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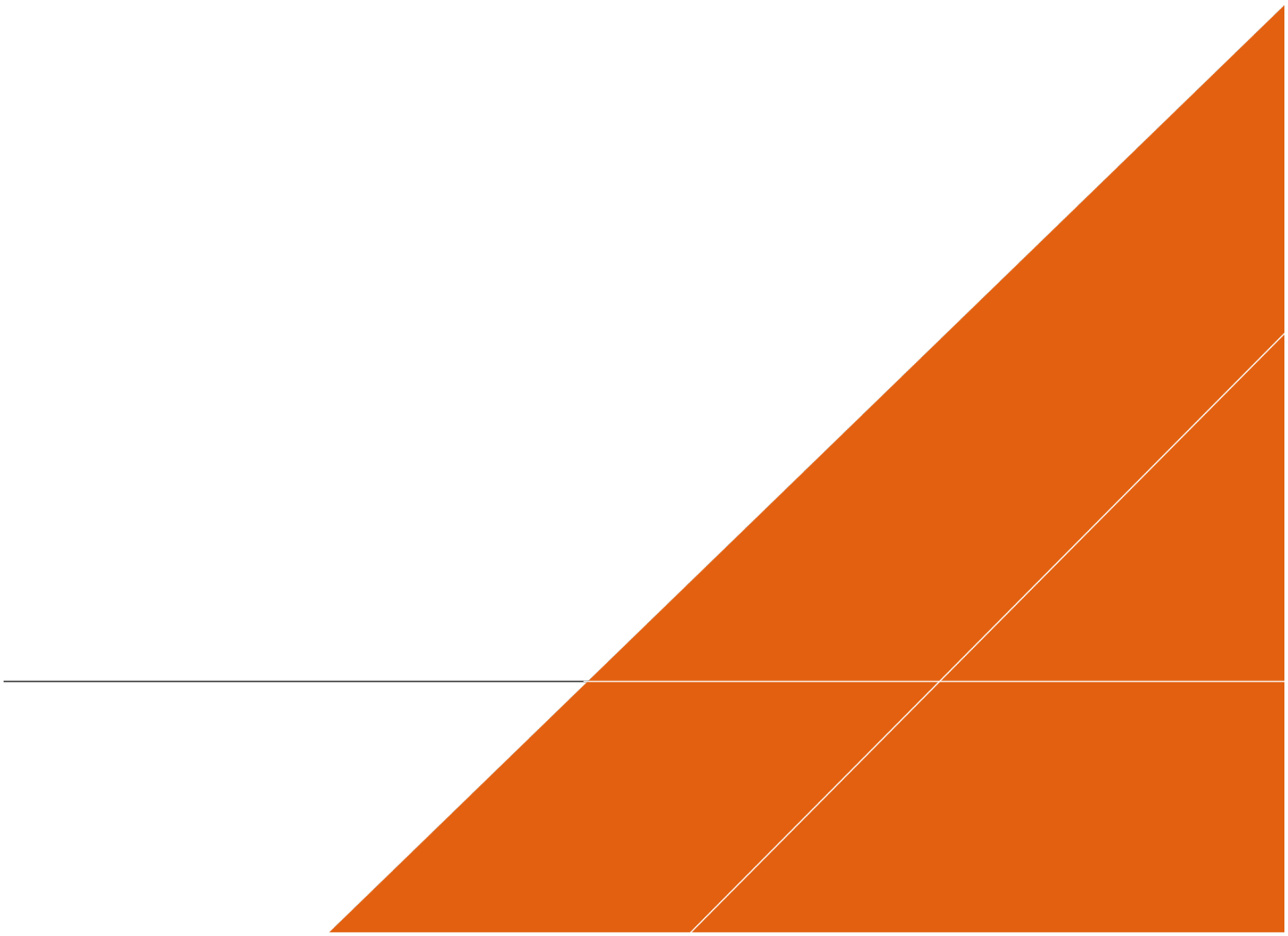
EASTERN CREEK RECYCLING ECOLOGY PARK EXPANSION

SSD Scoping Report

27 NOVEMBER 2020



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STATE SIGNIFICANT DEVELOPMENT APPROVAL

Scoping Report

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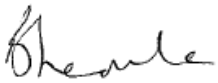
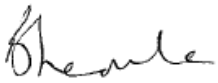
Checker	Bradley Searle	
Approver	Bradley Searle	
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REVISIONS

Revision	Date	Description	Prepared by	Approved by
A	29/10/20	Draft for Bingo review	SF	BS
B	23/11/20	Final	SF	BS

CONTENTS

GLOSSARY OF TERMS

Term	Definition
ADG Code	Australian Code for the Transport of Dangerous Goods by Road & Rail
BC Act	*Biodiversity Conservation Act 2016 (NSW)*
BLEP 2015	Blacktown Local Environmental Plan 2015
bgl	below ground level
C&D	construction and demolition
C&I	commercial and industrial
CEMP	Construction Environmental Management Plan
CLM Act	*Contaminated Land Management Act 1997 (NSW)*
COAG	Council of Australian Governments
DADI	Dial-A-Dump Industries
DECC	Department of Environment and Climate Change (Commonwealth)
DoAWE	Department of Agriculture, Water and Environment (Commonwealth)
DPI	Department of Primary Industries
DPIE	Department of Planning, Industry and Environment (NSW)
EA	Environmental Assessment
EP&A Act	*Environmental Planning and Assessment Act 1979 (NSW)*
EP&A Regs	*Environmental Planning and Assessment Regulations 2000*
EPA	NSW Environment Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*
EPL	Environmental Protection Licence
FTE	Full-time equivalent
ha	hectare
ICNG	Interim Construction Noise Guideline
ISEPP	*State Environmental Planning Policy (Infrastructure) 2007*
km	kilometres
LoS	Level of Service
m	metres
m3	cubic metres
MNES	Matters of National Environmental Significance
MOD	Modification
MOD 6	Modification 6
MPC	Materials Processing Centre
MSW	municipal solid waste
NRAR	Natural Resource Access Regulator (within DPIE)
NSW	New South Wales
OEMP	Operational Environmental Management Plan

Term	Definition
OSD	on site detention
PHA	Preliminary Hazard Analysis
PM10	particulate matter 10 micrometres or less in diameter
PM2.5	particulate matter 2.5 micrometres or less in diameter
POEO Act	*Protection of the Environment Operations Act 1997 (NSW)*
REP	Recycling Ecology Park
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policies
SEPP 33	*State Environmental Planning Policy No. 33 Hazardous and Offensive Development*
SEPP 55	*State Environmental Planning Policy No. 55 – Remediation of Land*
SEPP 59	*State Environmental Planning Policy No. 59 – Central Western Sydney Economic and Employment Area*
SMA	Segregated Materials Area
SSD	State significant development
TfNSW	Transport for NSW
tpa	tonnes per annum
VRZ	Vegetated Riparian Zone
WARR Act	*Waste Avoidance and Recovery Act 2001 (NSW)*
WARR Strategy	NSW Waste and Resource Recovery Strategy 2014-21
WHS	Work health and safety
WM Act	*Water Management Act 2000 (NSW)*
WMF	Waste Management Facility
WSEA SEPP	*State Environmental Planning Policy (Western Sydney Employment Area) 2009*

EXECUTIVE SUMMARY

Bingo Industries (Bingo – the Applicant) is seeking approval to expand the throughput limit to receive an additional 1.5 Mtpa at the Eastern Creek Recycling Ecology Park (REP) (formerly known as the Genesis Waste Management Facility (WMF)) at 1 Kangaroo Avenue, Eastern Creek in Sydney. The Eastern Creek REP is located within Lot 1 DP 1145808 and Lot 2 DP 1247691.

The Eastern Creek REP currently receives and processes up to 2 Million tonnes per annum (Mtpa) of construction and demolition (C&D) waste and commercial and industrial (C&I) waste. Bingo are seeking approval to expand the throughput limit to receive an additional 1.5 Mtpa at the Eastern Creek REP (the Proposal).

The proposed throughput would be processed through existing approved facilities including Materials Processing Centre 1 (MPC1), Materials Processing Centre 2 (MPC2) and the Segregated Materials Area (SMA) and would not require the provision of new processing infrastructure. However, supporting infrastructure is proposed to provide improved operational efficiency in support of the proposed throughput increase.

The Proposal is deemed State Significant Development (SSD) on the basis that it satisfies Clause 23(3) in Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP) *'Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste'.* As such, approval for the Proposal is sought as SSD under Part 4, Division 4.7 of the Environmental Planning and Assessment 1979 (EP&A Act). This Scoping Report has been prepared for submission to the Department of Planning, Industry and Environment (DPIE) to seek Secretary's Environmental Assessment Requirements (SEARs) for the Proposal. The Proposal would be assessed as a new State Significant Development Proposal and is not seeking to modify the existing approval (MP06_0139).

Proposal overview

The Application is seeking to expand the throughput limit at the Eastern Creek REP to receive an additional 1.5 Mtpa. The increase in throughput would be processed through existing approved facilities including MPC1, MPC2 and the SMA. Supporting infrastructure is also proposed to provide improved operational efficiency to support the increase in throughput.

The Proposal would comprise the following construction activities:

- Minor clearing and grubbing;
- Earthworks;
- Installation of a new entry and exit weighbridges and associated control offices;
- Internal road network upgrades and associated water management infrastructure (where required);
- Provision of new site entry and egress points and establishment of a staff car parking area; and
- Landscaping works.

Operation of the Proposal would continue in accordance with the current approval and would comprise:

- Receival of dry non-putrescible waste material from municipal and commercial sources;
- Resource recovery activities including timber shredding and mulching, green waste processing and mixed C&D waste processing;
- The operation of materials processing centres (MPC1 and MPC2) to recover recyclable material from C&I and C&D waste streams as well as utilisation of the chute and maintenance activities;
- Operation of the SMA, comprising crushing, grinding and separating works to process waste masonry materials;
- Stockpiling of tyres and green waste;
- Landfilling of the quarry void of non-putrescible waste (including asbestos and other non-recyclable waste); and

- Use of the designated operational areas for general operational activities.

Proposal objectives

The Proposal objectives are to:

- Enhance the operational efficiency of the Eastern Creek REP through improvements in internal design;
- Contribute to the State achieving resource recovery targets under the NSW Waste and Resource Recovery Strategy 2014-21 (NSW Environmental Protection Authority (EPA), 2014) (WARR Strategy) through increasing quantities of waste diverted from landfill; and
- Manage potential impacts associated with the construction and operation of the Proposal in an environmentally and socially responsible manner.

Need for the Proposal

The Eastern Creek REP represents essential waste infrastructure to meet the demand for processing and recovery of the anticipated C&D and C&I waste volumes in Greater Sydney in the next decade. Significant expansion of the recycling and reprocessing network is critical to meeting State and Commonwealth waste targets and responding to fundamental challenges to the recycling business model.

In a metropolitan region with severe space constraints, significant competition for land and high community sensitivity, optimising under-utilised facilities is a low-friction approach to enhancing the capacity and resilience of the overall system.

Rather than expand the footprint of waste infrastructure in Sydney, the Proposal aims to further unlock the potential of the strategically significant Eastern Creek site, with benefits of scale and optimal location within the Sydney transport network. The throughput increase supports development of the state-of-the-art Eastern Creek REP, which is being developed in response to market demand and the policies of both the NSW and Commonwealth governments for expanded and enhanced resource recovery infrastructure.

Further to this, the NSW WARR Strategy has mandated the establishment of the waste hierarchy that prioritises avoidance, recycling and finally disposal. The NSW WARR Strategy demands that resource recovery rates for C&D and C&I waste streams reach 70 per cent and 80 per cent, respectively, by 2021-22. It is Bingo's assumption that the 20-year waste strategy currently under development by the NSW Government will at least maintain, if not increase, these targets.

In addition to enabling enhanced resource recovery on site, the Proposal is also required to enhance the internal operational efficiency of the Eastern Creek REP. The reconfiguration of the internal road network, additional access points and weighbridges would allow for more efficient traffic movement through the site.

The Proposal is aimed at maximising the resource recovery capacity of the Eastern Creek REP to drive circular economy outcomes and to increase the rate of waste diversion from landfill. The Proposal achieves NSW WARR Strategy's recycling goals and would enhance the ability of waste infrastructure in the Sydney basin to meet the future demands of the C&D and C&I waste sectors.

Stakeholder engagement

Bingo is committed to engaging in a transparent and meaningful way with stakeholders at all stages of the development of the Proposal. This will ensure that interested parties have the opportunity to understand the nature of the Proposal and can provide informed feedback.

Bingo has commenced engagement with a number of Government and agency stakeholders regarding the Proposal including DPIE, DPIE's Natural Resource Access Regulator (NRAR), Blacktown City Council and the NSW EPA.

Consideration of issues that may be of interest to stakeholders, including the community and Government agencies, has helped inform the identification of key issues to be assessed as part of the EIS.

Key environmental issues

An environmental risk screening analysis has been carried out for the Proposal to identify the potential environmental impacts that may be caused by the Proposal and which areas are likely to be of interest to key stakeholders. The key environmental assessment issues identified for more detailed assessment during the preparation of the EIS include:

- Noise and vibration impacts on sensitive receivers from construction and operation of the Proposal;
- Traffic, access and parking in relation to potential impacts during construction and operation to the surrounding road network and within the Eastern Creek REP site; and
- Air quality and odour impacts on sensitive receivers from construction and operation of the Proposal.

Other environmental aspects that will be assessed during the preparation of the EIS but have been considered as 'other issues' due to the low likelihood and/or minor consequence of impacts include:

- Biodiversity impacts to flora and fauna during construction and operation of the Proposal;
- Water quality and hydrology, including potential impacts to surface and ground water quality during construction and operation of the Proposal;
- Landscape and visual amenity impact to sensitive receivers during construction and operation of the Proposal;
- Soils and contamination including potential disturbance of known contamination within soils on site;
- Hazards and risks arising from handling of minimal quantities of dangerous goods;
- Waste management impacts including construction and operational waste;
- Socio-economic issues related to the air, noise and visual amenity impacts during construction and operation; and
- Aboriginal and non-Aboriginal heritage including potential disturbance of unknown items of Aboriginal or non-Aboriginal heritage significance on site.

The assessment concluded that minimal potential environmental impacts have been identified as a result of the Proposal. The EIS will include the following in accordance with Schedule 1 of the *Environmental Planning and Assessment (EP&A) Regulations 2000*:

- A detailed description of the Proposal including its components, construction and operation activities;
- A comprehensive assessment of the potential impacts on the key issues including a description of the existing environment, assessment of potential direct and indirect construction, operation and staging impacts;
- Description of measures to be implemented to avoid, minimise, manage, mitigate, offset and/or monitor the potential impacts; and
- Identify and address issues raised by stakeholders.

