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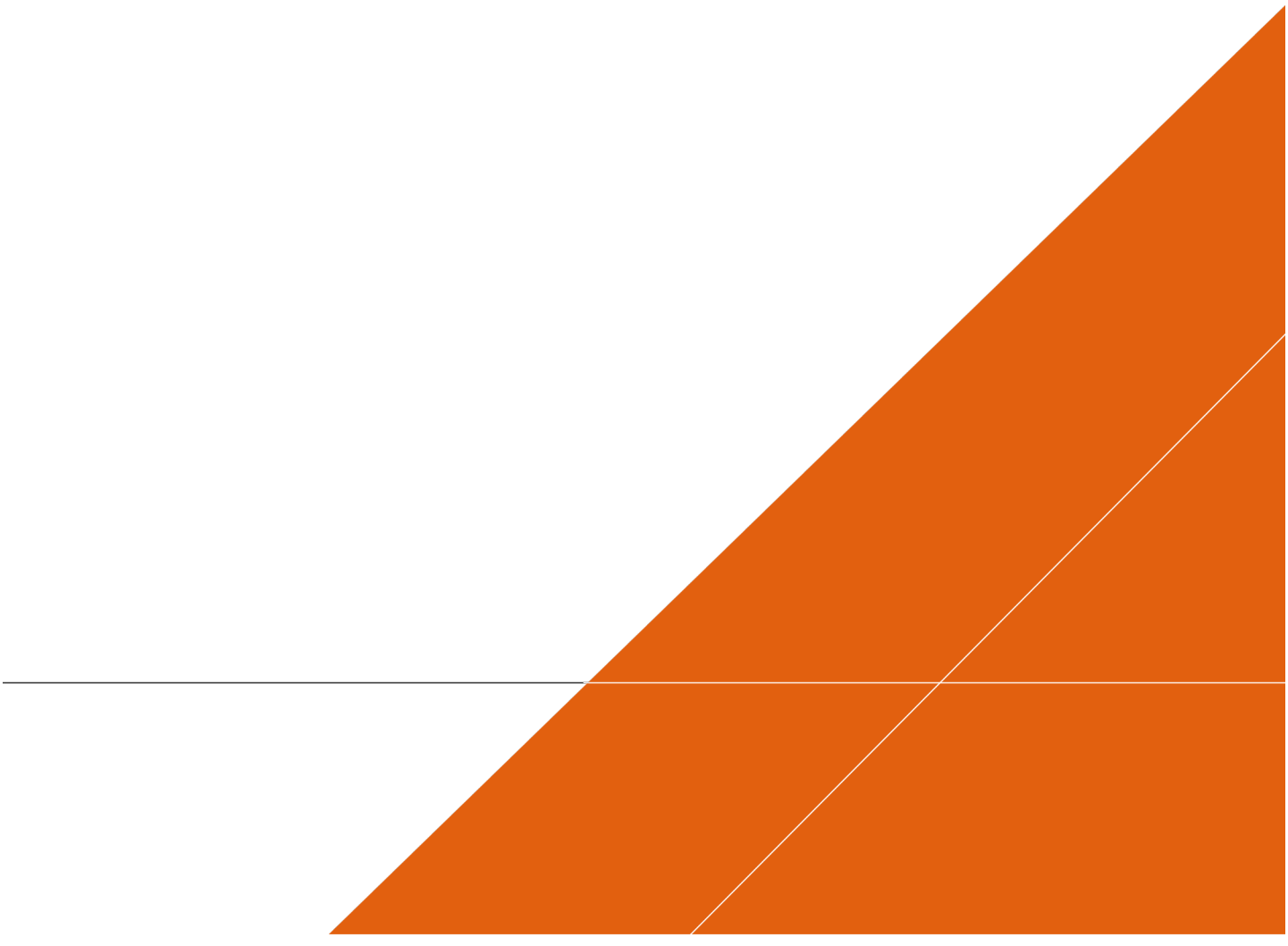
KINGS PARK METAL RECOVERY AND RECYCLING FACILITY EXPANSION

23-43 and 45 Tattersall Road, Kings Park - Sell & Parker Pty Ltd

State Significant Development - Environmental Impact Statement (SEARs No. 10396)

17 SEPTEMBER 2020



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SELL & PARKER PTY LTD

KINGS PARK METAL RECOVERY AND RECYCLING FACILITY EXPANSION

Environmental Impact Statement

State Significant Development

Author	Sean Fishwick, Francisco Medina, Kristen Branks	
Checker	Sean Fishwick	
Approver	Westley Owers	
Report No	01	
Date	17/09/2020	

REVISIONS

Revision	Date	Description	Prepared by	Approved by
01	30/07/2020	Draft Master EIS	KB, SF, FM	WO
02	06/08/2020	For DPIE review	KB, SF, FM	WO
03	16/09/2020	Updates to respond to DPIE comments	KB, SF	WO
04	17/09/2020	Final EIS issued to DPIE	KB, SF	WO

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STATEMENT OF VALIDITY

Submission of Environmental Impact Statement Prepared under Part 4, Division 4.12(8) of the *Environmental Planning and Assessment Act 1979*, and Schedule 2, Part 3, Clause 7(1)(e) of the *Environmental Planning and Assessment Regulation 2000*	
Environmental Assessment prepared by	
Name:	Westley Owers (NSW Environment Team Manager)
Qualifications:	BTP (Hons 1) MProDev
Address:	Level 16, 580 George Street Sydney NSW 2000
In respect of:	Sell & Parker Pty Ltd
Applicant Name:	Sell & Parker Pty Ltd
Applicant Address:	23-43 and 45 Tattersall Road, Kings Park NSW 2148
Proposed development:	The Proposal involves approval to increase the throughput limit of the RRF from 350,000 to 600,000 tonnes per annum (tpa).
Land to be developed:	A summary of the legal description (i.e. Lot and Deposited Plan (DP) references) of the Proposal site includes: • Lot 2, DP 550522 • Lot 5, DP 7086
Environmental Impact Statement:	An Environmental Impact Statement (EIS) is attached which addresses all matters in accordance with Part 4, Division 4.12(8) of the *Environmental Planning and Assessment Act 1979*, and Schedule 2, Part 3, Clause 7(1)(e) of the *Environmental Planning and Assessment Regulation 2000*. I certify that I have prepared the contents of this EIS in accordance with the Secretary's Environmental Assessment Requirements (SEARs) (No. 10396) dated 17 September 2020, and that to the best of my knowledge, the information contained within this EIS is not false or misleading.
Signature:	
Name:	Westley Owers
Date:	17/09/2020

GLOSSARY

Term	Definition
AADT	Annual average daily traffic
ABS	Australian Bureau of Statistics
AHD	Australian Height Datum
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
AOBV	Areas of outstanding biodiversity value
The Applicant	The entity seeking approval, namely Sell & Parker Pty Ltd
AQA	Air Quality Assessment
AQMP	Air Quality Management Plan
AQMS	Air Quality Monitoring Stations
ARI	Average recurrence interval
AWS	Automatic Weather Stations
BC Act	*Biodiversity Conservation Act 2016*
BDAR	Biodiversity Development Assessment Report
Blacktown DCP	*Blacktown Development Control Plan 2015*
Blacktown LEP	*Blacktown Local Environmental Plan 2015*
Blacktown LSPS	*Blacktown Local Strategic Planning Statement 2020*
BAM	Biodiversity Assessment Method
BoM	Bureau of Meteorology
BOS	Biodiversity Offsets Scheme
BV Map	Biodiversity Values Map
C&D	Construction and demolition waste
C&I	Commercial and industrial waste
CBD	Central Business District
CEMP	Construction Environmental Management Plan
CLM Act	*Contaminated Land Management Act 1977*
COAG	Council of Australian Governments
Council	Blacktown City Council
DA	Development Application
DAWE	The Australian Department of Agriculture, Water and the Environment
dB	decibels
DIPNR	NSW Department of Infrastructure, Planning and Natural Resources
DLWC	NSW Department of Land & Water Conservation
DPIE	NSW Department of Planning, Industry and Environment
DP	Deposited Plan

Term	Definition
DPI	Department of Primary Industries
EES	Environment, Energy and Science Group
EIS	Environmental Impact Statement
Envirocivil	Envirocivil Pty Ltd
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regs	*Environmental Planning and Assessment Regulation 2000*
EPA	*Environment Protection Authority*
EPBC Act	*Environmental Protection and Biodiversity Conservation Act 1999*
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ERA	Environmental risk analysis
ERM	Environmental Resources Management Australia
ERP	Emergency Response Plan
ESA	Environmental Site Assessment
ESD	Ecological Sustainable Development
FRNSW	Fire and Rescue NSW
FSR	Floor space ratio
GFA	Gross floor area
GHG	Greenhouse Gas
ha	Hectares
HRV	Heavy rigid vehicle
HV	Heavy vehicle
ISEPP	*State Environmental Planning Policy (Infrastructure) 2007*
kL	Kilolitres
kPa	Kilopascal
kW	Kilowatt
L	Litres
L/s	Litres per second
LCV	Light commercial vehicle
LEC	Land and Environment Court
LGA	Local Government Area
Lidar	Light detection and ranging
LMP	Landscape Management Plan
LoS	Level of service
LPG	Liquefied petroleum gas
LV	Light vehicle
LWMP	Landscape and Weed Management Plan
m	Metres

Term	Definition
mm	Millimetre
MNES	Matters of National Environmental Significance
MOD / MODs	Modification(s)
Modification 1 (MOD 1)	The approved modifications to the Original Approval dated 6 July 2017
Modification 2 (MOD 2)	The approved modifications to the Original Approval and approved MOD 1 dated 26 February 2018
Modification 3 (MOD 3)	The approved modifications to the Original Approval and approved MOD 2 dated 29 May 2019
MRV	Medium rigid vehicle
MUSIC Model	Model for Urban Stormwater Improvement Conceptualisation
Operational use batteries	Full batteries for daily operational use or stored on site
NMP	Noise Management Plan
Non-conforming waste	Any hazardous or dangerous waste that is unknowingly brought on-site under EPL 11555, stored in a quarantine area before disposal at a licenced facility.
Northstar	Northstar Air Quality Pty Ltd
NPfI	*Noise Policy for Industry 2017*
NPW Act	*National Parks & Wildlife Act 1975*
NPW Regulation	*National Parks and Wildlife Regulation 2009*
NVIA	Noise and Vibration Impact Assessment
OEMP	Operational Environmental Management Plan
The Original Approval	The approved Environmental Impact Assessment for SSD-5041
Pick 'N' Payless	Pick 'N' Payless Metal Recovery and Recycling Facility located at located at 57 Tattersall Road
Pcu	Passenger car unit
PHA	Preliminary Hazard Analysis
PIRMP	Pollution Incident Response Management Plan
POEO Act	*Protection of the Environment Operations Act 1997*
PPE	Personal protective equipment
The Project	The approved activities under SSD-5041 and MODs 1 - 3
The Proposal	The project for which approval is being sought, namely the expansion of Kings Park metal recycling and processing facility
The Proposal site	The Sell & Parker Premises at 23-43 and 45 Tattersall Road, Kings Park NSW. The area at which the Proposal would be located incorporates the following lots: Lot 2, DP 550522 Lot 5, DP 7086
RBLs	Rating background levels
Renzo Tonin	Renzo Tonin & Associates
Roads and Maritime	Roads and Maritime Services

Term	Definition
Roads Act	*Roads Act 1993*
RNP	*NSW Road Noise Policy*
RRF	Resource Recovery Facility
SEARs	Secretary's Environmental Assessment Requirements
SEE	Statement of Environmental Effects
SEIFA	Socio-Economic Indexes for Areas
Sell & Parker	Sell & Parker Pty Ltd
SEPP 33	*State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*
SEPP 55	*State Environmental Planning Policy No. 55 – Remediation of Land*
SEPPs	State Environmental Planning Policies
SRV	Small rigid vehicle
SSD	State Significant Development
State and Regional SEPP	*State Environmental Planning Policy (State and Regional Development) 2011*
STFM	Sydney Strategic Traffic Forecasting Model
T-way	transitway
TECs	Threatened Ecological Communities
TfNSW	Transport for NSW
tpa	Tonnes per annum
TSC Act	*Threatened Species Conservation Act 1995*
TSP	Total Suspended Particulate
TTIA	Traffic and Transport Impact Assessment
TTPP	The Transport Planning Partnership
ULABS	Used Lead Acid Batteries. Spent lead acid batteries commonly found in automobiles
UST	Underground storage tank
VIS	Vegetation Information System
WARR Act	*Waste Avoidance and Resource Recovery Act 2001*
WBCSD	World Business Council for Sustainable Development
WHS	Work health and safety
WM Act	*Water Management Act 2000*
WMP	Water Management Plan
WMS	Water Management System
WoNS	Weeds of National Significance
WRI	World Resources Institute

EXECUTIVE SUMMARY

This Environmental Impact Statement (EIS) has been prepared on behalf of Sell & Parker Pty Ltd (Sell & Parker) to support a State Significant Development (SSD) application under Part 4, Division 4.7 of the *Environmental Planning and Assessment 1979* (EP&A Act). Division 4.7 of the EP&A Act identifies the Minister for Planning and Public Spaces (or their delegate) as the consent authority for development that is identified as SSD.

The Proposal is for the expansion of throughput of an existing Resource Recovery Facility (RRF) located at 23-43 and 45 Tattersall Road, Kings Park (the Proposal site). The Proposal would allow to increase the throughput limit of the existing RRF from 350,000 to 600,000 tonnes per annum (tpa) of scrap metal. The existing infrastructure at the Proposal site has the capacity to accommodate the increased throughput and therefore, no construction works would be required. The Proposal would assist in achieving the higher recycling contamination standards prescribed by China's National Sword Policy as well as further reducing the volume of scrap metal that otherwise goes to landfill.

This EIS has been prepared by Arcadis Australia Pacific Pty Limited (Arcadis) on behalf of Sell & Parker (the Applicant) to support an application for the approval of the Proposal. It has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs No. 10396) provided for the Proposal in accordance with Section 4.12(8) of the EP&A Act and Schedule 3 the *Environmental Planning and Assessment Regulation 2000* (EP&A Regs).

Applicant and Proposal site

The existing RRF is operated by Sell & Parker (the Applicant) and is located on land owned by Trusts associated with the owners of Sell & Parker. The RRF currently operates under approval SSD-5041 and three (3) associated modifications (the Original Approval).

The Proposal site comprises two adjoining parcels of land being 23-43 and 45 Tattersall Road, Kings Park (Lot 2 in DP 550522 and Lot 5 in DP 7086 respectively). The area of the Proposal site is approximately 6.4 hectares (ha).

The Proposal site is situated approximately 40 kilometres (km) north-west of the Sydney Central Business District (CBD). The Proposal site is located within the Blacktown Local Government Area (LGA) in an area characterised by general industrial development. The Proposal site is located approximately 3 km from Blacktown CBD. The nearest residential development is approximately 300 metres (m) to the east across Sunnyholt Road.

Need for the Proposal

China's National Sword Policy introduced new import restrictions on recycled materials and reduced the maximum allowed contamination standards depending on the type of material. For many recycled materials, including scrap metal, the contamination limits set by this Policy effectively constitute a ban on exporting to China. Without an increase to recycling capacities in Australia, scrap metal that was previously exported to China may end up in landfill.

The Applicant currently holds license number A036040008 issued by the General Administration of Customs of the People's Republic of China. The Proposal would considerably improve the operational efficiency and capacity of the existing RRF while achieving greater recycling targets. The Proposal is therefore considered essential for the sector's ability to meet the contamination standards prescribed by China's National Sword Policy and divert scrap metal from landfill.

Further, the Proposal aligns to the strategic vision of relevant waste policy within NSW and Australia. Maximising the operational throughput is necessary to meet the growing demand for recycling facilities due to the restrictions set by China's National Sword Policy, to reduce the amount of waste and recyclables going to landfill and to meet the state resource recovery targets. Therefore, the Proposal represents a positive contribution to the circular economy in NSW and Australia.

Planning Approval Pathway and Statutory Context

The Proposal triggers the requirements for SSD under Clause 23 (waste and resource management facilities) of Schedule 1 of the *State Environmental Planning Policy* (State and Regional Development) *2011* (State and Regional SEPP), which refers to:

> *(3) Development for the purpose of resource recovery or recycling activities that handle more than 100,000 tonnes per year of waste.*

The Blacktown Local Environmental Plan 2015 (Blacktown LEP) is the primary Environmental Planning Instrument (EPI) that applies to the Proposal site. Under Clause 2.1 of the Blacktown LEP, the Proposal site is zoned IN1 – General Industrial. The Proposal would not change the current land use of the Proposal site or alter the structure of the approved RRF. Therefore, the Proposal would remain consistent with the objectives of the IN1 zone. Development control plans (DCPs) are not applicable to SSD under Clause 11 of the State and Regional SEPP.

The RRF currently operates under Environmental Protection Licence (EPL) No. 11555 which would require to be amended as prescribed by the Protection of the Environment and Operations Act 1997 (POEO Act). The Proposal is therefore considered 'Integrated Development' under Section 4.46 of the EP&A Act.

Proposal Description

The Proposal is to increase the scrap metal processing throughput at the Proposal site from 350,000 to 600,000 tpa.

The existing infrastructure at the Proposal site has the capacity to accommodate the increased throughput. The Proposal would not require any construction works and would not change the mix of materials currently received at the RRF. However, adjustments to site management practices would be required in terms of internal vehicle movements and stacking locations to allow the increased throughput.

The Proposal would utilise existing road infrastructure, other utility installations and stormwater discharge points. Table 0-1 presents a comparison between the Original Approval and the Proposal. Figure 0-1 below shows the operational layout of the Proposal.

Table 0-1- Summary of proposed amendments to existing development approval

Aspect	Approved Development (Original Approval)	Proposal	Difference
Processing capacity	350,000 tpa	600,000 tpa	Additional 250,000 tpa
Waste storage	Hazardous, restricted solid, liquid, clinical and related waste and asbestos waste.[1]	No changes proposed	Nil
Hours of operation	Oxy-acetylene torch cutting: Monday to Saturday: 9am to 3pm	No changes proposed	Nil
	• All other activities: Monday to Saturday: 6am to 9pm		

Aspect	Approved Development (Original Approval)	Proposal	Difference
	• No activity on Sundays or public holidays for the above • Maintenance and cleaning: - Monday to Saturday: 9pm to 6am - Sunday: 24 hours - No activity on public holidays.		
Number of employees	Approx. 119 staff employed with up to 79 on-site at one time	No changes proposed	Nil
Traffic and transport	• Approximately 298 vehicle movements per day comprising 51 light and 247 heavy vehicles.	• Approximately 513 vehicle movements per day comprising of 89 light vehicles and 424 heavy vehicles • Provision of up to 35 stacking spaces for heavy vehicles	215 additional vehicle movements comprising 38 light and 177 heavy vehicles
Site Layout	• As approved in MOD 3 (Figure 0-1 and Appendix C[2])	• Minor changes to working stockpile locations to allow efficient vehicle movements throughout the Proposal site.	Nil

[1] Waste storage description is consistent with the fee based activity description with EPL 11555

2 Note that changes to the appearance of the Site Layout Plan (as presented in Mod 3) have been made to improve legibility and remove references to infrastructure 'proposed' under Mod 3 (as Mod 3 changes have been predominately completed). However, consistent with this Proposal, site infrastructure remains unchanged.

LEGEND

- Proposal site boundary
- Property boundary
- Watercourse

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Coordinate System: GDA 1994 MGA Zone 56
Date issued: July 14, 2020
Aerial imagery source: nearmap Jun 2020

1:3,000 at A4

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Figure 0-1: Proposal site layout

Proposal Alternatives

A number of alternative scenarios to achieve the Proposal objectives were considered, and included:

- The 'Do Nothing' scenario: This option was rejected as without the Proposal the existing RRF would continue to operate under its current arrangement. This would limit the volume of scrap metal that could be received, and consequently, recovered as a result of the Proposal
- Construction of a new facility at an alternate site: The Proposal relies on the expansion to the existing RRF to improve productivity and efficiency of metal recovery and recycling. The Proposal could therefore not be undertaken at an alternate site without requiring the complete construction and operation of a new RRF
- Increased capacity (preferred option): A capacity analysis has been undertaken to identify the maximum feasible throughput that the Proposal site could accommodate based on the existing (and approved) infrastructure, processes, operating hours and general site layout. The results of the analysis indicated that an increase in throughput to 600,000 tpa would be within the limits of the existing approved infrastructure, including existing plant and equipment.

Consultation

Ongoing consultation by the Applicant has been undertaken throughout the preparation of this EIS with government agencies and the community.

Government Agency Consultation

A number of government agencies were consulted with during the preparation and assessment of the Proposal, including:

- Department of Planning, Environment and Industry (DPIE)
- Environment Protection Authority (EPA)
- Sydney Water
- Transport for NSW (TfNSW) (Formally Roads and Maritime Services)
- Fire and Rescue NSW (FRNSW)
- Blacktown City Council (Council)
- Department of Primary Industries (DPI)
- Environment, Energy and Science Group (EES)
- Water Group.

The above-mentioned government agencies were consulted with in the form of meetings, telephone conversations, email and/or letter correspondence. Key issues raised included:

- Traffic and transport
- Air quality and odour
- Noise and vibration
- Soils, water and contamination
- Flooding
- Hazards and risk

- Fire management and incident
- Biodiversity
- Aboriginal Cultural Heritage.

These issues have been addressed throughout this EIS.

Community Consultation

Community consultation was undertaken during the development of the EIS to facilitate engagement between the project team and key community stakeholders. This engagement served a dual purpose:

- To identify key community issues for consideration in the EIS and associated technical studies
- To create broad awareness of the Proposal so as to remove uncertainty around the Proposal.

Community consultation activities undertaken to date include:

- A dedicated webpage that offers general information about the Proposal, together with a timeline, factsheet and opportunity to lodge submissions on-line
- A dedicated contact number and project email address were used to provide a central point of contact for community enquiries.
- A total of 1850 letters were mailed out to landowners and the community seeking feedback on the Proposal. The letters contained a community factsheet and timeline as well as methods for submitting enquiries.

Community consultation was undertaken from 15/06/2020 to 31/07/2020. Community consultation responses received have been considered as part of the preparation of this EIS.

Key Environmental Issues

A summary of the key environmental issues, as identified within the SEARs (No. 10396), is provided within Table 0-2.

Table 0-2 – Key Environmental issues and potential impacts

Key environmental issue	Potential operational impacts
Traffic and transport	During operations, the Proposal would result in up to approximately 513 vehicles per day. The assessment determined that there would be no significant impact to the safety and function of the road network surrounding the Proposal site. There would be no significant change to the existing level of service at key intersections surrounding the Proposal. Vehicle movements generated by the Proposal would be able to be accommodated by the available on-site stacking spaces so can comfortably accommodate the traffic generation associated with the Proposal. Traffic and transport at the Proposal site will continue to be managed in accordance with the Operational Environmental Management Plan (OEMP) with the mitigation measures previously identified for the Original Approval (SSD-5041) being implemented for the Proposal.
Air quality and odour	Operation of the Proposal would result in the generation of particulate matter (PM), total suspended particulates (TSP), deposited dust,

Key environmental issue	Potential operational impacts
	nitrogen dioxide (NO2) and odour. The assessment identified exceedances of the established criteria for PM_{10} and $PM_{2.5}$. However, in all cases, the background already exceeds the assessment criteria without the Proposal. Critically, the assessment does not predict the operation of the Proposal would lead to any additional exceedances of the relevant criterion Mitigation measures in relation to air and odour previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal. In particular, the air quality and odour management strategies in the current OEMP will be implemented to reduce air quality impacts.
Noise and vibration	Operation of the Proposal has the potential to result in noise and vibration impacts from: • Operation of processing equipment • Movement of vehicles within the Proposal site and on the external road network • Scrap metal management activities such as tipping, sorting and loading material The noise and vibration impact assessment prepared for the Proposal identified that during operation noise emissions for all receivers comply with relevant noise trigger levels without any additional noise mitigation measures. Mitigation measures in relation to noise and vibration previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal. In particular, the noise and vibration management strategies in the current OEMP will be implemented to reduce impacts.
Soil, water and contamination	Operation of the Proposal site would not involve disturbance to soils as it is mostly a hardstand area and there would be no impact on-site soils. The water assessment and updated site water balance prepared for the Proposal identifies that the existing Water Management System (WMS) has the capacity to manage the increase in water use associated with the Proposal. Around 80% of the Proposal site's production water demands would be met through reused water. This represents a 61% saving of the total water demand of the site. The Proposal site is capped as permanent hardstand and the risk of exposure to existing contaminants (if present) is considered negligible. The Proposal would not result in changes in the types and quantities of potential contaminants as a result of increasing the operational capacity of the facility. Mitigation measures in relation to soil, water and contamination previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal. In particular, the soil, water and contamination management strategies in the current OEMP will be implemented to reduce impacts.
Flooding	The Proposal is operational only and would utilise existing infrastructure at the Proposal site. Operational changes will not result in changes to the existing ground conditions. As such, there would be no significant change to the existing flood regime on Proposal site and no change to flood impacts on the surrounding area are predicted. Mitigation measures in relation to potential flood impacts previously identified for the Original Approval (SSD-5041) would be implemented for

Key environmental issue	Potential operational impacts
	the Proposal. In particular, the flood management strategies in the current OEMP will be implemented to reduce impacts.
Hazards and risk	The Proposal would not result in a change to the types or quantities of dangerous goods stored at the Proposal site. The Proposal would not result in a change to operational hazards and risks at the Proposal site and would continue to be managed through the existing site OEMP. Mitigation measures relating to hazards and risk previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.
Aboriginal Heritage	The Aboriginal heritage assessment identified that there is no potential for impact to recorded or Aboriginal Heritage values. Impacts to non-recorded items or places of (i.e. unexpected finds) is considered highly unlikely due to the highly disturbed nature of the Proposal site and there being no construction or ground disturbing works required as part of the Proposal. Mitigation measures relating to Aboriginal heritage previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.
Waste management	Operation of the Proposal would not result in a change to wastes generated by daily operations such as office workforce waste An increase in throughput at the Proposal site would result in a corresponding increase in waste materials (floc) associated with scrap metal processing activities. Notwithstanding this, the waste management practices currently in place on-site (and as updated for the Proposal) would be suitable to ensure that additional floc can be adequately managed. Mitigation measures relating to waste management previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.
Greenhouse Gas	During operation of the Proposal, the activities/operations that will be performed which have the potential to result in emissions of GHG include: • Consumption of diesel fuel in mobile plant and equipment at the Proposal site • Travel fuel • Consumption of purchased electricity. GHG emissions associated with the Proposal are anticipated to represent less than 0.023% of total NSW GHG emissions in 2018 and less than 0.006% of total Australian GHG emissions in 2019. These emissions are considered to be negligible. Mitigation measures relating to GHG previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.
Biodiversity	The Proposal would not change the nature of operations at the Proposal site and would not require impacts to vegetation Therefore, there are no biodiversity impacts predicted as part of the Proposal. A BDAR waiver application was submitted a part of the Scoping Report and a Waiver has been formally approved by the Secretary of the

Key environmental issue	Potential operational impacts
	Department of Planning, Industry and Environment on 19th December 2019 and is attached as Appendix M. Mitigation measures relating to Biodiversity previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.
Visual	As the Proposal does not require a change to proposed infrastructure, the nature of views to the Proposal site would not change. No physical consistent change to views or the visual landscape to the Proposal site would be created as part of the Proposal. Mitigation measures relating to Visual previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.
Socio-economic	The Proposal does not require changes to the number of employees on the Proposal site or relationships with stakeholders. As such, socio-economic impacts from the Proposal are not anticipated. The Proposal would support the ongoing operations of the facility (supporting ongoing jobs and services) and allow an increase in the volume of metal recovered from scrap reducing the use of landfills throughout the local and wider community. Mitigation measures relating to the social and economic environment previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.

Cumulative

The Proposal has been assessed in the context of the proposed and future developments in the surrounding area that may result in cumulative environmental impacts, specifically:

- Envirocivil Recycling Facility Expansion (Designated Development DA) (DA SSP-19-00004) (the Envirocivil RRF Expansion Proposal) (BCC, 2020a)
- Pick 'N' Payless Metal Recovery and Recycling Facility (SSD Application) (SSD-8375) (the Pick 'N' Payless Expansion Proposal) (DPIE, 2020e).

Based on the nature of the Proposal (and these proposals) the key potential cumulative impacts identified are traffic and transport, air quality and odour and noise and vibration. Other potential cumulative impacts, such as soils, water and contamination, flooding, hazards and risks, Aboriginal and non-Aboriginal heritage, waste management, greenhouse gas, biodiversity, socio-economic were considered however, upon further analysis were determined, subject to appropriate site management, to be able to appropriately managed on a site by site basis and therefore are not considered to result in cumulative impacts.

As the Proposal only seeks approval for operational activities, the cumulative impact assessment undertaken considered the Proposal and other proposals operating at full operational capacity.

A summary of the potential cumulative impacts are as follows:

- **Traffic and transport:** Traffic generated for both proposals has been included within the future background scenarios and therefore it not anticipated that the cumulative impacts would be above those identified for the Proposal (refer to Section 7 of this EIS). Subject to the update of the OEMP, impacts from traffic generated by the Proposal and these neighbouring proposals can be adequately managed and mitigated
- **Air quality and odour:** Based on the impact assessment provided, the Proposal and these neighbouring proposals are not anticipated to result in additional adverse impacts (from an odour or air quality perspective) on surrounding receivers. No further mitigation measures for the Proposal are considered necessary.
- **Noise and vibration:** The potential noise contribution for the Envirocivil RRF Expansion Proposal is considered insignificant and therefore does not form part of the cumulative assessment. It was concluded that the cumulative noise impacts of the Proposal and the Pick 'N' Payless Expansion Proposal would comply with the recommended amenity noise levels identified with the NPfI. No further mitigation measures for the Proposal are considered necessary.

Conclusion

The Proposal, which is classified as SSD in accordance with Clause 23(3) of Schedule 1 of the State and Regional SEPP, has been subject to an EIS in accordance with the EP&A Act, EP&A Regs and the SEARs.

The potential environmental, social and economic impacts, both direct and cumulative, have been identified and thoroughly assessed as part of this EIS. The assessment concluded that no significant environmental impacts have been identified as a result of the Proposal. It is considered that any potential impacts can be satisfactorily mitigated through a range of measures that have been identified within the EIS. In addition, the Proposal has been assessed against – and has been found to be consistent with – the priorities and targets adopted in relevant and draft State plans as well as Government policies and strategies.

The Proposal would provide significant benefit in terms of providing a sustainable resource recovery facility for Blacktown and Western Sydney, and by creating choice and competition within Sydney for resource recovery. The proposed development is in the public interest and its approval is recommended.

Next Steps

The EIS would be placed on public display for 28 days in accordance with Schedule 1, Division 2 (Part 9, SSD applications) of the EP&A Act. This public display period would provide an opportunity for all stakeholders to comment on the Proposal. On completion of the public display period, all submissions received would be considered in a response to the Department of Planning, Industry and Environment (DPIE).

Opportunities would also be provided for the community to provide feedback as well as for the dissemination of up-to-date information on the Proposal via an email feedback system with the Applicant (development_approvals@sellparker.com.au) and the maintenance of an information line (02 9695 6899).

1 INTRODUCTION

1.1 Overview

Sell & Parker currently operate a resource recovery facility at 23-43 and 45 Tattersall Road, Kings Park, on land owned by Trusts associated with the owners of Sell & Parker (the Proposal site) (Figure 1-1). The RRF currently operates under approval SSD-5041 and three (3) associated modifications (MODs 1- 3) (the Original Approval).

The Applicant is seeking approval to increase the throughput limit of the RRF from 350,000 to 600,000 tonnes per annum (tpa) (the Proposal). Approval for the Proposal is sought as State Significant Development (SSD) under Part 4, Division 4.7 of the *Environmental Planning and Assessment 1979* (EP&A Act).

The increase in throughput limit would allow the Applicant to process up to 600,000 tpa of scrap metal (from both on-site and external sources). The Proposal would assist in achieving the higher recycling contamination standards prescribed by China's National Sword Policy as well as further reducing the volume of scrap metal that goes to landfill.

The existing infrastructure at the Proposal site has the capacity to accommodate the increased throughput and the Proposal would not require any physical works or change to the nature of operations. However, some adjustments to site management practices such as internal traffic flows and scheduling would be required.

LEGEND

- Proposal site boundary
- Operational area
- Property boundary
- Watercourse

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Figure 1-1: Proposal site layout

1.2 Background to the Proposal

Sell & Parker purchase, sell and recycle all types of ferrous and non-ferrous metals. Their facilities are located strategically throughout NSW and Australia including Sydney (Blacktown, Banksmeadow, Ingleburn) the NSW North Coast (Coffs Harbour), NSW South Coast (Nowra) and Hunter Region (Newcastle). Other facilities throughout Australia include Darwin and Port Headland.

Sell & Parker hold a licence (number A03604008) issued by the General Administration of Customs of the People's Republic of China allowing them to export processed scrap metal to China. They are also one of only three accredited suppliers to BlueScope Steel. As a result, Sell & Parker have the opportunity to pursue growth in metropolitan markets via economies of scale, vertical integration (acquisition) and superior networks that help reduce transportation costs and improve service delivery. The Kings Park RRF forms an important piece of Sell & Parker's network, servicing the Greater Sydney Metropolitan Area and processing material sourced across the Sell & Parker network.

1.2.1 Existing Approvals

In November 1996, Blacktown City Council approved a metal recycling facility with a throughput capacity of 30,000 tpa on the southern portion of 45 Tattersall Road. Since this time there have been a number of changes to the Proposal site to improve operation efficiency, safety and environmental impact. In 2001, throughput was increased to 90,000 tpa when the Land and Environment Court (LEC) approved the establishment of a metal shredder on the northern part of 45 Tattersall Road.

The Proposal site currently operates under SSD-5041 (the Original Approval) which was granted by DPIE on the 12th of November 2015. SSD-5041 allowed for:

- An increase in throughput from 90,000 tpa to 350,000 tpa
- Expansion of the Proposal site to include the neighbouring lot 23-43 Tattersall Road.

Subsequent to this approval, three (3) modifications have been approved as outlined in Table 1-1.

Table 1-1 – Approved MODs

Modification	Description
Modification 1 (MOD 1)	Granted by DPIE (formerly the Department of Planning and Environment) on 6 July 2017, including amendment to the site layout, design of buildings and structures and alterations and additions to existing buildings and structures.
Modification 2 (MOD 2)	Granted by DPIE (formerly the Department of Planning and Environment) on 26 February 2018, including changes to the acoustic wall, site entrance and construction of an awning (went to LEC then was approved).
Modification 3 (MOD 3)	Granted by DPIE (formerly the Department of Planning and Environment) on 29 May 2019, including alterations and additions to processing equipment, extension to operational hours and administrative changes.

The works associated with these modifications have been undertaken, with the exception of the relocation of the pre-shredder, as approved under SSD-5041 MOD 3. The pre-shredder has been partially constructed at the approved location. However, as result of the recent COVID-19 situation (both machinery and personnel availability), there has been delays to the completion of construction and commissioning of this

equipment. The pre-shredder in its existing location remains operational and is covered by purpose built fire management equipment. The pre-shredder will be relocated and ready for operations prior to activities associated with this Proposal being undertaken.

The approved operational hours for the RRF (as modified in MOD 3) are described in Table 1-2 below.

Table 1-2 – Operational hours SSD-5041

Activity	Day	Hours
Oxy-acetylene torch cutting	Monday to Saturday	9 am to 3 pm
	Sunday and public holidays	Nil
Maintenance and cleaning*	Monday to Saturday	9 pm to 6 am
	Sunday	24 hours
All other activities	Monday to Saturday	6 am to 9 pm
	Sunday and Public Holidays	Nil

* Maintenance and cleaning occur within operational hours as well as identified cleaning and maintenance periods

1.2.2 Environmental Protection License

The Proposal site currently operates with the EPL No.11555 outlined in Table 1-3.

Table 1-3 – Current EPL

Approval number	Premises	Activity summary	Date of approval
EPL 11555	23-43 and 45 Tattersall Road, Kings Park NSW	• Metallurgical activities – scrap metal processing • Waste storage – hazardous, restricted solid, liquid, clinical and related waste and asbestos waste.	• Licence issued: 16-Apr-2002 • Last license variation: 27-Aug-2020

1.2.3 Site Optimisation

The Applicant has undertaken a series of actions as part of the Original Approval and subsequent modifications (MODs 1 - 3) to optimise operations and improve safety and environmental performance at the Proposal site. The Proposal site currently operates under EPL No. 11555 which allows scrap metal processing up to 350,000 tpa.

Based on the Applicant's weighbridge data, the Proposal site currently has an approximate throughput of 340,000 tpa[1]. However, as discussed in Section 3.4, the Proposal site has the capacity to accommodate an increased throughput without altering the approved operational hours or requiring any construction works on the Proposal site.

[1] Received (in) 342,664 tonnes and processed (out) 346,056 tonnes as for 2019 (up to April 2020).

