JACKSON
ENVIRONMENT AND PLANNING
STRATEGY | INFRASTRUCTURE | COMPLIANCE | PROCUREMENT

Bettergrow's Composting and Landscape Supplies Facility

Request for Secretary's Environmental Assessment Requirements

Jackson Environment and Planning Pty Ltd
Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
T: 02 8056 1849 | E: admin@jacksonenvironment.com.au
W: www.jacksonenvironment.com.au

This report has been prepared by Jackson Environment and Planning Pty Ltd, Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060.

Author 1: Dr Mark Jackson, Director and Principal Consultant, B.Sc (Hons), PhD, Grad. Cert. Mgmt., Exec. Masters Public Admin.

Author 2: Dr Jill Lethlean, Senior Consultant, B. Chem. Eng., Masters App. Sc., PhD, Grad. Dip. Comp., Grad. Cert. Mgmt.

We declare that:
This report contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure to which the statement relates, and the information contained in the statement is neither false nor misleading.

Report version	Authors	Date	Reviewer	Approved for issue	Date
v1.0	Dr J.Lethlean	18/9/2020	Dr M.Jackson	Dr M.Jackson	20/09/20
FINAL	Dr J. Lethlean	01/10/20	Dr M.Jackson	Dr M.Jackson	01/10/20

Executive Summary

In December 2019, Borg Plantations was granted development approval by the Western Regional Planning Panel to establish a Timber/Bark Processing and Landscape Supply Facility at 24 & 26 Endeavour Rd, Oberon (DA10.2019.43.1). he development consent allowed for up to 99,000 tpa of bark, sawdust and timber to be processed into mulch and landscape supplies at the site.

The site will be operated by Bettergrow Pty Ltd, a Borg owned company. As part of the proposal, the approved development under DA10.2019.43.1 will be amended to include windrow composting operations, which will compost up to 40,000 tonnes per annum of garden organics from kerbside collections. The balance of materials to be received and processed at the site will still comprise wood material, including pine bark residuals, sawdust and clean pallets. The total material accepted at the site for processing will remain up to 99,000 tpa. The site footprint remains the same. However, the site layout and operations will change to accommodate the additional processing operations.

This report has been prepared to assist the Department of Planning, Industry and Environment (DPIE) to determine the level of assessment required for the proposed amendment and, if necessary, to prepare the Secretary's Environmental Assessment Requirements (SEARs).

Table 1.1. Summary of proposed changes to development.

Issue	Current consent (DA10.2019.43.1)	Proposed amendment	Change
Waste material received for processing	Up to 99,000tpa of timber, bark and sawdust	Up to 99,000 tpa organic waste consisting of up to 40,000tpa of garden organics and the remainder as timber, bark and sawdust.	No change in total amount received. Facility to receive garden organics, as well as timber, bark and sawdust
Processing operations	Wood shredder - primary shredder Wood shredder - secondary shredder Trommel screen Magnet separator	Wood shredder - primary shredder Wood shredder - secondary shredder Trommel screen Magnet separator Compost windrows – turned regularly Compost maturation windrows – static	Compost windrows – turned regularly Compost maturation windrows – static.
Stormwater treatment	1.5ML On-site Detention Basin (OSD)	Increase size of OSD, and other water treatment measures to be confirmed	Larger On-site Detention Basin and other water treatment measures to be confirmed. Stormwater management plan to be updated
Western boundary	20m wide earth berm and landscaping along western boundary	10m wide earth berm and landscaping along western boundary	Reduction in earth mound along western boundary.

CONTENTS

Appendix

1. Introduction

In December 2019, Borg Plantations was granted development approval by the Western Regional Planning Panel to establish a Timber/Bark Processing and Landscape Supply Facility at 24 & 26 Endeavour Rd, Oberon (DA10.2019.43.1). The development consent allowed for up to 99,000 tpa of bark, sawdust and timber to be processed into mulch at the site.

Bettergrow Pty Ltd proposes to amend the facility to include windrow composting operations, which will compost up to 40,000 tpa. The total material accepted at the site for processing will remain up to 99,000 tpa. The site footprint remains the same. However, layout and operations will need to be changed to accommodate the additional processing operations.

This report has been prepared to assist the Department of Planning, Industry and Environment (DPIE) to determine the level of assessment required for the proposed amendment and, if necessary, to prepare the Secretary's Environmental Assessment Requirements (SEARs).

Table 1.1. Summary of proposed changes to development.

Issue	Current consent	Proposed amendment	Change
Waste material received for processing	Up to 99,000tpa of timber, bark and sawdust	Up to 99,000tpa organic waste consisting of up to 40,000tpa of garden organics and the remainder as timber, bark and sawdust.	No change in total amount received. Facility to receive garden organics, as well as timber, bark and sawdust.
Processing operations	Wood shredder - primary shredder Wood shredder - secondary shredder Trommel screen Magnet separator	Wood shredder - primary shredder Wood shredder - secondary shredder Trommel screen Magnet separator Compost windrows – turned regularly Compost maturation windrows – static.	Compost windrows – turned regularly Compost maturation windrows – static.
Stormwater treatment	1.5ML On-site Detention Basin (OSD)	Increase size of OSD, and other water treatment measures to be confirmed.	Larger On-site Detention Basin and other water treatment measures to be confirmed. Stormwater management plan to be updated.
Western boundary	20m wide earth berm and landscaping along western boundary	10m wide earth berm and landscaping along western boundary	Reduction in earth mound along western boundary.

1.1. The proponent

Borg Manufacturing Pty Ltd is a leading Australian manufacturer of melamine panels and components for all joinery applications. Their manufactured products include a range of medium-density fibreboard (MDF), particle board, shelving and components.

In 2010, Borg purchased the former Carter Holt Harvey MDF facility in Oberon. Borg Manufacturing operate MDF and particle board manufacturing lines at the facility. The range of products manufactured at the facility include standard MDF, Moisture Resistant MDF, E0 (Low Formaldehyde Emitting) MDF and ultraprime MDF mouldings.

Borg Manufacturing operate two other major sites in New South Wales, in Charmhaven and Somersby. The Charmhaven site is the leading manufacturer of cabinet doors in Australia, utilising world class production and manufacturing techniques. The three manufacturing sites are supported by a 25,000 m^2 warehouse and distribution facility at Somersby, NSW.

The proponent for this development will be Bettergrow Pty Ltd. This company is a subsidiary of Borg Manufacturing Pty Ltd, and will be the operator of the development. Bettergrow is a long-standing family owned company that started operations in 1978 specialising in the development of innovative technology for the manufacture of organic soil improvement products from recovered organic waste materials. The company is a highly experience operator of organics recycling, drill mud recycling, biosolids recycling, composting and disposal facilities located across NSW and QLD.

1.2. Site description

The site is located at 24-26 Endeavour Rd, Oberon, NSW (Lot 33 & Lot 34, DP1228591), within the Oberon Council local government area. The entrance to the site will be 68 Hawken St, Oberon (Lot 18/DP1249431).

The proposed site has a total area of approximately 5.07 hectares. This area was previously used for agricultural purposes but is currently vacant and unused. The site is unsealed, largely clear of vegetation and does not include any existing dwellings.

The proposed site is situated mainly on land zoned IN1, General Industrial. The development site will also include a portion of land zoned RU1 Primary Production (see Figure 1.2).

There are a small number of nearby land use zones, including RU1 Primary Production to the north and adjoining to the east, R1 General Residential to the south, and B2 Local Centre further south. The nearest residential zoned land is approximately 500m to the south of the site boundary. The nearest residential receivers are separated by other industrial activities (including other un-associated outdoor waste processing and recycling activities) and a heavy vehicle bypass.

An overview of the site's details is given in Table 1.2 below.