1 INTRODUCTION

Bingo Industries (Bingo – the Applicant) own and operate the Eastern Creek Recycling Ecology Park (REP) (formerly known as the Genesis Waste Management Facility (WMF)) at 1 Kangaroo Avenue, Eastern Creek in Sydney. The Eastern Creek REP currently receives and processes up to 2 Million tonnes per annum (Mtpa) of construction and demolition (C&D) waste and commercial and industrial (C&I) waste. Bingo are seeking approval to expand the throughput limit to receive an additional 1.5 Mtpa at the Eastern Creek REP (the Proposal).

The proposed throughput would be processed through existing approved facilities including Materials Processing Centre 1 (MPC1), Materials Processing Centre 2 (MPC2) and the Segregated Materials Area (SMA) and would not require the provision of new processing infrastructure. However, supporting infrastructure is proposed to provide improved operational efficiency in support of the proposed throughput.

The Proposal is deemed State Significant Development (SSD) on the basis that it satisfies Clause 23(3) in Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP) *'Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste'.* As such, approval for the Proposal is sought as SSD under Part 4, Division 4.7 of the Environmental Planning and Assessment 1979 (EP&A Act).

This Scoping Report has been prepared for submission to the Department of Planning, Industry and Environment (DPIE) to seek Secretary's Environmental Assessment Requirements (SEARs) for the Proposal. These SEARs will provide the benefit of a defined scope of works to support the preparation of an Environmental Impact Statement (EIS) in line with the expectations of the regulators and in accordance with Part 4 of the EP&A Act. The Proposal would be assessed as a new State Significant Development Proposal and is not seeking to modify the existing approval (MP06_0139).

This Report has been prepared in accordance with the *Scoping an Environmental Impact Statement - Draft Environmental Impact Assessment Guidelines* (DPIE, 2017), including**:**

- Proposal description (Section 3);
- Justification and alternatives considered (Section 2);
- Planning framework and strategic planning (Section 4);
- Relevant matters for considerations including identification of those matters which will be addressed as other issues (Section 8) or key issues where a detailed assessment will also be necessary (Section 7);
- Proposed assessment approaches (Section 7);
- Identification of potential matters of concern to the community and other stakeholders (Section 5); and
- Proposed approach to engagement during preparation of the Environmental Impact Statement (EIS) (Section 5).

The key objective of the Proposal is to provide additional capacity in the NSW market to respond to shortfalls in resource recovery and recycling infrastructure. This scoping application has no association with the Next Generation Energy from Waste State Significant Development (SSD) Application (SSD-8477614).

1.1 Proposal overview

The Eastern Creek REP currently operates as an integrated waste management facility which comprises a resource recovery facility including two materials processing centres (MPC) and waste transfer station and non-putrescible landfill. The Eastern Creek REP is approved for the following activities:

- A total throughput capacity of 2 Mtpa of non-putrescible waste and landfilling of the quarry void of up to 1 Mtpa of non-putrescible waste (including asbestos and other non-recyclable waste), excluding residual chute waste from the material processing centre;
- Two advanced materials processing centres (MPC1 and MPC2) which recovers recyclable material from construction and demolition (C&D) waste and commercial and industrial (C&I);
- Crushing, grinding and separating works to process waste masonry material located in an area earmarked as the Segregated Materials Area (SMA); and
- Stockpiles of 50 t of tyres and 20,000 t of green waste (stockpiles for all other material cannot exceed the height of the amenity berms, impervious barriers or visual screens).

The Applicant is seeking approval to process an additional 1.5 Mtpa. The Proposal does not require construction of new processing infrastructure. However, supporting infrastructure including new heavy vehicle access points, weighbridges and upgrades to the internal road network is proposed to provide improved operational efficiency in support of the increase in throughput.

An overview of the Proposal is shown in Figure 1-1. A detailed description of the Proposal is presented in Section 3 of this report.

A number of resource recovery activities are currently carried out on site, including coarse crushing, cleaning and shredding activities (within the segregated materials area (SMA)) as well as more advanced recovery within MPC1. A second materials processing centre (MPC2) approved (under Modification 5 to approval MP06_139) is currently under construction and will increase the existing resource recovery capacity. The Proposal will increase the utilisation of this existing infrastructure.

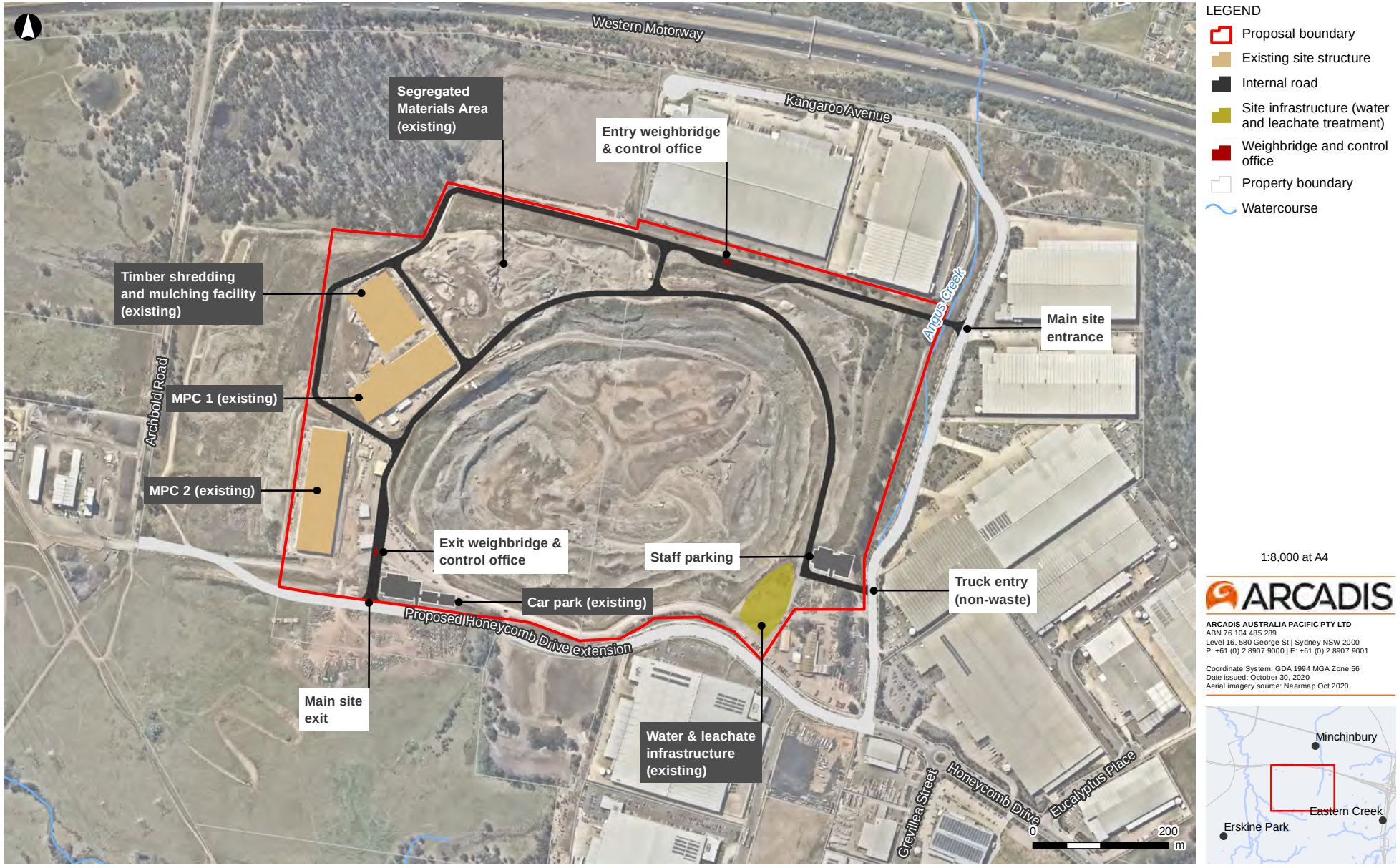

Figure 1-1: The proposal

1.2 The Applicant

The Applicant for the Proposal is Bingo Industries Pty Limited (Bingo). Bingo currently operates the Eastern Creek REP and would be responsible for operation of the Proposal.

Bingo has been operating since 2005 and is an industry leader in waste management and resource recovery in the New South Wales and Victorian markets. Through investing in recycling and resource management infrastructure, Bingo assists customers, governments and communities to move towards a truly circular economy by closing the resources loop.

Bingo currently operates 16 waste management facilities in Australia with a combined network capacity of 4.6 Mtpa. In New South Wales, Bingo manages a significant proportion of the Sydney basin C&I and C&D waste streams through the operation of a network of critical waste management infrastructure including transfer stations, advanced recycling facilities and landfills located at Patons Lane and Eastern Creek. Bingo's network of facilities incorporates advanced waste management technologies to achieve resource recovery rates in excess of 75 per cent and increase waste diverted from landfill.

Bingo also leverages its extensive network of waste facilities with a fleet of 255 collection vehicles across New South Wales, providing a fully integrated waste management network, from source to processing and advanced resource recovery and recycling. Bingo is leading the push for a 'waste free Australia' through a recycling-led solution, investment in advanced resource recovery technology and continuous innovation to enhance sustainable outcomes for the closed loop management of waste in New South Wales.

1.3 Site location

The 54 hectare (ha) Eastern Creek REP is shown in Figure 1-1 and comprises two parcels of land being 1 Kangaroo Avenue, Eastern Creek (Lot 1 DP 1145808 and Lot 2 DP 1247691). The Eastern Creek REP is located within the central western suburbs of Sydney, approximately 36 km west of the Sydney CBD, 18 km west of Parramatta and 12 km east of Penrith (the site). The regional context of the Eastern Creek REP is shown on Figure 1-2.

The site is located within the Eastern Creek industrial precinct/M7 business hub and is surrounded by a large range of industrial developments, primarily to the east. These industrial developments include Techtronic Industries, H&M distribution warehouse, Kuehne + Nagel (Australia) Pty Ltd warehouse, Kmart distribution centre, Bunnings distribution centre and DB Schenker warehouse. To the east of the Eastern Creek REP site is a 29-ha unoccupied site owned by DPIE.

The site is bounded by the Western Motorway (M4) to the north, Kangaroo Avenue to the east and Honeycomb Drive to the south. The Archbold Road extension will run parallel to the western boundary of the site (Transport for NSW (TfNSW), 2019). The Eastern Creek REP is enclosed by commercial and industrial buildings to the immediate north, east and south of the site. The closest residential receivers are located approximately 400 metres (m) to the north in the suburb of Minchinbury and approximately 1.2 kilometres (km) west in the suburb of Erskine Park. Nearby sensitive receivers are shown on Figure 1-3.

LEGEND

- Proposal boundary
- Eastern Creek Recycling Ecology Park boundary
- Major road
- Railway
- Watercourse

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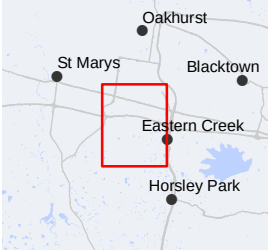

Figure 1-2: Regional context

LEGEND

- Proposal boundary
- Eastern Creek Recycling Ecology Park boundary
- Watercourse
- Education facility (Minchinbury Public School)
- Industrial receiver
- Recreational area
- Sensitive residential receiver

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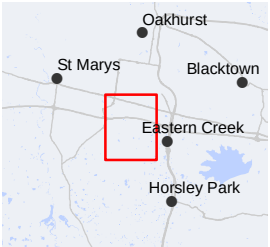

Figure 1-3: Nearby sensitive receivers

1.4 Site history

During the 1800s, the Eastern Creek REP site was used for both agricultural and breccia quarrying purposes. The quarrying activities expanded by the 1930s and was formally operated by the Ray Fitzpatrick Quarriers in the 1950s. Quarrying activities continued until September 2006, with the final quarry void estimated to be 11 million m^3.

In November 2009, Dial-A-Dump Industries (DADI) acquired the site and gained approval for the construction and operation of the Genesis Xero Waste Management Facility (now named Eastern Creek REP) (MP 06_0139), comprising a resource recovery facility and non-putrescible landfill with a material handling capacity of 700,000 tpa. This facility commenced operations in 2012.

Bingo acquired DADI in February 2019, comprising all its NSW waste and recycling assets. Bingo took over the operation of the Eastern Creek REP following completion of the acquisition process.

Since the original project approval, six modifications have been subsequently submitted and approved, the most recent of which was in April 2020. Table 1-1 provides a summary of these previous approvals. A seventh modification was submitted to DPIE in March 2017 but was subsequently withdrawn.

Table 1-1 Previous Modifications to MP 06_0139

Modification No.	Summary of Modifications	Approval Date
MOD 1	• Installation of conveyor and chute. • Permit two-way traffic on Fourth Avenue. • Construction of concrete bay walls within the green waste processing area. • Relocation of the wheel wash.	30 September 2010
MOD 2	• Administrative amendment to correct the land (lot and DP) to which the project applies.	9 November 2010
MOD 3	• Amendments to final landform level of the fill pad at Area D • Revision of operational landform levels and the site's stormwater design • Revision of the Voluntary Planning Agreement • Retrospective approval of various buildings/structures, including: - additional internal office and external amenities at the - weighbridge - new administration and amenities buildings - relocation of the vehicle turning bay.	5 December 2011
MOD 4	• Extension of the operational hours for the MPC	13 December 2013
MOD 5	• Construction of an additional MPC adjacent to the MPC1	17 March 2016
MOD 6	• Increase the proportion of the annual waste receival limit that can be landfilled from 700,000 to 1,000,000 tpa • Extend the hours of operation of certain approved activities	29 April 2020

Modification No.	Summary of Modifications	Approval Date
	• Increase the noise limits set out in the Project Approval.	
Transition to State Significant Development	• Following the repeal of Part 3A of the EP&A Act on 1 October 2011, the project was subject to the transitional arrangements provided by the *Environmental Planning and Assessment Regulations 2000* (EP&A Regs). The transitional arrangements provided by EP&A Regs have now ceased, and the project has been transitioned to a State Significant Development (SSD) on 2nd October 2020.	2 October 2020

1.5 Current Operations

The Eastern Creek REP was originally approved (MP 06_0139) under Part 3A (now repealed) of the EP&A Act in 2009 and commenced operations in 2012. Following the repeal of Part 3A of the EP&A Act on 1 October 2011, the project was subject to the transitional arrangements provided by the *Environmental Planning and Assessment Regulations 2000* (EP&A Regs), and the consent was subsequently modified under Section 75W of the EP&A Act six times (refer to Table 1-1).

The most recent modification, MOD 6, was approved on 29 April 2020 under these transitional arrangements. The transitional arrangements provided by EP&A Regs have now ceased, and the project was declared an SSD by the Minister on 2nd October 2020. Consequently, the project is subject to planning provisions provided under Part 4, Division 4.7 of the EP&A Act. Section 4.3.1 provides further detail on the planning approval pathway for the Proposal.