1.2.4 Environmental Performance

An Independent Environmental Audit was undertaken in December 2019 to assess compliance with conditions of all development consents and the EPL 11555 for the existing RRF. The audit identified a number of areas of concern and opportunities for improvement relating to environmental performance for the Proposal site. Sell & Parker have reviewed the results of the audit and have undertaken several steps to improve environmental performance. The key areas of concern and the improvement actions that are and will be undertaken are shown in Table 1-4.

Table 1-4 Outcomes and improvement actions from the 2019 Independent Environmental Audit

Environmental aspect	Area of concern	Improvement actions
Air quality	Proactive management of Air Quality on site	Sell & Parker will continue to improve data recording on site as per the AQMP and mange air emissions within the adopted site criteria.
Air quality	Management of dust suppression within the Proposal site	As per the EPL, dust suppression should be managed within the adopted site criteria. As a precaution, a start-up procedure has been developed to further manage dust emissions, including wetting down the processing yard areas prior to morning operations commencing. Existing mitigation includes water cannons and sprays and street sweepers that will continue to be used for dust suppression. Sell & Parker will ensure that all of this equipment is maintained in good working order. The AQMP will be reviewed and revised to address any increased throughput as required.
Air quality	Street sweeping activity and maintenance	Sell & Parker will continue to ensure dust suppression and dampening surfaces are maintained in operational areas, as required. The two on-site street sweepers will continue to be maintained regularly. If both street sweepers are unavailable, another street sweeper will be sourced. The AQMP will also be reviewed and revised to address any increased throughput processing, as required.
Air quality	Continuous recording of the weather stations	Operation and maintenance of the two weather stations will continue in accordance with EPL 11555.
Noise	The Noise Management Plan (NMP) should align with the Noise Policy for Industry (NPFi) by the EPA (2017)	The EPL Noise Monitoring Program has been updated in accordance with the current NPFi by the EPA (2017) to ensure internal and external noise testing and monitoring is conducted in accordance with the current NPFi. Noise mitigation and monitoring will continue to be implemented to address any increase throughput processing for the Proposal.
Noise	Noise barriers should be intact and maintained	Noise barriers will continue to be inspected and maintained in accordance with the NMP.
Overpressure	Explosion and blast limit conditions	All reasonable and feasible limit condition measures are being managed on the Proposal site as per the EPL. Sell & Parker will continue to record and monitor explosion and blast limits and review

Environmental aspect	Area of concern	Improvement actions
		practices in the unlikely event of a non-compliances.
Fire	Additional safety measures of stockpile and fire management	Sell & Parker have undertaken a considerable upgrade to fire management infrastructure and altered practices as required by the Original Approval (SSD-5041). In particular, updates to the OEMP and Stockpile Plan (Appendix C) have been implemented at FRNSW recommendations (Transitional Fire Risk Management and Implementation Plan, October 2017) to ensure fire practices are being met. The works have been completed in accordance with *and beyond* the requirements of the Fire Order. Firefighting infrastructure upgrades include: • 2x451 kl tanks • One electric and two diesel pumps for the provision of high-pressure water to multiple cannons (*monitors),* • Duplication at multiple points with a recycled water ring main for back up fire fighting, • Deluge system within the floc shed • Increased passive detection around significant infrastructure. Further detail on fire infrastructure has been provided in Section 2.4.6.
Pre-shredder location	Operation of the pre-shredder 70 m south-west of existing pre-shredder	The Modification Report (Arcadis, 2018) for SSD-5041 MOD 3 indicated the following in relation to construction program for the pre-shredder (and other equipment): *Works would be undertaken progressively over a period of approximately 3-12 months. Notwithstanding this, some aspects of the works may be delayed, subject to receipt of machinery and materials.* Sell & Parker have commenced construction of the pre-shredder at the proposed location (as identified in SSD-5041 MOD 3). However, as a result of COVID-19 (both machinery and personnel availability) there has been delays to the intended installation of this equipment. It is Sell & Parker's intention to recommence and at this stage is expected that the pre-shredder will be operational at this proposed location as soon as possible (subject to global influences – 4th Qtr 2020). At this stage, the timing for the relocation of the pre-shredder is considered consistent with that identified within the Modification Report, which clearly identified (albeit not being able to foresee the influences of COVID-19) a construction period (commencing from construction commencement, not approval) and the potential for delays. In the interim, the existing pre-shredder is currently covered by necessary fire infrastructure and in good working order thereby not posing an environmental concern.

Continual environmental improvement

Sell & Parker are committed to a program of continual environmental improvement for their business and operational sites. This is reflected through their environmental management system and operational management plans which detail the procedures that form the stages of the continuous improvement cycle as shown in Figure 1-2.

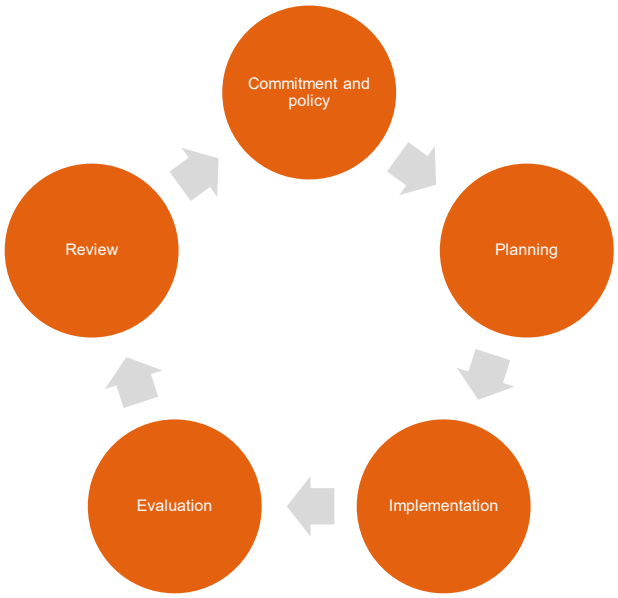

Figure 1-2 Continuous improvement cycle

As part of their commitment to continual environmental improvement Sell & Parker will continue to engage in Independent Environmental Audits on a 3 yearly cycle and promptly implement any further measures as required.

1.3 Proposal components and key terms

Table 1-5 provides a summary of the key terms, in addition to the glossary provided above, which are key to this EIS.

Table 1-5 – Key terms of this EIS

Term	Description
The Original Approval	The approved Environmental Impact Assessment for SSD-5041 (and subsequent modifications)
The Proposal	The Proposal for which approval is being sought, namely the expansion of Kings Park metal recycling and processing facility
The Proposal site	The Sell & Parker Premises at 23-43 and 45 Tattersall Road, Kings Park NSW (Figure 1-1). The area at which the Proposal would be located incorporates the following lots: • Lot 2, DP 550522 • Lot 5, DP 7086.

1.4 Proposal Objectives

The key objectives of the Proposal include the following:

- To increase the volume of scrap metal recycled at the RRF utilising existing approved infrastructure thereby maximising diversion from landfill
- To meet higher recycling standards prescribed by China's National Sword Policy
- To optimise the efficiency of site processes, including vehicle movements and stacking locations
- To support continuous improvement in the environmental performance of the Proposal site.

1.5 Structure of this EIS

The structure of this EIS is as follows:

- **EIS Summary**: Provides a brief overview of the Proposal, key environmental assessment results and an outline of the proposed environmental and social mitigation measures
- **Section 1 – Introduction**: Provides an introduction to the Proposal and the EIS, including project objectives, site history, and previous approvals
- **Section 2 – Site description**: Provides a summary of the existing Proposal site, its location in a regional and local context and existing operations of the Proposal site
- **Section 3 – Proposal justification, need and alternatives**: Provides a discussion on the need for the Proposal having regard to strategic justification, relevant legislation, plans and policy and also provides alternatives to the design and location of the Proposal
- **Section 4 – Proposal description**: Includes a description of the Proposal including built form and operational procedures
- **Section 5 – Statutory planning and approvals**: Provides a summary and assessment of the Proposal having regard to relevant statutory legislation and plans at a Commonwealth, State and Local Government level
- **Section 6 – Consultation**: Provides a summary of the consultation (public, stakeholder and government agencies) which has been undertaken to date for the Proposal
- **Sections 7 to 18 – Key environmental issues**: Provides a discussion on the existing environmental conditions and an assessment of the key environmental issues for the Proposal as identified in the SEARS (No. 10396), namely: traffic and transport, air quality and odour, noise and vibration, soils, water and contamination, flooding, hazard and risks, Aboriginal heritage, waste management, greenhouse gas emissions, biodiversity, visual, and socio-economic
- **Section 19 – Cumulative impacts**: Provides an analysis of the likely cumulative impacts resulting from the interaction of the Proposal with other developments within the region
- **Section 20 – Environmental risk assessment**: Provides an analysis of the likely environmental risks and assigns a rating before and after the implementation of mitigation measures
- **Section 21 – Compilation of mitigation measures**: Includes a summary of the mitigation measures identified in Sections 7 to 13

- **Section 22 – Ecological Sustainable Development:** Includes a summary of how the Proposal aligns with the principles of Ecological Sustainable Development (ESD)
- **Section 23 – Justification and conclusion**: Provides a justification and conclusion of the Proposal.

The following Appendices are included in the EIS:

Appendix	Description	Author
A	Consolidated SEARs Compliance Table	Arcadis
B	EP&A Regulation Checklist	Arcadis
C	Site Layout Plan	Algorry Zappia & Associates
D	Stockpile Plan	Sell & Parker
E	Traffic and Transport Impact Assessment	TTPP
F	Pavement Assessment	Arcadis
G	Air Quality and Odour Assessment	Northstar
H	Noise and Vibration Impact Assessment	Renzo Tonin & Associates
I	Water Management Assessment	Arcadis
J	Flooding Assessment	Arcadis
K	Fire Infrastructure Assessment	Sparks and Partners
L	Greenhouse Gas Assessment	Northstar
M	Biodiversity Waiver Report	Arcadis
N	Community and Stakeholder Participation Strategy	ID Planning
O	Community Consultation Newsletter	Arcadis

2 PROPOSAL SITE DESCRIPTION

This section provides a description of the Proposal site and local context. As the Proposal for increased throughput would utilise existing approved infrastructure, a description of this infrastructure and the associated operational processes has also been included in this section.

2.1 Site Overview

The Proposal site is approximately 6.4 hectares (ha) in size and is currently used as a metal recovery and recycling facility. The Proposal site contains several structures and associated infrastructure including:

- Warehouses
- Offices
- Plant and equipment
- Water management infrastructure (including gross pollutant traps, sediment filtration, detention basin, fine sediment filtration and process water tanks)
- Roads and carparking.

The existing key components at the Proposal site are outlined in Section 2.4.

2.2 Site Location and Local Context

The Proposal site is situated within the Blacktown Local Government Area (LGA) approximately 40 km north-west of the Sydney Central Business District (CBD) and around 3 km from Blacktown CBD.

Access is from Tattersall Road, to which the Proposal site has approximately 240 m of frontage. Tattersall Road is a two-lane road which connects to Sunnyholt Road to the east, and Vardys Road to the north-west, both of which are four (4) lanes. Sunnyholt Road connects in turn to the M7, 1.2 km to the north of the Tattersall Road intersection.

Key features of the area surrounding the Proposal site include:

- Tattersall Road to the north, with light and general industrial activities on the opposite side
- An intermittent drainage channel (Waller Creek) to the east of the Proposal site, which connects directly to Breakfast Creek – a highly modified watercourse which flows along the southern boundary of the Proposal site. Both watercourses separate the Proposal site from other industrial developments
- An automotive wrecking and recycling facility to the west (Pick ‘N’ Payless facility at 57 Tattersall Road) with further industrial activities beyond
- The nearest residential development is approximately 300 m to the east, with industrial structures and Sunnyholt Road between the Proposal site and these residential receivers.

The location of the Proposal site and local area is shown in Figure 2-1.

The local area is characterised by industrial and commercial development. The Proposal site is under Blacktown Local Environmental Plan (LEP) 2015 is zoned IN1 General Industrial (BCC, 2015). The zoning of the Proposal site and local area is shown in Figure 2-2.

LEGEND

- Proposal site boundary
- Major road
- Railway
- Watercourse

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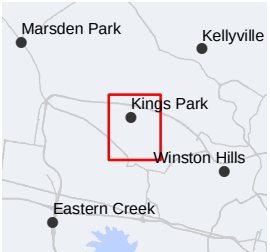
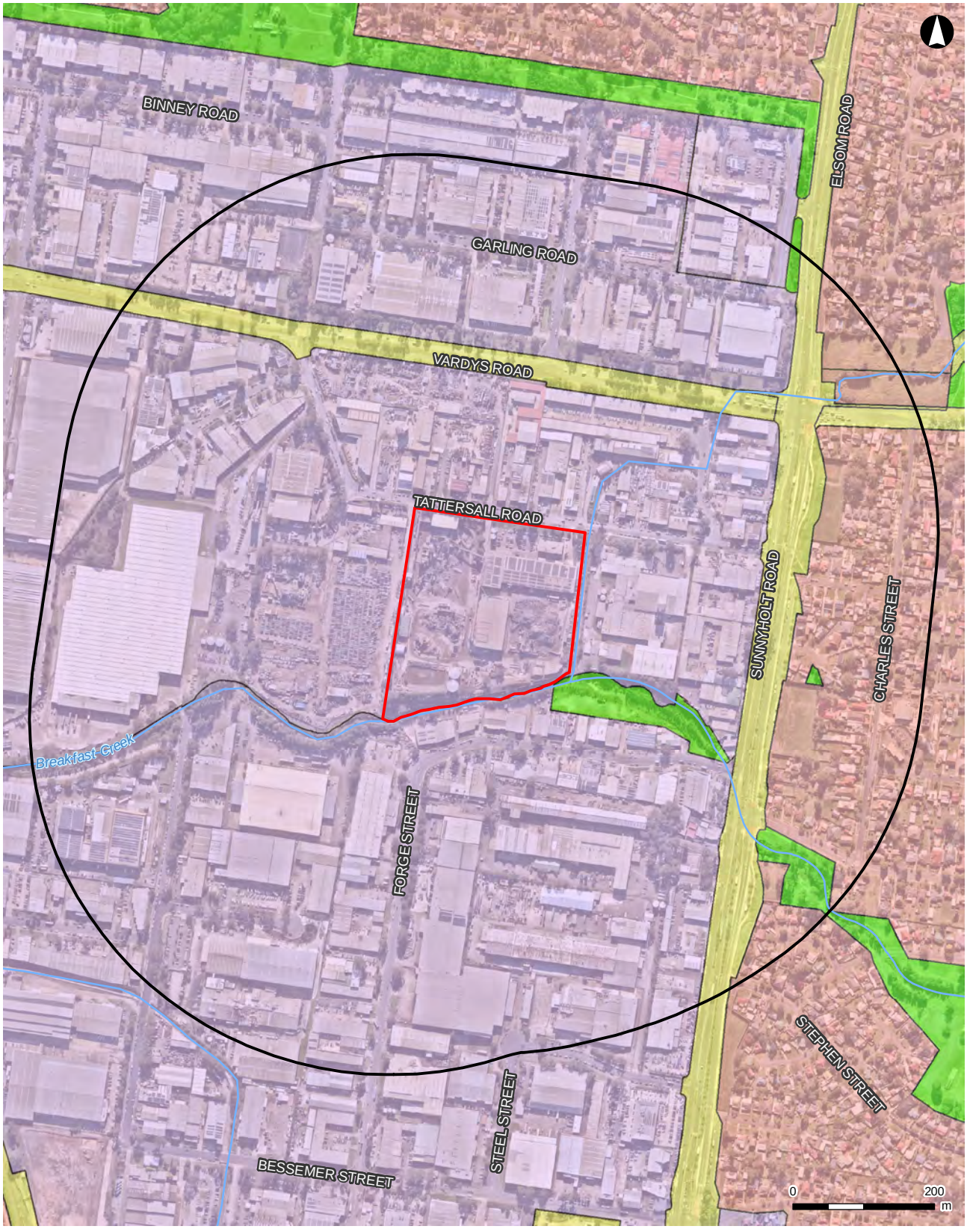


Figure 2-1: Location of the Proposal site



LEGEND

- Proposal site boundary
- 500m buffer
- Watercourse

Land zoning

- Industrial / Commercial
- Residential
- Recreation
- Infrastructure

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Figure 2-2: Land zoning surrounding the Proposal site

2.3 Property Ownership and Rights

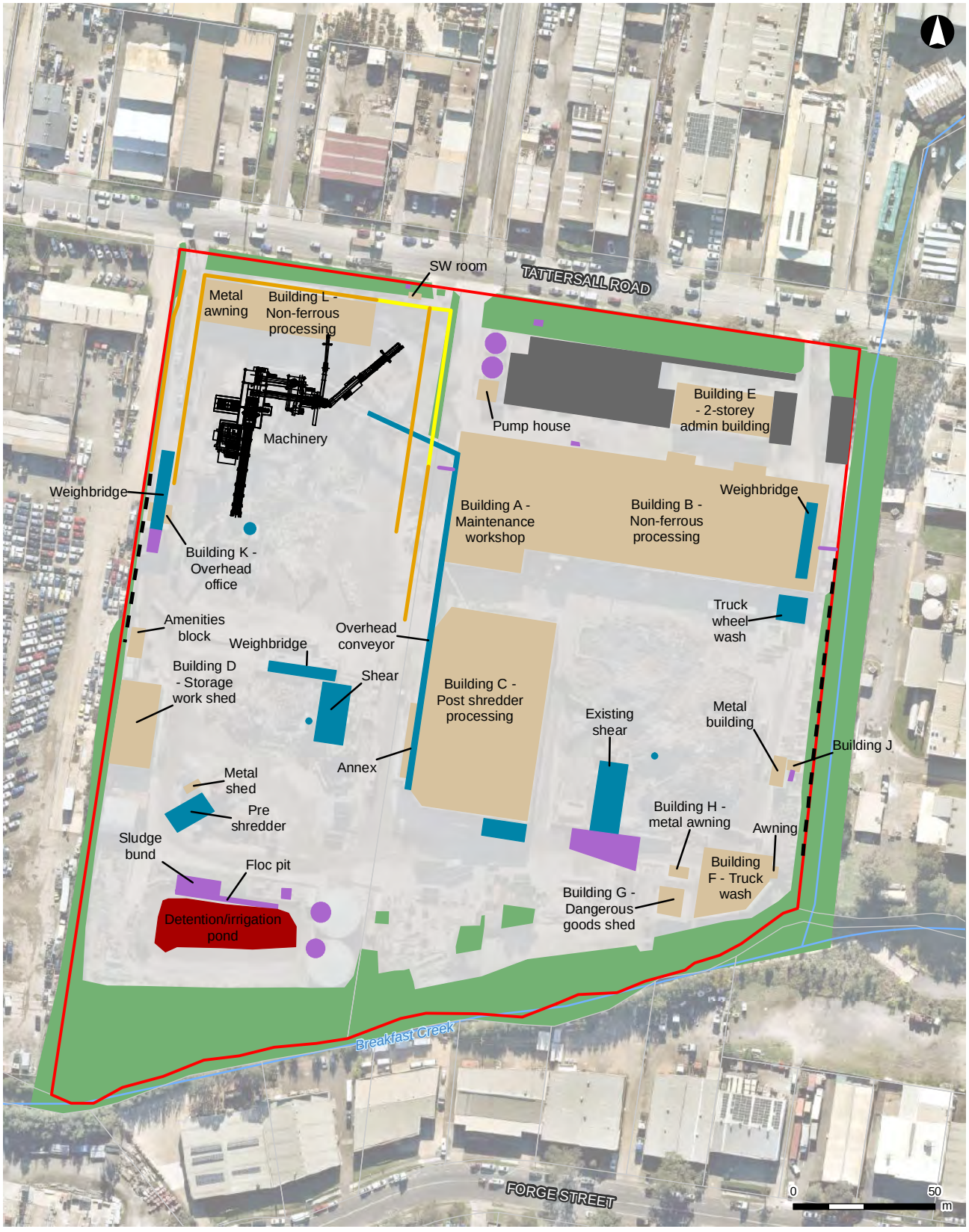
The Proposal site comprises two (2) adjoining parcels of land being 45 and 23-43 Tattersall Road, Kings Park. A summary of the lots affected by the Proposal, and their respective property owner is provided in Table 2-1.

Table 2-1 – Properties affected by the Proposal

Lot	DP	Property address	Owner
2	550522	23-43 Tattersall Road	Sell and Parker (Holdings) Pty Limited AFT The Parker Family Trust # 2
5	7086	45 Tattersall Road	Sell and Parker (Holdings) Pty Limited AFT The Parker Family Trust

2.4 Built form

Key elements of the Proposal site are shown in Figure 2-3. A detailed site layout showing the approved built form on-site that would be utilised by the Proposal is included in Appendix C. Note that changes to the appearance of the Site Layout Plan (as presented in Mod 3) have been made to improve legibility and remove references to infrastructure 'proposed' under MOD 3 (as MOD 3 changes are predominately complete). As is consistent with this Proposal, the Proposal site built form will not change (from that shown in the MOD 3 plan). A description of the existing approved infrastructure on the Proposal site that would be utilised during operation of the Proposal is provided in Sections 2.4.1 to 2.5.3.



LEGEND

- Proposal site boundary
- Vegetation
- Property boundary
- Watercourse
- Acoustic fence
- Acoustic wall
- Approved wall
- Building
- Carpark
- Detention pond
- Other infrastructure
- Processing infrastructure

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Figure 2-3: Key elements of the Proposal site

2.4.1 Hardstand

The majority of the site comprises concrete hardstand with the exception of landscaped areas along the boundaries of the site and the asphalted front car park. Hardstand has been designed to manage and direct run-off from operational areas and provide a working surface for resource recovery activities.

2.4.2 Sheds and warehouses

Several buildings have been constructed on-site through the Original Approval (SSD-5041) and subsequent modifications. These buildings are utilised for a range of purposes including processing, offices, maintenance, and storage. A description of each of these buildings is provided in Table 2-2. A plan showing the location of each of the buildings is provided in the detailed site layout in Appendix C.

Table 2-2 – Existing approved buildings on the Proposal site

Building	Purpose
A – Non-ferrous shed	Storage for large non-ferrous items
B – Non-ferrous processing	Processing and store of non-ferrous metals like aluminium. This is generally deposited by light vehicles in small quantities. Occasionally collection of baled metals occurs by heavy vehicles on the southern side of the non-ferrous building.
C – Post shredder processing	Floc material generated by the shredder is transported by an overhead conveyor to the post shredder processing building where processed for further resource recovery prior to collection.
D - Storage work shed	Storage of materials and equipment for maintenance activities
E – 2 storey Brick admin building	Reception training and administration building
F – Truck wash	Maintenance and cleaning of Sell & Parker vehicles
G – Dangerous goods storage	Storage of dangerous goods
H – Metal awning	General storage
J – BLK Building.	Electrical switch room
K – Overhead office	Workspace for administrative activities
L – Non-ferrous processing building	Contains automated sorting equipment for further processing non-ferrous outputs from the shredder.

2.4.3 Plant and equipment

Scrap metal is processed on the Proposal site through several key pieces of processing machinery, namely:

- Pre-shredder - The pre-shredder reduces the size of large ferrous items before they are fed into the shredder. The pre-shredder also acts as a safety device to handle potentially explosive materials (e.g. gas bottles).
- Shredder - Processes the majority of the ferrous metal arriving at site. Metal is delivered in a mix of vehicle types to the shredder tip floor before being fed into the shredder. The shredder produces shred, floc and small quantities of ferrous metals.
- Non-ferrous baler - Handles non-ferrous scrap metal such as aluminium.

- Lindemann Shear - Processes ferrous items that cannot be fed into the shredder or pre-shredder. This shear is generally utilised for high tensile and pre-stressed metals.
- Danieli Shear - Processes large ferrous items that cannot be fed into the shredder or pre-shredder.
- Oxycutting - Oversized items that cannot be processed by the shears are cut to size by oxycutting.
- Non-ferrous shredder residue sorting plant - Further reduces contamination rates in non-ferrous shredder outputs.
- Post-shredder processing machinery (floc recovery plant) – Further processes floc to increase resource recovery rates.

The location of these items is shown in Appendix C.

Of these processes, five (5) pieces of processing machinery process the majority of the scrap metal throughput. A summary of the capacity of each of these items of processing machinery and the possible and effective throughputs is described in Table 2-3.

Table 2-3 – Summary of processing capacity for plant equipment

Processing equipment	Operational capacity (tonnes per hour)[2]	Permissible Operational hours[3]	Daily Capacity (tonnes)	Weekly (tonnes)	Yearly (tonnes)[4]
Non-ferrous baler	10	15	150	900	45,300
Shredder	140	15	2,100	12,600	634,200
Lindemann Shear	7.5	15	112.5	675	33,975
Danieli Shear	17.5	15	262.5	1,575	79,275
Oxycutting	1.5	6	9	54	2,718
Total	**-**	**-**	**2,634**	**15,804**	**795,468**

As shown in Table 2-3, when running at maximum capacity for the approved processing hours, the five (5) key items of plant and equipment could process up to 795,468 tpa. The existing site currently processes up to 350,000 tpa in accordance with the conditions of consent for SSD-5041 and EPL 11555.

[2] This refers to the maximum operational capacity that could be achieved by this equipment. Maximum capacity is currently not being undertaken on-site and as it would be inconsistent with the volumes permitted with the existing approvals (SSD-5041).

[3] Based upon approved hours under SSD-5041.

[4] Approximately 302 operational days per year (using an average of 11 public holidays in a year).

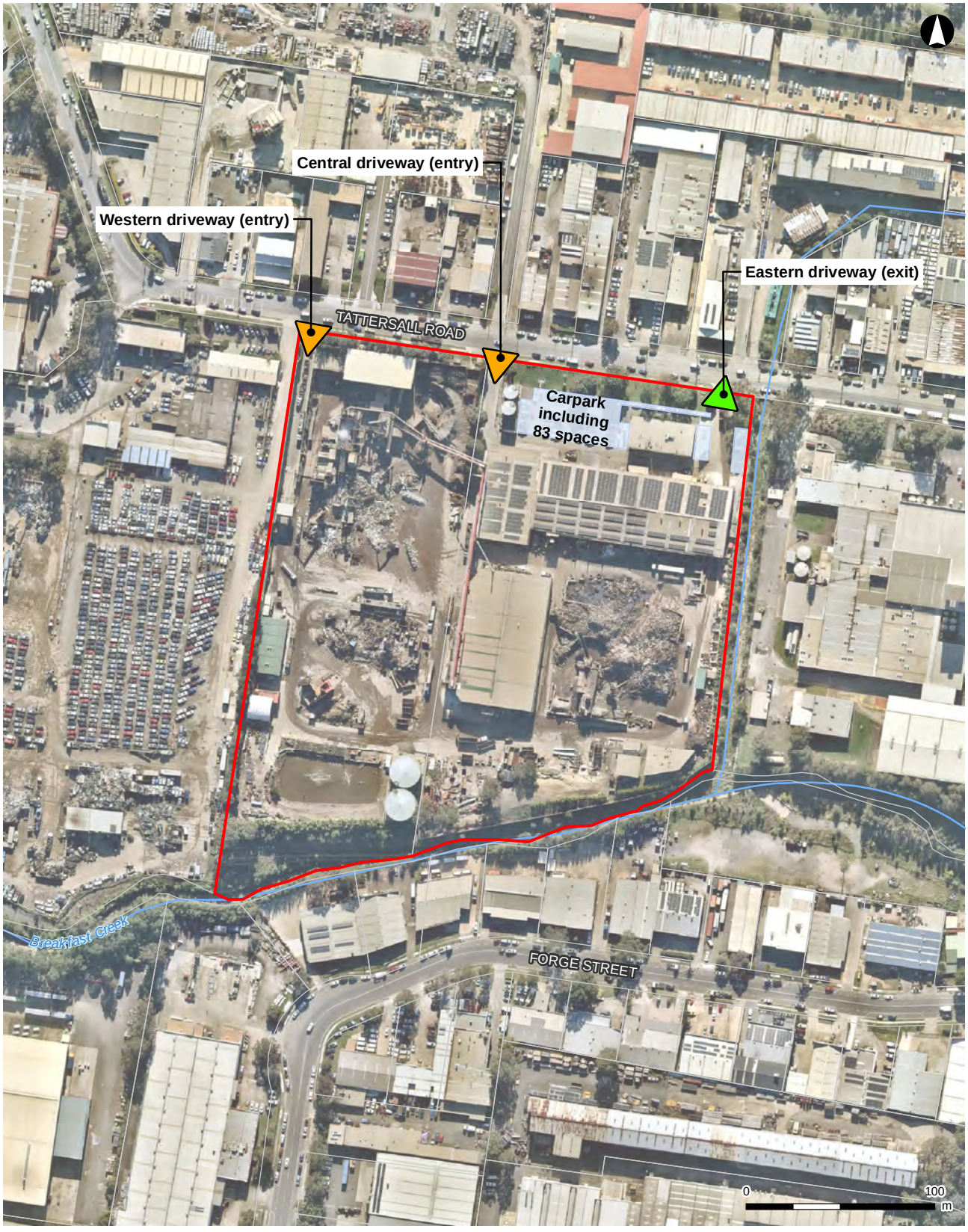
In addition to the scrap metal processed through site machinery:

- Around 10% of incoming scrap metal has been processed off site and does not require further processing.
- Around 5% of incoming scrap metal does not require processing as it is in a form acceptable for on-sale.

2.4.4 Access and parking

Vehicles typically transporting material to the Proposal site include light rigid vehicles (i.e. utes and small delivery vans) and up to 19 m semi-trailer trucks. It is noted occasionally, customers may access the Proposal site to deliver material in 25 m B-double truck. These vehicles enter and exit the Proposal site using one of the three separate access driveways as seen in Figure 2-4. The westernmost driveway is an ingress used by heavy vehicles, while the central driveway is used by light vehicles (staff, non-ferrous & deliveries), light rigid vehicles and occasionally by heavy vehicles (Sell & Parker internal fleet) collecting floc and shred outputs. All vehicles exit the Proposal site via the eastern driveway.

A total of 83 parking spaces are provided within the main carpark located on the northern boundary of the Proposal site as shown in Figure 2-4. This comprises 79 staff and four (4) visitor spaces.



LEGEND

- Proposal site boundary
- Carpark
- Property boundary
- Watercourse

Access point

- Western Driveway (entry)
- Central Driveway (entry)
- Eastern Driveway (exit)

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Figure 2-4: Access and parking of the Proposal site

2.4.5 Landscaping

The majority of the Proposal site is utilised for operational purposes and is hardstand. However, landscaping is provided along site boundaries and includes:

- Mature trees, shrubs and turf along the northern boundary of the site adjacent to Tattersall Road
- Bamboo planting along the eastern boundary to provide screening
- Thick bamboo screen along the southern boundary of the site between the boundary of 45 Tattersall Road and Breakfast Creek. Well established trees and shrubs on the southern boundary between 23 Tattersall Road and Breakfast Creek.
- Infill planting of Casuarina trees along the western boundary near the storage work shed to provide screening.

2.4.6 Fire management infrastructure

This section provides a description of the existing fire management infrastructure on the Proposal site. The fire management infrastructure at the Proposal site has been designed in consultation with NSW Fire and Rescue to comply with the *Fire and Rescue NSW (2020) Fire safety guidelines: Fire safety in waste facilities*.

Fire water supply

The existing fire hydrant system is supplied by two (2) 451 kL (902 kL total) effective capacity water tanks with 300 mm connection to Sydney Water mains (300 mm) located along Tattersall Road. The system has been designed to prevent backflow into the water mains.

Fire Brigade Booster Assembly

The existing fire hydrant system is provided with 300 mm manifold with 3-off booster assemblies located within the verge along Tattersall Road. Each booster assembly consisting of 150 mm suction points, 4-pt booster inlets to allow boosting of the hydrant system as well as 150 hard point fire brigade large bore and small-bore suction points.

Fire hydrant pumps

The fire hydrant system duty is 120 L/s at 700 kPa. This is served by two (2) diesel pumps situated in an external pump room. This pump duty is 120 L/s at 1100 kPa. There is an additional electrical pump within the fire pump room that has the capacity to serve 3 fire monitors.

Fire hydrant and protection systems

The fire hydrant system is installed to AS 2419.1-2005 and comprises a ring main system made up of sub-ring mains with inground and above ground isolation valves. The system includes:

- External fire hydrants
- Foam hydrants
- Mobile water cannons
- A manual water deluge system
- Smoke detection and alarm systems within buildings

- A dual fire hydrant for the fuel and oil storage area, with foam making capability, connected to the sites main ring with a stop valve
- Three (3) fire hydrant water cannons located at the top of the pre-shredder
- Dual external fire hydrants (with some foam making capability) for the scrap metal yard with fire hydrant water cannons located on the hammermill support structure
- A fully automated sprinkler system for the processing plant installed to AS 2419.1-2005 with high flow deluge on all inter zone penetrations
- A fully automated sprinkler system for final product building sections installed to AS 2419.1-2005
- Manual alarm points for staff to initiate alarm in case of fire
- Safe egress routes from all workstations
- All electronic control cabinets housed in a fire rated room with air conditioning
- All electronic control cabinets protected with appropriate fire detection systems and extinguishers.

Table 2-4 describes the fire hydrant systems for each building (where relevant).

Table 2-4 – Fire hydrant system for each building

Building	System Description
A (Non-ferrous processing)	• The building is sprinkler protected and served by a Ø150 internal sub ring main at high level • External fire hydrants and ring main isolation valves are located on the façade of the Building A • Two (2) above ground isolation valves are located in front of Building A and the fire hydrant pump room.
B (Non-ferrous processing)	• The building is sprinkler protected and is served by the same Ø150 hydrant internal sub ring main at high level that serves Building A • The Building B side ring main isolation valves are located underground • Two (2) external dual fire hydrant standpipes are located away from the building. Building B also has an external fire hydrant located on the façade of the building.
C (Floc processing)	• The building is sprinkler protected and served by a Ø150 sub ring main installed internally at high level • External fire hydrants and ring main isolation valves are located on the façade of the Building C.
D (Work shed)	• The building is a work shed that is provided with a dual fire hydrant standpipe off the site ring main • Building D is provided with drenchers/wall wetting sprinklers at the rear which are connected to the fire hydrant system. The drencher control valve is located on the façade behind Building D.
Outside Operational Area	• An external dual fire hydrant standpipe is located in front of the two-storey brick administration Building E • The floc building is provided with smoke detection system in addition to a water deluge system for the stockpile • The fuel and oil storage area is provided with a dual fire hydrant, complete with foam making capability, connected to the site ring main with a stop valve.

Building	System Description
	• The pre-shredder open yard is provided with three (3) fire hydrant water cannons located at the top of the Pre-shredder. The pre-shredder and associated water cannons are proposed to be relocated. • The scrap metal yard is provided with dual external fire hydrants, some complete with foam making capability, as well as fire hydrant water cannons which are located on top of the Mill support structure.

2.4.7 Water management infrastructure

The Proposal site has been designed to segregate clean and dirty areas so water can be captured and diverted to maintain separation. Clean water from roofs and the front carpark drains to neighbouring waterways as storm water. Dirty water from operational areas is captured and treated by the water treatment system prior to storage and reuse on-site.

All dirty water is captured and re-used on-site. No water is discharged from operational areas to Breakfast Creek. As such, there are no discharge water quality requirements. If required, discharge to trade waste is undertaken following treatment in accordance with a Sydney Water Trade Waste Agreement. The key components of the existing water treatment system include:

- A retention basin at the southern part of the Proposal site
- A floc pit to capture gross pollutants
- A sludge filtration system to remove suspended particulates
- A disinfection system
- Water storage tanks to hold treated and disinfected water for reuse.

The Water Management System is designed to contain a rainfall event of Annual Recurrence Interval (ARI) 1:100 72-hour duration.

2.4.8 Air quality management

The Proposal site includes the infrastructure to manage potential air quality emissions and minimise impacts from current operations, including:

- An industry leading emissions collection system servicing the hammer mill
- Fully sealed (hardstand) operational areas on-site to manage dust emissions from site surfaces
- Enclosed conveyors and conveyor transfer points
- Enclosure of floc processing activities (Building C)
- Water sprays and mister systems in operational areas and within the floc shed for dust suppression
- Provision of dust screens (that also act as acoustic screens) on site boundaries including:
  - A 10 metre high screen on the northern boundary of 45 Tattersall Road
  - An 8 metre high screen on the western boundary
  - An 8 metres high screen on the eastern boundary
  - A 4 metres high screen on southern boundary of 23 Tattersall Road.

2.4.9 Noise and vibration management

The Proposal site includes the provision of infrastructure and measures to manage potential noise emissions and minimise impacts from current operations, including:

- Acoustic panelling around key items of equipment such as the hammer mill
- Provision of acoustic screens (that also act as dust screens) on site boundaries, including:
  - A 10 metre high screen on the northern boundary of 45 Tattersall Road
  - An 8 metre high screen on the western boundary
  - An 8 metre high screen on the eastern boundary
  - A 4 metre high screen on southern boundary of 23 Tattersall Road
- Enclosure of the floc processing building (Building C)
- Update of management practices for the shear including delaying morning start time, change to loading position, change to types of materials processed by the shear after 7 pm
- Operational policy change to ensure truck preparation for the following day is completed in the afternoons (to avoid early morning noise emissions)
- Replacement of plant reversing beepers with directional tonal emitters
- Semi-encapsulation of the trommel separator.