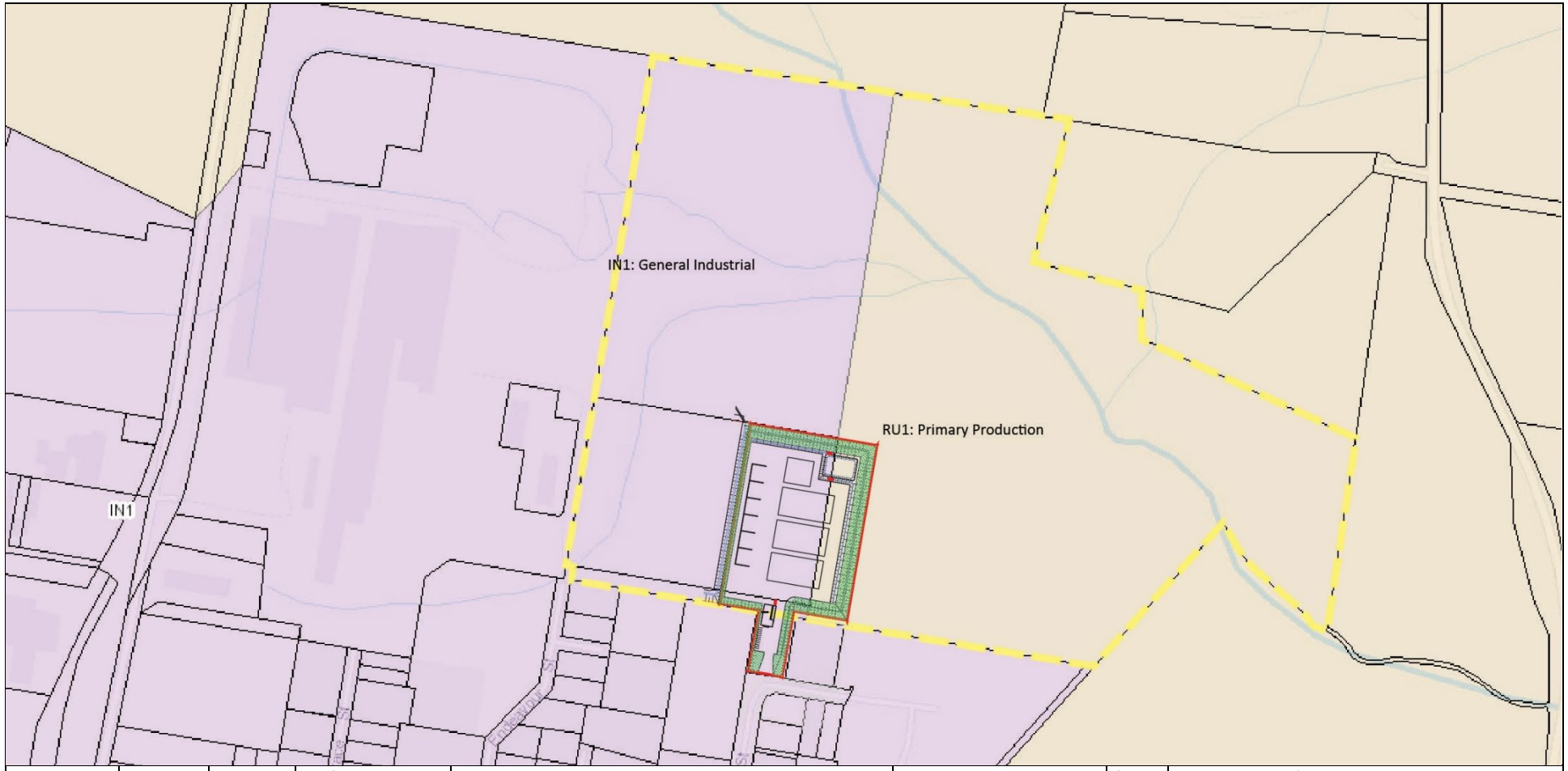
Table 1.2. Summary of site details for the proposed Bettergrow Oberon Composting and Landscape Supplies Facility.

Site address	•26 Endeavour St, Oberon, NSW, 2787 •Recently renamed 68 Hawken St
Lot numbers	• Lot 18/DP1249431 • Part of Lot 33/DP1228591 • Part of Lot 34/DP1228591
Site area	• Total development site area is 50,670 m^2
Local government area	• Oberon Council
Lots and Land zones	• Lot 18/DP1249431 - IN1 General Industrial • Lot 33/DP1228591 - RU1 Primary Production & IN1 General Industry • Lot 34/DP1228591 - IN1 General Industrial

Figure 1.1. Aerial view of the proposed modified site (proposed development area marked red).

Date	Revision	Drawn By	Site description	Jackson Environment and Planning Pty Ltd		Client	Bettergrow Pty Ltd
14/09/2020	Revision A	J Lethlean	24-26 Endeavour St, Oberon	Strategy | Infrastructure | Compliance | Procurement A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060 E: admin@jacksonenvironment.com.au T: 02 8056 1849 W: http://www.jacksonenvironment.com.au		Project	Composting and Landscape Supplies Facility
						Title	Aerial photo of site
						Scale	Not shown
						Source	Google

Figure 1.2. Land use zoning of the site and surrounds.



Date	Revision	Drawn By	Site description
14/09/2020	Revision A	J. Lethlean	24-26 Endeavour St, Oberon

Jackson Environment and Planning Pty Ltd
Strategy | Infrastructure | Compliance | Procurement
A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

Client	Bettergrow Pty Ltd
Project	Composting and Landscape Supplies Facility
Title	Land zoning of the site and surrounds
Scale	Not shown
Source	NSW Department of Planning, Industry and Environment

2. Project Description

The current development consent permits the shredding and mulching of up to 99,000 tpa timber, bark and sawdust. It is proposed to alter the process to receive and compost up to 40,000 tpa of garden organics at the site. The facility will still only receive a maximum of 99,000 tpa.

2.1. Process description

2.1.1. Operating hours

The facility is proposed to be operated from 7am to 6pm, Monday to Friday, and 8am to 1pm on Saturdays. The site will be closed on Sundays and public holidays. However, it is proposed that the site be accessible 24 hours per day, 7 days per week for delivery of material. This is to allow delivery of sawdust from the nearby timber panel plant as generated. It may also be necessary to receive other feedstocks and export of product outside operational hours. Machinery on site will only operate during the nominated operational hours.

2.1.2. Garden organics processing and composting

The composting component of the facility will accept up to 40,000 tpa of garden organics. Garden organics will be received at the site at the weighbridge. All loads will be carefully inspected for potential contamination on the weighbridge, then vehicles will be directed to the 'Tip and Spread Inspection Bay' (dedicated concrete block bay) for spreading and inspection of the load.

Loads containing non-complying waste materials will be re-loaded and removed from site immediately. Garden organics that meet the acceptable standards will then be subject to a manual contaminant removal process (e.g. to remove any contaminants such as plastic bags) and contaminants will be stored in a general waste bin on the site for disposal.