The Eastern Creek REP is currently authorised for the following activities:

- A throughput capacity of 2,000,000 tpa of non-putrescible waste accepted at the site, and landfilling of the quarry void of up to 1,000,000 tpa of non-putrescible waste (including asbestos and other non-recyclable waste);
- The operation of materials processing centres (MPC1 and MPC2) to recover recyclable material from C&I and C&D waste streams as well as utilisation of the chute and maintenance activities;
- Operation of the SMA, comprising crushing, grinding and separating works to process waste masonry materials;
- Receipt of segregated materials and truck delivery for landfilling activities; and
- Stockpiles of 50 t of tyres and 20,000 t of green waste (stockpiles for all other material cannot exceed the height of the berms, impervious barriers or visual screens).

The approved operating hours for the Eastern Creek REP are presented in Table 1-2 below.

Table 1-2 Approved operating hours

Activtiy	Day	Time
Construction	Monday – Friday	7:00am to 6:00pm
	Saturday	8:00am to 4:00pm
	Sunday and Public Holidays	Nil
MPC – operation, waste receival, chute use and maintenance	Monday – Friday	24 hours
	Saturday	
	Sunday and Public Holidays	

Activtiy	Day	Time
SMA – crushing and screening	Monday – Friday	6:00am to 6:00pm
	Saturday	8:00am to 4:00pm
	Sunday and Public Holidays	
SMA - receipt of segregated materials	Monday – Friday	24 hours
	Saturday	8:00am to 4:00pm
	Sunday and Public Holidays	8:00am to 4:00pm
Landfill – truck deliveries	Monday – Friday	5:00am to 9:00pm
	Saturday	
	Sunday and Public Holidays	

2 PROPOSAL NEED AND OBJECTIVES

2.1 Proposal objectives

The Proposal objectives are to:

- Enhance the operational efficiency of the Eastern Creek REP through improvements in internal design;
- Contribute to the State achieving resource recovery targets under the NSW Waste and Resource Recovery Strategy 2014-21 (NSW Environmental Protection Authority (EPA), 2014) (WARR Strategy) through increasing quantities of waste diverted from landfill; and
- Manage potential impacts associated with the construction and operation of the Proposal in an environmentally and socially responsible manner.

2.2 Need for the Proposal

The Eastern Creek REP represents essential waste infrastructure to meet the demand for processing and recovery of the anticipated C&D and C&I waste volumes in Greater Sydney in the next decade. Significant expansion of the recycling and reprocessing network is critical to meeting state and Commonwealth waste targets and responding to fundamental challenges to the recycling business model.

The National Waste Report, released by the Department of Environment and Energy in 2018, revealed three-quarters of our waste is generated by the C&D and C&I sectors, with 40% of this waste ending up in landfill. In order to increase recovery rates and divert waste from landfill, large-scale recycling facilities that can process large quantities of B&D and C&I waste are essential.

In a metropolitan region with severe space constraints, significant competition for land and high community sensitivity, optimising under-utilised facilities is a low-friction approach to enhancing the capacity and resilience of the overall system.

Rather than expand the footprint of waste infrastructure in Sydney, the Proposal aims to further unlock the potential of the strategically significant Eastern Creek site, with benefits of scale and optimal location within the Sydney transport network. The throughput increase supports development of the state-of-the-art Eastern Creek REP, which is being developed in response to market demand and the policies of both the NSW and Commonwealth governments for expanded and enhanced resource recovery infrastructure.

The NSW Waste and Resource Recovery (WARR) Strategy 2014-2022 establishes 2021/22 targets for the state, including waste avoidance, recycling and landfill diversion. The *WARR Strategy Progress Report 2017-18* (latest data available) indicates NSW is significantly below most of the targets for delivery at conclusion of the WARR Strategy next financial year (Table 2-1). The C&I targets are significantly short and there has been only marginal progress on overall landfill diversion.

Table 2-1 Relevant targets and progress (WARR Strategy Progress Report 2017-18)

Key Result Area	Target (2021/22)	Progress Report update
Increase recycling	Increase recycling rates for C&I waste to 70%	• Recycling rate in 2017-18 was 53%. • The C&I recycling rate increased by six percentage points from 47% in 2015-16.
	Increase recycling rates for C&D waste to 80%	• Recycling rate in 2017-18 was 77%. • The C&D recycling rate fluctuated in the last three years.
Divert more waste from landfill	Increase the diversion rate to 75%	• The diversion rate in 2017-18 was 65%.

Key Result Area	Target (2021/22)	Progress Report update
		• This is an increase of two percentage points from 63% in 2015-16 and is primarily driven by the increase proportion of construction waste, which has higher recovery rates.

Recycling of C&D waste is close to the 80% target. Additional recovery in the MLA of 975,000 tonnes would have been required to achieving the 9.2 Mt volume. However, performance is highly influenced by the long-distance transport of up to 1 Mt a year to Queensland, a practice anticipated to become less viable as the Queensland waste levy increases annually to $90/tonne by 2024. An increasing proportion is likely to require local management, with recovery capacity for 80% of it to achieve the State targets. Recycling of C&I waste is 17 percentage points below target. To achieve a 70% C&I recycling rate in 2017/18 within the Metropolitan Levy Area (for indicative purposes), an additional 634,000 tonnes of C&I recycling would have been required to achieve the 2.1 Mt target volume. That volume will grow year-on-year with economic growth.

There is very limited recovery of mixed C&I waste in Sydney, with only three existing processing facilities, with a collective approved annual capacity of 280,000 tonnes. The Cleanaway-ResourceCo facility at Wetherill Park is the only significant facility at an approved capacity of 250,000 tonnes per annum. These facilities produce a single-use refuse derived fuel (RDF), which is the lowest order recovery pathway in the waste hierarchy.

Going forward, the 20-Year NSW Waste Strategy is expected to adopt a circular economy framework that aims to keep materials circulating at their highest order use. Increasing throughput to the Eastern Creek REP would help drive circular economy outcomes rather than disposal or RDF production.

Beyond the NSW policy context, the Commonwealth government has responded to concerns about the environmental impact of exported recyclables by introducing phased in bans on export of scrap paper, plastic, glass and tyres that has not been subject to some form of value-added processing to make them ready for use. Almost 650,000 tonnes per annum will require additional value-added processing (Figure 2-1).

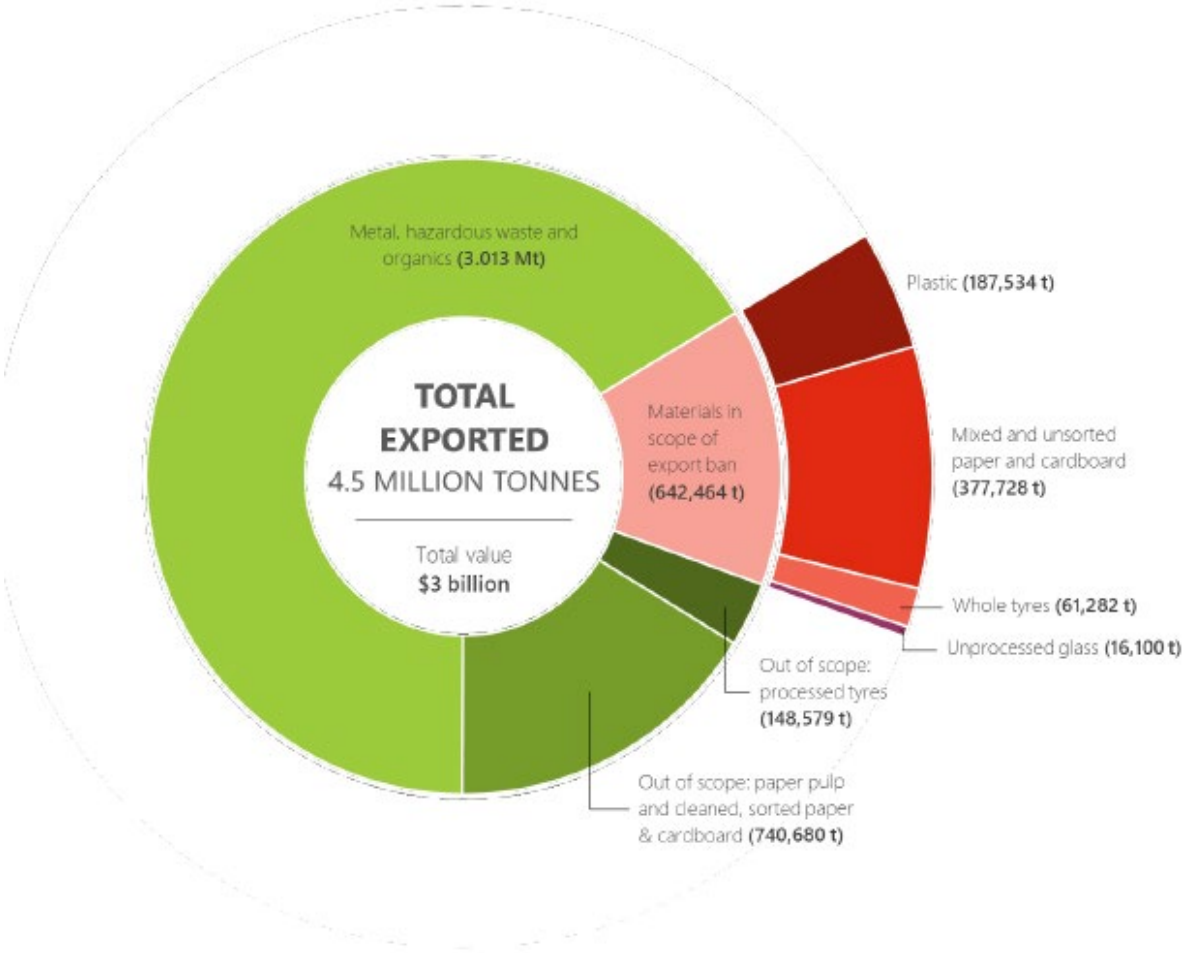

Figure 2-1 Estimated coverage of the incoming export ban[1]

The individual bans, proposed for progressive introduction between 2021 and 2024, are intended to facilitate investment in advanced sorting and materials reprocessing in order to produce a product that is tailored to the specifications for remanufacturing. The Commonwealth has allocated $250 million in the 2020.21 budget to modernise Australia's recycling infrastructure, including the $190 million Recycling Modernisation Fund.

In addition to further utilising the enhanced resource recovery infrastructure on site, the Proposal will also enhance the internal operational efficiency of the Eastern Creek REP. The reconfiguration of the internal road network, additional access points and establishment of entry and exit weighbridges would allow for more efficient traffic movement through the site. As the site currently only has access via Kangaroo Avenue, the extension of Honeycomb Drive (expected to be completed by the end of 2021) and addition of a separate truck exit point would also facilitate direct access to the future extension of Archbold Road. This would allow more efficient traffic circulation and reduce traffic currently transiting through the M7 Business Hub. These changes would have direct safety, economic and environmental benefits. In summary, the Proposal is aimed at maximising the resource recovery capacity of the Eastern Creek REP to drive circular economy outcomes and to increase the rate of waste diversion from landfill. The Proposal would also allow Bingo to enhance internal operational efficiencies and optimise site activities. On this basis, it achieves the NSW WARR Strategy's recycling goals and would enhance the ability of waste infrastructure in the Sydney basin to meet the future demands of the C&D and C&I waste sectors.

[1] Phasing out exports of waste plastic, paper, glass and tyres – Response Strategy, 2020. COAG

2.3 Alternatives

Consideration was given to alternative approaches as part of the design development process for the Proposal. Each of these alternatives have been discarded as they would not adequately address the critical need for expansion of operations at the Eastern Creek REP.

The feasible alternatives considered for the Proposal, included:

- **A 'Do nothing' scenario:** this scenario was rejected as it would not increase the resource recovery capacity of the existing operations. This would be inconsistent with the objectives and goals mandated in local, state and national strategic planning frameworks (discussed in Section 2.2).
- **Alternative site:** Several alternative sites were considered; however, these scenarios were rejected due to Eastern Creek's current approvals for diverse resource recovery activities and the integrated nature of waste management operations at the site. The Eastern Creek REP is also located in close proximity to both the M4 and M7 Motorways, which are part of the regional transport network that make the site highly accessible to metropolitan Sydney. This was considered beneficial for the operation of Bingo's broader metropolitan truck and waste service networks
- **Alternative site configuration and layout:** Bingo have commissioned a comprehensive master planning process to optimise the layout of the site into the future. The Proposal would not substantially alter the existing site layout. However, it would allow greater utilisation of existing infrastructure whilst supporting potential future layout changes. Future layout changes (subject to a separate approval) would be implemented in consultation with government authorities as well as additional data from more detailed environmental investigations for aspects such as noise and traffic.

Based on the above factors, the Proposal at the Eastern Creek site is considered the most suitable option.

3 PROPOSAL DESCRIPTION

The Applicant is seeking approval to increase throughput at the Eastern Creek REP from 2 Mtpa to 3.5 Mtpa (an increase of 1.5 Mtpa). There would be no change to the approved waste types accepted at the REP. The increase in throughput would be processed through existing approved facilities including MPC1, MPC2 and the SMA. Supporting infrastructure is also proposed to provide improved operational efficiency to support the increase in throughput. The proposed throughput increase would maximise resource recovery from the REP utilising existing infrastructure.

3.1 Built form

The Proposal as shown in Figure 1-1 would comprise the following new elements:

- Staff car parking area and access point from Honeycomb Drive in the south east of the site containing 69 light vehicle bays;
- Heavy vehicle access point from Kangaroo Avenue in the north east of the site;
- Heavy vehicle egress point from the proposed Honeycomb Drive extension in the south west of the site;
- Six new entry and exit weighbridges and associated control offices near the new northern vehicle access point from Kangaroo Avenue; and
- Reconfiguration and upgrade of the internal site road network and associated water management infrastructure (where required).

The Proposal would be designed and constructed in accordance with relevant legislation, regulations and standards.

3.2 Construction activities

Construction is anticipated to commence in January 2022 and would take approximately 12 months to complete. The value of the works is expected to be approximately $10 million and would generate approximately 30 full time equivalent jobs during the construction period. Works would be undertaken during standard construction hours:

- 7am to 6pm Monday to Friday
- 8am to 4pm Saturday
- No works on Sundays or Public Holidays.

The key construction components of the Proposal would include:

- Minor clearing and grubbing;
- Minor earthworks where required to facilitate internal roads, car parking and weighbridges;
- Installation of a new entry and exit weighbridges and associated control offices;
- Internal road network upgrades and associated water management infrastructure (where required);
- Provision of new site entry and egress points and establishment of a staff carparking area; and
- Landscaping works.

Construction equipment is anticipated to include:

- Excavators.
- Forklifts.
- Cherry pickers and mobile cranes.
- Water trucks.
- Handheld tools.

- Concrete agitators, concrete pumps and concrete saws.

3.3 Operations

Operation of the Proposal would continue in accordance with the current approval and would comprise:

- Receival of dry non-putrescible waste material from municipal and commercial sources;
- Resource recovery activities including timber shredding and mulching, green waste processing and mixed C&D waste processing;
- The operation of materials processing centres (MPC1 and MPC2) to recover recyclable material from C&I and C&D waste streams as well as utilisation of the chute and maintenance activities;
- Operation of the SMA, comprising crushing, grinding and separating works to process waste masonry materials;
- Stockpiling of tyres and green waste;
- Landfilling of the quarry void of non-putrescible waste (including asbestos and other non-recyclable waste); and
- Use of the designated operational areas for general operational activities including truck parking.