2.5 Existing operations

The existing approved RRF processes scrap metal up to limit of 350,000 tpa. The operation of the existing site currently employs approximately 119 employees with up to 79 of those employees working at the facility at any one time. Shifts and the exact number of employees on-site at any one time varies to suit operational requirements. However, an approximate guide to the number of employees on-site at a given time generally is as follows:

- Day (6am to 4.30pm) – 70 staff
- Afternoon (12pm – 10:30pm) - 12 staff
- Night (7pm to 5:30am) – 11 staff
- Max any one time (during day / afternoon changeover) – 79 staff.

The existing approved (under SSD-5041) operational hours are shown in Table 2-5.

Table 2-5 – operational hours approved under SSD-5041

Activity	Day	Hours
Oxy-acetylene torch cutting	Monday to Saturday	9 am to 3 pm
	Sunday and public holidays	Nil
Maintenance and cleaning*	Monday to Saturday	9 pm to 6 am
	Sunday	24 hours
All other activities	Monday to Saturday	6 am to 9 pm
	Sunday and Public Holidays	Nil

* Maintenance and cleaning occur within operational hours as well as identified cleaning and maintenance periods

The existing RRF currently processes scrap metal (including car bodies) from a number of sources, including:

- Industry
- Construction and demolition
- Manufacturing
- Sole operators
- Members of the public
- Councils.

Scrap metal received is processed into a number of 'product' streams:

- Fragmented metal (shred)
- Ferrous products
- Small quantities of other metals such a copper and aluminium, non-ferrous metals
- Non-metal residual outputs (floc) such as paper, plastic, timber, stone, rubber, glass, fabrics, foam.

Around 10% of incoming scrap metal has been processed off site and does not require further processing. Around 5% of incoming scrap metal does not require processing as it is in a form acceptable for on-sale. This material includes:

- Swarf
- Aluminium wheels
- Motors
- Manganese steel
- Batteries (ULABs)
- Brass
- Lead.

Vehicles typically transporting material to the Proposal site include light rigid vehicles (i.e. utes and small delivery vans) and up to 19 m semi-trailer trucks. It is noted occasionally, customers may access the Proposal site to deliver material in 25 m B-double truck.

For collection, ferrous product outputs are loaded directly from the stockpile into semi-trailers for transport to customers such as steel mills. Non-ferrous product outputs are collected adjacent to processing machinery in skips. They are then loaded directly into shipping containers and exported to end-users in Asia and other parts of the world.

Floc outputs are loaded into semi-trailer trucks within the post shredder processing building to be transported for further processing or disposal (landfill).

2.5.1 Scrap metal processing

Table 2-6 presents the key operational areas of the Proposal site where scrap metal is managed. The operational layout of the Proposal site is shown in the most recent Site Layout Plan in Appendix C. Each of these operational areas is serviced by an item/s of processing machinery.

Table 2-6 – Key operational areas of the Proposal site

Operational area	Types of materials managed	Related processing machinery	Description
Non-Ferrous	Non-ferrous	Non-ferrous baler	Handles non-ferrous materials like aluminium. Processing and storage are undertaken in the non-ferrous building. These materials are generally deposited by light vehicles in small quantities. Occasionally collection of baled material occurs by heavy vehicles on the southern side of the non-ferrous building.
Pre-Shredder	Oversize ferrous e.g. car bodies	Pre-Shredder (prior to shredder)	The pre-shredder reduces the size of large ferrous items before they are fed into the shredder. The pre-shredder also acts as a safety device to handle potentially explosive materials (e.g. gas bottles). Processed material from the pre-shredder is then fed into the shredder. The same materials that are processed in the pre-shredder are subsequently processed in the shredder.
Shredder	Ferrous	Shredder	Processes the majority of the ferrous metal arriving at the RRF. Material is delivered in a mix of vehicle types to the shredder tip floor before being fed into the shredder. The shredder produces shred, floc and small quantities of non-ferrous metals.
Lindemann Shear	Ferrous	Lindemann Shear	The Lindemann shear processes large ferrous items that cannot be fed into the shredder or pre-shredder. As part of MOD 3, this shear was modified to process high tensile and pre-stressed metals. Heavy material for processing and processed material are stored in stockpiles adjacent to the Shear.
Heavy / Danieli Shear (Heavy)	Ferrous	Danieli Shear	The Danieli shear processes large ferrous items that cannot be fed into the shredder or pre-shredder. Heavy material for processing and processed material are stored in stockpiles adjacent to the Shear.
Oxycutting	Large Heavy Ferrous	Oxycutting	Oversized items that cannot be processed by the shears are reduced in size by oxycutting. Oversize items for processing and processed material are stored in stockpiles within the oxycutting area.

Operational area	Types of materials managed	Related processing machinery	Description
Floc	Floc	Floc Recovery Plant	Floc from the shredder is transported directly to the floc shed for further processing by the floc recovery plant. Outputs from the floc recovery plant are collected by heavy vehicles from the floc building.
Shred	Shred	Shredder	Shred produced by the shredder is stored in a stockpile on the north eastern side of the shredder. Shred is collected by heavy vehicles directly from the shred stockpile.

The process of resource recovery as scrap metal moves through the Proposal site, including the above operational areas is shown in Figure 2-5.

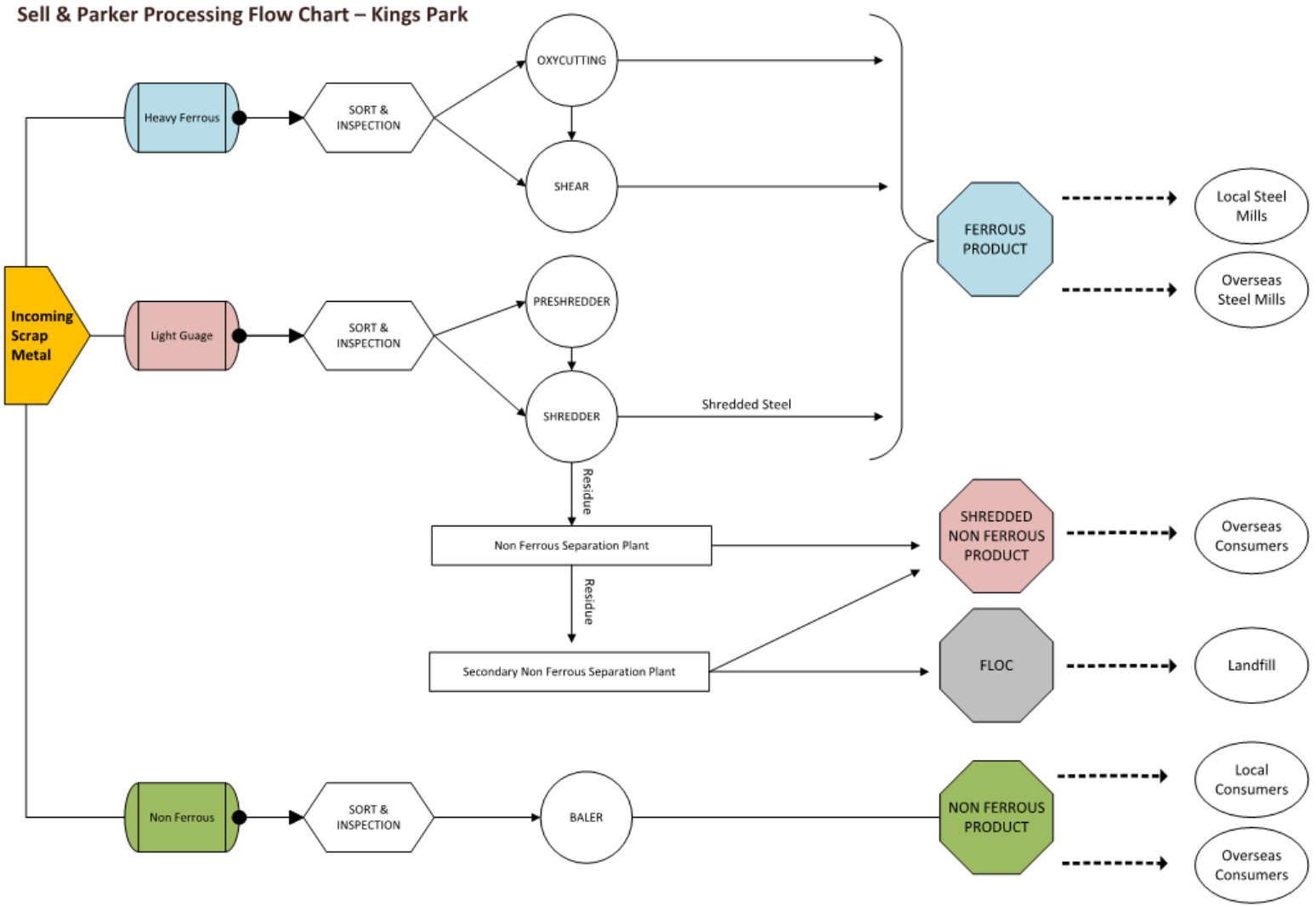

Figure 2-5 – Scrap metal processing through the Proposal site

2.5.2 Monitoring

The Data System is the electronic software system that generates and records the data for tracking, monitoring and recording the material movements on-site. This includes the weighbridge systems, scales, input and output material tracking systems, material grade/type and quality and customer details. Details are recorded at four (4) primary locations:

- Site ingress weighbridge / scales where details such as load type, vehicle weight, vehicle registration, date and time are recorded
- Unloading where the load in inspected to confirm ingress details and identify non-conforming recyclables
- Egress weighbridge / scales where here details such as load type, vehicle weight, vehicle registration, date and time are recorded and confirmed
- When product is on sold to customers / exported.

All stages are monitored and recorded by cameras.

Non-conforming material is occasionally received on the Proposal site. Non-conforming material is any hazardous or dangerous waste that is unknowingly brought on-site under EPL 11555 and is stored in a quarantine area before disposal at a licenced facility. Signage on site, on our website, and agreements with Sell & Parker's customer and contractors are in place to highlight materials that the Proposal site does not accept. It should be noted that for some of these non-conforming waste types Sell & Parker has an EPL license.

Prohibited (non-conforming) materials include:

- Rechargeable batteries
- Batteries that contain nickel, cadmium, lithium or alkaline
- Radioactive materials
- Explosives
- Pressure vessels
  - Gas cylinders
  - LPG
- Accumulators
- Flammable chemicals or materials, including residuals in drums or tins
- Corrosive materials
- Toxic, poisonous or infectious materials or residual wastes
- Hazardous materials, wastes or residual material
- Refrigerants or ozone depleting gasses
- Chemicals, including residual in drums or tins
- Safes
- Electronic wastes
- Tyres (individual units without rims)
- Boilers (without asbestos free certificate)
- Transformers (without PCB free certificate)
- Storage tanks (without clean certificate)

- Asbestos.

If non-conforming materials are received and identified during ingress / unloading materials, they are returned to the vehicle from which they were delivered. Recurring incidents can result in termination of approval to access Proposal site.

Material found after unloading is temporarily stored on the northern side of the central weighbridge, between the weighbridge and the tip floor (as shown on the Site Layout Plan in Appendix C). The material is then taken to a facility appropriately licensed that accepts that type of waste. Stores of material are cleared as soon as reasonably practicable after receipt.

2.5.3 Stockpiles

The location and size of stockpiles is shown on the Stockpile Plan (Appendix D).

Incoming scrap metal is generally temporarily stored in stockpiles adjacent to items of processing equipment. Following processing, product is stored in bins or stockpiles prior to their collection. The storage capacity, volume and height of each of the stockpiles is provided in Appendix D.

Notwithstanding this, the preparation of stockpiles is a dynamic process with stockpiles increasing and reducing in size and height periodically throughout the day based upon rate of receival of product to the Proposal site and the rate of processing. The key approach for scrap metal stockpiles is to ensure that they are placed within areas that are within reach of fire management equipment to ensure that, should a fire incident be encountered, this can be promptly supressed.

Therefore, the Stockpile Plan, albeit important, reflects a maximum height of stockpiles, however size of stockpiles would generally vary from the plan as a result of stockpile product receival and processing throughout the workday. At the end of the day (on closing) stockpiles would be located within the areas (and height and sizing) identified on the Stockpile Plan.

Note that the Stockpile Plan does not include stockpiles of finished product. Finished product stockpiles do not contain combustible materials and as such do not require regulation through a Stockpile Plan, as there is no inherent fire risk. Finished product stockpiles include:

- Baled aluminium cans within the non-ferrous shed
- Small volumes of non-ferrous metals in the non-ferrous shed
- Shred stored on the north eastern side of the shredder
- Sorted ferrous metals stored on the eastern side of the floc shed.

3 PROPOSAL JUSTFICATION, NEED AND ALTERNATIVES

This section outlines the need and justification for the Proposal. It also provides a description of the alternatives to the Proposal which have been considered.

The SEARs relating to the Proposal need and justification, and a summary of where they are addressed, is presented in Appendix A.

3.1 Objectives

The key objectives of the Proposal include the following:

- To increase the volume of scrap metal recycled at the RRF utilising existing approved infrastructure thereby maximising diversion from landfill
- To meet higher recycling standards prescribed by China's National Sword Policy
- To optimise the efficiency of the Proposal site processes, including vehicle movements and stacking locations
- To support continuous improvement in the environmental performance of the Proposal site.

3.2 Proposal Need and Strategic Justification

The recovery of resources is fundamental to the Environment Protection Authority's (EPA) Waste Avoidance and Resource Recovery Strategy and the NSW Government's Circular Economy Policy Statement (EPA, 2019; EPA, 2019a). This commitment on recovery of resources reflects global trends towards improved management of finite resources within a circular economy framework.

Metals are recognised as one of Earth's finite resources and fundamental for the economy and future generations. Whilst future demand for metals is difficult to accurately forecast, the need for efficient management of these finite resources within the materials economy is irrefutable.

As metals have value, recovery rates for this resource have been strong in NSW. The current operating facilities are just meeting demand. As a result, there is a need for expanding processing capacity of NSW's metal recycling network. Growing demand on Sydney's metal recycling network was reflected in the Waste Avoidance and Resource Recovery Progress Update for 2017-2018, where growth in commercial and industrial recovery rate grew by six (6) percentage points between 2015-2016 and 2017-2018, largely due to increases in metal recycling (EPA, 2019).

The Applicant recognises the need to increase their capacity for metals recycling to meet future demand and increase capture metals for productive re-use in the materials economy. Whilst the construction peak is set to decline and stabilise in NSW, the states growing population is likely to support continued supply of end-of-life cars, white goods and variety of metal goods that the Applicant receives and recycles.

Contribution to Circular Economy

The Chinese Government's National Sword Policy spelt the start of what is being called 'Australia's Waste Crisis'. Whilst the increasingly stringent contamination thresholds for imported scrap metals affected the Australian recycled metals markets less than plastics and paper/cardboard, it triggered public and political interest in recycling markets. The Federal Government's response has been to propose a ban on exports of plastic, paper, glass and tyres, and build a re-manufacturing sector in Australia. This combined with NSW Circular Economy Policy will drive growth and investment in the Australian waste industry, and further metals recovery capacity will

contribute to both the capacity needs and potentially supply of resources for recycled content products.

With increased public awareness of 'Australia's Waste Crisis', government agencies and business are seeking greater transparency in waste industry recycling processes. Sell & Parker have strong organisational commitments to further recovery of residues and flocs and are investing in research and development to close the loop on their operations. The proposed expansion would not only contribute to meeting future needs, but it would also provide greater capacity to absorb current metal scrap that meet quality standards of local and international markets. Sell & Parker are currently investigating other forms of resource recovery, such as recovering certain fractions of floc. This would lead to expansions to market share through increased capacity and would contribute to increasing NSW's metal recovery rates. Superior recovery rates and production of recovered commodities at a lower contamination rate would increase Sell & Parker's appeal to local and international markets.

Meeting the anticipated demand

With relatively few facilities in Greater Sydney with advanced metal recycling capabilities, the proposed throughput expansion is essential for securing Sydney's future metal recover capacity. Increasing population, consumption patterns and industry growth means that production of metals will grow demand for local metals recovery capacity. Future demand is a key driver for the Proposed expansion as the increase to potential throughput would assist Sell & Parker in continuing to meet demand in the Sydney market, and service the growing volumes of their large customer base. This Proposal would alleviate pressure on the limited advanced metal recovery capacity in Sydney.

The Proposal site is strategically positioned to service the metal recovery needs of Blacktown and Greater Sydney. Located in close proximity to complementary recovery facilities in Blacktown and the Sydney Steel Mills, this existing RRF is part of a resource recovery industry network, which is convenient due to its proximity to key industries and the Sydney CBD.

3.3 Consistency with Strategic Planning Policies

3.3.1 China's National Sword Policy

In March 2018, the People's Republic of China introduced new import restrictions on 24 types of recycling commodity, reducing the maximum allowable contamination in those streams from 5–10% to between 0.5% and 1%, depending on the material. For many commodity types the National Sword Policy contamination limits effectively constitute a ban on exporting to China as it is not financially feasible to separate them to that degree. For scrap metals the key limits are:

- 1% – Non-ferrous
- 0.5% – Ferrous
- 0.5% – Electric motors, wires and cables, metal and appliance scrap, smelt slag
- 0.3% – Automobile scrap.

Australia exported 750,000 tonnes of recyclables to China[5] in 2017-18, of which 156,000 tonnes were metals[6]. National Sword has constricted this flow and disrupted

[5] Including Hong Kong and Macau

[6] Data on exports of Australian wastes, 2019, Blue Environment for the Australian Government

the global market for recyclable material, with countries following China's lead including Thailand, Vietnam, Malaysia, India and Indonesia.

Global non-ferrous markets have been particularly hard hit, with high purity material essential to bolster sales. There are no regularly published figures on Australian export of scrap metal, but proxy figures for non-ferrous metal from the Institute of Scrap Recycling Industries indicate US exports of copper and copper alloy scrap to mainland China during January to July 2018 were down 41% compared to the same period in 2017. Aluminium scrap fell 26% in the same period[7].

This unforeseen tightening of export restrictions is driving global investment in advanced separation equipment and is a key driver for the Proposal. As mentioned above, the Applicant currently holds license number A036040008 issued by the General Administration of Customs of the People's Republic of China.

In addition, the Proposal represents an opportunity to respond to the forthcoming export ban agreed by the Council of Australian Governments (COAG). Without an increase to recycling capacities in Australia, scrap metal that was previously exported to China may end up in landfill. The Proposal would maximise the capability of an existing RRF as well as further reducing the volume of scrap metal going to landfill.

The Proposal aims to increase the RRF's throughput limit while optimising the efficiency of the processes at the Proposal site. The Proposal would assist in achieving the higher recycling contamination standards prescribed by China's National Sword Policy.

3.3.2 National Waste Policy: Less Waste, More Resources

The *National Waste Policy: Less Waste, More Resources* (Commonwealth of Australia, 2018) was released in November 2009 and outlines the federal government's direction for waste management in Australia through to 2020. The outcomes intended to be achieved under the Policy include the following:

- Australia manages waste, including hazardous waste, in an environmentally safe, scientific and sound manner, and has reduced the amount per capita of waste disposed
- Waste streams are routinely managed as a resource to achieve better environmental, social and economic outcomes
- Australia has increased the number of products, goods and materials that can be readily and safely used for other purposes at end of life.

The Proposal would assist the implementation of these outcomes by providing best practice resource recovery in an environmentally safe, scientific and sound method. The Proposal would utilise best practice resource recovery and environmental controls. The Proposal is therefore consistent with the aims and objectives of the National Waste Policy.

[7] http://www.recyclingtoday.com/article/state-of-scrap-trade/

3.3.3 NSW Waste Avoidance and Resource Recovery Strategy 2014-21

The WARR Act establishes the waste hierarchy that prioritises avoidance, recycling and finally disposal (EPA, 2014). The key waste policy tool under this framework is the NSW WARR Strategy, which sets goals that include:

- Avoiding and reducing waste generation
- Increasing recycling – with target recycling rates by 2021-22 of 80% for construction and demolition (C&D) waste and 70% for commercial and industrial (C&I) waste
- Diverting more waste from landfill to alternative uses, such as recycling and energy recovery.

The Proposal would form a key piece of waste infrastructure for enabling Sydney and NSW to achieve and promote the objectives of the WARR Strategy. The Proposal would directly result in increased recycling rate and diversion of waste to landfill by allowing a greater volume of scrap metal to be processed at the Proposal site. The Proposal is therefore considered consistent with the WARR Strategy.

3.3.4 NSW 2021: A Plan to make NSW Number One

NSW 2021: A Plan to Make NSW Number One (NSW 2021 State Plan) (NSW Government, 2011) is the NSW Government's ten-year plan to guide development and economic growth within NSW. NSW 2021 establishes 32 goals, of which the following are applicable to the Proposal:

- Goal 3 – Drive economic growth in regional NSW
- Goal 4 – Increase the competitiveness of doing business in NSW
- Goal 5 – Place downward pressure on the cost of living
- Goal 22 – Protect our natural environment
- Goal 23 – Increase opportunities for people to look after their own neighbourhoods and environments
- Goal 30 – Restore trust in State and Local Government as a service provider.

The Proposal is consistent with and supports the goals outlined in the NSW 2021 State Plan in the following ways:

- Economic growth would be stimulated and driven within the Western Sydney region with the need for additional materials required by the Proposal
- An increase to competitiveness in business would be provided through additional waste disposal and reuse/distribution services which are provided to both the community and the commercial sector
- The Proposal would maximise the environmental performance of the current RRF operations and include key initiatives and mitigation measures to protect the natural environment.

Overall, the Proposal has been designed to improve the efficiency, usability and environmental performance of the RRF which would result in benefits to both the community, the commercial sector and the environment. All of these factors are considered important to the improvement of the quality of development and stimulus of economic growth in NSW, and therefore meet the goals of the NSW 2021 State Plan.

3.3.5 Western Sydney Regional Waste Avoidance and Resource Recovery Strategy

The Western Sydney Regional *Waste Avoidance and Resource Recovery Strategy 2014–2017* (WSROC, 2014) is helping Western Sydney councils work together to reduce the waste produced and sent to landfill. The strategy has six (6) main targets, which are aligned with the NSW WARR Strategy:

- Avoid and reduce waste generation
- Increase recycling
- Divert more waste from landfill
- Manage problem wastes better
- Reduce litter and illegal dumping
- Improve regional governance.

The Proposal would provide best practice resource recovery equipment and practices to enhance recycling and divert more scrap metal from landfill. Further, the RRF would continue operating in accordance with robust procedures as detailed in the approved OEMP (refer to Section 4.3). The Proposal would therefore align with the Western Sydney Regional *Waste Avoidance and Resource Recovery Strategy 2014–2017* (EPA, 2014).

3.3.6 Western District Plan

The Western District Plan that was prepared by the Greater Sydney Commission is a strategy that provides a clear vision for the growth and development of the West District of Metropolitan Sydney for the next 40 years (Greater Sydney Commission 2018). The plan will work in conjunction with the Plan for Growing Sydney.

The Plan has established three (3) key goals, 27 directions, 31 priorities and 46 actions of which the following are applicable to the Proposal:

- Goal 3 – A sustainable city
- Direction 5.7 – Creating an efficient West District
- Priority S9 – Support opportunities for District waste management
- Action S9 – Identify land for future waste reuse and recycling.

The Proposal would help to create a sustainable city by ensuring recovery rates of up to 90% through the implementation of best practice resource recovery practices and equipment. This would assist in creating an efficient West District by reducing the amount of waste that goes into landfill as a result of increased resource recovery rates. It would also improve the availability of waste management services to residents of western Sydney.

3.3.7 Blacktown Local Strategic Planning Statement

The Blacktown Local Strategic Planning Statement (LSPS) sets out a 20-year vision for the future of Blacktown City as it grows and changes (BCC, 2019). The LSPS provides a land use vision for Blacktown, building on the outcomes of Council's Community Strategic Plan, *Our Blacktown 2036* (BCC, 2020).

Blacktown's 20-year planning vision is to become a planned city of sustainable growth, supported by essential infrastructure, efficient transport, a prosperous economy and equitable access to a vibrant lifestyle.

As seen in Figure 3-1 below, the Proposal site is located between Blacktown and Marayong (both identified as strategic centres in the Blacktown City Structure Plan).

Further to this, the Proposal site is identified as an employment area within the Blacktown Business Park. The Proposal is consistent with the objectives of the LSPS for the Blacktown Precinct, specifically the Proposal would contribute to Blacktown's productivity by:

- Retaining employment land in the Blacktown Precinct, which contributes to one of the largest concentrations of employment in Greater Sydney
- Providing diverse employment in the Blacktown Business Park.

Therefore, the Proposal would contribute to Blacktown's productivity in terms of economic activity and employment around strategic centres identified in the LSPS.

Additionally, the Proposal is consistent with the following local planning priority and action in the LSPS:

- Direction: Sustainability
- Local Planning Priority 16: Reducing carbon emissions and managing energy, water and waste efficiently
- Action 56: Collaborate on a Greater Sydney-wide response to the management of waste.

The Proposal would assist in achieving the above priority and action by contributing to increased rates of scrap metal recycling. As a result, the Proposal would substantially reduce the volume of scrap metal that goes to landfill and improve resource recovery rates in Blacktown.

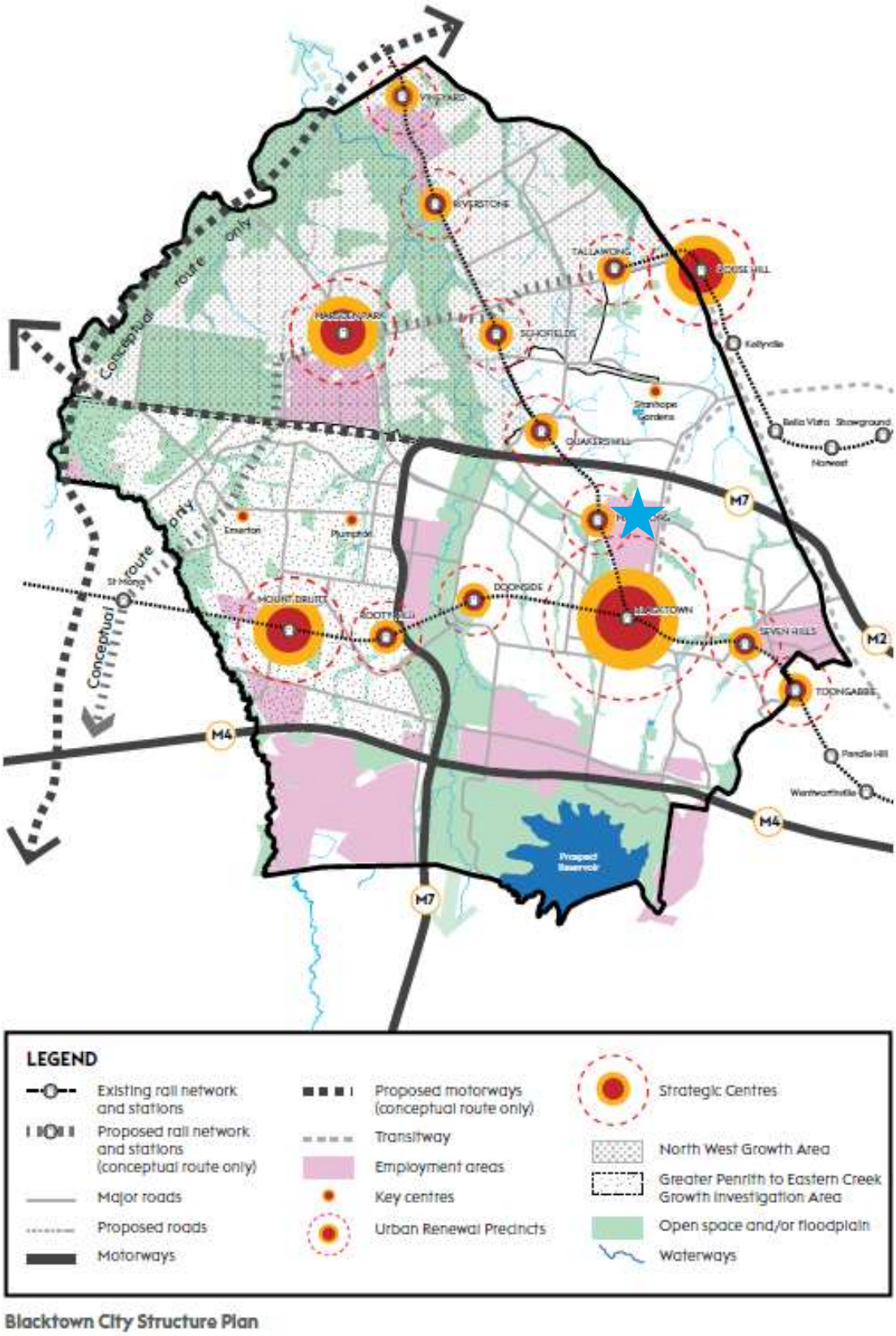

Figure 3-1 – Blacktown City Structure Plan. Proposal site identified with a blue star (Source: Blacktown LSPS 2020, p.7)

3.4 Capacity Analysis

As described in Section 3.2 (need and justification), further scrap metal recycling capacity is required to meet market demand and maximise resource recovery outcomes. An increase to the throughput limit at the Proposal site would enable existing infrastructure to be utilised meet these requirements and minimise potential environmental impacts. To determine a suitable throughput limit for the Proposal site a throughput capacity analysis was undertaken.

Inputs to the capacity analysis were based upon processing and vehicle capacities at the existing RRF. The analysis looked at three (3) primary components that affect the throughput capacity of the Proposal site, including:

- Capacity of processing plant and equipment (See Section 2.5.1)
- Ability of the Proposal site to accommodate vehicles movements associated with throughput, including queueing, stacking and tipping
- On-site storage capacity (stockpiles).

These components have been chosen as they are considered to have the greatest influence on how quickly the Proposal site can process, handle and store materials (i.e. its capacity). The assessment has been based on number of assumptions and data points, including:

- The analysis assumed there would be no changes to the built form of the Proposal site
- Processing rate for key items of machinery
- Traffic vehicle mix, numbers and load sizes have been calculated based on existing weighbridge data
- The proposed stacking layouts may require minor adjustments to the stockpile layout to accommodate stacking vehicles and vehicle movements
- Analysis conservatively assumes all incoming scrap metal is processed prior to despatch. In reality about 10% of incoming scrap metal is already processed and is dispatched without further processing.

The assumptions described have deliberately been made conservatively to provide a realistic assessment.

As described in Section 2.5, scrap metal is processed on the Proposal site through several key pieces of processing machinery, namely:

- Shredder
- Non-ferrous baler
- Lindemann Shear
- Danielli Shear
- Oxy-cutting.

A summary of the capacity of each of these items of processing machinery and the possible and effective throughputs is described in Table 3-1.

Table 3-1 Summary of processing capacity for plant and equipment

Processing equipment	Operational capacity (tonnes per hour)[1]	Permissible Operational hours[2]	Daily Capacity (tonnes)	Weekly (tonnes)	Yearly (tonnes)[3]
Non-ferrous baler	10	15	150	900	45,300
Shredder	140	15	2,100	12,600	634,200
Lindemann Shear	7.5	15	112.5	675	33,975
Danielli Shear	17.5	15	262.5	1,575	79,275
Oxy-cutting	1.5	6	9	54	2,718
Total	**-**	**-**	**2,634**	**15,804**	**795,468**

[1] This refers to the maximum operational capacity that could be achieved by this equipment. Maximum capacity is currently not being undertaken on-site and as it would be inconsistent with the volumes permitted with the Original Approval (SSD-5041).

[2] Based upon approved hours under SSD-5041.

[3] Approximately 302 operational days per year (using an average of 11 public holidays in a year).

If the current processing plant and equipment on the Proposal site, were to operate at 100% capacity, the Proposal site could realistically process 795,468 tonnes of material per annum. In reality, plant and equipment cannot operate at 100% capacity as a result of maintenance, stoppages, breakdowns, unexpected events etc. Noting that maintenance can be undertaken outside of operational hours a conservative estimate of the machinery running at 80% capacity has been adopted. This number has been considered in the context of previous waste infrastructure approvals and has been accepted in principle by DPIE as being reasonable (refer to Section 6.1.1).

When running at 80% of processing capacity, the Proposal site could reasonably expect to process up to 636,374 tpa. an increase in throughput to 600,000 tpa would be within the limits of the existing approved infrastructure, including existing plant and equipment.

As noted previously, the Proposal does not require construction of any additional infrastructure or alterations to operational hours. Only minor operational adjustments will be undertaken as part of the Proposal to accommodate the increased throughput, such as internal traffic flows and scheduling. Potential traffic and transport impacts are assessed in detail in Section 7.3 of this EIS.

3.5 Alternatives Considered

Three (3) alternatives to achieve the Proposal objectives were considered, including:

- The 'Do Nothing' scenario
- Construction of a new facility at an alternate site
- An increased to the current throughput.

The alternatives reviewed against the Proposal objectives are discussed below.

3.5.1 'Do Nothing' Scenario

If the Proposal does not proceed in any form, the existing RRF would continue to operate under its current throughput limit (350,000 tpa). This would limit the volume of scrap metal that could be received, and consequently, recovered at the Proposal site. Maximising the operational throughput is necessary to meet growing demand for scrap metal recycling facilities due to the restrictions set by China's National Sword Policy, to reduce the amount of waste and recyclables going to landfill and to meet state and strategic resource recovery targets.

The 'do nothing' scenario would not meet the Proposal objectives as it would not allow the Proposal site to meet increasing demand in terms of volumes and recovery rates for scrap metal.

3.5.2 Alternative Site

The Proposal relies on an increase to the approved maximum throughput at the existing RRF located at 23-43 and 45 Tattersall Road to improve capacity and resource recovery outcomes. The Proposal could therefore not be undertaken at an alternate site without requiring the complete construction and operation of a new RRF. The Proposal is therefore not considered severable from the existing RRF and therefore cannot be located at an alternative site.

Prior to construction of the existing RRF, the Applicant previously undertook a comprehensive investigation of sites across the Sydney metropolitan area to find a suitable site for the development of an RRF. The Proposal site was identified as the most suitable site for a number of reasons, including convenient road access for heavy vehicles, appropriate industrial zoning as evidenced by current resource recovery operations and proximity to waste generation sources.

As demonstrated through the capacity analysis, the existing site has the capacity to manage an increase in throughput without changes to the structure. The construction and operation of an additional scrap metal recovery facility at an alternative site is not considered to be the best usage of resources and would be likely to result in an increase to overall environmental impacts. Operation of a scrap metal recovery facility at an alternative site would not meet the project objectives as it would not utilise existing site infrastructure and would not improve the efficiency of on-site processes.

3.5.3 Increased throughput at the Proposal site

As discussed in Section 3.4 above, the results of a capacity analysis undertaken for the Proposal identified that an increase in throughput to 600,000 tpa would be within the limits of the existing approved infrastructure, without requiring construction of any additional infrastructure or altering approved operational hours. Increasing the throughput limit at the Proposal site would meet the project objectives as it would:

- Increase the volume of scrap metal recycled at the RRF utilising existing approved infrastructure and maximising diversion of scrap metal from landfill
- Allow the processing of scrap metal to higher recycling standards prescribed by China's National Sword Policy
- Optimise the efficiency of the Proposal site processes, including vehicle movements and stacking locations
- To support continuous improvement in the environmental performance of the Proposal site.

3.5.4 Preferred alternative

Based on the review of alternatives against the project objectives as described above, the preferred alternative would be to increase throughput at the Proposal site. This alternative would best address the project objectives whilst minimising potential impacts. As such, this alternative has been progressed as the basis for the Proposal.

4 PROPOSAL DESCRIPTION

This section provides a description of the Proposal. The SEARs relating to the Proposal site description and existing operations, and a summary of where these have been addressed, is presented in Appendix A.

The Proposal has been designed having regard to improving the existing on-site operations and maximising resource recovery tasks within the approved operational hours. The existing infrastructure that will be utilised to process the approved throughput has been described in Section 2. This Proposal site infrastructure has already been constructed and is operational (with the exception of the relocated pre-shredder). The Proposal would utilise this infrastructure to process the proposed throughput increase. As a result, no new infrastructure is 'proposed' or would be constructed for the Proposal.

4.1 Proposal Overview

The Proposal is seeking approval to increase the scrap metal processing throughput limit at the Proposal site from 350,000 to 600,000 tpa.

The Proposal is operational (processing) only and does not require the construction or operation of any new infrastructure. The existing infrastructure at the Proposal site has the capacity to accommodate the increased throughput. The Proposal would not require any construction works and would not change the mix of materials currently received at the RRF. However, adjustments to management practices would be required including:

- Changes to vehicle flow paths through the Proposal site (described in Section 4.3.4 and assessed in Section 7.1)
- Provision of an on-site stacking process for delivery vehicles (described in Section 4.3.4 and assessed in Section 7.1)
- Increased loading frequency of processing machinery e.g. shredder (described in Section 4.3.1).