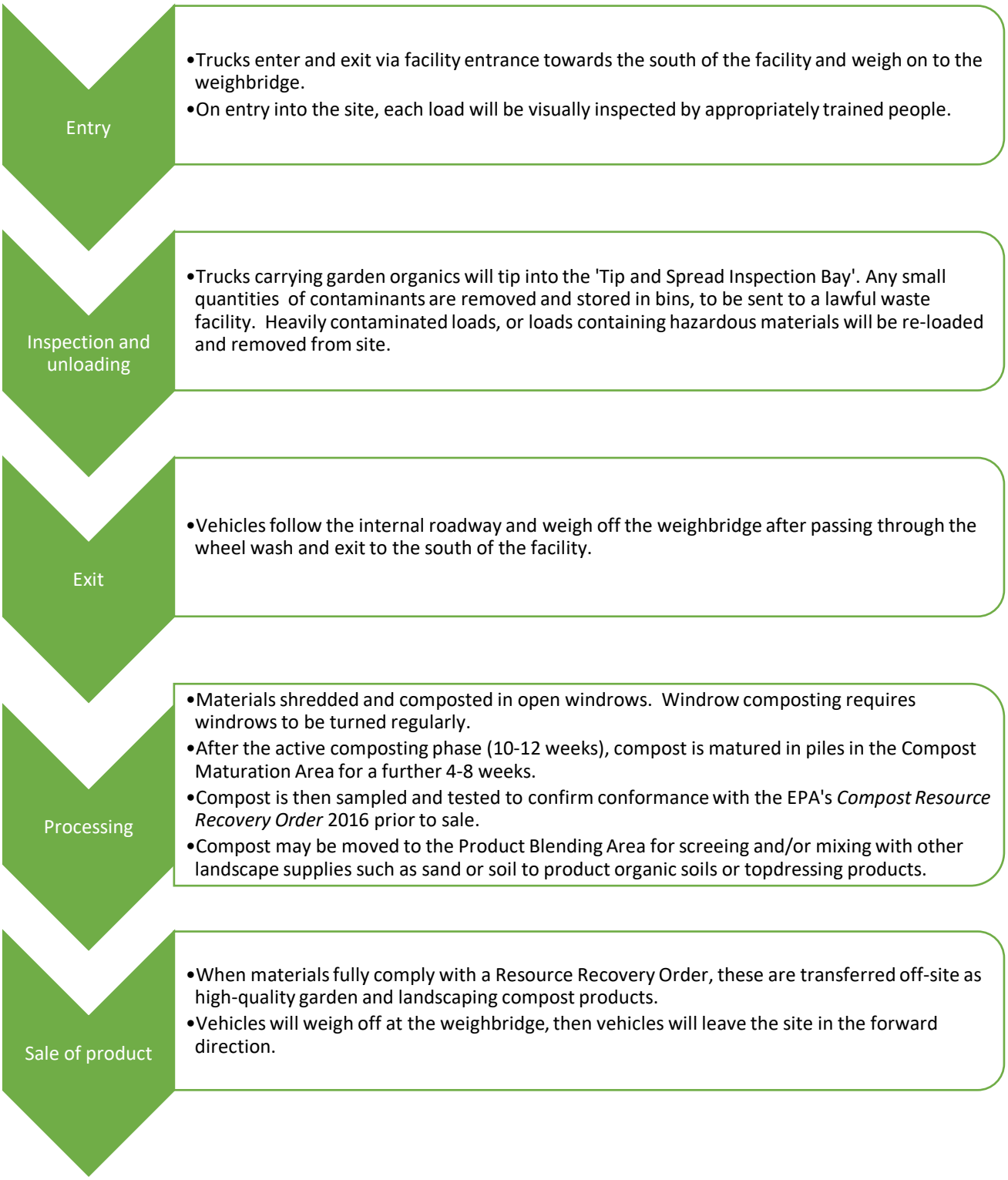
Garden organics that have been decontaminated will then be moved by front end loader to the garden organics storage bay or directly to the 'Garden Organics Shredding Area' on the operational pad. Garden organics will be shredded and then moved by front end loader to the 'Windrow Composting Area' and formed into trapezoidal shaped windows for composting.

The process is an aerobic composting process. Weekly turning of piles will be required to ensure that windrows are properly aerated and all contents of the piles are subject to pasteurisation temperatures to eliminate weed seeds and pathogens in accordance with the EPA's *Compost Resource Recovery Order* 2016.

The composting process requires organics to remain in the windrows for around 10-12 weeks. Once the active phase of composting is complete, the compost will be moved by front end loader to the 'Composting Maturation Area' where the compost will mature further over a 4-8 week period. This storage area will be periodically turned by front end loader to assist with the compost maturation process. Following the composting process, the compost will be tested to ensure the material complies with the *Compost Resource Recovery Order* 2016. Product will then either be moved to the 'Compost Storage Bay' along the western side of the site, or will be bulk loaded out from the Compost Maturation Area.

Depending on the product being made, the compost may be screened and blended in the 'Product Blending Area' with other landscaping materials (e.g. soil or sand) to manufacture specialised products such as organic soils, topdressing for sport turf or mulch. The process description for the garden organics composting operation is described in Figure 2.1.

Figure 2.1. Process flow chart for the composting operation.



2.1.3. Timber / Bark / Sawdust Processing

The process for the timber/bark/sawdust processing operation will remain the same as approved in DA10.2019.43.1. The only change will be the site layout and the reduced amount of timber/bark/sawdust accepted at the site, to allow for receiving garden organics for composting within the 99,000 tpa limit.

Site feedstocks will include bark residuals and sawdust, along with pallets. Pallets and timbers will also be trucked via backloading to Oberon from Borg's other sites for recycling. Delivery vehicles will enter the facility over the weighbridge. Pallets and timbers will be tipped into a dedicated 'Waste Tipping and Inspection Bay', where treated timbers and manufactured timbers (e.g. MDF) will be removed and disposed lawfully off-site. Any other contaminants in loads will be removed.

Incoming loads of bark from pine log processing in the MDF Manufacturing Facility will bypass the dedicated waste tipping and inspection area and be stored separately in a large concrete block storage bay, awaiting processing. Pre-inspection of this feedstock is not necessary, as it will contain clean, separated pine bark only.

Processing of feedstock is expected to include mulching via grinders and shredders, with screening by a trommel for sizing processed material. No composting will take place on site, and products will be transported from the site shortly after processing.

Processed landscaping materials will be stored in dedicated concrete block bays. To ensure the recovered products are consistently fit for purpose, and comply with *The Mulch Order* 2016, regular sampling will be undertaken in accordance with a quality assurance program and quality control measures.

The equipment on site is primarily for shredding and screening the waste wood feedstock, as well as moving the waste wood and products around the site. Table lists the plant and equipment to be used on site. It should be noted, other similar makes or models of equipment may be substituted. However, the size and function remain the same. Table 2.1 provides a summary of the processing equipment approved under the current development consent.

Table 2.1. Plant and equipment to be used in the operation.

Operational Area	Make	Model	Function
All areas	Front end loader (x 3)	Volvo L150 Front End Loader	Material handling and movement
	Excavator	CAT 329F Excavator	Material handling and movement
Processing and blending area	Wood shredder - primary shredder	Hammel 950 D/E	Waste size reduction
	Wood shredder - secondary shredder	Hammel NZS 1000	Waste size reduction
	Trommel screen	Hammel HZ 52	Screening and sorting by size
	Magnet separator	Included in screen	Removing ferrous metal

The process description for the timber, bark and sawdust processing operation is described in Figure 2.2.

Figure 2.2. Process flow chart for the timber/bark/sawdust processing operation.

Figure 2.3. Approved site layout (DA10.2019.43.1).