Key operational details are included in Table 3-1.

Table 3-1 Key operational details of the Proposal

Operational component	Proposed Operations
Receival limit	3,500,000 tpa
Resource recovery limit	2,500,000 tpa (included within the 3,500,000 tpa receival limit)
Landfill receival capacity	1,000,000 tpa (included within the 3,500,000 tpa receival limit)
Types of waste accepted	The Proposal would accept dry non-putrescible waste material from municipal and commercial sources including: • General solid waste (non-putrescible) including: – Acid sulphate soils – Bricks and concrete – Glass – Metals – Plastics – Sandstone • Mixed building and demolition waste • Virgin excavated natural material • Wood waste • Garden waste • Tyres • Asbestos waste • Asphalt waste • Soils • Paper and cardboard.

Operational component	Proposed Operations
Resource recovery processing activities*	The resource recovery processing activities including: • Timber shredding and mulching • Green waste processing • Mixed C&D waste processing • Dry C&I waste processing
Operating hours	See Table 3-2
General type of equipment used for processing	Equipment currently utilised on site includes the following: • Multiple mobile crushers and screeners used for the production of a range of recycled products • Multiple timber shredders • Auxiliary equipment including screens, stockpilers and reclaimers • Mobile equipment including loaders, excavators, dump trucks, water carts and landfill compactors • Large scale fixed recycling plant comprising shredders, screens, blowers, magnets, eddy current separators, optical and x-ray sorters
Storage	Stockpiling of: • 50 tonnes of tyres • 20,000 tonnes of green waste • Individual wood stockpiles must not exceed 2,000 tonnes (no limit to overall storage)

*The increase throughput would be processed utilising existing approved resource recovery processes. No new processing types or processing infrastructure is included within the Proposal.

Table 3-2 Proposed operational hours

Activtiy	Day	Time
MPC – operation, waste receival, chute use and maintenance	Monday – Friday	24 hours
	Saturday	
	Sunday and Public Holidays	
SMA – crushing and screening	Monday – Friday	6:00am to 6:00pm
	Saturday	8:00am to 4:00pm
	Sunday and Public Holidays	
SMA - receipt of segregated materials	Monday – Friday	24 hours
	Saturday	8:00am to 4:00pm
	Sunday and Public Holidays	8:00am to 4:00pm
Landfill – truck deliveries	Monday – Friday	5:00am to 9:00pm
	Saturday	
	Sunday and Public Holidays	

Note that the operational hours provided in Table 3-2 are consistent with those approved under MP06_0139.

4 PLANNING CONTEXT

The following section provides an overview of the key legislation and planning instruments applicable to the Proposal. A detailed assessment of all the relevant legislation will be undertaken as part of the Environmental Impact Statement (EIS).

4.1 Existing approvals and Environmental Protection License

As noted in Section 1.4, the existing project approval (MP 06_0139) was granted by the NSW Minister for Planning on 22 November 2009 under Part 3A (now repealed). Subsequently, six modifications to the Eastern Creek REP have been approved and are outlined in Table 1-1.

The existing Eastern Creek REP also holds two Environmental Protection Licences (EPL) issued by the NSW EPA:

- **EPL 13426** - relates to the landfilling component of the operation and permits the facility to undertake landfilling and waste storage activities
- **EPL 20121** - relates to the recycling and resource recovery component of the operation and permits the facility to undertake composting, resource recovery and waste storage activities.

4.2 Commonwealth legislation

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework to protect features deemed to be Matters of National Environmental Significance (MNES), including:

- World heritage properties
- National heritage places
- Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed)
- Nationally threatened species and ecological communities
- Migratory species
- Commonwealth marine areas
- The Great Barrier Reef Marine Park
- Nuclear actions (including uranium mining)
- A water resource, in relation to coal seam gas development and large coal mining development.

An initial assessment of the Proposal against MNES under the EPBC Act, suggests that the Proposal would not have any significant impact upon these matters and therefore referral to the Commonwealth Minister for the Environment is not considered warranted.

4.3 NSW Legislation

4.3.1 Environmental Planning and Assessment Act 1979

The Eastern Creek REP was originally approved under Part 3A of the EP&A Act (MP 06_0139) in November 2009. Following the repeal of Part 3A of the EP&A Act on 1 October 2011, the project was subject to the transitional provisions provided by the EP&A Regs. Since the commencement of operations in 2012, the project was modified six times under Section 75W of the EP&A Act (refer to Table 1-1). As the transitional arrangements for Part 3A have now ceased (September 2018), the project approval was declared an SSD by the Minister on 2nd October 2020 and all future modifications will be subject to the planning provisions under Part 4 of the EP&A Act.

Part 4 of the EP&A Act provides for control of 'development' that requires development consent from the relevant consent authority. Division 4.7 of Part 4 provides for control of SSD where the Minister for Planning and Public Spaces (or delegate) is the consent authority.

The Proposal would be considered as SSD under Clause 23 (waste and resource management facilities) of Schedule 1 of the State and Regional Development SEPP (refer to Section 4.3.2). The Proposal would be assessed as a new State Significant Development Proposal and is not seeking to modify the existing approval (MP06_0139).

Division 4.7 also identifies provisions of other environmental and planning legislation that does not apply to SSD and approvals required under other legislation that must be applied consistently with any approval granted for SSD under the EP&A Act.

Section 4.15 of the EP&A Act identifies the matters for consideration that must be taken into account by a consent authority when determining a development application. An assessment of the Proposal against the provisions of section 4.15 of the EP&A Act will be provided within the Environmental Impact Statement (EIS).

4.3.2 Other legislation

The EIS would provide a review of the Proposal against relevant legislation. Legislation that may be applicable to the Proposal includes, but may not be limited to:

- NSW *Protection of the Environment Operations Act 1997* (POEO Act): The POEO Act is the principal NSW environmental protection legislation and is administered by the EPA. The site has two active EPLs which may require modification.
- *Protection of the Environment Operations (Waste) Regulation 2014:* The Protection of the Environment Operations (Waste) Regulation 2014 POEO (Waste) Regulation requires tracking of certain waste within NSW and between participating states. Each party must be authorised to store, transport, or receive the specific type of waste.
- *Waste Avoidance and Recovery Act 2001* (WARR Act): The WARR Act aims to encourage the most efficient use of resources to reduce environmental harm and ensure that resource management is undertaken in a logical, sustainable and organised manner. The Proposal would promote resource recovery and diversion of waste to landfill and most importantly deliver on the principles of circular economy.
- *Contaminated Land Management Act 1997* (CLM Act)*:* The CLM Act governs the requirements to notify and remediate contaminated land in NSW. Previous environmental assessment documents have identified elevated levels of some analytes at the Easter Creek REP site (e.g. nickel is found to be naturally occurring at the site), however have not identified significant contamination.
- *Roads Act 1993:* Any works seeking to disturb public roads will require approval under the *Roads Act 1993* and consent to be granted either by Blacktown City Council or Transport for NSW.
- *Water Management Act 2000* (WM Act)*:* The WM Act governs the preparation of water sharing plans that set extraction limits and rules for water access, available water determinations, account management and trading to protect water sources. The Proposal has the potential to encroach on the Angus Creek Vegetated Riparian Zone (VRZ) and would be subject to approval under the WM Act.

4.4 State Environmental Planning Policies

The following State Environmental Planning Policies (SEPPs) may be applicable to the Proposal, and would be considered within preparation of the EIS if required:

- *State Environmental Planning Policy (Western Sydney Employment Area) 2009* (WSEA SEPP): The WSEA SEPP aims to promote economic development and employment, provide for the orderly and coordinated development of land, rezone land for employment or conservation purposes, ensure development occurs in a logical, cost-effective and environmentally sensitive manner and conserve and rehabilitate. Under the WSEA SEPP the site is predominantly zoned IN1 General

Industrial, with the conservation area to the north west of the site zoned E2 Environmental Conservation. As the Proposal would be undertaken wholly within the area zoned as IN1 General Industrial, it would be considered permissible with consent

- *State Environmental Planning Policy No. 55 – Remediation of Land* (SEPP 55): SEPP 55 aims to promote the remediation of contaminated land with the objective of reducing the risk of harm to human health or other aspects of the environment. Clause 7 of SEPP 55 imposes an obligation on the approval authority to have regard to certain matters before granting approval
- *State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)*: Section 121 of the ISEPP facilitates the development for the purposes of waste or resource management facilities to be undertaken, with development consent within a 'prescribed zone' being IN1 General Industrial. The Eastern Creek REP site is zoned IN1 General Industrial under the WSEA SEPP. Therefore, development of waste or resource management facilities and supporting infrastructure would be permissible on the Eastern Creek REP site with development consent

  In addition, the ISEPP identifies development that is considered to be Traffic Generating Development. As per Schedule 3 of the ISEPP, a recycling facility or transfer station of any size or capacity is considered to be a Traffic Generating Development. The EIS will assess traffic impacts in accordance with ISEPP.
- *State Environmental Planning Policy No. 33 Hazardous and Offensive Development* (SEPP 33): SEPP 33 links the permissibility of an industrial development to its safety and environmental performance. The Proposal falls within the definition of a "potentially hazardous industry" or "potentially offensive industry" under the SEPP 33. The EIS would prepare a hazards screening assessment to determine if a preliminary hazard analysis is required.
- Eastern Creek Precinct Plan (as a deemed Development Control Plan – adopted by the WSEA SEPP): The Eastern Creek Precinct Plan was prepared in accordance with the now repealed *State Environmental Planning Policy No. 59 – Central Western Sydney Economic and Employment Area* (SEPP 59) and provides guidelines for planning and development in the Eastern Creek Precinct. The Eastern Creek REP is identified in the Stage 3 Release Area and therefore the Proposal would need to consider the provisions of the Eastern Creek Precinct Plan in further assessment.

4.5 Local planning instruments

The relevant local planning instrument is the Blacktown Local Environmental Plan 2015 (BLEP 2015). However, as Lot 1 DP 1145808 and Lot 2 DP 1247691 (subject of the Proposal) are contained within the WSEA SEPP, the land use zoning of these lots in the BLEP 2015 is deferred.

Under the WSEA SEPP, the Eastern Creek REP site is zoned as predominantly IN1 General Industrial with the conservation area to the north west of the site zoned as E2 Environmental Conservation.

4.6 Strategic planning

The Proposal supports a number of key strategic documents and pieces of legislation. The most applicable of these being:

- **A Metropolis of Three Cities**: A Metropolis of Three Cities is the plan for the Greater Sydney Region to 2056 and is built on a vision of three cities: once of which being the Central River City where the Eastern Creek REP is located. Objective 35 of A Metropolis of Three Cities seeks to promote the development of a circular economy (objective 35); an outcome directly supported by the Eastern Creek REP and its resource recovery activities.
- **The Central City District Plan**: As a guide to delivering A Metropolis of Three Cities the Greater Sydney Commission has released five district plans. The facility is identified as a major component of the Central River City and would support a number of the Central City District Plan's key actions, including allowing the continued use of an existing location for waste recycling management (Action 77), and reducing the volume of waste via resource recovery (Action 78)
- **NSW Government Circular Economy Policy Statement**: The Policy Statement is aimed at changing the way we produce, assemble, sell and use products to minimise waste and reduce

environmental impacts. Increasing the volume of resource recovery via the Proposal directly contributes to achieving circular economy outcomes.

- **NSW Waste Avoidance and Resource Recovery (WARR) Strategy**: The NSW WARR Strategy sets waste recovery targets aimed at reducing waste and keeping materials circulating within the economy. These targets are to be achieved by 2021-22, and comprise:
  - C&I from 57% (in 2010–11) to 70%
  - C&D from 75% (in 2010-11) to 80%
  - MSW from 52% (in 2010–11) to 70%
  - Increase the waste diverted from landfill from 63% (in 2010-11) to 75%.

  The Proposal contributes to the achievement of these targets through the increase in resource recovery activities.
- **Western Sydney WARR Strategy:** The Western Sydney WARR Strategy outlines regional priorities and actions for councils aimed at diverting more waste from landfill and capitalising on the need to sustainably manage waste in the region. Themes 2 & 3: Increase Recycling and Divert More Waste from Landfill targets increasing domestic resource recovery rates in the region to 70 per cent by 2025. The Proposal directly supports this target through enhancing resource recovery rates at the Eastern Creek REP.

5 STAKEHOLDER ENGAGEMENT

5.1 Community and stakeholder engagement

Community engagement will be carried out by Bingo throughout the preparation of the Proposal to provide an opportunity for community members to provide feedback throughout the process. Engagement with the community, nearby businesses and other potential interest groups will occur via range of communication tools, including:

- Website updates and notifications;
- Fact sheets;
- Embellishment of an established email address and phone hotline; and
- Email, letter, phone calls and/or door knocks to surrounding businesses and relevant residential areas.

5.2 Government agency engagement

Bingo has commenced engagement with a number of Government and agency stakeholders regarding the Proposal including DPIE, DPIE's Natural Resource Access Regulator (NRAR), Blacktown City Council and the NSW Minister for Energy and Environment.

During the preparation of the EIS the Applicant will consult with, as a minimum, the following:

- Blacktown City Council.
- Environment Protection Authority (NSW EPA).
- Department of Planning, Industry and Environment (DPIE).
- Department of Primary Industries (DPI).
- Sydney Water.
- Natural Resource Access Regulator (NRAR).
- Transport for NSW (TfNSW).
- NSW Fire and Rescue.
- Nearby landowners and occupiers that may be affected by the Proposal.

The EIS will describe the consultation process and the issues raised by both the community and Government agencies and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, adequate explanation will be provided in the EIS.

6 PRELIMINARY ENVIRONMENTAL RISK ANALYSIS

An initial review of potential environmental issues for consideration has been undertaken to determine the level of assessment required to adequately identify and reduce the risk of each issue. The *Scoping an Environmental Impact Statement - Draft Environmental Impact Assessment Guidelines* (DPIE, 2017), provide guidance on key considerations for determining areas likely to have an impact, including:

- Extent (geographic) of the impact;
- Duration of the impact;
- Severity of the impact;
- Sensitivity of the receiving environment; and
- Potential for cumulative impact.

A preliminary risk screening analysis has been carried out to determine key issues associated with the Proposal with potential to have an impact. The screening analysis has been determined based on the methodology described below as well input from stakeholder engagement (described in Section 5).

6.1 Environmental risk screening methodology

The preliminary environmental risk screening identified and assessed the potential environmental impacts associated with the Proposal and assigned a risk ranking to each of the impacts identified. Each of the potential environmental impacts has been ranked between 'very low' and 'very high' based on the unmitigated environmental impacts that could potentially result.

Table 6-1 provides the risk categories used to guide the identification of an appropriate risk ranking.

