter and exit the site in a forward direction;
  - (e) heavy vehicles and bins associated with the Development are not parked on local roads or footpaths near the site;
  - (f) all vehicles are wholly contained on site before being required to stop;
  - (g) all loading and unloading of materials is carried out on-site in designated areas;
  - (h) all trucks entering or leaving the site with loads have their loads covered and do not track dirt onto the public road network; and
  - (i) vehicle manoeuvring areas must always be kept clear of any obstacles, including parked cars.
- B19. All trucks leaving the site must depart via a wheel wash facility to prevent mud, dust or debris from being deposited on Council roads. The wheel wash facility must be designed and constructed in consultation with Council and to the satisfaction of the Secretary prior to commencement of operation.

### **Operational Traffic Management Plan**

- B20. Prior to the commencement of operation, the Applicant must prepare an Operational Traffic Management Plan (OTMP) for the Development to the satisfaction of the Secretary. The plan must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The OTMP must:
- (a) be prepared by a suitably qualified and experienced person(s);
  - (b) be prepared in consultation with Council;
  - (c) detail the measures that are to be implemented to ensure road safety and network efficiency including restricting queuing or parking of vehicles on Anderson Road;
  - (d) detail heavy vehicle routes, access and parking arrangements;
  - (e) include a Driver Code of Conduct to:
    - (i) minimise the impacts on the local and regional road network;
    - (ii) minimise conflicts with other road users;
    - (iii) minimise road traffic noise;
    - (iv) ensure truck drivers use specified routes; and
    - (v) include a program to monitor the effectiveness of these measures.
  - (f) include a Traffic Control Plan (TCP) detailing:
    - (i) the on-site measures to be implemented to control the movement of trucks in and out of the site, as well as onsite; and
    - (ii) provisions for requiring the traffic controller to stop exiting trucks to allow an entering truck to manoeuvre into the site unhindered.
- B21. The Applicant must:
- (a) not commence operation until the OTMP required by Condition B20 is approved by the Secretary; and
  - (b) The Applicant must ensure the OTMP (as required and approved by the Secretary from time to time) is implemented for the operational life of the Development.

## **AIR QUALITY**

### **Dust Minimisation**

- B22. During construction, the Applicant must ensure that:
- (a) exposed surfaces and stockpiles are suppressed by regular watering;
  - (b) all trucks entering or leaving the site with loads have their loads covered;



- (c) trucks associated with the Development do not track dirt onto the public road network; and
- (d) public roads used by these trucks are kept clean.

#### **Operational Air Quality Management Plan**

- B23. Prior to the commencement of operation, the Applicant must prepare an Air Quality Management Plan (AQMP) to the satisfaction of the Secretary. The AQMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The AQMP must:
- (a) be prepared by a suitably qualified and experienced person(s);
  - (b) detail and rank all emissions from all sources of the Development, including particulate emissions and odour;
  - (c) describe the measures that will be implemented to minimise the potential risks to adverse air quality in the area including:
    - the management and mitigation measures to be employed on site;
    - plant and equipment being maintained to ensure that it is in good order;
    - how the air quality impacts of the development will be minimised during any adverse meteorological conditions or extraordinary events;
    - identification of high emission generating operational activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities; and
    - compliance with the relevant conditions of this consent including Condition B25; and
  - (d) identify the control measures that will be implemented for each emission source.
  - (e) defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.
- B24. The Applicant must:
- (a) not commence operation until the AQMP required by Condition B23 is approved by the Secretary; and
  - (b) The Applicant must ensure the AQMP (as required and approved by the Secretary from time to time) is implemented for the operational life of the Development.

#### **Odour Management**

- B25. The Applicant must ensure the Development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).

### **SOILS, WATER QUALITY AND HYDROLOGY**

#### **Erosion and Sediment Control**

- B26. Prior to the commencement of construction, the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements in the latest version of the *Managing Urban Stormwater: Soils and Construction Guideline* and the Erosion and Sediment Control Plan included in the CEMP required by Condition C1.

#### **Stormwater Management System**

- B27. Prior to the commencement of operation, the Applicant must design and install a stormwater management system for the Development. The system must:
- (a) be designed by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Secretary;
  - (b) be generally in accordance with the conceptual design in the EIS;
  - (c) include a storage tank with bunding to capture leachate from the main shed and waste stockpile areas for offsite disposal and treatment;
  - (d) be designed in accordance with applicable Australian Standards;
  - (e) demonstrate that discharge limits can meet those in the WSUD Guideline;
  - (f) ensure that the system capacity has been designed in accordance with Australian Rainfall and Runoff (Engineers Australia, 2016) and Managing Urban Stormwater: Council Handbook (EPA, 1997) guidelines (as may be updated or replaced from time to time);
  - (g) direct all sediment laden water in overland flow away from the leachate management system; and
  - (h) prevent cross-contamination of clean and sediment or leachate laden water.
- B28. Prior to the issue of a Construction Certificate, a certificate must be submitted to the Certifying Authority certifying that:
- (a) satisfactory arrangements have been made for the disposal of stormwater;
  - (b) the proposed development and alterations to the natural surface contours will not impede or divert natural surface water runoff so as to cause a nuisance to adjoining properties; and



- (c) the piped drainage system has been designed to Council's Stormwater Drainage Policy.
- B29. Prior to the issue of the Final Occupation Certificate, Works-As-Executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved must be submitted to the Certifying Authority.
- B30. The stormwater drainage generated from the development must be directed to:
- (a) the drainage easement; and
  - (b) Council's street kerb and gutter.
- B31. The stormwater management system must be operated and maintained for the duration of the Development.

#### **Discharge Limits**

- B32. The Development must comply with section 120 of the POEO Act, which prohibits the pollution of waters, except as expressly provided for in an EPL.

#### **Water Management Plan**

- B33. Prior to the commencement of construction, the Applicant must prepare a Water Management Plan (WMP) to the satisfaction of the Secretary. The WMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The WMP must:
- (a) be prepared in consultation with the CL&W;
  - (b) detail water use, metering, disposal and management on-site;
  - (c) detail the management of wastewater streams on site;
  - (d) verify the likely groundwater dewatering requirements;
  - (e) contain a Surface Water Management Plan, including:
    - (i) a program to monitor:
      - surface water flows and quality;
      - surface water storage and use;
      - discharge limits;
      - sediment basin operation;
    - (ii) sediment and erosion control plans;
    - (iii) surface water impact assessment criteria, including trigger levels for investigating and potential adverse surface water impacts; and
    - (iv) a protocol for the investigation and mitigation of identified exceedances of the surface water impact assessment criteria.
- B34. The Applicant must:
- (a) not commence construction until the WMP required by Condition B33 is approved by the Secretary; and
  - (b) The Applicant must ensure the WMP (as required and approved by the Secretary from time to time) is implemented for the life of the Development.

#### **Groundwater**

- B35. In the event that groundwater is intersected during construction the Applicant shall:
- (a) obtain the necessary water licences or approvals from CL&W;
  - (b) develop a Groundwater Management Plan for the testing, dewatering, storage, movement and treatment of any groundwater to the satisfaction of CL&W.

#### **Soil Salinity Verification**

- B36. Prior to the commencement of construction, the Applicant must undertake a soil salinity verification study at the site in consultation with Council. The salinity verification study must be undertaken:
- (a) by a suitably qualified and experienced person(s);
  - (b) in accordance with the Office of Environment and Heritage (OEH) document Site Investigations for urban salinity (2002) or other relevant guideline; and
  - (c) to the satisfaction of PCA prior to the issue of an Occupation Certificate.

#### **HAZARDS AND RISK**

##### **Dangerous Goods**

- B37. The quantities of dangerous goods stored and handled at the site must be below the threshold quantities listed in the Department of Planning's *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* at all times.



- B38. Dangerous goods, as defined by the *Australian Dangerous Goods Code*, must be stored and handled strictly in accordance with:
- (a) all relevant Australian Standards;
  - (b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
  - (c) the *Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin* (EPA1997).

In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement must prevail to the extent of the inconsistency.

#### **Bunding**

- B39. The Applicant must store all chemicals, fuels and oils used on-site in appropriately banded areas in accordance with the requirements of all relevant Australian Standards, and/or the EPA's *Storing and Handling of Liquids: Environmental Protection – Participants Handbook*.

#### **FIRE SAFETY**

##### **Fire Safety System**

- B40. The fire hydrant system must be installed in accordance with BCA Clause E1.3 (to buildings and open yard). The system shall comply with AS 2419.1:2005 except that the minimum flow rate shall be 50L/s in lieu of that detailed in Table 2.1.
- B41. The final design of the fire hydrant system must be prepared by a suitably qualified fire services engineer and submitted to the Principal Certifying Authority prior to issue of the Construction Certificate.
- B42. To provide for storage and collection of contaminated fire water, 180 m<sup>3</sup> of storage is to be provided on the site. A design prepared by a suitably qualified engineer is to be submitted to the Principal Certifying Authority prior to issue of the Construction Certificate.

##### **Bushfire Protection**

- B43. The Applicant shall incorporate appropriate bush fire protection measures into the detailed design of the Development in accordance with *Planning for Bush Fire Protection Guideline* (RFS 2006) to the satisfaction of the RFS.

#### **WASTE MANAGEMENT**

##### **Statutory Requirements**

- B44. All waste removed from the site must only be directed to a waste management facility or premises lawfully permitted to accept the waste.
- B45. Waste generated outside the site must not be received at the site for storage, treatment, processing, reprocessing, or disposal, except as expressly permitted by an EPL.
- B46. The Applicant must record the amount of waste (in tonnes) received at the site on a daily basis.
- B47. The Applicant must retain all sampling and waste classification data for the life of the development and keep it readily available for inspection by the EPA and the Secretary.

##### **Receipt, Storage & Handling of Waste**

- B48. The Applicant shall only receive waste on site that is authorised for receipt by an EPL.
- B49. The Applicant shall ensure any waste generated on the site during construction is classified in accordance with the EPA's *Waste Classification Guidelines, 2014* or its latest version, and disposed of to a facility that may lawfully accept the waste.
- B50. The Applicant shall:
- (a) implement auditable procedures to:
    - (i) ensure the site does not accept wastes that are prohibited;
    - (ii) screen incoming waste loads; and



- (b) ensure that:
    - (i) all waste types that are controlled under a tracking system have the appropriate documentation prior to acceptance at the site;
    - (ii) all waste received at the site must be recorded in accordance with clause 27 of the POEO (Waste) Regulation;
    - (iii) details of the quantity, type and source of wastes received on the site must be provided to the EPA and the Secretary when requested; and
    - (iv) staff receive adequate training to be able to recognise and handle any hazardous or other prohibited waste including asbestos.
- B51. The Applicant must assess and classify all liquid and non-liquid wastes to be taken off site in accordance with the EPA's *Waste Classification Guidelines Part 1: Classifying Waste, November 2014*, or its latest version and dispose of all wastes to a facility that may lawfully accept the waste.
- B52. All waste must be stored wholly within the designated waste stockpile areas.
- B53. All waste must be unloaded undercover within the designated unloading areas in the main shed.
- B54. The Applicant must maintain the site in a clean and tidy state at all times.
- B55. All residual waste that is removed from the site must be dispatched outside of peak traffic hours.

#### **Waste Monitoring Program**

- B56. From the commencement of operation, the Applicant must implement a Waste Monitoring Program for the Development. The program must:
- (a) be prepared by a suitably qualified and experienced person(s) prior to the commencement of operation;
  - (b) include suitable provision to monitor the:
    - (i) quantity, type and source of waste received on site; and
    - (ii) quantity, type and quality of the outputs produced on site; and
  - (c) ensure that:
    - (i) all waste that is controlled under a tracking system has the appropriate documentation prior to acceptance at the site; and
    - (ii) staff receive adequate training to be able to recognise and handle any hazardous or other prohibited waste including asbestos.

#### **Pests, Vermin and Noxious Weed Management**

- B57. The Applicant must:
- (a) implement suitable measures to manage pests, vermin and declared noxious weeds on the site; and
  - (b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in the surrounding area.

*Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.*

#### **VISUAL AMENITY**

##### **Landscaping**

- B58. Prior to the commencement of operation, the Applicant must prepare a Landscape Management Plan for the site in consultation with Council to the satisfaction of the Secretary. The plan must form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The plan must:
- (a) detail the species to be planted on-site;
  - (b) describe the monitoring and maintenance regime for all landscaping components; and
  - (c) be consistent with the Applicant's Management and Mitigation Measures at Appendix B.
- B59. The Applicant must:
- (a) not commence operation until the Landscape Management Plan is approved by the Secretary;
  - (b) implement the most recent version of the Landscape Management Plan approved by the Secretary; and
  - (c) maintain the landscaping and vegetation on the site in accordance with the approved Landscape Management Plan required by Condition B58 for the duration of the development.

## Lighting

- B60. The Applicant must ensure the lighting associated with the Development:
- (a) complies with the latest version of *AS 4282 (INT) - Control of Obtrusive Effects of Outdoor Lighting*; and
  - (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network including at night.

## SITE SECURITY

- B61. Prior to the issue of a Construction Certificate, the Applicant shall submit to Council a detailed design for security gates and fencing at the entrance to the site. Once the design has been agreed with Council, the Applicant shall install the security gates and fencing in accordance with the approved design.



## **PART C: ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING**

### **CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN**

- C1. The Applicant must prepare a Construction Environmental Management Plan (CEMP) to the satisfaction of the Secretary. The CEMP must:
- (a) be approved by the Secretary prior to the commencement of construction;
  - (b) identify the statutory approvals that apply to the Development;
  - (c) outline all environmental management practices and procedures to be followed during construction works associated with the Development;
  - (d) include an unexpected finds protocol for heritage items and contaminated material;
  - (e) describe all activities to be undertaken on the site during construction of the Development, including a clear indication of construction stages;
  - (f) detail how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;
  - (g) incorporate measures to reduce energy consumption;
  - (h) describe the roles and responsibilities for all relevant employees involved in construction works associated with the Development; and
  - (i) include the management plans required under Condition C2 of this consent.
- C2. As part of the CEMP required under Condition C1 of this consent, the Applicant must include the following:
- (a) a Construction Noise and Vibration Management Plan (see Condition B3); and
  - (b) an Erosion and Sediment Control Plan (see Condition B26).
- C3. The Applicant must:
- (a) not commence construction of the Development until the CEMP is approved by the Secretary; and
  - (b) carry out the construction of the Development in accordance with the CEMP approved by the Secretary (and as revised and approved by the Secretary from time to time).

### **OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN**

- C4. The Applicant must prepare an Operational Environmental Management Plan (OEMP) to the satisfaction of the Secretary. The OEMP must:
- (a) be submitted to the Secretary for approval prior to the commencement of operation;
  - (b) be prepared by a suitably qualified and experienced expert;
  - (c) provide the strategic framework for environmental management of the Development;
  - (d) identify the statutory approvals that apply to the Development;
  - (e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Development;
  - (f) incorporate measures to reduce energy consumption;
  - (g) describe the procedures that would be implemented to:
    - (i) keep the local community and relevant agencies informed about the operation and environmental performance of the Development;
    - (ii) receive, handle, respond to, and record complaints;
    - (iii) resolve any disputes that may arise;
    - (iv) respond to any non-compliance;
    - (v) respond to emergencies (including landowner notification); and
  - (h) include the following environmental management plans:
    - (i) Noise (see Condition B9);
    - (ii) Traffic (see Condition B20);
    - (iii) Air Quality (see Condition B23); and
    - (iv) Water (see Condition B33).
- C5. The Applicant must:
- (a) not commence operation of the Development until the OEMP is approved by the Secretary; and
  - (b) operate the Development in accordance with the OEMP approved by the Secretary (and as revised and approved by the Secretary from time to time).

### **MANAGEMENT PLAN REQUIREMENTS**

- C6. The Applicant must ensure that the environmental management plans required under Condition C4 of this consent are prepared by a suitably qualified person or persons in accordance with best practice and include:
- (a) detailed baseline data;
  - (b) a description of:
    - (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - (ii) any relevant limits or performance measures/criteria; and



- (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Development or any management measures;
- (c) a description of the management measures that would be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria;
- (d) a program to monitor and report on the:
  - (i) impacts and environmental performance of the Development; and
  - (ii) effectiveness of any management measures (see (c) above);
- (e) a contingency plan to manage any unpredicted impacts and their consequences;
- (f) a program to investigate and implement ways to improve the environmental performance of the Development over time;
- (g) a protocol for managing and reporting any:
  - (i) incidents;
  - (ii) complaints;
  - (iii) non-compliances with statutory requirements; and
  - (iv) exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

#### **Revision of Strategies, Plans and Programs**

- C7. Within three months of:
- (a) approval of a modification;
  - (b) approval of an annual review under Condition C8;
  - (c) submission of an incident report under Condition C9; or
  - (d) completion of an audit under Condition C12,

the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.

*Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Development.*

#### **ANNUAL REVIEW**

- C8. Within 12 months from the commencement of operation, and each year thereafter, unless otherwise agreed by the Secretary, the Applicant must review the environmental performance of the Development to the satisfaction of the Secretary. This review must:
- (a) describe the development that was carried out in the previous reporting period, and the Development that is proposed to be carried out over the next reporting period;
  - (b) include a comprehensive review of the monitoring results and complaints records of the Development over the previous reporting period, which includes a comparison of these results against the:
    - (i) the relevant statutory requirements, limits or performance measures/criteria;
    - (ii) requirements of any plan or program required under this consent;
    - (iii) the monitoring results of previous reporting periods; and
    - (iv) the relevant predictions in the EIS;
  - (c) identify any non-compliance over the last reporting period, and describe what actions were (or are being) taken to ensure compliance;
  - (d) identify any trends in the monitoring data over the life of the Development;
  - (e) identify any discrepancies between the predicted and actual impacts of the Development, and analyse the potential cause of any significant discrepancies; and
  - (f) describe what measures will be implemented over the next reporting period to improve the environmental performance of the Development.

#### **REPORTING**

##### **Incident Reporting**

- C9. Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report must be supplied to the Department outlining the basic facts. A further detailed report must be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to the Secretary no later than 14 days after the incident or potential incident.
- C10. The Applicant must maintain a register of accidents, incidents and potential incidents. The register must be made available for inspection at any time by the independent Hazard Auditor and the Department.



## Regular Reporting

- C11. The Applicant must provide regular reporting on the environmental performance of the Development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

## AUDITING

### Independent Environmental Audit

- C12. Within one year of the commencement of operation, and every three years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit (audit) of the Development. Division 2B of Part 6 of the EP&A Act applies to these audits, which are for the purposes of ascertaining information in relation to the environmental performance of the Development and the adequacy of strategies, plans and programs. Audits must:
- (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
  - (b) include consultation with the relevant agencies;
  - (c) assess the environmental performance of the Development and assess whether it is complying with the requirements in this consent, and any other relevant approvals, relevant EPL(s) (including any assessment, plan or program required under these approvals);
  - (d) review the adequacy of any approved strategy, plan or program required under the abovementioned consents; and
  - (e) recommend measures or actions to improve the environmental performance of the Development, and/or any strategy, plan or program required under these consents.

*Note: This audit team must be led by a suitably qualified auditor, and include relevant experts in any other fields specified by the Secretary.*

- C13. Within three months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The Applicant must implement these recommendations to the satisfaction of the Secretary.

## ACCESS TO INFORMATION

- C14. Prior to the commencement of construction and for the duration of the Development, the Applicant must:
- (a) make copies of the following publicly available on its website:
    - (i) the documents referred to in Condition A2;
    - (ii) all current statutory approvals for the Development;
    - (iii) all approved strategies, plans and programs required under the conditions of this consent;
    - (iv) a summary of the monitoring results of the Development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
    - (v) a complaints register updated on a quarterly basis;
    - (vi) the annual reviews of the Development;
    - (vii) any independent environmental audit of the Development and the Applicant's response to the recommendations in any audit;
    - (viii) any other matter required by the Secretary; and
  - (b) keep this information up to date, to the satisfaction of the Secretary

**APPENDIX A**  
**DEVELOPMENT LAYOUT PLANS**

# PROPOSED WASTE TRANSFER STATION AT 52 ANDERSON ROAD SMEATON GRANGE

## DRAWING LIST

000	COVER SHEET	REV F
100	GROUND FLOOR PLAN 1:500	REV F
101	ROOF PLAN 1:500	REV F
200	ELEVATIONS 1 1:250	REV F
201	ELEVATIONS 2 1:250	REV F
500	DETAILS SHEET1 1:250	REV F
501	DETAILS SHEET2 1:100	REV F

NOTES:  
1. All dimensions are in millimetres unless otherwise stated.  
2. All dimensions are to the centre of the object unless otherwise stated.

REVISIONS:  
A 10/10/14 ISSUED FOR GENERAL INFORMATION  
B 04/05/16 ISSUED FOR GENERAL INFORMATION  
C 18/05/16 ISSUED FOR GENERAL INFORMATION  
D 13/05/16 ISSUED FOR GENERAL INFORMATION  
E 14/06/16 ISSUED FOR GENERAL INFORMATION  
F 18/04/17 ISSUED FOR GENERAL INFORMATION

SCALE:  
1:1000 (GROUND FLOOR PLAN)  
1:250 (ELEVATIONS)  
1:100 (DETAILS)

DATE: 18/04/17  
DRAWN BY: J15300  
CHECKED BY: J15300

PROJECT NO: J15300  
PROJECT NAME: PROPOSED WASTE TRANSFER STATION  
AT 52 ANDERSON ROAD, SMEATON GRANGE

CLIENT: NSW GOVERNMENT  
DEPARTMENT OF PLANNING AND ENVIRONMENT  
PROJECT NO: J15300  
PROJECT NAME: PROPOSED WASTE TRANSFER STATION  
AT 52 ANDERSON ROAD, SMEATON GRANGE

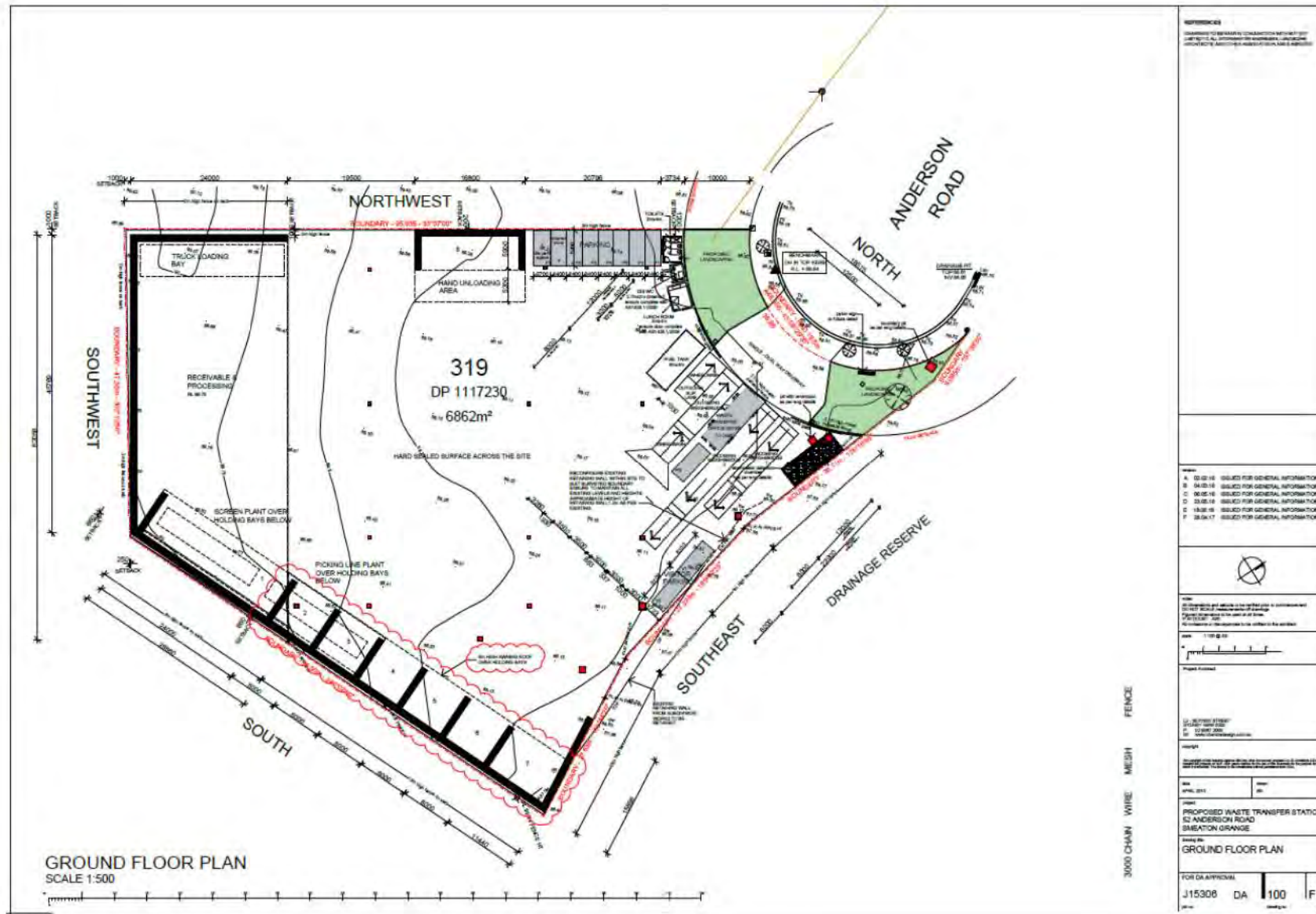
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DRAWN BY: J15300  
CHECKED BY: J15300

PROJECT NO: J15300  
PROJECT NAME: PROPOSED WASTE TRANSFER STATION  
AT 52 ANDERSON ROAD, SMEATON GRANGE

CLIENT: NSW GOVERNMENT  
DEPARTMENT OF PLANNING AND ENVIRONMENT  
PROJECT NO: J15300  
PROJECT NAME: PROPOSED WASTE TRANSFER STATION  
AT 52 ANDERSON ROAD, SMEATON GRANGE

DATE: 18/04/17  
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CHECKED BY: J15300

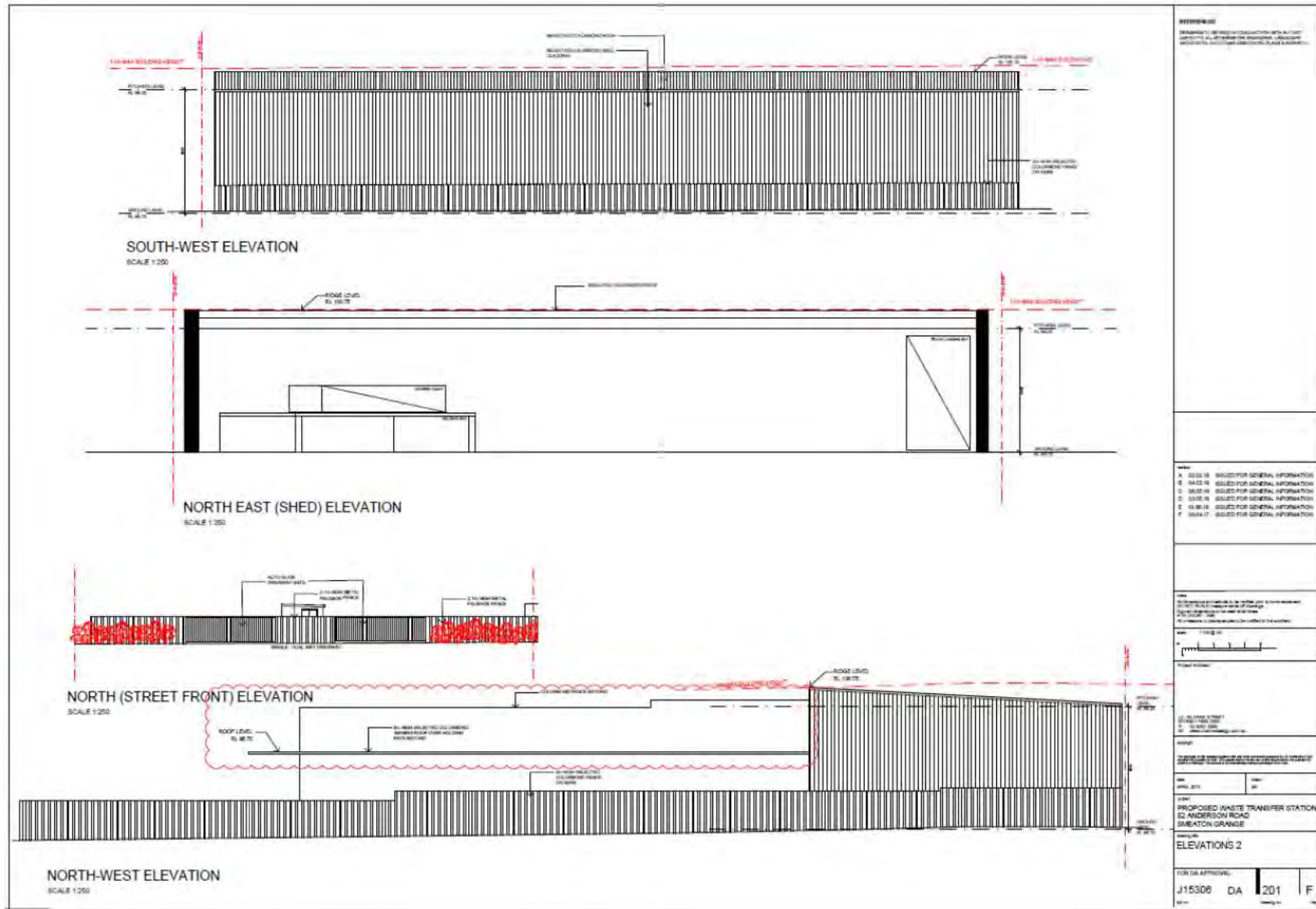
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PROJECT NAME: PROPOSED WASTE TRANSFER STATION  
AT 52 ANDERSON ROAD, SMEATON GRANGE



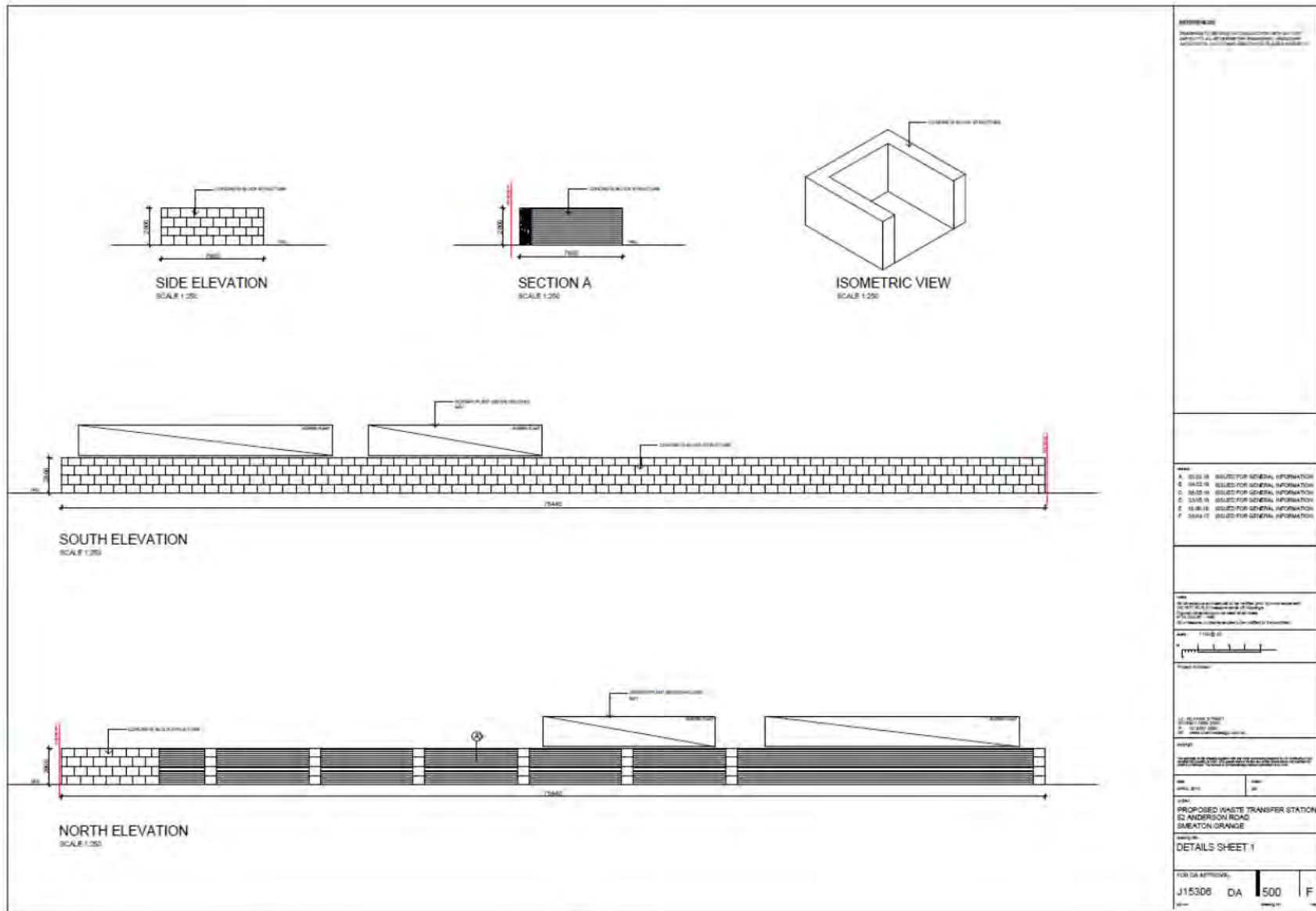


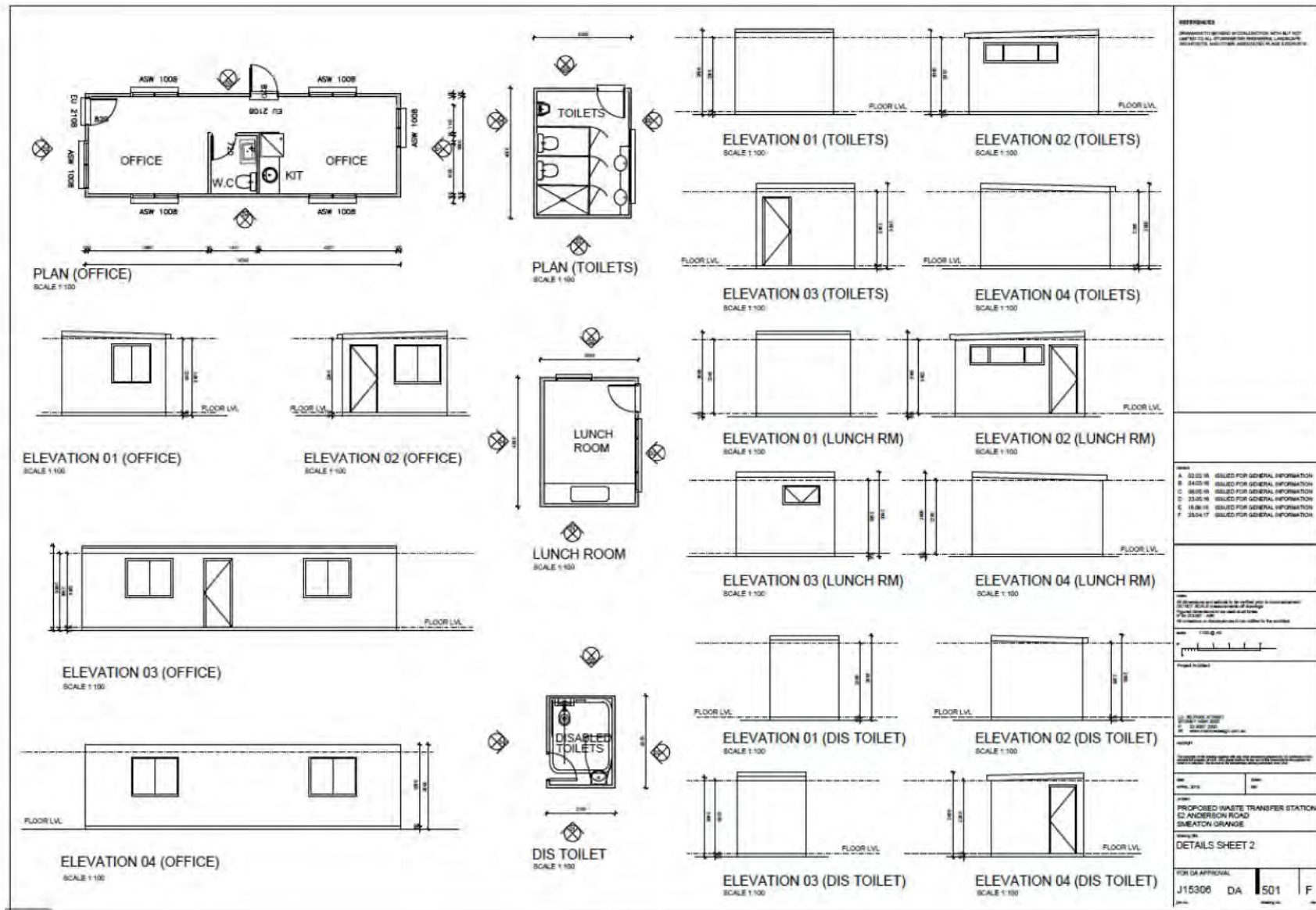












## APPENDIX B APPLICANT'S MANAGEMENT AND MITIGATION MEASURES

Key issue	Management measure
Facility design	<p>The facility will not be open between 10 pm and 6 am.</p> <p>The screening plant and External Bay 6 will be covered with a roof (approximately 5 m off the ground) to minimise moisture entering the timber stockpile. The roof will be within the site and adjacent to the 10 m tall fence so will not be visible from offsite.</p> <p>To minimise dust and noise emissions:</p> <ul style="list-style-type: none"> <li>• materials (waste, products and residues) will be stockpiled in the shed or in a marked bay</li> <li>• wastes will be processed in the shed or within the screening plant area (see Figure 3.3) and will not be processed outside of these areas;</li> <li>• green waste will only be stockpiled in the shed; and</li> <li>• timber will be stockpiled in a covered bay.</li> </ul> <p>The facility's front fence will be constructed as a combination decorative metal and masonry fence in accordance with <i>Camden Council Development Control Plan 2011 D4.2.5 Fencing</i>.</p>
Air quality	<p>The site environmental management plan (EMP) will detail dust management during construction and operations.</p> <p>Benedict Recycling will implement dust management measures (described in the EMP) so that dust emissions are minimised and do not impact upon surrounding sensitive receptors.</p> <p>Sorting and storage of materials will occur within the main processing shed and the management measures described in EIS Section 6.2.1 (and expanded in the EMP as required) will be implemented to minimise any dust emissions so that they are close to eliminated.</p> <p>Management measures that will be implemented during construction and operations to minimise air quality impacts will include:</p> <ul style="list-style-type: none"> <li>• Construction: <ul style="list-style-type: none"> <li>– record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;</li> <li>– record any exceptional incidents that cause dust and/or air emissions, either on or off site, and the action taken to resolve the situation in the log book;</li> <li>– carry out regular site inspections, record inspection results, and make an inspection log available to the local authority when asked;</li> <li>– impose a maximum-speed-limit of 20 km/h on all internal roads and work areas;</li> <li>– minimise idling vehicles onsite, wherever practicable;</li> <li>– ensure proper maintenance and tuning of all equipment engines;</li> <li>– ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport; and</li> <li>– provide an adequate water supply on site for effective dust/particulate matter suppression/mitigation.</li> </ul> </li> <li>• Operations: <ul style="list-style-type: none"> <li>– all existing sealed areas must be maintained;</li> <li>– water sprays will be used over any other bare surfaces that have potential to generate unacceptable amounts of dust;</li> <li>– water sprays will be used at stockpiles, operational areas and the screening plant during material handling;</li> <li>– a wheel wash in the weighbridge area will be used to clean truck tyres to prevent mud or sediment being carried to and deposited on the access road (and public roads);</li> </ul> </li> </ul>



Key issue	Management measure
	<ul style="list-style-type: none"> <li>– dust generating activities will be generally undertaken within the main shed; and</li> <li>– no composting will be undertaken on the site.</li> </ul>
Greenhouse gases	<p>Management measures that will be implemented during construction and operations to minimise greenhouse gas emissions will include:</p> <ul style="list-style-type: none"> <li>• on-site equipment will be regularly maintained and serviced to maximise fuel efficiency;</li> <li>• vehicle kilometres travelled on site will be minimised; and</li> <li>• energy efficiency will be progressively reviewed and implemented throughout the life of the facility.</li> </ul>
Noise	<p>Management measures that will be implemented during operation to minimise noise impacts will include:</p> <ul style="list-style-type: none"> <li>• choosing quieter plant and equipment, including installing best-practice noise suppression equipment, based on the optimal power and size to most efficiently perform the required tasks;</li> <li>• plant with high noise emissions will generally be located inside the shed;</li> <li>• plant and equipment will be regularly maintained and serviced;</li> </ul> <p>low-frequency reversing alarms (“growlers”) will be used rather than the standard high frequency beepers;</p> <ul style="list-style-type: none"> <li>• a site layout has been adopted that minimises the need for mobile plant to reverse;</li> <li>• plant and equipment will be switched off when not in use;</li> <li>• any vehicle queuing will be on site rather than on public roads;</li> <li>• material drop heights will be minimised and dragging materials along the ground will be minimised;</li> <li>• site contact details will be provided on a board at the front of the site;</li> <li>• any noise-related complaints will be handled promptly; and</li> <li>• a complaints register will be maintained.</li> </ul> <p>Benedict Recycling will commission noise verification monitoring at the closest residences to the south-east (R9) and to the north-east (R22) (or at equivalent locations) within 3, 6 and 12 months of the start of operations.</p>
Transport	<p>Signs will be erected at the facility requesting customers access the facility via Camden Valley Way via Anderson Road.</p> <p>Signs will be erected at the facility regarding drivers’ legal obligation to ensure that waste is covered during transport.</p> <p>Vehicles dispatching products or residue will be covered prior to leaving the site.</p>
Visual	<p>Management measures that will be implemented during construction and operations to minimise visual impacts will include:</p> <ul style="list-style-type: none"> <li>• this site will be colourbond fenced on the boundaries; and</li> <li>• the visual appearance of the site entrance on Anderson Road will be landscaped and kept tidy.</li> </ul>

Key issue	Management measure
Water	<p>Excavation into the alluvium on the site will be avoided where feasible.</p> <p>While no significant dewatering is predicted to be required during the construction of footings, DPI Water will be notified and a aquifer interference licence will be obtained if more than 3 ML of groundwater needs to be extracted during construction.</p> <p>Features to prevent impacts to groundwater include:</p> <ul style="list-style-type: none"> <li>• no significant excavations within the site;</li> <li>• existing sheds will be used to house the majority of the processing activities, preventing generation of runoff from these activities;</li> <li>• bunded fuels storage area;</li> <li>• sheds and the segregated heavy waste stockpiling and processing area will be outside of major overland flowpaths;</li> <li>• surface water captured within the runoff management system will be used for dust suppression so that mains water is not required for this purpose;</li> <li>• the majority of the site will be asphalt sealed to minimise the requirement for dust suppression using water (see Section 2.10.1);</li> <li>• groundwater will not be used; and</li> <li>• water will not be used in the product processing, other than for dust suppression.</li> </ul> <p>The site runoff controls will include:</p> <ul style="list-style-type: none"> <li>• a concrete perimeter kerb to keep runoff from entering and leaving the site;</li> <li>• an onsite detention/sedimentation basin/control device on site and remove sediment; and</li> <li>• flows from the sediment device will be controlled to ensure that poor quality water is not discharged from site.</li> </ul>

Key issue	Management measure
Bushfire	In order to maintain APZs, the landscaping vegetation will be maintained as follows:
Fire management	<ul style="list-style-type: none"> <li>• canopy cover will be kept at less than 15% of total surface area and will be kept at least 2 m from the roof line of a building;</li> <li>• garden beds and shrubs will not to be located under trees and sited at least 10 m from any exposed windows or doors; and</li> <li>• lower limbs of trees up to 2 m above the ground will be removed.</li> </ul> <p>Services including water, gas and electricity services will be located and installed in a manner that reduces the potential for them to contribute to fire hazard.</p> <p><i>Stockpiles will be covered by awnings and separated by block walls in a manner that reduced the potential for them to contribute to fire hazard.</i></p> <p>Water for fire fighting will be provided as follows, <i>to be detailed in a fire safety system designed in consultation with Fire and Rescue NSW:</i></p> <ul style="list-style-type: none"> <li>• existing fire hydrants in Anderson Road;</li> <li>• fire hydrants, <i>on-site, capable of providing 50L/s of firewater;</i></li> <li>• extinguishers and fire hydrant at the office building.</li> </ul> <p><i>Firewater will be contained by a bund capable of containing at least one hour of firewater (180 m<sup>3</sup>)</i></p> <p>The following requirements from Chapter 4 of PBP will be applied to water infrastructure:</p> <ul style="list-style-type: none"> <li>• above ground pipes external to structures in the APZ will be metal including and up to taps;</li> <li>• pumps in the APZs will be shielded; and</li> <li>• Fire hydrants at buildings which will be spaced, sized and pressured in accordance with <i>Australian Standard 2419.1-2005 Fire Hydrant Installations – System Design, Installation and Commissioning.</i></li> </ul> <p>In relation to the diesel tank:</p> <ul style="list-style-type: none"> <li>• the diesel tank which will be installed in accordance with <i>Australian Standard 1940:2004 The Storage and Handling of Flammable and Combustible Liquids</i> and will be fully enclosed in a colourbond shed.</li> </ul>
Contamination	In the event of encountering suspected contaminated land, the area should be left undisturbed until a suitably qualified consultant can assess the area in question and provide appropriate mitigation measures identified if required.