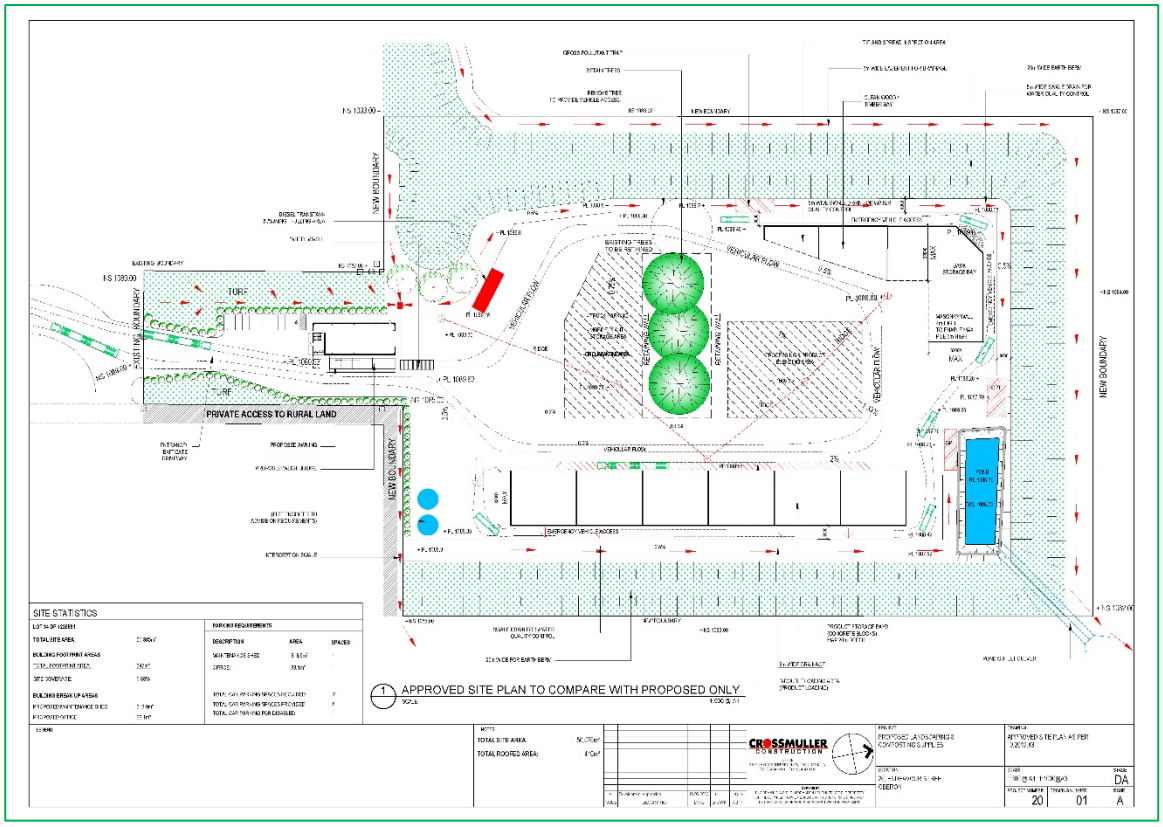
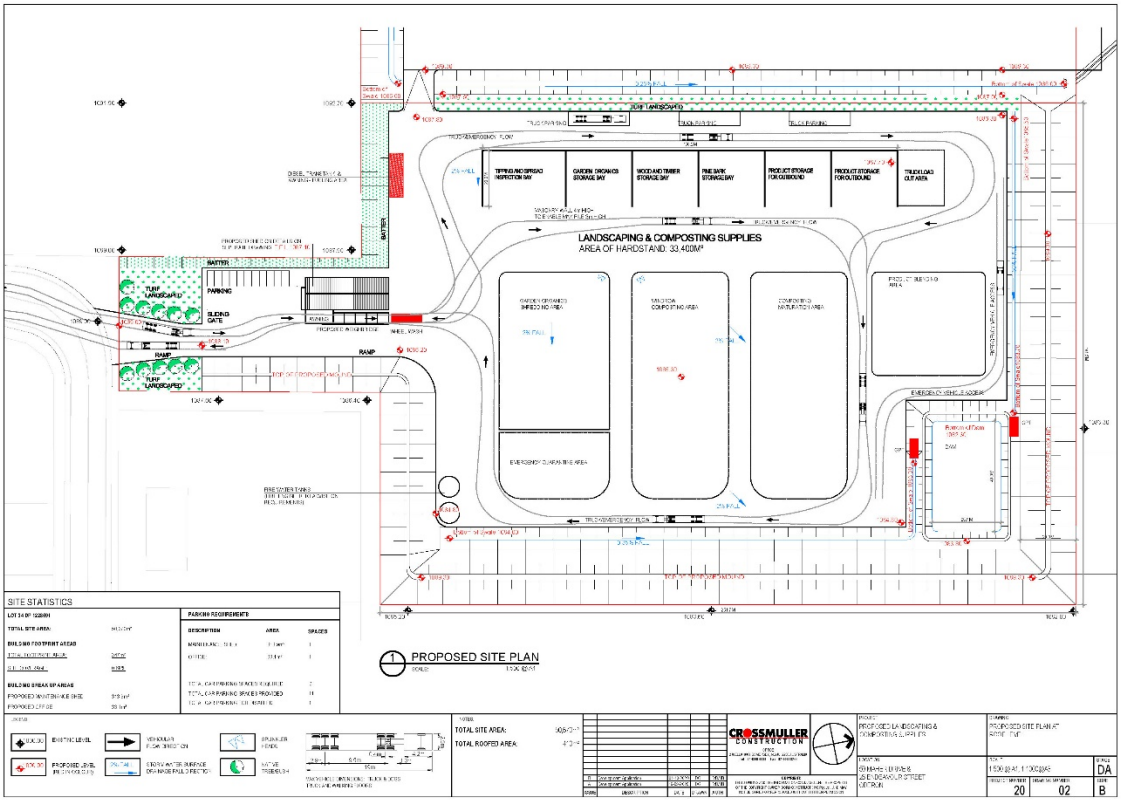


Figure 2.4. Proposed site layout, including composting operations.



3. Project Justification

3.1. Site suitability

The selected site is suitable as a bark/timber processing facility:

- It is located within an industrial estate away from residential areas;
- It is easy for heavy vehicles to access using major roads for the majority of their journey;
- The site is within easy reach for its customers, both projects generating used glass items and potential customers requiring the processed product;
- The site is relatively flat, making it suitable for processing equipment and heavy vehicle maneuvering;
- The site is a low risk for flooding;
- There is sufficient area on the site allowing for a suitable processing area; and

As discussed in detail in this EIS, the potential emissions can be mitigated to ensure there is no impact on surrounding properties.

3.2. Strategic drivers

3.2.1. NSW EPA's Strategic Plan and the WARR Strategy 2014-2021

In NSW, the State Government has committed to ambitious targets for recycling across the State. These targets are published in the NSW Waste Avoidance and Resource Recovery Strategy. By 2021–22, the NSW Government intends to increase recycling rates for:

- Municipal waste from 52% (in 2010–11) to 70%;
- Commercial and industrial waste from 57% (in 2010–11) to 70%;
- Construction and demolition waste from 75% (in 2010-11) to 80%; and
- Waste diverted from landfill from 63% (in 2010–11) to 75%.

A critical pathway to achieving these recycling targets is investment in new infrastructure. To encourage investment in new recycling facilities, the NSW Government is investing $337 million between 2017 and 2021 to build new recycling facilities. This investment is required to capture an additional 3.3 million tonnes of waste per year and have this material sustainably diverted from landfill[1].

3.2.2. NSW Waste Less, Recycle More Initiative

The NSW Government's $337 million Waste Less, Recycle More program includes $48 million to support the development of new infrastructure for both municipal, commercial and construction and demolition waste materials. A further $57 million is allocated to establishment and servicing of Community Recycling Centres across NSW to collect household problem wastes.

[1] NSW EPA (2014). *NSW Waste Avoidance and Resource Recovery Strategy: 2014 – 2021*. Internet publication: http://www.epa.nsw.gov.au/wastestrategy/warr.htm

3.2.3. NSW EPA Waste and Resource Recovery Infrastructure Strategy 2017-2021

In August 2017, the NSW EPA published the State's first draft strategy for prioritising new recycling infrastructure required across NSW by regional council groupings. The NSW EPA recognises that to achieve the diversion from landfill targets, significant investment in new infrastructure is still needed.

3.3. NetWaste Regional Waste Strategy 2017 – 2021

NetWaste is a voluntary peak organisation of councils in the Central West region of NSW. Netwaste consists of 26 councils, including Oberon Council. The group works collaboratively for better regional outcomes in waste management and various other service areas. Netwaste leads numerous programs to improve waste management and resource recovery activities in the region.

In 2017, NetWaste released a Regional Waste Strategy[2] setting out a plan for the region to avoid and recover waste to meet the NSW Government's recycling targets by 2021, as per the NSW Waste Avoidance and Resource Recovery Strategy.

The Regional Waste Avoidance and Recovery Strategy sets out a framework of themes, strategic objectives and targets. The primary aim of the Strategy is to facilitate a collaborative approach to ongoing enhancement of regional waste and resource management. The key strategy objectives include:

- Reducing the amount of waste being generated;
- Increasing resource recovery;
- Reducing greenhouse gas emissions;
- Delivering environmentally responsible waste management systems;
- Improving awareness of waste minimization and resource recovery principles and influencing behavioural change;
- Improving recycling and composting;
- Reducing litter and illegal dumping;
- Managing problem wastes;
- Facilitating information exchange and skills development; and
- Optimise procurement of grant funding.

This NetWaste Regional Waste Strategy also aims to progress towards the following key waste reduction targets:

- Growth in waste generation is held to the level of population growth by 2021-2022;
- Recycling waste increase to 70% for municipal solid waste and commercial and industrial waste, and 80% for construction and demolition waste by 2021-2022;

[2] NetWaste (2017). *Netwaste Regional Waste Strategy 2017 – 2021*. Internet publication: http://www.netwaste.org.au/wp-content/uploads/2018/04/NetWaste-Strategy-2017-21-FINAL.pdf

- Waste diverted from landfill increases to 75% by 2021-2022;
- Problem waste collection services are available for 80% of households by 2021-2022;
- Reduce the volume of litter in NSW by 40% by 2020; and
- Protecting local environments from pollution by reducing illegal dumping incidents by 30% by 2020.

The proposed project will assist the region in achieving its strategy objectives by providing greater opportunities for recycling garden organics and wood waste, including commercial sources of wood waste.

4. Planning Framework and Strategic Planning

4.1. Project approval

Bettergrow Pty Ltd has met with Oberon Council to discuss the potential development. Council was generally supportive of the development.

The amended development is considered designated as it will compost more than 5,000 tonnes of organics per annum as per Clause 13 of Schedule 3 of the *Environmental Planning and Assessment Regulation* 2000. Under Section 4.10 of the *Environmental Planning and Assessment Act* 1979 the proposed development being a Designated Development would also require an EIS to be submitted with the development application.