Table 6-1 Risk analysis categories and criteria for risk rating

Likelihood	Consequence				
	1 – Not significant	2 – Minor	3 – Moderate	4 – Major	5 – Severe
A – Almost certain	Moderate	Moderate	High	Very High	Very High
B – Likely	Low	Moderate	High	Very High	Very High
C – Possible	Low	Low	Moderate	High	High
D – Improbable	Very low	Low	Low	Moderate	Moderate
E - Rare	Very low	Very low	Low	Low	Moderate

The allocation of risk is determined on the basis of consideration of both the likelihood of an impact occurring, and the consequences of the impact occurring. The criteria for evaluating likelihood and consequence of risk are identified in Table 6-2 and Table 6-3, respectively.

Table 6-2 Criteria for evaluating likelihood

Level	Descriptor	Description	Frequency of Occurrence
A	Almost Certain	Is expected to occur in most circumstances	Once per month
B	Likely	Will probably occur in most circumstances	Between once a month and once a year
C	Possible	Might occur at some time	Between once a year and once in five years
D	Improbable	Could occur at some time	Between once in five years and once in 20 years
E	Rare	May occur in exceptional circumstances	Once in more than 20 years

Table 6-3 Criteria for evaluating consequence

Level	Category	Environmental
1	Not Significant	Environmental incident immediately contained.
2	Minor	Environmental incident contained with internal assistance.
3	Moderate	Environmental incident contained with external assistance.
4	Major	Environmental incident with short-term detrimental effect.
5	Severe	Environmental incident with long-term detrimental effect.

The screening process aims to prioritise the environmental issues for assessment and does not take into consideration the application of any mitigation measures to manage the potential impacts. Appropriate mitigation measures and safeguards would be developed during the assessment process and detailed in the EIS to minimise the potential impacts the Proposal would have on the environment. The risk assessment has been used to identify which environmental issues pose the greatest risk and are proposed as key issues, and which issues pose a low risk and would not require assessment within the EIS.

6.2 Preliminary risk screening

The outcomes of the preliminary environmental screening process for the Proposal are presented in Table 6-4.

Table 6-4 Outcomes of environmental risk screening

Issue	Unmitigated Environmental Risk Screening			Environmental Assessment Significance
	Likelihood	Consequence	Risk	
Traffic, access and car parking				
Construction traffic and transport impacts	Possible	Minor	Low	Moderate
Operational traffic and transport impact on surrounding network	Likely	Moderate	High	
Noise and vibration				
Construction noise and vibration impact on sensitive receivers	Possible	Minor	Low	Moderate
Operational noise and vibration impact on sensitive receivers	Possible	Moderate	Moderate	
Air Quality				
Construction air quality impacts on sensitive receivers	Improbable	Minor	Low	Moderate
Operational dust and vehicle emissions on sensitive receivers	Likely	Moderate	High	
Operational odour impact on sensitive receivers	Rare	Minor	Very low	
Water quality and hydrology				
Potential to encounter groundwater during construction	Improbable	Minor	Low	Low
Potential for water contamination during construction	Improbable	Minor	Low	
Change in flooding regime resulting in increased flood impacts	Improbable	Moderate	Low	
Soils and contamination				
Potential to encounter contaminated soils during construction	Possible	Minor	Low	Low

Issue	Unmitigated Environmental Risk Screening			Environmental Assessment Significance
	Likelihood	Consequence	Risk	
Contamination of soils caused by spills and leaks	Possible	Minor	Low	
Hazards and risk				
Storage and handling of dangerous goods causing risk	Improbable	Minor	Low	Low
Potential fire or other hazard and risk	Improbable	Moderate	Low	
Biodiversity				
Construction or operational impact to flora and fauna	Improbable	Moderate	Low	Low
Potential impact to threatened flora and fauna that the site may support	Rare	Moderate	Low	
Waste management				
Construction waste generation	Improbable	Not significant	Very low	Low
Operational waste handling and generation	Possible	Not significant	Low	
Visual				
Construction (temporary) impact on visual landscape on sensitive receivers	Improbable	Minor	Low	Low
Long-term impact on visual landscape on sensitive receivers	Improbable	Not significant	Very Low	
Social and economic				
Amenity impacts during construction and operation	Possible	Minor	Low	Low
Property and land use impacts	Rare	Minor	Very low	
Aboriginal and non-Aboriginal heritage				

Issue	Unmitigated Environmental Risk Screening			Environmental Assessment Significance
	Likelihood	Consequence	Risk	
Construction or operational impacts to Aboriginal heritage	Rare	Moderate	Low	Low
Construction or operational impacts to non-Aboriginal heritage	Rare	Moderate	Low	

7 KEY ENVIRONMENTAL ASSESSMENT ISSUES

The preliminary risk screening in Section 6, identified key environmental issues requiring further assessment. A summary of the key issues is presented in Table 7-1 below. All issues will be assessed further in the EIS, however detailed technical assessment will be undertaken for issues presenting a moderate, high or very high-risk level, and have been identified as “key issues”. Issues determined as having a lower risk level have been separated into “other issues”. Key and other issues have been further assessed in Sections 7 and 8 respectively.

Table 7-1 Identification of environmental issues

Environmental Aspect	Risk Level	Potential impact	Relevant Sections
Key issues			
Noise and vibration	Moderate	• Construction noise and vibration impact • Operational noise and vibration impact due to increased throughput and vehicle movements	Section 7.1
Traffic, access and car parking	Moderate	• Construction traffic and transport • Operational traffic, transport and access	Section 7.2
Air Quality	Moderate	• Construction air quality impacts • Operational dust and vehicle emissions • Operational odour	Section 7.3
Other issues			
Water quality and hydrology	Low	• Potential to encounter groundwater during construction • Potential for water contamination during construction • Stormwater and wastewater affecting water quality • Water use during operation	Section 8.1
Biodiversity	Low	• Potential impact to Angus Creek riparian corridor • Potential indirect impact to flora and fauna	Section 8.2
Landscape and visual amenity	Low	• Minor and temporary changes in visual landscape during construction • Lighting impacts to nearby sensitive receivers	Section 8.3
Soils and contamination	Low	• Potential to encounter contaminated soils during construction • Contamination of soils caused by spills and leaks	Section 8.4
Hazards and risk	Low	• Handling of potentially dangerous goods	Section 8.5
Waste Management	Low	• Construction and operation waste generation	Section 8.6
Socio-economic	Low	• Employment and economic benefits	Section 8.7

Environmental Aspect	Risk Level	Potential impact	Relevant Sections
		• Amenity impacts during construction and operation	
Aboriginal and non-Aboriginal heritage	Low	• Disturbance of items of Aboriginal or non-Aboriginal heritage significance.	Section 8.8

All potential environmental impacts will be considered further as part of the EIS, including a detailed assessment of the key issues. Potential environmental impacts associated with the Proposal will be considered and if required, managed through the implementation of appropriate mitigation and control measures.

To further identify the potential for environmental impacts from issues identified as key issues preliminary assessment has been undertaken by RWDI, formerly Wilkinson Murray (noise and vibration), Ason (traffic) and EMM (air quality).

7.1 Noise and vibration

7.1.1 Overview

The Eastern Creek REP is situated within an existing industrial precinct, with the closest sensitive receivers comprising the following:

- Residences in the suburb of Minchinbury, approximately 400 m north of the Eastern Creek REP on the opposite side of the M4 Motorway;
- Residences in the suburb of Erskine Park, approximately 1.2 km west of the Eastern Creek REP; and
- Industrial warehousing facilities to the immediate north, east and south of the Eastern Creek REP.

The residential receivers above are affected by existing road traffic noise from the M4 Motorway and industrial noise from the M7 Business Hub.

The key noise generating sources within the current Eastern Creek REP site operations include the MPC and landfill operations, truck movements within the site and operation of machinery and plant. The site includes a series of amenity berms that form part of the original development consent which surround the perimeter of the operational areas on the site. These amenity berms are generally 10 m high and include the following:

- North eastern amenity berm (7.705 ha);
- Northern amenity berm (surrounded by ring road) (approximately 180 m length);
- North western amenity screen (approximately 120 m length);
- Western amenity berm (approximately 330 m length) ; and
- Southern amenity berm (approximately 225 m length with 60 m length return).

The most recent modification to the development consent (MP 06_0139 MOD 6), approved the increase in noise limits to more appropriate contemporary standards. Since the commencement of operations in 2012, there have been no material noise compliance issues against the EPL.

7.1.2 Summary of issues

Construction

Construction activities would be minor and undertaken during the 'standard hours' period in accordance with the Interim Construction Noise Guideline (ICNG) (Department of Environment and Climate Change (DECC), 2009) and previous project modifications as follows:

- Monday to Friday: 7 am to 6 pm
- Saturday: 8 am to 4 pm
- Sunday and public holiday: No work.

Given the separation of the site from residential sensitive receivers and the industrial nature of the surrounding land uses, it is anticipated that noise impacts during construction would be minimal.

Operation

Preliminary noise modelling assessment was undertaken for the Proposal (Wilkinson Murray, 2020) to assess the implications of increasing vehicle movements and increasing processing volumes. The modelling indicated that increased vehicle movements from the Proposal could marginally increase noise levels to residential receivers in Erskine Park and Minchinbury (likely less than 0.5dB) and for industrial receivers to the north and east. However, exceedances of EPA Criteria is unlikely.

As a result, it was concluded that the Proposal was unlikely to cause significant change in noise impacts for both residential and commercial/industrial receivers.

As the Proposal would process the increased throughput using existing infrastructure there would be no change to sound power levels from the fixed plant. There may be minor increases due to the use of mobile plant and equipment. However, given the distance to residential receivers and the existing noise buffer provided by industrial land uses and M4 Motorway to the north, it is anticipated that these activities would have a negligible impact on the existing ambient noise environment.

7.1.3 Proposed further assessment

A detailed noise and vibration assessment will be undertaken as part of the EIS to determine the potential impacts of the Proposal on the surrounding sensitive receivers, for both construction and operation. This assessment will:

- Assess operational and construction noise impacts in accordance with the Noise Policy for Industry (NSW EPA, 2017) and the ICNG respectively;
- Assess the potential for sleep disturbance from the Proposal during the night-time period;
- Assess traffic noise consistent with EPA's Road Noise Policy; and
- Identify feasible and reasonable noise mitigation measures to address potential noise exceedances at sensitive receivers, if required.

7.2 Traffic, access and car parking

7.2.1 Overview

The Eastern Creek REP has been identified as a Traffic Generating Development, as per Schedule 3 of the ISEPP. It is noted that recycling facilities and waste transfer stations of any size or capacity are classified as a Traffic Generating Development.

The Eastern Creek REP site currently has one vehicular access point, used by both heavy and light vehicles. This access point is located on Kangaroo Avenue, approximately 150 m north of the Kangaroo Avenue/Honeycomb Drive intersection. Site vehicles must travel 2.2 km east through the

M7 Business Hub to reach Wallgrove Road/M7 Motorway which connects to the M4 Motorway (Western Motorway) to the north via a left turn from the Wonderland Drive intersection with Wallgrove Road/M7 Motorway.

The Proposal would include the addition of three vehicular access points and an upgrade to the existing site access point, comprising:

- A new heavy vehicle access point from Kangaroo Avenue in the north east of the Eastern Creek REP site (approximately 600 m north of the Kangaroo Avenue/ Honeycomb Drive intersection);
- A new heavy vehicle egress point from the proposed Honeycomb Drive extension in the south west of the Eastern Creek REP site; and
- A new light vehicles entry point into a staff car park from the proposed Honeycomb Drive extension in the south west of the Eastern Creek REP site.

Heavy vehicles transporting waste would enter the Eastern Creek REP site via a left turn only from Kangaroo Avenue into one of the two inbound weighbridge queuing lanes. Vehicles would then be directed to the resource recovery processing areas (MPC1, MPC 2 and SMA). Once trucks have collected processed waste for transportation, they would be directed to the egress point in the south west of the Eastern Creek REP site. Prior to exit, trucks would be weighed at the outbound weighbridge before turning left onto Honeycomb Drive and continue through the M7 Business Hub to the Wonderland Drive intersection with Wallgrove Road/M7 Motorway. The proposed Archbold Road Extension would permit right turn exits once constructed and would allow for direct connection onto the M4 Motorway.

Heavy and light vehicles (non-waste vehicles) would also enter through the existing access point via Kangaroo Avenue. These vehicles would turn right upon entry and would be directed as required to locations around the Eastern Creek REP. This would allow no waste delivery related vehicles to bypass the weighbridge. As these vehicles would not be transporting waste, they would not be weighed upon entry to the Eastern Creek REP site. A light vehicle access point into a staff car parking area would be provided from the proposed Honeycomb Drive extension, at the south west of the Eastern Creek REP site.

7.2.2 Summary of issues

Construction

Construction of the Proposal would require the use of heavy vehicles to deliver construction plant, equipment and materials as well as remove construction waste from the Eastern Creek REP site. There would also be an increase in light vehicles to the site and surrounding road network associated with the construction workforce.

Operation

Increased throughput for the Proposal would result in an increase in heavy vehicle movements, although the proportional increase is expected to be orientated toward larger vehicles. As the waste types would not change for the Proposal, the vehicle composition would remain the same. However, the Eastern Creek REP is intended to act as the hub of Bingo's network of recycling facilities and transfer stations. As such, the site would preference larger vehicles. This would result in comparatively fewer vehicle movements required to facilitate the additional throughput. A preliminary traffic and transport assessment was prepared (Ason, 2020) to identify potential impacts and areas for further assessment in the EIS.

The assessment indicates that based on surveys undertaken for previous assessments, key roads in the surrounding network would continue to operate at a satisfactory level with spare capacity and the increase in throughput is unlikely to have a material impact to the operation of the surrounding road network from what has already been approved. Further analysis may be required to confirm intersection performance at the critical intersection of Wonderland Drive / Wallgrove Road. However,

based on the anticipated vehicle generation of the Proposal there is unlikely to be a material impact at that location.

Alterations to the existing internal road network for the Proposal have been designed to minimise vehicles queuing on public roads (i.e. Kangaroo Avenue) prior to entry into the site. These alterations would also enhance traffic flow within the site, helping to improve operational efficiency.

7.2.3 Proposed further assessment

A traffic, access and parking impact assessment will be provided as part of the EIS. This assessment will determine the impacts during both the construction and operational phases of the Proposal. In addition, the assessment will provide recommendations to mitigate the likely impacts of the Proposal.

Appropriate consultation with Transport for NSW will be undertaken to satisfy the requirements of the ISEPP and *Roads Act 1993*.

7.3 Air quality

7.3.1 Overview

Previous air quality assessments completed for the Eastern Creek REP have indicated that the ambient air quality conditions are typical of an industrial precinct (Ramboll, 2018). It is noted that the existing background levels of $PM_{2.5}$ and PM_{10} exceed the guideline criteria (NSW EPA, 2016) due to the strong influence of vehicle emissions in the area. Considering these existing elevated background levels, the Eastern Creek REP currently complies with relevant assessment criteria for key pollutants ($PM_{2.5}$, PM_{10} and total suspended particulates).