Key issue	Management measure
Diesel spill	<p><u>Prevention</u></p> <p>Overfilling of tanks will be prevented through gauging or monitoring of the tank's contents.</p> <p>Tanks, vents and fittings will be inspected regularly and valves will be regularly overhauled (at periods not exceeding 10 years).</p> <p>Hoses used for transfer of diesel, these will be regularly inspected.</p> <p><u>Protection</u></p> <p>The diesel tank will be self-bunded. The bund will be large enough to contain a spillage in accordance with the requirement of AS1940 para 5.8. The bund drain valve will be kept closed and locked except during supervised drainage, and a sign will be placed to display the need to keep the drain valve closed and locked.</p> <p>Provision will be made to quickly shut off the flow of liquid from the storage tank to a consuming device in an emergency. The shut off valve will comply with para 6.3.3 in AS1940, including resistance in a fire.</p> <p>Diesel pumps will be designed such that the discharge pressure cannot exceed design limit of pump or piping in the case of dead heading (shut-off at the pump discharge). An emergency shut-off device will be provided on each pump.</p> <p>There will be a diesel spill kit stored at the bowser.</p> <p><u>Detection</u></p> <p>Regular inspections by site personnel will be undertaken. Any liquid inside the bunded areas, such as rain water or any spilt liquid, will be removed following established procedures.</p>
Emergency and evacuation management plans	<p>An emergency and evacuation plan will be prepared for the site that will include notification of neighbours in the event of a potential emergency.</p> <p>The site's Emergency Response Plan will be provided to Frasers and Coles.</p>
General	Benedict Recycling will ensure that the area around the entrance to the facility is kept tidy and litter free.

**APPENDIX C**  
**RESIDENTIAL RECEIVERS**







# Modification of Development Consent

## Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning, under delegation executed on 11 October 2017, I approve the modification of the development consent referred to in Schedule 1, subject to the conditions outlined in Schedule 2.



Chris Ritchie  
Director  
Industry Assessments

Sydney **10 SEPTEMBER**

2018

File: EF18/5937

### SCHEDULE 1

<b>Application No:</b>	SSD 7424
<b>Applicant:</b>	Roussakis Holdings Pty Ltd
<b>Consent Authority:</b>	Minister for Planning
<b>Development:</b>	Construction and operation of a resource recovery facility to process up to 140,000 tpa of general solid waste (non-putrescible)
<b>Date of Original Consent:</b>	22 December 2017
<b>Modification:</b>	SSD 7424 MOD 1 – Modifications to boundary fencing and driveway access.

### SCHEDULE 2

This consent is modified as follows:

1. Insert the following definitions in alphabetical order:

Modification Assessments

The document assessing the environmental impact of a proposed modification of this consent and any other information submitted with the following modification applications made under the EP&A Act:

SSD 7424 MOD 1 prepared by EMM Consulting and dated 31 May 2018 as amended by Response to Submissions prepared by EMM Consulting and dated 14 August 2018.

2. delete the definition for "Development" and insert the following definition in alphabetical order:

Development

The development as described in the EIS, and RTS and depicted in Appendix A, being for the construction and operation of a resource recovery facility to process up to 140,000 tpa of general solid waste (non-putrescible), as modified by the conditions of consent.

#### In Schedule 2

3. Delete Condition A2 and replace with the following:

- A2. The Development may only be carried out in:
- (a) in compliance with the conditions of this consent;
  - (b) in accordance with the directions of the Secretary;
  - (c) in accordance with the EIS and RTS;
  - (d) in accordance with Modification Assessments;
  - (e) in accordance with the development layout plans and drawings dated 10 May 2018 (Revision H) (see Appendix A1); and
  - (f) in accordance with the Management and Mitigation Measures (see Appendix B1).
4. Delete Condition B6 and replace with the following:
- B6. The Applicant must construct the fencing shown in Appendix A1 prior to the commencement of construction of any part of the Development.
5. Delete Condition B8 and replace with the following:
- B8. Detailed drawing and further details of the boundary fencing shown in Appendix A1 shall be submitted to and be approved in writing by the Secretary prior to commencement of construction of any part of the Development. The detail thereby approved must be carried out in accordance with that approval.
6. Delete Condition B58 and replace with the following:
- B58. Prior to the commencement of operation, the Applicant must prepare a Landscape Management Plan for the site in consultation with Council to the satisfaction of the Secretary. The plan must form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The plan must:
- (a) detail the species to be planted on-site;
  - (b) describe the monitoring and maintenance regime for all landscaping components; and
  - (c) be consistent with the Applicant's Management and Mitigation Measures at Appendix B1.
7. Delete Condition B61.

#### **In the Appendices**

8. Replace Appendix A with new Appendix A1.
9. Replace Appendix B with new Appendix B1.

## **APPENDIX A1**

### **Development Layout Plans**

# PROPOSED WASTE TRANSFER STATION AT 52 ANDERSON ROAD SMEATON GRANGE

## DRAWING LIST

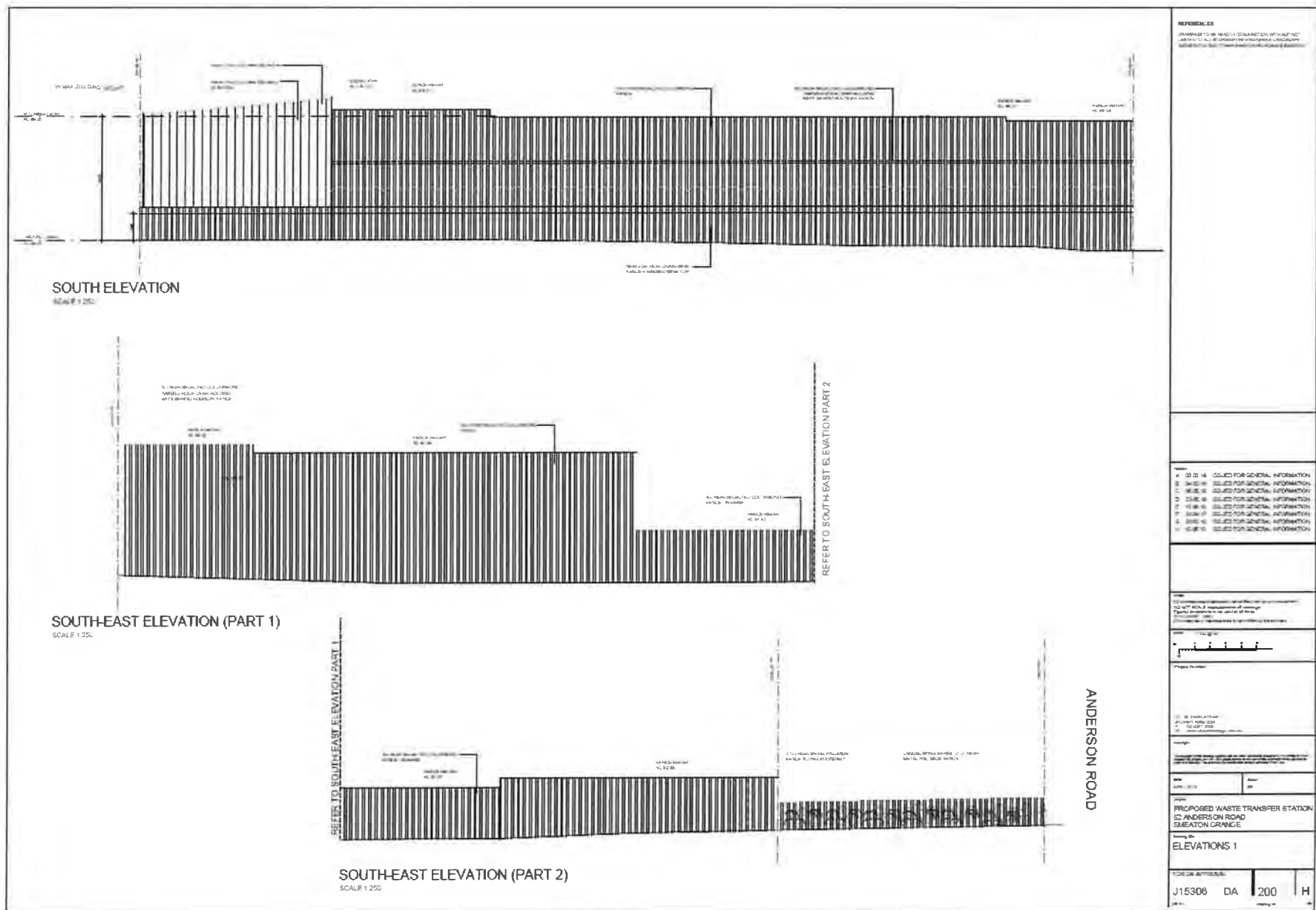
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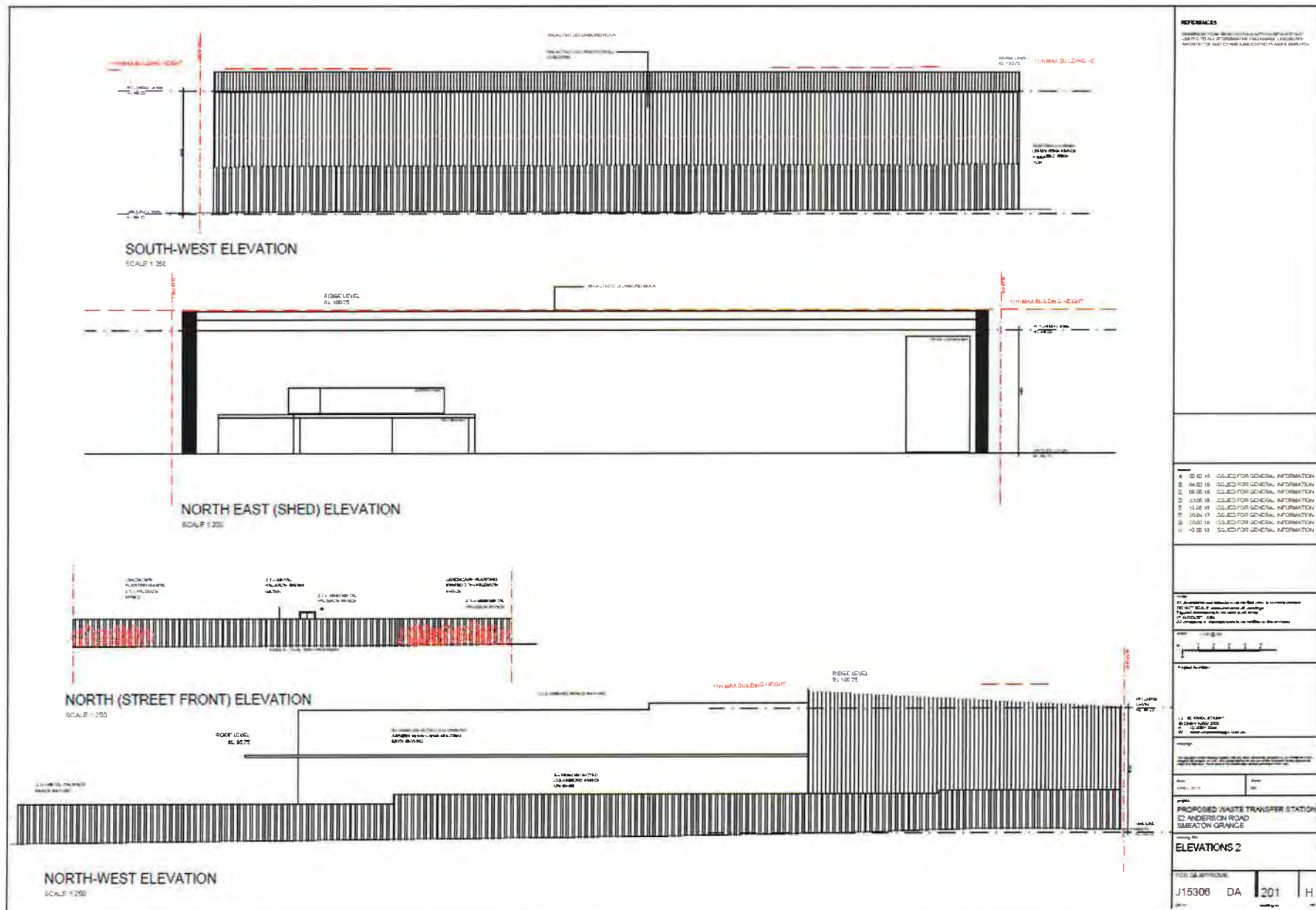
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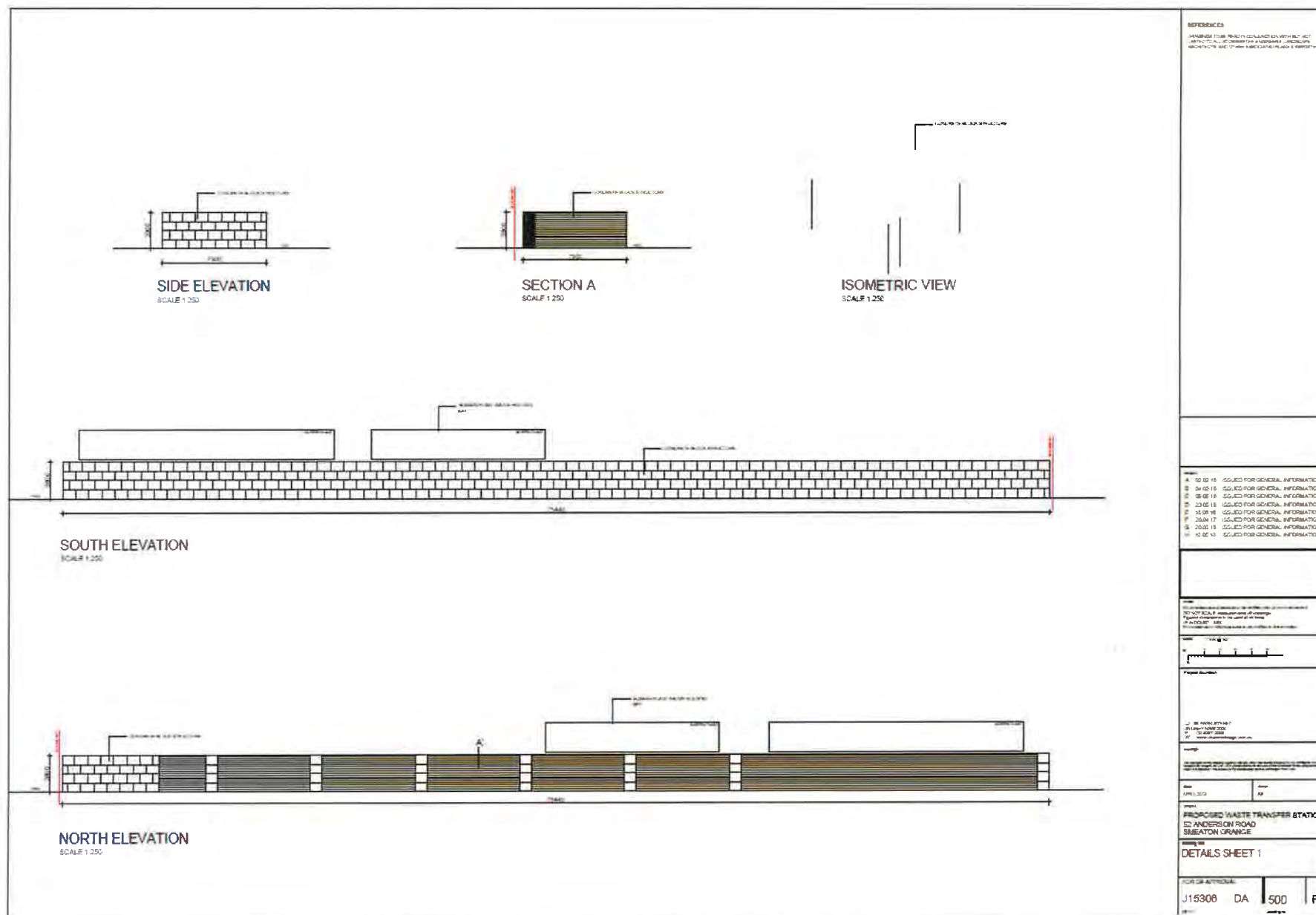






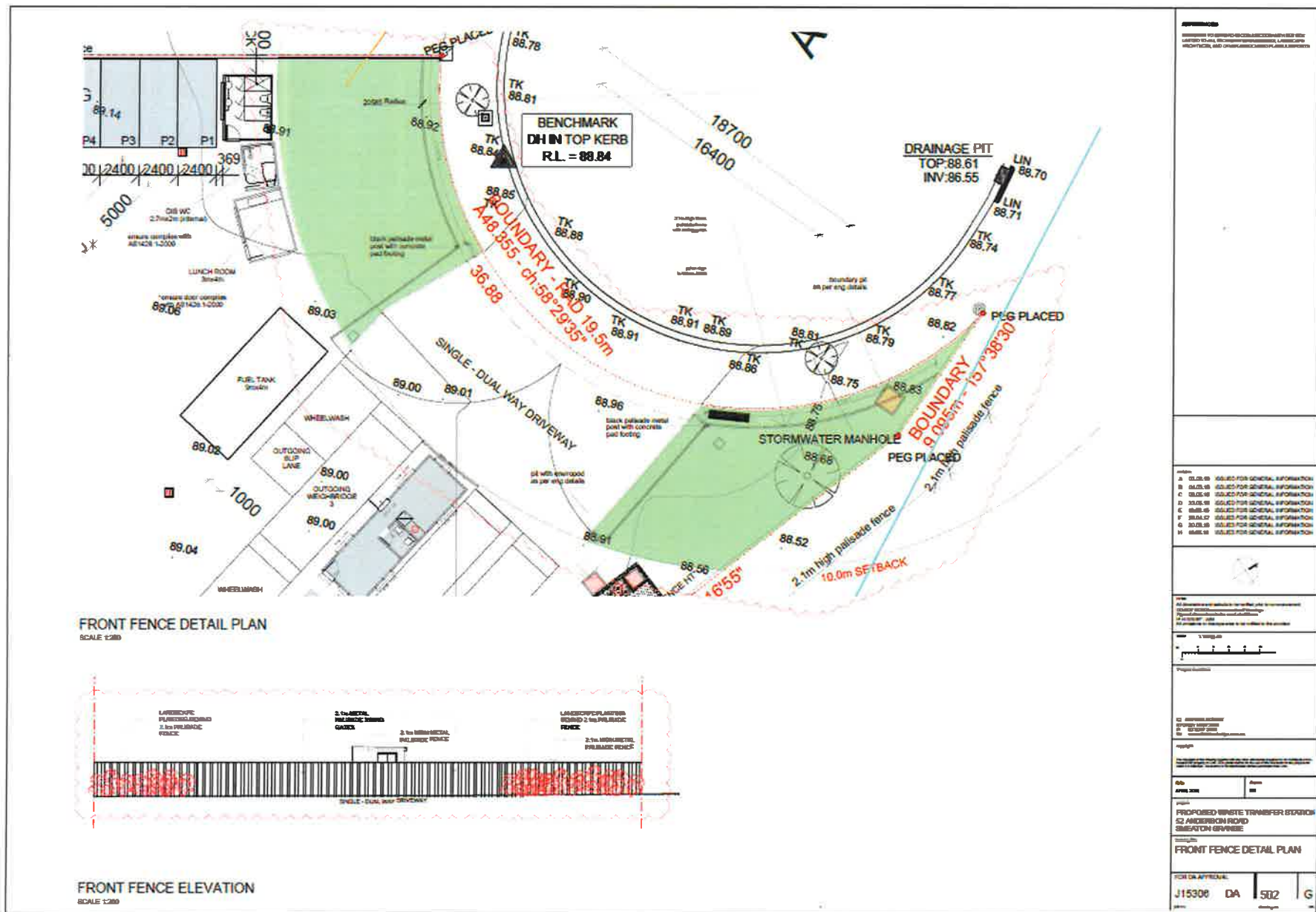












## APPENDIX B

### APPLICANT'S MANAGEMENT AND MITIGATION MEASURES

Key issue	Management measure
Facility design	<p>The facility will not be open between 10 pm and 6 am.</p> <p>The screening plant and External Bay 6 will be covered with a roof (approximately 5 m off the ground) to minimise moisture entering the timber stockpile. The roof will be within the site and adjacent to the 10 m tall fence so will not be visible from offsite.</p> <p>To minimise dust and noise emissions:</p> <ul style="list-style-type: none"> <li>• materials (waste, products and residues) will be stockpiled in the shed or in a marked bay</li> <li>• wastes will be processed in the shed or within the screening plant area (see Figure 3.3) and will not be processed outside of these areas;</li> <li>• green waste will only be stockpiled in the shed; and</li> <li>• timber will be stockpiled in a covered bay.</li> </ul> <p>The facility's front fence will be constructed as a black metal palisade fence in accordance with <i>Camden Council Development Control Plan 2011 D4.2.5 Fencing</i>.</p>
Air quality	<p>The site environmental management plan (EMP) will detail dust management during construction and operations.</p> <p>Benedict Recycling will implement dust management measures (described in the EMP) so that dust emissions are minimised and do not impact upon surrounding sensitive receptors.</p> <p>Sorting and storage of materials will occur within the main processing shed and the management measures described in EIS Section 6.2.1 (and expanded in the EMP as required) will be implemented to minimise any dust emissions so that they are close to eliminated.</p> <p>Management measures that will be implemented during construction and operations to minimise air quality impacts will include:</p> <ul style="list-style-type: none"> <li>• Construction: <ul style="list-style-type: none"> <li>– record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;</li> <li>– record any exceptional incidents that cause dust and/or air emissions, either on or off site, and the action taken to resolve the situation in the log book;</li> <li>– carry out regular site inspections, record inspection results, and make an inspection log available to the local authority when asked;</li> <li>– impose a maximum-speed-limit of 20 km/h on all internal roads and work areas;</li> <li>– minimise idling vehicles onsite, wherever practicable;</li> <li>– ensure proper maintenance and tuning of all equipment engines;</li> <li>– ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport; and</li> <li>– provide an adequate water supply on site for effective dust/particulate matter suppression/mitigation.</li> </ul> </li> <li>• Operations: <ul style="list-style-type: none"> <li>– all existing sealed areas must be maintained;</li> <li>– water sprays will be used over any other bare surfaces that have potential to generate unacceptable amounts of dust;</li> <li>– water sprays will be used at stockpiles, operational areas and the screening plant during material handling;</li> <li>– a wheel wash in the weighbridge area will be used to clean truck tyres to prevent mud or sediment being carried to and deposited on the access road (and public roads);</li> </ul> </li> </ul>

Key issue	Management measure
	<ul style="list-style-type: none"> <li>– dust generating activities will be generally undertaken within the main shed; and</li> <li>– no composting will be undertaken on the site.</li> </ul>
Greenhouse gases	<p>Management measures that will be implemented during construction and operations to minimise greenhouse gas emissions will include:</p> <ul style="list-style-type: none"> <li>• on-site equipment will be regularly maintained and serviced to maximise fuel efficiency;</li> <li>• vehicle kilometres travelled on site will be minimised; and</li> <li>• energy efficiency will be progressively reviewed and implemented throughout the life of the facility.</li> </ul>
Noise	<p>Management measures that will be implemented during operation to minimise noise impacts will include:</p> <ul style="list-style-type: none"> <li>• choosing quieter plant and equipment, including installing best-practice noise suppression equipment, based on the optimal power and size to most efficiently perform the required tasks;</li> <li>• plant with high noise emissions will generally be located inside the shed;</li> <li>• plant and equipment will be regularly maintained and serviced;</li> </ul> <p>low-frequency reversing alarms (“growlers”) will be used rather than the standard high frequency beepers;</p> <ul style="list-style-type: none"> <li>• a site layout has been adopted that minimises the need for mobile plant to reverse;</li> <li>• plant and equipment will be switched off when not in use;</li> <li>• any vehicle queuing will be on site rather than on public roads;</li> <li>• material drop heights will be minimised and dragging materials along the ground will be minimised;</li> <li>• site contact details will be provided on a board at the front of the site;</li> <li>• any noise-related complaints will be handled promptly; and</li> <li>• a complaints register will be maintained.</li> </ul> <p>Benedict Recycling will commission noise verification monitoring at the closest residences to the south-east (R9) and to the north-east (R22) (or at equivalent locations) within 3, 6 and 12 months of the start of operations.</p>
Transport	<p>Signs will be erected at the facility requesting customers access the facility via Camden Valley Way via Anderson Road.</p> <p>Signs will be erected at the facility regarding drivers’ legal obligation to ensure that waste is covered during transport.</p> <p>Vehicles dispatching products or residue will be covered prior to leaving the site.</p>
Visual	<p>Management measures that will be implemented during construction and operations to minimise visual impacts will include:</p> <ul style="list-style-type: none"> <li>• this site will be colourbond fenced on the boundaries; and</li> <li>• the visual appearance of the site entrance on Anderson Road will be landscaped and kept tidy.</li> </ul>

Key issue	Management measure
Water	<p>Excavation into the alluvium on the site will be avoided where feasible.</p> <p>While no significant dewatering is predicted to be required during the construction of footings, DPI Water will be notified and a aquifer interference licence will be obtained if more than 3 ML of groundwater needs to be extracted during construction.</p> <p>Features to prevent impacts to groundwater include:</p> <ul style="list-style-type: none"> <li>• no significant excavations within the site;</li> <li>• existing sheds will be used to house the majority of the processing activities, preventing generation of runoff from these activities;</li> <li>• bunded fuels storage area;</li> <li>• sheds and the segregated heavy waste stockpiling and processing area will be outside of major overland flowpaths;</li> <li>• surface water captured within the runoff management system will be used for dust suppression so that mains water is not required for this purpose;</li> <li>• the majority of the site will be asphalt sealed to minimise the requirement for dust suppression using water (see Section 2.10.1);</li> <li>• groundwater will not be used; and</li> <li>• water will not be used in the product processing, other than for dust suppression.</li> </ul> <p>The site runoff controls will include:</p> <ul style="list-style-type: none"> <li>• a concrete perimeter kerb to keep runoff from entering and leaving the site;</li> <li>• an onsite detention/sedimentation basin/control device on site and remove sediment; and</li> <li>• flows from the sediment device will be controlled to ensure that poor quality water is not discharged from site.</li> </ul>

Key issue	Management measure
Fire management	<p>In order to maintain APZs, the landscaping vegetation will be maintained as follows:</p> <ul style="list-style-type: none"> <li>• canopy cover will be kept at less than 15% of total surface area and will be kept at least 2 m from the roof line of a building;</li> <li>• garden beds and shrubs will not to be located under trees and sited at least 10 m from any exposed windows or doors; and</li> <li>• lower limbs of trees up to 2 m above the ground will be removed.</li> </ul> <p>Services including water, gas and electricity services will be located and installed in a manner that reduces the potential for them to contribute to fire hazard.</p> <p>Stockpiles will be covered by awnings and separated by block walls in a manner that reduced the potential for them to contribute to fire hazard.</p> <p>Water for fire fighting will be provided as follows, to be detailed in a fire safety system designed in consultation with Fire and Rescue NSW:</p> <ul style="list-style-type: none"> <li>• existing fire hydrants in Anderson Road;</li> <li>• fire hydrants, <i>on-site, capable of providing 50L/s of firewater</i>;</li> <li>• extinguishers and fire hydrant at the office building.</li> </ul> <p>Firewater will be contained by a bund capable of containing at least one hour of firewater (180 m<sup>3</sup>)</p> <p>The following requirements from Chapter 4 of PBP will be applied to water infrastructure:</p> <ul style="list-style-type: none"> <li>• above ground pipes external to structures in the APZ will be metal including and up to taps;</li> <li>• pumps in the APZs will be shielded; and</li> <li>• Fire hydrants at buildings which will be spaced, sized and pressured in accordance with <i>Australian Standard 2419.1-2005 Fire Hydrant Installations – System Design, Installation and Commissioning</i>.</li> </ul> <p>In relation to the diesel tank:</p> <ul style="list-style-type: none"> <li>• the diesel tank which will be installed in accordance with <i>Australian Standard 1940:2004 The Storage and Handling of Flammable and Combustible Liquids</i> and will be fully enclosed in a colourbond shed.</li> </ul>
Contamination	<p>In the event of encountering suspected contaminated land, the area should be left undisturbed until a suitably qualified consultant can assess the area in question and provide appropriate mitigation measures identified if required.</p>

Key issue	Management measure
Diesel spill	<p><u>Prevention</u></p> <p>Overfilling of tanks will be prevented through gauging or monitoring of the tank's contents.</p> <p>Tanks, vents and fittings will be inspected regularly and valves will be regularly overhauled (at periods not exceeding 10 years).</p> <p>Hoses used for transfer of diesel, these will be regularly inspected.</p> <p><u>Protection</u></p> <p>The diesel tank will be self-bunded. The bund will be large enough to contain a spillage in accordance with the requirement of AS1940 para 5.8. The bund drain valve will be kept closed and locked except during supervised drainage, and a sign will be placed to display the need to keep the drain valve closed and locked.</p> <p>Provision will be made to quickly shut off the flow of liquid from the storage tank to a consuming device in an emergency. The shut off valve will comply with para 6.3.3 in AS1940, including resistance in a fire.</p> <p>Diesel pumps will be designed such that the discharge pressure cannot exceed design limit of pump or piping in the case of dead heading (shut-off at the pump discharge). An emergency shut-off device will be provided on each pump.</p> <p>There will be a diesel spill kit stored at the bowser.</p> <p><u>Detection</u></p> <p>Regular inspections by site personnel will be undertaken. Any liquid inside the bunded areas, such as rain water or any spilt liquid, will be removed following established procedures.</p>
Emergency and evacuation management plans	<p>An emergency and evacuation plan will be prepared for the site that will include notification of neighbours in the event of a potential emergency.</p> <p>The site's Emergency Response Plan will be provided to Frasers and Coles.</p>
General	Benedict Recycling will ensure that the area around the entrance to the facility is kept tidy and litter free.



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## APPENDIX C – WASTE MANAGEMENT PLAN

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# **WASTE MANAGEMENT PLAN**



## **SMEATON GRANGE**

**August 2019**

<b>Document Control</b>				
<b>Rev No</b>	<b>Date</b>	<b>Revision Details</b>	<b>Author</b>	<b>Reviewer</b>
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## 1. INTRODUCTION

### 1.1 BACKGROUND

Benedict Recycling Pty Ltd (Benedict) is the operator of the Smeaton Grange waste recycling and transfer facility (the facility) at 52 Anderson Road, Smeaton Grange (the site).

This document is a waste management plan (WMP) for the facility required by Condition B56 of the Stage significant development (SSD) consent (Ref: SSD 7424) (the consent).

The consent was originally approved on 22 December 2017 for construction and operation of a resource recovery facility to process up to 140,000 tonnes per annum (tpa) of general solid waste (non-putrescible). A modification (MOD 1) to the consent was approved on 10 September 2018.

### 1.2 LOCATION

The site is in the local government area (LGA) of Camden, NSW. The legal description of the site is Lot 319 DP 1117230 and it is approximately 7,862 m<sup>2</sup> in size. The site is at the eastern edge of the Smeaton Grange industrial precinct. A site location plan and a site layout plan are provided in Figures 1.1 and 1.2, respectively.

### 1.3 PURPOSE OF THE WASTE MANAGEMENT PLAN

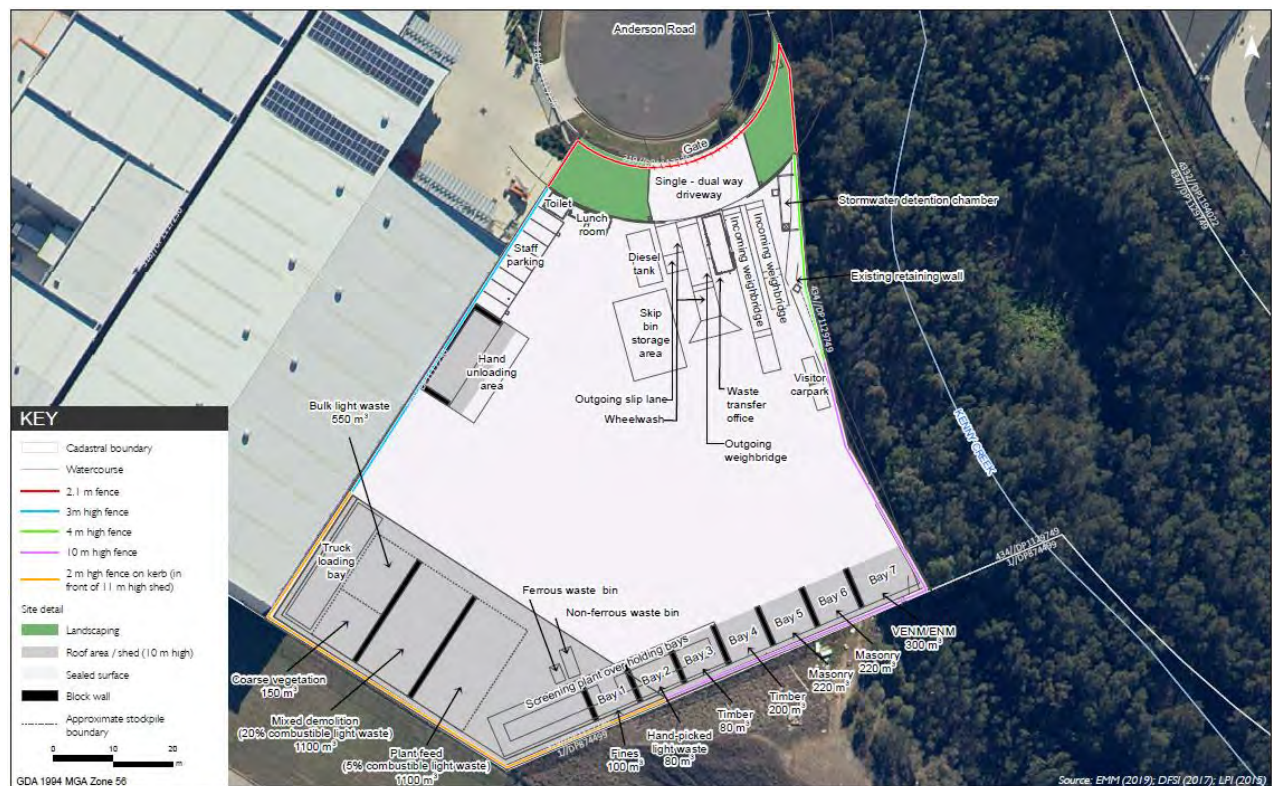
The purpose of this WMP is to meet the requirements of the consent as outlined in Table 2.1.

**Table 2.1 – Compliance table (SSD 7424)**

Condition	Requirement	Where Addressed in WMP
<b>A6</b>	The Applicant must not receive or process on site more than 140,000 tpa of general solid waste (non-putrescible).	Section 2.2
<b>A7</b>	The Applicant must not exceed the maximum stockpile volumes detailed in the consent.	Section 2.3 and Table 2.3
<b>A11</b>	The Applicant must retain all weighbridge records as required by the NSW Protection of Environment and Operation (Waste) Regulation and for the life of the development. The weighbridge records must be made immediately available on request by the Secretary and/or the EPA.	Section 5.1
<b>A12</b>	The Applicant must retain waste classification records for all waste received on the site and waste disposed from the site for the life of the development. The waste classification records must be made immediately available on request by the EPA and/or the Secretary.	Sections 5.1 and 5.2



<b>B56</b>	From the commencement of operation, the Applicant must implement a Waste Monitoring Program.	Chapter 5
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**Figure 1.1 – Site location plan****Figure 1.2 – Site layout plan**

## 2. WASTE TYPES AND QUANTITIES

Only 'pre-classified general solid waste (non-putrescible) waste' as defined by the NSW Environment Protection Authority's (EPA) *Waste Classification Guidelines - Part 1: Classification of Waste* (the guidelines) are to be accepted by the facility. No special, liquid, hazardous, restricted solid waste or general solid waste (putrescible), as defined by the guidelines, are to be accepted.

The sources and types of wastes will vary. An estimate of the proportion of wastes and the corresponding recycled products is provided in Table 2.2 based on the other inert waste recycling plants operated by Benedict Recycling.

All of the materials brought onto the site are to be taken from the site as products, as recyclable materials requiring further processing, or as non-recyclable residues (e.g. rubbish or spoiled recyclables such as contaminated paper/cardboard) for disposal at an EPA licensed landfill.

**Table 2.2 – Accepted waste types and quantities**

Waste types	Proportion <sup>1</sup>	Other limits
Soils and fines from excavated materials	33%	Soils that meet the CT1 thresholds for General Solid Waste in Table 1 of the guidelines
Concrete, excavated materials, bricks, rail ballast and spoils ('fines' with a particle diameter of less than 8 mm)	26%	Must not contain any contaminant levels exceeding the limits for General Solid Waste stated in the guidelines
Concrete, excavated materials, rail ballast and spoils (material with a particle diameter of greater than 8 mm)	19%	Must not contain any contaminant levels exceeding the limits for General Solid Waste stated in the guidelines.
Clean timber, coarse vegetation	5%	Clean timber to be non-CCA [copper chrome arsenic]-treated
Metals	2%	Predominantly steel
Rubbish to landfill (plastics, paper/cardboard, concrete-based building products (eg Hardiplank), minor amounts of plaster board, containers, carpet, synthetics, rags, etc)	15%	Target of maximum 15% to be diverted to landfill

Note: 1. Estimated proportion of annual waste accepted based on maximum 140,000 tpa.

### 2.1 SITE BASED WASTE ACTIVITIES

The NSW *Protection of the Environment Operations Act 1997* (POEO Act) requires companies or organisations carrying out activities that have a potential to affect the environment to obtain an Environment Protection Licence (EPL) from the EPA.

The POEO Act 1997 Schedule 1, Part 1, Activities Premises Based, defines:

#### WASTE STORAGE

- (1) *This clause applies to waste storage, meaning the receiving from off site and storing (including storage for transfer) of waste.*
- (2) *However, this clause does not apply to any of the following:*
  - (a) *the storage of stormwater,*
  - (b) *the storage of up to 60 tonnes at any time of any of the following kinds of waste (but not when accompanied by any other kind of waste)*
    - (i) *drilling mud*
    - (ii) *grease trap waste*
    - (iii) *waste lead acid batteries*
    - (iv) *waste oil*
  - (c) *the storage of sewage within a sewage treatment system,*
  - (d) *the storage and transfer of liquid waste that is generated and treated on site prior to sewer discharge, or lawful discharge to waters.*
- (3) *The activity to which this clause is declared to be a scheduled activity if:*
  - (a) *more than 5 tonnes of hazardous waste, restricted solid waste, liquid waste or special waste (other than waste tyres) is stored on the premises at any time, or*
  - (b) *more than 5 tonnes of waste tyres or 500 waste tyres is stored on the premises at any time (other than in or in a vehicle used to transport the tyres to or from the premises), or*
  - (c) *more than the following amounts of waste (other than waste referred to in paragraph (a) or (b)) are stored on the premises at any time:*
    - (i) *in the case of premises in the regulated area – more than 1,000 tonnes or 1,000 cubic metres,*
    - (ii) *in the case of premises outside the regulated area – more than 2,500 tonnes or 2,500 cubic metres, or*
  - (d) *more than the following amounts of waste (other than waste referred to in paragraph (a) or (b)) is received per year from off site:*
    - (i) *in the case of premises in the regulated area – 6,000 tonnes*
    - (ii) *in the case of premises outside the regulated area – 12,000 tonnes.*
- (4) *For the purposes of this clause, 1 litre of waste is taken to weigh 1 kilogram*

#### RESOURCE RECOVERY

- (1) *This clause applies to the following activities:*
  - recovery of general waste**, *meaning the receiving of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste) from off site and its processing otherwise than for the recovery of energy*
  - recovery of hazardous and other waste**, *meaning the receiving of hazardous waste, restricted solid waste or special waste (other than asbestos waste or waste tyres) from off site and its processing, otherwise than for the recovery of energy*
  - recovery of waste oil**, *meaning the receiving of waste oil from off site and its processing, otherwise than for the recovery of energy*

**recovery of waste tyres**, meaning the receiving of waste tyres from off site and their processing, otherwise than for the recovery of energy.

- (2) However, this clause does not apply to the recovery of stormwater or the processing of any of the following:
- (a) contaminated soil,
  - (b) contaminated groundwater,
  - (c) sewage within a sewage treatment system (whether or not that system is licensed).
- (3) Each activity referred to in Column 1 of the Table to this clause is declared to be a scheduled activity if:
- (a) it meets the criteria set out in Column 2 of that Table, and
  - (b) either
    - (i) less than 50% by weight of the waste received per year requires disposal after processing, or
    - (ii) an exemption granted under Part 9 of the Protection of the Environment Operations (Waste) Regulation 2014 exempts the person carrying out the activity from the requirements of section 48 (2) as they apply to waste disposal (application to land), waste disposal (thermal treatment), waste processing (non-thermal treatment) and waste storage.

Column 1		Column 2
ACTIVITY		CRITERIA
recovery of general waste		<p>if the premises are in regulated area:</p> <ul style="list-style-type: none"> <li>(a) involves having on site at any time more than 1,000 tonnes or 1,000 cubic metres of waste, or</li> <li>(b) involves processing more than 6,000 tonnes of waste per year</li> </ul> <p>if the premises are outside the regulated area:</p> <ul style="list-style-type: none"> <li>(a) involves having on site at any time more than 2,500 tonnes or 2,500 cubic metres, or</li> <li>(b) involves processing more than 12,000 tonnes of waste per year</li> </ul>
recovery of hazardous and other waste		involves having on site at any time more than 200 kilograms of waste
recovery of waste oil		involves processing more than 20 tonnes of waste oil per year or having on site at any one time more than 2,000 litres of oil.
recovery of waste tyres		involves having on site at any time (other than in or on a vehicle used to transport the tyres to or from the premises) more than 5 tonnes of tyres or 500 waste tyres,



		<i>or involves processing more than 5,000 tonnes of waste tyres per year.</i>
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Benedict Recycling will apply for an EPL prior to the start of operations. It is noted that under Section 89K of the EP&A Act, an EPL cannot be refused if it is necessary for carrying out SSD that is authorised by a development consent.

## 2.2 QUANTITY OF WASTE TO BE RECEIVED/STORED

Condition A6 of the consent limits the amount of general solid waste (non-putrescible) to be received or processed on site to no more than 140,000 tpa.

## 2.3 STOCKPILE LIMITS

Condition A7 of the consent provides maximum stockpile volumes as detailed in Table 2.3.

**Table 2.3 – Stockpile limits**

Stockpile	Waste type	Maximum volume
Bay 1	Fines (particles of less than 8 mm in diameter)	100 m <sup>3</sup>
Bay 2	Hand-picked light waste	80 m <sup>3</sup>
Bay 3	Timber	80 m <sup>3</sup>
Bay 4	Masonry	220 m <sup>3</sup>
Bay 5	Masonry	220 m <sup>3</sup>
Bay 6	Timber	220 m <sup>3</sup>
Bay 7	VENM/ENM	300 m <sup>3</sup>
Skip bin adjacent Bay 1	Ferrous waste	220 m <sup>3</sup>
Skip bin adjacent Bay 1	Non-ferrous waste	9 m <sup>3</sup>
Processing shed – west	Bulk light waste	2 m <sup>3</sup>
Processing shed - west	Coarse vegetation	550 m <sup>3</sup>
Processing shed – central	Mixed demolition with a 20% combustible light weight component	1,100 m <sup>3</sup>
Processing shed – east	Plant feed with a 5% combustible light waste component	1,100 m <sup>3</sup>

In the case of incoming loads of mixed waste, a sorting process is necessary to separate the various recyclable materials. Given the variable pattern of incoming waste traffic, the primary focus of the operation is to prevent wastes that are not approved to be accepted from being accepted, to complete this sorting process as efficiently as possible, to avoid a backlog of trucks and to prevent the formation of a larger than necessary stockpile in the incoming waste receipt area.



### 3. WASTE HANDLING/MANAGEMENT

Each load arriving at the facility is to be inspected and classified prior to the material being deposited on site. The methodology for waste load inspections is detailed and illustrated in the *Tip Inspecting Safe Work Procedure* attached in Appendix A.

All waste accepted shall be recorded on the facility's weighbridge system and a customer docket/receipt produced (see Appendix B).

The information recorded is to include:

- the date;
- vehicle registration number; and
- the type and weight of waste being delivered.

Incoming waste will be inspected at the weighbridge (and again after being tipped), see Section 4). Waste material that is unacceptable or specified prohibited from entering the site (see Appendix C) shall be refused entry and diverted to an appropriately licensed facility.