The proposed amended development will require an environment protection licence from the NSW Environment Protection Authority, under Schedule 1 Clause 12 and Clause 34 (1) of the *Protection of the Environment Operation Act* 1997. It is also noted that a weighbridge will need to be included with the development application as per Section 36 of the *Protection of the Environment Operations (Waste) Regulation* 2014.

4.2. Commonwealth policy and legislation

4.2.1. Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act) came into force from 16 July 2000. The EPBC Act requires actions which are likely to have a significant impact on matters of National Environmental Significance, or which have a significant impact on Commonwealth land, to be referred to the Commonwealth Minister for the Environment for approval.

The subject site is not listed as a national heritage place and the proposed development would not impact on any national heritage places. A search of the area on 4 July 2018 using the Protected Matters Search Tool[3] found no federally protected areas in the vicinity of the proposed development.

No National Environmental Significance matters would be impacted by the proposed development.

[3] Australian Government, *Protected Matters Search Tool*, online tool http://www.environment.gov.au/webgis-framework/apps/pmst/pmst.jsf

4.3. NSW statutory legislation and policy

4.3.1. Environmental Planning and Assessment Act 1979

The proposed development is consistent with the overall objectives of the *Environmental Planning and Assessment Act* 1979. Section 5 of the *Environmental Planning and Assessment Act* 1979 and the accompanying Regulation provide the framework for environmental planning in NSW and include provisions to ensure that proposals which have the potential to impact the environment are subject to detailed assessment, and to provide opportunity for public involvement.

The proposed development is consistent with the nominated objectives of the Act and is considered capable of fulfilling the statutory requirements. The preliminary environmental assessment determined that the proposed development will not result in any significant negative impacts that cannot be adequately mitigated or managed. This will be assessed in detail at the development application stage.

The proposed project is considered to be a designated development requiring assessment under Part 4 of the *Environmental Planning and Assessment Act* 1979.

4.3.2. Environmental Planning and Assessment Regulation 2000

Under Clause 32(1)(b)(iii) of Schedule 3 of the *Environmental Planning and Assessment Regulation* 2000, the proposed facility is a designated development:

Clause 13: Composting facilities or works:

> Composting facilities or works (being works involving the controlled aerobic or anaerobic biological conversion of organic material into stable cured humus-like products, including bioconversion, biodigestion and vermiculture)—
>
> (a) that process more than 5,000 tonnes per year of organic materials, or
>
> (b) that are located—
>
> (i) in or within 100 metres of a natural waterbody, wetland, coastal dune field or environmentally sensitive area, or
>
> (ii) in an area of high watertable, highly permeable soils, acid sulphate, sodic or saline soils, or
>
> (iii) within a drinking water catchment, or
>
> (iv) within a catchment of an estuary where the entrance to the sea is intermittently open, or
>
> (v) on a floodplain, or
>
> (vi) within 500 metres of a residential zone or 250 metres of a dwelling not associated with the development and, in the opinion of the consent authority, having regard to topography and local meteorological conditions, are likely to significantly affect the amenity of the neighbourhood by reason of noise, visual impacts, air pollution (including odour, smoke, fumes or dust), vermin or traffic.

Clause 32: Waste management facilities or works:

1) Waste management facilities or works that store, treat, purify or dispose of waste or sort, process, recycle, recover, use or reuse material from waste and:

(b) (iii) that have an intended handling capacity of more than 30,000 tonnes per year of waste such as glass, plastic, paper, wood, metal, rubber or building demolition materia, or

(d) that are located:

(i) in or within 100 metres of a natural waterbody, wetland, coastal dune field or environmentally sensitive area, or

(ii) in an area of high water table, highly permeable soils, acid sulphate, sodic or saline soils, or

(iii) within a drinking water catchment, or

(iv) within a catchment of an estuary where the entrance to the sea is intermittently open, or

(v) on a floodplain, or

(vi) within 500 metres of a residential zone or 250 metres of a dwelling not associated with the development and, in the opinion of the consent authority, having regard to topography and local meteorological conditions, are likely to significantly affect the amenity of the neighbourhood due to noise, visual impacts, air pollution (including odour, smoke, fumes or dust), vermin or traffic.

As the facility will process 99,000 tpa of organic material (of which approximately 40,000 tpa will be composted), the development is classified as a designated development.

4.3.3. State Environmental Planning Policy (Infrastructure) 2007

The aim of the *State Environmental Planning Policy (Infrastructure)* 2007 is to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services, and by providing greater flexibility in the location of infrastructure and service facilities.

Other key aims of the policy are to allow for the efficient development, redevelopment or disposal of surplus government owned land, and identify the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development). The policy also seeks to help proponents identify matters to be considered in the assessment of development adjacent to particular types of infrastructure development and providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing.

The following waste and recycling facilities are covered under Section 120 of the *State Environmental Planning Policy (Infrastructure)* 2007:

- "Resource recovery facility" means a facility for the recovery of resources from waste, including such works or activities as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from waste gases and water treatment, but not including re-manufacture of material or goods or disposal of the material by landfill or incineration.
- "Waste disposal facility" means a facility for the disposal of waste by landfill, incineration or other means, including associated works or activities such as recycling, resource recovery and other resource management activities, energy generation from waste gases, leachate management, odour control and the winning of extractive material to generate a void for disposal of waste or to cover waste after

its disposal.

- "Waste or resource management facility" means a waste or resource transfer station, a resource recovery facility or a waste disposal facility.
- "Waste or resource transfer station" means a facility for the collection and transfer of waste material or resources, including the receipt, sorting, compacting, temporary storage and distribution of waste or resources and the loading or unloading of waste or resources onto or from road or rail transport.

Under Section 121 of the Policy, the following activities are permitted with consent:

- Development for waste or resource management facilities, other than development referred to below, may be carried out by any person with consent on land in a prescribed zone.
- Development for the purposes of a waste or resource transfer station may be carried out by any person with consent on land in a prescribed zone.

The policy defines 'prescribed zones' as being compatible with waste or resource recovery facilities:

- RU1 Primary Production
- RU2 Rural Landscape
- IN1 General Industrial
- IN3 Heavy Industrial
- SP1 Special Activities
- SP2 Infrastructure

The proposed development meets the definition of a "Resource recovery facility" under Section 120 of the *State Environmental Planning Policy (Infrastructure)* 2007. Given the proposed development is to occur in a prescribed IN1 General Industrial and RU1 Primary Production zoning, the development is consistent with Section 120 of the *State Environmental Planning Policy (Infrastructure)* 2007, being development, which is permissible subject to development consent.

4.3.4. Protection of the Environment Operations Act 1997

The *Protection of the Environment Operation Act* 1997 (POEO Act) prohibits any person from causing pollution of waters, or air and provides penalties for air, water and noise pollution offences. Section 48 of the Act requires a person to obtain an Environment Protection License (EPL) from the NSW Environment Protection Authority before carrying out any of the premise based activities described in Schedule 1 of the Act.

Schedule 1 of the Act (34) details both "Resource Recovery" and "Composting" as Scheduled Activities. This clause applies to the following activities:

- (12) Composting, meaning the aerobic or anaerobic biological conversion of organics into humus-like products—

  (a) by methods such as bioconversion, biodigestion or vermiculture, or

  (b) by size reduction of organics by shredding, chipping, mulching or grinding.

- (34) 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.

These activities are declared to be a scheduled activity if it meets the following criteria (Table 4.1).

Table 4.1. Scheduled activities as per Schedule 1 of the *Protection of the Environment Operations Act* 1997.

Activity	Relevant Criteria
Composting	where it takes place outside the regulated area and does not receive organics from inside the regulated area— (i) it has on site at any time more than 2,000 tonnes of organics received from off site, or (ii) it receives from off site more than 5,000 tonnes per year of non-putrescible organics or more than 200 tonnes per year of putrescible organics.
Recovery of general waste	if the premises are in the regulated area:(a) involves having on site at any time more than 1,000 tonnes or 1,000 cubic metres of waste, or (b) involves processing more than 6,000 tonnes of waste per year. If the premises are outside the regulated area:(a) involves having on site at any time more than 2,500 tonnes or 2,500 cubic metres of waste, or(b) involves processing more than 12,000 tonnes of waste per year

Given the proposed facility will process more than 6,000 tonnes of wood waste per year and compost more than 5,000 tonnes of garden organics per year, an Environment Protection Licence for the facility will be required from the NSW EPA.