The Eastern Creek REP currently operates as a non-putrescible landfill and therefore accepts small volumes of organic material including wood waste, garden waste, paper and cardboard. Due to this odour emissions are expected, although to a significantly lower degree than a putrescible landfill. Recent odour emissions assessments of the site indicate that no significant odour emissions were detected beyond the Eastern Creek REP site boundary (TOU, 2015; SEMA, 2017).

The Eastern Creek REP is subject to air quality management standards and monitoring as a requirement of the EPL 20121. There are no material air quality compliance issues against the EPL for current site operations.

7.3.2 Summary of issues

Construction

During construction of the Proposal, air quality impacts are likely to be caused by dust generation during earthworks, spoil storage and transport emissions from construction vehicles, plant and equipment.

Appropriate dust control measures will be implemented to minimise any potential impacts of dust generation on nearby sensitive receivers. Erosion and sedimentation control measures would also be established during construction to further mitigate against potential dust impacts.

Operation

A preliminary Air Quality assessment was undertaken using the site's existing air quality model established under Modification 6 (EMM, 2020) to assess the implications of the Proposal. The emission sources and major pollutants identified at the Eastern Creek REP site are as follows:

- Particulate emissions from loading/unloading of waste material;
- Particulate emissions from waste material handling/sorting/processing activities; and

- Particulate emissions from onsite vehicle movements.

The preliminary assessment identified that the key source of emissions associated with the increase in throughput is associated with the movement of incoming/outgoing trucks (e.g. truck movements on paved roads and diesel combustion). Preliminary results highlight that immediately adjacent industrial receptors are likely to be most affected by an increased throughput. The impact on residential receivers is anticipated to be minimal with preliminary results indicating that there would be no exceedance of 24-hour average and annual average PM_{10} and a minor incremental increase at some residential receivers for $PM_{2.5}$.

Previous assessments (including those undertaken for Modification 6 to MP06_0139) indicate that background air quality levels are a dominant factor in exceedances particularly for $PM_{2.5}$. However, the likelihood of additional exceedances from the Eastern Creek REP is low. To adequately assess potential air quality impacts from the Proposal a discussion regarding the likelihood of additional exceedance days, frequency of busy and average operational days and reactive management practices will be undertaken as part of the EIS.

The Proposal involves several site improvements and alterations that will have an emission reduction benefit, including:

- the construction of a new site entry from Kangaroo Avenue for incoming trucks conversion to one-way traffic flow and construction of a new exit at the southern boundary to Honeycomb Drive. While principally a traffic management measure, these changes will reduce the number of vehicle kilometres travelled by trucks onsite, which is a dominant source of emissions in the MOD6 AQIA emissions inventory.
- The introduction of an additional MPC (MPC2), which will increase the amount of material handling, transfers and processing activities that will be subject to full enclosure.
- Reactive management practices, linked to the Eastern Creek REP real-time air quality monitoring network, to assist with the control of emissions during adverse meteorological conditions.

In addition to remodelling, EMM believe that a refinement of the emissions inventory assumptions will ultimately be undertaken for the Proposal. All MOD6 AQIA emissions inventory assumptions will be revisited and adjusted where possible (e.g. adopted emission standards for diesel equipment, diurnal distribution of material deliveries).

The Eastern Creek REP would not be receiving any additional potentially odorous waste (e.g. organic material) as part of the Proposal. Given this, odour emissions are considered to be negligible. In addition, the Proposal would not increase the rate waste is sent to landfill (as there is no proposed change to this limit) and a change in odour impacts is considered to be unlikely.

7.3.3 Proposed further assessment

A detailed air quality impact assessment will be carried out as part of the EIS to evaluate the impact of emissions of key pollutants during both construction and operation of the Proposal. The assessment will:

- Predict potential air quality impacts during construction and from operation with an increased throughput in accordance with the NSW EPA's *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*. In addition, cumulative particulate matter impacts will be assessed; and
- Predict potential air quality impacts from the Proposal in accordance with the *Technical framework: assessment and management of odour from stationary sources in NSW* (NSW EPA, 2006).

If required, additional air quality management measures would be identified to be implemented as part of operation of the Proposal.

8 OTHER ISSUES

A preliminary assessment identified that a number of environmental impacts may occur as a result of the Proposal. These issues are considered to be of lesser consequence than key issues outlined in Section 7 when taking into account the scope of the Proposal, the existing environment, the implementation of standard, best practice management, and mitigation measures. While not key issues, further assessment will be carried out for each as part of any future environmental assessment for the Proposal. Any environmental management and safeguard measures required to minimise and mitigate impacts will be documented as part of the EIS.

8.1 Water Quality and hydrology

8.1.1 Overview

The Eastern Creek Precinct Plan (Blacktown City Council, 2005) prescribes eight separate drainage sub catchments associated with the Stage 3 Release Area. Four of these catchments are relevant to the Eastern Creek REP, including:

- Quarry Catchment (north-west portion of Eastern Creek REP).
- Quarry North Catchment (north-east portion of the Eastern Creek REP).
- Upper Angus Creek Catchment (northern portion of the Eastern Creek REP).
- Ropes Creek Tributary Catchment (central and southern portion of the Eastern Creek REP).

Existing stormwater management systems include a number of onsite detention (OSD) basins whereby water is primarily reused for non-potable uses on site including toilets, dust suppression and wheel washing. Residual water is discharged offsite via the Blacktown Council's stormwater system.

As rainfall interacts with exposed waste in the landfill, a separate leachate management system is established on the Eastern Creek REP site. Leachate collects at the base of the landfill and diverted to a sump with collection capacity of 890 m^3/day. Leachate is then treated in batch reactors and discharge to Sydney Water sewers, permitted under Trade Waste Agreement 35580. Leachate management does not form part of the Proposal.

The Eastern Creek REP is located outside the high-risk flood areas within the Ropes Creek Catchment (located to the immediate west of the site).

8.1.2 Summary of issues

Construction

The Proposal would involve construction activities such as excavation and stockpiling which would have the potential for the following impacts:

- Change in overland flow paths
- Interaction with groundwater
- Erosion and sedimentation transport through exposed soils and stockpiled materials
- Water (both surface and groundwater) contamination resulting from an increase in sediment loads entering the stormwater system and entering nearby receiving waters.

Operation

The Proposal would improve the capture and management of stormwater on site through the upgrade of the stormwater infrastructure associated with road upgrades. Due to this, it is anticipated that the water quality of stormwater may improve as a result and allow for additional quantities to be re-used on site.

The Proposal would have the potential to alter the quantity of stormwater run-off from the site due to the increased proportion of impervious surfaces (e.g. formalising of internal road network). However, this is anticipated to be minor.

There are no additional leachate impacts associated with the provision of supporting infrastructure.

8.1.3 Proposed further assessment

An assessment of the potential impacts of the Proposal on water quality and hydrology during construction and operation would be undertaken and would include:

- Stormwater design plan demonstrating adequacy with relevant standards and guidelines
- Details of stormwater/wastewater/leachate management systems, including capacity of onsite detention systems and measures to treat, reuse or dispose of stormwater;
- Detailed site water balance to support continued sustainable water use; and
- Assessment of potential impacts of proposed stormwater management system upgrades during construction and operation.

8.2 Biodiversity

8.2.1 Overview

As outlined in Section 1.4, the Eastern Creek REP site has been operated as both a quarry and waste management facility since the early 20th Century. Due to this, the site is characterised by its highly modified industrial nature and has been largely cleared of vegetation.

A 11-ha patch of remnant bushland was maintained as a requirement of MP 06_0139 in the north western corner of the Eastern Creek REP site to mitigate and offset impacts. This area contains Cumberland Plain Woodland, listed as a critically endangered ecological community under both the Commonwealth EPBC Act and NSW BC Act. As a result, the area has subsequently been zoned E2 – Environmental Conservation under the WSEA SEPP. This area is currently fenced off from current operations and is not proposed to be disturbed by works under the Proposal.

A small stand of vegetation is situated on the northern and eastern boundary of the Eastern Creek REP site, adjacent to Kangaroo Avenue. Previous assessments have identified a mixture of native and exotic trees with no native understorey. The native vegetation was identified as Cumberland Plain Woodland in the Sydney Basin Bioregion which is listed as a critically endangered community under both the EPBC and BC Act (known as Cumberland Shale Woodlands and Shale-Gravel Transition Forest). The assessment concluded that the vegetation did not satisfy the condition thresholds to represent these endangered ecological communities (EMM, 2017). Only minimal clearing of vegetation located adjacent to Kangaroo Avenue in the location of the new northern entrance and along the new northern access road would be required as part of the Proposal.

No fauna habitat has been identified on Eastern Creek REP site; however, potential foraging habitat is provided by the vegetation on the eastern perimeter of the site.

All proposed works would be undertaken within the existing Eastern Creek REP site boundary, in areas already subject to the operation of the site.

8.2.2 Summary of issues

Construction

As the Eastern Creek REP site has a highly modified nature, minimal vegetation clearing would be required for the construction of the Proposal.

The construction of the Proposal may have potential for the following impacts:

- Animal strike;
- Potential introduction and/or spread of weeds, including noxious weeds; and
- Potential impacts on aquatic environments, habitats and species.

Operation

Upgrades road infrastructure associated with the Proposal would have a very low potential for impact on fauna species. While there is minimal remaining habitat for animals on the Eastern Creek REP site, the operation of mobile plant and equipment associated with the Proposal may result in an increased likelihood of animal strike and possible increase in mortality/injury to animals.

8.2.3 Proposed further assessment

Works in the north east of the Eastern Creek REP would potentially encroach on the Angus Creek VRZ and therefore would be considered a controlled activity under the WM Act. Given this, further assessment of potential impacts to the riparian corridor would be required and approval would be sought from DPIE's NRAR. Consultation with NRAR has commenced and will continue to be undertaken regarding this issue.

In general, works associated with the Proposal would be contained within the already disturbed areas of the Eastern Creek REP. However, given the potential impact to the Angus Creek riparian corridor a detailed ecological assessment of potential impacts to biodiversity would be provided in the EIS.

The Biodiversity Conservation Act 2016 (BC Act) requires that an SSD application must be accompanied by a biodiversity development assessment report (BDAR) unless the Planning Agency Head (or delegate) and the Environment Agency Head (or delegate) determine that the proposed development is not likely to have any significant impact on biodiversity values. As the Proposal is predominately operational and would have minimal potential for impacts to biodiversity, a waiver has been prepared and is included as Appendix A.

8.3 Landscape and visual amenity

8.3.1 Overview

The Eastern Creek REP is located within an existing industrial precinct and is surrounded by industrial land uses. The visual nature of the surrounding land uses is typified by a mix of industrial developments including warehousing and manufacturing. To the immediate west and south west of the Eastern Creek REP site is a vacant lot containing stands of native vegetation, Ropes Creek and high voltage transmission lines.

The Proposal would include construction of weighbridges and upgrades to roads. This may result in a change to some views to nearby visual receivers. E.g. users of Kangaroo Avenue. However, it is considered that the built form of the Proposal is consistent with the established built form and visual character of the broader Eastern Creek area.

8.3.2 Summary of issues

Construction

The construction of the Proposal would be likely to result in minor visual impacts associated with construction activities (sites/compounds, machinery, temporary structures etc.) on the visual amenity of adjacent industrial properties and to users of the M4 Motorway and Kangaroo Avenue.

Sensitive receivers such as residents at Minchinbury would be separated from visual impacts during construction by more than 400m and the intervening M4 Motorway. Other residential sensitive

receivers in Erskine Park are separated from the site by significant distances (over 1.2 km). It is unlikely that these receivers would be impacted.

Operation

The built form of the Proposal would be considered consistent with the established visual character of the broader area. There may be additional visual amenity impacts on road users of the future Archbold Road extension (TfNSW, 2020) as there would be no intervening visual screening between Archbold Road and the Eastern Creek REP. New infrastructure such as the new site entrance of Kangaroo Avenue has the potential to expose visual receivers such as road users to increased impact, although the impact is expected to be minor and in keeping with the established visual character of the area..

Given the minor nature and small scale of the proposed infrastructure (e.g. roads, weighbridges) an impact to visual amenity during operation is unlikely.

8.3.3 Proposed further assessment

Further assessment of the potential for visual and landscape character impacts will be undertaken within the EIS and will include:

- Identification of the visual qualities present, including the existing landscape character of the region, sensitive locations, catchments and key viewpoints;
- A visual impact assessment of the Proposal in the whole and parts on the landscape and urban character of the area, views to and from the Eastern Creek REP site, magnitude of change to existing views and the visual sensitivity of the viewers. This will consider impact on future users of Archbold Road; and
- The identification of feasible and reasonable measures to mitigate potential visual impacts.

8.4 Soils and contamination

8.4.1 Overview

Review of the Penrith 1:100,000 Geological Series Sheet (Clark and Jones, 1991) indicates that the Eastern Creek REP is underlain by Bringelly Shale of the Wianamatta Group of Middle Triassic Age. These soils typically comprise shale, carbonaceous claystone, claystone, laminate, fine to medium-grained lithic sandstone, and rare coal and tuff. Soils encountered on site generally consist of sandstone and are highly disturbed due to the previous quarrying and current landfill activities.

Previous contamination assessments (Douglas Partners, 2006) presented as part of the environmental assessment for MP06_13 indicated that contaminant levels present in the overburden and in-situ material at the site were compliant with the criteria recommended for the land use. One sample identified elevated levels of nickel; however, due to the naturally high levels of nickel in the source material, this was not considered contamination.

Borehole assessments (Consulting Earth Sciences (CES), 2017) identified a localised hotspot of benzene at a depth of 4-5 m below ground level (bgl) exceeding the applicable NEPM criteria. The assessment concluded that this hotspot was a low risk.

The more recent Baseline Contamination Assessment (Arcadis, 2018) noted exceedances of total petroleum hydrocarbons and Benzo(a)pyrene within the south-eastern portion of the Eastern Creek site. This was attributed to the presence of ash and slag in the fill material and historic leaks and spills. Notwithstanding, it was concluded that extensive soil and groundwater remediation was not warranted and that the site was suitable for continued industrial land use.

A search of the NSW EPA's Contaminated Land Record indicates that there are no records of contamination associated with the site.

8.4.2 Summary of issues

Construction

The Proposal may have a potential to have the following impacts:

- Erosion and sedimentation transport through exposed soils and stockpiled materials;
- Disturbance of known or unknown contaminants within the soil; and
- Water contamination resulting from an increase in sediment loads entering the stormwater system and entering nearby receiving waterways.

Operation

There is potential for spills and leaks to occur from operating machinery. This may result in contamination of soil, groundwater and surface water.

There is also potential for small volumes of leachate from waste in the resource recovery sheds and from within stockpiling areas. These areas would not be associated with the leachate generated due to direct infiltration of water into the landfill. The Proposal does not propose any works or impacts in the landfill area.

8.4.3 Proposed further assessment

The Proposal would provide an assessment of soils and contamination, including:

- Assessment of the potential to disturb known or unknown contamination during construction and operation. In the event impacts are identified, the EIS will identify suitable mitigation and/or remediation measures;
- Details of stormwater system, including capacity of onsite detention systems and measures to treat, reuse or dispose of stormwater; and
- Provide recommendations for erosion and sediment control measures during construction and operation of the project. Recommendations will be consistent with the *Managing Urban Stormwater: Soils and Construction* volume 1 and volume 2 series published by the former NSW Department of Environment and Climate Change (DECC) in 2008.