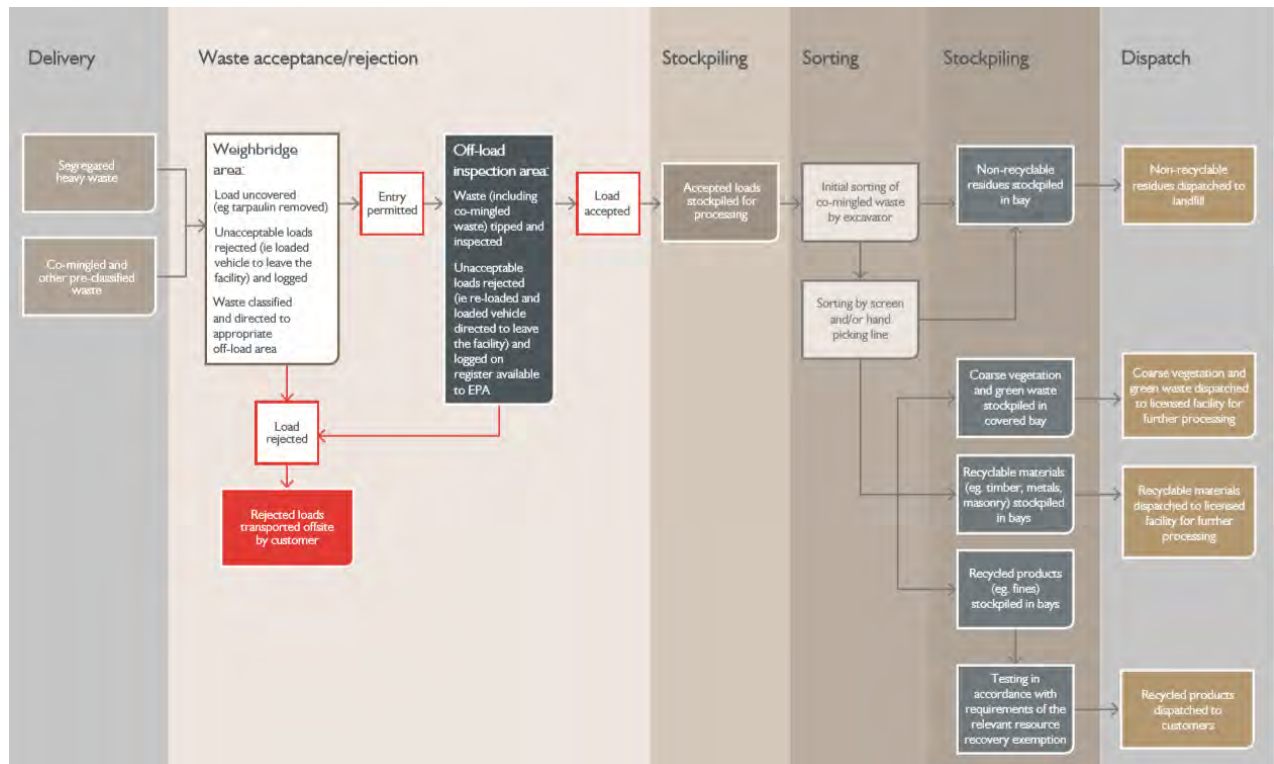
After leaving the weighbridge, each load is to be directed to the appropriate storage area by the site staff. All waste will be unloaded within the designated unloading area and be stored wholly within the designated waste stockpile areas in accordance with Condition A7 of the consent. Wherever possible raw materials are to be sorted at the source and directed into segregated stockpiles on-site.

Unsorted materials are to be spread on the ground on-site, sorted into the various categories and formed into segregated stockpiles. The sorted waste material may be subject to processing depending on its category and presentation.

Processing on site may include screening and picking. The processed material is to be stockpiled into its various processed categories for return to the market as product(s).

In addition to waste received on site, waste generated on site both during construction works and resulting from general office activities is classified in accordance with the guidelines.

A flowchart outlining the key steps in the waste recycling and transfer process is provided in Figure 2.1 below.

**Figure 2.1 – Waste flowchart**

### 3.1 EQUIPMENT BREAKDOWNS

Unexpected machinery breakdown has the potential to result in waste processing delays and hence build-up of incoming waste. To avoid such a situation, all equipment on site is to be regularly serviced and maintained (usually by the original equipment manufacturer) and the Benedict fleet of mobile equipment (HME) is typically replaced after approximately 10,000 hours of service. As such, equipment reliability is high and major breakdowns typically minimising the potential for excessive build-up of incoming waste on site.

Nevertheless, should an unexpected breakdown of equipment occur in the incoming waste receival area, replacement equipment is to be deployed when necessary to ensure that stockpile limits are not compromised due to a build-up of waste. This replacement equipment may be redeployed from another part of the site, hired or sourced from another Benedict site.

In the event that mobile equipment (HME) is unavailable for more than 48 hours due to breakdown, contractual arrangements are to be put in place whereby the original equipment manufacturer is bound to make available replacement equipment for use until such time as the repairs are completed.

Where high volumes of incoming waste traffic coincide with an equipment breakdown event and a build-up of waste is anticipated, the volume and types of waste received are to be managed accordingly to ensure that stockpile limits can continue to be met. This may include, but not be limited to, diverting customers to other facilities.

#### 4. NON-CONFORMING WASTE

Incoming waste is to be inspected in the following two stages:

- a preliminary inspection of the incoming waste on the vehicle at the weighbridge; and
- an inspection of the incoming waste after it is tipped off but before it is added to the appropriate feed stockpile (the customer will be required to wait until the waste has passed the inspection).

Details of any non-conforming waste loads are to be captured on the 'Notification of Non-Conforming Waste Form' (refer Appendix D) which is to be sent to the customer and filed on site. A log of all non-conforming loads is to be maintained in a central register that is available for EPA inspection.

The information recorded in the form and register is to include the following:

- date;
- carrier organisation/company;
- registration number of the vehicle; and
- type of waste.

Arrangements are to be made for the removal of any non-confirming waste for disposal at an appropriately licensed facility.

Should an incident occur in relation to a non-conforming waste, which poses a threat to the environment, the EPA is to be advised as soon as practical after the incident occurs.

The incident is to be reported by telephoning:

- EPA Newcastle office: 02 4908 6800; or
- EPA Pollution Hotline: 131 555.

Benedict will charge a re-loading fee to customers that tip waste that is found to contain any materials that the facility is not licensed to accept (e.g. putrescibles, hazardous, liquid and odorous waste). Benedict has found that customers who have a number of loads rejected and have to pay the re-loading fee, as a result of their rigorous inspection regime, stop using Benedict Recycling's facilities.

All staff directly involved in the inspection and classification of waste must be capable of identifying wastes that are not permitted to be disposed of at the facility. As such, basic internal training is to be carried out as required together with asbestos awareness training conducted by an external party which is scheduled annually as well as ad-hoc from time to time should there be any significant turnover of site staff.

#### 5. WASTE MONITORING PROGRAM

Condition B56 of the consent requires that a waste monitoring program be prepared by a suitably qualified person to:

- monitor the quantity, type and source of waste received on site;
- monitor the quantity, type and quality of the outputs produced on site;

- ensure that all waste that is controlled under a tracking system has the appropriate documentation prior to acceptance at site; and
- ensure staff receive adequate training to be able to recognise and handle any hazardous or other prohibited waste including asbestos.

Benedict is committed to minimising the risks associated with the waste received and the products despatched from the site by undertaking the waste monitoring program as detailed below. This chapter forms the waste monitoring program. It was prepared by Alycia Campbell (Benedict Environmental Compliance Officer).

### **5.1 INCOMING WASTE RECEIVALS**

The monitoring of the quantity, type and source of the waste received at the facility is to be recorded by the weighbridge software/system on a daily basis. An example of the information captured by the weighbridge software/system is shown in figure 5.1 below.

**Figure 5.1 – Weighbridge information capture**

**EDITING DOCKET NO: N-062719 (01/02/2018 07:18:AM)**

**SYSTEM DETAILS**  
 Site Prefix: N  
 Outgoing Load: ☐

**TRUCK DETAILS**  
 Registration No: [Redacted]  
 Driver Name: [Redacted]  
 Hnd unload grp: GOOGLE

**DATE DETAILS**  
 Date In: 01/02/2018  
 Date Out: 01/02/2018

**CUSTOMER DETAILS**  
 Customer Code: X0DEF0  
 Customer Name: COD EFPOS B RECYCLING\*\*\*\*CO  
 Customer Order No: GOOGLE  
 Customer Address: \*\*\*\*COD ONLY\*\*\*\*

**PRODUCT DETAILS**  
 Product Code: DEMOT  
 Product Name: MIXED LIGHT BUILDING & DEMOLITION  
 Product Rate: [Redacted]  
 Bin Size: m3 Den: 0.00

**CARTAGE DETAILS**  
 Cartage: [Redacted]  
 Fixed: 0  
 Per tonne: 0

**EXTRAS DETAILS**  
 Extra Code: [Redacted]  
 Extra Name: [Redacted]  
 Extra Rate: [Redacted]  
 Quantity: [Redacted]

**COSTS**  
 Tare: 1.78  
 Gross: 1.88  
 Net: 0.10  
 Product: [Redacted]  
 Cartage: 0.00  
 Extras: 0.00  
 Total: [Redacted]

Whilst the 'Customer Details', 'Truck Details' and 'Contractor Details' information is to be entered on arrival, the specific information relating to waste type is to be confirmed when the incoming load is inspected and classified using the 'Load Classification' form as shown in Appendix B. All necessary sampling and waste classification records will be in-line with any EPL requirements. Each incoming load is to be assigned a 'Product Code' which has an associated 'Product Name'.

## 5.2 OUTGOING PRODUCTS AND WASTE FOR DESPATCH

Materials leaving the site include:

- recycled products for re-use (compliant with Resource Recovery Orders);
- residual wastes to be further processed/lawfully recovered at a licensed waste facility; and
- residual wastes for disposal at a licensed waste facility.

The quantity, type and quality of the outputs produced on site are to be recorded by the same weighbridge software/system as that used to record incoming waste materials.

Recycled products for re-use are only to be approved for sale from the facility pending compliance with a variety of conditions as per specific Resource Recovery Orders issued by the EPA under clause 93 of the 2014 Waste Regulation.

### 5.3 MONTHLY EPA REPORTING

Under the POEO Act, all licence holders of levy liable waste facilities (i.e. landfills, waste recycling facilities, waste storage, and waste transfer facilities) must submit a Waste Contribution Monthly Report (WCMR). This report is submitted monthly on-line via the EPA's Waste and Resource Reporting Portal (WARRP), ensuring that there is suitable provision to monitor movement of waste to and from the premises.

The WCMR submitted via the WARRP system details the quantity, type and source of waste received by a site as well as the quantity, type and quality of waste transported from the site.

All sampling and waste classification data is to be retained for the life of the facility in accordance with EPA requirements.

Figure 5.3 below shows typical screenshots of the WARRP system being currently used to report waste material movements to and from the site.



**Figure 5.3 – WARRP screenshots**

WCMR: Facility ABC v1

Reporting Period Ending: September 2015 Due: 25 November 2015

☐ No waste has been received, processed or removed from site during this period

**Waste Received** Metropolitan Levy Area

**Municipal**

Received/Source	Waste Type	Quantity (tonnes)
<input type="button" value="Add New Source"/>		

**Commercial and Industrial**

Received/Source	Waste Type	Quantity (tonnes)
<input type="button" value="Add New Source"/>		

**Construction and Demolition**

Received/Source	Waste Type	Quantity (tonnes)
<input type="button" value="Add New Source"/>		

**Unknown waste stream**

Received/Source	Waste Type	Quantity (tonnes)
<input type="button" value="Add New Source"/>		

WCMR: Facility XYZ v1

Reporting Period Ending: September 2015 Due: 25 November 2015

**Deductions - Waste transported from site**

**i** Please note the proximity principle offence commenced on 1 November 2014. This makes it an offence to transport waste generated in NSW beyond 150km from its point of generation, with limited exceptions.

**Waste transported from site for disposal at a licenced waste facility**

Facility	Waste Type	Rate Paid	Quantity
<input type="button" value="Add another Facility"/>			

**Waste transported from site for lawful recovery at a licenced waste facility**

Facility	Waste Type	Rate Paid	Quantity
<input type="button" value="Add another Facility"/>			

**Waste transported from site under a Resource Recovery Order**

RRO	Waste Type	Rate Paid	Quantity
<input type="button" value="Add another RRO"/>			

**Waste transported from site for lawful recovery (not a licenced waste facility)**

Destination	Waste Type	Rate Paid	Quantity
<input type="button" value="Add another Destination"/>			

WCMR: Facility ABC
v1

Reporting Period Ending: August 2015
Due: 14 September 2015

Summary details

**Current position**

	Tonnes
Waste Received - MLA	500.00
Waste Received - PLA	400.00
Deductions - Waste transported from site	300.00
<b>Net position for reporting period</b>	<b>600.00</b>

**Authorised Amount**

Authorised Amount	9,999,999.00
Opening Stock	3,510.00
Net change to stockpile tonnage	600.00
<b>Closing Stock</b>	<b>4,110.00 tonnes - 0.04%</b>

**Certification statement**

I John Doe certify that the information contained in the report in respect of scheduled waste facility Facility ABC (licence number: L838343) located at Kentucky Road for the reporting period August 2015 is true and correct.

I further certify that all deductions claimed in this report are valid and correct and that the occupier of the scheduled waste facility has kept the necessary records to substantiate these claims as required by clauses 26 to 33 of the Protection of the Environment Operations (Waste) Regulation 2014.

I understand that all information contained within this report, records maintained in support of this report, and any claims for exemptions and deductions may be subject to EPA audit inspection.






Please select the option that applies to you:  

Click the E-Certify button to complete e-certification. You will receive a return email confirming that the report has been successfully submitted to the EPA. Please email [waste.levydata@epa.nsw.gov.au](mailto:waste.levydata@epa.nsw.gov.au) if you do not receive this confirmation.




Cancel
Done
Previous
E-Certify



## Tip Inspecting Safe Work Procedure (page 1 of 8)

SWP 5.4		<b>BENEDICT</b> BENEDICT	
<b>Tip Inspecting</b>			
<b>Purpose:</b>	To provide a detailed and illustrated methodology for tip inspecting.		
<b>Applications:</b>	Business Units	Benedict Recycling	
	Department	Operations	
	Plant	N/A	
<b>Exemptions:</b>	N/A		
<b>Documentation:</b> Including permits, notifications and forms	Load Classification Form		
<b>Specific Competency Requirement:</b>	<i>Position</i>		<i>Requirement</i>
	Tip Inspector		Trained in this SWP
			Trained in Waste Identification
			Trained in Asbestos Awareness
			Trained in Site Traffic Management Plan
			Trained in Site Communication Protocols
			Trained in Site PPE requirements
			Trained in Overloaded Heavy Vehicle Procedure
<b>Specialised Primary Equipment/ Plant/ Tooling</b>	<i>Description</i>		<i>Note</i>
<b>Personal Protective Equipment required during the entire activity:</b>	    		
	(When Required)		

**Tip Inspecting Safe Work Procedure (page 2 of 8)**




<div>SWP 5.4</div> <div><b>BENEDICT</b></div> <div><b>Tip Inspecting</b></div>					
STEP	TASK	ACTIVITY	POTENTIAL HAZARDS	CONTROLS/ PRECAUTIONS	ILLUSTRATIONS
1	Customer to stop at designated stop point	<p>Weightbridge to notify to tip inspector when large numbers of pickups and tip offs are entering the site</p> <p>Weightbridge to notify tip inspector of driver with no access to UHF radio</p> <p>Check truck/ vehicle condition</p> <p>Check drivers ticket for initial classification and verify</p> <p>Tip inspector to check for visible contaminants</p> <p>Indicate to driver where to tip load</p>	<p>Unfamiliar with site</p> <p>Collision</p> <p>Dust</p> <p>Slips, trips and falls</p> <p>Lack of communication</p> <p>Driver on mobile phone</p> <p>Contaminated load</p>	<p>Driver Induction.</p> <p>Traffic management signage.</p> <p>Stop point area is to be kept clean at all times.</p> <p>Appropriate PPE to be worn.</p> <p>Dust suppression system to be periodically used when required.</p> <p>Trucks to untarp before entering tipping area.</p> <p>Verbal and visual contact made with customer driver and directions to tipping area given.</p> <p>Stop vehicle until driver is off the phone.</p> <p>If load is deemed to be contaminated, report to supervisor/manager immediately.</p> <p>Collect ticket from driver. Do not allow any vehicle to enter the tipping area unless approved by a Benedict employee.</p>	  



**Tip Inspecting Safe Work Procedure (page 3 of 8)**

SWP 5.4



**BENEDICT****Tip Inspecting**

2	Customer tip off	Vehicle driving through tip off area Vehicle tipping off Inspect for contaminants Inspect for flammables Spread load when required	Too many vehicles/plant in tip area Collision Lack of communication Falling/ Rolling objects Vehicle tip over Dust Smouldering material/ Fire Crushing Unstable Vehicle Overloaded Vehicle Contaminated material	<p>Tip inspector must communicate to machine operators in tip off area that the incoming vehicle is entering the area.</p> <p>Tip Inspector is not to let a vehicle enter the tip off area until responses from the area machine operators have been received.</p> <p>Ensure traffic management speed limits are followed.</p> <p>Limit vehicles in tipping area</p> <p>Signal driver to be positioned in areas of poor visibility, if required.</p> <p>Wear appropriate PPE – Gloves, dust mask, Hi Vis, Steel capped shoes, hearing protection, eye protection, sun protection and hard hat when required</p> <p>Ensure drivers tipping off are wearing appropriate PPE for the tipping area when out of their vehicle.</p> <p>Ground should be level and clear of debris.</p> <p>Spray down material with hose if dust is generated, or activate dust suppression system if available.</p> <p>No smoking in tip off area</p> <p>Use the appropriate firefighting equipment to extinguish a fire. If unable to control fire, notify warden of emergency.</p> <p>Stand well clear of falling objects. DO NOT stand immediately next to/ behind the skip bin/ tipping body during the tipping process, in case of vehicle roll over and/ or flying objects rolling out at speed.</p> <p>Do not inspect load whilst driver is tipping. Wait for bin to be back in travel position or a safe distance away from load on ground.</p>	  
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Tip Inspecting Safe Work Procedure (page 4 of 8)

SWP 5.4

**Tip Inspecting****BENEDICT**




3	Customer Hand Unload (where applicable)	Customer unloading vehicle/ trailer/ light truck Benedict employee assisting in unloading vehicle/ trailer/ light truck Benedict employee supervising customer unloading Inspect for contaminants	Too many vehicles/ plant in unload area Collision Lack of communication Falling/Rolling objects Flying objects Needles Sharp Objects Slips, Trips and Falls	<p>For all skip bin trucks, ensure they have their stabilising legs down prior to tipping. Follow overloaded heavy vehicle procedure</p> <p>Do not allow drivers to tip on top of previously tipped loads, in case of potential reloading.</p> <p>For all Front lift trucks, waste is to be unloaded in a separate bay from all other waste streams. Material in this bay is to be lightly wet down on a regular basis after inspecting. Access to this area is to remain clear, as this material is removed off site on a First In, First Out basis.</p> <p>If contamination is present, report to supervisor/ manager immediately.</p>	
				<p>Tip Inspector is not to let a vehicle enter the tip off area until area is free and clear of mobile plant.</p> <p>Customer vehicles are to wait in stop area until tip inspector directs them to enter tip off area.</p> <p>Ensure traffic management speed limits are followed.</p> <p>Verbal and visual contact made with customer driver and directions to tipping area consulted.</p> <p>Stand well clear of falling objects. DO NOT stand immediately next to/ behind the tipping body during the tipping process, in case of objects becoming airborne or rolling out at speed.</p> <p>Dust suppression system to be utilised periodically and when dust levels are elevated.</p> <p>Waste bays and access roads to be regularly maintained to ensure area is free and clear of debris and dust.</p> <p>DO NOT stand on waste stockpiles.</p>	

**Tip Inspecting Safe Work Procedure (page 5 of 8)**

SWP 5.4		<b>BENEDICT</b>	
<b>Tip Inspecting</b>			
		<p>Lifting of Heavy/ Awkward objects</p> <p>Cuts/ Abrasions</p> <p>Dust Inhalation</p> <p>Eye Irritation</p> <p>Noise</p> <p>Needles</p> <p>Contaminated material</p> <p>Driver Frustration</p> <p>Smouldering material/ Fire</p>	<p>Wear appropriate PPE – Dust mask, Hi Vis, Steel capped shoes, hearing protection, eye protection, sun protection and hard hat when required. Gloves to be worn whenever handling waste materials.</p> <p>Provide assistance where customer is attempting to unload a heavy/ awkward object. Where object is found to be too difficult/ heavy to unload, use available mechanical aids to assist.</p> <p>Customers are to wear enclosed footwear.</p> <p>Customer to wear hi visibility shirt/ vest.</p> <p>Where customer does not have appropriate PPE, where possible, provide assistance to customer to minimise exposure to potential hazards.</p> <p>No smoking in tip off area</p> <p>Use the appropriate firefighting equipment to extinguish a fire. If unable to control fire, notify warden of emergency.</p> <p>If contamination is present, report to supervisor/ manager immediately.</p>
4	Tip Inspector to inspect load	Assessing and Classifying load	   <p>All relevant staff to attend asbestos awareness training.</p> <p>Tip inspectors trained in material classifications and identification.</p> <p>Tip Inspector to keep hydrated during the course of the shift.</p> <p>Wear appropriate PPE – Dust mask, Hi Vis, Steel capped shoes, hearing protection, eye protection, sun protection and hard hat when required. Gloves to be worn whenever handling waste materials.</p> <p>Dust suppression system/ water cart to be used when necessary.</p>

**Tip Inspecting Safe Work Procedure (page 6 of 8)**





SWP 5.4		<b>BENEDICT</b>	
<b>Tip Inspecting</b>			
		Flying objects	<p>Watch where you're walking – looking out for sharp objects.</p> <p>Do not attempt to remove, touch or handle syringes. Cease inspection in the vicinity of any evidence of hazardous medical waste. Report incident to supervisor immediately.</p> <p>Tip inspector in control of traffic management.</p> <p>Be aware of position of excavators and loaders.</p> <p>Maintain positive radio/ visual communication with drivers/ operators in the area.</p> <p>Wait for truck to completely stop and make reciprocated visual or radio contact with the vehicle driver prior to inspecting load on the vehicle.</p> <p>Do not climb on top of stockpiles.</p> <p>Extra attention is required when loads appear to be from an older building OR waste loads from a Front lift truck.</p> <p>If paints, oil, fuel, chemicals, food or putrescibles are detected or suspected, instruct material to be reloaded onto truck/vehicle. Use precautions to not allow uncontrolled release of liquids during the reloading process. Wet down area when complete.</p> <p>Photos taken of all non-recyclable/ contaminated loads sent to weighbridge for processing.</p> <p>Load to be classified on the spot – driver told – and paperwork given.</p> <p>If contamination is present, report to supervisor/ manager immediately.</p> <p>Any disagreements on classification of waste with customer, tip inspector to escalate to site supervisor/ manager.</p>
	Noise		
	Cuts/ abrasions		
	Sharp Objects		
	Needles		
	Slips, trips, falls		
	Collision		
	Contaminated material		
	Driver Frustration		
	Smouldering material/ Fire		

**Tip Inspecting Safe Work Procedure (page 7 of 8)**

SWP 5.4 <b>Tip Inspecting</b>				
5	Finding Contaminated Material	Bonded Asbestos Contaminated Material (ACM) found Report to supervisor/manager immediately	Dust Inhalation	<p>No smoking in tip off area</p> <p>Use the appropriate firefighting equipment to extinguish a fire. If unable to control fire, notify warden of emergency.</p>
				<p>Notify your supervisor/ manager immediately.</p> <p>If found immediately after tipping, instruct material to be reloaded onto truck. Use precautions to not allow dust to be generated during the reloading process.</p> <p>If found in stockpile, load is to be isolated, spread out and checked.</p> <p>Dust to be suppressed as outlined in asbestos awareness training.</p> <p>Asbestos handling material to be worn – e.g. P2 respirator and gloves if required.</p> <p>Asbestos material is to be double bagged in an approved asbestos bag and tied in a 'goose neck' position.</p> <p>Bags to be placed into an isolated area, to be sent away to a licenced waste facility.</p>
		Friable ACM found Report to supervisor/manager immediately	Dust Inhalation	<p>Notify your supervisor/ manager immediately.</p> <p>Gloves and P2 dust mask to be worn</p> <p>Cordon off area. E.g. Bollards and tape, Cones, Barriers etc.</p> <p>Wet down material.</p>



**Tip Inspecting Safe Work Procedure (page 8 of 8)**

SWP 5.4		<b>BENEDICT</b>	
<b>Tip Inspecting</b>			
	Finding flammable material Report to supervisor/manager immediately	Smouldering material/ Fire	<p>If flammable waste material is found, it is to be removed from the waste pile immediately and segregated from all other stockpiles.</p> <p>Wet down stockpiles where flammable materials were found</p> <p>Periodically wet down segregated flammable materials until removed from site.</p>
6	Releasing customer from tipping area	Impatient Driver Collision	<p>No vehicle is to leave the tipping area unless the tip inspector has signed and returned the classification docket to the driver.</p> <p>UHF radio communication between tip inspector and Benedict ground staff to inform of customer movements in shared yard areas.</p>
		 	

## ATTACHMENT B

## Load Classification and Customer Docket/Receipt

**BENEDICT RECYCLING PTY LTD** **BENEDICT**

**LOAD CLASSIFICATION**

DATE: 4 AUG TIME: 12:30 REGO: BV93JS

☐ BELROSE ☒ BANKSMEADOW ☐ CHIPPING NORTON

LOAD	BIN SIZE
<input checked="" type="checkbox"/> DEMOLITION	<u>1.5m</u>
<input type="checkbox"/> BRICK / CONCRETE	
<input type="checkbox"/> CONCRETE - 500	<u>ROSEBAY</u>
<input type="checkbox"/> CONCRETE + 500	
<input type="checkbox"/> CLEAN FILL	<u>1</u>
<input type="checkbox"/> RUBBLE	
<input type="checkbox"/> SAND <u>2.60</u>	
<input type="checkbox"/> SANDSTONE	
<input type="checkbox"/> STEEL	
<input type="checkbox"/> OTHER	

NON CONFORMING WASTE CHARGE ☐ YES ☐ NO

STAFF SIGNATURE: [Signature]

PRINT NAME: 139601

**WEIGHBRIDGE DOCKET**

**BENEDICT RECYCLING**  
BANKSMEADOW  
ABN: 71123156507  
30 MCPHERSON ST  
BANKSMEADOW

PH: 02 9316 6333

**W-104922**

04 Aug 2014 12:30 PM

TRUCK ID: 118  
CUSTOMER CODE: LUCHGO

**LOCHBOURNE PTY LTD**

SOURCE: PO BOX 1272  
POTTS POINT  
ORDER NO: ROSEBAY  
JOB NO:

AMOUNT	ITEM	RATE
0.08t	L_BENG	

METRES: 1.5

GROSS: 2.60 t TARE: 2.50 t

NET: 0.08 t

Driver Signature: [Signature]

I hereby certify that the docket details are correct and I have not exceeded my gross vehicle mass weight.

I hereby certify that this load does not contain any contaminated, hazardous, liquid, putrescibles or asbestos materials.

I have read and understood the conditions of entry.

Part of our tipping fees contains the \$133.10 EPA waste fee for every tonne that is stockpiled on site.

**ATTACHMENT C****Prohibited Wastes**

The following waste types as defined by the NSW Environment Protection Authority's *NSW Classification Guidelines Part 1: Classifying Waste (November 2014)*, will be excluded from the facility:

a) Hazardous Waste

- Containers, having previously contained a substance of Class 1, 3, 4, 5 or 8 within the meaning of the Transport of Dangerous Goods Code, or a substance to which Division 6.1 of the Transport of Dangerous Goods Code applies, from which residues have not been removed by washing<sup>2</sup> or vacuuming
- Coal tar or coal tar pitch waste (being the tarry residue from the heating, processing or burning of coal or coke) comprising of more than 1% (by weight) of coal tar or coal tar pitch waste
- Lead-acid or nickel-cadmium batteries (being waste generated or separately collected by activities carried out for business, commercial or community services purposes)
- Lead paint waste arising otherwise than from residential premises or educational or child care institutions
- Any mixture of the wastes referred to above

b) Special Waste

- Clinical and related
  - clinical waste
  - cytotoxic waste
  - Pharmaceutical, drug or medicine waste
  - Sharps waste (for cutting, piercing or penetrating the skin) – any waste from the use of sharps from human health care, medical research, veterinary care or skin penetration, injection of drugs, or other substances
- Asbestos Waste
- Waste Tyres

c) Liquid waste of any description

- Any waste (other than Special Waste) that:
  - Has an angle or response less than 5 degrees above horizontal
  - Becomes free flowing at or above 60 degrees Celsius or when it is transported
  - Is generally not capable of being picked up by a spade or shovel
  - Is classified as liquid waste under an EPA gazettal notice

d) General Solid Waste (Putrescible)

- Household waste that contains putrescible organics
- Waste from litter bins collected by or on behalf of local councils



- Manure and night soil
- Disposable nappies, incontinence pads or sanitary napkins
- Food waste
- Animal waste
- Grit or screenings from sewage treatment systems that have been dewatered so that the grit or screenings do not contain free liquids
- Any mixture of the wastes referred to above

## Notification of Non Conforming Waste Form

Form 72.5

## BENEDICT BENEDICT

### Notification of Non Conforming Waste Form

This form is to be completed by the Weighbridge Operator, Waste Controller or other authorised Benedict employee who identifies non conforming waste on site.

Date:			
Driver Name:			
Company:			
Company Contact:		Phone #:	
Address Collection of Waste:			
Docket #:			
Time of Delivery:			
Time of Notification:			
Registration:			
Reason for Rejection:			

This notification is to inform customers of BENEDICT Recycling about non conforming waste occurrences. BENEDICT Recycling only accepts Inert Mixed Demo Waste and recyclable material, as classified by Environmental Guidelines: Assessment, Classification & Management of Liquid and Non-Liquid Wastes (EPA, 1999). The above vehicle was identified as bringing in non conforming waste at the following location:

☐ Belrose
 ☐ Chipping Norton
 ☐ Newcastle
 ☐ Unanderra
 ☐ Other \_\_\_\_\_

**Identification Location – please tick**

☐ Weighbridge  
☐ Waste sorting / inspection area before unloading  
☐ Waste sorting / inspection area during examination after unloading

It is requested that you undertake the following action immediately. If action is not taken on the same day of this notification further charges will be incurred.

**Action Taken – please tick**

☐ Non complying load isolated  
☐ Removal of waste from site  
☐ Reloading into truck or suitable waste bins as supplied by you the customer. Please be advised that a reloading fee will be charged  
☐ Reclassification and price change. Reload fee docket number \_\_\_\_\_ or docket attached  
☐ None

☐ Emailed to Group by \_\_\_\_\_  
☐ Save copy under J:Benedict Recycling/Form 72

For any further clarification please contact Gay Willis on 0427 087 897

**APPENDIX D - WATER MANAGEMENT PLAN**



**PROPOSED RECYCLING FACILITY**

**SSD 7424**

**52 ANDERSON ROAD, SMEATON GRANGE**

**BENEDICT INDUSTRIES PTY LTD**

**WATER MANAGEMENT PLAN**

**AUGUST 2018**

**Mark Tooker**

**Director**

**Tooker and Associates**

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## APPENDICES

Appendix A	NRAR Review of Draft WMP
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Appendix C	Treatment Basin Sizing
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## 1. Introduction

Benedict Industries Pty Ltd proposes to construct and operate a recycling facility on an industrial lot at 52 Anderson Road, Smeaton Grange.

As a delegate of the Minister for Planning, the Planning Assessment Commission gave development approval to this State Significant Development 7424 on the 22 December 2017. This report deals with the water management issues in consent conditions B26 to B35 which essentially require further detail for the Water Management Plan and preparation of this Plan in consultation with Crown Lands and Water (CL&W). The Water Management Plan has been reviewed by the Natural Resources Access Regulator (NRAR) on behalf of the CL&W and found to meet all their requirements (refer Appendix A) other than for a development consent condition compliance table. This table is included below at Table 1.

This report has been prepared by Mark Tooker who has been endorsed by the Department of Planning as required in consent condition B27a (refer Appendix B).

Table 1 Development Consent Compliance Table

Condition No.	Condition	Report Reference
B26	Prior to the commencement of construction, the Applicant must install and maintain suitable erosion and sediment control measures on-site, in accordance with the relevant requirements in the latest version of the Managing Urban Stormwater: Soils and Construction Guideline and the Erosion and Sediment Control Plan included in the CEMP required by Condition C1.	Section 4.4 Figure 3
B27	Prior to the commencement of operation, the Applicant must design and install a stormwater management system for the Development. The system must:	
a	be designed by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Secretary;	Section 1 Appendix B
b	be generally in accordance with the conceptual design in the EIS;	Section 4.1
c	include a storage tank with bunding to capture leachate from the main shed and waste stockpile areas for offsite disposal and treatment;	Section 4.1
d	be designed in accordance with applicable Australian Standards;	Section 4.1
e	demonstrate that discharge limits can meet those in the WSUD Guideline;	Section 4.1 Section 4.2
f	ensure that the system capacity has been designed in accordance with Australian Rainfall	Section 4.1



	and Runoff (Engineers Australia, 2016) and Managing Urban Stormwater: Council Handbook (EPA, 1997) guidelines (as may be updated or replaced from time to time);	
g	direct all sediment laden water in overland flow away from the leachate management system; and	Section 4.1 Figure 4
h	prevent cross-contamination of clean and sediment or leachate laden water.	Sections 4.1, 4.2 and 4.3
B28	Prior to the issue of a Construction Certificate, a certificate must be submitted to the Certifying Authority certifying that:	
a	satisfactory arrangements have been made for the disposal of stormwater;	Section 4.1 and 4.2
b	the proposed development and alterations to the natural surface contours will not impede or divert natural surface water runoff so as to cause a nuisance to adjoining properties; and	Section 4.1
c	the piped drainage system has been designed to Council's Stormwater Drainage Policy.	Sections 4.1 and 4.2
B29	Prior to the issue of the Final Occupation Certificate, Works-As-Executed drawings signed by a registered surveyor demonstrating that the stormwater drainage and finished ground levels have been constructed as approved must be submitted to the Certifying Authority.	Drawings will be provided to certifying authority after construction is completed
B30	The stormwater drainage generated from the development must be directed to:	
a	the drainage easement; and	Stormwater is directed to the street kerb and drainage inlet pit – see B30 b
b	Council's street kerb and gutter.	Section 4.1 Figure 4
B31	The stormwater management system must be operated and maintained for the duration of the Development.	Section 5
B32	The Development must comply with section 120 of the POEO Act, which prohibits the pollution of waters, except as expressly provided for in an EPL.	Sections 4.1, 4.2 and 5
B33	Prior to the commencement of construction, the Applicant must prepare a Water Management Plan (WMP) to the satisfaction of the Secretary. The WMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The WMP must:	
a	be prepared in consultation with the CL&W;	Section 1 and Appendix A
b	detail water use, metering, disposal and	Sections 4 and 5

	management on-site;	
c	detail the management of wastewater streams on site;	Section 4
d	verify the likely groundwater dewatering requirements;	Section 4.7
e	contain a Surface Water Management Plan, including; <ul style="list-style-type: none"> <li>i) a program to monitor:               <ul style="list-style-type: none"> <li>● surface water flows and quality;</li> <li>● surface water storage and use;</li> <li>● discharge limits;</li> <li>● sediment basin operation;</li> </ul> </li> <li>ii) sediment and erosion control plans;</li> <li>iii) surface water impact assessment criteria, including trigger levels for investigating and potential adverse surface water impacts; and</li> <li>iv) a protocol for the investigation and mitigation of identified exceedances of the surface water impact assessment criteria.</li> </ul>	Sections 4 and 5
B34	The Applicant must:	
a	not commence construction until the WMP required by Condition B33 is approved by the Secretary; and	Section 4.4
b	The Applicant must ensure the WMP (as required and approved by the Secretary from time to time) is implemented for the life of the Development.	Section 5
B35	In the event that groundwater is intersected during construction the Applicant shall:	
a	obtain the necessary water licences or approvals from CL&W;	Section 4.7
b	develop a Groundwater Management Plan for the testing, dewatering, storage, movement and treatment of any groundwater to the satisfaction of CL&W.	Section 4.7

## **2. Site Description**

The site is a 6862m<sup>2</sup> lot at 52 Anderson Road, Smeaton Grange (refer Figure 1). Its legal description is Lot 301 DP1117230.

The site is located within an industrial subdivision. It has a relatively flat slope falling approximately 1m from its western boundary to the north eastern corner of the site (refer Figure 2). There is a constructed drainage reserve along the south eastern boundary of the site.

Anderson Road has a stormwater pipe drainage system with a kerb inlet pit located adjacent to the north eastern corner of the site.

The average annual rainfall in the area is 769mm (at Camden Airport).

## **3. Proposed Development**

The project will import general solid waste (non-putrescible) such as construction and demolition wastes and selected commercial and industrial wastes, for processing (e.g. screening and sorting) to produce saleable recycled materials and materials for further offsite processing. The recycled materials produced will include soils, timber, masonry, metals and dry paper, cardboard and plastics. These products will conform to recycled material specifications and the processes will recover a range of materials that would otherwise be disposed to landfill.

No special liquid, hazardous, restricted solid waste or general solid waste (putrescible), as defined in the NSW Protection of the Environment Operations Act (POEO Act) 1997 and EPA (2014) would be accepted at the Recycling Facility. All of the materials brought onto the site will be taken from the site as products or as rejects for disposal at licensed landfill sites. There would be no materials land-filled or otherwise permanently disposed of anywhere within the site as a result of this proposal.

The development will consist of a waste transfer holding shed along the south western boundary (refer Figure 2). This shed will be roofed and have an area of approximately 1294m<sup>2</sup>.

Material holding bays will be located on the southern boundary and this area would also be roofed with an area of approximately 282m<sup>2</sup>. Staff parking is located on the western boundary.

Weighbridges, wheel washes and amenity sheds will be located at the site entrance. There will be 10m landscaped and driveway setback from the front boundary covering an area of approximately 475m<sup>2</sup>.

## **4. Water Management Plan**

### **4.1 Overall Description**

The stormwater management system for the operation of the site has been designed to conform generally with the conceptual design in the EIS and with the Australian Rainfall and Runoff, Engineers Aust, 2016, the Managing Urban Stormwater: Council Handbook, EPA 1997, the Managing Urban Stormwater: Soils and Construction, Landcom, 2004 (Blue Book) and the Camden Council DCP, WSUD guidelines and Stormwater Drainage Policy.

The site surface will be fully sealed other than for the landscaped area along the street frontage. The grading of the ground slab would generally follow the existing site ground slopes. The open paved area excluding the roofed areas and front setback will have an area of approximately 4811m<sup>2</sup> (6862m<sup>2</sup>-1294m<sup>2</sup>-282m<sup>2</sup>-475m<sup>2</sup>). This open area would have runoff draining overland to the water treatment basin located in the north eastern corner of the site (refer Figures 4 and 5). A 450mm diameter piped drainage system would connect the basin to a gross pollutant trap (GPT) (Rocla CleansAll 375) and Humes Jellyfish treatment device (JF-1200-1-1) and then a piped drainage system connecting it to the Council drainage inlet pit at the kerb in Andreson Road. The pipe drainage system would be designed to Council's Standards. In the open area on site, a piped system would not be feasible because it would become readily blocked by the sediments deposited on the surface continuously by operating plant. As such, overland flows are proposed generally on the site with the ground slab graded to direct overland flows to the treatment basin.

The open area would be graded so that there is a crest in the surface along the front alignment of the roofed area along the southern boundary allowing any rainfall entering the roofed areas to drain to the rear and be collected in two collection pits each with a capacity of 200 L. These pits would be regularly pumped out into trucks and disposed in an approved facility external to the site. This would ensure that there was no cross contamination of the rainfall entering the roofed areas and the open area runoff.

The open areas would be graded to the water treatment basin in the north eastern corner of the site. There will be a 650mm high concrete kerb along the eastern site boundary and crest at the driveway to enable containment of spills on site including fire water. The water treatment basin would have a sluice gate over the outlet which would enable blockage of the outlet at times of spillage or to retain fire water on the site.

Runoff on the open paved area will run overland and be directed by the kerbs and drainage pipes to a concrete water treatment basin to allow storage, treatment and disposal of runoff from the site. Gravelled filled bags will be located at the base of the kerbs at regular intervals to collect suspended sediment from the runoff on route to the treatment basin. This details of the stormwater treatment basin and the overall water management plan for the site operation are presented on Figures 4 and 5. Water stored in the treatment basin will be reused for dust suppression on the site. Sediment collected in the basin would be removed regularly with the use of the site's excavator or frontend loader.

Water stored in the treatment basin would be focculated to achieve a total suspended solids concentration of 50mg/L or less. The geotextile filter on the dividing wall between the primary and secondary chambers in the treatment basin would remove sediment and gross debris from the runoff (refer Figure 5). Water would be pumped from the second chamber of this basin when the TSS concentration was 50mg/L or less into a 450mm drainage pipe directed to the GPT and Jellyfish treatment device to remove further sediment and nutrients so that discharges conform to the Camden Council WSUD guidelines for pollutant removal rates. Discharges from the Jellyfish treatment device will drain via a 450mm dia pipe to the street kerb inlet pit near the north eastern corner of the site.

The site facilities and stormwater management system have been designed so that they do not impede or divert natural surface flows so as to cause nuisance to adjoining properties. The site surface waters are managed onsite and discharged directly to the Council stormwater drainage system.

The erosion and sediment control plan strategy for the construction phase is discussed in Section 4.4.

#### 4.2 Surface Water Management – Operational Phase

A description of the overall surface water management plan for the site is provided in Section 4.1.

The Camden Council DCP notes that no detention storage is required in the Smeaton Grange industrial area to control peak stormwater flow rates off the site.

The management of surface water quality has been designed to conform with the Camden Council's WSUD guidelines and the state government guidelines Managing Urban Stormwater: Council Handbook and the Blue Book. They have also been designed to ensure runoff from the site will not cause any stormwater nuisance to adjacent sites.

MUSIC modelling has been undertaken to ensure that the treatment basin, GPT and Jellyfish treatment device proposed in the surface water management plan for the site conform to the Camden Council WSUD pollutant removal rates. These facilities readily achieve the average annual pollutant removal rates as required by Council which are:

Pollutant	Council reduction rate	Reduction rate achieved
Gross pollutants	90%	95.1%
Total suspended solids (TSS)	85%	87.2%
Total phosphorus	65%	69.6%
Total nitrogen	45%	54%

The results of the MUSIC modelling are presented in Appendix D.

The operations on the site will involve collecting and treating runoff from the open areas and the controls for this runoff were designed to conform to the Managing Urban Stormwater guidelines and Council's WSUD guidelines.

The runoff will flow overland to the treatment basin in the north eastern corner. The concept surface water management plan is presented in Figure 5. The water stored in the treatment basin will be reused onsite for dust suppression purposes.

The runoff water quality, given the use of sediments on the site, is best controlled in a risk based approach as proposed in the industry best management practice guidelines known as the Blue Book. The Blue Book recommends a range of source control measures for runoff water quality linked to a treatment basin at the outlet. The treatment basin will be a concrete structure which will store runoff from a 2 day 75 percentile rainfall on the site (13.6mm) and allow sediment to settle over two days. If necessary, the basin will be dosed with a flocculant to assist sediment settling and to allow pump out of water to reinstate the storage volume in the secondary chamber of the basin two days after significant rainfall. A submersible pump with a capacity of 2L/s would remove the water in chamber 2 in 6 hours. Excess water pumped from the basin will have a total suspended solids (TSS) concentration less than 50mg/L. The sediment collecting in the base of the primary chamber of the basin will be removed each week using the site's excavators and frontend loaders.

The minimum sizing of the basin is detailed in Appendix C. The primary basin (chamber 1) will have a water storage capacity of 58.8m<sup>3</sup> while the secondary chamber (chamber 2) would have a water storage capacity of 48.3m<sup>3</sup>. The total water storage provided at 107m<sup>3</sup> exceeds the minimum design guideline requirement of 48m<sup>3</sup> by 120% ensuring good performance and water quality.

The treatment basin has been designed with a primary treatment area to remove most of the sediment. This area will have a ramp entry to assist removal of accumulated sediment and Bidim geotextile screen to remove finer sediment and gross pollutants as water flows over the dividing wall into the secondary chamber. The secondary chamber is a final treatment and water quality testing area. Water will be flocculated as required to achieve a TSS concentration of 50mg/L or less before water is pumped from the secondary chamber to the discharge pipe. The outflows from the basin will be piped to the GPT and Jellyfish treatment device and then to the kerb inlet pit in the cul de sac at the head of Anderson Road adjacent to the north eastern corner of the site.

The secondary chamber will be able to store the minimum volume of water required by the Blue Book and as such, the primary chamber offers extra treatment above that required by the guideline. Its performance would therefore exceed that required by the guideline. As a bonus, the water in both the primary and secondary chamber will be reused as available for dust suppression purposes and thereby keep the water level in both chambers low such that the maximum storage would be available for the next storm.

The monitoring of the surface water management system during the operational phase for the site will include recording of rainfall events, water quality in the treatment basin, duration of pumped discharge from the basin, volume of sediment removed from the basin and cleanout of the GPT/Jellyfish devices with record of the volume of materials removed. The basin pumped discharge can only occur when the TSS concentration is less than 50 mg/L. The ease with which this concentration can be achieved by flocculation after each wet weather event will be the trigger for either increasing the upstream control measures on the site or undertaking further treatment in the basin. Accumulated sediment in the treatment basin would be monitored after each wet weather event and sediment removed if the sediment depth reaches 200mm.