4.3.5. *Protection of the Environment Operations (Waste) Regulation* 2014

As a licensed waste facility, Bettergrow Pty Ltd will be required to accurately measure all waste received and leaving the facility. The amount of waste received and transported off-site will need to be reported to the EPA through the Waste and Resource Reporting Portal (WARRP).

Products manufactured by the site will also need to comply with the *Mulch Resource Recovery Order* 2016 and the *Compost Resource Recovery Order* 2016, as required under Clause 93 of the *Protection of the Environment Operations (Waste) Regulation* 2014.

4.3.6. State Environmental Planning Policy No 33: Hazardous and Offensive Development Assessment

The aims of the State Environmental Planning Policy No. 33 Hazardous and Offensive Development (SEPP 33) are to amend the definitions of hazardous and offensive industries where used in environmental planning instruments. The SEPP 33 also renders ineffective a provision of any environmental planning instrument that prohibits development for the purpose of a storage facility on the grounds that the facility is hazardous or offensive if it is not a hazardous or offensive storage establishment as defined in this Policy.

In addition, the SEPP 33 sets out a requirement for development consent for hazardous or offensive development proposed to be carried out in the Western Division and seeks to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account. The SEPP 33 also helps to ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact, and to require the advertising of applications to carry out any such development.

Development that is potentially hazardous and/or offensive is permissible under SEPP 33 if the facility is capable of securing an EPL from the NSW Environment Protection Authority.

4.3.7. State Environmental Planning Policy No 55: Remediation of Land

Under State Environmental Planning Policy, No 55: Remediation of Land (SEPP 55), applicants for consent must carry out a preliminary site investigation for any development consent sought on land previously used for activities that may cause contamination. Agricultural activities are included as a use that may cause contamination.

As the proposed site was previously used for agricultural purposes, a preliminary site investigation was undertaken and a report included with the Environmental Impact Statement prepared for the previous development application. The principal aim of a preliminary site investigation is to identify any past or present potentially contaminating activities and to provide a preliminary assessment of the extent and nature of site contamination if it exists. It typically includes an appraisal of the site history and may include some initial site sampling.

4.3.8. Roads Act 1993

The *Roads Act* 1993 provides for several issues including the establishment of procedures for opening and closing public roads, acquisition of land for roadways in addition to regulating the carrying out of various activities on public roads including roadwork and road widening operations.

No closure of public roads would be required to gain access to the subject site. The site access road, Maher Road, is constructed, any internal access roadways will be built by the developer. The project does not seek to alter the access arrangements from the public roadway.

4.3.9. Biosecurity Regulation 2017

The *Biosecurity Regulation* 2017 identifies certain species of plants and animals as pests and restricts their importation into and sale within NSW. It also contains provisions for the government to declare biosecurity zones for the purposes of controlling outbreaks of proscribed pests.

The sale of compost carries a risk of spreading weed seeds and plant pathogens if these are contained in the feedstock. This is managed through the composting process by ensuring the composting process pasteurises the compost and that final product is kept apart from incoming feedstock.

4.4. Local environmental planning instruments

4.4.1. Oberon Local Environmental Plan 2013 (OLEP)

The applicable Local Environmental Planning Instrument is the *Oberon Local Environmental Plan* 2013 (the LEP). While the LEP does not specifically state that 'Waste Management Facilities or Work's or 'Resource Recovery Facilities' are a permissible form of development, it states that any development that is not specifically prohibited or permitted without consent is permitted with consent. Waste Management Facilities and Resource Recovery Facilities are not specifically prohibited or permitted without consent. Landscaping material supplies facilities, however, are explicitly permitted with consent under the LEP.

Section 120 of the *State Environmental Planning Policy (Infrastructure)* 2007 defines 'Waste or Resource Management Facilities' a form of development which is permissible subject to development consent.

The proposed development will focus on developing resource recovery activities on land zoned as IN1 General Industrial and RU1 Primary Production. The objectives of the zone are:

- To encourage employment opportunities;
- To minimise any adverse effect of industry on other land uses;
- To support and protect industrial land for industrial uses.

There are no specific building height of building limits or floor space ratio restrictions that apply to the site area.

The Oberon LEP sets out the following requirements for land located within an industrial buffer zone. The map for this zone is shown in Figure 4.1. The relevant clause (6.6) states:

> The objectives of this clause are as follows:
>
> > to protect the operational environment of industries operating within the Oberon Timber Complex,
> >
> > to control development near the Oberon Timber Complex and waste disposal facilities to minimise land use conflict.

This clause applies to land identified as "Oberon Timber Complex" on the Industrial Buffer Map.

Before granting development consent to development on land to which this clause applies, the consent authority must consider the following:

- The impact that any noise, odour or other emissions associated with existing land uses may have on the development;
- Any proposed measures incorporated into the development that limit the impact of such noise and other emissions associated with the existing land use.

Any opportunities to relocate the development outside the land to which this clause applies;

Whether the development is likely to adversely affect the operational environment of any existing development on the land to which this clause applies.

The proposed development is located within the industrial buffer area. The Bark/Timber Processing and Landscape Supplies Production Facility may be considered to be part of the "Oberon Timber Complex", as the facility activities are directly part of the timber manufacturing supply chain. In any case, suitable mitigation methods will be put in place to minimise the impact of the development on adjoining and nearby premises.

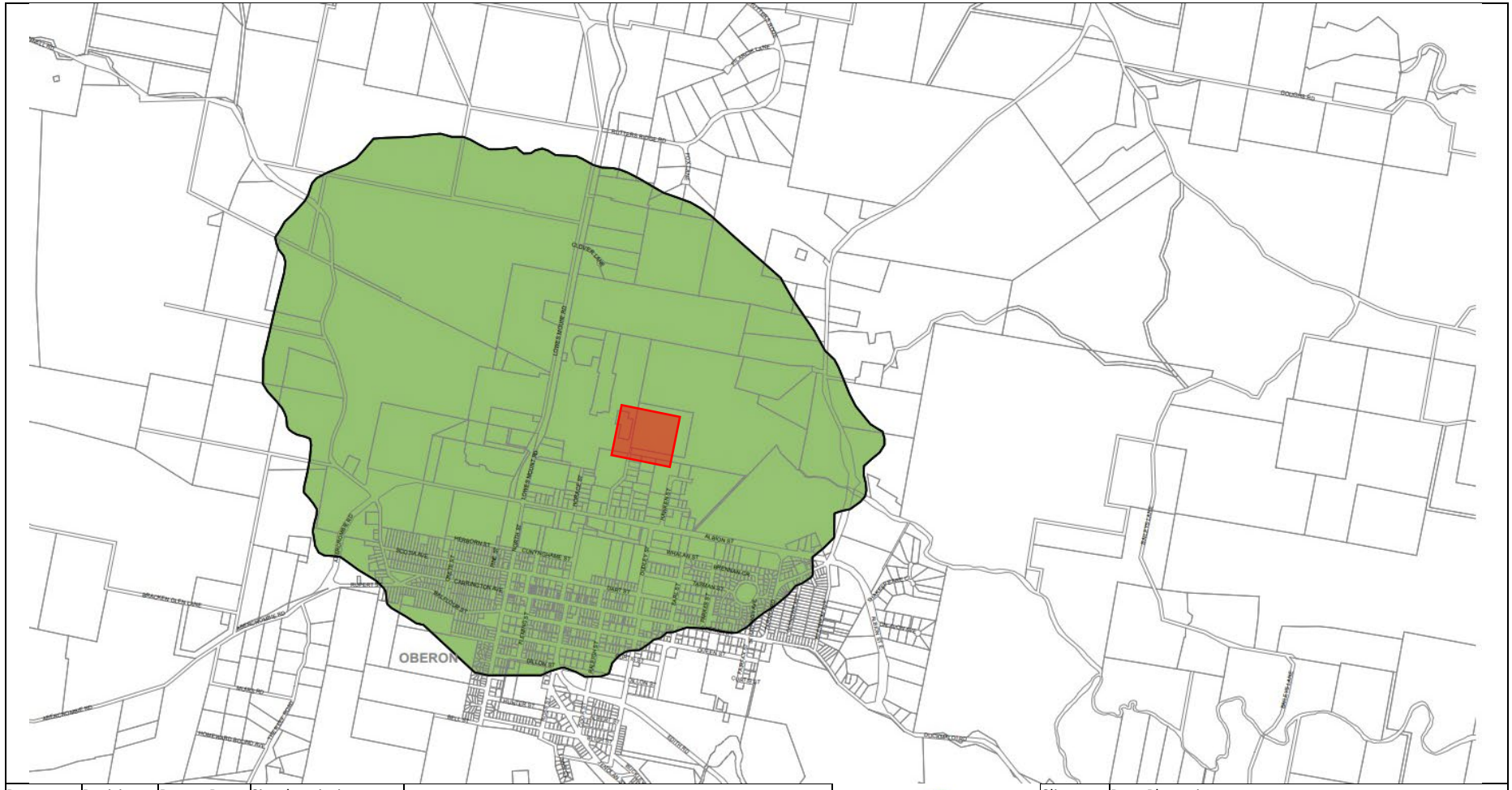
4.4.2. Oberon Development Control Plan 2001