For the purposes of this Proposal, vehicle stacking locations are defined as the designated areas where vehicles can wait to access an operational area of the Proposal site (e.g. the shredder tip floor) whilst it is occupied. The use of stacking spaces allows vehicles to wait within the Proposal site without hindering operations.

The Proposal would utilise existing road infrastructure, utility connections and stormwater infrastructure.

A summary of the proposed amendments to the existing RRF operations are provided in Table 4-1.

Table 4-1 – Summary of proposed amendments to existing RRF operations

Aspect	Original Approval	Proposal
Processing capacity	350,000 tpa	600,000 tpa
Waste storage	Hazardous, restricted solid, liquid, clinical and related waste and asbestos waste.[1]	No changes proposed
Hours of operation	Oxy-acetylene torch cutting: Monday to Saturday: 9am to 3pm • All other activities: Monday to Saturday: 6am to 9pm • No activity on Sundays or public holidays for the above • Maintenance and cleaning*: - Monday to Saturday: 9pm to 6am - Sunday: 24 hours - No activity on public holidays.	No changes proposed
Number of employees	• Approx. 119 staff employed with up to 79 on-site at one time	• No changes proposed
Traffic and transport	Approximately 298 vehicle movements per day comprising 51 light and 247 heavy vehicles.	• Approximately 513 vehicle movements per day comprising of 89 light vehicles and 424 heavy vehicles • Provision of up to 35 stacking spaces for heavy vehicles
Site layout	As approved in MOD 3 (see Figure 1-1 and Appendix C)[2]	Minor changes to working stockpile locations to allow efficient vehicle movements throughout the Proposal site.

* Maintenance and cleaning occur within operational hours as well as identified cleaning and maintenance periods

[1] Waste storage description is consistent with the fee-based activity description with EPL 11555

[2] Note that changes to the appearance of the site layout plan (as presented in Mod 3) have been made to improve legibility and remove references to infrastructure 'proposed' under Mod 3 (as Mod 3 changes have been predominately completed). However, consistent with this Proposal, site infrastructure remains unchanged.

The Proposal includes processing of scrap metal outdoors. This is considered common practice in the metal recycling industry. The size and bulk of scrap metal processed, and the extent (height, width and scale), manoeuvrability and reach of associated machinery and equipment is considerably challenging, to near impracticable for an enclosure to accommodate.

The Proposal site is currently approved (under SSD-5041) for the storage and processing of scrap metal external to buildings and the Proposal would continue these activities. Where possible, site activities, which can be accommodated within buildings/enclosures, have already been done so on the Proposal site.

The Proposal does not include any additional or 'new' activities. Further, as scrap metal is not an inherently a dusty waste stream this approach is considered to be

acceptable. Potential impacts will continue to be managed through the implementation of mitigation measures.

4.2 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

On-going maintenance activities would continue as part of the Proposal.

4.3 Operation

The Proposal would facilitate an increased throughput limit from 350,000 to 600,000 tpa of scrap metal.

4.3.1 Resource Recovery

The Proposal would not alter the types of materials received at the existing RRF. The Proposal site would continue to operate in generally the same manner it does under the Original Approval (as described in Section 2) with an increased throughput (up to 600,000 tpa).

As described in Section 3.4, the existing plant and equipment at the Proposal site has the capacity to comfortably process the proposed throughput within the operational hours with the majority of processing through the shredder.

The increase in throughput does not require additional staff, equipment or changes to operational hours but will rather be managed by utilising existing infrastructure more efficiently.

Using the shredder as an example - the shredder itself has a fixed operating speed and will process the volume of scrap metal loaded onto the infeed belt (up to the hourly capacity limit of 140 tonnes). Consequently, the increase in throughput for the Proposal would be facilitated by an increase in frequency of delivery of scrap metal to the tip floor, allowing more frequent loading of the shredder infeed belt with larger grab volumes for each loader on average. Ultimately, the shredder is running at the same operational rate, however as being fed more, is processing more scrap metal.

This example can be extrapolated to other items of processing machinery (e.g. shears) an in this way, an increase in throughput at the Proposal site can be facilitated without an increase in staff, equipment, or operational hours.

The only change the Proposal would necessitate on EPL 11555 is to amend it to include the increased throughput as part of the Proposal.

Due to the nature of the scrap metal markets, the actual throughput volumes arriving at the Proposal site on a daily, weekly and yearly basis during operations may vary. Daily and weekly rates would be a proportion (based upon deliveries to the Proposal site at that time) of the yearly maximum throughput based on the number of operational days (as provided in 4.3.5). Daily and weekly rates would fluctuate based on market conditions and individual customer requirements, however the total volume of processing per year would not exceed the throughput of 600,000 tpa.

4.3.2 Plant and Equipment

As described in Section 2.5.1, scrap metal is processed at the existing RRF through the existing six (6) key pieces of processing machinery, namely:

- Pre-shredder
- Shredder
- Non-ferrous baler
- Lindemann Shear
- Danieli Shear
- Oxycutting.

The location of these items is shown in Figure 4-1 and on the detailed Proposal site layout in Appendix C.

The existing plant and equipment would be utilised as part of the Proposal. There would be no changes to plant and equipment, or their general location for the Proposal.

4.3.3 Stockpiles

Incoming scrap metal that requires processing would continue to be tipped and sorted into working stockpiles adjacent to items of processing equipment. Following processing, product would be stored in bins or stockpiles prior to collection, sale or disposal (finished product). The storage capacity, volume and height of each of the relevant stockpiles is provided in Appendix D.

Note that the Stockpile Plan does not include stockpiles of finished product. Finished product stockpiles do not contain combustible materials and as such do not require regulation through a stockpile plan as there is no inherent fire risk. Finished product stockpiles include:

- Baled aluminium cans within the non-ferrous shed
- Small volumes of non-ferrous metals in the non-ferrous shed
- Shred stored on the north eastern side of the shredder
- Sorted ferrous metals stored on the eastern side of the floc shed.

Stockpile footprints would change from time to time to facilitate ongoing operations. Any future changes to stockpiles that would result in a change to height or volumes would be updated on the Stockpile Plan and submitted to the Secretary for approval (refer to Section 20).

4.3.4 Traffic Circulation and Vehicle Stacking

As detailed in the Traffic and Transport Impact Assessment (Appendix E) by TTPP, the RRF would generate approximately 513 vehicles on a daily basis or 34 vehicles per hour at 600,000 tpa.

The Proposal would result in additional 215 vehicles on a daily basis or 15 vehicles per hour across a 15-hour workday (as per approved operational hours). The volume of material proposed to arrive at each processing location and the number of vehicles generated by each process at the proposed throughput limit is detailed in the Traffic Assessment. To accommodate the vehicles arriving at the Proposal site and minimise impacts to the surrounding road network, indicative stacking spaces would be provided within the Proposal site. A summary of the on-site stacking is shown on Figure 4-1. These spaces are indicative only. The actual location of stacked vehicles would vary depending on the number, arrival timing and type of vehicles.

LEGEND

- Proposal site boundary
- Property boundary
- Watercourse
- Floc and shred
- Heavy Shear
- Non Ferrous (External)
- Oxycutting
- Pre shredder
- Shredder

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Figure 4-1: Stacking capacity on the Proposal site (general locations)

4.3.5 Operational Workforce and Hours

The operation of the Proposal site would not require a change to the operational workforce or hours as approved under SSD-5041 and described in Section 2.5. The Proposal site would continue to employ approximately 119 employees with up to 79 of those employees working at the facility at any one time. Shifts and the exact number of employees on-site at any one time can vary to suit operational requirements. However, an approximate guide to the number of employees on-site at a given time generally is as follows:

- Day (6am to 4.30pm) – 70 staff
- Afternoon (12pm – 10:30pm) - 12 staff
- Night (7pm to 5:30am) – 11 staff

Operational hours for the Proposal are shown in Table 4-2. These remain consistent with those approved within SSD-5041 MOD 3.

Table 4-2 Operational hours for the Proposal

Activity	Day	Hours
Oxy-acetylene torch cutting	Monday to Saturday	9 am to 3 pm
	Sunday and public holidays	Nil
Maintenance and cleaning*	Monday to Saturday	9 pm to 6 am
	Sunday	24 hours
All other activities	Monday to Saturday	6 am to 9 pm
	Sunday and Public Holidays	Nil

* Maintenance and cleaning occur within operational hours as well as identified cleaning and maintenance periods

4.3.6 Fire Infrastructure

The Proposal would not require any changes to the approved fire infrastructure on the Proposal site as described in Section 2.4.6.

4.3.7 Water management infrastructure

The Proposal would not require any changes to the approved water management infrastructure on the Proposal site as described in Section 2.4.7.

4.3.8 Maintenance

This Proposal would continue maintenance and cleaning activities which would be undertaken periodically throughout daily operations (i.e. within operational hours as well as identified cleaning and maintenance periods).

Maintenance would include, but not be limited to:

- Pavements: Ongoing surface and joint repair depending on the pavement type, with subgrade repair where necessary
- Stormwater: Sediment and pollutant clean out and repairs to drainage infrastructure as required
- Ongoing vegetation management and weed control

- Electrical and Communications equipment: Ongoing maintenance and replacement where necessary. Equipment includes light poles, distribution boards, CCTV, boom gates, card readers etc.
- Line marking and other ancillary road furniture: Line marks would be re-lined and road furniture repaired or replaced as necessary
- Fencing and gates: Ongoing fence and gate repair
- Ongoing infrastructure and plant/equipment repair and replacement as necessary

Relevant activities and management measures would be detailed in the OEMP.

4.3.9 Operational Environmental Management Plan

The existing Operational Environmental Management Plan (OEMP) (and associated subplans as relevant) for the Proposal site would be updated for the Proposal. As the Proposal includes only a change to the throughput and no other operational procedures these updates are anticipated to be relatively minor.

Air quality management

The Proposal site includes existing infrastructure to manage potential air quality emissions and minimise impacts from current operations, including:

- An industry leading emissions collection system servicing the hammermill
- Fully sealed (hardstand) operational areas on-site to manage dust emissions from site surfaces
- Enclosed conveyors and conveyor transfer points
- Enclosure of floc processing activities (Building C)
- Water sprays and mister systems in operational areas and within the floc shed for dust suppression
- Provision of dust screens (that also act as acoustic screens) on site boundaries including:
  - A 10 metre high screen on the northern boundary of 45 Tattersall Road
  - An 8 metre high screen on the western boundary
  - An 8 metres high screen on the eastern boundary
  - A 4 metres high screen on southern boundary of 23 Tattersall Road.

Noise and vibration management

The Proposal site includes the provision of infrastructure and measures to manage potential noise emissions and minimise impacts from current operations, including:

- Acoustic panelling around key items of equipment such as the hammermill
- Provision of acoustic screens (that also act as dust screens) on site boundaries, including:
  - A 10 metre high screen on the northern boundary of 45 Tattersall Road
  - An 8 metre high screen on the western boundary
  - An 8 metre high screen on the eastern boundary
  - A 4 metre high screen on southern boundary of 23 Tattersall Road
- Enclosure of the floc processing building (Building C)

- Update of management practices for the shear including delaying morning start time, change to loading position, change to types of materials processed by the shear after 7 pm
- Operational policy change to ensure truck preparation for the following day is completed in the afternoons (to avoid early morning noise emissions)
- Replacement of plant reversing beepers with directional tonal emitters
- Semi-encapsulation of the trommel separator.

5 STATUTORY PLANNING APPROVALS

This section provides an assessment of the Proposal's consistency with relevant legislation and planning instruments.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 5-1. Strategic planning, including relevant policies and plans is provided within Section 3. A full SEARs compliance table is presented in Appendix A.

Table 5-1 – Statutory planning SEARs

SEARs	Where addressed
Consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments	Throughout this chapter

5.1 Commonwealth Legalisation

5.1.1 Environmental Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places defined in the Act as Matters of National Environmental Significance (MNES) – as well as to govern actions undertaken on Commonwealth land. The MNES that are protected under the EPBC Act are:

- World heritage properties
- National heritage places
- Wetlands of international importance (listed under the Ramsar Convention)
- Threatened species and ecological communities
- Migratory species protected under international agreements
- Commonwealth marine areas
- The Great Barrier Reef National Park
- Nuclear actions (including uranium mines).

In accordance with sections 67 and 67A of the EPBC Act, any works that have the potential to result in an impact on any MNES or on Commonwealth land are considered 'controlled actions' and require a referral to the Federal Minister for the Environment for approval.

A search undertaken on the *EPBC Protected Matters Search Tool* on 10th June 2020 identified 7 threatened ecological communities, 53 threatened species and 16 migratory species as having the potential to occur within 10 km of the Proposal site (DAWE, 2020). However, given the highly modified nature of the landscape these are considered unlikely to occur within or in close proximity to the Proposal site.

The Proposal is not anticipated to significantly impact any MNES and therefore, referral to the Federal Minister for the Environment is not considered warranted.

5.2 State Legalisation

5.2.1 Environmental Planning and Assessment Act 1979

The NSW environmental planning and assessment framework is established by the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regs), which sets out approval requirements and provides for the making of environmental planning instruments (EPIs), which in turn determine the relevant approval pathway for development in NSW.

Part 3 of the EP&A Act provides for the formation of Environmental Planning Instruments (EPIs), which can take the form of Local Environmental Plans (LEPs) or State Environmental Planning Policies (SEPPs). EPIs contain provisions that control the permissibility of development and identify when development approval is required.

Under the EP&A Act, development is assessed in the following relevant main categories in Table 5-2.

Table 5-2 - EP&A Act planning approval pathways

EP&A Act	Description
Part 4, Division 4.1 (Section 4.1)	Development that is identified as exempt development and complying development, and therefore does not require development consent
Part 4, Division 4.1 (Section 4.2)	Development that requires development consent, as specified by an EPI
Part 4, Division 4.7 (Section 4.36)	Development that requires development consent, and is considered State Significant Development (SSD), as specified by an EPI.

The Proposal would be considered SSD under Clause 23 (waste and resource management facilities) of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011,* which refers to:

> *(3) Development for the purpose of resource recovery or recycling activities that handle more than 100,000 tonnes per year of waste*

Division 4.7 of the EP&A Act identifies the Minister (or his delegate) as the consent authority for development that is identified as State Significant Development (SSD). 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 compliance of this EIS with Section 4.15 of the EP&A Act is presented in Table 5-3.

Table 5-3 - Assessment of compliance of this EIS with the matters for consideration in Section 4.15 of the EP&A Act

Matters for consideration	Where addressed in EIS
(1) In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application: (a) the provisions of: (i) any environmental planning instrument	Sections 5.3 and 5.4

Matters for consideration	Where addressed in EIS
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved)	Where relevant throughout Section 5
(iii) any development control plan	Section 5.4
(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4	N/A
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph)	Where relevant throughout Section 5 and Appendix B
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	Sections 7 to 19
(c) the suitability of the site for the development	Section 2 and Sections 7 to 19
(d) any submissions made in accordance with this Act or the regulations	Submissions would be provided during the exhibition of the EIS. Consultation with relevant parties has been undertaken and is included in Section 6.
(e) the public interest	Section 19

5.2.2 Protection of the Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) sets out procedures and requirements for waste, air, water and noise pollution control. Schedule 1 of the POEO Act establishes that an environment protection licence (EPL) must be obtained for a scheduled activity (i.e. activities listed in Schedule 1 of the POEO Act).

Scheduled activities which apply to the Proposal are outlined in Table 5-4, with the relevant EPL triggers for each activity. EPL 11555 for the RRF already includes these activities, however a variation would be sought to amend the existing EPL to increase the quantities of scrap metal recycled on the Proposal site.

Table 5-4 – Applicable scheduled activities under the POEO Act

Clause	Activity type	Description	Relevant criteria
Clause 34	Resource recovery	The receiving of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste) from off-site and its processing, otherwise than for the recovery of energy	The Proposal site is located within a regulated area as defined in the POEO Act. The criteria triggered by the Proposal for resource recovery is therefore: • Has on-site at any time more than 1,000 t or 1,000 m^3 of waste, or, processes more than 6,000 t of waste per year
Clause 42	Waste storage	The receiving from off-site and storing (including storage for transfer) of waste	The Proposal site is located within a regulated area as defined in the POEO Act. The criteria triggered by the Proposal for waste storage is therefore: • Has on-site at any time more than 1,000 t or 1,000 m^3 of waste, or, receives more than 6,000 t of waste per year.

Environment Protection Offences

The POEO Act establishes a range of pollution offences and penalties that are applicable to all activities undertaken on a site. Specific pollution offences are created for actions associated with:

- Water pollution
- Air pollution
- Noise pollution
- Land pollution
- Littering and waste.

The POEO Act also establishes a number of regulations that provide further details on the management of pollution. Those that are applicable to the Proposal are discussed briefly below.

Operation of the Proposal would be undertaken in a manner that achieves compliance with the requirements of the POEO Act and its regulations. Operational controls would be detailed in the updated OEMP.

The existing Pollution Incident Response Management Plan (PIRMP) would be updated to include the increase in throughput limit for the Proposal.

5.2.3 Protection of the Environment Operations (Clean Air) Regulation 2010

The *Protection of the Environment Operations (Clean Air) Regulation 2010* prescribes emission concentration limits which apply to industries. Under the regulation, the Proposal would fall under the ambit of the 'Group 6 emission concentration limits', which are the most stringent limits under the regulation.

Section 8 discusses the air quality impacts associated with the Proposal and demonstrates how the Proposal would achieve the limits set out in the regulation.

5.2.4 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. Schedule 1 of the Regulation identifies the types of waste which apply. In addition, the Regulation has specific reporting and record-keeping requirements. It is an offence under the POEO Act to wilfully or negligently dispose of waste in a manner that harms or is likely to harm the environment.

The POEO (Waste) Regulation also prescribes the requirements for recording information relating to:

- The delivery of waste or other material at scheduled waste facilities
- Loads of waste or other material transported from the facility for use, recovery, recycling, processing or disposal at another place
- Other vehicles entering the facility for a purpose related to the operation of the facility.

The Proposal would meet the requirements of record-keeping and reporting under the POEO (Waste) Regulation.

Clause 15 of the regulation requires scheduled premises that receive more than 10,000 tpa of waste to install a weighbridge to ensure that the quantity of waste being transported to and from the site is correctly recorded. The Proposal would include the use of two (2) weighbridges (one for incoming heavy vehicles and one for outgoing vehicles) for recording waste volumes. Weighbridges at the Proposal site would be operated and maintained in accordance with the requirements of the POEO (Waste) Regulation to accurately record waste transported to and from the Proposal site. Further information on the management of waste at the Proposal site is provided in Section 4.3.

5.2.5 Waste Avoidance and Resource Recovery Act 2001

The importance of responsible resource management, including maximisation of the utility of resources and associated minimisation of disposal to landfill is highlighted in the *Waste Avoidance and Resource Recovery Act 2001* (WARR 2001). The WARR Act is the principle piece of legislation governing waste and resource management in NSW, and objectives of the Act include:

- Encouraging the most efficient use of resources
- Reducing environmental harm
- Ensuring that resources are managed against the waste hierarchy of avoidance, resource recovery, and then disposal
- Diversion of waste from landfill
- Ensuring industry takes part in reducing and dealing with waste
- Achieving integrated, state-wide waste and resource management planning and service delivery.

As discussed in Section 3 the Proposal is consistent with current waste management and recovery principles specified in local, regional and state strategies. The Proposal would maximise opportunities for resource recovery and reduce the potential for scrap metal to be deposited in landfill. The Proposal therefore complies with the WARR Act.

5.2.6 Contaminated Land Management Act 1997

The general intention of the *Contaminated Land Management Act 1997* (CLM Act) is to establish a process for investigating and (where appropriate) remediating the land that the EPA considers to be contaminated significantly enough to require regulation.

Section 5 of the CLM Act defines the contamination of land as:

The presence in, on or under the land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment (CLM Act, s5).

The Proposal would not require any construction works or changes to the current use of the Proposal site. Potential contamination impacts from operations would be managed in accordance with the existing OEMP for the RRF. The Proposal would not alter the current contamination management measures.

5.2.7 Roads Act 1993

The *Roads Act 1993* (Roads Act) governs activities in, on under or over a public road. This Act is governed by NSW Roads and Maritime Services (Roads and Maritime), the local council or the NSW Land and Property Management Authority depending on the road classification. Roads and Maritime has authority over major roads, and the local council over local roads. Under Section 138 of the Roads Act approval is required before any works can be undertaken within a public road reserve.

The Proposal would not require any works within a public road. However, it would result in minor increases to traffic flows on the surrounding roads and on-site. TfNSW and Blacktown City Council have been consulted during the preparation of the EIS. Further detail on consultation has been provided in Section 5.3.2.

A discussion of the traffic impacts associated with the Proposal and mitigation measures proposed to ameliorate those impacts are presented in Section 7.

5.2.8 Water Management Act 2000

The object of the *Water Management Act 2000* (WMA) is to provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations. The WMA Act provides for the preparation of water sharing plans that set extraction limits and rules for water access, available water determinations, account management and trading in order to protect water sources and their dependent ecosystems, whilst recognising the social and economic benefits of the sustainable and efficient use of water (Aquifer interference policy).

Breakfast Creek is located at the rear boundary of the Proposal site and is highly modified and vegetated. There is no discharge of water from the Proposal site operational areas to Breakfast Creek and the Proposal would not alter this approach. Further, no works are proposed on the Proposal site. Therefore, the Proposal would not result in any impacts to Breakfast Creek.

5.2.9 Biodiversity Conservation Act 2016

The purpose of the *Biodiversity Conservation Act 2016* (BC Act) is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development.

The BC Act replaced *the Threatened Species Conservation Act 1995* (TSC Act) on 25 August 2017. The BC Act incorporates broadly similar objectives to those identified in

the TSC Act, and additionally seeks to establish a framework for assessment and offsetting of development impacts as well as investment in biodiversity conservation, specifically:

- The NSW Biodiversity Offsets Scheme (BOS), established under Part 6 of the BC Act
- The Biodiversity Assessment Method (BAM), established under Section 6.7 of the BC Act. The purpose of the BAM is to assess certain impacts on threatened species and threatened ecological communities (TECs), and their habitats, and the impact on biodiversity values, where required under the BC Act.

The BOS applies to SSD projects, unless the Secretary of the DPIE and the Chief Executive of the DPIE EES determine that the project is not likely to have a significant impact and waive the requirement for assessment under the BOS. As the Proposal does not involve any physical works on the Proposal site a Biodiversity Development Assessment Report (BDAR) prepared in accordance with the BAM is not required. The BDAR Waiver has been approved and is attached as Appendix M.

However, to ensure a comprehensive assessment of the Proposal has been undertaken, a desktop assessment to identify potential biodiversity impacts of the Proposal has been undertaken and is presented in Section 16.

5.2.10 National Parks and Wildlife Act

The National Parks & Wildlife Act 1975 (the NPW Act) provides statutory protection for all Aboriginal 'objects' (consisting of any material evidence of the Aboriginal occupation of NSW) and for 'Aboriginal Places' (areas of cultural significance to the Aboriginal community). The act defines the statutory obligations of proponents undertaking development with the potential to impact on Aboriginal objects and Places.

The Due Diligence Code provides a process whereby a reasonable determination can be made as to whether or not Aboriginal objects would be impacted by an activity, whether further investigation is warranted and whether the activity requires an AHIP application. A Section 90 Aboriginal Heritage Impact Permit (AHIP) is the only permit available to impact identified Aboriginal objects and/or an identified Aboriginal place. An AHIP can only be issued by DPIE.

The SEARs for the Proposal include the requirement for:

An assessment of Aboriginal cultural heritage values that exist across the development documented in an Aboriginal Cultural Heritage Assessment Report (ACHAR) or an assessment of Aboriginal cultural heritage issues which satisfies the requirements of the National Parks and Wildlife Act 1974.

In response to this, an assessment of the Proposal against the *'Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW'* (DECCW, 2010) is provided in Section 13 of the EIS. This assessment demonstrates that the Proposal is highly unlikely to result in impacts to Aboriginal heritage items of places and that an ACHAR is not required.

5.3 State and Regional Environmental Planning Policies

5.3.1 State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (State and Regional Development) 2011 identifies classes of development and determines whether a development is classified as SSD under Section 4 of the EP&A Act. This SEPP identifies the thresholds for

waste and resource management facilities, along with other development types, to be classified as SSD.

The aims of the SEPP (State and Regional Development) are:

- To identify development that is State Significant Development.
- To identify development that is State Significant Infrastructure and critical State Significant Infrastructure.
- To confer functions on Sydney and regional planning panels to determine development applications.

Under Clause 23, Schedule 1 of SEPP (State and Regional Development) the Proposal is considered to be:

> *development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.*

The Proposal is therefore classified as SSD and is assessable under Division 4.1 of the EP&A Act.

Under Clause 11 of the SEPP (State and Regional Development), development control plans (DCPs), developed under LEPs, are not applicable to SSD.

5.3.2 State Environmental Planning Policy (Infrastructure) 2007

The applicable aims of the *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) are:

> *to facilitate the effective delivery of infrastructure across the State by:*
>
> *(f) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing.* (ISEPP, Cl 2)

Clause 121 of the ISEPP makes provision for waste or resource management facilities to be undertaken, with development consent within a 'prescribed zone' being IN1 General Industrial. The Proposal site is zoned IN1 General Industrial under the Blacktown LEP. Therefore, the proposed development would be permissible with development consent.

Under Clause 104 of ISEPP, traffic generating developments, including recycling facilities, must be referred to Roads and Maritime Services. The consent authority must take into consideration:

- Any submission that Roads and Maritime provides in response to the application within 21 days after the notice was given (unless, before the 21 days have passed, Roads and Maritime, advises that it will not be making a submission), and
- The accessibility of the Proposal site, including:
  - The efficiency of movement of people and freight to and from the site and the extent of multi-purpose trips; and
  - The potential to minimise the need for travel by car and to maximise the movement of freight in containers or bulk freight by rail; and
- Any potential traffic safety, road congestion or parking implications of the development.

(ISEPP, Cl 104)

A Traffic and Transport Impact Assessment has been prepared to identify and address the potential traffic implications of the Proposal, and is summarised in

Section 7 and presented in Appendix E. Consultation has been undertaken with Roads and Maritime during the preparation of this EIS (described in Section 5.2.7). Therefore, the Proposal is consistent with the requirements of the ISEPP.

5.3.3 State Environmental Planning Policy No. 33 – Hazardous and offensive development

SEPP 33 links the permissibility of an industrial development proposal to its safety and environmental performance. Certain activities may involve handling, storing or processing a range of materials, which, in the absence of controls, may create risk outside of operational borders to people, property or the environment. Such activities would be defined by SEPP 33 as a 'potentially hazardous industry' or 'potentially offensive industry'. SEPP 33 applies to any industrial development proposals which fall within these definitions.

Under Clause 3, a development is deemed part of a potentially hazardous industry if it satisfies the definition:

> *"a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:*
>
> *a) to human health, life or property, or;*
>
> *b) to the biophysical environment;*
>
> *and includes a hazardous industry and a hazardous storage establishment."*

A development is deemed part of a potentially offensive industry if it satisfies the following definition:

> *"a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment."*

The Department of Planning (2011) guideline "*Applying SEPP 33*" provides a risk screening procedure to facilitate determination of whether a proposed development is applicable under the SEPP. If SEPP 33 is triggered under this screening test, Clause 12 of SEPP 33 requires that any proposal to carry out a potentially hazardous development must be supported by a Preliminary Hazard Analysis (PHA).

As the Proposal falls within the definition of a "potentially hazardous industry" or a "potentially offensive industry", a screening assessment was undertaken, which is outlined in Section 12. The assessment found no potentially hazardous or dangerous goods would be stored on-site that would exceed the prescribed thresholds outlined in *Applying SEPP 33*, and that a PHA was not required for the Proposal.

5.3.4 State Environmental Planning Policy No. 55 – Remediation of Land

The objective of SEPP 55 is to provide for a coordinated state-wide planning approach for the remediation of contaminated land. 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 requires the approval authority to have regard to certain matters before granting approval. These matters include:

- Whether the land is contaminated.

- Whether the land is, or would be, suitable for the purpose for which development is to be carried out.
- If remediation is required for the land to be suitable for the proposed purpose, whether the land will be remediated before the land is used for that purpose.

SEPP 55 also imposes obligations to carry out any remediation work in accordance with relevant guidelines, developed under the CLM Act and to notify the relevant council of certain matters in relation to any remediation work.

As mentioned above, the Proposal would not change the current use of the Proposal site and no construction works would be undertaken as part of the Proposal. Therefore, no remediation works would be required.

5.4 Local Environmental Plan and Development Control Plan

5.4.1 Blacktown Local Environment Plan 2015

The *Blacktown Local Environmental Plan 2015* (Blacktown LEP) is the primary Environmental Planning Instrument (EPI) that applies to the Proposal site. The current land use, built form and general layout of the Proposal site would not be altered by this Proposal, and as such no additional assessment matters are triggered under the Blacktown LEP.

This EIS (refer to Sections 7 to 19) discusses the potential impacts of the Proposal on the environment and identifies the measures that would be employed to minimise those impacts and ensure that the aims of the Blacktown LEP are achieved.

The consistency of the Proposal with the requirements of the Blacktown LEP is provided in Table 5-5.

Table 5-5 – Proposal's compliance with Blacktown LEP

LEP Clause	Development Standard	Proposal	Complies?
Zoning (Land Use Table)	The Proposal site is located in zone IN1 General Industrial.	The Proposal would not change the current land use of the Proposal site. Therefore, the Proposal would remain consistent with the objectives of the IN1 zone and is considered permissible with development consent.	Yes
Height of buildings (Clause 4.3)	Maximum building height limit of 32m for the Proposal site.	The Proposal would not require any construction works. Therefore, this control is not applicable.	N/A
Floor space ratio (FSR) (Clause 4.4)	There is no FSR control applicable to the Proposal site.	As above.	N/A
Heritage conservation (Clause 5.10)	The Blacktown LEP outlines heritage conservation areas and requirements for consent with regards to impacting on heritage items.	The Proposal site or surrounds contain no heritage items listed in the Blacktown LEP.	N/A

LEP Clause	Development Standard	Proposal	Complies?
Flood planning (Clause 7.1)	The Blacktown LEP outlines objectives and considerations regarding land within a flood planning area.	An assessment of flooding impacts has been undertaken and is included as Section 11. The assessment concludes that as there will be no physical works on the Proposal site, the Proposal would not result in any flood impact on the adjacent properties.	Yes
Terrestrial biodiversity (Clause 7.2)	The Blacktown LEP outlines objectives and considerations for preserving biodiversity values, including flora, fauna and their habitats.	The Proposal site is not located on land identified as "Biodiversity" on the Terrestrial Biodiversity Map.	N/A
Development of certain land in Zone IN1 (Clause 7.8)	This clause applies to any land within Zone IN1 General Industrial that is within 250 m of land in a residential zone.	The Proposal site is located approximately 300 m from a residential zone (east). Therefore, this clause is not applicable to the Proposal.	N/A

5.4.2 Blacktown Development Control Plan 2015

The *Blacktown Development Control Plan 2015* (Blacktown DCP) supports the Blacktown LEP by providing more detailed controls that apply to the Blacktown LGA.

Under the provisions of Clause 11 of SEPP (State and Regional Development), DCPs do not apply to SSD. Therefore, the Blacktown DCP does not apply to the Proposal.

However, consideration has been given to the objectives of the Blacktown DCP in order to demonstrate consistency of the Proposal with the overarching aims of Council for the Proposal site and the surrounding area. Sections of the Blacktown DCP which may otherwise be relevant (if the Proposal was not SSD) include:

- Part E – Development in the Industrial Zones
- Part G – Site Waste Management and Minimisation
- Part J – Water Sensitive Urban Design and Integrated Water Management Cycle Management.

As mentioned above, the Proposal would not involve any changes to the layout or structure of the Proposal site and therefore, the Proposal would not affect the sites consistency with the Blacktown DCP (refer to Table 5-6 below).

Table 5-6 – Proposal's consistency with the Blacktown DCP – Industrial Development

Control	Summary of Requirement	Comment	Compliance?
Part E – Development in the Industrial Areas			
4.6 Open storage areas	Details should be provided of any materials to be stored outside the buildings of the site, including their location.	A Stockpile Plan has been prepared for the Proposal taking into consideration the FRNSW guidelines for waste facilities as at Feb 2020. This includes the description of materials, location and maximum size for relevant stockpiles.	Yes. Section 3 and Appendix D of the EIS provide details of the Stockpile Plan.
4.7 Vehicular access and circulation	Details and plans of vehicular access and circulation must be provided, including vehicular movement, layout, car parking and turning circles.	A Traffic and Transport Impact Assessment has been prepared for the Proposal, which includes movements within and surrounding the Proposal site, vehicle queuing, car parking and the operation of the proposed vehicular access and egress.	Yes. Section 7 and Appendix E of the EIS provide a Traffic and Transport Impact Assessment.
7.2 Pollution control	Pollution control should be assessed in regards air, water, noise, and waste storage and removal.	The EIS is supported by the following assessments: air quality and odour, stormwater and flooding, noise and vibration, and waste management. Each assessment identifies potential impacts related to the Proposal, including the required mitigation and management measures for each issue.	Yes. Sections 7-12 and 14; and Appendix G, Appendix H, Appendix I, and Appendix J
Part G – Site Waste Management and Minimisation			
3.4 Performance standards for development	Performance criteria for industrial developments includes specific standards for waste management, such as: site waste bins, garbage and recycling areas, management of special waste, collection	An assessment of operational waste has been undertaken for the Proposal which includes details of the Proposal site waste practices, including management of special waste, collection points,	Yes. Section 14 of the EIS provide details of waste minimisation and management.

Control	Summary of Requirement	Comment	Compliance?
	points, and the ongoing management of operational waste.	and the ongoing management of operational waste.	
Part J – Water Sensitive Urban Design and Integrated Water Cycle Management			
4.2 Water quality	All industrial developments must achieve the minimum percentage reduction of the annual load of pollutants under this provision.	A Water Management Assessment has been prepared for the Proposal, which includes details of water quality and quantity during operations of the Proposal. As detailed in the assessment the Proposal would not require discharge from operational areas. As such, the specified water quality criteria are not applicable.	Yes. Section 10 and Appendix I of the EIS provide details of water quality.
4.3 Water conservation	Industrial and business developments must supply 80% of their non-potable demand using non-potable sources.	As noted in the Water Management Assessment, the Proposal would supply 80% of the non-potable demand using non-potable sources.	Yes. Section 10 and Appendix I of the EIS provide details of water conservation on the Proposal site.
4.4 On-site stormwater detention and waterway stability	Developments must manage peak flows in accordance with Council's Engineering Guide for Development or Upper Parramatta River Catchment Trust On-Site Stormwater Detention Handbook (Version 4) (1999).	The Proposal would manage peak flows in accordance with Council's Guidelines. An increase in production water demand would result in a reduced overflow discharges to the sewer, as a greater volume of captured water would be reused. This would further reduce the low risk of overflow discharge and any potential contamination to Breakfast Creek.	Yes. Section 10 and Appendix I of the EIS provide details of stormwater management.
4.5 Erosion, sediment and pollution control	Developments and activities must be implemented in accordance with Managing Urban Stormwater: Soils and Construction (The Blue Book) (Landcom, 2004).	Erosion, sediment and pollution control would continue to be managed for the Proposal to ensure the Stormwater Management System is maintained and discharge remains in the closed retention system.	Yes. Section 10 and Appendix I of the EIS provide details of erosion, sediment and pollution control.

6 CONSULTATION

This section provides a summary of consultation activities undertaken for the Proposal including details of how issues raised during consultation have been addressed. To guide consultation activities a Community and Stakeholder Participation Strategy has been prepared and is included as Appendix N.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 6-1. A full SEARs compliance table is presented in Appendix A.

Table 6-1 Consultation SEARs

SEARs	Where Addressed
• The EIS must provide a detailed community and stakeholder participation strategy which identifies who in the community has been consulted and a justification for their selection, other stakeholders consulted and the form(s) of the consultation, including a justification for this approach	Appendix N
• The EIS must provide a report on the results of the implementation of the strategy including issues raised by the community and surrounding landowners and occupiers that may be impacted by the proposal	Government Agency consultation - Section 6.1 Community consultation including landowners and service providers - Section 6.2
• The EIS must give details of how issues raised during community and stakeholder consultation have been addressed and whether they have resulted in changes to the proposal	Government Agency consultation - Section 6.1 Community consultation including landowners and service providers - Section 6.2
• The EIS must give details of the proposed approach to future community and stakeholder engagement based on the results of the consultation	Section 6.3
• During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.	Government Agency consultation - Section 6.1 Community consultation including landowners and service providers - Section 6.2
In particular you must consult with: • Department of Planning, Industry and Environment, specifically the: • Environment, Energy and Science Group including the Climate Change and Sustainability Division • Regions, Industry, Agriculture and Resources Group • Water Group • Department of Primary Industries • Environment Protection Authority • Transport for NSW (including the former Roads and Maritime Services) • NSW Fire and Rescue • Blacktown City Council	Government Agency consultation - Section 6.1 Local community and other stakeholders - Section 6.2

SEARs	Where Addressed
• Local community and other stakeholders.	
The EIS must describe the consultation process and the issues raised 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, a short explanation should be provided.	Sections 6.1– 6.3

6.1 Government Agency Consultation

Consultation activities undertaken for the Proposal provided information to relevant State government agencies, service and infrastructure providers, the community and nearby landowners and allowed the opportunity for interested stakeholders and community members to provide feedback on the Proposal. The SEARs for the Proposal detailed government agencies to be consulted during preparation of the EIS. A summary of consultation these agencies is include in Table 6-2 and detailed in the sections below.