#### **4.3 Roof Water Management**

Runoff from the roofed areas would be designated as clean water and would be collected in rainwater tanks and reused on site for dust suppression. Any overflow from the tanks would be directed in separate pipes to the kerb in Anderson Road. This water would not be added to the surface water flows on the open area nor cross contaminate this clean roof water.

A water capacity of 20,000L would be provided in two 10,000L tanks to collect runoff from the roofs of the receival and processing area and the holding bay area.

#### **4.4 Surface Water Management during Construction**

Construction on the site would not commence until the water management plan was approved by the Secretary of the DPE and the erosion and sediment control plan facilities were installed.

The erosion and sediment control plan for the construction phase has been designed based on the state government best practice guidelines Managing Urban Stormwater: Soils and Construction Guideline also known as the Blue Book. These proposed measures are presented in the Erosion and Sediment Control Plan (ESCP) at Figure 3 which has been approved by the Department.

The measures include source controls diverting and slowing flows to maximise the deposition of sediment in the runoff as well as a sediment basin to permit storage, settling and treatment prior to discharge. Water stored in the basin will be tested for total suspended solids (TSS) and treated with flocculant if necessary to reduced the TSS concentrations to 50mg/L or below. Then the water would be pumped from the basin to the stormwater system to restore the storage volume available in the basin for the next wet weather event.

The erosion and sediment control measures during construction would be monitored on a weekly basis or after wet weather to remove accumulated sediment and repair any of the controls. Accumulated sediment in the basin would be removed on a monthly basis.

The sediment basin will be constructed over the proposed footprint of the treatment basin in the initial construction works on the site.

The treatment basin along with the GPT and Jellyfish device which will be implemented for the operational phase of the site will manage the erosion and sediment control during the operational phase.

#### **4.5 Fire Water Management**

The development consent conditions require that a minimum volume of 180m<sup>3</sup> of fire water be able to be stored onsite.

The site has a 650mm high kerb along the eastern boundary and a crest in the driveway at RL 89m AHD. This allows the ponding of up to 180m<sup>3</sup> of fire or runoff water when the valve on the drainage outlet pipe in the treatment basin is closed (refer Figure 5). The area of the ponded water is hatched on Figure 2.

A sluice gate is proposed on the outlet pipe on the treatment basin to allow discharges from the basin to be prevented temporarily while fire runoff water has to be stored in the treatment basin and/or on site.

The firewater would be stored on site until it could be tested and if acceptable, it would be released to the road stormwater via the treatment basin. If the water quality was not acceptable, then the firewater would be removed by pumping into a truck and disposed offsite to an approved facility.

The storage of fire water on site will be monitored during each event to ensure that the volume allowed for is sufficient. If it is found to be insufficient, then a portable bund could be provided across the driveway to further increase the storage available on the site.

#### **4.6 Fuel Storage**

As required by the development consent conditions, the fuel storage area would be bunded to store any spillages and prevent mixing with surface runoff from the open areas.

The Jellyfish treatment device would have an ability to remove oils from the surface runoff.



#### **4.7 Groundwater**

The construction of the treatment basin will require excavation over the proposed footprint of the treatment basin in the north eastern corner of the site. The basin with an area of approximately 45m<sup>2</sup> and a depth of 3.15m is very small when compared to the area of the site at 6862m<sup>2</sup>. The existing groundwater level on the site has been measured at a 4m depth below the surface.

Given that the excavation and basin area will be less than 0.6% of the site and not down to groundwater levels, the excavation and basin will have negligible impact on groundwater behaviour on the site.

During the construction of the treatment basin, the duration over which the excavated area for the basin is open will be minimised and will be no longer than seven days. It is likely that this excavation will not encounter significant groundwater. As a contingency plan, if this is not the case then the proponent will comply with development consent condition B35 and prepare a groundwater management plan for approval by CW&L.

Following construction of the treatment basin, it will form a water tight structure so that no groundwater will need to be extracted.

#### **4.8 Sewage disposal**

The site sewage will be disposed to the Sydney Water sewer connection available to the site.

#### **4.9 Potable Water**

The potable water for the site will be supplied from the Sydney Water water mains connection to the site. The potable water meter on site will permit monitoring of potable water use on the site.

#### **4.10 Site Water Balance**

The site water balance has been calculated based on existing and developed scenarios. Details are provided in Appendix E.

The average annual runoff volume from the site under existing conditions has been estimated at approximately 1847m<sup>3</sup>.

In the developed scenario, the extent of increase in runoff from the site will be reduced by capturing some of the runoff in the treatment basin and in the rainwater tanks and reusing it for dust suppression on the site. The estimated average annual runoff in the developed case (without reuse) would be approximately 3711m<sup>3</sup>. The estimated average annual reuse volume for dust suppression will be approximately 1470m<sup>3</sup> reducing the average annual runoff volume to 2241m<sup>3</sup>. This reuse will reduce the average increase in runoff volume from the site from over 100% to only 21%. This is a significant reduction in volumes and benefit for the drainage system downstream.

The capturing of roof runoff will not provide sufficient water to cover the dust suppression water requirements however, it is estimated that on average, up to only 60m<sup>3</sup> of town water supply will be used each year for dust suppression. The reuse of site runoff will provide up to 96% of the water

required for dust suppression. This provides a significant benefit in reducing the demand on the water supply in terms of volume available and the water reticulation available capacity.

The use of potable water on the site in the amenities will be small in comparison to the operational needs. There will be 5 personnel on site on average and the expected annual use of potable water for drinking and toilet purposes will be around 100m<sup>3</sup>.

Meters will be installed on the rainwater tank outlets and the potable water supply line to monitor recycled water use and for potable water use on the site.

## **5. Surface Water Management Plan**

The water management plan would be maintained and operated for the duration of the project. The monitoring and review of the surface water management system performance will consist of:

- a. monitoring of turbidity in the secondary chamber of the treatment basin against the trigger to allow pumpout at 50mg/L TSS;
- b. flocculating the primary and secondary chambers after each rainfall event;
- c. pumping out the secondary secondary chamber of the treatment basin within 2 days of each rainfall event;
- d. monitoring daily rainfall depth each day;
- e. noting each non pumped discharge event and daily rainfall for each event;
- f. providing an annual report on the above monitoring and comparing the 2 day rainfall with the design value, comparing the non pumped discharge frequency with the guideline value and comparing the actual annual rainfall with the long term average annual rainfall;
- g. assess the above information and whether further mitigation measures are warranted.

## **6. Summary of Mitigation Measures for the Proposed Development**

The mitigation measures proposed to minimize the impact of the proposed works on the water related aspects of the environment are:

- A runoff erosion and sediment control strategy to manage runoff which conforms to Local and State Government authority best practice guidelines;
- specific runoff sediment traps along the flow path to remove sediment and debris at the source;
- a sediment basin on site to trap runoff and remove sediment;
- reuse runoff from the sediment basin for dust suppression on the site;
- treatment of runoff downstream of the treatment basin in a GPT and Jellyfish facility;
- capture of clean roof runoff in large rainwater tanks for reuse in dust suppression on the site;
- use of a large holding shed to house materials for transfer and equipment to prevent runoff generated from these activities;
- connection to the sewerage system for onsite personnel amenities;

- location of sheds and processing area outside of major overland flow paths;
- large storage up to 180m<sup>3</sup> on site for fire water or excess surface runoff;
- no use of groundwater; and
- no use of water in the product processing.

## **7. Conclusions**

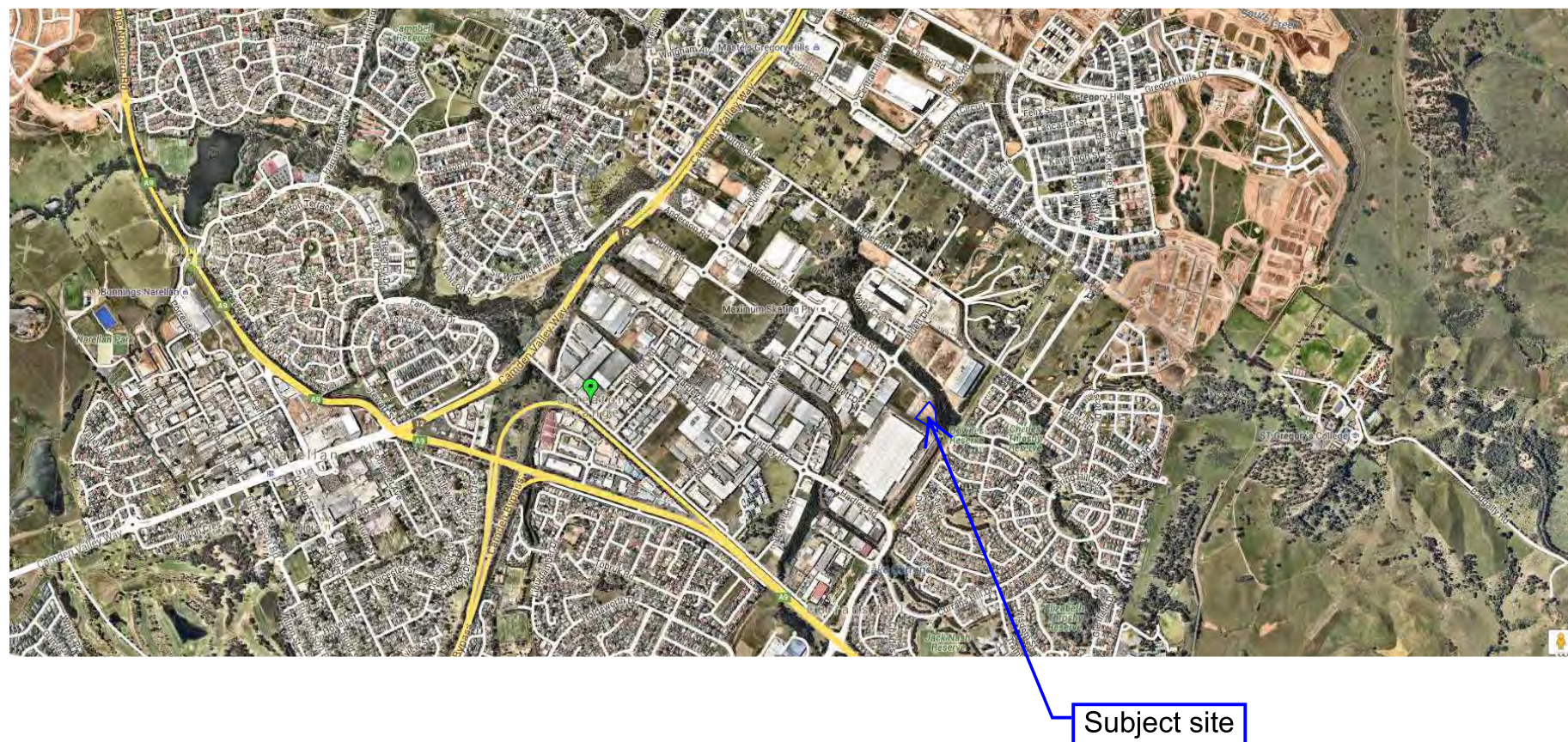
The proposed processing facility and mitigation measures have been formulated to minimise the impact on water related aspects of the site and downstream watercourses and riparian areas. As such, the proposed development will not have a significant adverse impact on:

- stormwater runoff;
- groundwater;
- wastewater disposal;
- potable water demand;
- runoff volume and water quality;
- flooding; and
- watercourses and riparian areas.

## FIGURES



### FIGURE 1



## Locality Plan



OVERFLOW FROM EXTREME STORM EVENTS OR EXCESSIVE FIRE FLOWS WILL OVERFLOW THROUGH DRIVEWAY TO ANDERSON ROAD

NO PARKING TWO WAYS

89.0

89.0

88.8

88.9

89.0

88.95

88.9

88.95

89.0

89.1

88.6

88.7

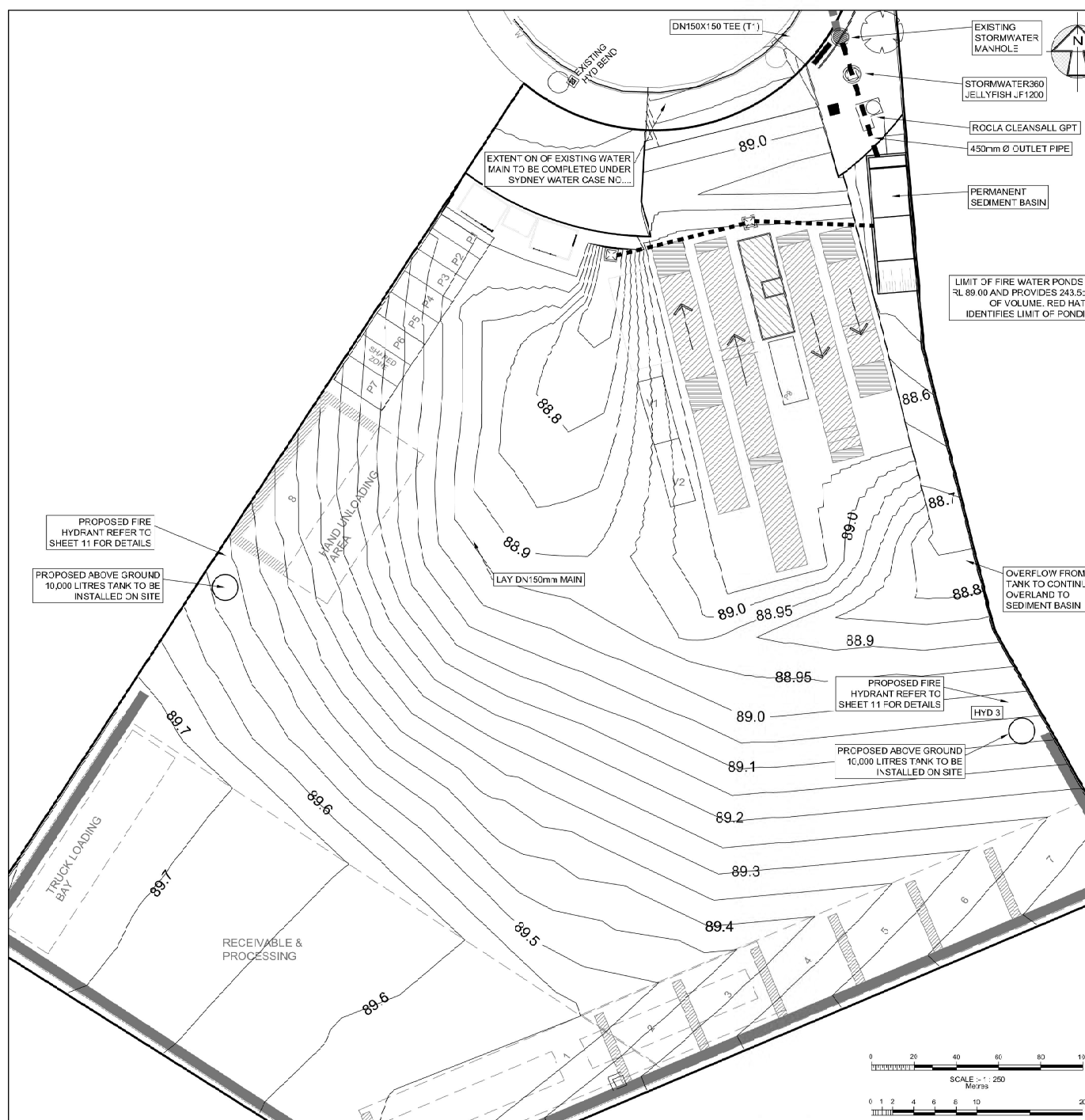
88.8

LARGE 650mm HIGH KERB / WALL RESTRICTS FIRE WATER OR 100 YEAR STORM FLOWS FROM DISCHARGING INTO KENNY CREEK

LIMIT OF FIRE WATER PONDS TO RL 89.00 AND PROVIDES 203.3cu ft VOLUME. RED HATCH IDENTIFIES LIMIT OF PONDING

TO SUMMIT CHANGING

FIGURE 2



### FIRE WATER VOLUME CHECK

CONTOUR	AREA	VOLUME	ACCUMULATIVE VOLUME
88.5	49.3	0.0	0.0
88.55	76.3	3.1	3.1
88.6	102.4	4.5	7.6
88.65	120.2	5.6	13.2
88.7	139.5	6.5	19.7
88.75	180.1	8.0	27.7
88.8	270.4	11.3	38.9
88.85	434.1	17.6	56.5
88.9	653.9	27.2	83.7
88.95	1005.6	41.5	125.2
89	1450.6	61.4	186.6

# FIGURE 3

REFERENCES  
DRAWINGS TO BE READ IN CONJUNCTION WITH BUT NOT LIMITED TO ALL STORMWATER ENGINEERS, LANDSCAPE ARCHITECTS, AND OTHER ASSOCIATED PLANS & REPORTS

Temporary sediment stockpile with silt fence to control runoff

Shaker grid at exit

Sediment basin

Overland flow diversion mound and silt fence

Gravel filled bags to trap sediment in runoff

## Notes

1. All erosion and sediment control measures to be in accordance with Council specifications and the Blue Book;
2. Water pumped from the sediment basin to have TSS less than 50mg/L;
3. Street along site frontage to be swept regularly;
4. All control measures to be maintained weekly and after significant rainfall.

## Erosion and Sediment Control Plan

GROUND FLOOR PLAN  
SCALE 1:500

revision	
A	02.02.16 ISSUED FOR GENERAL INFORMATION
B	04.03.16 ISSUED FOR GENERAL INFORMATION
C	06.05.16 ISSUED FOR GENERAL INFORMATION
D	23.05.16 ISSUED FOR GENERAL INFORMATION
E	18.08.16 ISSUED FOR GENERAL INFORMATION
F	29.04.17 ISSUED FOR GENERAL INFORMATION
G	29.02.18 ISSUED FOR GENERAL INFORMATION
H	10.05.18 ISSUED FOR GENERAL INFORMATION



notes  
All dimensions and setbacks to be verified prior to commencement  
DO NOT SCALE measurements off drawings  
Figured dimensions to be used at all times  
MINOR DISCREPANCIES to be notified to the architect

scale 1:100 @ A3  
Project Architect

L2 - 60 PARK STREET  
SYDNEY NSW 2000  
P - 02 9287 2000  
W - www.charniedesign.com.au

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date	drawn
APRIL 2013	SS

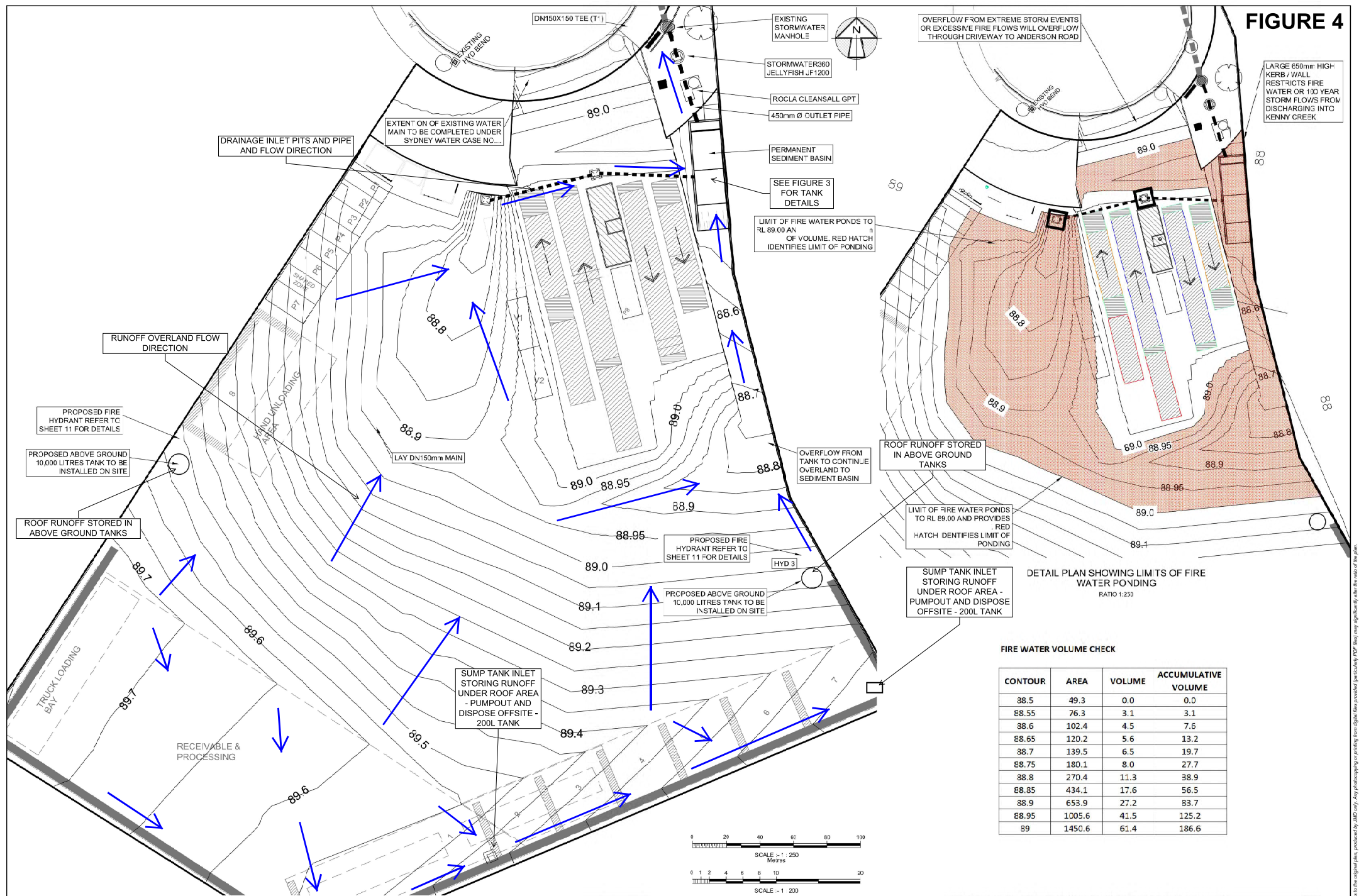
project  
PROPOSED WASTE TRANSFER STATION  
52 ANDERSON ROAD  
SMEATON GRANGE

drawing title  
GROUND FLOOR PLAN

FOR DA APPROVAL		100	H
J15306	DA		
job no.	drawing no.		



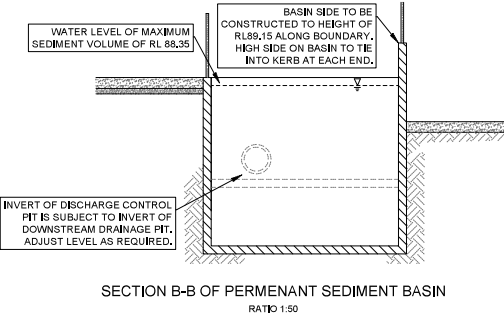
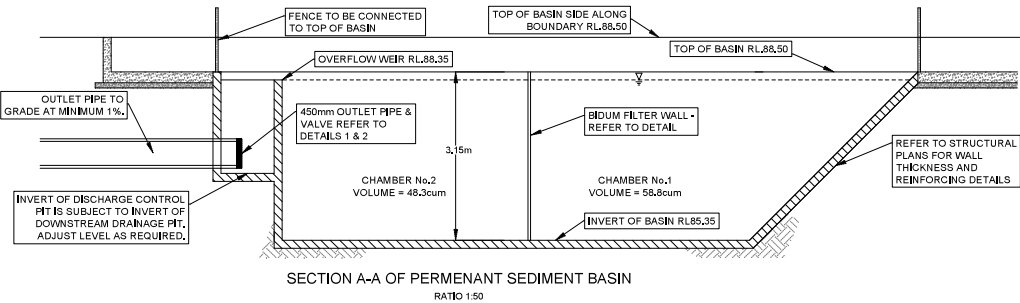
FIGURE 4



Issue	App	Date	Description	Client: ROUSSAKIS HOLDINGS PTY LTD.	Datum: AHD	Origin of Levels: SURVEY COMPLETED BY RHOD SURVEYING & DEVELOPMENT CONSULTANTS BENCH MARK SHOWN ON PLANS	JMD Development Consultants	John M. Daly & Associates PTY LTD A.B.N. 98051977989	Project: LOT 319 IN DP1117230 - 52 ANDERSON ROAD, SMEATON GRANGE WASTE RECYCLING AND TRANSFER FACILITY (SSD7424)	Sheet 1 of 3 sheets
				Designed by: S.G.				Surveys Engineering Project Management Licensed Water Service Co-ordinators		Ref: 1800764
				Date of Drawing: 30-07-2018				32 Iolanthe Street P.O. BOX 25 CAMPELLTOWN N.S.W. 2560		
				Ratio (A1): 1:220	Date of Survey:			PH: (02) 4625 5055 FAX: (02) 4628 2013 email: admin@jmd.com.au		
A	T.H.	30-07-2018	ISSUED FOR CC						Locality: SMEATON GRANGE	L.C.A.: CAMDEN
									CAD Ref: S:\365\18\18007\ENG\CAD\18007E4-PLAN	

The ratio shown on this plan relates to the original plan, produced by JMD only. Any photocopying or printing from digital files provided (particularly PDF files) may significantly alter the ratio of the plan.

FIGURE 5



Issue	App	Date	Description	Client: ROUSSAKIS HOLDINGS PTY LTD.	Datum : AHD	<div><div>JMD</div><div>Development Consultants</div></div>	John M. Daly & Associates PTY LTD A.B.N. 88051977989 Surveying Engineering Project Management Licensed Water Service Co ordinators 32 Ianthe Street P.O. BOX 25 CAMPELLTOWN N.S.W. 2560 PH: (02) 4625 5055 FAX (02) 4628 2013 email: admin@jmd.com.au	Project : LOT 319 IN DP1117230 - 52 ANDERSON ROAD, SMEATON GRANGE SMEATON GRANGE WASTE RECYCLING AND TRANSFER FACILITY (SSD7424)		Sheet 2 of 3 sheets
				Designed by : S.G.	Origin of Levels : SURVEY COMPLETED BY RHOD SURVEYING & DEVELOPMENT CONSULTANTS BENCH MARK SHOWN ON PLANS			TREATMENT BASIN DETAILS		Ref: 18007E4
				Date of Drawing : 30-07-2018						
A	T.H.	30-07-2018	ISSUED FOR CC	Ratio (A1) : 1:250	Date of Survey :			Locality : SMEATON GRANGE	L.G.A. : CAMDEN	CAD Ref: S:\J085\18\18007\ENG\CAD\E4\18007E4-PLAN

This sheet is to be used in conjunction with the original plan. Produced by JMD only. Any photocopying or printing from digital files provided particularly "PDF" files may significantly alter the ratio of the plan.



**APPENDIX A**

NRAR Letter Review of Draft WMP





## Natural Resources Access Regulator

**Natural Resources Access Regulator**  
Level 11, 10 Valentine Ave, Parramatta  
PO Box 3720,  
Parramatta NSW 2124  
T 1800 633 362  
[www.industry.nsw.gov.au/nrar](http://www.industry.nsw.gov.au/nrar)

Kate Masters  
A/Team Leader, Post Approvals  
Industry Assessments  
Department of Planning and Environment  
GPO Box 39  
Sydney NSW 2001

OUT18/9591

via email: [kate.masters@planning.nsw.gov.au](mailto:kate.masters@planning.nsw.gov.au)

Dear Ms Masters,

**RE: Smeaton Grange Resource Recovery Facility – Review of Draft Water  
Management Plan**

Thank you for providing the Natural Resources Access Regulator (NRAR) formerly the Department of Industry – Water, the opportunity to provide comments on the Smeaton Grange draft Water Management Plan (WMP).

NRAR is satisfied that the WMP meets our requirements and no further issues are required to be addressed by the proponent. NRAR advises that the conditions of consent still require the proponent to comply with condition B35 of the consent if groundwater is intercepted during construction.

Please contact Ryan Shepherd, Water Regulation Officer (Newcastle) on (02) 4904 2650 or [ryan.shepherd@nrar.nsw.gov.au](mailto:ryan.shepherd@nrar.nsw.gov.au) if you have further enquiries regarding this matter.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Irene' followed by a stylized 'Z'.

**Irene Zinger**  
**Manager, Regional Water Regulation Branch (East)**  
**Natural Resources Access Regulator**

22 June 2018





**APPENDIX B**

DPE Letter of Consultant Acceptance





Mr Taylor Richardson  
EMM Consulting  
PO Box 21  
ST LEONARDS NSW 1590

OBJ15/17951  
SSD 7424

Via email: [trichardson@emmconsulting.com.au](mailto:trichardson@emmconsulting.com.au)

Dear Mr Richardson

**Smeaton Grange Waste Recycling and Transfer Station (SSD 7424)  
Endorsement of Expert**

I refer to your correspondence dated 23 January 2017, seeking approval for Mr Mark Tooker of Tooker and Associates to design the stormwater management system pursuant to Condition B27(a) of SSD 7424.

The Department has reviewed the qualifications of Mr Mark Tooker and considers he has the appropriate skills and experience to design the stormwater management system.

Should you have any further enquiries about this matter, please contact Bianca Thornton, Planning Services, on (02) 8217 2040 or via email at [bianca.thornton@planning.nsw.gov.au](mailto:bianca.thornton@planning.nsw.gov.au).

Yours sincerely



25/1/18.

Chris Ritchie  
**Director**  
**Industry Assessments**  
As the Secretary's nominee



## **APPENDIX C**

### Runoff Water Management Sediment Basin Sizing

#### Blue Book

Settling Volume =  $10 \times C_v \times A \times R$  where:

$C_v$  = volumetric runoff coefficient = 0.69

$A$  = area draining to the treatment basin in hectares = 0.4811 ha

$R$  = 2 day total rainfall depth which is not exceeded 75% of storms = 13.6mm

Settling Volume =  $10 \times 0.69 \times 0.4811 \times 13.6 = 45.1\text{m}^3$

Storage Volume =  $\frac{\text{settling volume} \times 0.5}{8 \text{ weeks}}$

= on basis that basin sediment is cleared at the end of each week

=  $2.8\text{m}^3$

Total Sediment Basin Volume = 47.9 say  $48\text{m}^3$



**APPENDIX D**

MUSIC Modelling





## APPENDIX E

### Site Annual Water Balance

#### 1. Assumptions

Mean Annual Rainfall	769mm
Mean Number of Rainy Days	47 days
Mean Number of Dry Days	318 days
Volumetric Runoff Coefficient	
- existing	0.35
- developed	0.69
Traffic Areas requiring dust suppression	4811m <sup>2</sup>
Total Site Area	6862m <sup>2</sup>
Roof Area	1576m <sup>2</sup>
Paved Runoff Area	4811m <sup>2</sup>
Landscaped Area	475m <sup>2</sup>
Dust Suppression Water Application Rates	= 1L/m <sup>2</sup> /dry day
Average Annual Dust Suppression Water Usage	4811 x 1 x 318 = 1529m <sup>3</sup>

#### 2. Existing Conditions

Site Area	= 6862m <sup>2</sup>
Volumetric Runoff Coefficient	= 0.35
Annual Rainfall	= 769mm
Runoff Volume	= 6862 x 0.35 x 0.769 = 1847m <sup>3</sup>

#### 3. Developed Conditions

a. Roof Area	= 1576m <sup>2</sup>
Volumetric Runoff Coefficient	= 0.85
Reuse Volume	= 1576 x 0.85 x 0.769 x 0.4 = 412m <sup>3</sup>
Runoff Volume	= 1576 x 0.85 x 0.769 x 0.6 = 618m <sup>3</sup>

b. Paved Area	= 4811m <sup>2</sup>
Volumetric Runoff Coefficient	= 0.69
Runoff Volume	= 4811 x 0.69 x 0.769 = 2553 m <sup>3</sup>

c. Runoff captured in sediment basin for each event= 4811x0.69x0.0136m =45m<sup>3</sup>

Average annual number of wet days = 47

Potential average annual number of two day rainfall = 23.5

Runoff volume reused from basin for dust suppression = 23.5x45 = 1058m<sup>3</sup>

- d. Landscaped Area = 475m<sup>2</sup>  
 Volumetric Runoff Coefficient = 0.35  
 Runoff Volume = 475 x 0.35 x 0.769 = 128m<sup>3</sup>
- e. Net Average Annual Runoff Volume = 2553+128+618-412-1058 = 2241m<sup>3</sup>

4. Average Annual Dust Suppression Water Supply

- Volume of Water Required = 1529m<sup>3</sup>  
 Volume available from sediment basin = 1058m<sup>3</sup>  
 Volume from roof runoff = 412m<sup>3</sup>  
 Volume to be supplied from town water supply = 59m<sup>3</sup>

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## **APPENDIX E – AIR QUALITY MANAGEMENT PLAN**

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Intended for  
Benedict Recycling Pty Limited

Document type  
Report

Date  
May 2018

# SMEATON GRANGE WASTE RECYCLING AND TRANSFER FACILITY AIR QUALITY MANAGEMENT PLAN

SMEATON GRANGE WASTE RECYCLING AND  
TRANSFER FACILITY  
AIR QUALITY MANAGEMENT PLAN

Revision	Date	Made by	Checked by	Approved by	Signed
Final	02/03/2018	S. Fishwick	R. Kellaghan	S. Fishwick	
Rev 1	10/05/2018	S. Fishwick	R. Kellaghan	S. Fishwick	

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## 1. INTRODUCTION

Benedict Recycling Pty Ltd (Benedict Recycling) has received approval from the NSW Department of Planning and Environment (DPE) to develop and operate a waste recycling and transfer facility at 52 Anderson Road, Smeaton Grange, NSW (the facility).

Development Consent SSD 7424 for the facility was issued on 22 December 2017 by the Planning Assessment Commission. Condition B23 of SSD 7424 requires that an Air Quality Management Plan (AQMP) is prepared for the facility prior to the commencement of operations to form part of the Operational Environmental Management Plan (OEMP). Specifically, condition B57 states the following:

*Prior to the commencement of operations, the Applicant must prepare an Air Quality Management Plan (AQMP) to the satisfaction of the Secretary. The AQMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The AQMP must:*

- (a) be prepared by a suitably qualified and experienced person(s);*
- (b) detail and rank all emissions from all sources of the Development, including particulate emissions and odour;*
- (c) describe the measures that will be implemented to minimise the potential risks to adverse air quality in the area including:*
  - (i) the management and mitigation measures to be employed at the site;*
  - (ii) plant and equipment being maintained to ensure that it is in good order;*
  - (iii) how the air quality impacts of the development will be minimised during any adverse meteorological conditions or extraordinary events;*
  - (iv) identification of high emission generating operational activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities;*
  - (v) compliance with the relevant conditions of this consent;*
- (d) identify the control measures that will be implemented for each emission source; and*
- (e) defines what constitutes an air quality incident and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.*

Ramboll Australia Pty Ltd (Ramboll) has been commissioned by EMM Consulting Pty Ltd (EMM) on behalf of Benedict Recycling to prepare the required AQMP for the facility. Table 1-1 provides a summary of where the above requirements are addressed in the AQMP.

Table 1-1 Emission source ranking	
Condition	Relevant section of AQMP
Detail and rank all emissions from all sources of the Development, including particulate emissions and odour	Section 2.2
Describe the management and mitigation measures to be employed at the site	Sections 2.3, 2.4, 2.5 and 2.6
Describe maintenance of plant and equipment to ensure that it is in good order	Section 2.5
Describe how the air quality impacts of the development will be minimised during any adverse meteorological conditions or extraordinary events	Section 2.4
Identify high emission generating operational activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities	Section 2.2 and 2.3
Demonstrate compliance with the relevant conditions of this consent	Sections 2 and 3
Identify the control measures that will be implemented for each emission source	Section 2.3
Define what constitutes an air quality incident and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents	Section 3.4

## 2. EMISSION SOURCES AND MITIGATION MEASURES

### 2.1 Facility operations

The facility will import inert general solid waste (non-putrescible), such as construction and demolition wastes, and selected commercial and industrial wastes, for processing (e.g. screening and sorting) to produce saleable recycled materials. The recycled materials produced will include soils, metals and dry paper/cardboard. These products will meet recycled material specifications while recovering a range of materials that would otherwise be disposed to landfill.

No special, liquid, hazardous, restricted solid waste or general solid waste (putrescible) will be accepted at the facility. All of the materials brought onto the site will be taken from the site as products or as rejects for disposal at an EPA licensed landfill. There will be no materials land-filled or otherwise disposed anywhere within the site as a result of this proposal.

The facility is approved to accept up to a total of 140,000 tonnes per year of the following wastes:

- unsegregated and segregated building and demolition waste — soils, bricks, concrete, paper/cardboard, plastics, rubber, plasterboard, ceramics, glass, metal and timber, and the like;
- vegetation and uncontaminated soils;
- tiles, asphalt, suitable slags and concrete batching waste;
- excavated natural materials including virgin natural excavated material (VNEM) such as sand and sandstone which are generated during bulk earthworks and road and infrastructure repair; and
- rail ballast and spoils.

As described above, no special liquid, hazardous, restricted solid waste or general solid waste (putrescible) will be accepted at the site. The facility will accept inert waste from businesses and the general public.

All incoming material will be stored undercover in bays within the waste transfer holding shed prior to processing.

Waste processing activities at the facility include sorting, picking, screening and stockpiling.

Sorting will generally occur within the waste transfer holding shed. A range of mobile plant (e.g. excavator and front-end loader) and a screening and picking line, will be used to handle and process the waste and products in the shed. Material processed in the shed would be stockpiled in the shed prior to quality testing and dispatch.

Segregated heavy waste requiring crushing or shredding (eg concrete, bricks or timber) will be sent to licensed recycling facilities able to process this waste.

Recycled products will generally be dispatched to customers, generally in the western Sydney region, by heavy vehicles.

Some waste (less than 20%) is not yet able to be easily recycled (referred to as non-recyclable residue). This will be stockpiled prior to being sent to an EPA licensed facility for disposal.

The facility will generally accept deliveries (from businesses and the public) and dispatch materials between 6 am and 10 pm Monday to Friday and between 7 am and 4 pm on Saturday. It will also accept deliveries from 8 am to 4 pm on Sunday, providing an additional day on which the public could deliver recyclable waste to the facility. On occasions, the facility will accept waste deliveries 24 hours per day to allow infrastructure projects operating on a similar basis (e.g. rail corridor works) and adjoining businesses, to deliver waste as it is generated. Delivery of materials after hours will only be permitted for safety/emergency reasons

Waste processing will only occur at the site from 7 am to 6 pm Monday to Saturday. There will be no processing on Sundays or public holidays.

## 2.2 Particulate matter emissions sources

An air quality impact assessment (AQIA) report was completed by Ramboll Environ in 2016 for the facility and involved the quantification of dust emissions from onsite operations at a rate of 140,000tpa. Potential sources of particulate matter emissions were identified as the following:

- Vehicle entrainment of particulate matter due to the haulage of material along the sealed roads in the Recycling Facility;
- Unloading of material to the raw material storage areas within the main shed;
- Screening plant operations within the main shed;
- Loading and transfer of screened material to storage bays;
- Loading of product to truck for dispatch; and
- Diesel fuel combustion by on-site plant and equipment.

In the AQIA, particulate matter emissions from these sources were quantified for three size fractions, namely:

- Total Suspended Particulates (TSP);
- particulate matter with an equivalent aerodynamic diameter of 10 microns (PM<sub>10</sub>); and
- particulate matter with an equivalent aerodynamic diameter of 2.5 microns (PM<sub>2.5</sub>).

Individual emissions sources at the facility were grouped into the following primary source categories:

- Truck and mobile equipment movements (wheel generated dust on paved roads and diesel combustion);
- Material handling inside shed (truck unloading, handling by mobile plant, loading to trucks and diesel fuel combustion); and
- Material screening inside shed (including diesel fuel combustion).

The total TSP, PM<sub>10</sub> and PM<sub>2.5</sub> emissions from each category are ranked in Table 2-1, while the contribution to annual emissions by particle size fraction is illustrated in Figure 2-1. From the source category ranking, material processing and material handling within the shed are the largest particulate matter emission sources at the facility.

Material processing activities possess the highest emission potential of operational emission sources at the facility. As detailed in Section 2.1, processing activities are only permitted to occur between 7 am to 6 pm Monday to Saturday. Mitigation measures for the processing activities are presented in Table 2-2.

The mitigation measures for each of the primary source categories are presented in Table 2-2.

Table 2-1 Emission source ranking			
Emission source category	Rank of emission source by particulate matter size fraction		
	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>
Truck movements	3	3	3
Material Handling inside shed	2	2	2
Material processing inside shed	1	1	1

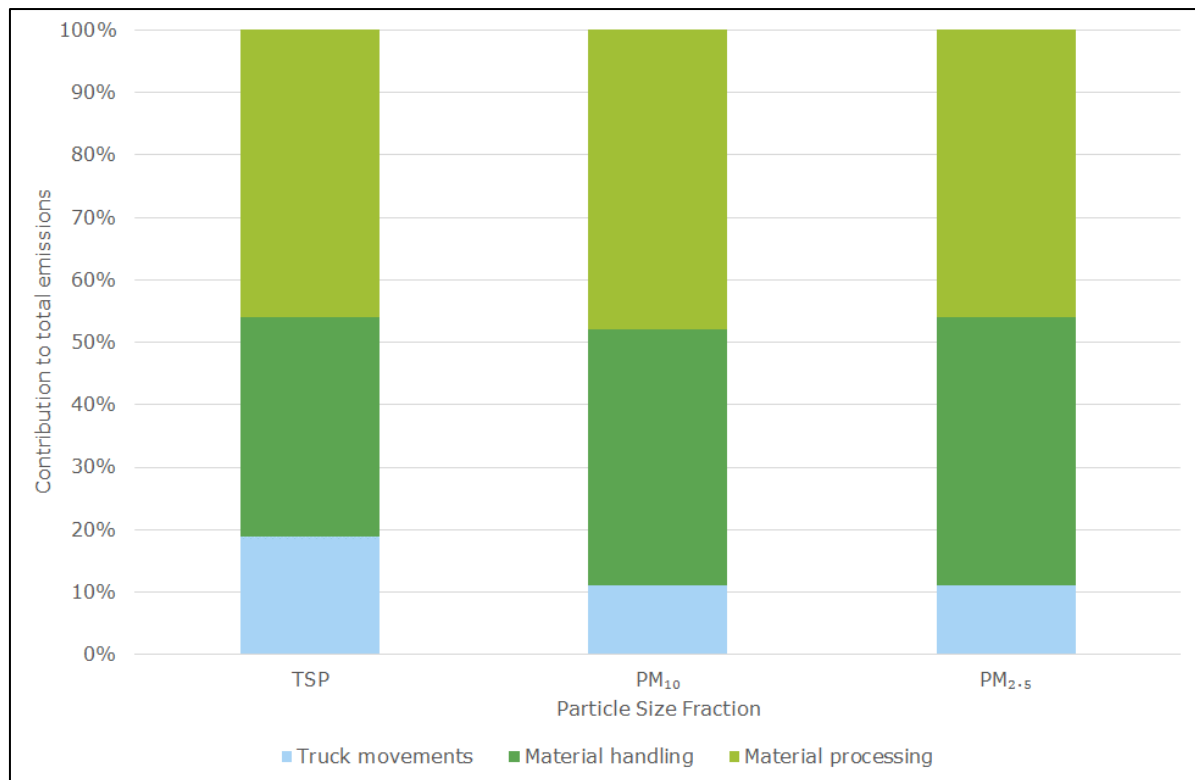


Figure 2-1: Source contribution to annual particulate matter emissions

### 2.3 Dust mitigation measures

As per Appendix B of SSD 7424, the following management measures will be implemented at the facility to minimise air quality impacts:

- Materials (waste, products and residues) will be stockpiled within the shed;
- Wastes will be processed in the shed or within the screening plant area and will not be processed outside of these areas;
- Green waste will only be stockpiled in the shed;
- Timber will be stockpiled in a covered bay;
- All existing sealed areas to be maintained;
- Water sprays will be used over any other bare surfaces that have a potential to generate unacceptable amounts of dust;
- Water sprays will be used at stockpiles, operational areas and the screening plant during material handling;
- A wheel wash in the weighbridge area will be used to clean truck tyres to prevent mud or sediment being carried to and deposited on the access roads (and public roads);
- Dust generating activities will be generally undertaken within the main shed; and
- No composting will be undertaken on the site.

The water spray system to be installed at the facility will comprise of a fine mist curtain at the edge of the roof of the materials storage bays and shed, and irrigation sprinklers at the perimeter of site. The radius of each sprinklers will be between 20 and 40 meters to ensure sufficient dust suppression coverage.

The mitigation measures for each of the primary emission sources categories are presented in Table 2-2.