8.5 Hazards and risk

8.5.1 Overview

The Eastern Creek REP currently has approval to store diesel, which is classified as a C1 – class 3 hazardous good but is not classified in the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) (National Transport Commission, 2018). As at the approval of Modification 6 (MP 06_0139 MOD 6), the Eastern Creek REP was not determined to be a hazardous development under SEPP 33 due to the storage of diesel on the site not meeting the criteria threshold.

As described in Section 4.1, the Eastern Creek REP is operated under two EPLs which manage any offensive material produced by the facility. Due to this, the Eastern Creek REP is not considered an offensive development under SEPP 33.

8.5.2 Summary of issues

Construction

Hazards associated with construction of the Proposal would be managed as part of a Construction Environmental Management Plan (CEMP), which would be prepared prior to construction

commencing. Work health and safety (WHS) risks will be identified with the CEMP and managed in accordance with the *WHS Act 2011*.

Operation

The Proposal would not involve the following:

- An increase in the generation of offensive emissions beyond EPL criteria; and
- Location of structures/workshops within high bushfire hazard areas or increase risks associated with the landfill escarpment.

Potential hazards associated with the Proposal would be managed as part the existing Operational Environmental Management Plan (OEMP) and the existing EPLs.

8.5.3 Proposed further assessment

To confirm if the Proposal is a potentially hazardous and / or offensive industry under SEPP 33, the SEPP 33 application guideline will be applied. The EIS will confirm the types, quantities, storage locations and storage conditions of any dangerous goods proposed to be stored on site. If any exceedances to thresholds are identified, the Proposal will be supported by a comprehensive Preliminary Hazard Analysis (PHA) to determine the cumulative risks associated with the Proposal, however this is considered highly unlikely to be required given minimal quantities of dangerous goods to be stored onsite.

Hazards and risks associated with the construction and operation of the Proposal will be identified as part of the EIS and mitigation measures to reduce risk will be identified.

8.6 Waste management

8.6.1 Overview

Waste management associated with the inherent activities of resources recovery for the Proposal are described in the project description (refer to Section 3). The construction and operation of the Proposal itself would have limited potential to generate waste.

8.6.2 Summary of issues

Construction

During construction of the Proposal, the potential waste streams that could be generated by the construction process include:

- Excess drainage and piping materials.
- Asphalt and bitumen waste.
- Concrete.
- Formwork – use and offcuts.
- Steel and steel reinforcement offcuts.
- Fixings.
- Timber.
- Adhesive/resins/paints/fixings.
- Batteries.
- Miscellaneous construction chemicals.

- Tool and equipment consumables.
- Fuels/oils/grease.
- Packaging – cardboard, plastic and drums.
- Putrescible waste from lunchrooms.
- Plant and equipment maintenance waste (e.g. oily rags, oil filters, tyres etc).

These waste streams would need to be managed appropriately to ensure minimisation of waste generation and avoid, where possible, transportation to landfill.

Operation

The Proposal would be unlikely to generate substantial quantities of waste in excess to what is already produced by existing operations.

8.6.3 Proposed further assessment

The Proposal will outline how waste generated during construction and operation would be managed in accordance with the *POEO Act 1997* and *WARR Act 2001.*

A resource and waste management assessment will be undertaken as part of the EIS to determine the potential impacts of the Proposal, both during construction and operations. The assessment will:

- Identify waste streams generated during the construction stage of the Proposal;
- Assess waste management impacts associated with construction activities; and
- If required, identify additional management and mitigation measures for resource use and waste to be incorporated into the existing OEMP.

8.7 Socio-economic

8.7.1 Overview

The Proposal would be located in the Blacktown LGA which currently has a population of 337,000 people and is projected to continue to grow into the future (Australian Bureau of Statistics, 2017). The key economic activities in the vicinity of the Eastern Creek REP site include manufacturing and storage. Residential receivers are located to the north in Minchinbury, on the opposite side of the M4 Motorway and west in the suburb of Erskine Park. Industrial receivers are located to the north, east and south within the M7 Business Hub.

The Proposal will provide significant employment opportunities for residents of Western Sydney where there are currently 220,000 more workers than jobs available.

8.7.2 Summary of issues

Construction

There may be some minor and temporary amenity impacts to residential and industrial receivers during construction. These would result from potential air, noise and visual amenity impacts as discussed in sections above. Due to the limited nature of the construction activities and short construction timeframe, these amenity impacts are anticipated to be minor.

Operation

The Proposal would provide the following direct social and economic benefits to the Sydney region:

- Creation of up to 20 FTE jobs to support the increased throughput;
- Increase the levels of landfill diversion in NSW; and
- Increased rate of resource recovery and promotion of circular economy principles.

It is also anticipated that the internal operational efficiencies associated with the Proposal would improve the flow of traffic movements throughout the site and the external road network.

As discussed in the sections above, the Proposal may cause minor amenity impacts on surrounding sensitive receivers as a result of air quality and noise. Community and stakeholder concerns would be incorporated and addressed into the EIS to ensure any amenity impacts are mitigated or avoided.

8.7.3 Proposed further assessment

The potential social and economic impacts associated with the Proposal will need to be further informed by technical impact assessments carried out for relevant issues (i.e. air, noise and visual). Feedback from community and stakeholder consultation and engagement activities will be required to inform the mitigation strategies implemented for the Proposal.

8.8 Aboriginal and non-Aboriginal heritage

8.8.1 Overview

The previous Aboriginal archaeological assessment (McDonald, 2005) of the Eastern Creek REP site identified two isolated finds and one open scatter comprising three artefacts within the site boundary. These were recorded on the boundary between a highly disturbed area with low archaeological potential and a minimally disturbed area with relatively high archaeological potential. Given that the surface manifestations of these artefacts were assessed as being “poor” it was concluded that the public significance of these heritage finds was low.

This assessment identified the vegetated conservation area in the north-western corner of the Eastern Creek REP, and an area to the south of the site have been previously identified as having ‘high archaeological sensitivity’. The broader area across Eastern Creek has numerous areas with highly sensitive Aboriginal heritage values, and a number of non-Aboriginal heritage items are located approximately two km to the south-west of the site. No non-Aboriginal heritage items or places have been identified on the Eastern Creek REP site subject to the Proposal.

The original EA (MP 06_0139) determined that the project would avoid impacts to items of Aboriginal and non-Aboriginal heritage significance. None of the subsequent project modifications involved impacts to Aboriginal or non-Aboriginal heritage.

8.8.2 Summary of issues

Construction

The Proposal would only involve ground disturbance and earthworks activities in areas previously disturbed by the current waste management operations and former quarry. This area was previously identified as having ‘low archaeological sensitivity’ for Aboriginal heritage (McDonald, 2005). Due to this, it is considered unlikely that the Proposal would impact on known or unknown Aboriginal and non-Aboriginal heritage items.

Operation

As stated above, the Proposal would operate within existing disturbed areas of the Eastern Creek REP site. Given this, it is considered unlikely that previously undiscovered items of Aboriginal or non-Aboriginal heritage significance would be disturbed during the continued operation of the Eastern Creek REP.

8.8.3 Proposed further assessment

Contemporary land use practices have led to high levels of ground disturbance that would have removed or displaced any isolated archaeological material that may have been present. All works proposed under the Proposal would be undertaken in areas with ‘low archaeological sensitivity’ therefore it is unlikely that any items of Aboriginal significance would be uncovered as a result of either construction or operation. No non-Aboriginal heritage items have been uncovered at the Eastern Creek site.

Given the above, it is not considered necessary to provide a detailed Aboriginal and non-Aboriginal heritage assessment in the EIS.

9 CONCLUSION

The Applicant is seeking to increase the operational throughput at the Eastern Creek REP, located at 1 Kangaroo Avenue, Eastern Creek. The Applicant is proposing to increase the approved throughput limit by 1.5 Mtpa, from 2 Mtpa to 3.5 Mtpa and to construct and upgrade supporting infrastructure to support operations. Supporting infrastructure would include installation of new weighbridges, adjustments to existing site access/egress points, a new staff carparking area and internal road network to optimise current and future operations on the site.

The Proposal does not propose any adjustments to the current approved waste types. The Proposal would increase the processing capacity of the site and provide more formalised and efficient supporting infrastructure to fully utilise the capacity of existing approved resource recovery infrastructure. The internal road network upgrades, including alterations to the site entry and egress points will also deliver improved environmental performance outcomes.

The Eastern Creek REP was originally approved under Part 3A (now repealed) in 2009. Following the repeal of Part 3A of the EP&A Act, the project was subject to the transitional provisions provided by the EP&A Regs and subsequently modified six times under Section 75W of the EP&A Act.

Following the cessation of the transitional arrangements provided by the EP&A Regs, the project approval was declared an SSD by the Minister. Consequently, the Eastern Creek REP is now subject to planning requirements under Part 4 of the EP&A Act.

The Proposal is deemed State Significant Development (SSD) on the basis that it satisfies Clause 23(3) in Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 *'Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste'.* As such, approval for the throughput increase and supporting infrastructure is sought as State Significant Development (SSD) under Part 4, Division 4.7 of the EP&A Act.

The potential environmental impacts have been identified and their magnitude ascertained as part of this SSD Scoping Report. The key environmental issues identified for Proposal include:

- Noise and vibration.
- Traffic, access and car parking.
- Air quality.

It is therefore requested that Secretary's Environmental Assessment Requirements are issued for this Proposal under Part 4, Division 4.7 of the EP&A Act to enable an Environmental Assessment of the Proposal to be undertaken.

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APPENDIX A BIODIVERSITY DEVELOPMENT ASSESSMENT WAIVER APPLICATION

MEMO

ARCADIS Design & Consultancy for natural and built assets

Eastern Creek Recycling Ecology Park: Biodiversity Development Assessment Waiver Application

Introduction

Bingo Industries (Bingo – the Applicant) own and operate the Eastern Creek Recycling Ecology Park (REP) (formerly known as the Genesis Waste Management Facility (WMF)) at 1 Kangaroo Avenue, Eastern Creek in Sydney. The Eastern Creek REP currently receives and processes up to 2 Million tonnes per annum (Mtpa) of construction and demolition (C&D) waste and commercial and industrial (C&I) waste. Bingo are seeking approval to expand the throughput limit to receive an additional 1.5 million tonnes per annum (Mtpa) at the Eastern Creek REP (the Proposal).

This memo has been prepared to provide an assessment of impacts to biodiversity values associated with the Proposal and to support a Biodiversity Development Assessment Report (BDAR) waiver application.

Background

The Applicant is seeking approval to increase throughput at the Eastern Creek REP (refer to Figure 1) from 2 Mtpa to 3.5 Mtpa (an increase of 1.5Mtpa). The proposed increased throughput would be processed through existing approved facilities and would not require the provision of new processing infrastructure. However, supporting infrastructure is proposed to provide improved operational efficiency in support of the proposed throughput increase. The supporting infrastructure would include:

- Staff car parking area and access point from Honeycomb Drive in the south east of the site containing 69 light vehicle bays
- Heavy vehicle access point from Kangaroo Avenue in the north east of the site
- Heavy vehicle egress point from the proposed Honeycomb Drive extension in the south west of the site
- Six new entry and exit weighbridges and associated control offices near the new northern vehicle access point from Kangaroo Avenue.
- Reconfiguration and upgrade of the internal site road network and associated water management infrastructure (where required)

The Proposal is deemed State Significant Development (SSD) on the basis that it satisfies Clause 23(3) in Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* (State and Regional Development SEPP) *'Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste'.* As such, approval for the Proposal is sought as SSD under Part 4, Division 4.7 of the Environmental Planning and Assessment 1979 (EP&A Act). This would usually require detailed consideration of biodiversity values under Clause (2) of Section 7.9 of the *Biodiversity Conservation Act 2016* (BC Act), where appropriate.

As noted in the fact sheet 'How to apply for a BDAR waiver for a Major Project Application' (2019) by the Department of Planning, Industry and Environment (DPIE), the BC Act requires that an SSD application be accompanied by a BDAR unless the Planning/Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values. This

memo seeks to provide information to assist the Planning/Environment Agency Head in making this determination.

This memo has been prepared to demonstrate that the Proposal would not significantly impact on biodiversity values. As such, a BDAR is not required and the Proposal should be considered exempt from satisfying Clause (2) of Section 7.9 of the BC Act.

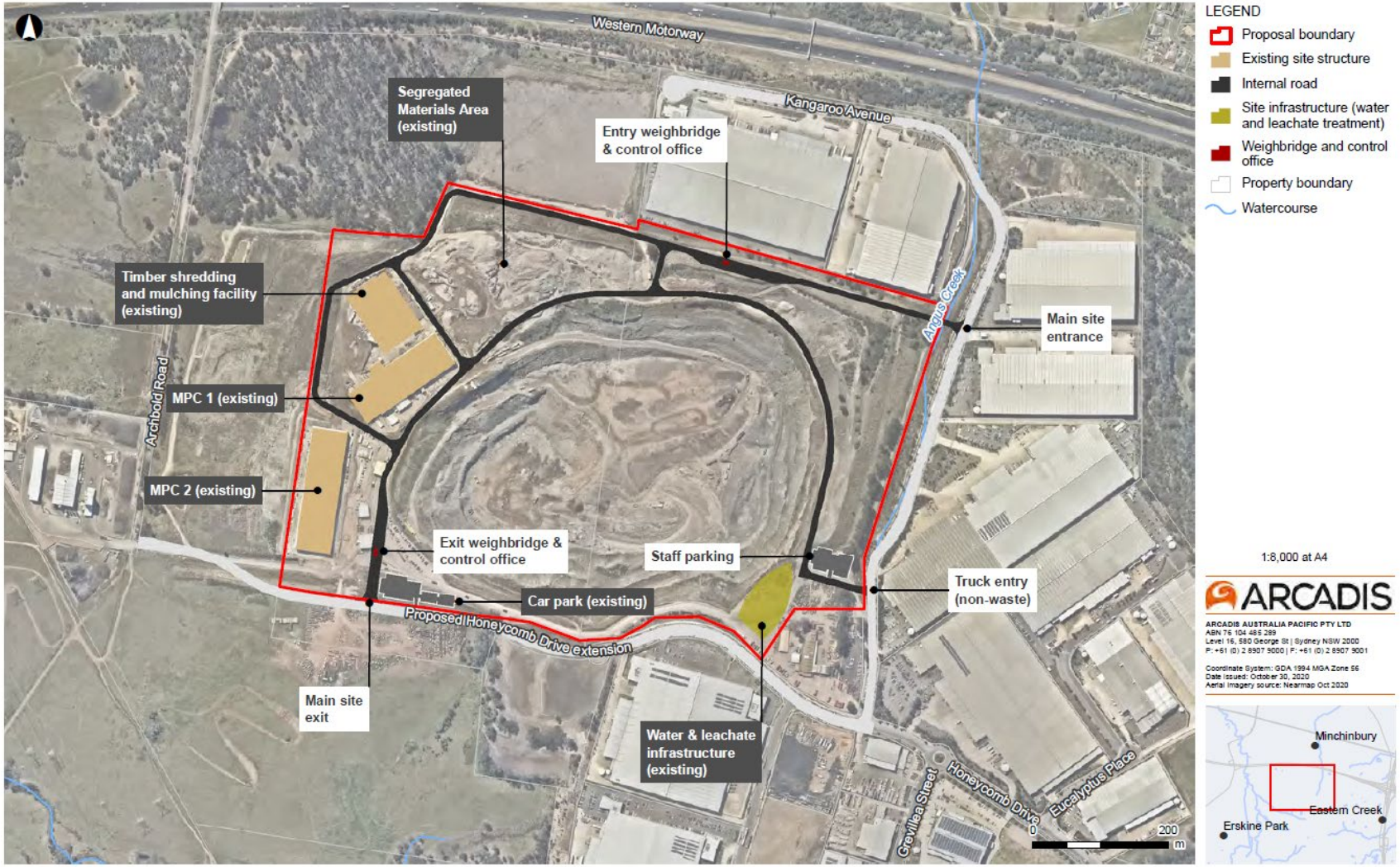

Figure 1 - Site Layout

Potential impacts to biodiversity values

Since early 20th Century, the Eastern Creek REP has been operated as both a quarry and waste management facility. Currently, the Eastern Creek REP is operating as a waste management facility, receiving and processing up to 2Mtpa of C&D and C&I waste. Due to this site history, the site is characterised by its highly modified industrial nature and has been largely cleared of native vegetation.