Table 6-2 Government agencies consultation summary

Agency	Consultation activities	Response
Department of Planning, Industry and Environment (DPIE)	• Kick off meeting to outline the Proposal and seek feedback prior to lodgement of the scoping report (7 November 2019). • Scoping report / request for SEARs (lodged on 21 November 2019)	Feedback provided during kick-off meeting (7 November 2019). Issued SEARs (19 December 2019)
Environment, Energy and Science Group including the Climate Change and Sustainability Division (as part of DPIE)	• Scoping report / request for SEARs (lodged on 21 November 2019) • EIS progress update letter (8 July 2020)	Input into SEARs (3 December 2019) Response to progress letter (9 July 2020)
Regions, Industry, Agriculture and Resources Group (as part of DPIE)	• On the 2nd April 2020 the RIAR Group became the Department of Regional NSW. As such, the agency is no longer considered to be relevant to this Proposal. This was confirmed in correspondence by DPIE on 8 July 2020.	N/A – This group has been transitioned to the Department of Regional NSW and is no longer considered to be relevant to this Proposal
Water Group (as part of DPIE)	• Scoping report / request for SEARs (lodged on 21 November 2019) • EIS progress update letter (8 July 2020)	No feedback received
Department of Primary Industries	• Scoping report / request for SEARs (lodged on 21 November 2019) • EIS progress update letter (8 July 2020)	No feedback received

Agency	Consultation activities	Response
Environment Protection Authority	• Early consultation meeting undertaken prior to the issue of SEARs (27th November 2019) • Scoping report / request for SEARs (lodged on 21 November 2019) • EIS progress update letter (8 July 2020)	• Feedback within consultation meeting (27 November 2019) • Input into SEARs (28 November 2019) • Response to progress letter (20 July 2020)
Transport for NSW (including the former Roads and Maritime Services)	• Scoping report / request for SEARs (lodged on 21 November 2019) • EIS progress update letter (8 July 2020)	• Input to SEARs (6 December 2019) • Response to progress letter (20 July 2020)
NSW Fire and Rescue	• Scoping report / request for SEARs (lodged on 21 November 2019) • EIS progress update letter (8 July 2020)	• No feedback received
Blacktown City Council	• Scoping report / request for SEARs (lodged on 21 November 2019) • EIS progress update letter (8 July 2020)	• Input to SEARs (12 December 2019)

6.1.1 Department of Planning, Industry and Environment

On 7 November 2019, a scoping meeting was undertaken with DPIE representatives and the Applicant to discuss the Proposal. Key elements of the Proposal were presented during the meeting and a copy of the presentation has been provided to DPIE representatives. A summary of the key outcomes from the meeting and where each of these have been discussed within this report is provided in Table 6-3 below.

Further detail was provided to DPIE in the form of the scoping report / request for SEARs. DPIE has provided assessment requirements for the EIS (the SEARs). A summary of where the SEARs have been addressed within this EIS is provided in Appendix A and at the start of each EIS section (where relevant).

Table 6-3 - DPIE consultation outcomes

Topic	Comment	Response
Proposed expansion	The assessment should include data to show downtimes on each part of equipment	A capacity analysis was prepared to assess the maximum site capacity from an equipment / traffic perspective and determine a feasible throughput limit. This capacity analysis included consideration of equipment down time and utilisation of existing equipment compared to total capacity. The outcomes of this analysis are provided in Section 7.2. DPIE accepted in principle the approach undertaken.

Topic	Comment	Response
	Weighbridge data must be provided to support delivery vehicle stacking analysis	Weighbridge data from June 2019 has been used to inform the traffic and stacking assessments. A summary of this data is provided in Section 7 and Appendix E (Traffic Impact Assessment).
	The worst-case scenario should also be considered in the assessment	A number of conservative assumptions have been included within the capacity analysis to present what is considered a 'worst case scenario'. A summary of the outcomes of the capacity analysis is presented in Section 7.2.
	Confirm if there is a trade waste agreement in place	A Trade Waste Agreement with Sydney Water (Conditional Consent 39940) is in place for discharge of treated water. An increase in discharge quantity would not be required for the Proposal. Further detail is provided in Section 10.3.
	The assessment should consider the new fire safety guideline 'Fire safety in waste facilities' – Fire and Rescue NSW	Existing fire infrastructure that would be utilised for the Proposal has been designed to align with the objectives of 'Fire safety in Waste Facilities' (FRNSW, 2020) (see Section 2.4.6)
	The Proposal should involve a comprehensive traffic assessment to justify the proposed expansion. In addition, the assessment must consider traffic impacts at the nearest intersection as there has been community concern in this regard	A detailed Traffic Impact Assessment (TIA) assessment has been prepared for the Proposal and is summarised in Section 7 and included as Appendix E. The TIA includes an assessment of intersection performance at surrounding intersections with and without the Proposal. The assessment shows that surrounding intersections would continue to operate at a similar level of service with the Proposal.
	The stockpile plan should be provided.	Provided as Appendix D.
	The EIS should include a cumulative assessment of the environmental impacts of the Proposal and the current Pick 'N' Payless application (SSD-8375).	Cumulative impacts including impacts with the Pick 'N' Payless site are discussed in Section 19.
	EPA should be consulted prior to the submission of the SSD Scoping Report	Consultation with the EPA is discussed in this section.
	Government agencies to be involved as part of this Proposal include (but are not limited to): Roads and Maritime, Blacktown City Council, Fire and Rescue	Engagement with government agencies during the preparation of the EIS is described in this section.

Topic	Comment	Response
	NSW, EPA and Catchment Authority.	

6.1.2 Environment, Energy and Science Group (as part of DPIE)

The EES Group were consulted by DPIE during the scoping report and request for SEARs stage. The EES group provided feedback on the Proposal including a number of assessment requirements. A summary of these requirements and how they have been considered in the preparation of the EIS is provided in Table 6-4.

A letter was also provided to EES Group in July 2020 to provide an update on the Proposal, described specialist investigation carried out, and how areas for consideration raised by EES Group during earlier stages of consultation were being addressed. EES Group responded to the letter to confirm they had no further comments at this stage.

Table 6-4 - EES Group consultation outcomes

Topic	Comment	Response
Aboriginal Cultural Heritage	EES recommended the SEARs include a number of Aboriginal Cultural Heritage requirements	No known objects or places of Aboriginal heritage significance have been identified within the Proposal site or immediate surrounds. Additionally, The Proposal does not require construction, excavation or any changes to the structure of the Proposal site. As such the Proposal would not encounter any Aboriginal objects even if present. The limited potential for impacts to Aboriginal Heritage has been further discussed in Section 13.
Biodiversity	A Biodiversity Development Assessment Report (BDAR) Waiver request is currently being assessed and will be forwarded under separate cover, therefore a BDAR is not necessary to be included within the SEARs.	A BDAR Waiver has been approved and is attached as Appendix M. As the Proposal does not require clearance of vegetation, any construction or any changes to the nature of operations, impacts to biodiversity are considered to be negligible. A discussion of the potential for biodiversity impacts has been provided in Section 16.
Flooding	EES recommended the SEARs include flooding requirements	A flooding assessment has been prepared to address this requirement and is detailed in Section 11 and Appendix J. The assessment identifies that there would be no significant change to the existing flood regime on Proposal site and no change to flood impacts on the surrounding area are predicted.

Topic	Comment	Response
Soil and Water	EES recommended the SEARs include water and soils requirements	A soils, water and contamination assessment has been prepared and is detailed in Section 10. A detailed Water Management Assessment has been prepared to support the assessment and is included as Appendix I. The existing water management infrastructure would be utilised for the Proposal and there would be no discharge from the operational areas in the Proposal site. As part of the assessment a detailed water balance has been prepared. The water balance identified that an increase in production demand for the Proposal would result in a reduced overflow discharges to the sewer and allow a greater volume of captured water to be reused.

6.1.3 Environment Protection Authority

An early consultation meeting was undertaken with the EPA prior to the issue of SEARs on the 27th November 2019 to detail the Proposal and seek feedback from the EPA. Outcomes from this meeting have been detailed in Table 6-5.

Further consultation with the EPA occurred through the scoping report / request for input to SEARs. In their response, EPA raised a number of areas for consideration. A summary of these areas for consideration and how they have been considered is provided in Table 6-5.

A letter was provided to the EPA in July 2020 to provide an update on the Proposal, described specialist investigation carried out, and how areas for consideration raised by the EPA during earlier stages of consultation were being addressed. A brief response from the EPA was provided to confirm receipt of the letter, however no new issues were raised.

Table 6-5 - EPA Consultation outcomes

Topic	Comment	Response
Early consultation		
Proposal justification	How does the Proposal relate to China Sword?	The Proposal would maximise the capability of an existing RRF as well as further reducing the volume of scrap metal going to landfill. The Proposal aims to increase the RRF's throughput limit while optimising the efficiency of the processes at the Proposal site. The Proposal would assist in achieving the higher recycling contamination standards prescribed by China's National Sword Policy. A discussion of the Proposal justification including the relevance of the China Sword policy is include in Section 3.

Topic	Comment	Response
Air quality	How will Oxycutting be managed?	Oxycutting will continue to be managed in accordance with the existing OEMP. Oxycutting operations will not change as part of the Proposal. Potential air quality impacts including a discussion of potential impacts from oxycutting have been assessed in Section 8.
Water management	The integrity of the on-site retention dam should be investigated.	A validation program to test retention basin integrity has been undertaken. Sell & Parker will continue to undertake yearly validation sampling to ensure ongoing efficacy of the retention basin. Further detail on the water management system is provided in Section 10 and Appendix I.
Water management	Is the recycled water used for dust suppression tested?	An assessment of the risks associated with stormwater reuse on the Proposal site was undertaken as a part of the 2015 development assessment approval conditions for the site. The assessment concluded that such risks were low and acceptable. Further detail on the water management system including water re-use on the Proposal site is provided in Section 10 and Appendix I.
Fire safety guidelines	The Proposal should be compliant with the NSW Fire Safety Guidelines.	Recent upgrades to the fire systems on the Proposal site have brought the Proposal site in line with current best practice. The efficacy of the Proposal site fire management systems has been endorsed through correspondence with Fire and Rescue NSW in mid 2019. Further detail on fire infrastructure utilised for the Proposal is provided in Section 2.4.6.
Scoping report / request for SEARs		
Air pollution	Impact on the amenity of surrounding community from smoke, odour, particulates and dust and the measures to be implemented to minimise or prevent these emissions including: • The feasibility of semi encapsulation of oxy-cutting	Potential air quality impacts including a discussion of potential impacts from oxycutting have been assessed in Section 8.3.2. As shown in the emissions inventory prepared for the Proposal, point source emissions are dominated by the wet scrubber stack, and emissions from the

Topic	Comment	Response
	activities to manage particulate emissions • A cumulative assessment of environmental impacts • Evidence that existing approved infrastructure can accommodate increased throughput – in particular the Emissions Collection System.	oxycutting process are low. The predicted impacts of odour and NO_X from the oxycutting process (and the site as a whole) are also shown to be significantly lower than the relevant criteria. As such, the inclusion of additional mitigation, such as encapsulation is not reasonable or feasible. Oxycutting will continue to be managed in accordance with the existing OEMP. An assessment of potential cumulative air quality impacts from the Proposal and nearby development is included in Section 19. A capacity analysis has been prepared for the Proposal which includes consideration of equipment down time and utilisation of existing equipment compared to total capacity. The outcomes of this analysis are provided in Section 7.2. The air quality assessment (Section 8) includes consideration of existing on-site infrastructure. Outcomes of the assessment demonstrate that the Proposal would not result in significant air quality impacts and would generally be within the relevant assessment criteria.
Water management	The proponent should investigate dredging and clay lining the existing stormwater retention basin as originally proposed in Environmental Impact Statement dated17 March 2014 to manage potential discharge of hydrocarbon contaminants. Long term data provided by the proponent was not conclusive in determining if there were any significant issues with the integrity of the retention basin. Long term data provided by the proponent indicated that dissolved concentration of a number of metals in the retention basin exceed ecological guideline values. The proponent should demonstrate that the use of retention basin water for dust suppression will not generate breathable mist that may cause any human-health risks.	A validation program to test retention basin integrity has been undertaken. Sell & Parker will continue to undertake yearly validation sampling to ensure ongoing efficacy of the retention basin. The existing water management system includes a disinfection system to minimise risks associated with water re-use on-site. An assessment of the risks associated with stormwater reuse on the Proposal site has been undertaken as required by the 2015 development assessment approval conditions. The assessment concluded that such risks were low and acceptable. Further detail on the water management system including water re-use on the Proposal site is provided in Section 10 and Appendix I.

Topic	Comment	Response
Noise and vibration	Impact on the amenity of surrounding community from movement of metal in particular during early morning and night periods.	Potential noise impacts are assessed in Section 9. Note that on the basis of noise measurements undertaken at Sell & Parker's Kings Park site and other similar metal recycling facilities, and after accounting for acoustic shielding provided by intervening structures between the site and both residential and industrial receptors, the character of noise as perceived at the receiver locations is not tonal, impulsive or low frequency.
Fire safety guideline	Safety in Waste Facilities' should be incorporated into stockpile design and separation.	The stockpile plan (Appendix D) has been designed in consideration of the on-site fire management infrastructure and the Fire Safety Guidelines (see Section 2.4.6).

6.1.4 Transport for NSW

Consultation with TfNSW occurred through the scoping report / request for input to SEARs. In their response, TfNSW raised a number of areas for consideration. A summary of these areas for consideration and how they have been considered is provided in Table 6-6.

A letter was also provided to TfNSW in July 2020 to provide an update on the Proposal, described specialist investigation carried out, and how areas for consideration raised by TfNSW during earlier stages of consultation were being addressed. TfNSW responded to the letter to confirm they had no further comments at this stage.

Table 6-6 TfNSW consultation outcomes

Topic	Comment	Response
Transport and accessibility	The EIS for the subject development should include a Traffic and Transport Impact Assessment.	A Traffic Impact Assessment has been prepared to address the SEARs and detailed requirements provided by TfNSW. The traffic assessment investigated the potential impacts of the Proposal on the surrounding traffic and transport network. The assessment found that additional traffic associated with the Proposal site would result in similar levels of service at nearby intersections as before the addition of development traffic. The TIA is included as Appendix E and summarised in Section 7.3.

Topic	Comment	Response
Transport policies and guidelines	Relevant policies and guidelines that could assist the Applicant with the preparation of the Traffic and Transport Impact Assessment include: • Guide to Traffic Generating Development (Roads and Maritime Services) • Road Design Guide (Roads and Maritime Services, 2002) • *Austroads Guide to Traffic Management – Part 12: Traffic Impacts of Development* (Austroads, 2020) • *Austroads Guidelines for Planning and Assessment of Road Freight Access in Industrial Areas* (Austroads, 2014) • *Cycling Aspects of Austroads Guides Australia Standards AS2890.3 (Bicycle Parking Facilities)* (Austroads, 2017) • Integrated Public Transport Service Planning Guidelines: Sydney Metropolitan Area 2013 (TfNSW, 2013)	A Traffic Impact Assessment has been prepared in accordance with the relevant policies and guidelines as identified within TfNSW's submission. The TIA is included as Appendix E and summarised in Section 7.

6.1.5 Blacktown City Council

Consultation with Blacktown City Council has been undertaken through the scoping report / request for input to SEARs. In their response, Blacktown City Council raised a number of areas for consideration. A summary of these areas for consideration and how they have been considered is provided in Table 6-7.

A letter was provided to Blacktown City Council in July 2020 to provide an update on the Proposal, described specialist investigation carried out, and how areas for consideration raised by the Blacktown City Council during earlier stages of consultation were being addressed. No response was provided to this letter.

Table 6-7 Blacktown City Council consultation outcomes

Topic	Comment	Response
Consultation	We trust that all relevant owners and occupiers of nearby residential properties within a 1 km radius of the site be informed of this proposal, in particular the residential properties to the east.	As described in Section 6.2, consultation has been undertaken with community members within a 1 km radius of the Proposal site. A summary of consultation outcomes is provided in Section 6.2.
Air Quality Impact Assessment	An Air Impact Assessment must be conducted by a suitably qualified expert in line with the Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2011).	An Air Quality Assessment has been prepared by Northstar Air Quality Consultants (whom are suitably qualified) and has assessed potential air quality impacts in accordance with the *Approved Methods for the*

Topic	Comment	Response
		Modelling and Assessment of Air Pollutants in New South Wales (NSW EPA, 2017a). The assessment has been summarised in Section 8 and is included as Appendix G.
Noise Impact Assessment	Conduct a noise and vibration assessment by a suitably qualified consultant in accordance with NSW Industrial Noise Policy (EPA, 2000).	A Noise and Vibration Impact Assessment (NVIA) for the Proposal has been prepared by Renzo Tonin & Associates (whom are suitably qualified) which assess impacts in accordance with the *Noise Policy for Industry* (2017) (NPfI). The NVIA includes: • Identification of noise sources and receivers • An assessment of potential operational noise impacts including consideration of surrounding developments • An assessment of road traffic noise The assessment has been summarised in Section 9 and is included as Appendix H.
Waste Management	• Identify all waste streams including quantity, details and types • Provide details of waste handling and transport • Details waste stockpiles	The Proposal is operational only and would not change the existing approved waste types or their handling and processing. A description of waste management at the Proposal site is provided in Section 2.
Surface Water and Wastewater Management	• Describe in intake and discharge water at the site • Assess potential impacts to surface water, ground water and wastewater • Assess impacts to surrounding water bodies • Described control measures • Describe ongoing management	A soils, water and contamination assessment has been prepared and is detailed in Section 10. As is current practice, no water would be discharged from the operational areas on the Proposal site into local waterways. A detailed water management assessment has been prepared to support the assessment and is included as Appendix I. The existing water management infrastructure would be utilised for the Proposal and there would be no discharge from operational areas. As part of the assessment a detailed water balance has been prepared. The water balance identified that an increase in production demand for the Proposal would result in a reduced overflow discharges to trade waste and allow a greater volume of captured water to be reused.

Topic	Comment	Response
		As the Proposal site is sealed and no new infrastructure would be required, the Proposal would not result in an impact to groundwater (Section 10.3.2). Mitigation (or control measures) and ongoing management has been provided within Section 10.4.
Engineering	Any Civil Engineering Works must follow Blacktown City Council's Engineering Guide for Development - 2005 to facilitate the efficient processing of engineering plan submissions, and to ensure that infrastructure associated with any development is designed and constructed to be safe, serviceable, economical to maintain and meets community expectations.	The Proposal would utilise existing approved infrastructure and will not require civil engineering works.
Stormwater drainage	Ensure development meets Council stormwater and flooding standards.	The Proposal would utilise existing approved infrastructure and will not require the construction of new infrastructure on the Proposal site. A flooding assessment has been prepared and has been summarised in Section 10 and detailed in Appendix I. The assessment identifies that there would be no significant change to the existing flood regime on Proposal site and no change to flood impacts on the surrounding area are predicted.
Traffic management	Additional traffic volumes. We request that a traffic and parking analysis report prepared by a suitably qualified person be sought in the draft SEARs. The accumulative impact of this proposal along with adjacent industrial development, particularly that to the west of the site	A Traffic Impact Assessment (including an assessment of increased traffic volumes and parking requirements) has been prepared for the Proposal and is included as Appendix E and summarised in Section 7. The traffic assessment investigated the potential impacts of the Proposal on the surrounding traffic and transport network. The assessment includes an assessment of potential cumulative impacts with the adjacent Pick 'N' Payless development. The assessment found that additional traffic associated with the Proposal site would result in similar levels of service at nearby intersections as before the addition of development traffic.
Planning matters	• The EIS is to demonstrate that appropriate facilities are available	The Proposal would utilise existing approved infrastructure to process an increased throughput. The Proposal would not require additional

Topic	Comment	Response
	to serve the needs of the (additional?) staff. • That the applicant be required to address in the EIS all relevant environmental planning instruments and DCPs. • We request that landscaping, particularly around the perimeter of the site and adjacent to Breakfast Creek, continue to be improved and embellished and that this be requested of the applicant to address in the EIS. The same applies to fencing and perimeter, machinery and building acoustic treatment. • That the applicant adequately addresses employee and visitor safety, including a fire and incident management strategy.	staff. A description of the Proposal site include staff facilities is included in Section 4. A discussion of the how the Proposal addresses relevant environmental planning instruments and DCPs is presented in Section 5. As physical works would not be required for the Proposal, additional landscaping works are not considered to be required. Existing landscaping, fencing and barriers (or shielding) is located around the Proposal site boundaries (refer to Section 2). An assessment of the potential visual impacts of the Proposal including consideration of existing landscaping is provided in Section 17. Employee and visitor safety would continue to be managed through the Proposal sites existing Operational Environmental Management Plan and Emergency Response Plan which would be updated to reflect the Proposal.

6.2 Community Consultation

During the preparation of the EIS, consultation was primarily undertaken to facilitate engagement between the project team and key community stakeholders. This engagement served a dual purpose:

- To identify key community issues for consideration in the EIS and associated technical studies
- To create broad awareness of the Proposal so as to remove uncertainty around the Proposal.

The community consultation was undertaken during development of the EIS. Consultation activities undertaken to date include:

- A contact number and project email address (development_approvals@sellparker.com.au) were used to provide a central point of contact for community enquiries
- Around 1,850 letters were mailed out to landowners and the community (with a 1 km radius of the Proposal) seeking feedback on the Proposal. The letters contained a community newsletter and Proposal timeline as well as methods for submitting enquiries (Appendix O).

It was initially envisaged to undertake face to face community information sessions however this was not able to be undertaken as a result of the risks associated with COVID-19.

Information provided to the community is presented in Appendix O. A total of 9 residents and nearby business owners responded to the letters provided. A summary of the comments raised by the residents and where they have been addressed in the EIS is provided in Table 6-8.

Table 6-8 Community comments

Topic	Comment	Response
Noise	Concerns around existing noise in particularly, conveyor belt noise, beeping, reversing alarms. Concerns that the Proposal would increase noise levels. Concerns around noise impacts to residential receivers.	The Proposal would not require a change to the existing approved operational or maintenance hours. To assess potential noise impacts associated with the Proposal a Noise and Vibration Impact Assessment has been prepared. The assessment has been summarised in Section 9 and is included as Appendix H. The assessment considers potential noise impacts to nearby residential receivers including sleep disturbance impacts. The assessment found that the Proposal would comply with the established noise criteria at all receiver locations and would not result in a significant noise impact. Notwithstanding these findings Sell & Parker are implementing a number of measures to further reduce noise emissions from the Proposal site such as beeper-less signals and improved fencing.
Stormwater	Is there discharge to Breakfast Creek?	The existing water management infrastructure would be utilised for the Proposal and as is current practice, there would be no discharge from operational areas on the Proposal site (into Breakfast Creek).
Air quality	Concerns around dust impacts to properties	An air quality assessment has been prepared by Northstar Air Quality Consultants and has assessed potential air quality impacts in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (NSW EPA, 2017a)*. The assessment has been summarised in Section 8 and is included as Appendix G. The assessment identified that operation of the Proposal would not result in exceedance of the established air quality criteria and would not result in a significant impact to surrounding receivers.
Documentation	Please provide a link to the submission page of DPIE	The Proposal would be located on the DPIE major projects web page (https://www.planningportal.nsw.gov.au/major-projects/project/25901)

Following lodgement of the EIS, additional communications and engagement will be undertaken with community groups, stakeholders and other individuals.

6.3 Consultation during and after the EIS Exhibition

This EIS would be placed on public display for 28 days in accordance with Schedule 1, Division 2 (Part 9, SSD applications) of the EP&A Act. During the exhibition period, DPIE invites written submissions on the Proposal from the community, government and non-government agencies, stakeholders and other interested parties.

After the exhibition of the EIS, the Secretary will provide copies of any submissions received to the Applicant. The Secretary may then require the Applicant to prepare a submissions report to respond to the issues raised in submissions. The Secretary will prepare an environmental assessment report and provide it to the Minister for Planning and Public Spaces. The Minister will then decide whether or not to approve the Proposal and the conditions attached.

7 TRAFFIC AND TRANSPORT

This section provides an assessment of the potential traffic and transport impacts associated with the Proposal. A detailed Traffic and Transport Impact Assessment has been prepared by The Transport Planning Partnership (TTPP) and is included in as Appendix E.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 7-1. A full SEARs compliance table is presented in Appendix A.

Table 7-1 – Traffic and transport SEARs

SEARs	Where Addressed
Details of all traffic types and volumes likely to be generated during construction and operation, including of haul routes. Traffic flows are to be shown diagrammatically to a level of detail sufficient for easy interpretation.	Section 7.2 and 7.3 Appendix E TIA
Plans demonstrating how all vehicles likely to be generated during construction and operation and awaiting loading, unloading, or servicing can be accommodated on the site to avoid queuing in the street network.	Section 7.3 Appendix E TIA
The EIS must include an assessment of the predicted impacts of this traffic on road safety and the capacity of the road network, including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model	Section 7.2 and 7.3 Appendix E TIA
The EIS must include swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site	Section 7.2 and 7.3 Appendix E TIA
The EIS must include plans of any proposed road upgrades, infrastructure works, or new roads required for the development	Section 7.3 Appendix E TIA
The EIS must include an assessment of potential impacts on local road pavement lifespan.	Section 7.3 Appendix E TIA

7.1 Methodology

The methodology for the assessment of potential traffic impacts for the Proposal involved:

- Defining the extent of the road network potentially impacted by the Proposal (the road network)
- Determining the roadway capacity for each road within the road network
- Defining the existing site access and layout
- Identifying existing traffic volumes for the Proposal site and key intersections
- Quantifying the vehicle movements likely to be generated by the Proposal
- Defining the heavy vehicle stacking capacity for the Proposal site
- Defining the performance levels (measured via level of service (LoS)) for key intersections

- Identifying the assessment scenarios to determine potential traffic impacts in the future
- Assessing the impact of the Proposal against the traffic assessment scenarios.

The assessment also includes consideration of access and circulation within the Proposal site, as well parking and public transport access.

7.1.1 Defining the road network

Key roads from the surrounding road network were included within the assessment based on their use as a haulage route and therefore their potential to be impacted by vehicle movements associated with the Proposal. The key roads included within the assessment are described within Section 7.2.1 and comprise of:

- Tattersall Road
- Sunnyholt Road
- Vardys Road.

Other surrounding local roads, such as Melissa Place and Romford Road would not be utilised as haulage routes for the Proposal.

7.1.2 Determining roadway capacity and safety

The capacity of a road refers to the number of vehicles that a road can physically accommodate. To determine utilisation of roadway capacity from traffic flows, the numbers of light vehicles and heavy vehicles travelling on a given road are converted to a uniform unit of measure, passenger car unit (pcu) as presented in Table 7-2. A multiplication factor is applied based on the type of vehicle recorded by traffic tube counts or as estimated for future scenarios. This is further discussed in Section 7.3.2.

Table 7-2 – Passenger car units factor by vehicle type

Vehicle Type	PCU factor
Passenger car	1.0
Light commercial vehicle (LCV)	1.0
Rigid heavy	2.0
Bus	2.0
Articulated heavy	4.0

Table 7-3 below, provides the operational capacity for urban roads extracted from the Road and Maritime Service's "*Guide to Traffic Generating Developments*" (2002) (the Guide). Each of the key roads accessing the Proposal site were evaluated against the criteria in Table 7-3 to determine their current and future capacity. Analysis was then completed to determine the Proposal's potential to impact the capacity of each road.

Table 7-3 – Typical mid-block capacities for urban road with interrupted flow

Type of road	One-way mid-block land capacity (pcu/hr)	
Median or inner lane	Divided road	1,000
	Undivided road	900
Outer or kerb lane	With adjacent parking lane	900
	Clearway conditions	900
	Occasional parked cars	600

Type of road	One-way mid-block land capacity (pcu/hr)	
4 lane undivided	Occasional parked cars	1,500
	Clearway conditions	1,800
4 lane divided	Clearway conditions	1,900

It is generally accepted that on a two-way divided road, the operational capacity can be as high as 1,000 pcu per hour, per lane. When traffic volumes exceed the operational capacity, traffic delays and congestion along the roadway may be experienced. Exceedances of roadway capacity may also impact on road safety.

7.1.3 Determining existing traffic conditions

Traffic movements surveys were undertaken between Thursday 13th and Thursday 20th February 2020 to determine the existing traffic conditions. The surveys comprised the following:

- An automatic traffic tube count on Tattersall Road for a 7-day period (between Thursday 13th and 20th February 2020) as a part of the road capacity analysis
- Intersection surveys at key nearby intersections and the three (3) Proposal site access driveways on Tattersall Road. Intersection surveys were undertaken on Thursday 13th February and Saturday 15th February 2020 during the following road network peak periods:
  - Thursday AM survey period: 7:00am – 10:00am
  - Thursday PM survey period: 4:00pm – 7:00pm
  - Saturday Midday survey period: 10:00am – 1:00pm.

The periods during which the surveys were undertaken, were considered to reflect normal operating conditions for the road network.

The following intersections were surveyed to collect existing traffic movement counts:

- Sunnyholt Road – Vardys Road
- Sunnyholt Road – Tattersall Road
- Vardys Road – Tattersall Road
- Tattersall Road – Eastern Site Access Driveway
- Tattersall Road – Central Site Access Driveway
- Tattersall Road – Western Site Access Driveway.

Based on the traffic movement counts, the weekday morning and evening peak hours and weekend peak hour have been identified as:

- Thursday AM peak hour: 7:45am – 8:45am
- Thursday PM peak hour: 4:00pm – 5:00pm
- Saturday peak hour: 11:45am – 12:45pm.

7.1.4 Traffic generation rates

Under the *State Environmental Planning Policy (Infrastructure) 2007*, the Proposal site is considered a 'traffic-generating development' and it is a requirement to assess the impact of traffic associated with the future operation of the Proposal site.

Generally, the Guide is used as a tool to determine future traffic generation rates for different developments. The Guide contains traffic generation rates for four (4) industrial development types, namely, factories, warehouses and business parks, similar to the Proposal. For each development type, a traffic generation rate is assigned per m^2 of Gross Floor Area (GFA). Whilst the Proposal could be considered a similar development type, traffic generation rates for the Proposal are not directly impacted by changes in the GFA. Rather, vehicle movements are influenced by the amount of material throughput capacity. Therefore, the application of the Guide's traffic generation rates is not considered appropriate for the Proposal.

The traffic generation analysis of the Proposal has been undertaken on a 'first principles' approach using weighbridge data from the Proposal site. Weighbridge data has been extracted for the 25 days of June 2019. This data is considered to be reflective of operations at around 340,000 tpa, further discussed in Section 7.2.3. To estimate future traffic volumes when operating at 600,000 tpa (i.e the Proposal), the existing weighbridge has been extrapolated using the same vehicle mix and proportions. The types of

Vehicles typically transporting material to the Proposal site include light rigid vehicles (i.e. utes and small delivery vans) and up to 19 m semi-trailer trucks. It is noted occasionally, customers may access the Proposal site to deliver material in 25 m B-double truck. For the purposes of this assessment, these have been split into light vehicles (LV) and heavy vehicles (HV). LV's have been defined as any vehicle less than 3 tonnes, i.e. passenger cars, utes and vans. HV's are any vehicle greater than 3 tonnes, i.e. SRVs, MRVs, HRVs, and semi-trailers.

A breakdown of the traffic rates per vehicle and a description of vehicle types and movements has been presented in Section 7.2.3.

7.1.5 On-site stacking capacity

On-site stacking capacity has been assessed on the basis of a 25-minute turnaround time per vehicle within each processing area. This duration has been calculated as the current average duration spent on-site based on weighbridge incoming and outgoing data including accommodation for a 19 m semi-trailer (the largest vehicle to typically access the site). The available on-site stacking spaces can be referred to in Figure 4-1 and Table 7-4.

Table 7-4 – Processing types and capacity available on-site

Processing Type	Available Stacking Spaces
Non-Ferrous (External)	4
Non-Ferrous (Internal)	>5
Pre-Shredder	2
Shredder	8
Lindemann Shear	N/A*
Danieli Shear	11
Oxycutting	1
Floc and Shred	4

(*) The Lindemann Shear does not require nominated stacking space as the facility is infrequently accessed by trucks (i.e. existing 3 trucks per month) and will continue to be accessed infrequently (i.e. future 5 trucks per month).

Light vehicles can enter the non-ferrous shed when delivering material. Whilst not shown on Figure 4-1, there is sufficient space to accommodate more than five (5) light vehicles within the non-ferrous shed. As such, five (5) stacking spaces have been considered for the stacking capacity assessment.

In one hour, each stacking space can accommodate 2.4 vehicles (60 minutes / 25 minutes). The number of vehicles which can be accommodated at each material processing location on-site is a function of:

- The number of available stacking spaces
- The stacking space turnover rate (i.e. 2.4 vehicles per space, per hour).

To determine whether the number of vehicles can be satisfactorily accommodated within the available stacking spaces, a comparison is made between:

- The number vehicles accessing the Proposal site per hour (per processing area)
- The stacking space threshold.

7.1.6 Intersection level of service (LoS)

The existing operation of the nearby intersections to the Proposal site have been assessed using SIDRA Intersection version 8.0, a computer-based modelling package which assesses intersection performance under prevailing traffic conditions. SIDRA calculates intersection performance as a LoS. SIDRA provides analysis of the operating conditions which can be compared to the performance criteria set out in Table 7-5. Generally, a LoS of D or above is considered acceptable for the intersection. Any E or F LoS is considered to have delays and is at capacity for the intersection.

Table 7-5 – Level of service criteria for intersection operation

Level of service (LoS)	Average delay (seconds per vehicle)	Traffic, signals, roundabout	Give way and stop signs
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29-42	Satisfactory	Satisfactory, but accident study required
D	43-56	Operating near capacity	Near capacity and accident study required
E	57-70	At capacity, at signals, incidents will cause excessive delays, roundabouts require other control mode	At capacity, requires other control mode

Level of service (LoS)	Average delay (seconds per vehicle)	Traffic, signals, roundabout	Give way and stop signs
F	Greater than 71	Unsatisfactory with excessive queuing	Unsatisfactory with excessive queuing: requires other control mode

7.1.7 Assessment scenarios

To determine the potential impact on the surrounding road network, both in terms of roadway capacity and intersection LoS, the likely traffic distribution and traffic generation scenarios were identified.

Traffic growth

Background traffic growth has been adopted based on the Sydney Strategic Traffic Forecasting Model (STFM) traffic volumes obtained from Transport for NSW. From the STFM traffic volumes, the background growth rates (per cent per annum) from 2020 to 2030 can be determined and are based on approved developments in Sydney. STFM growth plots have been used to increase background traffic flows for SIDRA modelling of future scenarios for the development discussed further in Section 7.3.2.

Traffic distribution

The directional split of vehicles traveling to or from the Proposal site used within the traffic modelling is based on the current distribution of:

- 60% travel via Sunnyholt Road, north of the site
- 20% travel via Sunnyholt Road, south of the site
- 20% travel via Vardys Road, west of the site.

Operational traffic scenarios

To assess the traffic implication arising from the Proposal, intersection capacity analysis has been undertaken for the key nearby intersections (detailed in Section 7.1.3).

Operational traffic flows have been modelled using SIDRA software to assess potential traffic impacts across a number of existing and future scenarios. The following scenarios have been assessed:

- Scenario 0 – Existing conditions (inc. base case)
- Scenario 1 – Future conditions with development traffic in the opening year of the Proposal (Opening year with the Proposal - 2020)
- Scenario 2 – Future conditions with background traffic growth 10 years post-opening of the Proposal (Future conditions without the Proposal - 2030)
- Scenario 3 – Future conditions with background traffic growth and development traffic 10 years post-opening of the Proposal (Future condition with the Proposal 2030).

Signalised intersections have used optimised phase times in SIDRA for Scenarios 1 to 3. This approach is consistent with advice from TfNSW on other recent projects. The results of the traffic flows are presented in Section 7.3.2.

7.1.8 Pavement lifespan

To the assess the impacts of pavement lifespan on Tattersall Road a pavement assessment was undertaken by Arcadis (Appendix F) as part of the Proposal.

Existing traffic loadings were estimated based on the current traffic volumes measured by the traffic counts on Tattersall Road. Future traffic loadings were estimated using the traffic model developed as part of the TIA.

An application was submitted to Blacktown City Council for information relating to the material, profile and age of Tattersall Road but no response has been received prior to EIS submission. Therefore, for the purposes of this assessment the pavement lifespan has been assumed to be 20 years.

Using these inputs, the impact of the Proposal on pavement lifespan has been calculated for Tattersall Road and has been detailed in Section 7.3.2.