Table 2-2 Emission source mitigation measures	
Emission source category	Mitigation measures in place at the facility
Truck movements	<ul style="list-style-type: none"> <li>• Trucks will only move along paved surfaces.</li> <li>• Trafficked areas are swept twice daily, dampened with the water sprays and hosed down at the end of each day.</li> <li>• Wet suppression of the site is provided through installed network of water cannons.</li> <li>• Travel speeds along all unpaved roads within the facility are limited to 20km/hr. Reduction in vehicle travel speed minimises dust generation.</li> <li>• All loads leaving the site are covered. External customer's loads entering the site are predominantly covered and all customers are encouraged to cover their loads.</li> </ul>
Material handling inside shed (including truck unloading, material handling and storing by front end loader and excavator, truck loading)	<ul style="list-style-type: none"> <li>• The use of water cannons and shed misting system increases the moisture content of material being unloaded.</li> <li>• Truck unloading within the shed provides wind breaks.</li> </ul>
Material processing inside shed	<ul style="list-style-type: none"> <li>• Shed provides partial enclosure of the material screen</li> <li>• Water misting system to increase material moisture levels through screening process.</li> <li>• Conveyor belts and transfer points will be routinely cleaned of overspill.</li> </ul>

#### 2.4 Mitigation during adverse weather conditions

From the perspective of dust emissions from the facility, adverse meteorological conditions are considered to be sustained periods of hot and dry weather and/or high wind speeds. A key environmental management responsibility of facility personnel, led by the facility foreman, is the visual monitoring of dust emissions (Section 3.1 presents air quality emission management responsibilities).

In the event of adverse weather conditions, the facility foreman is required to maintain vigilance for visual dust emissions leaving facility boundary and implement appropriate additional mitigation strategies. Additional mitigation measures will include the targeted use of water sprays at site to the identified dust emissions sources or the temporary restriction and/or cessation of the activity until adverse weather conditions have eased.

#### 2.5 Plant and equipment emission mitigation measures

All mobile plant and equipment owned and operated by Benedict Recycling at the facility will be routinely serviced to ensure that fuel combustion emissions meet manufacturer emissions specifications on an ongoing basis. At a minimum, all Benedict Recycling mobile plant and equipment will be serviced on an annual basis, with more frequent servicing conducted if required (e.g. occurrence of excessive smoky exhaust). Further, engine idling will be minimised wherever practicable.

#### 2.6 Odour emissions sources

Condition B25 of SSD 7424 states that:

*The Applicant must ensure the Development does not cause or permit the emission of any offensive odour (as defined in the POEO Act):*



The majority of material received by the facility would be inert building waste and therefore the potential for odour emissions arising is low. The facility is licenced to receive greenwaste material and glass. The facility is not approved to undertake composting on site nor receive putrescible waste.

Storage of potentially odourous material, such as greenwaste, will only occur within the shed and for a limited period of time, reducing the potential for odourous emissions impacting the surrounding area.

### 3. MONITORING AND INCIDENT REPORTING

#### 3.1 Dust mitigation performance monitoring

Facility personnel are responsible for monitoring the performance of onsite air quality (dust and odour) mitigation measures on a day to day basis. Responsibilities for air quality emission management are as set as follows:

The Facility Foreman is responsible for:

- regular visual monitoring of the dust levels at the facility;
- managing vehicle speed movements;
- restricting operations during periods of strong wind;
- utilising spray systems when required for receipt and processing activities;
- arranging or street sweeping of hardstand/roads when required;
- maintain effectiveness of wheel wash by monitoring water levels and the removal of sedimentation when necessary;
- arranging for watering of the pavement to reduce dust when appropriate;
- regular monitoring of odour levels in the facility;
- cleaning of the waste storage/processing areas;
- arranging the removal of residual waste;
- reducing odours by the use of portable odour neutralising sprays when appropriate;
- completion of a complaint form if dust or odour complaint is received; and
- coordinating with the Facility Manager to ensure the complaint is investigated.

The Facility Manager is responsible for:

- implementing this procedure;
- auditing the site on a regular basis to ensure compliance **with the OEMP for air and odour emissions;**
- **coordinating investigation of the dust or odour complaints with the Facility Foreman;**
- **documenting the results of the investigation and actions taken;**
- **maintaining the records of the dust and odour complaints;**
- liaison with the complainant regarding the steps to be taken to minimise further air pollution emissions where appropriate; and
- ensuring that the nominated officers have been trained in the requirements of this procedure.

#### 3.2 Ambient air quality monitoring

There is currently no requirement for ambient air quality monitoring at the facility.

#### 3.3 Complaints reporting

Any complaint received by Benedict Recycling regarding dust impacts from the facility will be acted on within 24-hours in the following manner:

- Details of the complaint (date, time, specifics, complainants contact details) will be noted;
- Activities occurring during the complaint period to be investigated;
- Log findings of operations during the complaint period in the complaints register. Review relevant management practices as necessary;
- Respond to complainant with findings of the review.

The details of any dust-related complaint will be logged in an appropriate register, with investigation findings and actions noted. The record of a complaint must be kept for at least 4 years after the complaint was made. The record must be produced to any authorised officer of the EPA who asks to see them.

All complaints received will be listed in the EPL Annual Return. A verified complaint would be treated as an air quality incident which would be directly reported to the DPE.

### 3.4 Air quality incident definition and response

As stated previously, a verified complaint that is deemed to be the direct result of operational emissions from the facility will be classified as an air quality incident. Within 24-hours of an air quality incident, an initial letter report outlining basic details of the incident will be sent to the Department. Within 14 days of an incident, a detailed report will be prepared and submitted to the Department documenting incident investigation findings, causes of the incident and additional mitigation measures proposed to prevent a reoccurrence.

A register of verified incidents will be maintained by Benedict Recycling and made available for review on request.

### 3.5 Review of AQMP

This AQMP will be reviewed and revised as necessary:

- Every 12-months at the time of the EPL Annual Return;
- Following a significant change to facility operations (e.g. modification to approved operations); or
- Following receipt of review notification from the DPE or NSW EPA.

---

## **APPENDIX F – OPERATIONAL TRAFFIC MANAGEMENT PLAN**

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# Operational Traffic Management Plan

Benedict Smeaton Grange Resource Recovery Facility  
52 Anderson Road, Smeaton Grange

Reference: 18.061r01v03  
Date: September 2019

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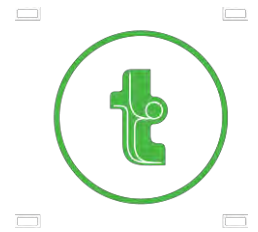
## Document Verification

<b>Job Number:</b>	18.061			
<b>Project:</b>	52 Anderson Road, Smeaton Grange			
<b>Client:</b>	EMM Consulting Pty Ltd			
<b>Revision</b>	<b>Date</b>	<b>Prepared By</b>	<b>Approved By</b>	<b>Signature</b>
v03	18/09/2019	Neil Caga	Ben Liddell	

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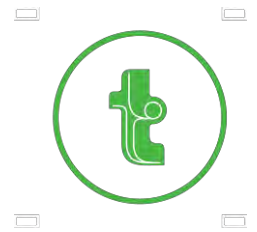
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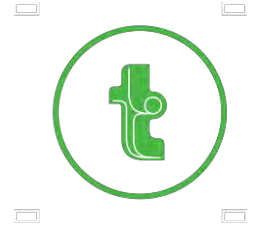
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Appendix C:	Swept Path Analysis
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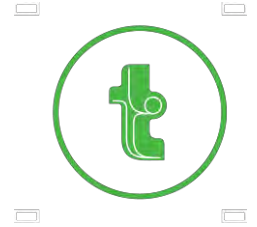
# 1. Introduction

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This Operational Traffic Management Plan (OTMP) has been prepared by TRAFFIX on behalf of EMM Consulting Pty Ltd to govern the day to day operation of the Benedict Smeaton Grange Resource Recovery Facility at 52 Anderson Road, Smeaton Grange. This development consists of the following components:

- A recycling facility designed to accept a total of 140,000 tonnes of waste per year including;
  - Unsegregated and segregated building and demolition waste – soils, bricks, concrete, paper/cardboard, plastics, rubber, plasterboard, ceramics, glass, metal and timber
  - Vegetation and uncontaminated soils
  - Tiles, asphalt, suitable slags and concrete batching waste
  - Excavated natural materials including virgin natural excavated material such as sand and sandstone
  - Rail ballast and spoils
- Seven (7) product bays;
- One (1) heavy vehicle unloading bay;
- One (1) hand unloading bay;
- One (1) receivable and processing shed;
- Three (3) weighbridges and two (2) outgoing wheel washes;
- Seven (7) on-site parking spaces for staff; and
- Two (2) on-site parking spaces for visitors.

The development is approved under the State Significant Development (SSD) 7424 consent, which was granted by the Minister for Planning on 22 December 2017. Condition B20 of the Conditions of Consent requires an Operation Traffic Management Plan to be prepared and approved by the Secretary prior to the commencement of works.



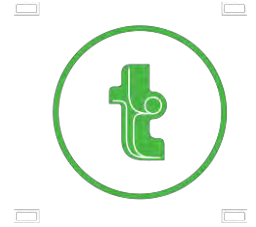
## 2. OTMP Requirements

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In addition to the above, Condition B20 of the SSD Consent outlines a number of requirements which are to be adhered for the OTMP. These conditions state the following:

*B20. Prior to the commencement of operation, the Applicant must prepare an Operational Traffic Management Plan (OTMP) for the Development to the satisfaction of the Secretary. The plan must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The OTMP must:*

- (a) be prepared by a suitably qualified and experienced person(s);*
- (b) be prepared in consultation with Council;*
- (c) detail the measures that are to be implemented to ensure road safety and network efficiency including restricting queuing or parking of vehicles on Anderson Road;*
- (d) detail heavy vehicle routes, access and parking arrangements;*
- (e) include a Driver Code of Conduct to:*
  - (i) minimise the impacts on the local and regional road network;*
  - (ii) minimise conflicts with other road users;*
  - (iii) minimise road traffic noise;*
  - (iv) ensure truck drivers use specified routes; and*
  - (v) include a program to monitor the effectiveness of these measures.*
- (f) Include a Traffic Control Plan (TCP) detailing:*
  - (i) The on-site measures to be implemented to control the movement of trucks in and out of the site, as well as on-site; and*
  - (ii) Provisions for requiring the traffic controller to stop exiting trucks to allow an entering truck to manoeuvre into the site unhindered.*



## 3. Existing Conditions

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### 3.1 Location and Site

The site is located within an existing Smeaton Grange industrial estate approximately 45 kilometres south-west of Sydney central business district. More specifically, the site is located at 52 Anderson Road, Smeaton Grange. It has an irregular shaped configuration with a site area of 6,862m<sup>2</sup> and is currently zoned as *IN1 – General Industrial* under the *Camden Local Environmental Plan 2010*.

The northern boundary fronts a cul-de-sac on Anderson Road and is approximately 37 metres long. The northwest boundary borders an industrial development and measures approximately 96 metres long. The southeast boundary borders Kenny Creek and measures approximately 100 metres long. The remaining of the site borders industrial developments and vary in length and orientation.

The site is currently vacant and does not provide a vehicular crossing to Anderson Road.

Reference should be made to the Location Plan and Site Plan presented in **Figure 1** and **Figure 2** respectively. A Photographic Record is also provided in **Appendix A** identifying key characteristics of the existing site frontage.



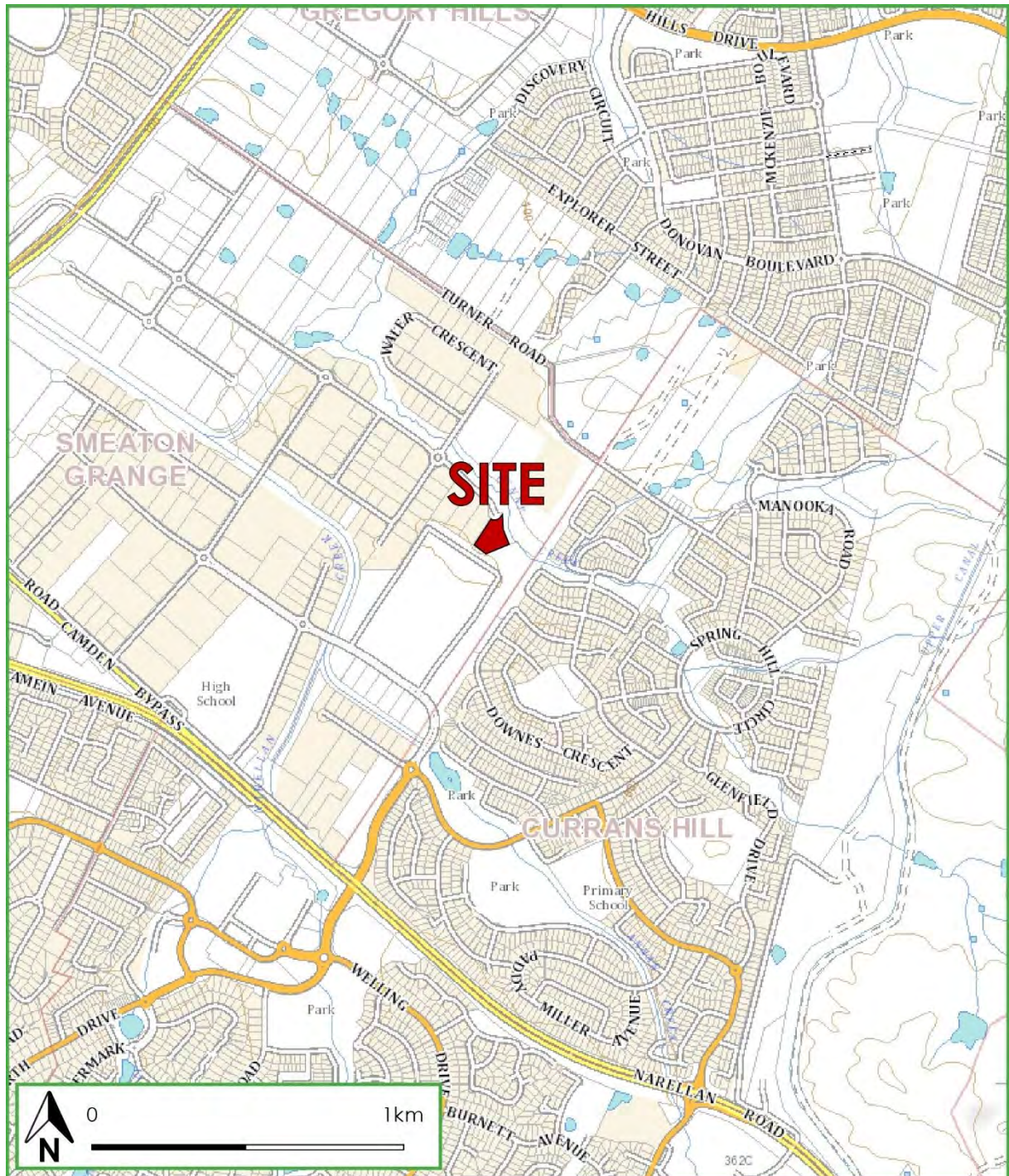


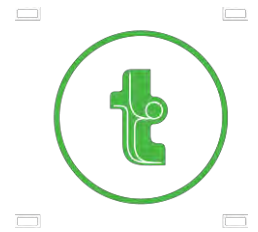
Figure 1: Location Plan





Figure 2: Site Plan





## 3.2 Road Hierarchy

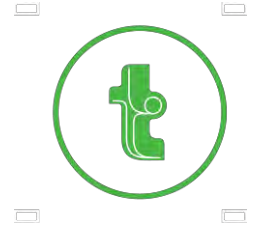
The road hierarchy in the vicinity of the site is shown in **Figure 3**, with the following roads of particular interest:

- ➡ **Narellan Road:** an RMS Main Road (MR178) that runs in a northwest – southeast direction between Appin Road in the south and Camden Valley Way in the north. Narellan Road is subject to an 80 km/h speed limit and accommodates three (3) traffic lanes in either direction within a divided carriageway. Narellan Road provides a vital link between the Smeaton Grange industrial zone and the Hume Motorway and Camden Valley Way. The intersection of Narellan Road and Hartley Road is a large four-legged signalised intersection.
- ➡ **Camden Valley Way:** an RMS Main Road (MR620) that runs in a north-south direction between the Hume Highway in the north and Argyle Street in the south. Camden Valley Way is subject to an 80 km/h speed limit and accommodates two (2) traffic lanes in either direction within a divided carriageway. The intersection of Camden Valley Way and Anderson Road is a large four-legged signalised intersection.
- ➡ **Hartley Road:** a local road that generally runs in a north-west direction between Orierton Road in the north and Narellan Road in the south. In the vicinity of the site, Hartley Road is subject to a 50 km/h speed limit and accommodates two (2) traffic lanes in either direction within a divided carriageway. Sections of Hartley Road provides unrestricted on-street parallel parking.
- ➡ **Anderson Road:** a local road that runs in a northwest – southeast direction between Camden Valley Way in the north and terminating at a cul-de-sac at the subject site in the south. In the vicinity of the site, Anderson Road is subject to a 50 km/h speed limit and accommodates one (1) travel lane and one (1) parking lane in either direction within an undivided carriageway.

It can be seen from **Figure 3** that the site is conveniently located with respect to the arterial and local road systems serving the region. It is therefore able to effectively distribute traffic onto the wider road network, minimising traffic impacts.



Figure 3: Road Hierarchy



## 4. Overview of Site Operations

---

### 4.1 Times of Operation

The Benedict Smeaton Grange Resource Recovery Facility will accept deliveries from businesses and the public during the following times:

- Monday to Friday 6:00am to 10:00pm;
- Saturday 6:00am to 5:00pm; and
- Sunday 8:00am to 4:00pm.

The Benedict Smeaton Grange Resource Recovery Facility will process waste during the following times:

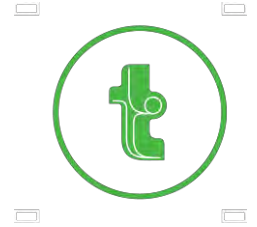
- Monday to Saturday 7:00am to 6:00pm; and
- Sundays and Public Holidays No processing.

A site plan has been included in **Appendix B** for reference.

### 4.2 Vehicles Accessing Site

As previously stated, the Benedict Smeaton Grange Resource Recovery Facility will accept deliveries from businesses and the public. The following vehicles are expected to access the site during operation:

- Light vehicles such as utilities and cars with trailers;
- Single axle heavy vehicles such as 'Daihatsu's' and skip-bin trucks; and
- Multiple axle combination heavy vehicles such as 'truck and dogs' and B-Doubles



## 4.3 Site Operations

### 4.3.1 Heavy Vehicles

All material carried by heavy vehicles accessing the Benedict Smeaton Grange Resource Recovery Facility will be inspected prior to entry. Vehicles carrying contaminants will be denied entry and will be turned away from the site. Vehicles adhering to the facilities standards will gain access via one of two weighbridges.

Once the approved vehicle has been weighed, the vehicle will manoeuvre to the truck loading area on the northwest side of the site. Materials will be unloaded from the vehicle and stored uncovered in the waste transfer holding shed.

Waste will then be sorted with mobile plant such as excavators and front end loaders etc. and a screening and picking line will be used to handle and process the waste and products in the holding shed. Processed materials will either be stored in the shed or in the storage bays on the southern boundary of the site. Segregated waste requiring further crushing or shredding (concrete, bricks, timber etc.) will be sent to a licensed recycling facility with the appropriate recycling capabilities.

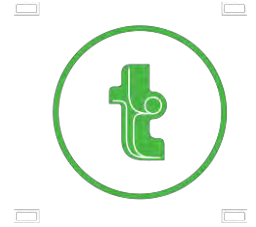
Once waste is unloaded, vehicles will travel to the outgoing wheel wash and weighbridge. Heavy vehicles will then exit the site onto Anderson Road and follow approved truck routes to their next destination.

### 4.3.2 Public Vehicles

Similar to heavy vehicles, public vehicles will be inspected for contaminants and denied entry if they do not comply with facility standards. Light vehicles will be weighed and manoeuvre to the hand unloading area on the northwest boundary of the site. It should be noted that members of the public depositing waste will be directed through the site by facility staff. This will ensure that conflicts between the public vehicles and heavy vehicles are minimised.

Once waste is unloaded, public vehicles will travel to the outgoing wheel wash. Vehicles will then exit the site onto Anderson Road and disperse into the local and regional road network.

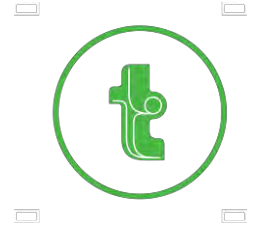
Swept Path Analysis provided in **Appendix C** satisfactorily demonstrates heavy vehicle movements into and within the site.



## 4.4 Car Parking

The Benedict Smeaton Grange Resource Recovery Facility provides eight (8) off-street parking spaces for employees on the northwest boundary of the site. It is envisioned that staff will arrive and leave the site outside of the core operational hours outlined in Section 4.1. This will reduce conflicts with staff vehicles and heavy vehicles accessing the site.

The site also accommodates two (2) visitor parking spaces, including one (1) accessible parking space on the southeast boundary of the site. A Traffic Control Plan shown in **Appendix D** provides line marking and signage requirements to facilitate safe pedestrian movements between the visitor parking spaces and the site office located at the entry / exit point.



## 5. Traffic Management

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### 5.1 Site Access

The site access is located on Anderson Road and provides a 17 metre two-way shared driveway. A plan of the access arrangement has been provided in **Appendix B**.

The largest vehicle accessing the site is a 25 metre B-Double heavy vehicle. Swept Path Analysis shown in **Appendix C** demonstrates that a 25 metre B-Double can access the site via the proposed driveway, enter the incoming weighbridge, turnaround on-site, and exit via the outgoing weighbridge. It should also be noted that the swept path analysis demonstrates that vehicles can enter and exit the site simultaneously, thus a traffic controller is not required to stop exiting vehicles.

The proposed access arrangements are deemed acceptable and will operate satisfactorily.

### 5.2 Weighbridges & Wheel Wash

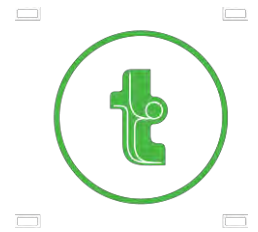
The site provides two (2) incoming weighbridges and one (1) outgoing weighbridge. The incoming weighbridges comprise of an 18 metre and 28 metre weighbridge which can accommodate a 19 metre articulated vehicle and 25 metre B-Double respectively. Smaller heavy vehicles and light vehicles such as utilities and cars with trailers can access all weighbridges.

Swept Path Analysis shown in **Appendix C** demonstrates that the incoming and outgoing weighbridges can accommodate all vehicles expected to access the site.

It should also be noted that the incoming weighbridges are fitted with licence plate recognition software that has the capability to deny access to vehicles that have breached the facilities waste collection requirements more than three (3) times.

In addition to the weighbridges, the site also includes two (2) outgoing wheel washes, including a standalone wheel wash for light vehicles, and a wheel wash before the 17 metre outgoing weighbridge. The proposed wheel washes can be accessed by all vehicles exiting the site.





## 5.3 Truck Routes

The proposed truck routes for the resource recovery facility are shown in **Figure 4** below and is summarised as follows:

### *North:*

- ➡ Route to Site: Trucks will arrive at the site via Camden Valley Way and Anderson Road.
- ➡ Route from Site: Trucks will depart from the site via Anderson Road and Camden Valley Way.

### *East:*

- ➡ Route to Site: Trucks will arrive at the site via Narellan Road, Hartley Road, Anzac Avenue and Anderson Road.
- ➡ Route from Site: Trucks will depart from the site via Anderson Road, Anzac Avenue, Hartley Road and Narellan Road.

### *South:*

- ➡ Route to Site: Trucks will arrive at the site via Hume Motorway or Camden Bypass, Narellan Road, Hartley Road, Anzac Avenue and Anderson Road.
- ➡ Route from Site: Trucks will depart from the site via Anderson Road, Anzac Avenue, Hartley Road, Narellan Road and Hume Motorway or Camden Bypass.

### *West:*

- ➡ Route to Site: Trucks will arrive at the site via Narellan Road, Hartley Road, Anzac Avenue and Anderson Road.
- ➡ Route from Site: Trucks will depart from the site via Anderson Road, Anzac Avenue, Hartley Road and Narellan Road.

The above routes make use of the arterial road network as much as possible with the use of local streets only where required. A copy of these routes shall be provided to all drivers prior to attending the site.



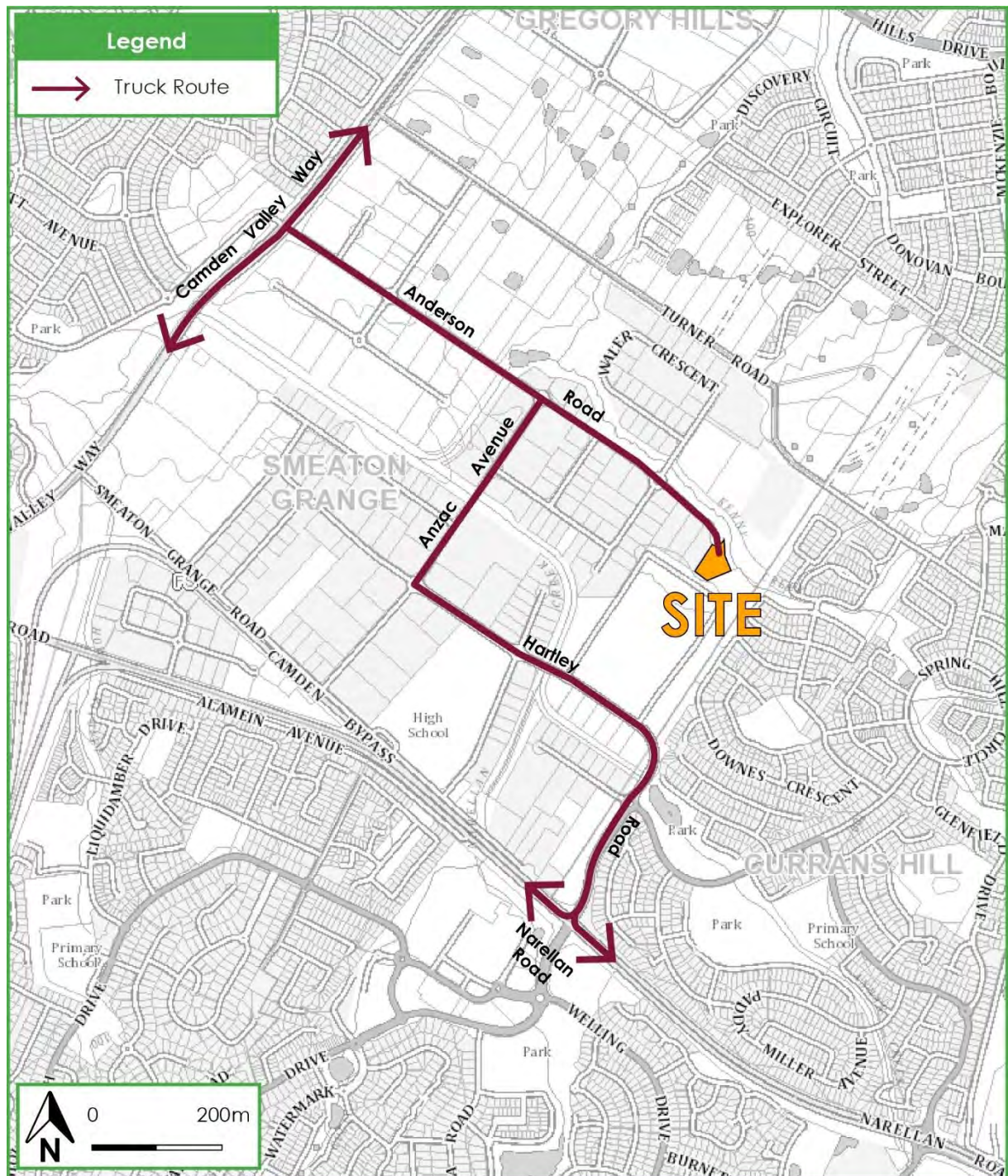
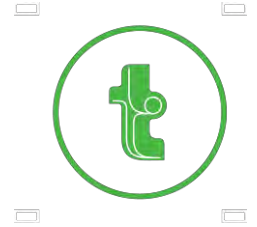
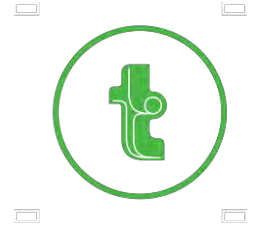


Figure 4: Proposed Truck Routes for 52 Anderson Road, Smeaton Grange



## 5.4 Pedestrian Control Plans

The development provides two (2) visitor parking bays on the north-east boundary of the site. It is expected that visitors will park and report to the site office located at the vehicle access point of the site. A traffic control plan for visitors to the site has been provided in **Appendix D**. The signage and line marking indicated on the plan will be installed prior to the operation of the site. It is noted that all other pedestrians within the site will be staff who are familiar with its operation and will have completed safety induction training for pedestrian movements throughout the site.



## 6. Driver Code of Conduct

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### 6.1 Purpose of the Code

The Driver Code of Conduct for Heavy Vehicles (the Code) is to ensure that drivers adhere to the designated transport routes, and outlines procedures to ensure that drivers implement safe driving practices, particularly when entering the site from Anderson Road.

All employees and contractors are made aware that responsible driving and adhering to the code is a condition of employment at the Benedict Smeaton Grange Resource Recovery Facility. All drivers are trained in the Code of Conduct and audits of the compliance with the Code are conducted. All drivers reported or found to be acting in a manner contrary to the Code will be subject to disciplinary action. A copy of the Code of Conduct is included in **Appendix E**.

### 6.2 General Requirements

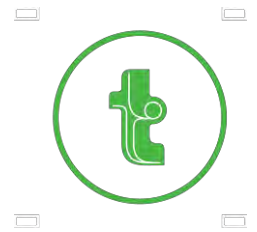
Heavy vehicle drivers hauling to the Benedict Smeaton Grange Resource Recovery Facility must:

- Have undertaken a site induction carried out by an approved member of the facility's staff or suitably qualified person under the direction of the facility's management;
- Hold a valid driver's licence for the class of vehicle being operated;
- Operate the vehicle in a safe manner within and external to the facility site; and
- Comply with the direction of authorised site personnel when within the site.

### 6.3 Heavy Vehicle Speed

The following speed restrictions apply in relation to the Benedict Smeaton Grange Resource Recovery Facility:

- Speed limit of 50 km/h on Anderson Road ;
- Speed limit of 10 km/h within the Resource Recovery Facility; and
- All heavy vehicles travelling to or from the facility must not travel over 50 km/h between the site and Narellan Road and Camden Valley Way.



Drivers are to observe the posted speed limits on all public roads with speed adjusted appropriately to suit the road environment and prevailing weather conditions, to comply with the Australian Road Rules. The vehicle speed must be appropriate to ensure the safe movements of the vehicle based on the vehicle configuration.

In addition, all drivers and truck operators working for or on behalf of Benedict Smeaton Grange Resource Recovery Facility are to be made aware of the “Three Strikes Scheme” introduced by the Roads and Maritime Services which applies to all vehicles over 4.5 tonnes. When a heavy vehicle is detected travelling at 15 km/h or more over the posted or relevant heavy vehicle speed limit by a mobile Police unit or fixed speed camera, the Roads and Maritime Services will record a strike against that vehicle. If three strikes are recorded within a three (3) year period, the Roads and Maritime Services will act to suspend the registration of that vehicle (up to three months).

## 6.4 Driver Fatigue

Fatigue is one of the biggest causes of crashes for heavy vehicle drivers.

The National Heavy Vehicle Accreditation Scheme allows heavy vehicle operators the choice of operating under three fatigue management schemes: Standard Hours of Operation; Basic Fatigue Management (BFM); and Advanced Fatigue Management (AFM). All heavy vehicle drivers operating out of the Benedict Smeaton Grange Resource Recovery Facility are to be aware of their adopted fatigue management scheme and operate within its requirements.

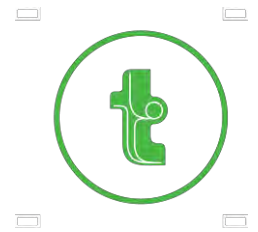
Fatigue includes (but not limited to) the following:

- Feeling sleepy;
- Feeling physically or mentally tired, weary or drowsy;
- Feeling exhausted or lacking energy; and
- Behaving in a way consistent with any of the above.

## 6.5 Heavy Vehicle Control

In order to minimise the impact of noise from truck transport the following controls apply to truck operators at the Benedict Smeaton Grange Resource Recovery Facility:

- Compression brakes not to be used in the vicinity of residential areas;



- Tailgates must be locked and secured to avoid noise or spillage;
- Always observe the posted speed on site and the local road network;
- No tailgating is permitted – a 3 second gap is to be observed at all times;
- Equipment to be used must be fit for the purpose; and
- Drivers to obey the operating hours outlined in Section 4.1.

## 6.6 Load Covering

Loose material on the road surface has the potential to cause road crashes and vehicle damage. All loaded vehicles entering or leaving the site are effectively covered for the duration of the trip. The load cover may be removed upon arrival at the delivery site. All care is to be taken to ensure that all loose debris from the vehicle body and wheels is removed prior to leaving the site and again after unloading. Drivers must ensure that following tipping that the tailgate is locked before leaving the site. Facility management is to monitor loose material on the side of the vehicle route from facility operations and take appropriate action (removal or suppression) regularly.

## 6.7 Cleanliness

All loading vehicles are to be inspected prior to leaving the site for cleanliness. Any materials that could fall on the road should be removed prior to leaving the site. It is noted that all outgoing vehicles will traverse through a wheel wash to ensure contaminants are contained on-site.

## 6.8 Vehicle Departure and Arrival (avoiding convoys)

Heavy Vehicles travelling in close proximity on single lane public roads can be of concern to light vehicle drivers as well as increasing noise through or adjacent to residential areas. To alleviate public concern and increase road safety, heavy vehicles leaving the facility should be separated. This will be controlled as far as practicable by the loader operator however it is important for all drivers to be aware of the requirement to avoid convoys leaving the facility.

It is difficult to schedule arrivals to the facility (except at the commencement of work for the day) due to the different directions of approach from external jobs and the varying job completion times, however, when a driver becomes aware, through visual contact or two-way contact between trucks, that they will arrive at approximately the same time then they are to ensure that there is a suitable gap between vehicles.





## 6.9 Operating Hours

All drivers are to be informed of the Benedict Smeaton Grange Resource Recovery Facility outlined in Section 4.1.

## 6.10 Truck Routes

All drivers are to be informed of the approved truck routes (described in Section 5.3) above operating at the Benedict Smeaton Grange Resource Recovery Facility. Adherence to this is to be verified by the facility manager or other designated employee through random observations.

## 6.11 Overtaking

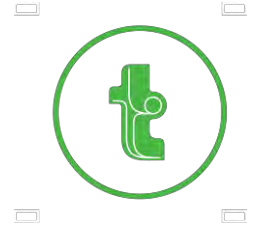
There is to be no overtaking of road registered vehicles by Benedict Smeaton Grange Resource Recovery Facility trucks or transport contractors while on Anderson Road, Anzac Avenue and Hartley Road.

## 6.12 Breakdowns and Incidents

In the case of a breakdown the vehicle must be towed to the nearest breakdown point as soon as possible. All breakdowns must be reported to the Benedict Smeaton Grange Resource Recovery Facility management and the vehicle protected in accordance with the Heavy Vehicle Drivers handbook. Emergency contact numbers have been provided in **Table 1** overleaf for reference.

**Table 1: Emergency Contact Details**

Organisation	Contact Details
RMS Transport Management Centre Incident reporting line	131 700
Camden Council	(02) 4654 7777
Benedict Smeaton Grange Resource Recovery Facility	TBC
NSW Police Service (Camden)	(02) 4632 4499



## 7. Compliance Measures & Monitoring

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### 7.1 Commencement of the Driver Code of Conduct

It is proposed that the Driver Code of Conduct be initiated when the project becomes operational and reviewed after six (6) months of operation by the Benedict Smeaton Grange Resource Recovery Facility management and as required, a suitable qualified traffic consultant.

This document is to be signed by individual drivers and a Benedict Smeaton Grange Resource Recovery Facility authorised representative at the time when heavy vehicle drivers attend their site induction or shortly thereafter. A copy of the Memorandum of Understanding is provided in Appendix F for reference.

### 7.2 Compliance Measures

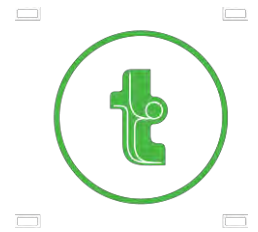
To assist in the orderly resolution of complaints, Benedict Smeaton Grange Resource Recovery Facility will keep a register iteming all reported incidents relating to complaints in regard to heavy vehicle driver conduct external to the facility site.

The incident register is to include (where possible):

- i. Date;
- ii. Location/s;
- iii. The driver / heavy vehicle details;
- iv. Contact details of the person lodging the complaint;
- v. What / when actions were taken to resolve the issue; and
- vi. The reply to the person/organisation that made the complaint.

The incident register is to be audited at three monthly intervals by facility management and made available, upon request to an authorised Council officer.





## 7.3 Monitoring Measures

In addition to the register, Benedict Smeaton Grange Resource Recovery Facility will undertake formal observations / review of compliance at three (3) month intervals and will document and undertake any remedial with employees or sub-contractors that may be necessary as a result of these observations. These formal observations / reviews maybe undertaken as part of an overall review of the facility safety management.

## 7.4 Public Relations

The operation of the facility can be considered to be similar to that of a construction worksite. That being said the public will not always know how, what, when or why the operation of facility may change from time to time (i.e. shift to shift). It is therefore the responsibility of the facility management to provide enough information to any member of the public entering the site of the site conditions, operations at that time. This can be achieved by, but not limited to adequate safety and directional signage advising where it is acceptable and not acceptable for the public to traverse the site. Monitoring by the facility management of these conditions shall be ongoing so as to provide adequate information to any member of the public to be able enter and exit the site safely.

Monitoring shall also include dealing / reviewing any potential incident raised by a member of the public in a timely manner. A summary of review and monitoring requirements for the Smeaton Grange site are provided in **Table 2** overleaf.



**Table 2: Summary of Review / Monitoring Requirements**

Item Description	Audit Period	Audited By	Contact Person	Contact Details
Driver Code of Conduct	6 months from the commencement of operation	Facility Management or Suitably Qualified Traffic Consultant	Benedict Smeaton Grange Resource Recovery Facility	TBC
Driver Site Induction (Driver Code of Conduct)	As required	Facility Management		
Operational / Road & Cumulative Noise	In accordance with approved noise monitoring plan	Facility Management or Noise Monitoring Consultant		
Incident Register	Every 3 months from the commencement of operation	Facility Management		
Compliance Observations	Every 3 months from the commencement of operation	Facility Management		
Loose Material on side of truck routes	Daily	Facility Management		
Driver Fatigue	Daily	Facility Management		
Dealing with the Public	Ongoing	Facility Management & Council		

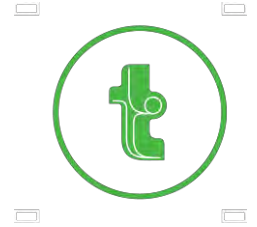


## 8. SSD Compliance

A response to each item of Condition B20 of the SSD Consent is provided in **Table 3** below, including references to sections of this report, where applicable.

**Table 3: SSD Compliance**

Item	Condition	Compliance
a	Be prepared by a suitably qualified and experienced person(s).	Provided separately.
b	Be prepared in consultation with Council.	Reference should be made to Council's Correspondence provided separately.
c	Detail the measures that are to be implemented to ensure road safety and network efficiency including restricting queuing or parking of vehicles on Anderson Road.	Reference should be made to <b>Section 6.8</b> , which outlines vehicle departures and arrivals from the site.
d	Detail heavy vehicle routes, access and parking arrangements.	The proposed truck routes for the resource recovery facility are provided in <b>Section 5.3</b> , with the site plans in <b>Appendix A</b> presenting the site access and parking arrangements.
e	<p>Include a Driver Code of Conduct to:</p> <ul style="list-style-type: none"> <li>(i) Minimise the impacts on the local and regional road network;</li> <li>(ii) Minimise conflicts with other road users;</li> <li>(iii) Minimise road traffic noise;</li> <li>(iv) Ensure truck drivers use specified routes; and</li> <li>(v) Include a program to monitor the effectiveness of these measures.</li> </ul>	<p>Reference should be made to the Driver Code of Conduct in <b>Section 6</b>.</p> <ul style="list-style-type: none"> <li>(i) The truck routes described in <b>Section 5.3</b> were designed to make use of the arterial road network as much as possible in order to minimise the potential impacts;</li> <li>(ii) To minimise potential conflicts with other road users, it is heavy vehicles are proposed to be separated as far as practicable by the load operator, as discussed in <b>Section 6.8</b>;</li> <li>(iii) <b>Section 6.5</b> outlines the heavy vehicle control measures to minimise road traffic noise;</li> <li>(iv) The specified truck routes have been described in <b>Section 5.3</b> and <b>Section 6.10</b>; and</li> <li>(v) Compliance and monitoring measures have been discussed and outlined in <b>Section 7</b>.</li> </ul>
f	<p>Include a Traffic Control Plan (TCP) detailing:</p> <ul style="list-style-type: none"> <li>(i) The on-site measures to be implemented to control the movement of trucks in and out of the site, as well as on-site; and</li> <li>(ii) Provisions for requiring the traffic controller to stop exiting trucks to allow an entering truck to manoeuvre into the site unhindered.</li> </ul>	<p>A TCP has been provided in <b>Appendix D</b>.</p> <ul style="list-style-type: none"> <li>(i) A swept path analysis has been included in <b>Appendix C</b> that demonstrates satisfactory heavy vehicle movements into and within the site; and</li> <li>(ii) Reference should be made to <b>Section 5.1</b> and <b>Appendix C</b> which demonstrates that vehicles can enter and exit the site simultaneously, negating the need for a traffic controller to stop exiting vehicles. Reference should also be made to the Driver's Code of Conduct in <b>Section 6.8</b>, which provides various methods for truck drivers to 'self-manage' simultaneous departures / arrivals through visual and two-way contact between vehicles.</li> </ul>

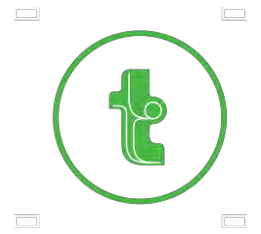


## 9. Conclusions

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This report should be read in conjunction with other documentation prepared by Benedict Recycling Pty Ltd relating to the Driver Code of Conduct. The plan outlined above is considered satisfactory and will minimise any disruptions to residents / tenants of neighbouring developments, as well as pedestrians within the site. This plan meets all requirements of the RMS *Traffic Control at Work Sites Manual*, Condition B20 of the SSD Consent and is recommended for adoption.





## Appendix A

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Photographic Record







View looking south towards the site from Anderson Road, Smeaton Grange



View looking south-west towards site from the Anderson Road, Smeaton Grange





View looking north from the site and Anderson Road, Smeaton Grange.



View looking north from the site and Anderson Road, Smeaton GRange.





## Appendix B

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Site Plan



## REFERENCES

DRAWINGS TO BE READ IN CONJUNCTION WITH BUT NOT LIMITED TO ALL STORMWATER ENGINEERS, LANDSCAPE ARCHITECTS, AND OTHER ASSOCIATED PLANS & REPORTS

000	COVER SHEET	REV H
100	GROUND FLOOR PLAN 1:500	REV H
101	ROOF PLAN 1:500	REV H
200	ELEVATIONS 1 1:250	REV H
201	ELEVATIONS 2 1:250	REV H
500	DETAILS SHEET1 1:250	REV F
501	DETAILS SHEET2 1:100	REV F
502	FRONT FENCE DETAIL	REV G

revision	
A	02.02.16 ISSUED FOR GENERAL INFORMATION
B	04.03.16 ISSUED FOR GENERAL INFORMATION
C	06.05.16 ISSUED FOR GENERAL INFORMATION
D	23.05.16 ISSUED FOR GENERAL INFORMATION
E	18.08.16 ISSUED FOR GENERAL INFORMATION
F	28.04.17 ISSUED FOR GENERAL INFORMATION
G	20.02.18 ISSUED FOR GENERAL INFORMATION
H	10.05.18 ISSUED FOR GENERAL INFORMATION

notes

All dimensions and setbacks to be verified prior to commencement  
DO NOT SCALE measurements off drawings

Figured dimensions to be used at all times

IN DOUBT ASK

All dimensions or discrepancies to be notified to the architect

scale 1:500 @ A3

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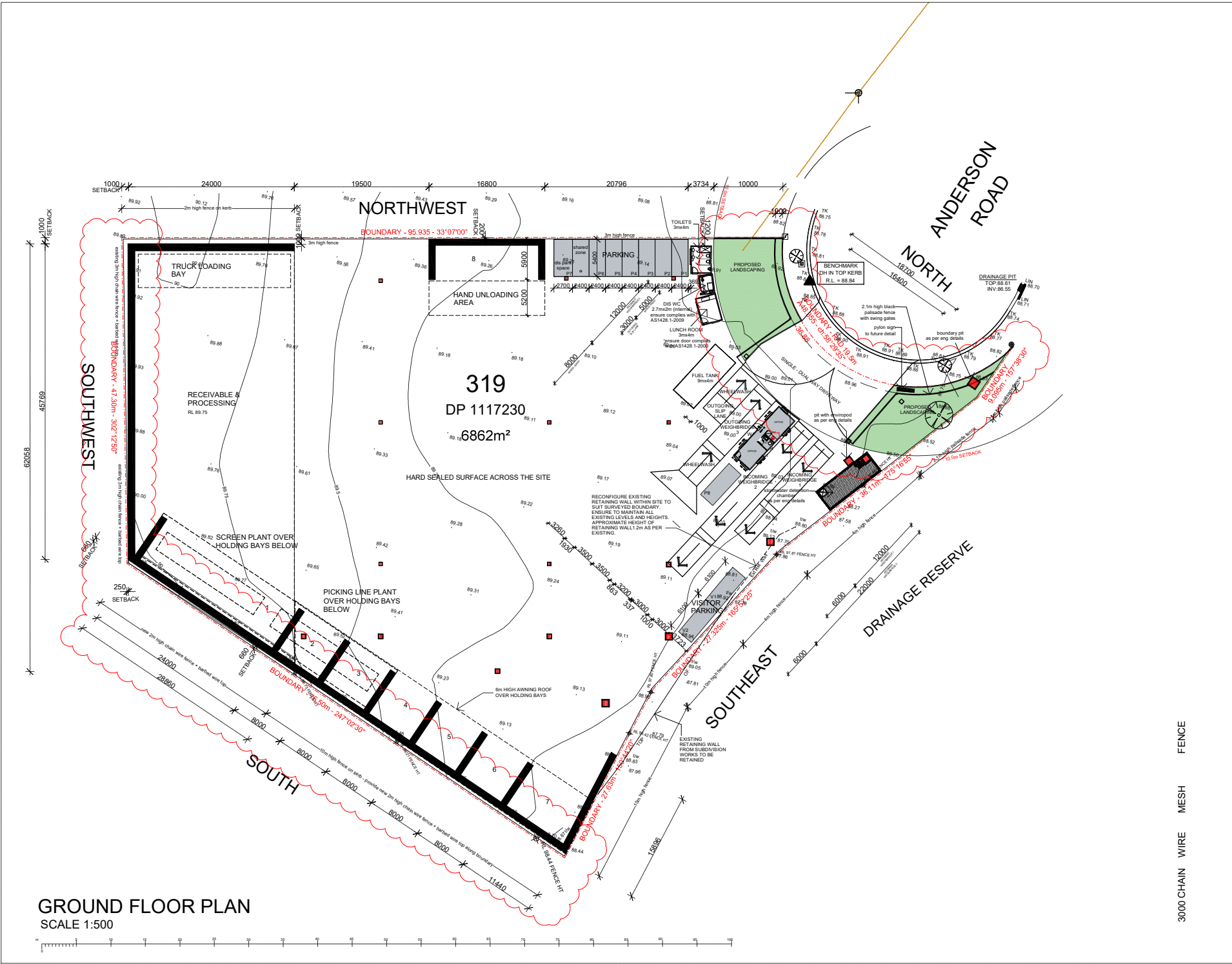
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FEB 2016	SS

project  
PROPOSED WASTE TRANSFER STATION  
52 ANDERSON ROAD  
SMEATON GRANGE

drawing title  
COVER SHEET

FOR DA APPROVAL		
J15306	DA	000 H
job no.		drawing no.