The general objectives of the *Oberon Development Control Plan* 2001 are:

- To provide development controls and guidelines which will assist in achieving the objectives of the *Oberon Local Environmental Plan* 1998;
- To provide development controls and guidelines that are flexible, in order to promote innovative and imaginative building and development that will relate well to its surroundings both man-made and natural;
- To promote and encourage a high quality of design and amenity for all developments in the area;

- To provide for and require well considered development that is environmentally and economically sustainable.

Figure 4.1. Oberon Timber Complex and buffer zone (approximate site location marked in red).



Date	Revision	Drawn By	Site description
24/05/18	Revision A	M.McGee	24-26 Endeavour St, Oberon
10/09/20	Revision B	J. Lethlean	

Jackson Environment and Planning Pty Ltd
Strategy | Infrastructure | Compliance | Procurement
A: Suite 102, Level 1, 25-29 Berry St, North Sydney NSW 2060
E: admin@jacksonenvironment.com.au
T: 02 8056 1849
W: http://www.jacksonenvironment.com.au

Client	Borg Plantations
Project	Bark/Timber Processing and Landscape Supplies Facility
Title	Oberon Timber Complex
Scale	Not to Scale
Source	NSW Department of Planning and Environment

4.1. Other guidelines and policies

4.1.1. NSW Composting Guidelines

The NSW *Environmental Guidelines: Composting and Related Organics Processing Facilities*[4] provides a description of the environmental issues associated with composting facilities, and provides guidance on how to manage these issues. The guidelines also set out the regulatory framework governing composting facilities in NSW. The guidelines are performance-based, which means alternative management measures can be employed, if it can be demonstrated that the performance is at least as good as for those measures included in the guidelines.

The performance requirements set out under these guidelines will be considered in the development application for the project.

[4] NSW EPA (2004). *Environmental Guidelines: Composting and Related Organics Processing Facilities.* Internet publication: https://www.environment.nsw.gov.au/resources/waste/envguidlns/composting_guidelines.pdf

5. Relevant Matters

This chapter provides a summary of the expected issues and impacts of the project amendment to the surrounding properties and environment.

5.1. Social issues

The site is located within an industrial area, on undeveloped land that was previously used for agriculture. The social impacts of the development will be minimal.

5.2. Economic issues

The site will have a positive impact on the local economy. The development will create new jobs during construction of the facility and permanent employment for the ongoing operations.

5.3. Waste management

As a recycling facility, most of the waste received and stored on-site will be processed into products, which will be sold through the landscape supplies aspect of the business. Under the amended development consent, approximately 40,000tpa garden organics will be received for composting and 59,000tpa bark/timber/sawdust received for mulching.

Garden organics are considered a low risk feedstock for composting facilities, under the NSW *Environmental Guidelines: Composting and Related Organics Processing Facilities.*

The amount of non-conforming waste on-site will be carefully managed through a rigorous inspection as loads of feedstock are received. There will be a very small fraction of residual waste generated on-site, through extraction of contaminants and by staff. Residual waste will be collected in containers (MGB or skip bins) and removed regularly for disposal at a licensed waste disposal facility.

5.4. Water Quality

Stormwater capture and treatment is likely to be one of the main issues associated with the development. Sediment, organic particles, tannins and other potential contaminants will be caught in the stormwater that runs off stored material and windrows.

The processing and storage areas will be on a hardstand. All stormwater will be captured and treated using a series of GPTs and an onsite detention basin. An updated Soil and Water Management Plan, including a stormwater management plan, will be required to account for the increased scope of operations.

5.5. Water use

The facility will be connected to the town water supply for the office and amenities. Recycled water from the stormwater detention pond will be required during the development and operational stages for dust control (such as misting systems).

Recycled water will be also required for watering of natural vegetation around the site perimeter. The composting operations will require water. The amount of water required will be determined as part of an operational analysis. However, it is anticipated that the majority of the water needs can be met from reclaimed stormwater. Stormwater from the OSD will need to be treated to meet appropriate health standards before use on the compost windrows.

Treatment of the captured stormwater would also make it suitable for use in sprays for dust suppression on stockpiles. The environmental and human health risks associated with the application of recycled water for dust suppression will

be considered based on the guidelines published by the Department of Environment and Conservation in 2007, *Managing Urban Stormwater, Harvesting and Re-use*.

An updated site water balance will be prepared as part of the updated Soil and Water Management Plan.

5.6. Contaminated Sites Assessment

No contaminated site issues were detected during the previous development assessment (Feb/Mar 2019). The site will be covered in a hardstand, which will protect the underlying soil and groundwater from contamination by the activities at the site. It is believed that the information in the previous contaminated site assessment is still current, and that no further investigation is required.

5.7. Air Quality

The most significant air quality issue at the site will be dust and potentially odour from the mulching and composting operations. Dust control measures will be employed to control dust emissions from the site. The composting operations will have the potential to generate odours.

It should be noted that windrow composting is an aerobic composting process. If properly aerated, production of odour, methane and other noxious gases is minimal. Therefore, process management will be integral to managing air quality and odour issues at the site.

An air quality impact assessment would be required for the amended development consent.

5.8. Noise and Vibration

The operations at the site have the potential to generate significant levels of noise and vibration. Sources of noise include mulching, screening, shredding, windrow turning, mobile plant (e.g. front-end loader) and traffic. The noise assessment conducted as part of the previous development consent will need to be updated to account for the additional equipment on-site. Where necessary, noise mitigation measures will be implemented.

5.9. Traffic

Access to the site will be via Maher Drive. All heavy traffic movements will be in the forward direction. It is also proposed to construct a driveway link between this site and the site to the west in the south-west corner of the site. The neighbouring site is owned by Borg Manufacturing, and would be used occasionally to transfer wood waste from that site to the mulching/composting facility for recycling.

Large vehicles will deliver waste material for processing to the site, and remove products from the site for use off-site. An operational analysis will be performed to determine the number and size of vehicles expected at the facility. A previous traffic study found that there would be no significant impact on traffic near the facility, for the same amount of tonnage processed at the site (99,000 tpa).

On-site swept path will need to be updated to ensure there is sufficient access for both delivery vehicles and emergency services vehicles.

5.10. Biodiversity

The majority of site is already cleared and highly disturbed. There is a stand of three trees on part of the site. It is proposed to clear these trees during the construction of the new facility. The current development consent was granted on the basis that these trees would be retained.

A Flora and Fauna Assessment Report was conducted by Narla Environmental Pty Ltd in March 2019, with a site survey conducted on 13 September 2018. The site survey covered the entire area included in the amended proposed development. Therefore, further investigation of the site would not be required for the updated development consent.

Narla determined that the vegetation assemblage within the Subject Site was representative of non- native vegetation. This does not constitute a Threatened Ecological Community (TEC). No threatened fauna were identified on the Subject Site during field survey. Due to the poor condition and lack of suitable habitat within the Subject Property (and surrounding locality) it was determined that the removal of potential habitat is unlikely to significantly impact upon a viable population of any of potentially occurring threatened species.

5.11. Bushfire risk

A Bushfire Risk Assessment was conducted by Bushfire Planning and Design in March 2019. The risk assessment found that the proposed development could meet the requirements of *Planning for Bushfire Protection* 2006. The Bushfire Risk Assessment will need to be updated to account for the revised extent and operations at the site, and to ensure it meets the requirements of *Planning for Bushfire Protection* 2019.