7.1.9 Parking

There would be no changes to workforce and visitation at the Proposal site or parking requirements. However, an assessment has been provided on the ability of the existing parking arrangements to meet current and future parking requirements.

Due regard has been given to the parking rates as stipulated by Blacktown City Council Development Control Plan (DCP) 2015 (BCC, 2015a). The DCP provides parking rates for land uses including light industry, general industry, and warehouse or distribution centres.

According to Blacktown LEP 2015, a “resource recovery facility” does not fall under the “industrial” land use classification. This would be related to the varying nature of activities of each land use; that is, a resource recovery facility encompasses separating, sorting, processing or waste treating activities whereas industrial / warehousing / distribution involves the manufacturing, storage or distribution of goods.

As has been the case with other SSD applications for resource recovery facility developments in Sydney, on-site car parking provision is more appropriately determined by ‘first principles’. ‘First principles’ is a method of estimating on-site parking demand based on the size of the workforce employed at the Proposal site to run the operations. This method generates a more realistic and practical on-site parking provision for staff and visitors associated with the Proposal site which does not categorically fit the class of an industrial development as stipulated in Council’s DCP.

7.2 Existing Environment

7.2.1 Existing road network

The Proposal site is well connected to arterial, state and regional roads. The M7 Motorway is located to the north of the Proposal site. Sunnyholt Road and Old Windsor Road are located to the east, and Vardys Road adjoins to Tattersall Road to the west. The Proposal site is located on the south side of Tattersall Road and contains two (2) ingress driveways, a western and central driveway and one eastern egress driveway. A description of the key roads surrounding the proposal is provided below:

- **Tattersall Road:** A two-way local road serving access to industrial land uses including the Proposal site runs in an east-west direction. A broken centreline marking separates the traffic lanes and unrestricted parking is available on both sides of the road near the Proposal site. The marked speed limit on Tattersall Road is 50 km/h. Tattersall Road adjoins Sunnyholt Road in the east at a signalised intersection and Vardys Road in the west at a priority-controlled (seagull) junction.
- **Sunnyholt Road:** A state road providing access to the M7 Motorway, Blacktown town centre and Old Windsor Road. In the vicinity of the Proposal site, Sunnyholt Road comprises a four-lane two-way road separated by a central median with a marked speed limit of 70 km/h. A bus transitway (T-way) runs parallel on the eastern side of Sunnyholt Road and parking is prohibited along both sides of Sunnyholt Road.
- **Vardys Road:** A regional road runs parallel to the M7 Motorway, it is configured with two (2) lanes in each direction by a central median. Parking is prohibited on both sides of the road and the marked speed limit is 60 km/h.

Key intersections within the road network considered to have potential to be impacted by the Proposal include:

- Sunnyholt Road – Vardys Road (signalised intersection)
- Sunnyholt Road – Tattersall Road (signalised intersection)
- Vardys Road – Tattersall Road (priority-controlled intersection).

The road network and key intersections providing access to the Proposal site are displayed in Figure 7-1.

LEGEND

- Proposal site boundary
- Property boundary
- Watercourse

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Coordinate System: GDA 1994 MGA Zone 56
Date issued: August 4, 2020
Aerial imagery source: nearmap Jun 2020

1:7,500 at A4

Figure 7-1: Existing road network and key intersections

7.2.2 Existing roadway capacity and safety

The maximum number of pcu per hour was just below 300 pcu in the westbound direction between 2:00 and 3:00pm (Figure 7-2). Tattersall Road operates well below the RMS threshold as stated in the Guide of 1,000 pcu per lane, per hour (RMS, 2002).

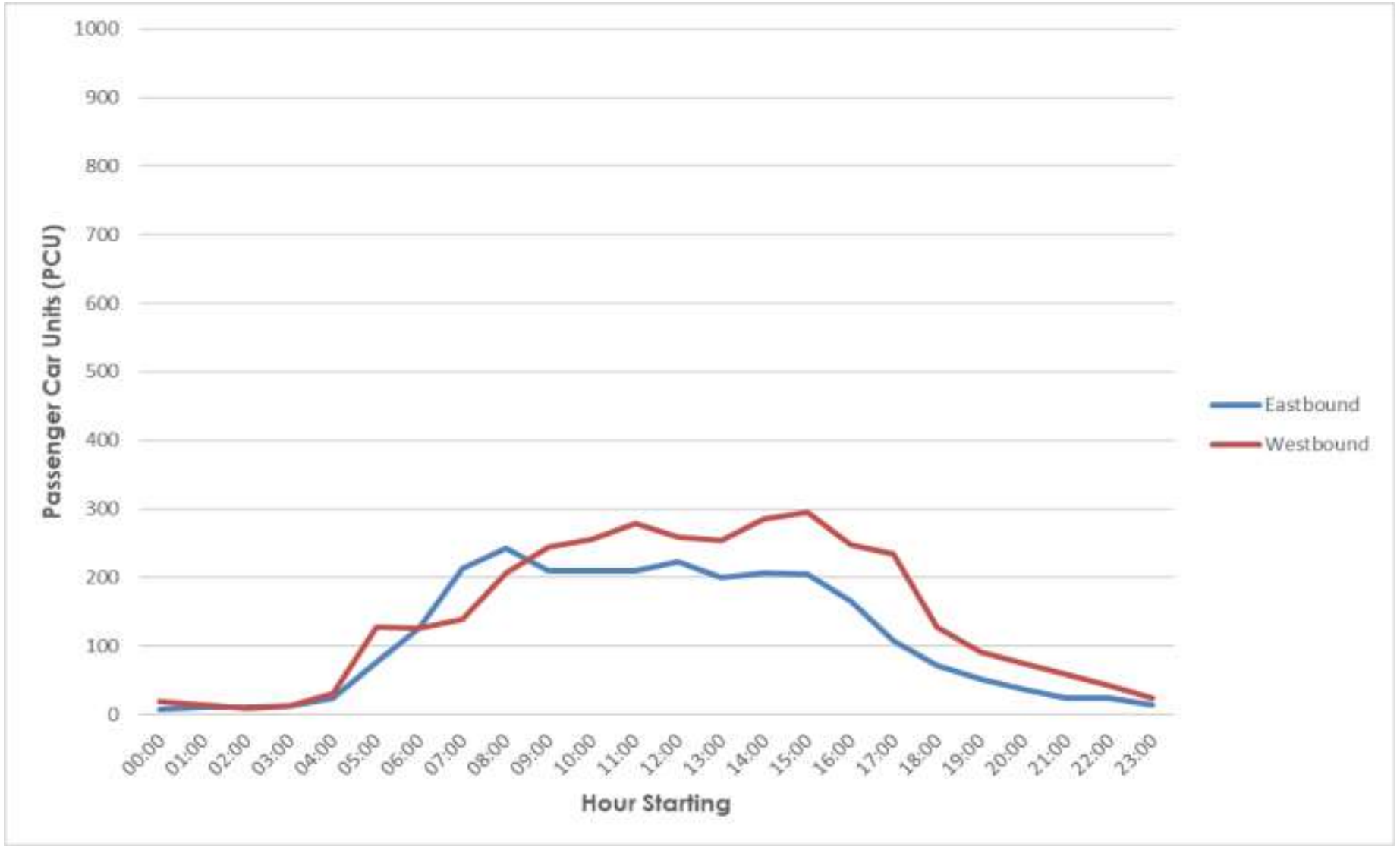


Figure 7-2 – Tattersall Road two-way flows (TTPP February 2020)

7.2.3 Existing traffic volumes

Traffic generation from existing operations

During the annual licence period (up to 19 April 2020), the materials received and processed were as follows:

- Received (incoming): 342,644 tonnes
- Processed (outgoing): 346,056 tonnes.

Notwithstanding this, the current permissible limit for material throughput is 350,000 tpa. Thus, the existing site-generate traffic volumes have been assessed at the permissible limit which forms the “base case” for the assessment presented. The base case was developed by ‘scaling up’ actual weighbridge using the same vehicle mix and proportions.

Vehicles typically transporting material to the Proposal site include light rigid vehicles (i.e. utes and small delivery vans) and up to 19 m semi-trailer trucks. It is noted occasionally, customers may access the Proposal site to deliver material in 25 m B-double truck.

Vehicles can access the existing RRF via the three (3) driveways at the southern side of Tattersall Road (refer to Figure 2-4), of which two (2) are ingress driveways and the one is an egress eastern driveway (Table 7-6). The access driveway used is determined by the type of vehicle and the nature of the trip (e.g. deposit material, staff movement, etc).

Table 7-6 – Access arrangements for the Proposal site

Driveway	Arrangement
Western	• Vehicles delivering non-ferrous material with a tare weight greater than 10 t (i.e. HRVs, semis, etc.)
Central	• Vehicles delivering non-ferrous material with a tare weight less than 10 t (i.e. up to and including MRVs) • Vehicles arriving to the Proposal site to collect floc and shred material. These vehicles collect multiple loads from the Proposal site per day. Deliveries to the other facilities on the Proposal site also access this driveway. Each vehicle enters via the western driveway when first arriving at the Proposal site to establish a tare weight, which is used for subsequent trips throughout the day. These vehicles weigh out via the eastern driveway.
Eastern	• Egress of all vehicles is via the eastern driveway.

Existing operational activities generate approximately 298 vehicles per day or 19 vehicles per hour across a 15-hour workday. A breakdown of hourly and daily vehicle numbers generated by the Proposal site operations in the base case is presented in Table 7-7.

Table 7-7 – Hourly and daily vehicle numbers generated by the existing Proposal site in the base case

Period	Light vehicles	Heavy vehicles	Total
Hourly	3	16	**19**
Daily	51	247	**298**

Traffic volumes

Movements ingoing and outgoing of the existing RRF as measured during traffic surveys for the peak periods are shown in Table 7-8. A visual summary of all traffic movements recorded during these periods are shown in Figure 7-3, Figure 7-4 and Figure 7-5.

Table 7-8 – Peak period traffic movements (existing) associated with the Proposal site

Direction	Peak Period	Light vehicles	Heavy vehicles	Total
Inbound	Weekday AM	10	7	**17**
	Weekday PM	2	4	**6**
	Weekend	2	2	**4**
Outbound	Weekday AM	4	7	**11**
	Weekday PM	35	7	**42**
	Weekend	27	2	**29**

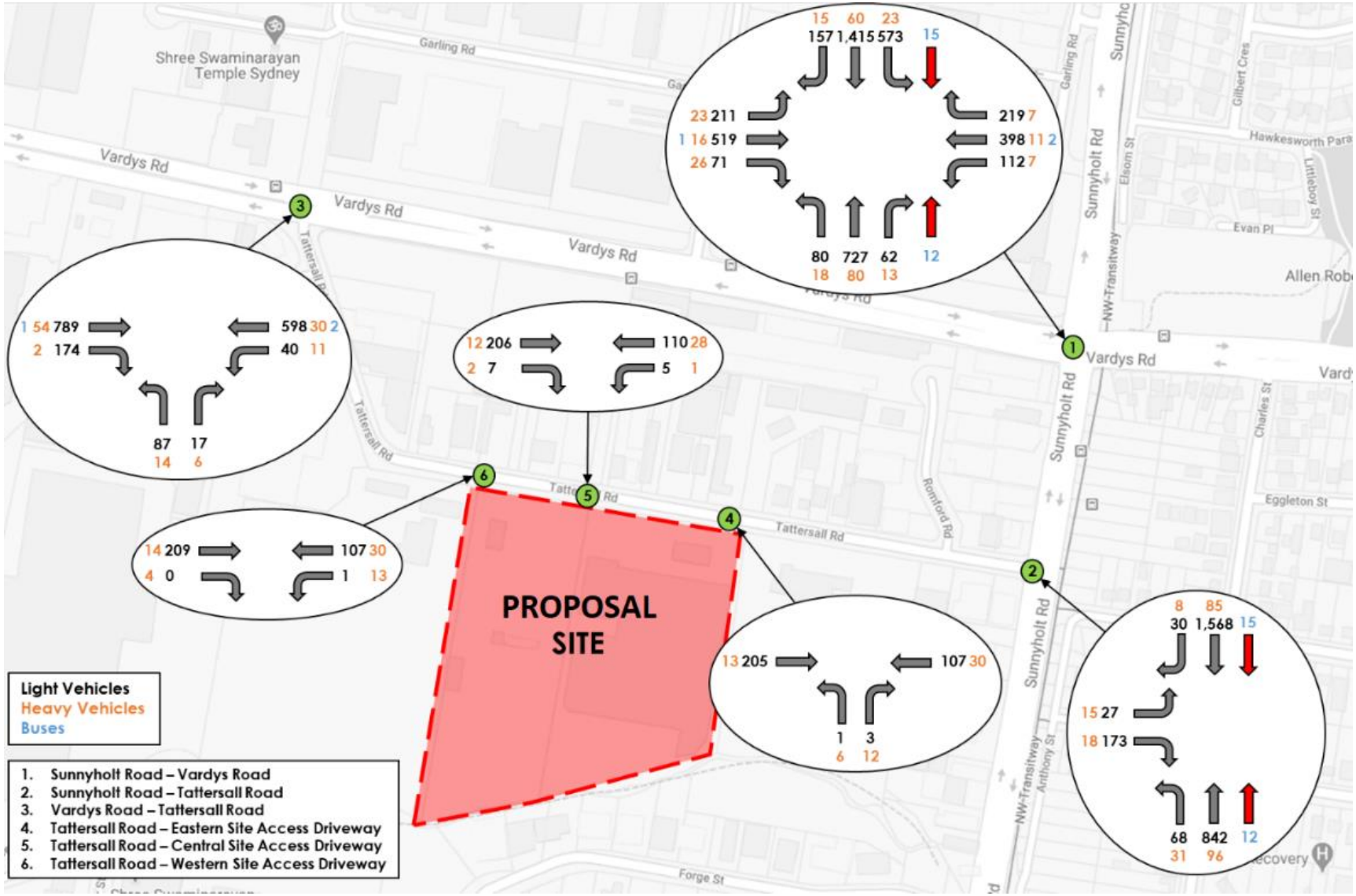


Figure 7-3 – Weekday AM peak traffic movements

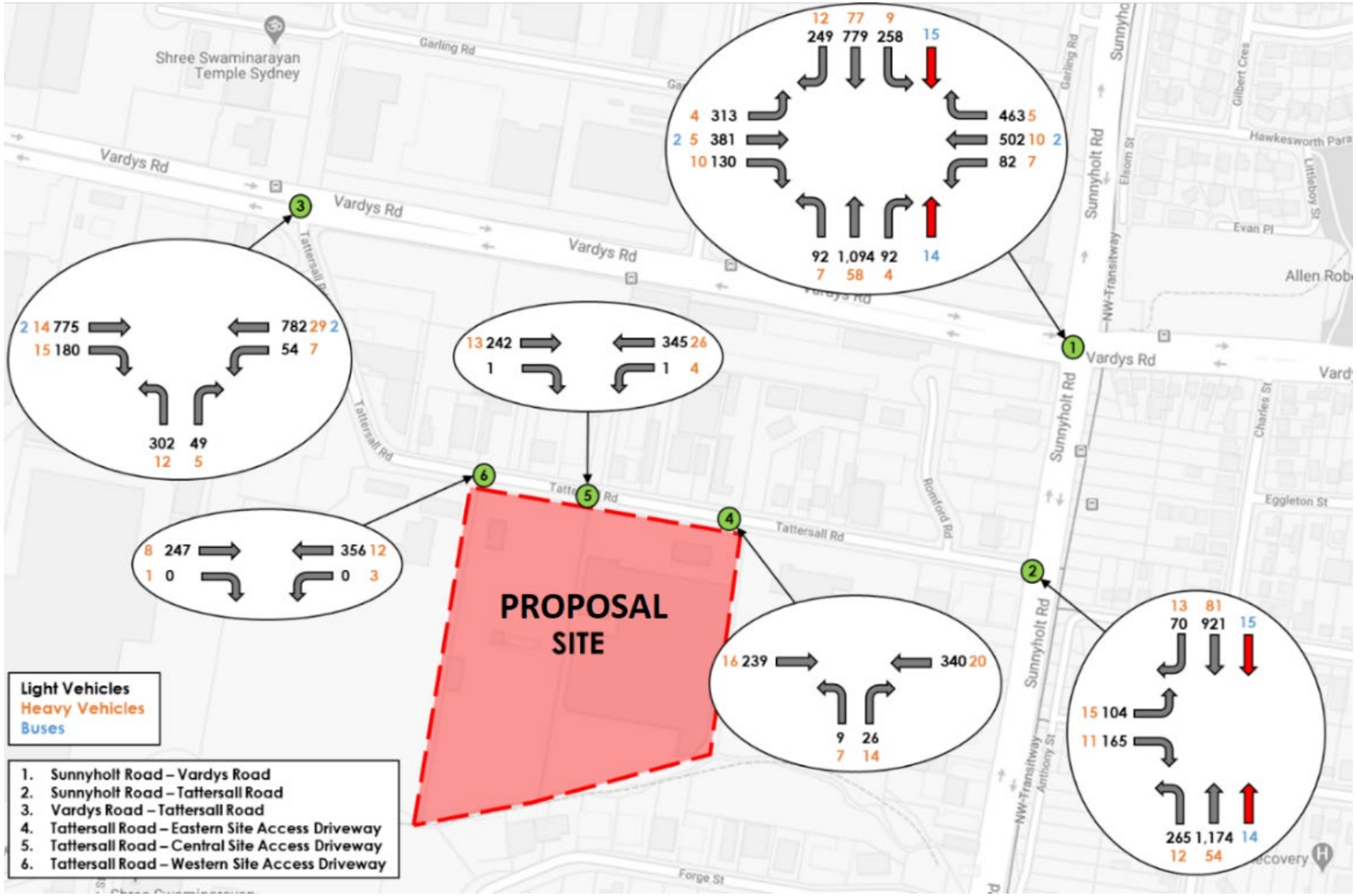


Figure 7-4 – Weekday PM peak traffic movements

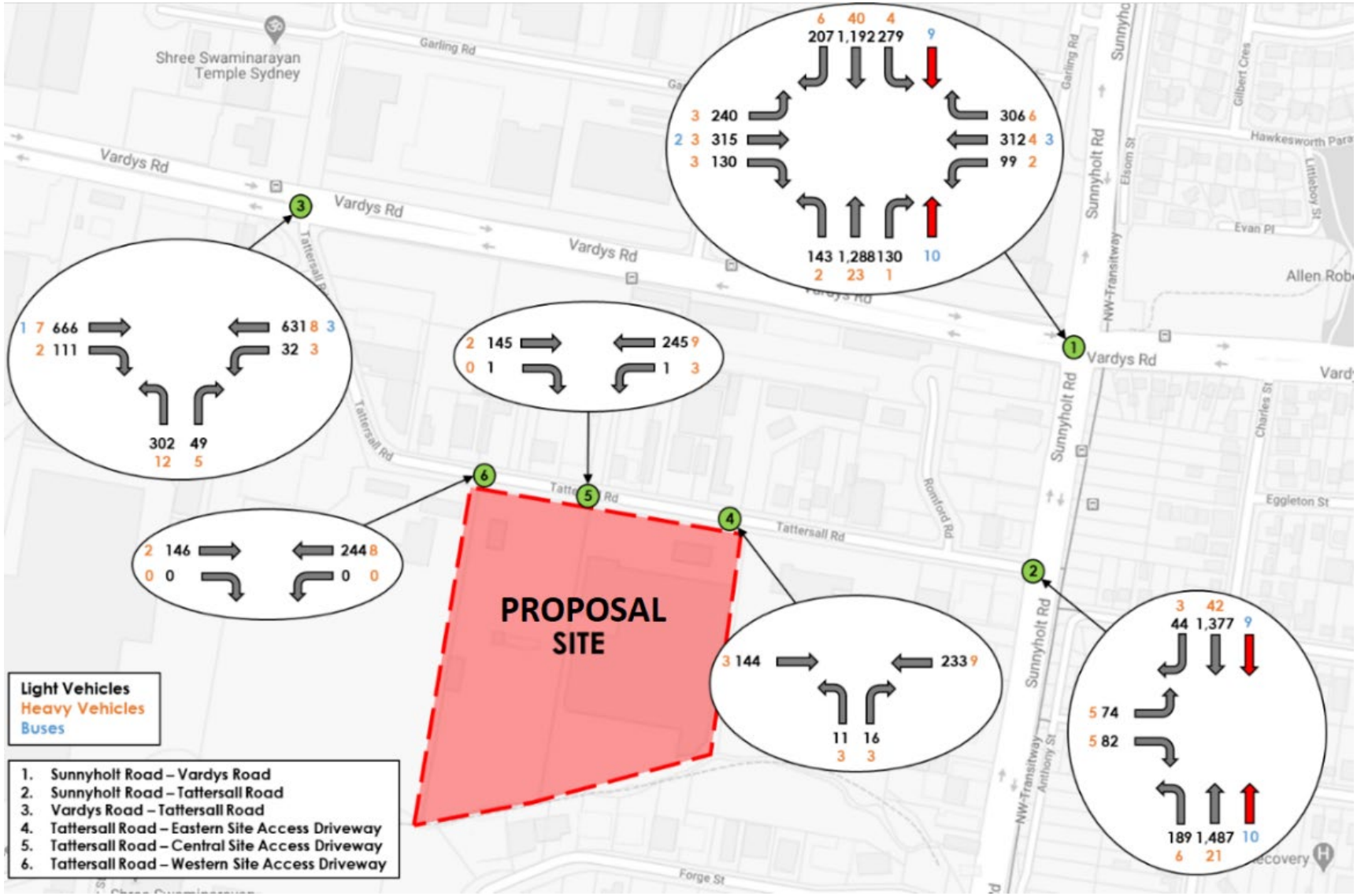


Figure 7-5 – Saturday peak traffic movements

7.2.4 Existing intersection performance

The existing intersection operational performance during the weekday AM and PM peak periods and weekday peak period are summarised in Table 7-9.

Table 7-9 – Existing intersection performance

Intersection	Intersection Type	AM Peak		PM Peak		Weekend Peak	
		Average delay (sec)	LoS	Average delay (sec)	LoS	Average delay (sec)	LoS
Sunnyholt Road – Vardys Road	Signalised	>100	F	61	E	88	F
Sunnyholt Road – Tattersall Road	Signalised	11	A	65	E	67	E
Vardys Road – Tattersall Road	Priority (Give way)	12	A	16	A	9	A
Tattersall Road – Eastern Site Driveway	Priority (Give way)	11	A	13	A	8	A
Tattersall Road – Central Site Driveway	Priority (Give way)	5	A	6	A	6	A
Tattersall Road – Western Site Driveway	Priority (Give way)	6	A	9	A	7	A

As shown in Table 7-9, the existing RRF driveways operate at an acceptable LoS A. Signalised intersections at Sunnyholt Road - Vardys Road and Sunnyholt Road - Tattersall Road operate at a poor LoS E and F in all peak periods, excluding Sunnyholt Road - Tattersall Road in the weekday AM peak which operates at a LoS A. The Vardys Road – Tattersall Road intersection operates at a LoS A during peak periods.

7.2.5 Parking

The existing RRF provides 83 parking spaces including 79 employee parking spaces and 4 visitor parking spaces. The existing RRF currently employs a total of 119 staff which will not change as a result of the Proposal. The current maximum number of staff on-site at any one time is 79 persons which occurs during the shift change over between the day and afternoon shift. The parking provision at the existing RRF satisfactorily accommodates the current parking demand generated by the Proposal site (based on a first principles approach). The Proposal would utilise the current workforce and shift arrangements.

7.2.6 Public Transport

The Proposal site is primarily served by the T-way bus stop located on Sunnyholt Road and Vardys Road. Sunnyholt Road bus stop is located within 450 m of the Proposal site and is approximately a six-minute walking distance. There are frequent bus services to key neighbouring suburbs including Blacktown, Parramatta, Glenwood and Norwest.

Marayong train station is located approximately 1.4 km walking distance west of the Proposal site which is approximately a 17-minute walk. Marayong train station provides services via the T1 Western Line and T5 Cumberland Line providing connectivity to key transport nodes in Blacktown and Parramatta (TfNSW, 2020).

A summary of the nearby bus stops and train station connections surrounding the Proposal site can be seen in Table 7-10 and Figure 7-6.

Table 7-10 – Existing public transport routes

Public Transport	Route No.	Route Description	Typical Weekday Frequency	
			Peak Periods	Off-peak periods
Rail	T1	Emu Plains or Richmond to City	4-10 minutes	15 minutes
	T5	Leppington to Richmond	30 minutes	30 minutes
Bus	661	Blacktown to Parramatta via Kings Langley & North West T-way	20 minutes	60 minutes
	706	Blacktown to Parramatta via Winston Hills	60 minutes	60 minutes
	730	Blacktown to Castle Hill via Glenwood & Norwest	10-20 minutes	30 minutes
	731	Blacktown to Rouse Hill via Stanhope Gardens	15-20 minutes	30 minutes
	732	Blacktown to Rouse Hill via The Ponds	30 minutes	30 minutes
	734	Blacktown to Riverstone via Schofields	30 minutes	30 minutes
	735	Rouse Hill to Blacktown	30 minutes	30 minutes
	743	Blacktown to Kings Langley	30 minutes	30-60 minutes

Source: Transport for NSW (2020)

LEGEND

- Proposal site boundary
- Major road
- Railway
- Watercourse
- Council recommended state link
- Existing cycleway
- Proposed developer funded
- Proposed off-road cycleway
- Proposed on-road cycleway
- RMS proposed state link
- Railway station
- Transport interchange

ARCADIS AUSTRALIA PACIFIC PTY LTD
ABN 76 104 485 289
Level 16, 580 George St | Sydney NSW 2000
P: +61 (0) 2 8907 9000 | F: +61 (0) 2 8907 9001

Coordinate System: GDA 1994 MGA Zone 56
Date issued: August 4, 2020
Aerial imagery source: NSW LPI

1:20,000 at A4

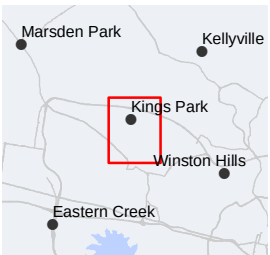


Figure 7-6: Existing public transport routes

7.2.7 Pedestrian and cyclist facilities

Pedestrian footpaths are provided on Tattersall Road on both sides. Vardys Road, west of Tattersall Road, there is an established footpath on the south side of the road and extends in the direction towards Marayong train station.

A separate shared path is located on the east side of Sunnyholt Road that connects to the broader cycle network within the Blacktown LGA. A future cycle link is also proposed between Sunnyholt Road and Lalor Park (as noted in Blacktown City Council 2016 Bike Plan, 2016) as presented in Figure 7-7.

Figure 7-7 – Existing and proposed cyclist routes (BCC, 2016)

7.3 Potential Impacts

7.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

7.3.2 Operation

Material delivery

The Proposal would retain the existing site access routes having separate ingress driveways for light vehicles and heavy vehicles as described in Section 7.2.3.

Traffic generation

An overview of the vehicle movements for the Proposal, in consideration of the base case, is provided in Table 7-11. Vehicles typically transporting material to the Proposal site include light rigid vehicles (i.e. utes and small delivery vans) and up to 19 m semi-trailer trucks. It is noted occasionally, customers may access the Proposal site to deliver material in 25 m B-double truck.

Table 7-11 – Comparison of existing and proposed vehicle movements

Vehicle Type	Vehicles (base case)		Vehicles (Proposal)		Change	
	Hourly	Daily	Hourly	Daily	Hourly increase	Daily increase
Light Vehicles	3	51	6	89	+3	+38
Heavy Vehicles	16	247	28	424	+12	+177
Total	19	298	34	513	+15	+215

The Proposal is expected to result in an increase of 15 hourly vehicles and 215 daily vehicles. The net total (includes both base case and the Proposal) of traffic of weekday AM and PM peak periods and Saturday peak period are presented in Table 7-12.

Table 7-12 – Estimated net vehicle movements for peak periods

Direction	Peak Period	Light Vehicles	Heavy Vehicles	Total No. of vehicles
Inbound	**Weekday AM**	13	27	40
	Weekday PM	2	12	14
	Weekend	2	5	7
Outbound	**Weekday AM**	4	25	29
	Weekday PM	35	28	63
	Weekend	27	8	35

Direction	Peak Period	Light Vehicles	Heavy Vehicles	Total No. of vehicles
Net increase of traffic from base case		(+3)	(+12)	(+15)

The potential impacts to the Proposal site and local road network from the traffic generation as described are discussed in the following sections.

On-site stacking capacity

Table 7-13 provides an assessment of whether the available stacking spaces could suitably accommodate the number of vehicles arriving as part of the Proposal.

Table 7-13 – Assessment of on-site stacking for the Proposal

Processing Type	Available Stacking Spaces (*)	No. of vehicles stacking can accommodate	No. of vehicles accessing the Proposal site per hour	Accommodation per hourly basis (Satisfactory/Unsatisfactory)
Non-Ferrous – External (Heavy Vehicles)	4	10	2	Satisfactory
Non-Ferrous – Internal (Light Vehicles)	>5	>12	5	Satisfactory
Pre-Shredder	2	5	2	Satisfactory
Shredder	8	19	17	Satisfactory
Lindemann Shear	N/A	N/A	0	N/A
Danieli Shear	11	26	1	Satisfactory
Oxycutting	1	2	Average of 0 per hour, 2 per day	Satisfactory
Floc and Shred	4	10	6	Satisfactory

(*) The number of vehicles can be accommodated across the stacking spaces, rounded to the nearest whole number.

The available on-site stacking spaces in most areas can comfortably accommodate the traffic generation associated with the Proposal. The ability for all vehicles to stack within the Proposal site would optimise daily operations and prevent queuing on the local road network.

Intersection Performance

Table 7-14, Table 7-15 and Table 7-16 display the modelled intersection performances for existing and future traffic conditions with and without the Proposal. The assessed traffic modelling scenarios consider the road network conditions in the

opening year of the development (2020 with and without the Proposal) and 10 years after opening (2030 with and without the Proposal). In both years, additional traffic associated with the Proposal site would result in similar levels of service at nearby intersections as before the addition of traffic generated by the Proposal.

Weekday AM Peak

Table 7-14 – LoS at key intersections during the Weekday AM peak

Intersection	Scenario 0 (Existing Conditions inc. base case)		Scenario 1 (Opening Year with the Proposal - 2020)		Scenario 2 (Future Conditions without the Proposal - 2030)		Scenario 3 (Future Conditions with the Proposal - 2030)	
	Ave Delay (sec)	LoS	Ave Delay (sec)	LoS	Ave Delay (sec)	LoS	Ave Delay (sec)	LoS
Sunnyholt Road – Vardys Road	> 100	F	> 100	F	> 100	F	> 100	F
Sunnyholt Road – Tattersall Road	11	A	11	A	10	A	11	A
Vardys Road – Tattersall Road	12	A	12	A	14	A	14	A
Tattersall Road – Eastern Driveway	11	A	11	A	11	A	11	A
Tattersall Road – Central Driveway	5	A	5	A	5	A	6	A
Tattersall Road – Western Driveway	6	A	6	A	6	A	6	A

Table 7-14 shows that all intersections in the AM peak operate at a LoS A in the weekday AM peak with the exception of the Sunnyholt Road - Vardys Road intersection which would operate at a LoS F. During the AM peak, the Proposal would not result in a change to LoS at key intersections.

Weekday PM Peak

Table 7-15 – LoS at key intersections during Weekday PM peak

Intersection	Scenario 0 (Existing Conditions inc. base case)		Scenario 1 (Opening Year with the Proposal - 2020)		Scenario 2 (Future Conditions without the Proposal - 2030)		Scenario 3 (Future Conditions with the Proposal - 2030)	
	Ave Delay (sec)	LoS	Ave Delay (sec)	LoS	Ave Delay (sec)	LoS	Ave Delay (sec)	LoS
Sunnyholt Road – Vardys Road	61	E	59*	E	65	E	75	F
Sunnyholt Road – Tattersall Road	65	E	53*	D	74	F	94	F
Vardys Road – Tattersall Road	16	A	17	B	20	B	20	B
Tattersall Road – Eastern Driveway	13	A	15	B	12	A	13	A
Tattersall Road – Central Driveway	6	A	7	A	6	A	6	A
Tattersall Road – Western Driveway	9	A	10	A	9	A	9	A

(*) Improved average delay at intersections is the result of optimised phase times in SIDRA Intersection. As intersections operate in reality using SCATS system, SIDRA software will adjust phase times to optimise the intersection operation when a marginal increase of traffic movements is added to the network therefore producing a reduction in degree of saturation from which comes the average delay.

As presented in Table 7-15, most assessed intersections would continue to operate a LoS B or above during the PM peak across the scenarios. The exception to this would be the Sunnyholt Road – Vardys Road and Sunnyholt Road – Tattersall Road intersections.

Sunnyholt Road – Vardys Road would operate at a LoS E in the PM peak, with the exception of Scenario 3, where this intersection would operate at an LoS of F. Whilst the Proposal would result in a reduction in LoS, the additional average delay per vehicle is considered minor (10 seconds average delay per vehicle) when compared to the future conditions with the Proposal. It should also be noted that in SIDRA modelling, as an intersection's level of service depletes (from A to F) the intersection becomes more sensitive to change as it has less capacity to absorb minor impacts.

This can result in a greater impact to average delay than would otherwise be expected at an intersection with a better LoS. This is demonstrated at the Sunnyholt Road – Vardys Road intersection. If the intersection level of service was at an acceptable level (LoS D or better) before the development traffic was added, the intersections are capable to accommodate the changes resulting in a lesser impact.

Sunnyholt Road – Tattersall Road currently operates at a LoS E, in 2030. The addition of the Proposal would change intersection operation to a LoS F. However, the Proposal contribution to total traffic volumes in 2030 at this intersection comprises 0.8% of total traffic. In the context of background traffic volumes, the Proposals contribution is negligible.

Weekend Peak

Table 7-16 – LoS at key intersections during the Weekend peak

Intersection	Scenario 0 (Existing Conditions inc. base case)		Scenario 1 (Opening Year with the Proposal - 2020)		Scenario 2 (Future Conditions without the Proposal - 2030)		Scenario 3 (Future Conditions with the Proposal - 2030)	
	Ave Delay (sec)	LoS	Ave Delay (sec)	LoS	Ave Delay (sec)	LoS	Ave Delay (sec)	LoS
Sunnyholt Road – Vardys Road	88	F	88	F	> 100	F	94*	F
Sunnyholt Road – Tattersall Road	67	E	81	F	> 100	F	> 100	F
Vardys Road – Tattersall Road	9	A	9	A	9	A	10	A
Tattersall Road – Eastern Driveway	8	A	11	A	8	A	10	A
Tattersall Road – Central Driveway	6	A	6	A	6	A	6	A
Tattersall Road – Western Driveway	7	A	8	A	7	A	8	A

(*) Improved average delay at intersections is the result of optimised phase times in SIDRA Intersection. As intersections operate in reality using SCATS system, SIDRA software will adjust phase times to optimise the intersection operation when a marginal increase of traffic movements is added to the network therefore producing a reduction in degree of saturation from which comes the average delay.

Table 7-16 shows that the weekend peak period experiences the longest delays and lowest LoS at the Sunnyholt Road - Tattersall Road and the Sunnyholt Road - Vardys Road intersections. The Proposal would result in a minor reduction in LoS (from E to F) at Sunnyholt Road – Tattersall Road in the opening year. Whilst the Proposal would result in a reduction in LoS, the additional average delay per vehicle is considered minor (14 seconds average delay per vehicle), when compared to the base case. The Proposal contribution to total traffic volumes in 2020 at this intersection comprises 0.8% of total traffic. In the context of background traffic volumes, the Proposals contribution is negligible.

It should also be noted that in SIDRA modelling, as an intersection's level of service depletes (from A to F) the intersection becomes more sensitive to change as it has less capacity to absorb minor impacts. This can result in a greater impact to average delay than would otherwise be expected at an intersection with a better LoS. Both the Sunnyholt Road - Tattersall Road and the Sunnyholt Road - Vardys Road intersections would continue to operate at overcapacity in future scenarios both with and without the Proposal.

Road capacity and safety

Tattersall Road currently experiences average traffic flows up to the equivalent of 300 pcu, well below the RMS threshold of 1,000 pcu per lane per hour (Figure 7-2).

During the weekday peaks, the Proposal site is estimated to generate up to an additional 3 light vehicles and 12 heavy vehicles incoming, which would equate to approximately 39 pcu. In the future cases, Tattersall Road is estimated to carry approximately 339 pcu in the busiest hour which is well below the pcu threshold limit (1,000). As such, Tattersall Road would operate continue to operate within the prescribed roadway capacity (Table 7-12) with the addition of Proposal traffic.

As Tattersall Road would continue to operate within capacity, safety would not be expected to reduce as a result of the Proposal.

Pavement lifespan

As detailed in Appendix F, it is estimated that the proposed traffic loadings associated with additional vehicles from operation of the Proposal could potentially result in pavement lifespan being reduced by three (3) years (on a 20-year design life). This is based on the assumption that the existing pavement has a remaining lifespan of 20 years without additional traffic loadings on the road. This reduction is considered minor and typical for developments of this scale and nature. The proposed heavy vehicle movements equate to an increase in 17% of the total traffic loadings compared to without the Proposal.