**REFERENCES**

Drawings to be read in conjunction with but not limited to all stormwater engineers, landscape architects, and other associated plans & reports

A	02.02.16	ISSUED FOR GENERAL INFORMATION
B	04.03.16	ISSUED FOR GENERAL INFORMATION
C	06.05.16	ISSUED FOR GENERAL INFORMATION
D	23.05.16	ISSUED FOR GENERAL INFORMATION
E	18.08.16	ISSUED FOR GENERAL INFORMATION
F	29.04.17	ISSUED FOR GENERAL INFORMATION
G	20.02.18	ISSUED FOR GENERAL INFORMATION
H	10.05.18	ISSUED FOR GENERAL INFORMATION

**notes**

All dimensions and setbacks to be verified prior to commencement  
DO NOT SCALE measurements off drawings  
Figured dimensions to be used at all times  
**WITHIN 500mm** of discrepancies to be notified to the architect

scale 1:100 @ A3

Project Architect

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APRIL 2013	SS

project

PROPOSED WASTE TRANSFER STATION  
52 ANDERSON ROAD  
SMEATON GRANGE

drawing title

GROUND FLOOR PLAN

FOR DA APPROVAL		100	H
J15306	DA		

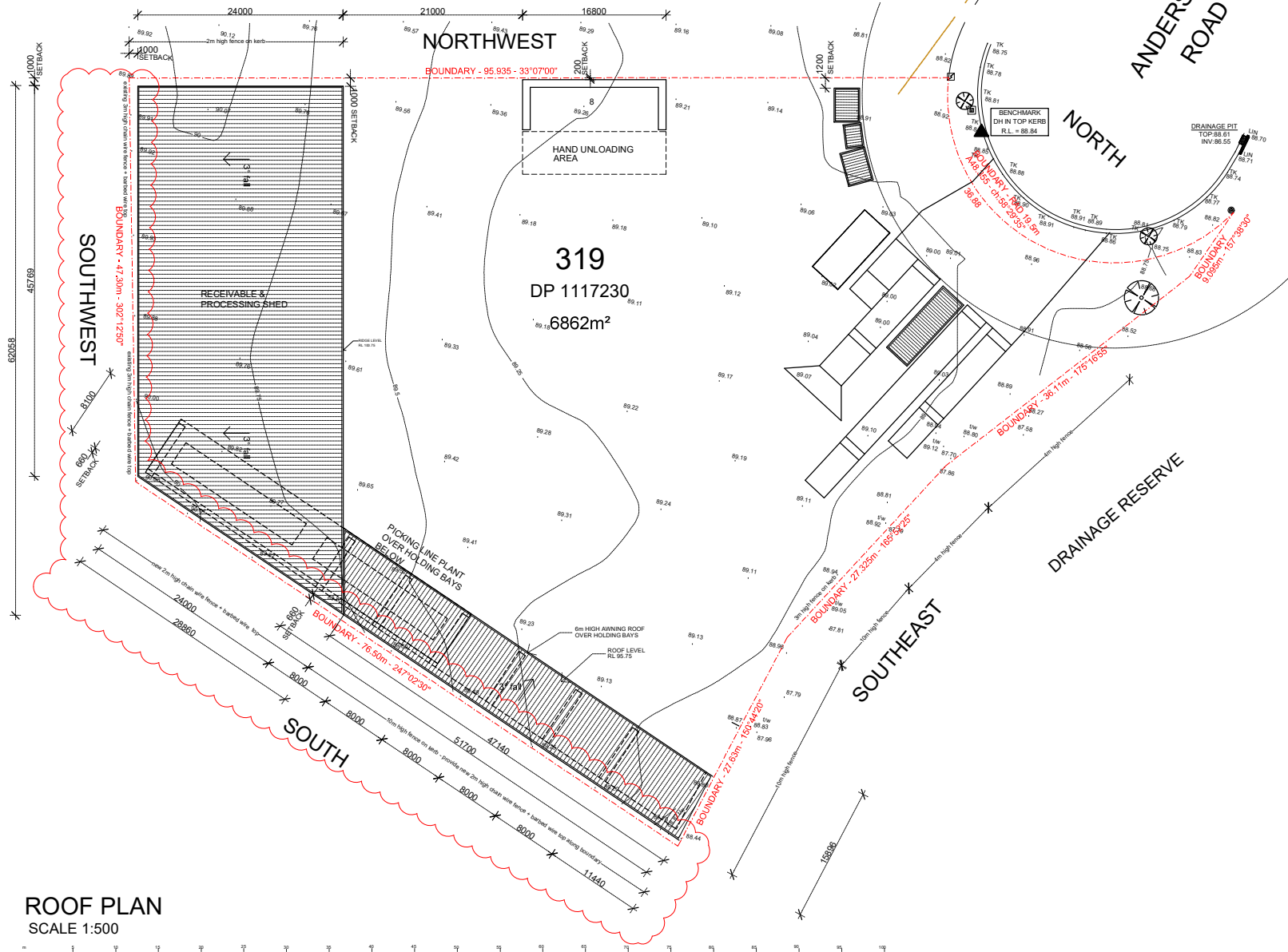
job no.

drawing no.

rev

3000 CHAIN WIRE MESH FENCE

GROUND FLOOR PLAN  
SCALE 1:500



ROOF PLAN  
SCALE 1:500

REFERENCES  
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|---|----------|--------------------------------|
| A | 02.02.16 | ISSUED FOR GENERAL INFORMATION |
| B | 04.03.16 | ISSUED FOR GENERAL INFORMATION |
| C | 06.05.16 | ISSUED FOR GENERAL INFORMATION |
| D | 23.05.16 | ISSUED FOR GENERAL INFORMATION |
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| F | 28.04.17 | ISSUED FOR GENERAL INFORMATION |
| G | 20.02.18 | ISSUED FOR GENERAL INFORMATION |
| H | 10.05.18 | ISSUED FOR GENERAL INFORMATION |



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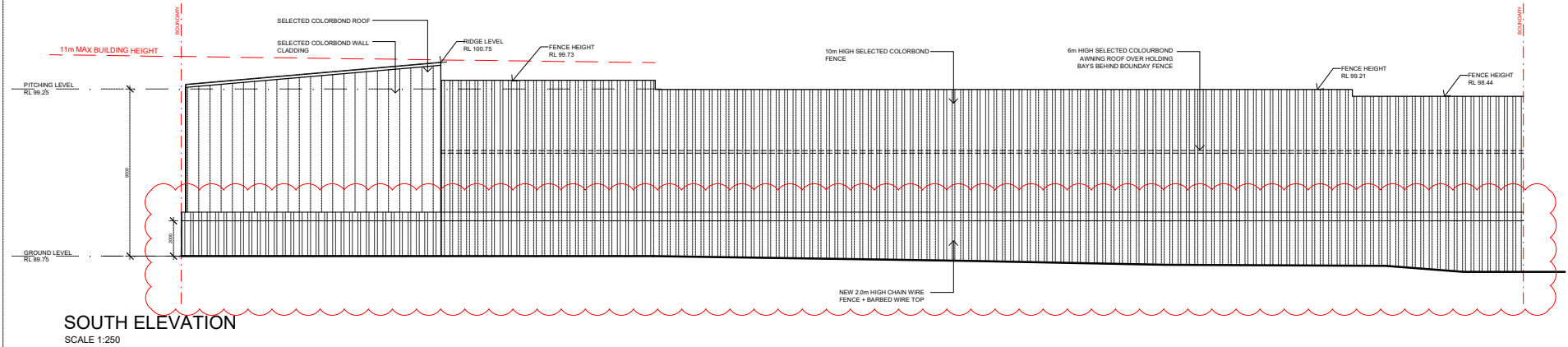
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52 ANDERSON ROAD  
SMEATON GRANGE

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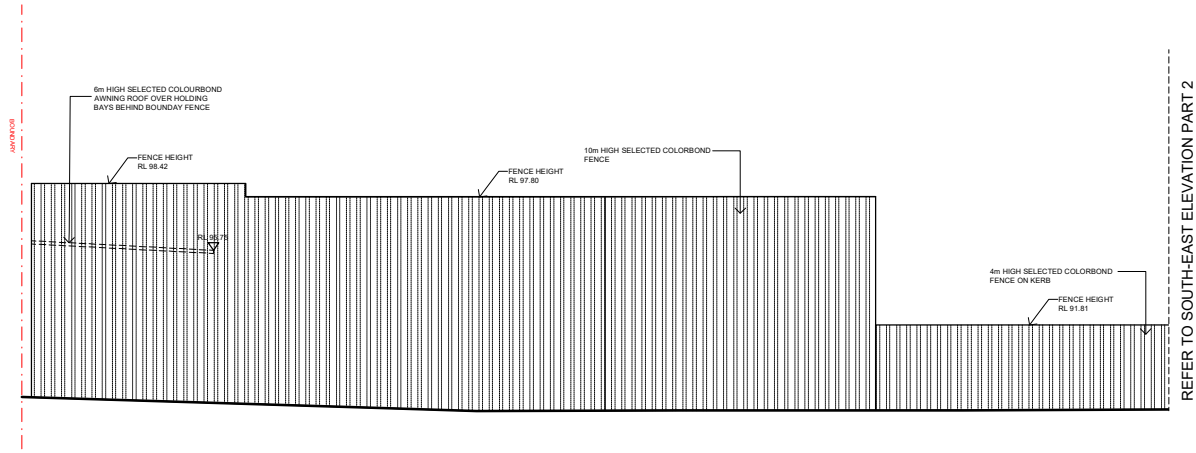
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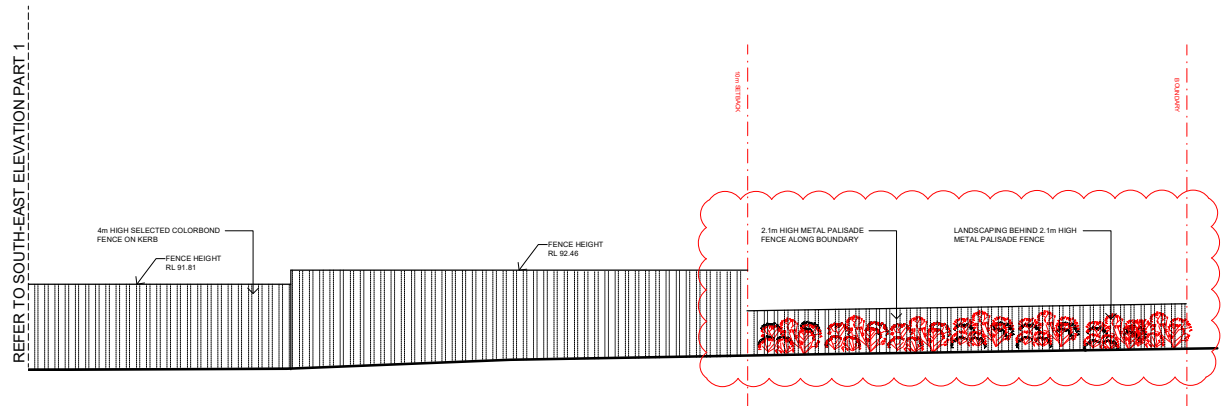




**SOUTH ELEVATION**  
SCALE 1:250



**SOUTH-EAST ELEVATION (PART 1)**  
SCALE 1:250



**SOUTH-EAST ELEVATION (PART 2)**  
SCALE 1:250

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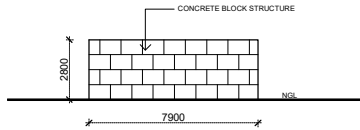
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52 ANDERSON ROAD  
SMEATON GRANGE**

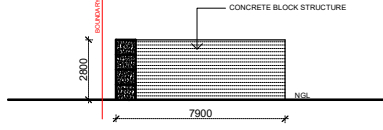
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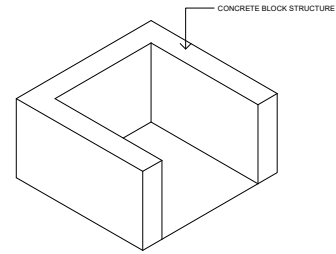
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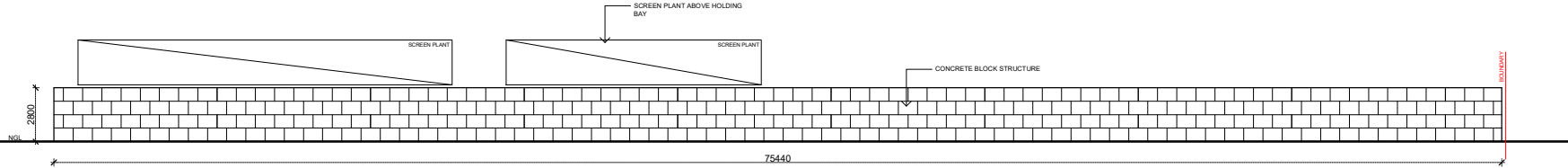
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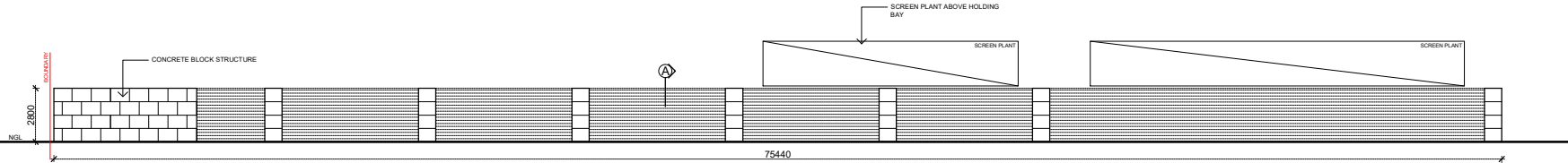
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ISOMETRIC VIEW  
SCALE 1:250



SOUTH ELEVATION  
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NORTH ELEVATION  
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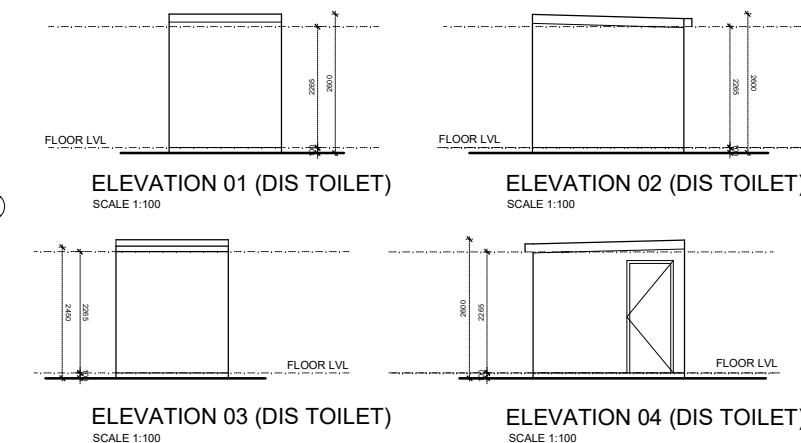
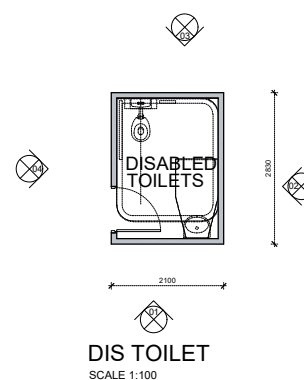
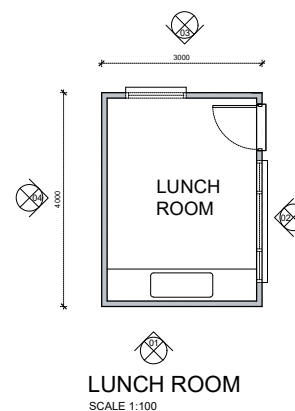
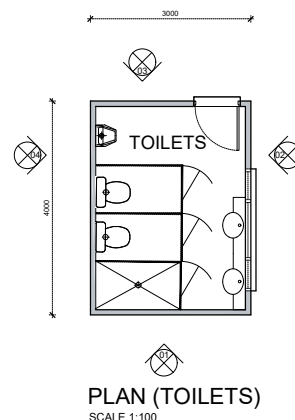
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52 ANDERSON ROAD  
SMEATON GRANGE

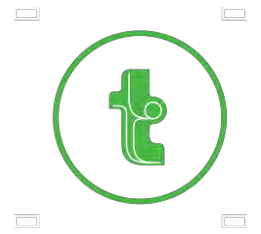
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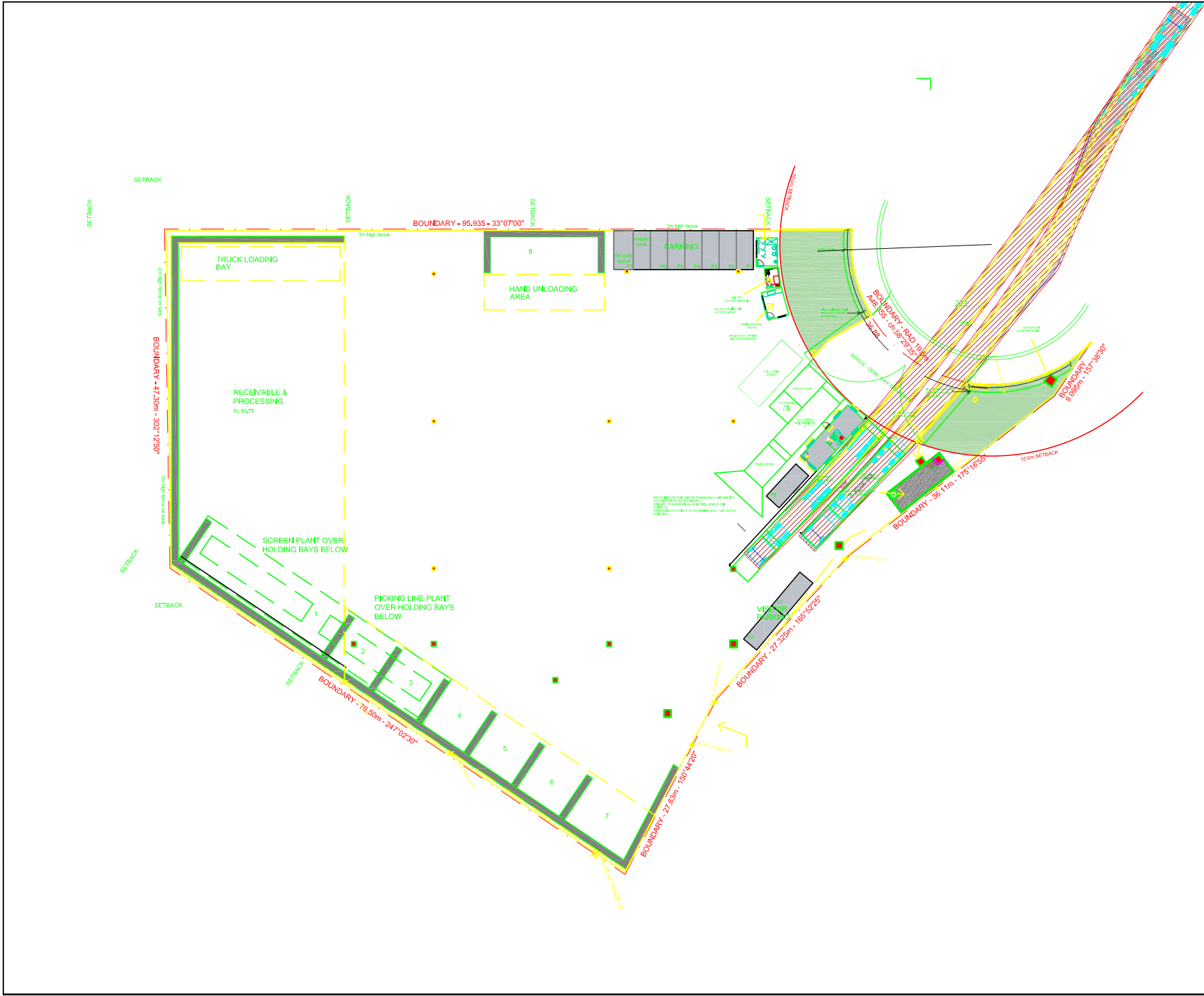
## Appendix C

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### Swept Path Analysis







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Vehicle swept path diagrams prepared using computer generated turning path software and associated CAD drawing platforms. Vehicle data based upon relevant Australian Standards (AS/NZS 2890.1-2004 *Parking facilities - Off-street car parking*, and/or AS 2890.2-2002 *Parking facilities - Off-street commercial vehicle facilities*). These standards embody a degree of tolerance, however the vehicle characteristics in these standards represent a suitable design vehicle and do not account for all variations in vehicle dimensions / specifications and/or driver ability or behaviour.

no, revision note

by, date

Swept Path Legend:

Wheel Path

Vehicle Body Envelope

Clearance Envelope (300mm)

architect

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Level 2, 60 Park Street  
Sydney NSW 2000

client

EMM Consulting Pty Ltd  
PO Box 21  
St Leonards NSW 1590

scale

1:500 @ A3

0m

5

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15

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project

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Smeaton Grange NSW 2567

drawing prepared by

TRAFFIX

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traffic & transport planners

drawing title

Swept Path Analysis

25m B-Double & 19m AV Design Vehicles

Site Access & Weighbridges

drawn: BL

checked: AK

date: 05-04-2018

18.061

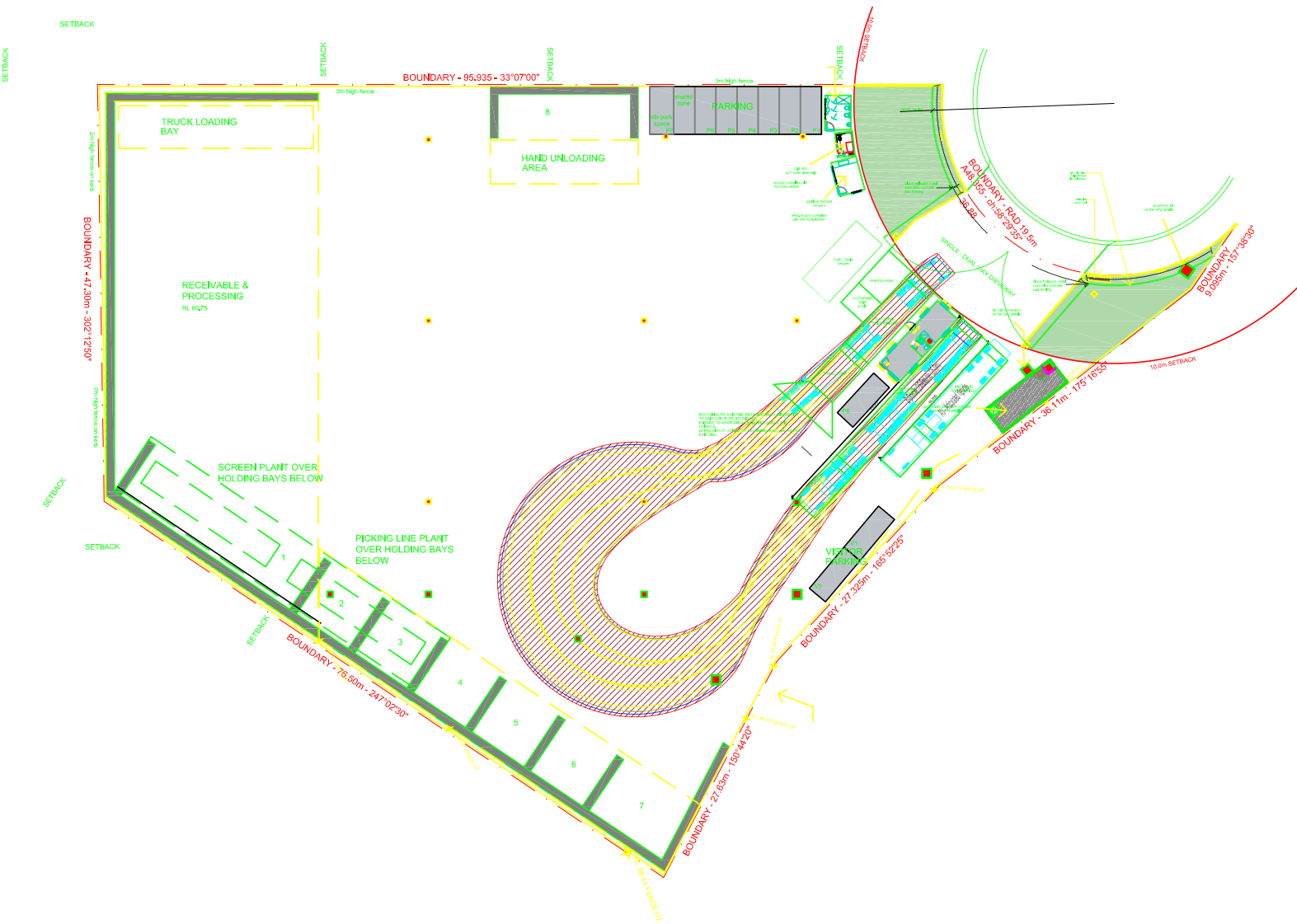
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no. revision note by. date

**Sweep Path Legend:**

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

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Sydney NSW 2000

**client**

EMM Consulting Pty Ltd  
PO Box 21  
St Leonards NSW 1590

**scale**

1:500 @ A3

0m 5 10 15 20

**project**

52 Anderson Road  
Smeaton Grange NSW 2567

**drawing prepared by**

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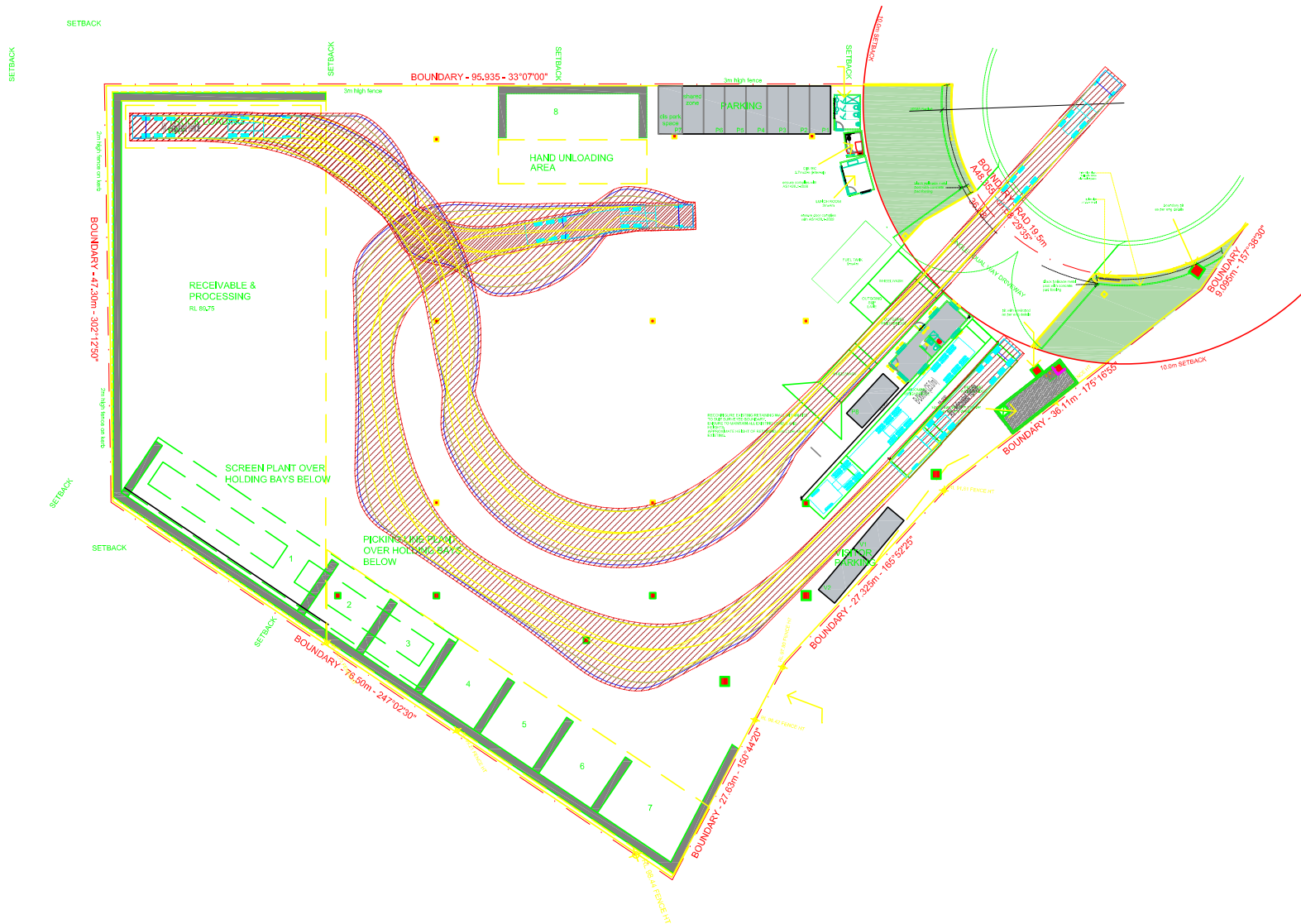
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25m B-Double Design Vehicle  
Turning on-site and Exit

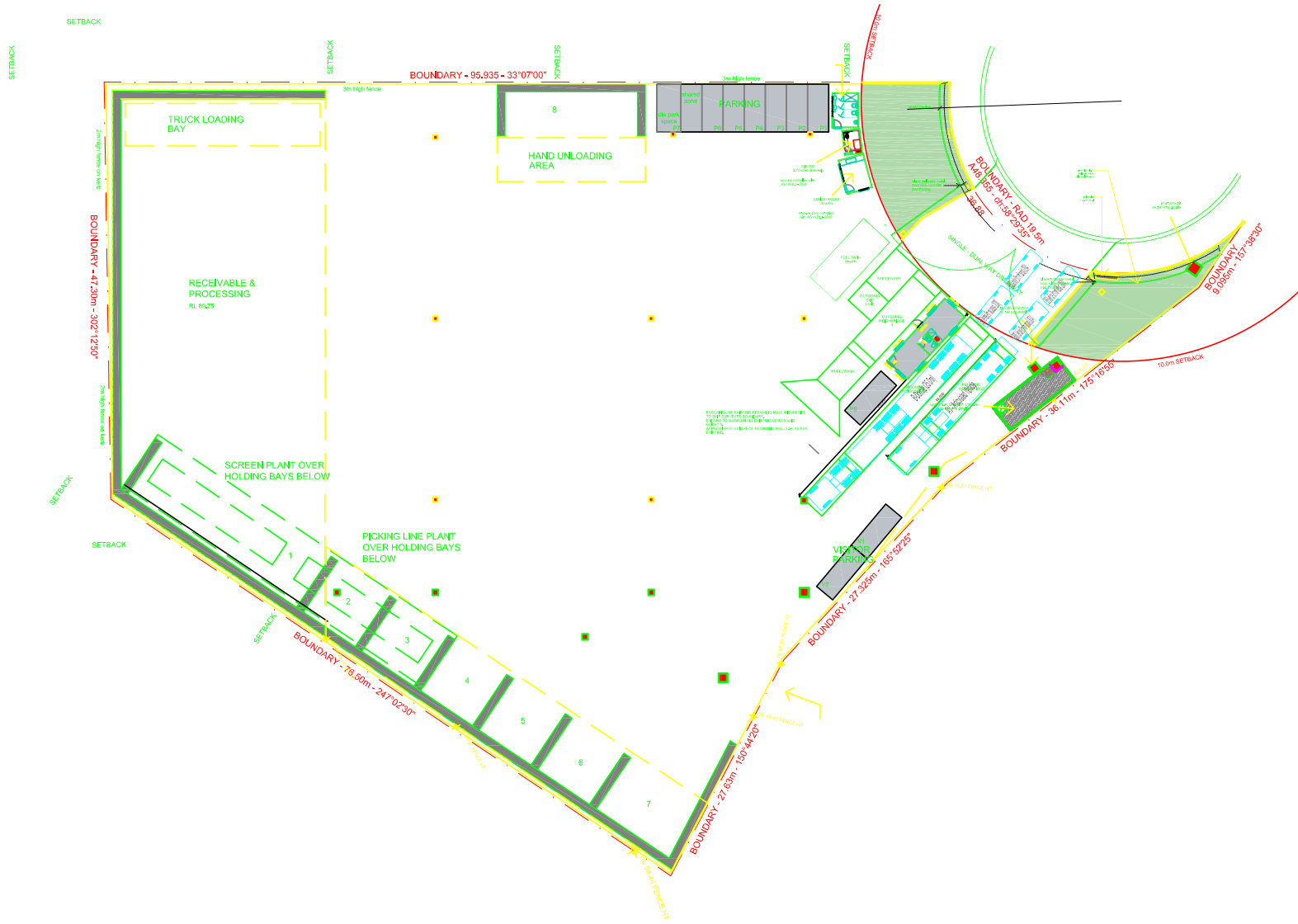
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no. revision note		by. date	
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<div>architect</div> <div>CDArchitects Level 2, 60 Park Street Sydney NSW 2000</div>			
<div>client</div> <div>EMM Consulting Pty Ltd PO Box 21 St Leonards NSW 1590</div>			
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<div>project</div> <div>52 Anderson Road Smeaton Grange NSW 2567</div>			
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no. revision note

by. date

Swept Path Legend:

Wheel Path

Vehicle Body Envelope

Clearance Envelope (300mm)

architect

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Sydney NSW 2000

client

EMM Consulting Pty Ltd  
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scale

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project

52 Anderson Road  
Smeaton Grange NSW 2567

drawing prepared by

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drawing title

Swept Path Analysis  
25m B-Double & 19m AV Design Vehicles  
Queuing space

drawn: BL

checked: AK

date: 05-04-2018

18.061

TX.04

project no.

drawing phase.

drawing no.

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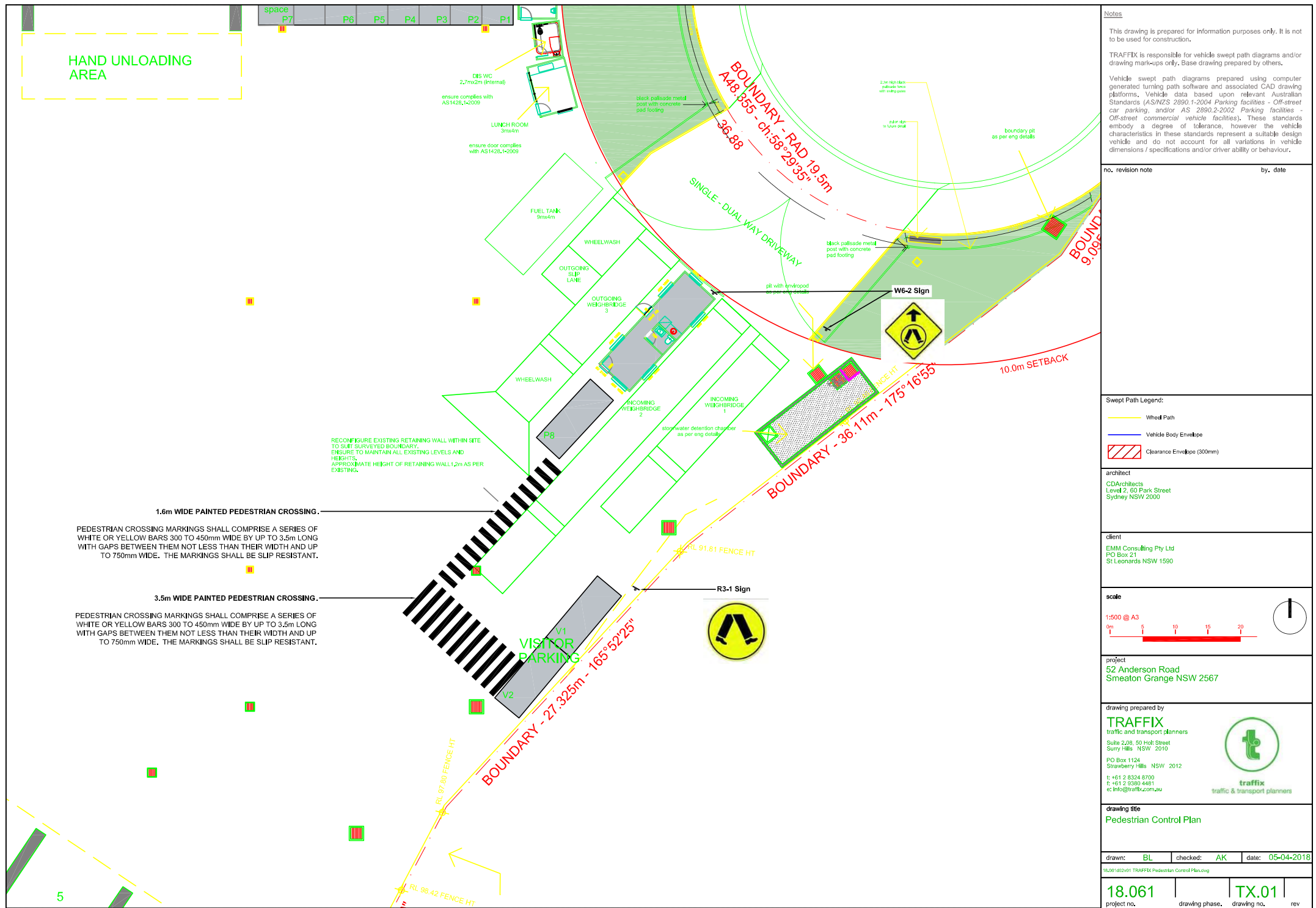


## Appendix D

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### Traffic Control Plan











## Appendix E

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### Driver's Code of Conduct



# DRIVER CODE OF CONDUCT



## SMEATON GRANGE

**MARCH 2018**

**Disclaimer:** Whilst Benedict will make every effort in good faith to communicate the contents of this document to heavy vehicle drivers frequenting the Smeaton Grange Recycling Facility (SGRF), it cannot guarantee enforcement of nor compliance with any specific elements of the document for heavy vehicles which are beyond the SGRF site boundary.

Document Control				
Rev No	Date	Revision Details	Author	Reviewer
01	27/03/2018	Draft	MH	IC

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## 1. INTRODUCTION

### 1.1 BACKGROUND

Benedict Recycling Pty Ltd (Benedict) is the operator of the Smeaton Grange Recycling Facility (SGRF) located at 52 Anderson Road, Smeaton Grange.

The construction and operation of a resource recovery facility to process up to 140,000 tonnes per annum of General Solid Waste (non-putrescible) was approved on the site by the NSW Department of Planning and Environment under application number SSD 7424 on 22 December 2017.

Condition B12 of the development consent for SSD 7424 approving the construction and operation of the facility stipulates that a Driver Code of Conduct be developed as a component of the *Operational Traffic and Pedestrian Management Plan*.

The purpose of this document is to minimise the impact of heavy vehicle traffic associated with SGRF on the local and regional road network, and on other road users.

### 1.2 LOCATION

The facility is located at 52 Anderson Road, Smeaton Grange NSW and is within the local government area of Camden Council. The site occupies Lot 319 in DP 1117230, with a total land area of approximately 6.8 ha.

Figure 1.1 shows the location of the site and the main arterial routes used to access the site. The site is bounded by:

- industrial development to the south-west;
- vegetated creek corridor (Kenny Creek) to the north and east; and
- an easement to the south-east.



Figure 1.1 – Site Location Map



### 1.3 HEAVY VEHICLE TRAFFIC ROUTE

When travelling to SGRF heavy vehicles will typically turn off either Camden Valley Way into Anderson Road, or off Narellan Road into Hartley Road and proceed to Anderson Road via Anzac Avenue. These main haulage routes to and from the site are shown in Figure 1.2 below.

***Queuing and parking on Anderson Road must be avoided.***



Figure 1.2 – Traffic Routes

## 2. DRIVER CODE OF CONDUCT

Benedict Recycling will implement all reasonable and feasible measures to minimise the impact of traffic generated by the operations of SGRF on the efficient and safe operation of the local road network, in particular Anderson Road. As part of their site induction, drivers of heavy vehicles associated with SGRF operations will be notified that queuing or parking on Anderson Road is to be avoided.

All heavy vehicles hauling to and from the SGRF site must:

- i. Have undertaken a site induction carried out by an approved member of the SGRF staff or suitably qualified person under the direction of the SGRF management;
- ii. Hold a valid driver's licence for the class of vehicle that they operate;
- iii. Operate the vehicle in a safe manner within and external to the SGRF site;
- iv. Comply with the direction of authorised site personnel when within the site.

A single page document detailing the *Site Access Traffic Route* and summarising other key aspects of heavy vehicle related compliance will be kept at the site weighbridge for reference purposes. A sample of this document can be found in Appendix A.

## 2.1 HEAVY VEHICLE SPEED

Increased speed means not only an increased risk of collision but also increased severity if an accident does occur. A study undertaken for the Australian Transport Safety Bureau found that travelling 10km/h faster than the average traffic speed can more than double the risk of involvement in a casualty accident (source: Roads and Maritime Services).

There are two (2) types of speeding:

1. Where a heavy vehicle travels faster than the posted speed limit; and
2. Where a driver travels within the speed limit but due to road conditions (e.g. fog or rain) this speed is inappropriate (source: Roads and Maritime Services).

Drivers and truck operators are to be aware of the 'Three Strikes Scheme' introduced by the Roads and Maritime Services (RMS) which applies to all vehicles over 4.5 tonnes. When a heavy vehicle is detected travelling at 15km/h or more over the posted or relevant heavy vehicle speed limit by a mobile Police unit or fixed speed camera, the RMS will record a strike against that vehicle. If three strikes are recorded within a three (3) year period, the RMS will act to suspend the registration of that vehicle (up to three months).

More information is available from the Roads and Maritime Services (RMS) website.

Vehicle speed on public roads is enforced by the NSW Police Service.

The speed limit within the SGRF site is 10 km/h which is to be strictly maintained.

***All heavy vehicle drivers associated with Smeaton Grange Recycling operations are to observe the posted speed limits, with speed adjusted appropriately to suit the road environment and prevailing weather conditions, to comply with the Australian Road Rules. The vehicle speed must be appropriate to ensure the safe movements of the vehicle based on the vehicle configuration.***

## 2.2 HEAVY VEHICLES DRIVER FATIGUE

Fatigue is one of the biggest causes of accidents for heavy vehicle drivers. The Heavy Vehicle Driver Fatigue Reform was therefore developed by the National Transport Commission (NTC) and approved by Ministers from all States and Territories in February 2007.

The Heavy Vehicle Driver Fatigue Law commenced in NSW on 28 September 2008 and applies to trucks and truck combinations over 12 tonne GVM (however there are Ministerial Exemption Notices that can apply).