5.12. Heritage

No sites or items of heritage significance were found within 500m of the proposed development site. The development is unlikely to have an adverse impact on heritage values in the area.

5.13. Chemicals and hazards

Very few chemicals and hazardous substances will be stored or used on-site. The largest amount of dangerous goods stored on-site will be approximately 60,000L diesel fuel. A hazard assessment of the previous development application found that the hazards could be easily managed. The hazard assessment will need to be updated to account for the revised extent and operations at the site. The Pollution Incident Response Management Plan will also need to be updated.

5.14. Visual Impact

A Visual Impact Assessment was conducted as part of the development application process in 2019. The Visual Impact Assessment found that there would be no visual impacts. As the site footprint has not changed, the Visual Impact Assessment will still be valid.

The proposal to reduce the earth mound along the western boundary should not impact the visual impact from that direction, as the site to the west is to be developed and the Borg Manufacturing plant is beyond that site.

5.15. Biosecurity

The site design has considered how raw materials potentially with weed seeds and pathogens is separated from processed products or timber / bark not containing these biosecurity risks. As the garden organics are pasteurised, they move towards the north of the site into an area which does not receive raw and materials potentially containing weed seeds and pathogens.

6. Proposed Consultation and Engagement

Bettergrow Pty Ltd will consult with relevant government agencies, as required by a SEARs issued by DPIE. In addition, Bettergrow Pty Ltd will consult with neighbouring properties and the local Council regarding the proposed amendment to the development.

Appendix A – Current Development Consent

Appendix B – Scoping Worksheet

Environmental and social matters		Impact	Is the impact, without mitigation, likely to cause a material effect with regard to its …				Does the impact need assessment in the EIS?	How will the impact be managed?	Are there community & other stakeholder concerns regarding the impact or activity?	Relevant Section in scoping report
			Extent	Duration	Severity	Sensitivity				
Amenity	Acoustic	The noise levels will be significantly elevated during construction and during the ongoing operations	✓	✓	✓	✓	Noise and Vibration Impact Assessment conducted in 2019 will need to be updated.	The site is located in an industrial area, away from sensitive land uses. Facility operations will be limited to daylight hours.	Previous consultation identified some concerns about noise from neighbouring properties.	5.8
	Visual	Minimal impact					No.	Site will be surrounded by earth berms and landscaping	No concerns.	5.14
	Odour	Potential for significant odours from composting operations	✓	✓	✓	✓	Air Quality Impact Assessment conducted in 2019 will need to be updated.	Odours are controlled by management of the composting process.	Odour will be a concern to neighbouring properties.	5.7
	Microclimate	No impact					No.	N/A	No concerns.	N/A

Environmental and social matters		Impact	Is the impact, without mitigation, likely to cause a material effect with regard to its …				Does the impact need assessment in the EIS?	How will the impact be managed?	Are there community & other stakeholder concerns regarding the impact or activity?	Relevant Section in scoping report
			Extent	Duration	Severity	Sensitivity				
Access	Access to property	Previous traffic study found access to be adequate. Minimal impact.					Traffic Study may need to be updated following a revision of the operational analysis to determine expected vehicle numbers.	To be confirmed, if traffic flow changes.	DPWS was concerned the development might impact the use of their helipad.	5.9
	Access to services	No impact					No.	N/A	No concerns.	N/A
	Road and rail network	No impact					No.	N/A	No concerns.	N/A
Built environment	Public domain	No impact					No.	N/A	No concerns.	N/A
	Public Infrastructure	No impact					No.	N/A	No concerns.	N/A
	Other built assets	No impact					No.	N/A	No concerns.	N/A
Heritage	Natural	No impact					No.	N/A	No concerns.	N/A
	Cultural	No impact					No.	N/A	No concerns.	5.12
	Aboriginal culture	No impact					No.	N/A	No concerns.	5.12
	Built	No impact					No.	N/A	No concerns.	N/A
Social	Health	No impact					No.	N/A	No concerns.	N/A
	Safety	The amendment may result in a slight increase in heavy traffic on the roads.					Traffic Study may need to be updated following a revision of the operational analysis to determine expected vehicle numbers.		No concerns.	5.9 5.13

Environmental and social matters		Impact	Is the impact, without mitigation, likely to cause a material effect with regard to its …				Does the impact need assessment in the EIS?	How will the impact be managed?	Are there community & other stakeholder concerns regarding the impact or activity?	Relevant Section in scoping report
			Extent	Duration	Severity	Sensitivity				
	Community services and facilities	No impact					No.	N/A	No concerns.	N/A
	Housing availability	No impact					No.	N/A	No concerns.	N/A
	Social cohesion	No impact					No.	N/A	No concerns.	N/A
Economic	Natural resource use	As a recycling facility, the development has the potential to reduce natural resource use.					No.	N/A	No concerns.	N/A
	Livelihood	New permanent jobs will result from the development					No.	N/A	No concerns.	5.2
	Opportunity cost	No impact					No.	N/A	No concerns.	N/A
Air	Particulate matter	Potential for dust generation	✓	✓	✓	✓	Air Quality Impact Assessment conducted in 2019 will need to be updated.	Dust suppression measures will be employed on-site.	Previous consultation identified dust as a significant concern for neighbouring properties.	5.7
	Gases	Minimal atmospheric emissions in aerobic composting					No.	N/A	No concerns.	N/A

Environmental and social matters		Impact	Is the impact, without mitigation, likely to cause a material effect with regard to its …				Does the impact need assessment in the EIS?	How will the impact be managed?	Are there community & other stakeholder concerns regarding the impact or activity?	Relevant Section in scoping report
			Extent	Duration	Severity	Sensitivity				
	Atmospheric emissions	Minimal atmospheric emissions in aerobic composting					No	N/A	No concerns.	N/A
Biodiversity	Native vegetation	Removal of three low-value trees. Minimal impact.					Justification for removal of trees to be included in revised development consent. However, current Biodiversity Study found the trees to be of little ecological value.	N/A	No concerns.	5.10
	Native fauna	No impact					Justification for removal of trees to be included in revised development consent. However, current Biodiversity Study found the trees to be of little ecological value.	N/A	No concerns.	5.10
Land	Stability / structure	The site will be covered in hardstand. No impact					No.	N/A	No concerns.	N/A
	Soil chemistry	The site will be covered in hardstand. No impact					No.	N/A	No concerns.	5.6
	Capability	The hardstand will limit future use to industrial applications.					No. Hardstand already approved under previous development consent.		No concerns.	N/A

Environmental and social matters		Impact	Is the impact, without mitigation, likely to cause a material effect with regard to its …				Does the impact need assessment in the EIS?	How will the impact be managed?	Are there community & other stakeholder concerns regarding the impact or activity?	Relevant Section in scoping report
			Extent	Duration	Severity	Sensitivity				
	Topography	The site is flat. It will be completely levelled during construction to install the hardstand.					No.	N/A	No concerns.	N/A
Water	Water quality	Potential significant water quality issues without mitigation measures.	✓	✓	✓	✓	Soil and Water Management Plan prepared in 2019 will need to be updated.	Stormwater capture and treatment system to be upgraded.	Previous consultation identified water quality as a potential concern.	5.4
	Water availability	Water for operations will be recycled on-site from captured stormwater. Town water is available for office/domestic use.					Soil and Water Management Plan prepared in 2019 will need to be updated.	Stormwater capture and treatment system to be upgraded.	No concerns.	5.4
	Hydrological flows	There are no riparian areas near the site.					Soil and Water Management Plan prepared in 2019 will need to be updated.	N/A	No concerns.	
Risks	Coastal hazards	No impact					No.	N/A	No concerns.	
	Flood waters	The site is not a flood area. No impact					No.	N/A	No concerns.	

Environmental and social matters	Impact	Is the impact, without mitigation, likely to cause a material effect with regard to its …				Does the impact need assessment in the EIS?	How will the impact be managed?	Are there community & other stakeholder concerns regarding the impact or activity?	Relevant Section in scoping report
		Extent	Duration	Severity	Sensitivity				
	Bushfire	Minimal impact.					No.	Site will be surrounded by earth berms. Firefighting equipment will be kept on-site.	No concerns.	5.11
	Undermining	No impact					No.	N/A	No concerns.	
	Steep slope	No impact					No.	N/A	No concerns.	

Appendix C – Approved site layout plan and proposed amended site layout plan