Parking

The Proposal would utilise the current workforce and shift arrangements at the Proposal site. Therefore, there would be no changes to the car parking demand generated by the Proposal site.

7.4 Mitigation Measures

7.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

7.4.2 Operation

The existing OEMP will be updated to reflect the operational changes associated with the Proposal. Specific changes relating to traffic would comprise the inclusion of the indicative stacking details.

Mitigation measures in relation to traffic and transport previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal and are shown in Table 7-17.

Table 7-17 – SSD-5041 traffic and transport mitigation measures

Reference number	Mitigation Measure	Implementation Stage
1A	• Proposal site access, driveways and parking will be maintained in accordance with the latest versions of Australian Standard AS 2890.1 and AS 2890.2	Operation
1B	• The Proposal site will be maintained to ensure the swept path of the longest vehicle accessing the subject site, as well as manoeuvrability through the site, is in accordance with AUSTROADS Guide to Road Design	Operation
1C	• On-site stacking would be managed to ensure operation of the Site does not result in any vehicles parking or queuing on the public road network	Operation
1D	• All vehicles will be wholly contained on site before being required to stop	Operation
1E	• All loading and unloading of heavy vehicles will be carried out on-site	Operation
1F	• Proposed turning areas in the car park will be kept clear of any obstacles, including parked cars, at all times	Operation
1G	• All vehicles will enter and leave the site in a forward direction.	Operation

8 AIR QUALITY AND ODOUR

This section provides an assessment the potential air quality and odour impacts associated with the Proposal. A detailed Air Quality Assessment (AQA) has been prepared by Northstar Air Quality Pty Ltd (Northstar) and is included as Appendix G.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 8-1. A full SEARs compliance table is presented in Appendix A.

Table 8-1 – Air Quality and odour SEARs

SEARs	Where addressed
A quantitative assessment of the potential air quality, dust and odour impacts of the development in accordance with relevant Environment Protection Authority guidelines, including potential cumulative impacts	Section 8.3 Appendix G
The details of buildings and air handling systems and strong justification for any material handling, processing or stockpiling external to buildings	Section 8.2 and 8.3 Appendix G
Details of proposed mitigation, management and monitoring measures	Section 8.4

8.1 Methodology

Potential air quality impacts have been assessed in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (NSW EPA, 2017a) (Approved Methods). The methodology for the assessment of air quality impacts associated with the Proposal includes:

- Determining the existing baseline air quality
- Estimating emissions from Proposal-related activities
- Using a dispersion model to predict ground-level concentrations for key pollutants at nearby sensitive receivers
- Assessing the 'cumulative' impacts of the Proposal, taking into account the combined impact of Proposal-only emissions with the existing baseline air quality
- Comparing 'cumulative' impacts with relevant criteria.

For the purposes of this assessment the modelled emissions predictions from operational activities on the Proposal site are termed 'incremental impacts'. Incremental impacts have been added to the measured background air quality concentrations, which represent the air quality which may be expected within the area surrounding the Proposal site, without the impacts of the Proposal. The addition of incremental impacts to the background air quality constitute the predicted 'cumulative impacts'.

8.1.1 Sensitive receivers

A number of discrete receiver locations have been identified to assess the potential impacts of the Proposal. Receiver locations are intended to represent a selection of locations that may be susceptible to changes in air quality. Locations selected are typically residential but also include other sensitive land uses such as schools, medical centres, places of employment, recreational areas or ecologically sensitive locations.

Discrete receiver locations have been compared to population-density data obtained from the Australian Bureau of Statistics (ABS, 2018) to ensure that the selected locations are representative of the locations in which the nearby residential population reside. Figure 8-1 shows the location of sensitive receiver locations and residential population (as mapped by the ABS) densities in those areas.

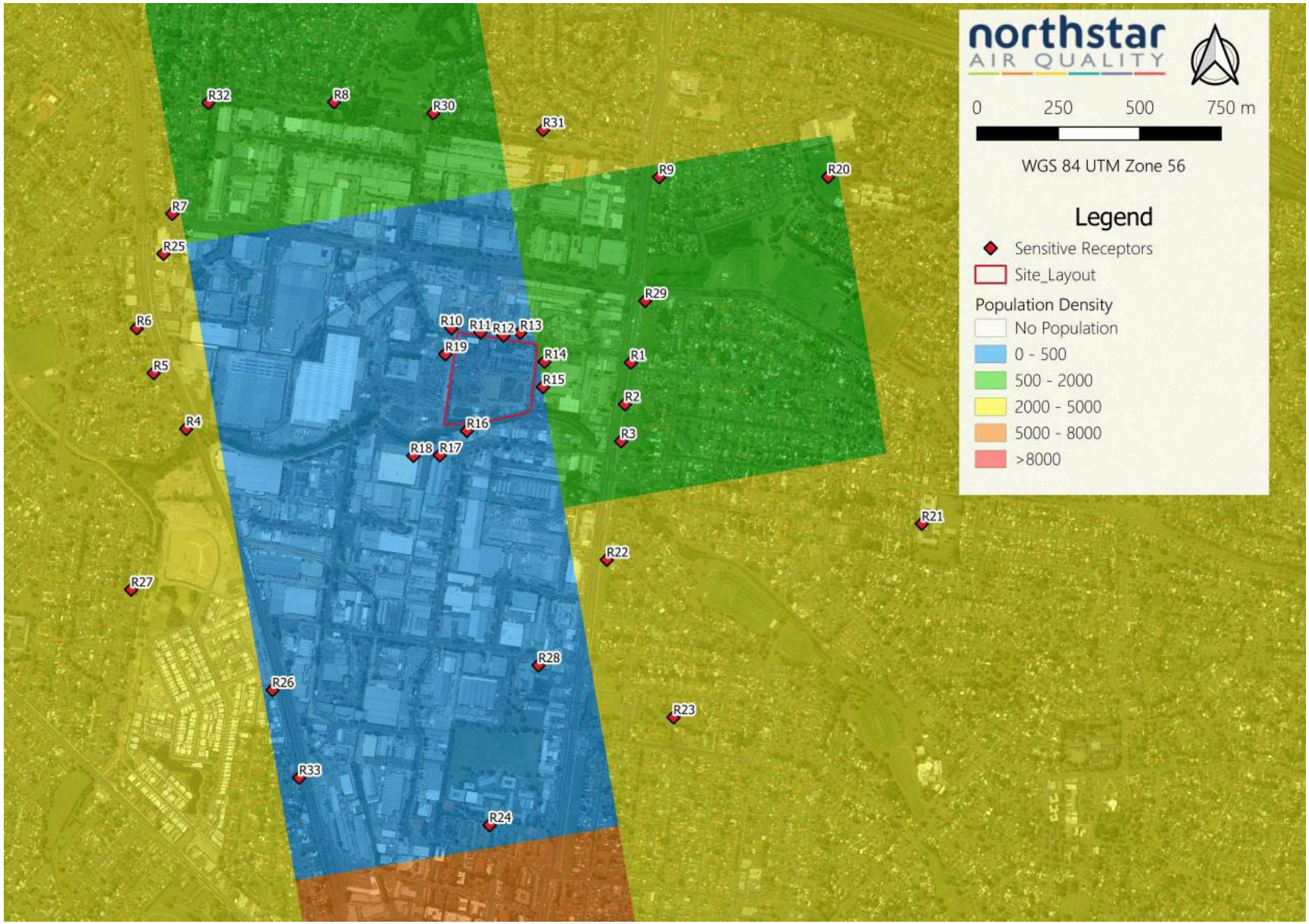


Figure 8-1 – Sensitive receiver locations and ABS population densities (Northstar 2020)

Receivers R10-R19 are fence-line receivers locations designed to represent the maximum off-site pollutant concentrations and are not representative of typical community exposure locations. Receivers R1-4, R6-8, R22 and R28-R33 have been used to evaluate the potential cumulative impact with the proposed expansion of the adjacent Pick 'N' Payless site.

A detailed list of all receiver locations is provided in Appendix G.

8.1.2 Ambient air quality assessment criteria

Air quality criteria are benchmarks set to protect the general health and amenity of the community in relation to air quality.

Assessment criteria have been established using the relevant conditions for EPL 11555 and the criteria listed within the Approved Methods. Relevant criteria have been outlined in Table 8-2.

Table 8-2 – Air quality assessment criteria

Pollutant	Averaging period	Units	Criterion
Nitrogen dioxide (NO_2)	1 hour	$\mu g \cdot m^{-3}$	246
	Annual	$\mu g \cdot m^{-3}$	62
Particulates (as PM_{10})	24 hours	$\mu g \cdot m^{-3}$	50
	1 year	$\mu g \cdot m^{-3}$	25
Particulates (as $PM_{2.5}$)	24 hours	$\mu g \cdot m^{-3}$	25
	1 year	$\mu g \cdot m^{-3}$	8
Particulates (as TSP)	1 year	$\mu g \cdot m^{-3}$	90
Particulates (as dust deposition)	1-year(c)	$g \cdot m^{-2} \cdot month^{-1}$	2
	1-year(d)	$g \cdot m^{-2} \cdot month^{-1}$	4
Lead	Annual average	$\mu g \cdot m^{-3}$	0.5
Copper dusts and mists	1 hour	$Mg\ m^{-3}$	0.018
Iron oxide fumes	1 hour	$Mg\ m^{-3}$	0.09
Manganese and compounds	1 hour	$Mg\ m^{-3}$	0.018
Chromium (VI)	1 hour		0.00009

Note that the air quality criteria for the relevant pollutants relate to the total pollutant burden in the air and not just the pollutants from the Proposal. As such, consideration of background pollutant levels is required when using these goals to assess potential impacts.

8.1.3 Odour assessment criteria

It is noted that odorous materials are not accepted at the Proposal site, but a number of activities performed have the potential to give rise to odour emissions, such as oxycutting and emissions from the wet scrubber stack.

Impacts from odorous air contaminants are often nuisance-related rather than health-related. For impact assessments the benchmark for operational facilities is not specific assessment criteria, rather whether the emission of odour is 'offensive' (as

defined by the POEO Act) or being prevented or minimised using best management practices.

8.1.4 Background air quality

Background air quality has been characterised using representative air quality monitoring data. The Proposal site is located in proximity to a number of air quality monitoring stations (AQMS) operated by NSW DPIE. The closest active AQMS is located at Prospect.

As none of the AQMS in proximity to the Proposal site measures Total Suspended Particulate (TSP), background TSP levels have been established by comparing the relationship between TSP and PM^{10} for the Sydney Metropolitan region. This approach to approximation of annual average TSP levels is frequently used for assessment in similar locations. A relationship between ambient concentrations of TSP to PM10 of 2.0551: 1 has been used.

Background dust deposition rates are not available for the Proposal site. As such to derive a cumulative rate, the incremental impact assessment criterion (2 $g \cdot m^{-2} \cdot$month-1) will be used. This is a commonly adopted approach when background deposition rates are not available.

Background air quality monitoring of other pollutants assessed in this AQIA, including metals, are not routinely performed in NSW, or Australia. Due to the lack of available data background concentrations of other pollutants assessed in this AQA, including metals, are assumed to be negligible and are assessed as incremental impacts only. This is a commonly adopted assumption in air quality assessments and is consistent with previous assessment on the Proposal site.

On-site air quality monitoring is undertaken using an in-station and an out-station. The collected data is a useful tool for identifying potential off-site impacts and providing a trigger for appropriate management response during daily operations. However, the data is unsuitable for use within this impact assessment due to its highly variable nature and influence from nearby sources (e.g. adjacent industrial facilities) and the variability of short term (i.e. minutes) on-site dust generating events.

8.1.5 Meteorology

Meteorological conditions are measured at several Australian Government Bureau of Meteorology (BoM) Automatic Weather Stations (AWS) and DPIE managed Air Quality Monitoring Station (AQMS) surrounding the Proposal site. The Prospect AQMS has been selected as the most likely to represent the conditions at the Proposal site, based upon its proximity and lack of significant topographical features between the two locations.

8.1.6 Emissions inventory

A detailed emissions inventory has been developed to identify emissions sources and approximate the activities being performed at the Proposal site on a day-to-day basis. The detailed emission inventory is included with the AQA (Appendix G). Modelled emissions sources include:

- Point sources (e.g. oxycutting)
- Material handling sources
- Material transfer points
- Conveyors
- Truck dumping materials

- Wind erosion from stockpiles.

As the Proposal does not require the provision of new infrastructure, for consistency, assumptions regarding air quality controls have been derived from the air quality assessment for the Original Approval (prepared by ERM, 2019) and controls imposed through the existing EPL.

8.1.7 Dispersion modelling

A dispersion modelling exercise has been carried out using the NSW EPA approved CALPUFF Atmospheric Dispersion Model. The modelling has been performed using TAPM and processing with CALTAPM, CALMET and CALPUFF. This approach is consistent with that adopted in ERM air quality assessment (2019) which supported the Original Approval.

8.2 Existing Environment

The Proposal site and directly adjacent receivers are located in an area of very low population as would be expected for an industrial area.

The elevation of the Proposal site is approximately 44 m Australian Height Datum (AHD) and the topography between the Proposal site and nearest sensitive receptor locations is relatively uncomplicated.

8.2.1 Local meteorological conditions

Meteorological conditions have been established utilising data from the Prospect AQMS located approximately 4.9 km south of the Proposal site.

The data shows that prevailing winds in the area come from a south-westerly direction. The majority of winds are generally in the range of <0.5 m per second to 5.5 m per second, with the highest wind speeds (greater than 8 m per second) occurring from a south-easterly direction.

8.2.2 Background air quality

Pollutant levels in ambient air quality have been established using data from the nearby Prospect AQMS. A summary of the background air quality data used in the assessment is provided in Table 8-3.

Table 8-3 – Background air quality

Pollutant	Averaging period	Measured value	Notes
TSP (derived from PM_{10})	Annual $\mu g \cdot m^{-3}$	45.01	Estimated on a TSP:PM10 ratio of 2.0551 : 1
PM_{10}	24-hour $\mu g \cdot m^{-3}$	Daily varying	The 24-hour maximum for PM_{10} in 2018 was 113.3 $\mu g.m^{-3}$ (exceeding the criterion)
	Annual $\mu g \cdot m^{-3}$	21.9	
$PM_{2.5}$	24-hour $\mu g \cdot m^{-3}$	Daily varying	The 24-hour maximum for $PM_{2.5}$ in 2015 was 47.5 $\mu g.m^{-3}$ (exceeding the criterion)
	Annual $\mu g \cdot m^{-3}$	8.5	
Dust deposition	Annual $g \cdot m^{-2} \cdot month^{-1}$	2	Difference in NSW DPIE maximum allowable and incremental impact criterion

Pollutant	Averaging period	Measured value	Notes
Nitrogen dioxide (NO_2)	1-hour µg·m^{-3}	104.6	Hourly max 1-hr average in 2018
	Annual µg·m^{-3}	18.7	Annual average in 2018
Ozone (O_3)	1-hour µg·m^{-3}	224.7	Hourly max 1-hr average in 2018
	Annual µg·m^{-3}	39.8	Annual average in 2018

Background concentrations of other pollutants assessed in this AQA, including metals, are assumed to be negligible and are assessed as incremental impacts only.

8.3 Potential Impacts

8.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

8.3.2 Operation

For the purposes of this assessment emission from the Proposal only have been termed ‘incremental’. Emissions from the proposal when added to the background levels are termed ‘cumulative’.

Incremental (Proposal-only) and cumulative (Proposal plus background) levels of particulate matter, TSP and dust deposition were modelled and compared to the criteria presented in Section 8.1.2.

TSP

The modelled levels of TSP from the Proposal with and without background levels have been compared against the established assessment criteria of 90 µg·m^{-3} and are shown in Table 8-4. As shown predicted annual average concentrations for TSP and PM_{10} are below criteria for all relevant receivers. Note that receptors R10-R19 have not been included as they are fence-line receptor locations designed to represent the maximum off-site pollutant concentrations and are not representative of typical community exposure locations.

Table 8-4 Predicted annual average TSP

Annual Average Concentration (µg·m-3)			
Receiver	**Incremental**	**Background**	**Cumulative**
Criterion	**-**	**90**	**90**
R1	0.5	45.0	45.5
R2	0.5	45.0	45.5
R3	0.4	45.0	45.4
R4	0.3	45.0	45.3
R5	0.3	45.0	45.3
R6	0.2	45.0	45.2
R7	0.2	45.0	45.2

Annual Average Concentration (µg·m-3)			
R8	0.2	45.0	45.2
R9	0.2	45.0	45.2
R20	0.1	45.0	45.1
R21	<0.1	45.0	45.1
R22	0.2	45.0	45.2
R23	<0.1	45.0	45.1
R24	0.1	45.0	45.1
R25	0.2	45.0	45.2
R26	0.2	45.0	45.2
R27	0.2	45.0	45.2
R28	0.2	45.0	45.2
R29	0.4	45.0	45.4
R30	0.2	45.0	45.2
R31	0.2	45.0	45.2
R32	0.1	45.0	45.1
R33	1.6	45.0	46.6

PM10 and PM2.5

The modelled levels of PM_{10} and $PM_{2.5}$ from the Proposal with and without background levels have been compared against the established assessment criteria for annual average and maximum 24-hour average concentrations.

The results for annual average PM_{10} and $PM_{2.5}$ impacts are shown in Table 8-5. As shown, the PM10 levels when considering background (cumulative) would be below the established annual average assessment criteria of 25 µg·m^{-3}.

Predicted annual average concentrations for $PM_{2.5}$ are above criteria at all receivers. However, this is attributable to existing air quality concentrations for $PM_{2.5}$ already exceed the criterion at all receivers. The additional contribution from the Proposal at all receivers is <0.1 µg·m^{-3} and is considered negligible.

Note that receptors R10-R19 have not been included as they are fence-line receptor locations designed to represent the maximum off-site pollutant concentrations and are not representative of typical community exposure locations.

Table 8-5 – Predicted annual average PM_{10} and $PM_{2.5}$ concentrations

Annual Average Concentration (µg·m-3)						
Receiver	**PM_{10}**			**$PM_{2.5}$**		
	Incremental	**Background**	**Cumulative**	**Incremental**	**Background**	**Cumulative**
Criterion	**-**	**25**	**25**	**-**	**8**	**8**
R1	0.3	21.9	22.2	<0.1	8.5	8.6
R2	0.3	21.9	22.2	<0.1	8.5	8.6

Annual Average Concentration (µg·m-3)						
R3	0.3	21.9	22.2	<0.1	8.5	8.6
R4	0.2	21.9	22.1	<0.1	8.5	8.6
R5	0.2	21.9	22.1	<0.1	8.5	8.6
R6	0.1	21.9	22.0	<0.1	8.5	8.6
R7	0.1	21.9	22.0	<0.1	8.5	8.6
R8	0.1	21.9	22.0	<0.1	8.5	8.6
R9	0.1	21.9	22.0	<0.1	8.5	8.6
R20	<0.1	21.9	22.0	<0.1	8.5	8.6
R21	<0.1	21.9	22.0	<0.1	8.5	8.6
R22	0.1	21.9	22.0	<0.1	8.5	8.6
R23	<0.1	21.9	22.0	<0.1	8.5	8.6
R24	<0.1	21.9	22.0	<0.1	8.5	8.6
R25	0.1	21.9	22.0	<0.1	8.5	8.6
R26	0.1	21.9	22.0	<0.1	8.5	8.6
R27	0.1	21.9	22.0	<0.1	8.5	8.6
R28	0.1	21.9	22.0	<0.1	8.5	8.6
R29	0.3	21.9	22.2	<0.1	8.5	8.6
R30	0.1	21.9	22.0	<0.1	8.5	8.6
R31	0.1	21.9	22.0	<0.1	8.5	8.6
R32	<0.1	21.9	22.0	<0.1	8.5	8.6
R33	<0.1	21.9	22.0	<0.1	8.5	8.6

To assess predicted PM_{10} and $PM_{2.5}$ against the established 24-hour maximum criteria, the maximum incremental (Proposal only) emissions at each receiver were compared against background levels for each 24-hour period across the background data year.

For PM_{10}, the assessment identified exceedances of the criterion. However, in all cases the background 24-hour PM_{10} levels for the exceedance period already exceed the assessment criteria without the Proposal. The assessment does not predict the operation of the Proposal would lead to any additional exceedances of the relevant 24-hour PM_{10} criterion.

For $PM_{2.5}$, the assessment identified exceedances of the established 24-hour maximum criteria. However, in all cases, the background already exceeds the assessment criteria without the Proposal. Critically, the assessment does not predict

the operation of the Proposal would lead to any additional exceedances of the relevant 24-hour $PM_{2.5}$ criterion.

Nitrogen dioxide

Modelled incremental and cumulative 1-hour and annual average impacts for nitrogen dioxide would comply with the established criteria at all receivers.

Metals

Metals are assessed as a percentage of total $PM_{2.5}$ levels emission, specifically:

- Chromium 0.04 %
- Copper 0.1 %
- Iron 5.76 %
- Lead 0.49 %
- Manganese 0.088 %
- Nickle 0.031 %
- Titanium 0.025 %
- Vanadium 0.001 %
- Zinc 2.1 %.

The maximum incremental 1-hour $PM_{2.5}$ prediction from the model is 25.4 $\mu g \cdot m^{-3}$. This would result in maximum 1-hour concentrations of:

- Chromium 0.01 $\mu g \cdot m^{-3}$ (11.3 % of the criterion)
- Copper 0.03 $\mu g \cdot m^{-3}$ (0.1 % of the criterion)
- Iron 1.46 $\mu g \cdot m^{-3}$ (1.6 % of the criterion)
- Manganese 0.02 $\mu g \cdot m^{-3}$ (0.1 % of the criterion)

Lead (Pb) uses an annual average criterion, and therefore the maximum (non-fence line) concentration of $PM_{2.5}$ has been utilised to derive Pb values. The maximum annual average $PM_{2.5}$ prediction of <0.1 $\mu g \cdot m^{-3}$ and a Pb fraction of 0.49 % derives an annual average lead concentration of 0.0005 $\mu g \cdot m^{-3}$ (0.1 % of the criterion).

Background concentrations of metals are assumed to be negligible, and therefore the assessment considers incremental impacts only. The results do not predict any exceedances of the respective 1-hour metals criteria nor the annual average lead criteria.

Dust deposition

The Proposal would result in an incremental dust deposition impact of <0.1 g m^{-2} $month^{-1}$. This is well below the criterion of 2.0 g m^{-2} $month^{-1}$.

As discussed in Section 8.1.4, background levels of dust deposition have been calculated as 2.0 g m^{-2} $month^{-1}$ at all receivers. When considered with incremental dust deposition rates, the cumulative impact at all receivers would be 2.1 g m^{-2} $month^{-1}$. This is significantly lower than the established cumulative criteria of 4 g m^{-2} $month^{-1}$.

Odour

The assessment does not predict any exceedance of the 2 OU odour impact criterion at any receptors, nor at any industrial assessment locations.

8.4 Mitigation Measures

8.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

8.4.2 Operation

During consultation, stakeholders have identified emissions from oxycutting as a concern and proposed potential mitigation measures (e.g. encapsulation of these activities). As shown in the emissions inventory prepared for the Proposal, point source emissions are dominated by the wet scrubber stack, and emissions from the oxycutting process are low. The predicted impacts of odour and NO_X from the oxy-cutting process (and the site as a whole) are also shown to be significantly lower than the relevant criteria. As such, the inclusion of additional mitigation is not required. Mitigation measures in relation to air and odour previously identified for the Original Approval (SSD-5041) will continue to be implemented for the Proposal. In particular, the air quality and odour management strategies in the current OEMP will be implemented to reduce air quality impacts as shown in Table 8-6.

Table 8-6 - SSD-5041 Air quality and odour mitigation measures

Reference number	Mitigation Measure	Implementation Stage
2A	• All activities on site would be undertaken in accordance with the Site Air Quality Management Plan. The Air Quality Management Plan (AQMP) will include the following: – A description of the measures to be employed to minimise air emissions – A description of contingency measures to deployed to minimise impacts should adverse air emissions occur or appear likely to occur – Identification of triggers for the deployment of operational air quality measures – Identification of triggers for ceasing or partially ceasing operations on-site during adverse air quality conditions – A description of the system used to evaluate the performance of the Proposal site – Details of the location, frequency and duration of monitoring activities – A protocol to determine the occurrence of any exceedance of the criteria in the EPL should an exceedance occur – A complaints management procedure including steps to investigate complaints and rectify issues where required.	Operation
2B	• The air quality emissions control system will be maintained in good working order	Operation
2C	• A continual weather monitoring station will be maintained on-site	Operation

Reference number	Mitigation Measure	Implementation Stage
2D	• An air quality monitoring system will be maintained on-site to evaluate the performance of the Proposal	Operation
2E	• All plant is to be inspected daily and ensure it is fit for use	Operation
2F	• Works that have the potential to generate fugitive dust emissions must be planned to take into account weather conditions	Operation
2G	• Works areas, and where applicable material stockpiles, will be wetted down as required	Operation
2H	• Work areas will be maintained to allow street sweeper access	Operation
2I	• Sealed surfaces on-site will be maintained regularly using street sweepers to prevent dust re-entrainment from vehicle movements and other equipment use	Operation
2J	• All Sell & Parker trucks are to have their loads covered	Operation
2K	• Ferrous vehicles will exit the Proposal site via the wheel wash	Operation
2L	• Dust screens and walls will be inspected monthly with any identified failures, gaps or holes placed onto a maintenance report for rectification. Rectifications will be done using appropriate materials that do not diminish their dust collection qualities	Operation
2M	• When monitoring indicates that that there is a potential for the 4 hour rolling average to breach air quality criteria, corrective actions will be instigated	Operation
2N	• Only one oxy-acetylene torch will be operating at a time	Operation
2O	• Cutting of any metal beam that is up to 100 millimetres thick will be undertaken with the shear where feasible.	Operation

9 NOISE AND VIBRATION

This section provides an assessment of the potential noise and vibration impacts associated with the Proposal. A detailed Noise and Vibration Assessment (NVA) has been prepared by Renzo Tonin & Associates (Renzo Tonin) (refer to Appendix H).

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 9-1. A full SEARs compliance table is presented in Appendix A.

Table 9-1 – Noise and vibration SEARs

SEARs	Where addressed
A quantitative assessment of potential construction, operational and transport noise and vibration impacts in accordance with relevant Environment Protection Authority guidelines, including any potential cumulative impacts, and be undertaken by a suitably qualified and experienced person(s)	Section 9.3 Appendix H
Details and justification of the proposed noise mitigation and monitoring	Section 9.4 Appendix H

9.1 Methodology

Noise monitoring was undertaken at nearby residential and industrial receivers to determine the background noise levels surrounding the Proposal site. Representative receiver locations have been established as it is impractical to carry out measurements at all locations surrounding a site. Receivers have been selected as they are considered to be representative of the nearest affected receivers in the area surrounding the Proposal site.

Proposal-specific noise and vibration criteria were determined using the outcomes of this monitoring and the application of relevant guidelines for:

- Operational noise
- Road traffic noise
- Vibration.

9.1.1 Background Noise Level monitoring

Due to impacts of COVID-19 in 2020, industrial sites in the surrounding area are not operating at normal capacity which has likely reduced the background noise levels in the area. Consequently, monitoring for background noise levels at the time this assessment was prepared does not capture the typical background noise level in the area. As such, this assessment has utilised long term unattended noise level data from December 2013 provided by Environmental Resources Management Australia Pty Ltd (ERM) for previous approvals at the Proposal site. The original data was re-analysed for this report according to the guidelines contained in the NPfI.

Long-term unattended noise monitoring

Long-term unattended noise monitoring was conducted by ERM (2019) from 17 to 24 December 2013 to determine the day, evening and night rating background levels (RBLs) and ambient noise levels applicable to the Proposal site and surrounding area.

The measured noise levels at representative locations are shown in Table 9-2 and Figure 9-1.

Table 9-2 – Summary of long-term unattended noise measurement results, dB(A)

Monitoring Location	L_{A90} Rating Background Noise Level (RBL)			L_{Aeq} Ambient Noise Levels[4]		
	Day[1]	Evening[2]	Night[3]	Day[1]	Evening[2]	Night[3]
L1 - 1/50 Charles Street, Blacktown	41	45	40	58	55	48
L2 - 2 Anthony Street, Blacktown	44	44	35	52	50	48

1. Day: 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays
2. Evening: 6pm to 10pm Monday to Sunday and Public Holidays
3. Night: 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays
4. As required by the *Noise Policy for Industry* (NPfI), the external ambient noise levels presented are free-field noise levels. (i.e. no facade reflection).

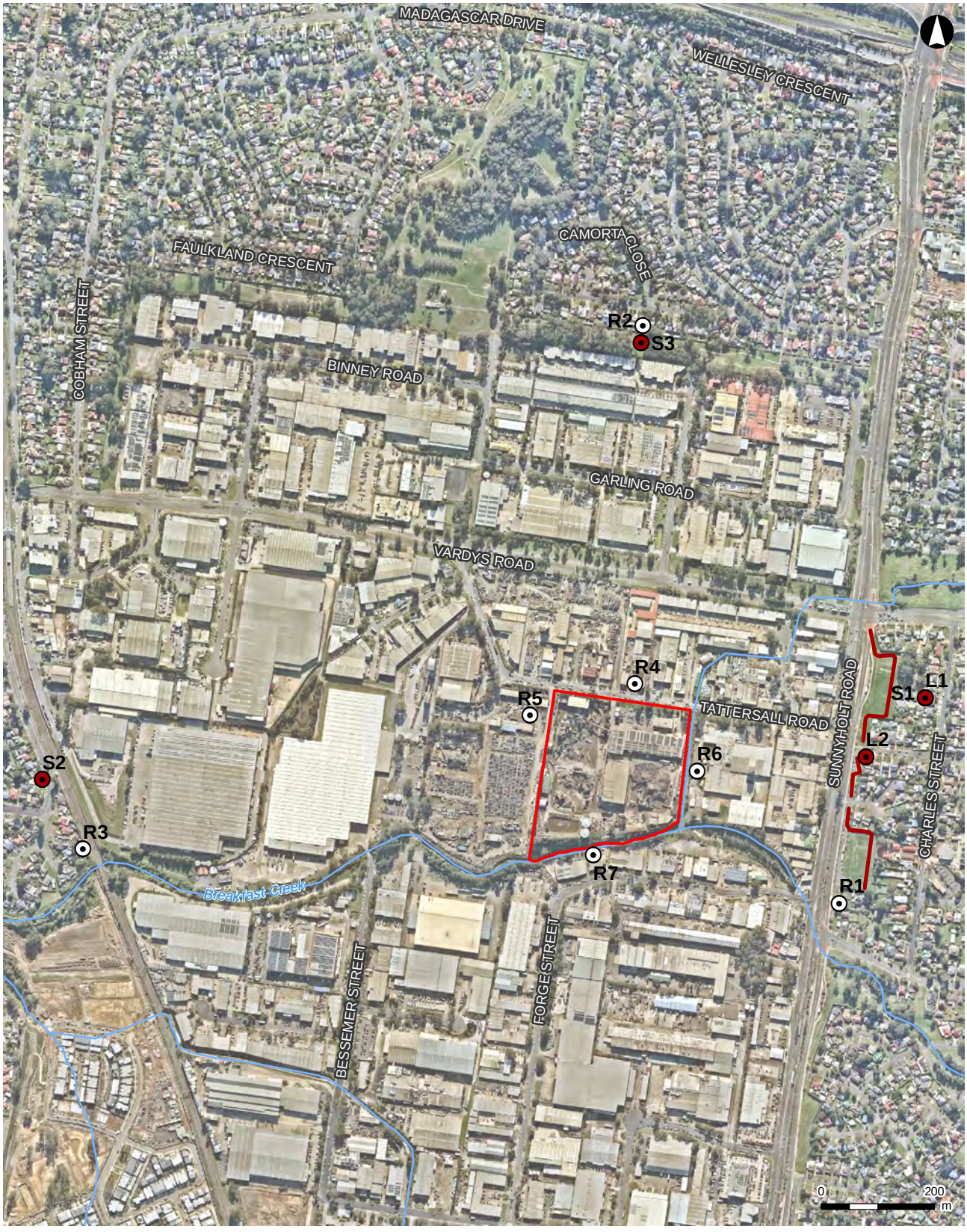
Short-term attended noise monitoring

Short-term attended noise monitoring was undertaken by Renzo Tonin on 6 February 2014 and 4 June 2015 at some locations (where required) to supplement the long-term noise monitoring results and obtain greater understanding of the surrounding noise environment.

A summary of the short-term attended noise measurement results is shown in Table 9-3. The dominant noise source at representative locations was attributed to traffic noise along the road. Attended noise measurement at location S1 (50 Charles Street, Blacktown) was aborted due to the influence of nearby construction works on Anthony Street.

Table 9-3 – Summary of short-term attended noise measurement, dBA(A)

Location	Measured Noise Level, dB(A)	
	L_{A90}	LA_{eq}
6 February 2014		
S1 - 50 Charles Street, Blacktown	43	57
S2 - 6 Railway Road, Marayong	46	60
S1 - 50 Charles Street, Blacktown	42	57
S3 - 17 Camorta Close, Kings Park	45	47
4 June 2015		
R1 - 189 Sunnyholt Road, Blacktown	55	62
	55	64
	58	64
S3 - 17 Camorta Close, Kings Park	44	47



LEGEND

- Proposal site boundary
- Noise monitoring location
- Receiver location
- Existing noise wall
- Watercourse

ARCADIS AUSTRALIA PACIFIC PTY LTD
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Coordinate System: GDA 1994 MGA Zone 56
Date issued: July 20, 2020
Aerial imagery source: nearmap Jun 2020

1:10,000 at A4

ARCADIS

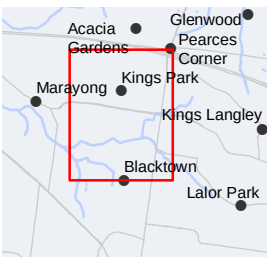

Figure 9-1: Noise receivers surrounding the Proposal site

Given the simultaneous short-term attended noise monitoring results obtained, a correlation factor of 3 dB was between locations S1 and S2, and between locations S1 and S3.

The correlation factor was applied to the long-term unattended noise monitoring results and the correlated Rating Background Noise Level results for Railway Road and Camorta Close as shown in Table 9-4.

Table 9-4 – Correlated Rating Background Noise Levels, dB(A)

Monitoring Location	L_{A90} Rating Background Noise Level (RBL)[4]		
	Day[1]	Evening[2]	Night[3]
S2 - 6 Railway Road, Marayong	44	48	43
S3 - 17 Camorta Close, Kings Park	44	48	43

1. Day: 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays
2. Evening: 6pm to 10pm Monday to Sunday and Public Holidays
3. Night: 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays
4. As required by the NPfI, the external ambient noise levels presented are free-field noise levels (i.e. no façade reflection).

9.1.2 Noise assessment criteria

Operational Noise Criteria

Operational Noise Criteria were established with consideration to the *NSW Policy for Industry* (NPfI), which provides guidance on the assessment of operational noise impacts. The NPfI guidelines include both intrusive and amenity criteria that are designed to protect receivers from noise significantly louder than the background level and to limit the noise level from all sources near a receiver.

Intrusive noise limits set by the NPfI control the relative audibility of operational noise compared to the background level. The amenity criteria limit the total noise level from all industrial sources affecting a receiver.

Proposal-specific intrusiveness and amenity criteria are presented in Table 9-5 and Table 9-6.

Table 9-5 – Proposal specific intrusiveness noise levels

Receiver	Intrusiveness noise level, $LA_{eq,15min}$			
	Shoulder	Day	Evening	Night
R1 – Sunnyholt Road1	46	46	46	45
R2 – Camorta Close2	49	49	49	48
R3 – Railway Road2	49	49	49	48

1. RBL based on long term noise monitoring results at Location L1
2. RBL based on correlation of short-term measurements at Locations S2 and S3 with short term measurements at Location S1.

Table 9-6 – Proposal specific noise amenity levels

Type of Receiver	Noise Amenity Area	Time of the Day	Recommended Noise Level, dB(A)	
			$L_{Aeq, Period}$	$L_{Aeq, 15min}$
Residential	**Urban**	Day	55	58
		Evening	45	48
		Night	40	43
Industrial	**All**	When in use	65	68

1. Daytime 7am to 6pm; Evening 6pm to 10pm; Night-time 10pm to 7am
2. On Sundays and Public Holidays, Daytime 8am to 6pm; Evening 6pm to 10pm; Night-time 10pm to 8am.
3. The LAeq index corresponds to the level of noise equivalent to the energy average of noise levels occurring over a measurement period.

Proposal-specific noise trigger levels have been determined as shown in Table 9-7 in accordance with the NPfI noise trigger levels.