Under the law, industry has the choice of operating under three (3) fatigue management schemes:

- Standard Hours of Operation
- Basic Fatigue Management (BFM)
- Advanced Fatigue Management (AFM)

***All heavy vehicle drivers associated with Smeaton Grange Recycling operations are to be aware of their adopted fatigue management scheme and operate within its requirements.***

### 2.3 HEAVY VEHICLES COMPRESSION BRAKING

Compression braking by heavy vehicles is a source of irritation to the community generating many complaints especially at night when residents are especially sensitive to noise.

In some instances, compression braking is required for safety reasons however when passing through or adjacent to residential areas a reduction in the speed of the vehicle is recommended to reduce the instances and severity of compression braking.

### 2.4 HEAVY VEHICLE NOISE

The operating hours for transportation of materials to and from SGRF are:

Monday to Friday	6:00am to 10:00pm
Saturday	6:00am to 5:00pm
Sundays	8:00am to 4:00pm

Condition B2 of the development consent stipulates that work outside of the above hours may be undertaken in the following circumstances:

- a) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
- b) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.

### 2.5 LOAD COVERING

Loose material on the road surface has the potential to cause road crashes and vehicle damage.

***All heavy vehicles arriving at or departing from the Smeaton Grange Recycling Facility that are carrying loads of dust generating material must have their loads covered at all times, except during loading and unloading.***

***All care is to be taken to ensure that all loose debris from the vehicle body and wheels is removed prior to leaving the site.***

***Drivers must ensure that following tipping, the vehicle tailgate is locked before leaving the site.***

## 2.6 VEHICLE DEPARTURE AND ARRIVAL

Heavy vehicles travelling in close proximity on a single lane public road can be of concern to light vehicle drivers as well as increasing noise through or adjacent to residential areas. Outgoing traffic leaving the site via the weighbridge is typically separated by a minimum of approximately two (2) minute intervals whilst weighbridge dockets are generated and/or payment is processed.

Condition B55 of the development consent stipulates that all residual waste that is removed from the site must be dispatched outside of peak traffic hours, which are defined in the consent as from 8:00am to 9:00am and from 3:45pm to 4:45pm.

## 2.7 INCIDENT REPORTING

To assist in the orderly resolution of complaints, site management will keep a register itemising all reported incidents relating to complaints in regard to heavy vehicle driver conduct external to the site.

Information to be logged is to include (where possible):

- i. Date
- ii. Location/s
- iii. Driver/heavy vehicle details
- iv. Contact details of person lodging the complaint;
- v. What/when actions were taken to resolve the issue; and
- vi. The response made to the complainant.



## Site Access Traffic Route

## SMEATON GRANGE SITE ACCESS TRAFFIC ROUTE



### ALL CUSTOMERS TO COMPLY WITH THE FOLLOWING:

- **AVOID QUEUING & PARKING** on **ANDERSON ROAD**
- Observe and adhere to all site **SPEED LIMITS**
- **COVER LOADS** at all times except during loading & unloading
- **REMOVE LOOSE DEBRIS** from vehicle body and wheels **BEFORE LEAVING** the site
- Ensure vehicle **TAILGATE** is **LOCKED** before leaving the site





## Appendix F

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### Memorandum of Understanding







## MEMORANDUM OF UNDERSTANDING

Vehicle drivers attending the site must comply with the Driver Code of Conduct by Benedict Recycling Pty Ltd dated March 2017. The Code is summarised as follows:

- a) hold a current appropriate licence for the vehicle they are operating
- b) strictly comply with all traffic regulations
- c) comply with all maximum gazetted speed limits on all roads, or a lesser speed as dictated by the site specific signage
- d) drive in a manner at all times that is in accordance with road conditions
- e) yield "right of way" whenever appropriate to ensure safe passage of other road users
- f) at all times leave adequate distance between vehicles to allow safe passing by other road users, as required
- g) decrease vehicle speeds to minimise dust and noise around private dwellings, road works and stationary vehicles
- h) not use engine braking where noise is likely to adversely impact on residents
- i) remain calm and courteous when in contact with other road users, members of the public, landowners
- j) not use obscene language on radio or intercom communication
- k) accurately complete required paperwork prior to departure
- l) maintain vehicles in a clean and tidy condition
- m) ensure that there is no littering
- n) avoid any other noise emitting activities for example:
  - i. Raised voices should be avoided
  - ii. No shouting or yelling permitted
  - iii. Radio volume to be turned down
- o) truck engines to be turned off during deliveries

I, ..... (Print name) of ..... (company name) hereby agree to abide by the Benedict Recycling Pty Ltd Code of Conduct for the Benedict Recycling Site in Smeaton Grange which is summarised in the above conditions (a)-(o)

*Signed:* .....

*Company:* .....

*Date:* .....



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## **APPENDIX G – OPERATIONAL NOISE AND VIBRATION MANAGEMENT PLAN**

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# Operational noise and vibration management plan

52 Anderson Road, Smeaton Grange

Smeaton Grange Waste Recycling and Transfer Facility

Prepared for Benedict Industries Pty Ltd | 14 March 2018







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## Operational noise and vibration management plan

Smeaton Grange Waste Recycling and Transfer Facility | 52 Anderson Road,  
Smeaton Grange

Prepared for Benedict Industries Pty Ltd | 14 March 2018

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## Operational noise and vibration management plan

Final

Report J15135RP1 | Prepared for Benedict Industries Pty Ltd | 14 March 2018

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Approved by **Najah Ishac**

Position Acoustic Consultant

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Signature



Date 14 March 2018

Date 14 March 2018

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# 1 Introduction

EMM Consulting Pty Limited (EMM) has been engaged by Benedict Industries Pty Ltd (Benedict Industries) to prepare an operational noise and vibration management plan (ONVMP) as required by development consent conditions (DA SSD 7424) for the Waste Recycling and Transfer Facility (the facility) at 52 Anderson Road, Smeaton Grange (the site). The site is located in an industrial area.

The ONVMP provides recommended noise management measures for the operational phase of the facility. The ONVMP has been prepared to address the requirements of the approval conditions, guided by the following guidelines and policies:

- NSW Department of Planning and Environment (DPE) 2017, Development Consent DA SSD 7424 (22 December 2017);
- NSW Environment Protection Authority (EPA) 2000, Industrial Noise Policy (INP);
- NSW Environment Protection Authority (EPA) 2017, Noise Policy for Industry (NPfI);
- NSW Department of Environment and Conservation (DEC) 2006, Assessing Vibration: a technical guideline;
- Australian Standards AS 1055.1-1997 'Acoustics – Description and measurement of environmental noise – General procedures';
- Australian Standards AS IEC 61672.1-2004 'Electroacoustics – Sound level meters – Specifications'; and
- German Standard DIN 4150-3 (2016-12) 'Part 3 Structural Vibration in Buildings. Effects on Structures'.

It is noted that the INP has been replaced by the NPfI. However, the INP continues to be applicable for the assessment of the facility. This is discussed further in Section 5.2.

This ONVMP has been prepared to address the requirements of Condition B9 of the development consent. Table 1.1 lists the requirements of Condition B9 and references the section of the report where each of these requirements has been addressed.

**Table 1.1** Project approval conditions and relevant section of the report

Condition Number	Condition	Relevant report section
A25	The Applicant must ensure that only the plant and equipment listed in Table 2 is used on site.	2.2.2
A26	The Applicant must ensure that all plant and equipment used for the Development is:	
	(a) maintained in a proper and efficient condition; and	2.2.2
	(b) operated in a proper and efficient manner.	2.2.2
B1	The Applicant must comply with the hours of work detailed in Table 3 unless otherwise agreed in writing by the Secretary.	2.2.3

**Table 1.1 Project approval conditions and relevant section of the report**

Condition Number	Condition	Relevant report section
B2	Works outside the hours identified in Condition B1 may be undertaken in the following circumstances:	
	(a) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or	2.2.3
	(b) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.	2.2.3
B5	The Applicant must ensure that noise generated by operation of the Development does not exceed the noise criteria Table 4.	3, 4, 5
B9	Prior to the commencement of operation, the Applicant must prepare an Operational Noise and Vibration Management Plan (ONVMP) for the Development to the satisfaction of the Secretary. The ONVMP must form part of the OEMP required by Condition C4 and be prepared in accordance with Condition C6. The ONVMP must:	
	(a) be prepared by a suitably qualified and experienced noise expert;	1
	(b) describe all noise sources from the Development;	2.2
	(c) describe the measures that will be implemented to minimise the noise emissions in the area including:	
	(i) the management and mitigation measures to be employed on site;	4, 5, 6
	(ii) how the noise impacts of the Development will be minimised during any adverse meteorological conditions or extraordinary events;	4
	(iii) identification of high emissions generating operational activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities; and	2, 4.2
	(d) until the Secretary directs otherwise, include a quarterly monitoring program that evaluates and reports on:	
	(i) compliance with the noise criteria specified in Condition 5;	5
	(ii) the management and actions to be taken to address any exceedances of the criteria specified in Condition B5; and	5, 6
	(iii) the contingency measures that will be implemented in the event management actions are not effective in reducing noise levels to an acceptable level.	6.3
	(e) identify the control measures that will be implemented for each emission source; and	4.2, 5
	(f) defines what constitutes a noise incident, and includes a protocol for identifying noise incidents and notifying the Department and relevant stakeholders of any such incident.	6
B10	If in the opinion of the Secretary the monitoring program required by Condition B9(d) demonstrates systematic exceedances of the noise criteria in Condition B5, the Applicant shall not be permitted to operate on the site between the hours of 10 pm and 7 am.	N/A
B12	Prior to the commencement of the construction, the Applicant must prepare a Driver Code of Conduct and induction training for the Development to minimise road traffic noise. The Applicant must update the Driver Code of Conduct and induction training for construction and operation and must implement the Code of Conduct for the life of the Development.	4.1
B13	The Applicant must ensure that all its vehicles are fitted with a broadband reversing alarm.	4.1
C9	Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report must be supplied to the Department outlining the basic facts. A further detailed report must be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to the Secretary no later than 14 days after the incident or potential incident.	6.1, 6.2

This ONVMP has been prepared by EMM's Senior Acoustic Consultant Teanuanua Villierme. Teanuanua is a Member of the Australian Acoustical Society (MAAS) with over six years experience specialising in noise and vibration assessment and measurement. Teanuanua has extensive project experience working on industrial developments and has conducted attended noise monitoring surveys at numerous industrial sites. Teanuanua's Curriculum Vitae is provided in Appendix A.

Several technical terms are required for the discussion of noise and vibration. These are explained in Appendix B.





## 2 The Facility

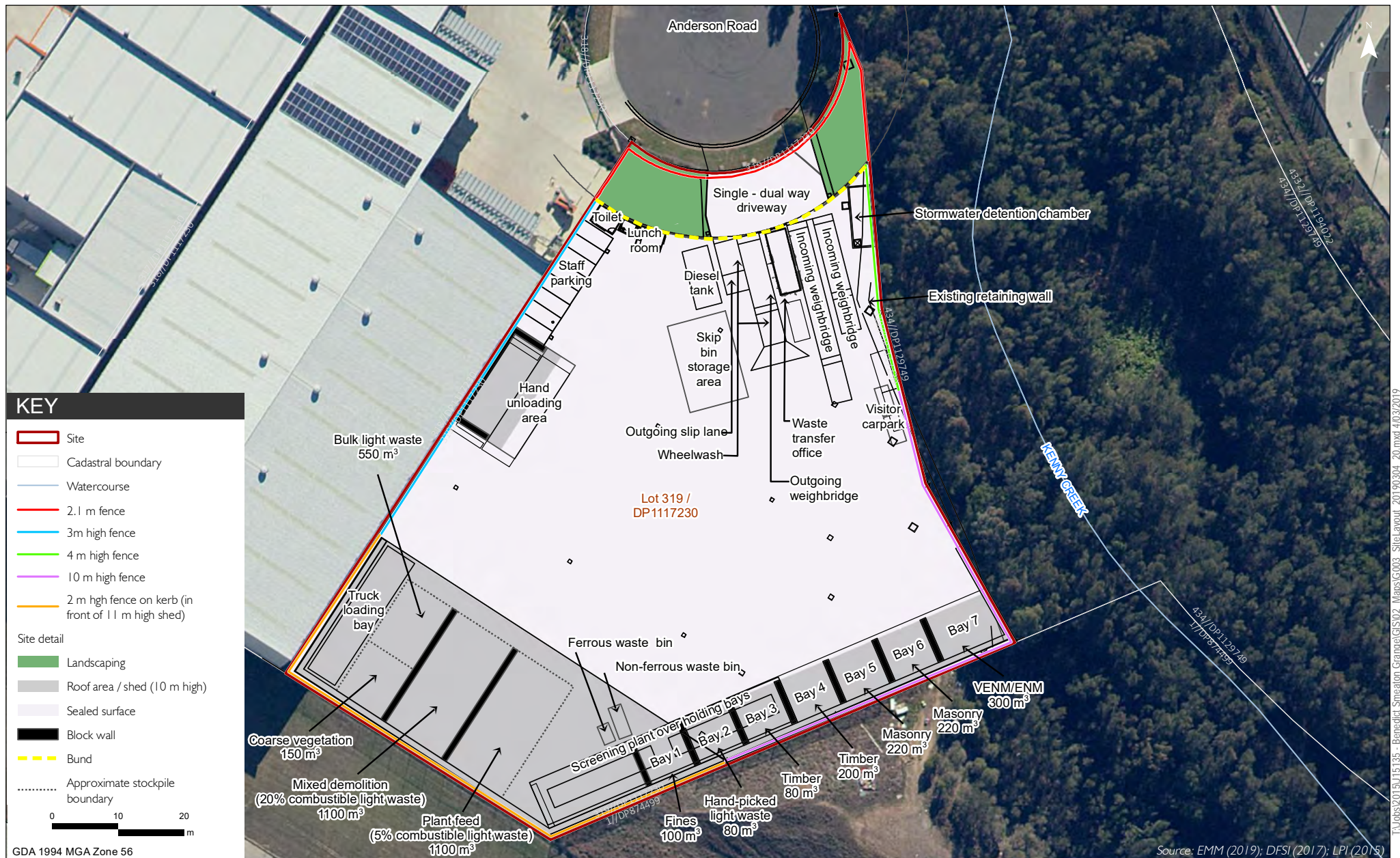
### 2.1 The facility

The facility will operate within the Smeaton Grange industrial precinct on a 6,862 m<sup>2</sup> lot, at 52 Anderson Road, Smeaton Grange.

The facility will comprise the following key elements:

- a waste transfer holding shed (sheet metal construction);
- a segregated heavy waste and stockpiling area in bins;
- a yard, storage and parking area;
- a weighbridge area;
- a sprinkling site irrigation system;
- demountable office and amenities;
- general use areas (including internal roads); and
- a perimeter curb (asphalt or concrete).

Figure 2.1 shows the site layout.



## 2.2 Operation

### 2.2.1 Activities

Operation at the facility will comprise the following activities:

- deliveries of waste material by road trucks;
- sorting and screening of waste material (holding bays);
- processing of waste material at the waste transfer holding shed;
- loading of recycled material into trucks; and
- transport of product off-site by road trucks.

### 2.2.2 Plant and equipment

Plant and equipment used at the facility will be in accordance with development consent Condition A25, as reproduced in Table 2.1.

**Table 2.1** Plant/equipment and activities

Plant and equipment <sup>1</sup>	Number	Typical activities
Plant and equipment used on site		
Front-end loader (eg Volvo L150)	1	Unloading and loading trucks, moving waste and products
Trucks (customers)	5	Delivering waste and dispatching products, returning to/leaving the site
Plant and equipment used in main shed		
13 tonne excavator	1	Sorting waste using a variety of excavator attachments, loading trucks
Screening plant	1	Sorting co-mingled waste
Picking line	1	Sorting co-mingled waste from screening plant

Notes: 1. Or equivalent.

Condition A26 of the development consent states:

The Applicant must ensure that all plant and equipment used for the Development is:

- (a) maintained in a proper and efficient condition; and
- (b) operated in a proper and efficient manner.

Hence, regular maintenance of all plant and equipment will be logged and stored on site available for review at any time.

### 2.2.3 Operating hours

The facility will be operating during the approved hours in accordance with development consent condition B1, as shown in Table 2.2.

**Table 2.2**      **Operating hours**

<b>Activity</b>	<b>Day</b>	<b>Time</b>
Waste deliveries and dispatch	Monday - Friday	6 am to 10 pm
	Saturday	6 am to 5 pm
	Sunday	8 am to 4 pm
Waste processing	Monday - Friday	7 am to 6 pm
	Saturday	7 am to 4 pm

Condition B2 of the development consent states:

Works outside of the hours identified in Condition B1 may be undertaken in the following circumstances:

- (a) for the delivery of material required outside these hours by the NSW Police Force or other authorities for safety reasons; or
- (b) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.

## 2.3 Sensitive receivers

The nearest noise sensitive receivers most likely to be affected by operational noise from the site are residences located approximately 120 m to the south-east. There are also adjacent industrial premises including an existing large industrial warehouse on the adjacent lot to the south-west and a light industrial building to the north.

Figure 2.2 shows the site boundary and nearest sensitive receivers.





KEY

- Sensitive receptor
- Site
- Cadastre

Site boundary and sensitive receivers

Waste Recycling and transfer facility  
52 Anderson Road, Smeaton Grange

Operational noise and  
vibration management plan

Figure 2.2







### 3 Noise criteria

Noise criteria for the facility are stipulated in Table 4 of development consent Condition B5. The noise criteria are specified for the day, evening and night periods and apply at all residential receivers which have the potential to be impacted by operational noise from the facility (refer to Figure 2.2 for the nearest residential receivers). The noise criteria for the facility are reproduced in Table 3.1.

**Table 3.1 Noise criteria**

Residential receiver	Assessment period	Noise level $L_{Aeq,15min}$ , dB
All	Day <sup>1</sup>	40
	Evening <sup>2</sup>	40
	Night <sup>3</sup>	40

Notes: 1. Day period is between 7 am-6 pm Monday to Saturday and 8 am-6 pm Sundays and Public Holidays.  
2. Evening period is the period between 6 pm-10 pm.  
3. Night period is the remaining period.

Table note of Table 4 of the development consent states:

Noise generated by the Development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Refer to the plan in Appendix C for the location of residential receivers.

All compliance monitoring will adhere to the requirements of the EPA's policies and guidelines.



## 4 Mitigation and management

Based on the noise assessment report *Noise Impact Assessment – Waste Recycling and Transfer Facility – 52 Anderson Road, Smeaton Grange* prepared by EMM in June 2016 for the Environmental Impact Assessment (EIS), operational noise levels from the facility are expected to be below the relevant criteria (refer to Table 4.1) at all residential receivers during worst case meteorological conditions. Notwithstanding, site-specific noise mitigation and management measures that have been adopted at the facility are provided in the following sections.

### 4.1 Development consent conditions (DA SSD 7424)

To mitigate operational noise from the facility, the following mitigation measures will be adopted:

- acoustic fencing and structures (shed) constructed along the site boundaries (as per Appendix A of the development consent) mitigate noise levels at the nearest residential receivers. Noise modelling has shown that the acoustic fencing and structures would provide a reduction of operational noise levels to below the relevant criteria at all residential receivers;
- the facility does not operate between 10 pm and 6 am, and waste processing is limited to the daytime hours (refer to Table 2.2). Refer to Section 2.2.3 for exempt circumstances;
- a Driver Code of Conduct and induction training will be prepared and implemented to minimise road traffic noise during operation, and as required, be updated and implemented for the life of the development;
- quieter plant and equipment (in accordance with Table 2.1) will be selected based on the optimal power and size to most efficiently perform the required tasks, including installing best-practice noise suppression equipment where possible;
- excavator, heavies sorter (screen) and picking line will be located inside the shed;
- all plant and equipment will be regularly maintained in a proper and efficient condition and serviced, in accordance with manufacturer specifications;
- all plant and equipment will be operated in a proper and efficient manner;
- all plant and equipment will be switched off when not in use;
- all site vehicles will be fitted with a broadband reversing alarm ("growlers");
- a site layout to minimise on-site mobile plant and vehicle reversing will be adopted;
- vehicle parking or queuing on public roads will be minimised;
- all vehicles will enter and exit the site in a forward direction;
- loading and unloading of materials is to be carried out in on-site designated areas;
- material drop heights and dragging along the ground will be minimised;
- site contact details will be provided at the front of the site and on the Benedict Industries website;

- a noise complaints management system will be implemented to handle complaints promptly and will include a complaint register. This is discussed further in Section 4.3;
- noise monitoring will be completed at the closest residences to the south-east (R9) and to the north-east (R22) or at equivalent (representative) locations within 3, 6 and 12 months of the start of operations. Compliance noise monitoring will be on-going and completed on a quarterly basis at representative monitoring locations. This is discussed further in Section 5; and
- management actions will be taken to address any exceedances of the criteria (refer to Table 4.1). Contingency measures will be implemented in the event management actions are not effective in reducing noise levels to an acceptable level. This is discussed further in Section 5.

## 4.2 High noise emission operational activities and noise control

Operational noise sources on-site with the most potential to impact the sensitive receivers include the front-end loader, excavator, heavies sorter (screen), picking line and road trucks. To minimise the risk of noise impacts from high emission activities associated with these sources, the following control measures will be adopted:

- the excavator, heavies sorter (screen) and picking line will be located inside the shed;
- loading of trucks will be carried out within the truck loading located inside the shed;
- unloading of materials from trucks will be carried out at the designated bay areas;
- unnecessary vehicle movements will be minimised, including trucks reversing; and
- the front-end loader will be turned off when not in use.

## 4.3 Management measures during adverse meteorological conditions and extraordinary events

The INP discusses the effects that adverse meteorological conditions such as temperature inversion conditions and high winds can have on noise levels from a development. Based on the EMM noise assessment report (2016), temperature inversion conditions may occur in the site area in the morning shoulder period in the winter months and hence may increase noise levels from the facility. The same can occur during high winds blowing from source-to-receiver direction (ie from a westerly direction), where noise levels from the facility may increase.

The nearest Bureau of Meteorology automatic weather station at Camden Airport (station 068192) will be used to inform site personnel on the daily weather conditions. Management measures will be implemented at the facility during adverse meteorological conditions and extraordinary events. Primarily, the management measures listed in Section 4.1 will be re-enforced. Further, supplementary measures will be developed on an on-going basis and implemented for the life of the development.

## 4.4 Complaints management system

A complaint management system to engage in active community consultation and maintain positive relations with local residents will be implemented for the life of the development. The purpose of this system is to minimise noise complaints by addressing their concerns upfront.

To effectively manage any requests for information or respond to any public concerns in relation to noise and/or vibration from site operation, the following systems shall be maintained:

- the proponent will supply the relevant governing authorities with the names and appropriate contact numbers for the site manager and one other senior staff member;
- an emergency contact phone number will be put in place to allow contact with the site manager in relation to any environmental matter including those concerned with noise and vibration issues. This phone number will be clearly displayed on the site fencing;
- a feedback form will also be available on Benedict Industries website;
- the proponent will use a complaint handling system to monitor environmental noise and vibration complaints. All information relating to such complaints will be kept in a register. The register will include but not be restricted to the following information:
  - date and time of complaint;
  - complainant details (ie full name, address and contact details where these have been voluntarily provided);
  - nature and source of complaint;
  - action taken; and
  - follow-up with complainant.
- the complaint register will be made available to any relevant regulatory authority upon request; and
- the site manager will endeavour to respond to any complaint within one working day of its receipt.

A response strategy, which would be adopted following complaints in relation to noise and/or vibration, is discussed in Section 6.3.



## 5 Noise monitoring

### 5.1 Objective

The noise monitoring program is designed to verify that noise emissions from the facility complies with the relevant noise criteria at the most affected residential receivers.

Condition B9(d) of the development consent states:

until the Secretary directs otherwise, include a quarterly monitoring program that evaluates and reports on:

- (i) compliance with the noise criteria specified in Condition B5;
- (ii) the management actions to be taken to address any exceedances of the criteria specified in Condition B5; and
- (iii) the contingency measures that will be implemented in the event management actions are not effective in reducing noise levels to an acceptable level.

### 5.2 Noise monitoring standards

Noise monitoring will be undertaken in accordance with the relevant Australian standards and EPA guidelines including:

- AS 1055.1-1997 'Acoustics – Description and measurement of environmental noise – General procedures';
- AS IEC 61672.1-2004 'Electroacoustics – Sound level meters – Specifications';
- INP (EPA 2000) and Application Notes; and
- NPfl (EPA 2017).

It is noted that the INP has been replaced by the NPfl. However, the INP continues to apply in accordance with the EPA's *Implementation and transitional arrangements for the Noise Policy for Industry* (2017), as follows:

- where the INP is referenced in existing statutory instruments (such as consents and licences);
- for industrial development applications approved prior to the release of the NPfl in October 2017;
- for industrial development applications where the Secretary's Environmental Assessment Requirements (SEARs) were issued prior to the release of the NPfl, up to two years following the date of issue of the SEARs; or
- if SEARs are not issued (that is, development consent that is not State Significant Development or Infrastructure), for industrial development applications where it can be demonstrated that the environmental assessment is well progressed before release of the NPfl.



Further, the INP Application Notes state that Section 4 of the INP has been withdrawn and the modifying factor adjustments outlined in Fact Sheet C of the NPfl are to be used when assessing potential annoying characteristics of a noise source. Fact sheet C of the NPfl (EPA 2017) provides guidelines for applying corrections to account for annoying noise characteristics such as tonal noise and low frequency noise.

The INP and Fact Sheet C of the NPfl were adopted for the purpose of the ONVMP.

All acoustic instrumentation used for monitoring under the noise monitoring program will have current NATA or manufacturer calibration certificates as per the relevant Australian standards.

### 5.3 Noise monitoring program

The attended noise monitoring will be completed on a quarterly basis (as a minimum) to verify that noise emissions from the facility satisfy the relevant noise criteria at representative residential receivers. The attended noise monitoring program will be used to:

- estimate the site noise contribution from the measured noise levels;
- determine the individual noise sources contributing to the ambient noise environment wherever possible;
- determine whether a correction for annoying noise characteristics should be applied to the site noise level before comparison with the relevant noise criteria in accordance with the NPfl; and
- gain an understanding of the effects of meteorological conditions on the propagation of noise from site to surrounding residential receivers.

The development consent does not specify the assessment period in which the monitoring need to be completed. The attended noise monitoring which must include, as a minimum, one 15-minute measurement at each of the representative receivers will be completed during the morning shoulder (6 am-7 am) and day (7 am-6 pm) periods, to verify noise from the facility during the most critical morning shoulder period (deliveries and dispatch only) and typical daytime operations.

For each 15-minute attended noise monitoring measurement, the following information will be recorded:

- name of monitoring personnel;
- monitoring location;
- date(s) and time(s) at which the monitoring measurement started ended at each location;
- height of the microphone above the ground and, if relevant, distances to building facades or property boundaries (if monitoring cannot be completed within the property boundary);
- quantitative meteorological data such as wind speed (including the height above ground at which the measurement was taken), wind direction, temperature and humidity;
- qualitative meteorological information such as cloud cover, fog or rainfall;
- instrument type and in-field calibration details before and after the monitoring period;
- the  $L_{Aeq,15min}$  noise level for the 15-minute period;

- statistical noise level descriptors over the 15-minute interval:  $L_{Amin}$ ,  $L_{A90}$ ,  $L_{A10}$ ,  $L_{A1}$  and  $L_{Amax}$ ;
- notes that identify the noise sources that contribute to the overall noise environment;
- an estimate of the noise contribution from the facility and from other identifiable noise sources;
- measurement in one-third octave bands from 10 Hz to 8 kHz inclusive (or a broader range of bands) for the 15-minute interval to assess if site noise exhibit tonal characteristics that may require the application of a correction for annoying noise characteristics in accordance with Fact Sheet C of the NPfI. The method for determining if a correction for tonal noise is applicable is presented in Section 5.6;
- measurement of C-weighted and A-weighted site noise levels to identify the likely presence of low frequency noise in accordance with Fact Sheet C of the NPfI. The method for determining if a correction for low frequency noise is applicable is presented in Section 5.6;
- data suitable for assessing the relative contribution of site noise to the overall noise level being measured by using a low-pass filter with a shoulder frequency of 630 Hz; and
- recommendations or comments where considered appropriate.

In accordance with the methodology outlined in Section 3 of the INP (EPA 2000), if any of the data in a 15 minute period is affected by rain or wind speeds in excess of 3 m/s, and where possible, another entire 15 minute period of data unaffected by rain or adverse wind conditions shall be undertaken.

## 5.4 Instrumentation

All noise monitoring instrumentation shall meet the requirements of AS IEC 61672.1-2004 and carry current NATA or manufacturer calibration certificates. Instrument in-field calibration shall be checked before and after each survey, with the variation in calibrated levels not exceeding  $\pm 0.5$  dB.

The sound level meter will be programmed to record statistical noise level indices continuously for each 15-minute interval, including  $L_{A1}$ ,  $L_{A10}$ ,  $L_{A90}$ ,  $L_{Amin}$ ,  $L_{Aeq}$  and  $L_{Amax}$ , using 'fast' time response.

## 5.5 Meteorological parameters

The meteorological conditions during the monitoring survey will be recorded including wind speed (including the height above ground at which the measurement was taken), wind direction, temperature, humidity, cloud cover and the presence of fog and rain (if any).

Table note of Table 4 of the development consent states:

Noise generated by the Development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. Refer to the plan in Appendix C for the location of residential receivers.

The meteorological conditions will be used to determine if the noise criteria (refer to Table 4.1) apply in accordance with the INP. The noise criteria apply during all meteorological conditions except during the following conditions:

- rain;

- wind speeds greater than 3 m/s (at 10 m above ground level); or
- temperature inversion conditions greater than 3 degrees Celsius/100 m.

## 5.6 Corrections for annoying noise characteristics

The INP application notes state that Section 4 of the INP has been withdrawn and the corrections outlined in Fact Sheet C of the NPfI are to be used when assessing the characteristics of a noise source. The NPfI specifies corrections for noise with annoying characteristics such as tonal noise and low frequency noise. These are discussed in the following sections.

### 5.6.1 Tonal noise

Tonal noise can be defined as noise levels containing a prominent frequency and characterised by a definite pitch. Examples of tonal noise sources include ventilation fans, reversing beepers or alarms. The method for assessing the presence of tonal noise involves comparing differences in noise levels between neighbouring one-third octave centre frequency bands.

Fact sheet C of the NPfI provides guidelines for applying a correction to account for tonal noise emissions. The NPfI specifies that a 5 dB positive adjustment is applicable where the level of any of the one-third octave bands exceeds the level of both adjacent bands by:

- 5 dB or more if the centre frequency of the band containing the tone is in the range 500-10,000 Hz;
- 8 dB or more if the centre frequency of the band containing the tone is in the range 160-400 Hz; or
- 15 dB or more if the centre frequency of the band containing the tone is in the range 25-125 Hz.

### 5.6.2 Low frequency noise

Low frequency noise can be characterised as noise containing dominant energy within the low frequency range (ie less than 200 Hz). Examples of low frequency noise sources can include screens and centrifuges in coal washeries, as well as pumps, fans, boilers, ventilation plant, electrical installations and wind turbines.

Fact sheet C of the NPfI provides guidelines for applying a correction to account for low frequency noise emissions. The NPfI specifies that a difference of 15 dB or more between site 'C-weighted' and site 'A-weighted' noise emission levels identifies the potential for an unbalanced spectrum and potential increased annoyance. Where a difference of 15 dB or more between site 'C-weighted' and site 'A-weighted' noise emission levels is identified, the measured one-third octave noise levels should be compared to the values in Table C2 of the NPfI, which has been reproduced in Table 5.1.

**Table 5.1 One-third octave low-frequency noise thresholds**

One-third octave $L_{Zeq,15min}$ threshold level													
Frequency (Hz)	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160
dB (Z)	92	89	86	77	69	61	54	50	50	48	48	46	44

The following correction is to be applied where the site 'C-weighted' minus site 'A-weighted' noise emission level is 15 dB or more and:

- where any of the one-third octave noise levels in Table 5.1 are exceeded by up to and including 5 dB and cannot be mitigated, a 2 dB positive adjustment to measured A-weighted levels applies for the evening/night period; or
- where any of the one-third octave noise levels in Table 5.1 are exceeded by more than 5 dB and cannot be mitigated, a 5 dB positive adjustment to measured A-weighted levels applies for the evening/night period and a 2 dB positive adjustment to measured A-weighted levels applies for the day period.

Hence, where possible throughout each survey the difference between site 'C-weighted' and site 'A-weighted' noise emission levels will be estimated by the operator by matching audible sounds with the response of the analyser ( $L_{Ceq} - L_{Aeq}$ ). Where this is deemed to be 15 dB or greater, the measured one-third octave frequencies will be compared to the values in Table 5.1 to identify the relevant correction (if applicable). It is of note that the NPfI states that low frequency noise correction does not apply during adverse meteorological conditions, including during wind speeds above 3 m/s at 10 m above ground level, stability category F with wind speeds above 2 m/s at 10 m above ground level, or during stability category G.

## 5.7 Data analysis

The  $L_{Aeq,15min}$  noise level contribution from the facility as well as the overall ambient noise levels together with the weather and site operating conditions shall be reported on a quarterly basis.

The contributed noise emissions from operations at the facility shall be evaluated and assessed against the noise level criteria given in Table 4 of development consent Condition B5 (refer to Table 3.1). Compliance may be determined by:

- post analysis of data (including through the review of audio recordings);
- direct measurement against the  $L_{Aeq,15min}$  criteria;
- operator estimated  $L_{Aeq,15min}$  contribution;
- by calculation from near field measurements;
- by measurement at a representative location; or
- a combination of any or all the above methods as approved by the EPA or in accordance with the INP or NPfI as relevant.

## 5.8 Noise monitoring report

All routine monitoring results will be documented and reported initially on a quarterly basis.

Quarterly reports should consist of the following information:

- summary of all attended noise monitoring results;
- measured, calculated and/or operator estimated site  $L_{Aeq,15min}$  contributed noise levels for each monitoring location;
- statement of compliance/non-compliance; and

- details of any complaints relating to noise and their state of resolution.

The noise monitoring contractor undertaking the monitoring on behalf of Benedict Industries will provide the site representative with a monitoring report outlining the results and outcome of the survey.

The site representative will review the monitoring report provided by the contractor to assess compliance with the criteria outlined in Table 4 of development consent Condition B5 (refer to Table 3.1). Noise monitoring results will be posted on the Benedict Industries website.

## 6 Noise incident

### 6.1 Definition

A noise incident can be defined as noise emissions from the facility causing or threatening to cause material harm at surrounding receivers, and/or an exceedance of the noise criteria. A noise incident will be deemed to have occurred if a non-compliance of the noise criteria provided in Table 3.1 has been recorded during noise monitoring.

### 6.2 Reporting

Condition C9 of the development consent states:

Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report must be supplied to the Department outlining the basic facts. A further detailed report must be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to the Secretary no later than 14 days after the incident or potential incident.

The Department will be notified should a non-compliance related to noise has been identified during the monitoring program, in accordance with Condition C9 of the development consent.

### 6.3 Response strategy

In the event of an exceedance or potential exceedance of the relevant noise criteria, a response strategy will be followed. The response measures will include:

- identifying the noise source that has caused the exceedance. This would be done in consultation with the complainant and by conducting a noise survey to quantify the level of disturbance. Additional noise measurement methods such as near-field attended monitoring may be utilised to investigate where site noise emissions are difficult to quantify at the representative residences. The noise, weather and plant operating data shall be documented so that the matter can be investigated and appropriate actions undertaken accordingly;
- reassessing the Best Management Practice (BMP) mitigation techniques employed at the site to reduce the impact of the noise source in question;
- following the adoption of additional or alternative mitigation, a further noise and/or vibration survey would be conducted at the complainant's location to demonstrate the effectiveness of the mitigation strategy; and
- if a management strategy is unsuccessful, re-evaluate the Best Available Technology Economically Achievable (BATEA) mitigation strategies being used.

## 6.4 Recording noise incidents

Benedict Industries will keep a record of any noise and/or vibration incidents in relation to operations at the facility.



## 7 Review and improvement

A comprehensive review of the complaint and incident records will be completed as part of the project annual review within 12 months from the commencement of operation, and each year thereafter, and will be provided to the Department.

The noise monitoring program is to be reviewed at least every three years, when updates to the plan are required, or as directed by the Secretary in consultation with other agencies. The review process is to reflect changes in environmental legislation and guidelines, and changes in technology or operational procedures.

Review of this ONVMP will also take place if monitoring records indicate that it is warranted or in the event of any significant change to noise quality management procedures at the facility. Any modifications to the ONVMP will be undertaken in consultation with the appropriate government agencies.



## References

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NSW Department of Planning and Environment 2017, Development Consent DA SSD 7424 (approved 22 December 2017);

NSW Environment Protection Authority 2000, Industrial Noise Policy;

NSW Environment Protection Authority 2017, Noise Policy for Industry;

NSW Department of Environment and Conservation 2006, Assessing Vibration: a technical guideline;

Australian Standards AS 1055.1-1997 'Acoustics – Description and measurement of environmental noise – General procedures';

Australian Standards AS IEC 61672.1-2004 'Electroacoustics – Sound level meters – Specifications'; and

German Standard DIN 4150-3 (2016-12) 'Part 3 Structural Vibration in Buildings. Effects on Structures'.



## Appendix A

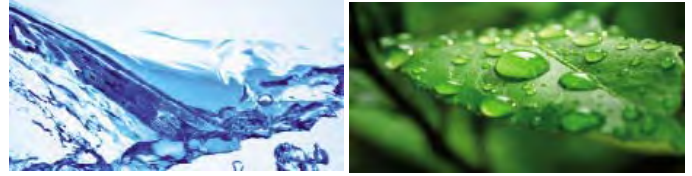
### Curriculum Vitae - Teanuanua Villierme

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# Curriculum vitae

## Teanuanua Villierme



Senior Acoustic Consultant

Teanuanua is an acoustic consultant whose primary focus has been in the fields of environmental, building and occupational noise. Teanuanua is based in EMM's Newcastle Office and has extensive consulting experience within the construction, transport, extractive, waste and remediation and renewable industries.

His project experience includes the preparation of noise and vibration impact assessments for a number of clients within various industries, for mines, quarries, concrete batching plant and asphalt plant sites, waste recycling sites, gas plant facilities, residential developments, child care centres and animal boarding facilities.

Teanuanua also has experience in noise monitoring and sound power testing at numerous mines, quarries, concrete batching plant and asphalt plant sites. These projects allowed him to work in the fields of environmental monitoring and reporting under dynamic conditions.

His skill-set includes environmental, building, occupational, road traffic and rail noise monitoring, noise modelling and sound power testing.

### Qualifications and memberships

- Masters of Engineering Management, University of Newcastle, 2011
- Bachelor of Applied Science, Southern Cross University, 2009
- Member of the Australian Acoustical Society (MAAS)

### Career

- EMM Consulting, 2012–present
- Project Manager, Australian Laboratories Services, 2011
- Environmental Officer, Environmental Resources Management, 2010
- Ecologist, Greenloaning Biostudies, 2009

### Representative experience

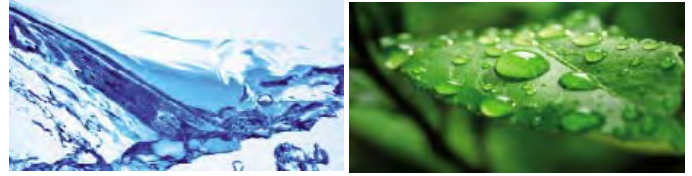
#### Environmental impact assessments (noise and vibration)

- Marsden Park Warehousing and Industrial Estate, Marsden Park NSW (Logos Property)
- Hay Sun Farm, Balranald NSW (Overland Sun Farming)
- Hillston Solar Farm, Balranald NSW (Overland Sun Farming)
- Limondale Solar Farm, Balranald NSW (Overland Sun Farming)
- Rasp Mine, Broken Hill NSW (CBH Resources)
- Willow Tree Gravels Quarry, Willow Tree NSW (Willow Tree Gravels)
- Teven Quarry, Teven NSW (Boral)
- Muswellbrook Coal Mine, Muswellbrook NSW (Muswellbrook Coal)
- Johns River Quarry, Johns River NSW (Boral)
- Mayfield West Recycling Facility, Mayfield West NSW (Benedict Industries)



# Curriculum vitae

## Teanuanua Villierme



### Senior Acoustic Consultant

- Gunlake Quarry, Marulan NSW (Gunlake)
- Clermont Open Cut, Clermont QLD (Glencore)
- Tritton Copper Mine, Hermidale NSW (Tritton Resources)
- Dubbo Zirconia Project, Toongi NSW (Alkane Resources)
- Chain Valley Colliery, Chain Valley Bay NSW (LakeCoal)
- Talbragar Quarry, Talbragar NSW (Boral)
- Seaham Quarry, Seaham NSW (Boral)
- Hunter Valley Operations, Hunter Valley NSW (Yancoal)
- Bulahdelah Bypass Upgrade, Bulahdelah NSW, (Boulderstone)

### Peer review

- Hunter 8 Maitland to Minimbah Third Track Project, independent peer review of rail noise attenuation, NSW (Australian Rail Track Corporation)

### Noise monitoring

- Mangoola Open Cut, Hunter Valley NSW (Glencore)
- Clermont Open Cut, Clermont QLD (Glencore)
- Tumut Pulp & Paper Mill, Tumut NSW (Visy)
- Macksville Quarry, Macksville NSW (Boral)
- East Guyong Quarry, Guyong NSW (Hanson Construction Material)
- Peats Ridge Quarry, Peats Ridge NSW (Boral)
- Wave Hill Quarry, Narrabri NSW (Boral)
- Burrier Quarry, Burrier NSW (Boral)
- Allandale Quarry, Allandale NSW (Quarry Products Newcastle)
- North West Rail Link Early Works, Sydney NSW (Boulderstone)
- Mount Thorley Warkworth Mine, Hunter Valley NSW (Yancoal)

## Appendix B

### Glossary of acoustic terms

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A number of technical terms are required for the discussion of noise. These are explained in Table B.1.

**Table B.1**      **Glossary of acoustic terms**

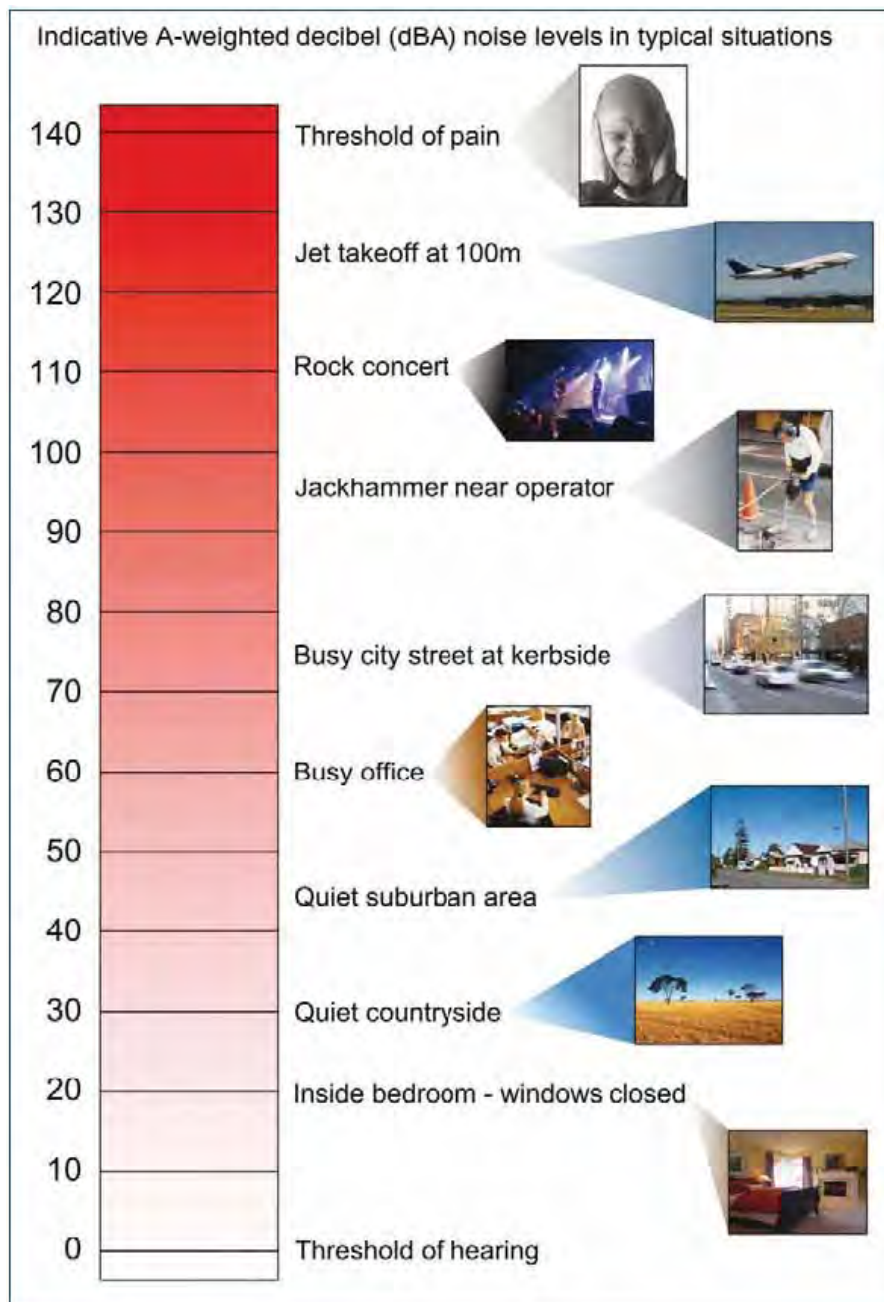
Term	Description
dB	Noise is measured in units called decibels (dB). There are several scales for describing noise, the most common being the 'A-weighted' scale. This attempts to closely approximate the frequency response of the human ear.
DEC	The NSW Department of Environment and Conservation
DPE	The NSW Department of Planning and Environment
DECCW	The NSW Department of Environment, Climate Change and Water
EPA	The NSW Environment Protection Authority
INP	The NSW Industrial Noise Policy
$L_{A1}$	The A-weighted noise level exceeded for 1% of the time.
$L_{A10}$	The noise level which is exceeded 10% of the time. It is roughly equivalent to the average of maximum noise level.
$L_{A90}$	The noise level that is exceeded 90% of the time. Commonly referred to as the background noise level.
$L_{Aeq}$	The energy average noise from a source. This is the equivalent continuous sound pressure level over a given period. The $L_{eq,15 \text{ minute}}$ descriptor refers to an $L_{eq}$ noise level measured over a 15-minute period.
$L_{Amax}$	The maximum root mean squared sound pressure level received at the microphone during a measuring interval.
NPfI	The NSW Noise Policy for Industry

It is useful to have an appreciation of decibels, the unit of noise measurement. Table B.2 gives an indication as to what an average person perceives about changes in noise levels:

**Table B.2**      **Perceived change in noise**

Change in sound pressure level (dB)	Perceived change in noise
1 to 2	typically indiscernible
3	just perceptible
5	noticeable difference
10	twice (or half) as loud
15	large change
20	four times (or quarter) as loud

Examples of common noise levels are provided in Figure B.1.