Small patches of degraded native vegetation occur along the northern and eastern boundary of the Eastern Creek REP site, adjacent to Kangaroo Avenue. Previous assessments have identified this vegetation as a mixture of native and exotic trees with no native understorey (EMM, 2018). A 11 ha patch of remnant bushland is maintained as a requirement of MP 06_0139 adjacent to the north western corner of the Eastern Creek REP site to mitigate and offset impacts. This area contains Cumberland Plain Woodland, listed as a critically endangered ecological community under both the Commonwealth EPBC Act and NSW BC Act. As a result, the area has subsequently been zoned E2 – Environmental Conservation under the WSEA SEPP. This area is currently fenced off from current operations and is outside of the Proposal construction and operational boundaries. This area would not be disturbed by works for the Proposal.

Section 1.5 of the BC Act provides a description of biodiversity values, relevant to the Act that would normally require assessment within the relevant biodiversity assessment report (in this case, a BDAR). A description of additional biodiversity values is also provided in Section 1.4 of the *Biodiversity Conservation Regulation 2017* (BC Regulation).

Table 1 below provides an assessment of these defined biodiversity values, in relation to the Eastern Creek REP. This assessment has been undertaken by a suitable qualified person in accordance with the requirements in DPIE's fact sheet.

Table 1 Assessment of potential impacts of the Proposal on biodiversity values

Biodiversity value	Meaning	Relevance	Potential impacts
Vegetation abundance - 1.4(b) BC Regulation	Occurrence and abundance of vegetation at a particular site	NA	The majority of the Eastern Creek REP is comprised of cleared areas and man-made structures. Degraded native vegetation comprising stands of mixed native and exotic trees and shrubs with a predominantly exotic grassy understorey occur on the northern and eastern boundaries. An 11ha protected area occurs adjacent to the north western portion of the Eastern Creek REP (refer to Figure 1). Previous assessments have identified the vegetation on the northern and eastern boundaries of the Eastern Creek REP as a mixture of native and exotic trees with no native understorey. Regional vegetation mapping has mapped this vegetation as Cumberland Plain Woodland. The assessment concluded that the vegetation did not satisfy the condition thresholds to represent these endangered ecological communities (EMM, 2018).

Biodiversity value	Meaning	Relevance	Potential impacts
			It is anticipated that only minimal clearing of vegetation located adjacent to Kangaroo Avenue in the location of the new northern entrance and along the new northern access road would be required as part of the Proposal. **The Proposal is very unlikely to have a significant impact on vegetation abundance.**
Vegetation integrity 1.5(2)(a) BC Act	Degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state	NA	As noted above, the Eastern Creek REP site is located within a highly disturbed area, characterised by over a 100 years of industrial land use. The small patch of vegetation on the northern and eastern boundaries of the Eastern Creek REP has been identified as a mix of native and exotic tree and shrub species with a largely exotic understory. Previous assessments of this vegetation have concluded that it does not satisfy the condition threshold requirements to represent an endangered ecological community (EMM, 2018). Only minimal clearing of this vegetation in the location of the new northern entrance and along the new northern access road would be required as part of the Proposal. Beyond this minor clearing, it is not anticipated the Proposal would reduce the vegetation integrity of vegetation on site. **The Proposal is not likely to have a significant impact on vegetation integrity.**
Habitat suitability 1.5(2)(b) BC Act	Degree to which the habitat needs of threatened species are present at a particular site	NA	The Proposal would require only minimal clearing of vegetation located adjacent to Kangaroo Avenue in the location of the new northern entrance and along the new northern access road. This may be considered marginal foraging habitat thought the trees are not of an age that would provide tree hollows. Due to the disturbed nature of the vegetation within the site and the widespread availability of similar foraging resources in the surrounding area, it is unlikely that this habitat would be of significance. **The proposal is very unlikely to have a significant impact on habitat suitability.**

Biodiversity value	Meaning	Relevance	Potential impacts
Threatened species abundance 1.4(a) BC Regulation	Occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site	NA	The native vegetation located on the northern and eastern boundaries of the site has been mapped as Cumberland Plain Woodland in regional vegetation mapping. However, assessments have concluded that the vegetation did not satisfy the condition thresholds to represent this endangered ecological community (EMM, 2018). An 11ha patch of remnant bushland adjacent to the north-western corner of the Eastern Creek REP contains Cumberland Plain Woodland, and potential habitat for threatened species (such as Cumberland Plain Land Snail), however this area is outside of the construction and operational boundaries of the Proposal and would not directly impacted. For this reason, it is considered that threatened ecological species or communities, including potential habitat, would not be impacted as a result of the Proposal. **The Proposal is not likely to have a significant impact on threatened species abundance.**
Habitat connectivity 1.4(c) BC Regulation	Degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range	NA	The Eastern Creek REP occurs in an already highly cleared and fragmented landscape. The 11 ha Environmental Conservation adjacent to the northwest of the Eastern Creek REP is outside of the Proposal boundary and would not be disturbed as part of the Proposal. Vegetation clearing would be limited to small areas of modified native vegetation that is not consistent with an endangered ecological community (EMM, 2018). Based on the already degraded nature of the vegetation within the site and minimal requirement for vegetation removal, the Proposal is considered unlikely to impact the movement of fauna species, pollinators, or seed movement across the landscape. **The Proposal is not likely to have a significant impact on habitat connectivity.**
Threatened species movement	Degree to which a particular site contributes to the	NA	Vegetation along the northern and eastern boundaries of the Eastern Creek REP is scattered and fragmented and

Biodiversity value	Meaning	Relevance	Potential impacts
1.4(d) BC Regulation	movement of threatened species to maintain their lifecycle		therefore unlikely to facilitate the movement of threatened species across the landscape. It is also likely that the area would be actively avoided by more mobile fauna species given the ongoing operation of the facility. **The Proposal is not likely to have a significant impact on threatened species movement.**
Flight path integrity 1.4(e) BC Regulation	Degree to which the flight paths of protected animals over a particular site are free from interference	NA	It is possible that threatened species would fly over the Eastern Creek REP site on occasion, whilst moving within their home range or during migration. This is most likely the case for threatened bats and woodland birds. The Eastern Creek REP is located in an already highly modified landscape comprised of industrial units. The Proposal would not include any additional infrastructure that would increase interference with the flight path of any protected fauna. **The Proposal is not likely to have a significant impact on flight path integrity.**
Water sustainability 1.4(f) BC Regulation	Degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.	NA	The Eastern Creek REP does not contain any waterbodies. However, Anzac Creek runs adjacent to the eastern boundary of the Eastern Creek REP. In general, works associated with the Proposal would be contained within the already disturbed areas of the Eastern Creek REP. The Proposal would not involve any discharge into Angus Creek and if discharge of treated water is required, a trade waste agreement will be implemented. Therefore, the Proposal would not have any impacts on Angus Creek or surrounding water bodies. **The Proposal is not likely to have a significant impact on water sustainability.**

Summarising information from Table 1, it is considered unlikely that any threatened species or communities occur within the Eastern Creek site, therefore it is unlikely that there would be a significant impact when considering the criteria in Section 1.5 of the BC Act and Section 1.4 of the BC Regulation.

Biodiversity Values Map

The Biodiversity Values Map (BV Map) has been produced by OEH and is used to identify land with high biodiversity value, as defined by the BC Regulation. It is used as one of the triggers for entry into the Biodiversity Offset Scheme (BOS) for proposals being assessed under Part 4 of the EP&A Act, except Division 4.1 SSD proposals. The biodiversity values map is a compilation of datasets that have been identified in Section 7.3 of the BC Regulation as being of high biodiversity value.

Querying the map is not typically required for SSD proposals since Section 7.9 of the BC Act requires entry into the BOS for all SSI and SSD proposals. Since the purpose of this memorandum is to demonstrate that a BDAR is not required for the Proposal, the BV map has been queried to confirm the presence or absence of mapped areas of high biodiversity value.

Figure 1 outlines that two small patched of mapped areas of high biodiversity value occur in or adjacent to the Eastern Creek REP site. Recent aerial imagery clearly identifies that no vegetation remains in the location of these two patches. It is likely that the biodiversity values shown relate to old regional vegetation data sets that do not reflect the current vegetation extent. Notwithstanding the lack of biodiversity present in these two patches, no construction activities are proposed in these two locations.

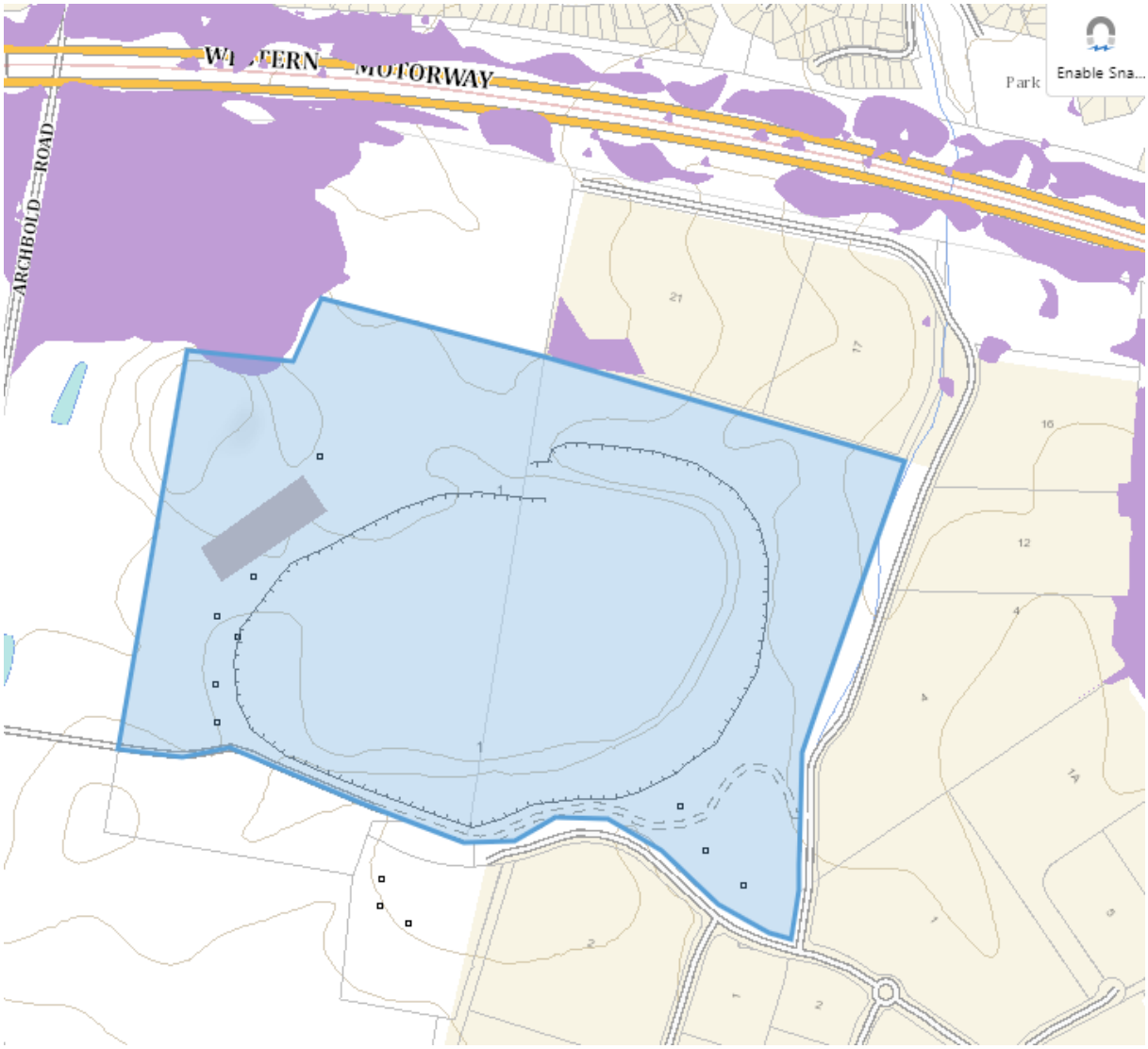

Figure 2 Biodiversity values within the Eastern Creek REP

Conclusion/Recommendation

This memo has considered the potential impacts of the Proposal on biodiversity values prescribed in Section 1.5 of the BC Act, Section 1.4 of the BC Regulation and the BV Map. The Proposal would have no significant impact on these biodiversity values or PCTs.

The Proposal would be undertaken within the boundary of the existing Eastern Creek REP which is operated as a waste management facility. The site is largely cleared of vegetation, except for some small patches on the eastern and northern boundaries. Regional vegetation mapping has identified this as Cumberland Plain Woodland, However it has been previously assessed as not meeting the condition thresholds to represent these endangered ecological communities (EMM, 2018).

Only minimal clearing of this vegetation is proposed for the establishment of a new northern entrance and new northern access road. There are also unlikely to be any prescribed impacts, as defined under the BC Regulation.

The Eastern Creek contains a small portion of land mapped as containing a high biodiversity value on the BV Map. However, there is currently no vegetation in this area, therefore it is considered likely that

this has been based on outdated regional vegetation mapping. Notwithstanding, there would be no impacts in the areas identified on the BV Map.

In light of the above findings, it is requested that the Proposal be considered exempt from Clause (2) of Section 7.9 of the BC Act, meaning that the EIS need not be accompanied by a BDAR, prepared in accordance with the *Biodiversity Assessment Method 2017*.

References

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