Source: NSW Road Noise Policy (DECCW 2011)

Figure B.1 Common noise levels





#### SYDNEY

Ground floor, Suite 01, 20 Chandos Street  
St Leonards, New South Wales, 2065  
T 02 9493 9500 F 02 9493 9599

#### NEWCASTLE

Level 1, Suite 6, 146 Hunter Street  
Newcastle, New South Wales, 2300  
T 02 4907 4800 F 02 4907 4899

#### BRISBANE

Level 4, Suite 01, 87 Wickham Terrace  
Spring Hill, Queensland, 4000  
T 07 3839 1800 F 07 3839 1866



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## **APPENDIX H – EMERGENCY MANAGEMENT PLAN**

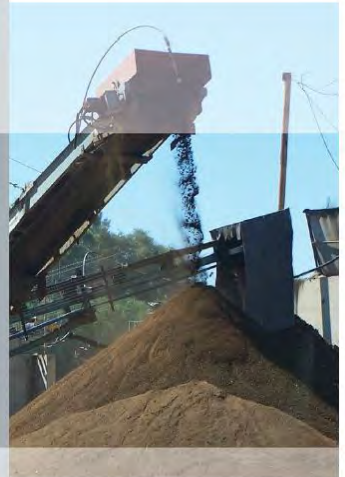
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# EMERGENCY MANAGEMENT PLAN

**BENEDICT  
RECYCLING  
SMEATON GRANGE**



# Emergency Management Plan – Smeaton Grange

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## Emergency Management Plan – Smeaton Grange

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# Emergency Management Plan – Smeaton Grange

## 1. INTRODUCTION

In the interests of the health and safety of all staff, contractors, customers and visitors on site, it is important that we establish procedures to be followed in an emergency. This is known as the Emergency Management Plan for the site. During normal business hours, staff and contractors are to contact the Chief Warden/Site Manager in relation to any security/emergency matters

All staff and contractors on site outside of business hours should report their presence to the Site Manager. If a staff member or contractor is concerned for their personal safety whilst on site at these times, they should contact the Site Manager.

Please take the time to read this document thoroughly and become familiar with what action you need to take in an emergency. Your knowledge of the site and how to contact the Chief Warden or the Site Manager could save lives or minimise damage and loss of property.

## 2. SITE LOCATION

**Benedict Recycling – Smeaton Grange**  
52 Anderson Road, Smeaton Grange NSW 2567

### Directions

Turn into Anderson Road from Camden Valley Way and proceed through three (3) roundabout intersections to the end of the road. The site is at the end of the cul-de-sac.

**GPS Coordinates: 34°2'18.9" South 150°45'58.1" East**

## 3. COMPANY CONTACTS

<i>To be confirmed (TBC)</i> – Site Manager	Mob: TBC
Ian Collier – Recycling General Manager	Mob: 0431 379 669
Peter Murdocca – WHS Manager	Mob: 0448 268 395
Chief Warden <i>TBC</i> – Plant Operator	Mob: TBC
Weighbridge	Landline: TBC

## Emergency Management Plan – Smeaton Grange

### 4. EMERGENCY CONTACTS

Service	Phone	Service	Phone
Police	000 or 112	State Emergency Service	132 500
Fire	000 or 112	Telstra	132 000
Ambulance	000 or 112	Bush Fire Information Line:	1800 679 737
Campbelltown Hospital	(02) 4634 3000	Fire & Rescue NSW	(02) 4647 7266
Poisons Information	13 11 26	EPA Pollution Hotline	131 555
WIRES	1300 094 737	SafeWork NSW	13 10 50
Neighbour	Phone	Neighbour	Phone
Coles Distribution Centre (80 Hartley Road)  Site contact – TBC	(02) 4648 9311	TBC Site contact - TBC	TBC
Metal Roofing & Building Supplies (50 Anderson Road)  Site contact – TBC	(02) 4648 9100	TBC Site contact - TBC	TBC
Amazon Data Center (42a Bluett Drive)  Site contact – TBC	TBC	TBC Site contact - TBC	TBC



## Emergency Management Plan – Smeaton Grange

### 5. EMERGENCY CONTROL ORGANISATION

An Emergency Control Organisation (ECO) has been established for the site. The ECO for Benedict Recycling Smeaton Grange is:

<b>Chief Warden</b>	Red Cap <i>Labelled 'Chief Warden'</i>	<i>TBC</i>
<b>Area Warden</b>	White Cap <i>Labelled 'Warden'</i>	<i>TBC</i>
<b>Weighbridge</b>	n/a	<i>TBC</i>

The ECO has responsibility for:

- Ensuring the ECO is suitably staffed by persons who can carry out the duties of wardens on site. As far as possible, each area of site should be represented by trained wardens to provide safety for the staff of their area. Staff are invited to participate in the ECO by the Site Manager
- Participating in periodic meetings of the ECO. These meetings are convened to discuss improvements to site in the event of an emergency situation.
- Co-ordinating a full evacuation exercise which is held annually for the ECO, staff, contractors, customers and visitors on site to practise the emergency procedures. All staff members are expected to participate in the exercise so that they are familiar with the emergency procedures.
- Contacting the landowner/occupiers of neighbouring properties/businesses to advise of an emergency situation as appropriate.

The list of current wardens are located in prominent areas of site, i.e. weighbridge, lunchroom.

Emergency events include (but are not restricted to):

- Fire (General)
- Medical emergency
- Phone Threat (Bomb or substance)
- Severe Storm/Flood
- Gas leak and Airborne Contaminants
- Chemical/Fuel Spill
- Discovery of Ordinance
- Civil disturbance
- Armed hold up/ Aggressive intruder
- Bushfire
- Stockpile Fire



## Emergency Management Plan – Smeaton Grange

Benedict Recycling Newcastle outsources its emergency control training and compliance to Elite Fire Training.

The training is usually conducted in three phases:

- Phase 1: Chief Warden training and roles and responsibilities training for the ECO
- Phase 2: Use of emergency equipment. E.g. portable extinguishers, blankets
- Phase 3: Annual building evacuation exercise

### 6. RAISING AN ALARM

<b>During business hours</b>	Alert Emergency Services  Dial 000  Inform the Chief Warden/ Site Manager  Dial TBC
<b>Out of hours</b>	Alert Emergency Services  Dial 000  Inform the Site Manager  Dial TBC

### 7. EMERGENCY CONTROL POINT

The Emergency Control Point is the location on site where the Chief Warden will control the emergency response. It is also the point where the Emergency Services will go to when they arrive on site.

This will be from the entry point of site, off Anderson Road.

Arrangements for assisting emergency services include:

- i) Access to site and escort
  - Access via main entrance
  - Weighbridge personnel at site entrance will arrange escort or provide directions
- ii) Equipment available (details in Resources and Equipment section)
  - First aid equipment
  - Firefighting equipment
  - Mobile plant



## Emergency Management Plan – Smeaton Grange

### iii) Trained personnel

#### Site Personnel with Emergency Training

Name	Training	Location
<i>TBC</i>	First Aid	Operations Weighbridge Operations
<i>TBC</i>	Emergency Warden	Operations

### iv) Numbers of Trained personnel required:

The numbers of trained personnel required are as follows:

- First Aid – x person (minimum)
- Wardens x
- Fire extinguisher (all – staggered over 2 years)

## 8. FIRE SAFETY EQUIPMENT AND SYSTEMS




The site is fitted with the following equipment and to ensure the safety of all persons on site. All are checked and maintained on a regular basis by external contractors.

- Fire blankets
- Portable fire extinguishers
- Fire Hose Reels

Whilst there are portable firefighting equipment throughout the site to minimise property damage, the main objective in any emergency is the safe and orderly evacuation of all staff, contractors, customers and visitors from the site. Efforts to extinguish fires should only be undertaken if the fire is minor and it is safe to do so.

## Emergency Management Plan – Smeaton Grange

### 9. FIRE EXTINGUISHERS – WHICH TO USE

Type	Description	Used For
<b>Class ABE</b> 	<p>The powder fire extinguisher ABE, distinguished by a white coloured band around the top of the cylinder, is the most widely used type of fire extinguisher suited for fires occurring in the house, office, boat, garage, car or caravan.</p> <p>They discharge a fine powder that absorbs fuel molecules, depriving the fire of a fuel source.</p> <p>These extinguishers are located throughout the site.</p>	<p>Powder fire extinguishers ABE are suitable for the following types of fire:</p> <p>Class A – Paper, textiles, wood, most plastics &amp; rubber</p> <p>Class B – Flammable liquids</p> <p>Class C – Combustible gases</p> <p>Class E – Electrically energised equipment</p>
Type	Description	Used For
<b>Class A</b> 	<p>Water fire extinguishers are completely red with no coloured band</p> <p>Water fire extinguishers discharge a stream of water onto the fire, lowering the temperature of the burning material to below ignition point.</p>	<p>Water extinguishers A are suitable for the following types of fire:</p> <p>Class A – Paper, textiles, wood, most plastics and rubber</p>
<b>Class AF</b> 	<p>Wet chemical fire extinguishers, marked by an oatmeal coloured band, are effective against fires involving cooking oils and fats.</p> <p>They employ an agent that reacts with burning cooking oil or fat to form a suds-like blanket across the fuel surface, cutting off the fire's air supply and preventing the release of flammable vapours.</p>	<p>Wet chemical fire extinguishers are suitable for the following types of fires:</p> <p>Class A – Paper, textiles, wood, most plastics and rubber</p> <p>Class F – Cooking oils or fats</p>

## Emergency Management Plan – Smeaton Grange

### 10. WATER PUMP

The site has access to a multipurpose water pump facility located on the site water cart. The water cart may be used in the event of a fire if safe to do so.

### 11. WHAT TO DO WHEN HEARING AN EMERGENCY ALERT OVER UHF RADIO

Inform the Chief Warden / Site Manager over the site 2-way radio (Channel x). If unsuccessful phone TBC.

<b>EMERGENCY call has been made over UHF Radio</b>		
<b>Chief Warden and/or Deputy Chief Warden</b>	<b>Area Wardens</b>	<b>All other persons</b>
Determine safe evacuation paths if required  Determine if light vehicles are required for evacuation  Determine Assembly Point if changed  Make announcement to affected area(s) or entire site  Receive emergency services advise status  Receive radio calls from wardens to advise when zones are evacuated  Assist emergency services  Emergency services alone gives the all clear	Area warden remains in radio contact with all wardens  Area wardens commence zone check  When zone clear, report via UHF radio to Chief Warden, advising of status  Report to the Chief/Deputy Warden when complete	Remain calm  Evacuate using nearest SAFE exit, leave bulky items behind  Weighbridge staff to bring visitor register and portable first aid kit to evacuation point  Close doors as you leave room/building/vehicles

### 12. PEOPLE WITH A DISABILITY

Assist people with a disability to the assembly point. Ensure that the Chief Warden is informed that there is a person with a disability receiving assistance on site. Never attempt to carry another person.

## **Emergency Management Plan – Smeaton Grange**

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### **13. FIRST AID**

The site has a number of trained first aiders on site, trained to the 'Apply first aid' standard.

The list of current first aiders are located in prominent areas of site, i.e. weighbridge, lunchroom.

A portable first aid kit from one of the site vehicles is to be brought to the assembly point in an emergency event.

### **14. EMERGENCY PLANS**

#### **14.1 – FIRE/ EXPLOSION**

1. Rescue persons from immediate danger/ within the vicinity of the fire, if SAFE to do so
2. Call the Chief Warden/ Deputy Warden and advise the following:
  - a. Name
  - b. Location of fire
  - c. What is on fire – are there any chemical/ gases nearby? If so, what are they?
  - d. Are any persons injured or trapped? If so, give location/s
3. If SAFE to do so, contain the smoke and fire – close doors and windows, but ensure you have a safe exit path
4. Follow instructions from the Chief Warden and Area Wardens
5. Leave the building/site via the safest, closest exit
6. Assemble at the Emergency Assembly Area
7. Report to your supervisor for a physical count
8. DO NOT go back into any building/site until instructed by the Chief Warden

## **Emergency Management Plan – Smeaton Grange**

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### **14.2 – MEDICAL EMERGENCY**

1. Move the person if they are in immediate danger and if it is SAFE to do so.
2. Call the Ambulance – 000 (112 as a secondary option for mobile phone users)
3. Notify a First Aid Officer
4. Give all details of the situation to the Ambulance Service:
  - a. Your name and phone number
  - b. Injured persons details – age, sex, description of injury
  - c. Address and location of injured
5. First Aid Officer provides care based on training and/or instructions given by the Ambulance service
6. Notify supervisor/manager of incident
7. Warden/nominated employee to go to gate to direct Ambulance once onsite
8. Once injured worker is attended to by the Ambulance service, when appropriate, incident area is to be preserved
9. Nominated employee to go with injured person to doctor's surgery/hospital.
10. Incident Notification is to be completed
11. Report the incident to WHS



## Emergency Management Plan – Smeaton Grange

### 14.3 – PHONE THREAT (Bomb, Substance, Device etc)

1. Take all calls seriously

**2. DO NOT HANG-UP**

3. Remain calm and composed

4. Where possible obtain attention of another staff member

5. Record time and date:

6. Exact words of the caller:

7. Enquire on the nature of the threat:

- a. When is the going to explode? \_\_\_\_\_
- b. Where did you put the bomb? \_\_\_\_\_
- c. When did you put it there? \_\_\_\_\_
- d. What does the bomb look like? \_\_\_\_\_
- e. What will make the bomb explode? \_\_\_\_\_
- f. Did you place the bomb? \_\_\_\_\_
- g. Why did you place the bomb? \_\_\_\_\_
- h. What is your name? \_\_\_\_\_
- i. What is your address? \_\_\_\_\_

8. Note if possible:

- a. Gender and estimated age \_\_\_\_\_
- b. Background noises (callers side) \_\_\_\_\_
- c. Callers accent or speech indicators \_\_\_\_\_
- d. Did you recognise the voice? \_\_\_\_\_
- e. If so who do you think it was? \_\_\_\_\_
- f. Was the caller familiar with the area? \_\_\_\_\_
- g. Manner of caller (calm, emotional etc.) \_\_\_\_\_
- h. Was the call taped? \_\_\_\_\_
- i. Duration of the call \_\_\_\_\_

9. When the call is finished, **DO NOT HANG-UP** (this may assist in tracing the call)

10. Response:

- a. Contact Chief Warden with details of the threat
- b. The Chief Warden will ascertain the threat, risk level and areas affected
- c. The Chief Warden will contact the emergency services. On advice, the Chief Warden may declare an evacuation
- d. Where applicable, the Chief Warden will engage a search of the threat

## **Emergency Management Plan – Smeaton Grange**

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### **14.4 – SEVERE STORM / FLOOD**

Chief Warden/Site Manager to assess local weather conditions, site conditions and weather forecasts prior to calling a severe storm/flood event. In the event of a severe storm/flood event, please follow the below

1. Plant Areas/ Workshop
  - Turn off all gas and water supply
  - Turn off electricity supply
  - Place all parts/ machinery into buildings where possible
  - Secure parts/ machinery that cannot be moved
  - Batten down all loose fixings
  - Close bins
2. Offices
  - Place all computers onto the desk
  - Unplug power cords
  - Elevate printers, scanners etc. where possible
  - Close all windows and blinds
3. Follow instructions given by Chief Warden/Site Management
4. Upon return to work, a risk assessment may need to be undertaken of the workplace to assess for damage
5. Do not use any electrical equipment until instructed

## **Emergency Management Plan – Smeaton Grange**

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### **14.5– GAS LEAK AND AIRBOURNE CONTAMINANTS**

If you detect a gas leak or can smell gas or other airborne contaminant:

- Immediately extinguish any naked flames in the vicinity or check for hot works being undertaken
- Turn off gas outlet/cylinder supply if possible
- Move anyone in immediate danger if it is safe for you to do so
- Contact the Chief Warden and advise them of the situation
- Chief warden to assess situation
- Isolate the area and ask all people to remove themselves from the immediate area
- Open windows and doors to disperse the gas
- Do not operate light or power switches – the sparking of a switch may ignite the gas

If the leak is serious (broken gas line, very strong smell of gas):

- Report what you have seen and done to the Chief Warden immediately
- Chief warden to assess situation
- If possible, Chief warden to shut off the gas supply to the site
- Chief warden to announce a full evacuation of the site.
- Chief warden to Call 000
- Chief warden to advise when it is safe to return to site

## Emergency Management Plan – Smeaton Grange

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### 14.6– CHEMICAL/FUEL SPILL

- Contain any liquid or solid spills if safe to do so
- Refer to SDS for information regarding cleaning procedures
- Due to risk of fire/ explosion ensure all ignition sources are switched off in the vicinity of spill
- Contact Site Manager to notify them of the spill
- In the event of a fire notify Chief Warden immediately
- Chief warden to assess situation
- Evacuate if necessary
- If required, notify the EPA

### 14.7– DISCOVERY OF ORDNANCE

- Contact Chief Warden/ Site Manager with details of the ordnance found. **DO NOT HANDLE.**
- The Chief Warden/ Site Manager will cordon off affected area.
- The Chief Warden/ Site Manager is to contact the police and supply a photo of what has been found and wait for further instruction.
- If Police deem further action is required, the Chief Warden/ Site Manager is to implement the instructions given and wait for their arrival to site.
- Once on site, Police along with supporting military personnel, will handle the removal of item found and deem the area safe to reopen.

## **Emergency Management Plan – Smeaton Grange**

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### **14.8– CIVIL DISTURBANCE**

- Do NOT intervene
- Notify Chief Warden who will notify Police
- Assist injured if SAFE to do so
- If injured persons contact Ambulance Service
- Assist with withdrawal of staff, locking up the offices, securing records, files, cash and other valuable property
- Evacuate if necessary

### **14.9– ARMED HOLD UP/ AGGRESSIVE INTRUDER**

- Always consider your safety as you are number one priority
- Observe the offender (height, weight, age, clothing, speech, disabilities, accent, etc.)
- Hand over cash if asked
- Once it is safe to do so, contact the Chief Warden and advise of the situation
- If they cannot be contacted, dial 000 and request Police assistance
- Secure your area by locking doors and do not allow anyone else into the area until the Police have advised to do so
- Complete the Phone Threat Form to capture observations before you forget
- Ensure someone remains to brief Police on arrival
- Incidents such as an armed hold up can be extremely disturbing. It is highly recommended that counselling be sought after the event. Benedict staff can access the Employee Assistance Program (EAP)

## **Emergency Management Plan – Smeaton Grange**

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### **14.10– BUSHFIRE**

#### **Watch for Triggers**

- Bushfire Alerts
- High Fire Danger Warnings
- Smoke or Fire Nearby

#### **NOTIFY CHIEF WARDEN/SITE MANGER OF ABOVE TRIGGER/S**

#### **Monitor**

- Fires Near Me App or Rural Fire Service (RFS) web page [www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)
- Bush Fire Information Line: 1800 679 737
- Fire & Rescue NSW: (02) 4647 7266
- Local radio, local ABC/emergency broadcaster frequency, TV, newspapers
- [www.facebook.com/nswrfs](https://www.facebook.com/nswrfs)
- [www.twitter.com/nswrfs](https://www.twitter.com/nswrfs)
- Live Traffic updates on NSW Transport web page <https://www.livetraffic.com/>

#### **BE AWARE OF THE BUSH FIRE ALERT LEVEL - [www.rfs.nsw.gov.au/fdr](http://www.rfs.nsw.gov.au/fdr)**

#### **Response - Leave Early**

- Text message warning comes through advising to leave now (Read message carefully as it will give direction as to where to go)
- Check roads are open (via Live Traffic website)
- Once Safest route is decided on, pick a safe meeting point, travel together once at meeting point sign off.

#### **Response – Stay and Defend**

- Notify RFS that you plan to stay and defend give them location and number of people on site
- Notify Family that you will be staying
- Grab Fire blankets, dust masks, gloves, glasses or goggles, bag of rags, water and first aid kit
- Drink lots of water
- Move items away from boundary into centre of site away from where personnel are assembled (If water cart is available fill and move to assembly area)

#### **After fire has passed**

- Notify RFS of updated situation and ask if safe to leave
- Check Workers condition (fatigue, shock, hydrated, injuries etc.) if in doubt call 000 for medical help
- Check site for spot fires and burning embers
- Notify Manager when you reach home

## Emergency Management Plan – Smeaton Grange

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### 14.11– STOCKPILE FIRE MANAGEMENT

#### *Mitigation Measures*

- Waste stockpile area is designated as a **NO SMOKING** zone and exclusion zone for flammable and combustible liquids or hazardous wastes.
- Maintenance and **activities that can produce sparks** such as welding or cutting, are to be conducted away from waste stockpile areas.
  - If emergency maintenance is required near waste stockpiles, a hot works permit is to be completed and surrounding work areas to be watered down before, during and after works
  - Monitor work area for 30mins after hot works have been completed.
- **Waste stockpiles** to be typically 3 – 5 metres in height and <150 tonnes.
- Manage stockpiles in a 'first in first out' manner to **minimise residency time** of stock on ground. (excluding compacted material utilised in loading zone)
- Regular **stockpile observations** (as part of day-to-day stockpile management).
- **Water cart** in regular use on site daily.

#### *Fire Management*

- In the event of a fire, **Smother material** by applying a soil/sand based product AND/OR water (via Front End Loader/Excavator bucket/Fire equipment) over the affected and surrounding stockpile area.
- After sufficiently smothering the material, utilise the Front-end loader/Excavator to **'deconstruct' the stockpile**, spreading the affected material into an approximately 300mm thick layer, away from the original stockpile.
- Use the site Water cart/Fire equipment to **soak the affected material** by applying a high volume of water over the spread stockpile.
- Keep the **fire affected material isolated** until such time as any subsequent fire risk has been eliminated.
- **Continued regular observation** of material after extinguishing, to ensure no further flare-up occurs.



## **Emergency Management Plan – Smeaton Grange**

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### **15. ADDITIONAL EMERGENCY RESPONSES**

*The first priority in an emergency is to obtain medical assistance for the injured person. Any staff that are skilled in first aid should be called to the scene, and the injured person should be transported to a medical clinic or hospital if required.*

Handling an Emergency: (DRSABCDR)

**Danger:** check danger to you, to others, to the casualty.

**Response:** check for response: Tap on the shoulder and say "can you hear me?"

**Send for help:** call triple zero (000) for an ambulance.

**Airway:** look in mouth for foreign material. Tilt head back, lift chin.

**Breathing:** look, listen and feel for normal breathing.

If casualty is not breathing normally and not responsive, commence CPR.

**CPR:** place your hands in the centre of chest. Pushing down hard compress chest (1/3 depth of chest). Continue compressions until help arrives

**Defibrillation:** apply a defibrillator and follow voice prompts. (if available)

**Recovery position:** place casualty in the recovery position.

#### **15.1 - VEHICLE ACCIDENT**

1. If a vehicle accident occurs, proceed to the accident site and if required determine what emergency services will be needed.
2. Staff should wear reflective safety vests and act to control traffic around the accident until vehicles can be moved or emergency services arrive.
3. Render first aid to any injured persons and follow the D.R.S.A.B.C.D.R. action plan as written in the Australian first aid manual.
4. Contact emergency services on 000 or 112 on a mobile
  - Describe the nature of emergency
  - Give location of emergency - notify if 4WD ambulances will be needed
  - Give the Company name
  - Give your name
5. If it involved a vehicle rollover or vehicle falling over a high wall, determine what equipment will be the most appropriate for recovering the vehicle and obtain the site managers approval before proceeding.

## Emergency Management Plan – Smeaton Grange

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### 15.2 - PERSONS/ VEHICLES SUBMERGED IN WATER

1. If a person has fallen into water or silt, provide assistance where possible. Assess if emergency services will be required, if required remain until emergency services arrive.
2. If the employee/contractor or visitor has been recovered, carry out first aid following the D.R.S.A.B.C.D.R. action plan as written in the Australian first aid manual.
3. Contact base and get them to call 000 if further assistance is required. Inform emergency services if a 4WD ambulance or Rescue Helicopter is required.
4. Once area is isolated and all persons are clear or removed from danger, if plant has also fallen into or sunk into the pond or dam, the Site Manager must conduct a full risk assessment of the proposed recovery method. The Site Manager must give approval of the method of recovery and also determine whether the Operation's Manager's approval is also required.

### 15.3 - ON DISCOVERY OF ELECTROCUTION OR ELECTRICAL EMERGENCY

1. Raise alarm by shouting loud enough or by calling on two way radio/ mobile phone to gain attention.
2. Check danger to yourself, others and the casualty.
3. **Do not become a casualty yourself.** Assess the area before attempting any actions.
4. Never approach the area and remain at minimum 8 metres from the electrically affected area.
5. Switch power supply off at the mains if safe to do so.
6. If safe to do so, follow the D.R.S.A.B.C.D.R. action plan as written in the Australian first aid manual.
7. Instruct someone to get help and call emergency services on 000.
8. Isolate and barricade off area, minimum 8 metre circumference of power source of energy. Only authorised personnel are to be permitted in the area.
9. Continue providing first aid until ambulance arrives or relieved by supervisor or another first aid officer.
10. If any employee, contractor or visitor receives an electric shock they **MUST** seek medical attention. They **MUST** be driven to a medical centre for a check-up (electrocardiogram & blood analysis). They **MUST** inform the doctor that they need a blood test and 12 lead ECG.

### 15.4 - ON DISCOVERY OF POWER LINES COMING DOWN

1. Raise alarm on 2-way radio. Tell all personnel to remain where they are until further notice. Account for all staff on site.
2. Barricade area off, remain at minimum 8 metres from power lines and ensure no persons/vehicles can get close to fallen power lines.
3. Contact Energy Provider. Call 000 if there are any injuries.
4. If injuries are sustained, follow emergency plan E3 (on discovery of electrocution or electrical emergency).
5. A site employee is to remain outside the barricaded area to ensure nobody enters the area until the Energy Provider arrives.
6. Barricades are only to be removed after the Energy Provider has rectified the problem, declared the area safe, and the site Supervisor/ Manager has given approval.

## Emergency Management Plan – Smeaton Grange

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### 15.5 - FAILURE OF UTILITIES/ PLANT

1. Stop what you are doing
2. Push emergency stop buttons and/ or lanyards or turn off equipment
3. Check surroundings for danger to yourself and others
4. Notify your site supervisor/manager that maintenance is required to check equipment and make the necessary adjustments
5. Follow any lawful direction from your site supervisor/manager
6. Always follow Isolation Procedures and all electrical work to be conducted by Qualified Competent Electrician

### 15.6 - STRUCTURAL FATIGUE OR COLLAPSE

1. Stop what you are doing
2. Check the surroundings for danger to yourself and others
3. Turn off fixed/mobile equipment (if possible)
4. Notify supervisor/manager immediately
5. If emergency evacuation is announced, follow emergency evacuation procedure to emergency assembly area
6. Move in an orderly manner by the safest and most direct route to your emergency assembly area
7. Report to your area warden/supervisor at the assembly point
8. Remain at the assembly point and await further instructions
9. Wardens are to conduct a head count, to ensure that all personnel have vacated the area. Check the sign in book to see which visitors have entered the site
10. Do not re-enter the facility until assessed safe to return by the Chief Warden
11. Contact emergency services 000 or 112 on a mobile or S.E.S if necessary
  - Describe the nature of emergency
  - Give location of emergency
  - Give the Company name
  - Give your name

### 15.7 - ALLERGIC REACTION

1. DRSABCDR
2. Administer adrenaline via an auto injector (eg EpiPen/ Anapen)
3. Call (000) or (112) for an ambulance
4. Keep casualty in a position of comfort
5. Administer oxygen and/ or asthma reliever medication if necessary
6. Repeat administration or adrenaline if no improvement after five minutes
7. Monitor casualty's responsiveness and prepare to give CPR if necessary

### 15.8 - ASTHMA ATTACK

1. Ensure casualty is comfortable and encourage casualty to take slow, deep breaths
2. Give casualty 4 puffs of a blue reliever inhaler - casualty takes a breath with each puff
3. Use a spacer if available; give 4 puffs, once at a time - casualty takes 4 breaths after each puff
4. Wait 4 minutes
5. If no improvement, give another 4 puffs
6. If attack continues: Call (000) and keep giving children 4 puffs every 4 minutes and Adults 6-8 puffs every 5 minutes.

## **Emergency Management Plan – Smeaton Grange**

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### **15.9 - ANIMAL BITES**

1. DRSABCD
2. Control bleeding - use direct pressure and elevation
3. Apply dressing and bandage firmly
4. Immobilise if bite on a limb
5. Seek medical aid

### **15.10 - SNAKE BITES**

1. DRSABCD
2. Calm casualty and lie casualty down
3. DO NOT attempt to suck the venom out of affected area. DO NOT wash the bite.
4. If bite is on a limb, apply broad pressure bandage over the bite site as soon as possible.
5. Apply pressure immobilisation bandages. Apply a firm roller bandage starting just above the fingers and toes and moving up the limb as far as can be reached.
6. Immobilise casualty: Apply a splint to immobilise bitten limb. Check circulation in fingers and toes. Ensure casualty does not move
7. Call (000) for an ambulance

### **15.11 - BURNS**

1. DRSABCD
2. If fire is involved encourage casualty to STOP, DROP and ROLL
3. Wrap in fire blanket or similar
4. Roll casualty along ground until flames extinguished
5. Cool burnt area under cold running water for 20 minutes (30 mins for bitumen burn)
6. If burn to eye, flush eye with water for 20 minutes
7. Remove clothing and jewellery from burnt area (unless sticking to the burn). Don't touch the injured areas or burst blisters
8. Place sterile, non-stick dressing over burn
9. Calm casualty - manage for shock if burn is large or deep
10. Call (000) for an ambulance

### **15.12 - CHEST PAIN**

1. Advise casualty to stop activity, and sit or lie down to rest
2. Assist the casualty to take any prescribed medication they have for angina or chest pain
3. If symptoms last 10 minutes, get worse or are severe, call (000) for an ambulance immediately
4. Give a 300mg tablet of aspirin. Do not give aspirin: If allergic or on anticoagulant medication (eg warfarin)
5. Stay with the casualty to monitor consciousness and breathing.

## **Emergency Management Plan – Smeaton Grange**

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### **15.13 - CHOKING**

1. Encourage casualty to relax and breathe deeply - ask casualty to cough to remove object
2. If coughing does not remove the blockage: Call (000) for an ambulance
3. Bend casualty well forward and give 5 sharp upward blows with the heel of your hand. Reassess after each blow.
4. If not cleared after 5 back blows: Give 5 chest thrusts. Re-assess after each chest thrust.
5. Continue alternating 5 back blows with 5 chest thrusts until medical aid arrives.
6. If casualty becomes unresponsive: Remove any visible obstructions from mouth and commence CPR

### **15.14 - DIABETIC EMERGENCY**

1. DRSABCD
2. Give sweet food or drink (not diet or sugar free drinks) every 15 minutes.
3. If no improvement call (000) for an ambulance

### **15.15 - FRACTURES**

1. DRSABCD
2. Control any bleeding and cover any wounds
3. Check for fractures: open, closed or complicated
4. Instruct casualty not to move injured part
5. Immobilise fracture using broad bandages and a padded splint or sling
6. Every 15 minutes check the bandages are not too tight
7. Watch for signs of loss of circulation to hand or foot
8. Call (000) for an ambulance

### **15.16 - RECOVERY POSITION**

1. Kneel beside casualty
2. Place farther arm at right angle to body
3. Place nearer arm across chest
4. Lift nearer leg at knee so it is fully bent upwards
5. Roll casualty away from you on to side while supporting head and neck
6. Keep leg at right angle with knee touching ground to prevent casualty rolling onto face

### **15.17 - SEVERE BLEEDING**

1. Remove or cut casualty's clothing to expose wound
2. Apply direct pressure over wound
3. Lie casualty down and raise injured part above level of heart
4. Apply a bandage over wound ensuring pad remains in position
5. If bleeding persists, leave initial pad in place and apply a second pad - secure with bandage
6. Check circulation below wound
7. If severe bleeding persists, give nothing by mouth - Call (000) for an ambulance
8. Treat for shock



## **Emergency Management Plan – Smeaton Grange**

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### **15.18 - SHOCK**

1. DRSABCDR
2. Manage injuries such as bleeding and burns
3. Call (000) for an ambulance
4. Raise legs above level of heart (unless fractured or a snake bite)
5. Treat any other injuries (e.g. fractures or minor wounds)
6. Loosen tight clothing around the neck, chest and waist
7. Maintain body warmth
8. Monitor and record breathing and pulse
9. If casualty becomes unresponsive, place in the recovery position

### **15.19 - SPRAINS AND STRAINS**

1. DRSABCD
2. Advise casualty to rest
3. Place ice pack on the injured area
4. Apply a compression bandage to the injured area
5. If possible, elevate the injured area
6. Seek medical aid.

## **16. SYSTEM DOCUMENTS**

Form 56	First Aiders – Newcastle
Form 141	Emergency Evacuation Drill Report
Form 270	Emergency Evacuation Map – Office
	Emergency Evacuation Map – Storage Shed
	Emergency Evacuation Map – Weighbridge
Form 301	Emergency Wardens – Newcastle

Fire Equipment Register (Service provider book on site)



**APPENDIX I – LANDSCAPE MANAGEMENT PLAN**





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## Smeaton Grange Waste Recycling and Transfer Facility

52 Anderson Road, Smeaton Grange  
Landscape Management Plan

Prepared for Benedict Industries | 22 June 2018

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## Smeaton Grange Waste Recycling and Transfer Facility

Final Draft

Report J15135RP5 | Prepared for Benedict Industries | 22 June 2018

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Prepared by **Taylor Richardson**

Approved by **Phil Towler**

Position Senior Planner

Position Associate Director

Signature



Signature



Date 22 June 2018

Date 22 June 2018

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### Document Control

Version	Date	Prepared by	Reviewed by
V1	22 June 2018	Taylor Richardson	Phil Towler



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## 1 Introduction

This letter outlines Landscape Management Plan for a resource recovery facility at 52 Anderson Road, Smeaton Grange. It has been prepared as per Condition B58 of the development consent for SSD 7424, dated 22 December 2017:

Prior to the commencement of operation, the Applicant must prepare a Landscape Management plan for the site in consultation with Council to the satisfaction of the Secretary. The plan must form part of the OEMP in Condition C4 and be prepared in accordance with Condition C6. The plan must:

- (a) Detail the species to be planted on-site (refer Table 1);
- (b) Describe the monitoring and maintenance regime for all landscaping components (refer Section 6); and
- (c) Be consistent with the Applicant's Management and Mitigation Measures at Appendix B1 (refer Section 6).

A landscape plan was prepared as part of the Response to Submissions (RTS) document for the SSD 7424 development application. That landscape plan showed the front boundary fence with a 10 m setback from the road reserve. The setback for the front boundary fence is proposed to be reduced to 1 m as part of Modification 1, currently being assessed by the Department of Planning and Environment (DPE).

A revised landscape plan has been prepared to account for the new front boundary fence location. The revised landscape plan is at Figure 1.1. The new location of the fence will not impact the proposed planting.

The landscaping will comprise the vegetation included at Table 1.

All landscaping works will be undertaken by an appropriately qualified landscape contractor.

Planting schedule				
Species	Common name	Maximum height	Planting	Pot size
<i>Eucalyptus tereticornis</i>	Forest red gum	30 m	Plant four trees either side of entrance	45 L
<i>Grevillea</i>	Boongala spinebill	2 m	2 m spacing along fenceline	5 L
<i>Callistemon citrinus</i>	Crimson bottlebrush	4 m	2 m spacing along fenceline	5 L
<i>Lomandra longifolia</i>	-	15 m	Plant at 0.5 m spacing with mulching	Growth tube



## 2 Description of site and proposed works

### 2.1 Existing condition

The area to be landscaped is generally flat and contains light ground cover, with some weeds present. It serves as an unsealed vehicle entry to the site, with associated damage (Plate 1).



**Photograph 2.1**      **Front of site**

### 2.2 Proposed works

The following works are proposed in the landscape area:

- Provide masonry edge to landscaped area and road reserve to contain imported topsoil and mulch;
- Remove weed species;
- Provide species listed in Table 1 to stabilise and provide screening;
- Provide additional topsoil where required;



**Table 1**      **Plant schedule**

<b>Species</b>	<b>Common Name</b>	<b>Maximum height</b>	<b>Pot size</b>	<b>Planting location</b>
<i>Eucalyptus tereicomis</i>	Forest red gum	30 m	45 L	Four trees on either side of driveway
<i>Grevillea sp</i>	Boongala Spinebill	2 m	5 L	2 m spacing along rear landscape boundary, adjacent to driveway
<i>Callistemon citrinus</i>	Crimson Bottlebrush	4 m	5 L	2 m spacing along rear landscape boundary, adjacent to side boundary
<i>Lomondra longolia</i>		1.5 m	Grow tube	Plant and 0.5 m spacing along landscaped area

## 3 Standards and sampling

### 3.1 Substitutions

The plant schedule at Table 1 is the accepted document for plant quantities and sizes for the project. In the event that planned species are not available, substitutions will be considered and approved by the site supervisor.

### 3.2 Inspections

The following inspections will be made, as applicable:

- plants available on site for compliance inspection prior to planting;
- subgrades cultivated and/or prepared prior to placing topsoil;
- plant material set out before planting; and
- completion of planting establishment work.

Trees will comply with AS 2303:2015. One of the eight trees will be sampled for compliance purposes (12% sample). Roots will be inspected by washing and exposing a small section of the rootball to establish the root development from the stem. Unsuitable trees may be rejected, with substitutes to be considered and approved by the site manager.

Bulk materials will be inspected via a 2 kg sample of each type.

### 3.3 Applicable standards

The following Australian Standards may be referenced during the project, as required:

- AS 4419 – Soils for landscaping and garden use (1998);
- AS 4454 – Composts, soil conditioners and mulches (1997);
- AS 4373 – Pruning of amenity trees (1996); and
- AS 2303 – Tree stock for landscape use (2015).



## 4 Work activities

### 4.1 Sequence

Landscape works are to take place after completion of concreting works on site and establishment of front security fence to reduce potential exposure to runoff or damage from construction activities.

### 4.2 Coordination

The landscape contractor will review final engineering and infrastructure drawings prior to establishment of the landscape area. This will involve coordination with the site supervisor.

Existing services on site at the time of planting may include, but are not limited to, storm water drainage, water, telecommunications and electricity. Locations of all services will be established prior to excavation and cultivation of the landscape area. Excavation within 1 m of underground services will be undertaken by hand.

### 4.3 Work near trees

Existing street trees will be protected from damage. Materials will not be placed against, under or near trees. Equipment will not be attached to trees.

Compaction of the ground under trees will be avoided. Top soil will not be added or removed within tree drip lines. Where it is necessary to cut tree roots, cutting will not unduly disturb the remaining root system.

Any damage to trees to be retained will be reported to Council and attended to by a qualified arborist who will prepare a report covering rectification works. Remedial works will be undertaken as required, including removal and replacement if so recommended.



## 5 Site preparation

### 5.1 Initial site clearing and stripping

Initial earthworks on the site will involve the clearing and stripping of the site. The landscape area will be cleared, along with existing weeds. This process will involve:

- stripping and grubbing of all existing site vegetation and weeds, including roots and topsoil;
- stockpiling and separation of all existing vegetation and vegetation impact soils from site earthworks;
- if there are sufficient quantities, mulching any larger material for potential reuse on site; and
- removing vegetated material from site to approved facilities as required.

### 5.2 Weed management

Remaining and re-established weeds will be eradicated by low impact physical and chemical methods. A non-residual glyphosate herbicide will be applied, as per manufacturer's instruction. Weeds and rubbish will be removed, by hand, prior to subsoil preparation.

### 5.3 Subsoil preparation

Planting holes and bases will be cultivated to 150 mm. Augurs will not be used without cultivation of sides and base. Cultivation of soils near services or tree roots will be done by hand. Cultivation of soils within 300 mm of paths or structures will be done by hand.

Stones exceeding 25 mm and clods of earth exceeding 50 mm will be removed. Any weeds, rubbish or other unfavourable material uncovered during cultivation will be removed.

Any additives to topsoil placed in the landscape area will be incorporated by cultivating through the topsoil prior to placement.

The surface will be trimmed to the required design levels after cultivation.

### 5.4 Soil type and quality

Soils will comply with AS 4419-1998. Soils texture will be 'Medium – (sandy Loam)' or 'Coarse – (sand soil)'.

Soil for the landscape works will be certified as weed free, including onion weed, nut grass, clover, wandering jew, bindii and oxalis. Soil will be placed to all planting bed areas and individual tree locations as required.

All spoilt or excess soil excavated in the process of implementing the landscaping will be removed by the landscape contractor.

## 5.5 Soil placement

Soil will be placed on the prepared subsoil, with an even spread and grade. Allowances will be made for compaction, with final levels allowing for mulch to be placed to the top of paving and masonry edges.

The soil service level will be:

- smooth and free from stones or lumps of soil;
- graded to drain freely without ponding, to catchment points;
- graded evenly into adjoining ground surfaces; and
- ready for planting.

## 5.6 Compost and fertiliser

Compost will consist of well rotted vegetative material, animal manure or other approved material. It will be free from harmful chemicals, grass and weed growth and with a neutral pH.

Fertiliser will be delivered in sealed and labelled bags or containers, including recommended uses and application rates. Fertiliser will be used in accordance with the manufacturer's recommendations.

## 5.7 Mulching

Mulch will be placed within the tree drip lines and *Lomandra longolia* planted areas. It will be free of deleterious and extraneous matter, such as soil, weeds, sticks and stones. Mulch will be clear of plant stems, and raked to an even surface with the finished levels.

## 6 Establishment and maintenance

### 6.1 Establishment maintenance period

A twelve month establishment maintenance period will commence upon occupation of the site.

A planting maintenance program will be performed by the contractor on a quarterly basis. Maintenance work will be recorded in a log book, noting the activities and materials that have been used.

Following completion of the establishment maintenance period, the site owner will be responsible for on-going maintenance and monitoring of the site in accordance with this management plan.

Maintenance activities are outlined in Table 2.

**Table 2** Maintenance plan

Maintenance measure	Action	Timing
Weed management (maintenance weeding)	Hand removal of herbs and seedlings Spot spraying of grasses, herbs and seedlings	Quarterly during establishment period Quarterly upon completion of the establishment period
Weed monitoring	Inspections noting: <ul style="list-style-type: none"><li>- Presence of weeds (species diversity, infestations, new species)</li><li>- Recommendations for adaptive management, changes to weed control regime and corrective measures.</li></ul>	Quarterly during establishment period Quarterly upon completion of the establishment period
Mulch reinstatement	Mulched surfaces will be reinstated if necessary	Quarterly during establishment period Annually upon completion of the establishment period
Plant replacement	Failed, damaged or stolen plants will be replaced for the extent of the planting establishment period.	Monthly during establishment period Annually upon completion of the establishment period
Reporting	Monitoring results to be reported during the establishment period. Following the establishment period, the land owner will be responsible for ongoing maintenance and monitoring of site in accordance with the maintenance plan.	Quarterly monitoring reports during establishment period Annual monitoring reports following landscape establishment period.
General	The area around the entrance to the facility is kept tidy and litter free.	As required.

### 6.2 Weed management

In the first instance, weeds will be removed by hand, pulling the whole stem of each plant from the ground or digging out plants with a hand held tool.

In the event that chemical control is required, the spot spraying of an appropriate herbicide may be applied in the manner prescribed on the label:



- spraying of the foliage of individual plants or clumps;
- spraying the basal stems of plants;

In the event that herbicides are used, they must be selective, with spray drift must be minimised, with spray directed away from neighbouring sites.