Table 9-7 - Proposal-specific noise trigger levels

Receiver Location	$LA_{eq, 15min}$ Project noise trigger levels, dB(A)			
	Shoulder[1]	**Day**	**Evening**	**Night**
R1 – Sunnyholt Road	46	46	46	43
R2 – Camorta Close	49	49	48	43
R3 – Railway Road	49	49	48	43
R4 – 38 Tattersall Road[2]	68	68	68	68
R5 – 57-69 Tattersall Road[2]	68	68	68	68
R6 – 21 Tattersall Road[2]	68	68	68	68
R7 – 38 Forge Street[2]	68	68	68	68

1. The daytime project noise trigger levels have been adopted for the shoulder period (6am – 7am) as the subject site is located within an industrial complex where the majority of neighbouring facilities are operational during the shoulder period, and the noise environment for residential receivers during the shoulder period is similar to the day time period
2. Receivers R4, R5, R6 and R7 are industrial receivers and only the amenity criteria are applicable to these receivers when in use.

Sleep disturbance criteria were established with consideration to the NPfI, which outlines research regarding the causes of sleep disturbance. The adopted criterion for the assessment of Proposal-related sleep disturbance should be undertaken where the night-time noise levels at a residential location exceed:

- $LA_{eq,15min}$ 40dB(A) or the prevailing RBL plus 5dB, whichever is the greater; and/or
- L_{Amax} of 52 dB(A) or the prevailing RBL plus 15 dB, whichever is greater.

The operational Proposal-specific noise levels associated with operational noise are summarised in Table 9-8.

Table 9-8 – Operational Proposal specific sleep disturbance assessment levels, dB(A)

Receiver Location	Shoulder period 6am – 7am		Night period 10pm – 6am	
	$L_{Aeq,15min}$	L_{AFmax}	$L_{Aeq,15min}$	L_{AFmax}
R1 – Sunnyholt Road	46	56	45	55
R2 – Camorta Close	49	59	48	58
R3 – Railway Road	49	59	48	58

Road Traffic Noise Criteria

Criteria for off-site road traffic noise are specified in the *Road Noise Policy* (RNP). The RNP assessment criteria for residential land uses ('arterial road') is presented in Table 9-9.

Table 9-9 – Road Traffic Noise Criteria, dB(A)

Road Category	Type of Proposal / Land Use	Noise Criteria, dB(A)	
		Day (7:00am – 10:00pm) $L_{Aeq,15hour}$ (dBA)	Night-time (10:00pm – 7:00am) $L_{Aeq,9hour}$ (dBA)
Arterial road (e.g. Sunnyholt or Vardys Roads)	Existing residences affected by additional traffic on existing arterial roads generated by land use development	60 (External)	55 (External)

Additionally, in accordance with the provisions of the RNP, any increase in the total traffic noise level should be limited to 2 dB above the corresponding road traffic noise levels due to general traffic growth that would have occurred if the Proposal had not proceeded. A 2 dBA increase is not typically considered noticeable.

9.1.3 Meteorology

The NPfI recommends that project noise criteria are to be applied under weather conditions characteristic of a project area. Types of characteristic conditions can include calm, wind and temperature inversions.

For the Proposal, a detailed approach using site specific meteorological data has been undertaken. Data for the assessment has been sourced from the Bureau of Meteorology's automatic weather station installed at the Horsley Park Equestrian Centre, located 12 km south of the Proposal site, over the period between 2nd June 2014 and 1st June 2015. Note that background monitoring has been obtained from previous assessment prepared for the Proposal site. To maintain consistency, weather data from previous assessments (for the same time period) has also been utilised.

The Proposal is located within an industrial area within a broader urban setting and the likelihood of night-time temperature inversions is negligible. As such, only wind effects have been considered further regarding to meteorological conditions.

Wind

Analysis of the collected wind data was undertaken using the EPA's Noise Enhancement Wind Analysis program (EPA, 2017b) to determine if wind is a 'feature' of the area as defined by the NPfI. The analysis indicated that there is a greater than 30% occurrence of winds between 0.5 m/s and 3 m/s for Receivers R3, R4 and R6. Consequently, the prevailing wind conditions have been considered in the noise prediction calculations for Receivers R3, R4 and R6.

9.1.4 Noise modelling

Potential noise emissions have been predicted by modelling the noise sources, receiver locations, local topography, and possible noise control treatments using CadnaA (Version 2020 MR 1) noise modelling computer program utilising the ISO9613 standard. The program calculates the contribution of each noise source at each specified receptor point and allows for the prediction of the total noise from a site.

Sound power levels

Sound power levels of the operational noise sources are presented in Table 9-10 and Table 9-11. Sound power levels were determined based on previous on-site measurements and data from similar projects.

Table 9-10 – Summary of Sound Power Level per plant and equipment

Plant and Equipment[1]	Sound Power Level (per item)		Number of items (included in noise model)
	$L_{Aeq,\ 15min}$	L_{Amax}	
General operations (6am – 9pm)			
Hammer mill[2]	116	119	1
Metal shear	112	129	1
Excavator	107	115	2
Front end loader	107	115	2
Pre shredder	107	116	1
Seram/pedestal Crane	107	116	2
Material handler	105	117	3
Truck (travelling in and out of site)	105	110	7
Maintenance and cleaning (24 hours)			
Forklift	90	95	3
Handtools	105	110	1
Pressure hose	97	102	1
Crane	107	112	3

1. Only the noisiest and most dominant noise sources have been presented
2. Presented sound power level of the hammer mill includes noise generated by the shaker.

Table 9-11 – Sound Power Levels of car park vehicle movements on-site

Activity[1]	Sound Power Level, dB(A) re. 1pW
Vehicle door closing	86
Vehicle engine starting	92
Vehicle moving (10km/h)	79 per metre

1. A worst-case scenario has been considered and would include 83 staff, 83 vehicle doors closing, 83 vehicle engine starts and 83 vehicles manoeuvring in the carpark, within a one-hour period.

9.1.5 Vibration assessment

Assessment of potential disturbance from vibration on human occupants of buildings has been undertaken in accordance with the DEC's '*Assessing Vibration; a technical guideline*' (DEC, 2006). Given the separation distance between the plant and equipment used on the Proposal site and the nearest residential receiver's vibration levels would be insignificant. As such, vibration levels have only been assessed for adjacent industrial premises.

Sources of vibration are defined in three (3) categories, 'Continuous', 'Impulsive' or 'Intermittent'. Criteria for vibration are defined as a single weighted root mean square (rms) acceleration source level. For continuous and impulsive sources, the criteria is separated into directional axes in reference to the human body, i.e. x-axis (back to chest), y-axis (right side to left side) or z-axis (foot to head). Criteria for the Proposal is shown in Table 9-12 and Table 9-13.

Table 9-12 – Preferred and maximum levels for human comfort, m/s^2

Location	Assessment period	Preferred value		Maximum values	
		z-axis	x- and y - axis	z-axis	x- and y - axis
Continuous vibration (Weighted RMS Acceleration, m/s^2, 1-80Hz)					
Workshops (receiver)	Day- or night-time(1)	0.04	0.029	0.080	0.058
Impulsive vibration (Weighted RMS Acceleration, m/s2, 1-80Hz)					
Workshops (receiver)	Day- or night-time(1)	0.64	0.46	1.28	0.92

[1]Daytime period is 7:00am to 10:00pm, and night time period is 10:00pm to 7:00am.

Table 9-13 – Acceptable vibration dose values for intermittent vibration, m/s$^{1.75}$

Location	Daytime		Night	
	Preferred value	Maximum value	Preferred value	Maximum value
Workshops (receiver)	0.80	1.60	0.80	1.60

To quantify vibration levels from the existing plant with the greatest potential vibration impacts, attended vibration measurements were undertaken for the hammer mill and metal shear. Vibration measurements were conducted on Friday 9th May 2014, (hammer mill) and the 25th and 26th May 2015 (equivalent metal shear located at Sell & Parkers Darwin facility). A detailed methodology for attended vibration measurements is provided in Appendix H.

Based on the vibration measurements conducted, the vibration sources are classified as continuous and/or intermittent. As such, impulsive vibration has not been considered further within this assessment.

9.2 Existing Environment

The noise environment at the Proposal site is typical of an industrial area. The background noise levels are largely influenced by the surrounding industries, including retail and commercial industrial areas, and vehicular noise on the surrounding road network.

The closest residential receivers to the Proposal site are located approximately 300 m east of the Proposal site. These residential receivers are on the eastern side of Sunnyholt Road, North West Bus Transitway and Anthony Street, and sheltered by an acoustic wall along Anthony Street.

Acoustic screen fencing has been erected around the existing site's northern, eastern and western boundaries and along existing driveways.

Noise receivers within the vicinity of the Proposal site are identified in Table 9-14 and Figure 9-1.

Table 9-14 – Noise receivers surrounding the Proposal site

Receiver ID	Land Use	Address	Description
R1	Residential	189 Sunnyholt Road, Blacktown	Located approximately 315 m east of the Proposal site and representative of the nearest residential receivers along Sunnyholt Road
R2	Residential	17 Camorta Close, Kings Park	Located approximately 650 m north of the Proposal site and representative of the nearest residential receivers along Camorta Close
R3	Residential	3 Railway Road, Marayong	Located approximately 830 m west of the Proposal site and representative of the nearest residential receivers along Railway Road
R4	Industrial	38 Tattersall Road, Kings Park	Located to the north of the Proposal site along Tattersall Road
R5	Industrial	57-69 Tattersall Road, Kings Park	Located to the west, adjacent to the Proposal site
R6	Industrial	21 Tattersall Road, Kings Park	Located to the east, adjacent to the Proposal site
R7	Industrial	38 Forge Street, Blacktown	Located to the south of the Proposal site, across Breakfast Creek

9.3 Potential Impacts

9.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

9.3.2 Operation

Proposal site noise

Predicted noise levels are summarised in Table 9-15. Results show that noise emissions for all receivers comply with relevant noise trigger levels without any additional noise mitigation measures.

Note that based noise measurements undertaken at Sell & Parker's Kings Park site and other similar metal recycling facilities, and after accounting for acoustic shielding provided by intervening structures between the site and both residential and industrial receptors, the character of noise as perceived at the receiver locations is not tonal, impulsive or low frequency. Therefore, it is not necessary to apply modifying factors to correct for the character of the noise.

Note that prevailing winds have only been considered for receivers and time periods where the EPAs Noise Enhancement Wind Analysis program (see Section 9.1.3) has identified they are affected by prevailing wind conditions.

Table 9-15 – Predicted noise levels emissions from the Proposal, dB(A)

Receivers	Predicted Noise Levels, $LA_{eq,15min}$			
	Shoulder	Day	Evening	Night[1]
Receiver R1 – 189 Sunnyholt Road (residences to the east along Sunnyholt Road)				
Project Noise Trigger Levels	46	46	46	43
Predicted noise level (neutral conditions)	45	45	45	38
Receiver R2 – 17 Camorta Close (residences to the north along Camorta Close)				
Project Noise Trigger Levels	49	49	48	43
Predicted noise level (neutral conditions)	37	37	37	35
Receiver R3 – 3 Railway Road (residences to the west along Railway Road)				
Project Noise Trigger Levels	49	49	48	43
Predicted noise level (neutral conditions)	32	32	32	31
Predicted noise level (prevailing wind conditions)	N/A	N/A	37	N/A
Receiver R4 – 38 Tattersall Road (neighbouring industrial premises to the north)				
Project Noise Trigger Levels	68	68	68	68
Predicted noise level (neutral conditions)	59	59	59	68
Predicted noise level (prevailing wind conditions)	N/A	N/A	59	68
Receiver R5 – 57-69 Tattersall Road (neighbouring industrial premises to the west)				
Project Noise Trigger Levels	68	68	68	68
Predicted noise level (neutral conditions)	54	54	54	59
Receiver R6 – 21 Tattersall Road (neighbouring industrial premises to the east)				

Receivers	Predicted Noise Levels, $LA_{eq,15min}$			
	Shoulder	Day	Evening	Night[1]
Project Noise Trigger Levels	68	68	68	68
Predicted noise level (neutral conditions)	49	49	49	52
Predicted noise level (prevailing wind conditions)	N/A	N/A	49	52
Receiver R7 – 38 Forge Street (neighbouring industrial premises to the south)				
Noise Trigger Levels	68	68	68	68
Predicted noise level (neutral conditions)	62	62	62	61
1. Night time activities only consider maintenance and cleaning works.				

In addition to the predicted noise levels emissions outlined above, the predicted sleep disturbance noise levels at residential receivers during the night-time period (from 10pm to 7am) are presented in Table 9-16. Results show that noise emission levels to residential receivers (R1, R2 and R3) comply with the noise trigger levels and the sleep disturbance levels without the need for any additional noise mitigation measures.

Table 9-16 – Predicted sleep disturbance noise levels from the Proposal, dB(A)

ID	Predicted $L_{Aeq,15min}$ Noise Level			Predicted L_{AFMax} Noise Level			Complies?
	Assessment Level	Neutral Condition	Prevailing Wind Condition	Assessment Level	Neutral Condition	Prevailing Wind Condition	
R1	45	39	N/A	55	55	N/A	Yes
R2	48	35	N/A	58	49	N/A	Yes
R3	48	31	N/A	58	42	N/A	Yes

Notwithstanding these, Sell & Parker are implementing a number of measures to further reduce noise emissions from the Proposal site such as beeper-less signals and improved fencing.

Road traffic noise

The existing annual average daily traffic (AADT) volumes along Sunnyholt Road have been obtained at a permanent traffic counting station (station no. 69198) located on Sunnyholt Road, 30 m from Devitt Street. The AADT volume from 2018 is reported to be 36,215 vehicles at Sunnyholt Road.

Vehicle movements from the Proposal site are estimated at approximately 513 movements per day as assessed in the Traffic and Transport Impact Assessment (TTPP, 2020; Appendix E). If all vehicles from the Proposal were to utilise Sunnyholt Road (which is considered highly unlikely), this would equate to 0.01% of the total traffic volumes. This volume is considered negligible in comparison to the AADT volumes along Sunnyholt Road.

Overall, traffic increase as a result of the Proposal would not contribute to the existing traffic noise levels at Sunnyholt Road and would be significantly less than the allowable 2 dB(A) increase to existing traffic noise levels.

Vibration

Hammer mill

Results from vibration measurements for the hammer mill are outlined in Table 9-17 and Table 9-18.

Table 9-17 – Measured continuous vibration levels for the hammer mill

Plant item	Measurement No.	Approximate distance to plant from monitoring location	Measured weighted rms acceleration, m/s^2		
			x-axis	y-axis	z-axis
Hammer mill	1	10 m	0.001	0.001	0.007
	2		0.001	0.001	0.007
	3		0.001	0.001	0.006
	4		0.001	0.001	0.006
	5		0.001	0.001	0.006
	6		0.001	0.001	0.006
Criterion	**-**	**-**	**0.029**	**0.029**	**0.04**

When continuous vibration measurements for the hammer mill are assessed against the established vibration criteria, the measured vibration levels comply with the preferred limits established for vibration.

Table 9-18 – Measured intermittent vibration levels for hammer mill

Plant Item	Measurement No.	Approximate distance to plant from monitoring location		Measured vibration dose value, $m/s^{1.75}$
Hammer mill	1	10 m		0.025
	2			0.025
	3			0.023
	4			0.023
	5			0.021
	6			0.023
Criterion		**-**	**-**	**0.80**

When intermittent vibration measurements for the hammer mill are assessed against the established vibration criteria, the measured vibration levels comply with the preferred limits.

As the measured vibration levels from the hammer mill were taken at 10 m distance and the nearest industrial receiver is greater than 30 m away, vibration levels would also not exceed criteria at the receiver. As such, operation of the hammer mill for the Proposal would not result in vibration impacts at sensitive receivers.

Metal shear

Results from vibration measurements for the metal shear are shown in Table 9-19 and Table 9-20.

Table 9-19 – Measured continuous vibration level for metal shear

Plant item	Measurement No.	Approximate distance to plant from monitoring location	Measured weighted rms acceleration, m/s^2		
			x-axis	y-axis	z-axis
Metal shear	1	5.5m	0.006	0.001	0.003
	2		0.002	0.001	0.006
	3		0.002	0.001	0.006
	4		0.048	0.002	0.004
	5		0.015	0.002	0.004
	6		0.018	0.002	0.003
	7	9m	0.012	0.003	0.003
	8		0.008	0.002	0.005
	9		0.008	0.002	0.002
	10	50m	0.006	0.001	0.001
	11		0.017	0.006	0.001
	12		0.018	0.006	0.001
	13		0.015	0.006	0.001
Criterion	**-**	**-**	**0.029**	**0.029**	**0.04**

When continuous vibration measurements for the metal shear (as shown in Table 9-19) are assessed against the established vibration criteria, the levels comply with the preferred limits of 0.029 m/s2 in the x and y axes and the preferred limit of 0.04 m/s2 in the z axis.

Table 9-20 - Measured intermittent vibration levels for the metal shear

Plant Item	Measurement No.	Approximate distance to plant from monitoring location	Measured vibration dose value, $m/s^{1.75}$
Metal Shear	10	50 m	0.017
	11		0.194
	12		0.270
	13		0.166
Criterion	**-**	**-**	**0.80**

When intermittent vibration measurements for the metal shear are assessed against the established vibration criteria, the measured vibration levels comply with the preferred limits for intermittent vibration.

The assessment identifies that measured vibration levels from the metal shear comply with the established vibration criteria. As such, operation of the metal shear for the Proposal would not result in vibration impacts at sensitive receivers.

9.4 Mitigation Measures

9.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

9.4.2 Operation

Noise and vibration emissions from the operation of the Proposal would comply with the established noise and vibration criteria. The noise management strategies in the current OEMP will continue to be implemented to manage ongoing compliance.

Table 9-21 – SSD-5041 Noise and vibration mitigation measures

Reference number	Mitigation Measure	Implementation Stage
3A	• Acoustic fences and walls will be inspected monthly with any identified failures, gaps or holes placed onto a maintenance report for rectification. Rectifications shall be done using appropriate materials that do not diminish their acoustic qualities	Operation
3B	• If there are activities to be undertaken that could potentially cause excessive noise or vibration issues, mitigation measures are to be assessed prior to the activity taking place	Operation
3C	• All plant and equipment installed and used on-site will be maintained and operated in a proper and efficient condition	Operation
3D	• If weather conditions are likely to result in an increase of noise transmission, activities will be assessed and where required rescheduled, reduced or stopped. Monitoring shall be done in conjunction with data supplied from the on-site meteorological station	Operation
3E	• An airblast overpressure measuring device will be maintained on the Proposal site boundary	Operation
3F	• To manage the potential for noise impacts from explosions the following measures would be implemented: – The use of the pre-shredder to process vehicles – Labelling of bins that we do not accept gas bottles – Signed agreement of the material acceptance form outlining items we don't accept – Inspection of loads – Immediate return of unacceptable items to the truck (where possible) • Deduction of tonnage from the load as a disincentive penalty.	Operation

Reference number	Mitigation Measure	Implementation Stage
3G	• Noise and vibration generating activities on-site would be undertaken in accordance with the Proposal site Noise and Vibration Management Plan. The Noise and Vibration Management Plan will include the following: – Identification of noise and vibration criteria as established within this EIS to which the Proposal site must comply – A procedure for investigation of noise complaints including a methodology for rectifying issues as required – A methodology for minimising noise impacts during adverse weather conditions – A procedure for regular assessment of noise monitoring data including measures to relocate, modify and/or stop operations as required to ensure compliance with the noise criteria. • A procedure for recording and checking data collected by the airblast overpressure monitor.	Operation

10 SOILS, WATER AND CONTAMINATION

This chapter provides an assessment of the potential soils, water and contamination impacts associated with the Proposal. The chapter is supported by a Water Management Assessment undertaken by Arcadis (Appendix I). A summary of the relevant SEARs and where they are addressed in this section is provided in the Table 10-1. A full SEARs compliance table is presented in Appendix A.

Table 10-1 – Soils, Water and Contamination SEARs

SEARs	Where addressed
An assessment of potential impacts to soil and water resources, topography, hydrology, groundwater, drainage lines, watercourses and riparian lands on or nearby the site, including mapping and description of existing background conditions and cumulative impacts	Section 10.3 Appendix I
A detailed site water balance including identification of water requirements for the life of the project, measures that would be implemented to ensure an adequate and secure water supply is available for the Proposal and a detailed description of the measures to minimise the water use at the site	Section 10.3 Appendix I
Details of stormwater/wastewater management including the capacity of on-site detention system(s), on-site sewage management and measures to treat, reuse or dispose of water	Section 10.2 and 10.3 Appendix I
An assessment of any potential impacts to Breakfast Creek	Section 10.3 Appendix I
A description of erosion and sediment controls	Section 10.2 Appendix I
Characterisation of the volume and quality of all wastewater generated at the site (including details of the contaminants of concern that may leach from the waste into the wastewater and proposed mitigation measures to manage any impacts).	Section 10.2 and 10.4 Appendix I

10.1 Methodology

10.1.1 Soils

A desktop review on 21 May 2020 was carried out to identify the soils and geological characteristics of the Proposal site, including the following documents:

- The *1:100,000 Soil geological sheet* (Chapman and Murphy, 1989)
- The *Soil Landscapes of the Sydney 1:100,000* map (DPIE, 2020d)
- The NSW Department of Land & Water Conservation (DLWC, 1998) Acid Sulphate Soil Risk Maps
- The NSW Department of Infrastructure, Planning and Natural Resources (DIPNR) Map of Salinity Potential for Western Sydney – 2002 (DIPNR, 2003) and the

Guidelines to Accompany the Map of Salinity Potential for Western Sydney (DIPNR, 2002).

10.1.2 Water

A site visitation was undertaken in early 2020 to assess the potential water impacts associated with the Proposal. This existing approved water infrastructure on the Proposal site was reviewed in the consideration of:

- *Protection of the Environment Operations Act 1997* (POEO Act): Under the Act, the Kings Park RRF currently operates under Environment Protection Licence (EPL) 11555, which does not allow discharge of (contaminated) water to Breakfast Creek
- Sydney Water Trade Waste Agreement: Under the agreement, discharge to sewer can occur in accordance with the Sydney Water Trade Waste Permit (Conditional Consent 39940 on 21 December 2018).

The existing Water Management System (WMS) at the Proposal site was designed as part of the Original Approval to achieve compliance with EPA requirements.

Existing water balance calculations have been based on the Proposal site's operational water balance prepared in October 2016 (Appendix I).

Proposal site water balance

Water balance calculations are aimed to evaluate the security of reuse water supply from the on-site retention pond to meet the Proposal site's production water demands for both current and proposed conditions, and to demonstrate that the current Trade Waste Agreement with Sydney Water is sustainable over the long term considering the proposed increase in production throughput.

For this purpose, proposed water balance calculations were undertaken using Model for Urban Stormwater Improvement Conceptualisation software (MUSIC). MUSIC has a typical node for modelling rainwater tanks, which allows for the simulation of stormwater harvesting and reuse for extended rainfall periods.

The methodology for preparing the Proposal site water balance comprised of the following:

- A review of the existing hydrogeological setting surrounding the Proposal site
- Identification of key water usage from scrap metal processing that occurs on the Proposal site
- An assessment of existing stormwater and wastewater systems and their capacity to manage the proposed operational increase
- An assessment of the discharge to the sewer via the Sydney Water Trade Waste Agreement
- An assessment of water requirements and measures to ensure water security and minimise water usage on the Proposal site
- A review water usage of amenities by employees on the Proposal site.

As specified in Blacktown City Council's guidelines, the MUSIC model used daily rainfall data from Blacktown station (067059) for the years 1963 to 1993, which is considered suitable for all developments within Blacktown LGA. The average annual rainfall for the selected simulation period is 854 mm/year and the average annual evapotranspiration is 1,261 mm/year.

The MUSIC model included the "dirty" catchment of 3.25 ha discharging into the on-site retention basin, which is then reused to supply the site's production water demand supplemented by the two (2) aboveground storage tanks and the

supplementary detention storages at the carpark and the rear yards. The total capacity of the site's storage system is 10,791 m^3.

Using MUSIC modelling software, two (2) scenarios were modelled:

- **Current scenario (350,000 tpa):** assumes the site's storage system captures run-off from the "dirty" catchment for reuse to meet the site's total production water demand of 47 kL/day.
- **Proposed scenario (600,000 tpa):** assumes the Proposal site's storage system captures run-off from the "dirty" catchment for reuse to meet the site's total production water demand of 81 kL/day.

The modelling assumed the Proposal would utilise existing infrastructure including stormwater discharge points and other utility installations and is further described in Section 10.2.

10.1.3 Contamination

A desktop database search on 21 May 2020 and review of publicly available information was undertaken to identify the potential for contamination impacts. The sources consulted included:

- A search of the NSW EPA's Contaminated Land notice records (EPA, 2020a) and notified sites list (EPA, 2020)
- Historical and current land use of 23-43 and 45 Tattersall Road (the Proposal site)
- A review of previous investigations undertaken on the Proposal site.

10.2 Existing Environment

10.2.1 Soils

The Proposal site is predominantly hardstand and has been highly disturbed by past industrial and farming activity. The soil landscape occurs on a relatively flat area with a slope of less than 5%.

A review of the *Soil Landscapes of Sydney 1:100,000* map identified that the Proposal site is located in the Blacktown Landscape Group. The Proposal site is mapped on the *1:100 000 Sydney geological sheet* (Chapman and Murphy, 1989), as being underlain by Triassic-aged Bringelly Shale of the Wianamatta Group. The soil comprises of mottled textured clay soils, high plasticity and are expansive subsoils with poor drainage ranging from shallow to moderate depth (ERM, 2019).

Acid sulphate soils have not been identified as occurring on the Proposal site (DLWC, 2020).

10.2.2 Hydrological setting

The Proposal site is located within the Hawkesbury River catchment, an area of approximately 21,600 km^2 within the Sydney Basin. Breakfast Creek, located at the rear boundary of the Proposal site, is a modified waterway that flows through the industrial estate from east to west. Waller Creek is a tributary of Breakfast Creek that flows towards Breakfast Creek on the eastern side of the Proposal site. Breakfast Creek then flows into Eastern Creek and reaches the Hawkesbury River (ERM, 2019; BCC, 2014).

The nearest weather station is located on Collins Street in Seven Hills, located 5.3 km away from the Proposal site. The mean rainfall determined using data obtained from the Bureau of Meteorology (BoM) over the period of 1950 to 2020 is greatest in June, with a mean rainfall approximately 81 mm/month or 910 mm/year.

10.2.3 Existing Water Management System

The existing approved WMS was designed and constructed to comply with the conditions of approval for SSD-5041 and subsequent three (3) associated modifications.

The WMS is principally based on separating “clean” run-off from “dirty” run-off. Clean run-off can be defined as roofed areas and the front carpark at the 23-43 Tattersall Road site that are clean water areas and rainfall run-off that flow through a stormwater drain to Breakfast Creek.

All other zones in the 23-43 Tattersall Road site including the shear areas is classified as dirty run-off and therefore, water flows are diverted to the floc pit prior to being pumped into the retention basin. All dirty run-off is collected, disinfected and reused in a closed loop system and is stored in the aboveground storage tanks.

The basis of the Proposal site’s WMS is shown in Figure 10-1, and each system is described below. These can also be reviewed in detail in the Stormwater Management Assessment in Appendix I.

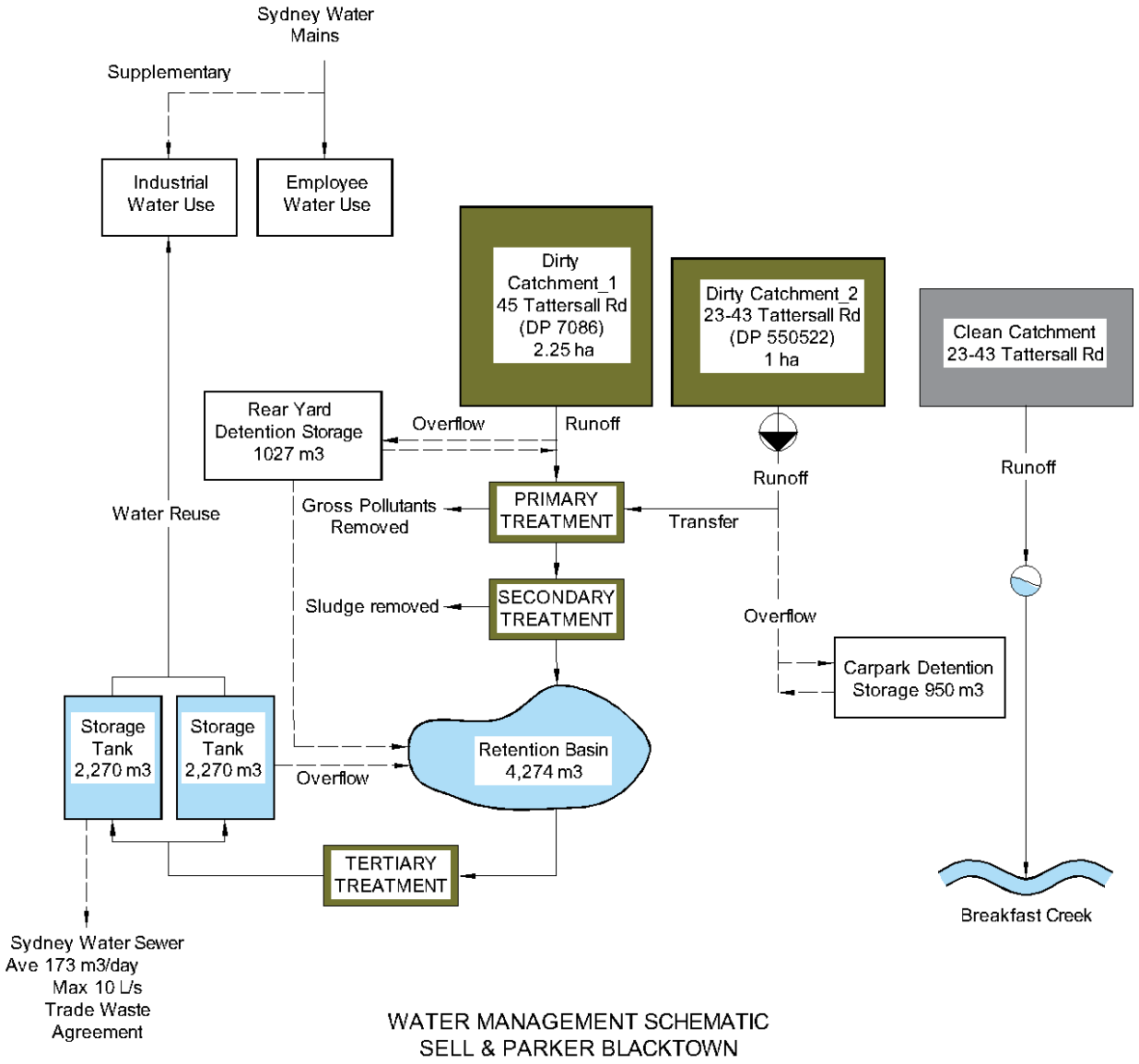

Figure 10-1 – Existing Water Management System on the Proposal site (Arcadis, 2020).

- **Water transfer and diversion management:** Roofed areas and the front carpark at the 23-43 Tattersall Road site are clean water areas and rainfall run-off from these locations flow through a stormwater pit-pipe system to Breakfast Creek. The dirty catchment in 45 Tattersall Road drains directly to the floc pit, while the dirty run-off in 23-43 Tattersall Road drains to an underground concrete buffer tank fitted with a rising main that transfers collected run-off to the floc pit. This is further detailed in the Stormwater Management Assessment (Appendix I).
- **Primary Treatment System (Floc Pit):** Dirty water from the 45 Tattersall Road site is gravity fed into the floc pit, which comprises of a drive through two-part system that allows coarse gross pollutants to fall out in the first section. A hydrocarbon boom is utilised, as required. Water passing through the screens will go into the floc pump pit ready for automatic transfer to the secondary treatment system.
- **Secondary Treatment System (Sludge bags)**: Water is pumped from the Primary Treatment System pit to the sludge bags in the allocated bunded area locater near the retention basin wall. The bund is 15 m in length, 5 m wide with a 30 cm gutter and constructed from reinforced concrete. The bags maintain the majority of the sediment while filtered water seeps out into the bund and is gravity fed down a sluice pipe into the retention basin. The sludge bags will retain suspended solids including hydrocarbons and metals that adhere to particles in the water.
  - **On-site Retention Basin**: The site's retention basin is used for storage of secondary treated run-off and storage of run-off overflowing from the site's transfer system during heavy rainfall events. The storage capacity of this retention basin is 4,274 m^3, supplemented by two (2) temporary on-site detention systems; 1,027 m^3 detention storage at the rear yard and 950 m^3 detention storage at the rear carpark. A validation program to test retention basin integrity has been undertaken in consultation with the EPA. Sell & Parker will continue to undertake yearly validation sampling to ensure ongoing efficacy of the retention basin.
- **Tertiary Water Treatment System (TWTS):** This stage comprises of a media filtration and chlorine disinfection to remove fine suspended particulate material and provide a water quality that meets the requirements for Sydney Water sewer discharge agreement. The TWTS is used to treat the Proposal site's run-off for storage in one of the aboveground storage tanks, which is then supplied within the site as reuse water or discharged into the sewer before anticipated large rainfall events and during heavy rainfall to maximise available storage capacity. The filtration system is fully automated operating on a set level controls in the tanks and the retention basin. And two back up diesel pumps are available in the event of large rainfall events.
- **Storage tanks:** The treated water is utilised for site reuse and discharged as trade wastewater, if required. Water can be released back through all three (3) stages of the filtration system from the tanks if additional water treatment is required. Each tank has a 2,270 kL capacity.

10.2.4 Existing water balance

Water usage

Water usage at the existing site comprises production water and water for employee use. Water for these purposes is sourced from water captured and recycled through the existing WMS or potable mains water.

Production water uses include:

- Water spray within the shredder for cooling the hammer mill
- Other uses within the shredder such as for shredding and wetting floc
- Wetting of scrap metal in the raw material stockpile area
- Dust suppression
- Washdown of areas required for pedestrian and truck movements and work areas outside of stockpile locations.

The Proposal site's shredder water usage in 2019 for sprays (which does not include any other water usage) is shown in Table 10-2.

Table 10-2 – Monthly water use for shredder spray in 2019

Month	Water Consumption (kL)
January	740
February	814
March	563
April	599
May	426
June	148
July	246
August	594
September	515
October	626
November	934
December	489
Total (kL/year)	**6,694**
Average (kL/day)	**18**

Based on the water usages shown in Table 10-2, daily average of water volumes for shredder spray is 18 kL/day (assuming 365 days per year to facilitate water balance modelling using MUSIC software). The remaining production water demands include the shredder's other water uses, site's washdown and dust control, were estimated using calculation of the site's operational water balance during August-October 2016. These are shown in Table 10-3.

Table 10-3 – Other water use recorded in 2016

Production Use	Aug 2016 (kL)	Sep 2016 (kL)	Oct 2016 (kL)	Average per day (kL/day)
Other Shredder uses (Shred & Floc)	349	489	184	11
Washdown	390	390	390	13
Dust control	180	200	50	5

Based on the above, the estimated total Proposal site's water demands for the current production (350,000 tpa) per day is compiled in Table 10-4 (assuming 365 days per year to facilitate water balance modelling using MUSIC software).

Table 10-4 – Proposal site estimated production water demand for 350,000 tpa

Water Use Type	Average Water Use
Shredder (spray)	18 kL / day
Shredder (Shred & Floc)	11 kL / day
Washdown	13 kL / day
Site dust control	5 kL /day
Daily total for production	**47 kL / day**
Yearly total for production	**17,155 kL/year**

Employee water usage includes drinking, laundry, bathroom, toilet flushing and kitchen use. Water for employee usage is sourced from Sydney Water's mains. Potable water may be infrequently used to supplement the production water use, when required. Sell & Parker has indicated that supplementary potable water for production use is rare and during extended dry periods.

Sell & Parker considers the 2018 mains water use to be representative of typical potable water demand during current production throughput as there was flow meter irregularity in the 2019 data. The total monthly use of water mains in the site for 2018 is presented in Table 10-5. The daily average of these readings was 25 kL/day (assuming 365 days per year to facilitate water balance modelling using MUSIC software).

Table 10-5 – Total monthly use of water mains for 2018

Month	Potable Water Consumption (kL)
January	1,760
February	1,462
March	1,356
April	436
May	571
June	434
July	404
August	546
September	388
October	491
November	524
December	752
Total (kL/year)	**9,124**
Average (kL/day)	**25**

Controlled discharge to sewer

The existing site is authorised to discharge to the sewer under a Trade Waste Agreement with Sydney Water provided that certain flow rate and pollutant concentration levels are met. Discharge occurs when the volume of recycled water exceeds the production requirements of the site e.g. following a large rainfall event.

Under the agreement, the maximum instantaneous rate of pumped discharge is 10 L/s and the total discharge must be less than 864 kL/day on average (calculated across the reporting period). Trade Waste for the existing site is discharged via a metered pipe from the clean water tanks to the sewer discharge point. The quality of discharged effluent volumes has been tested since activation and the discharge volumes to the sewer are displayed in Table 10-6.

Table 10-6 – Discharge volumes to sewer for 2019-20

Date	Volume Discharged to Sewer (kL)
15/01/2019	569
16/01/2019	474
12/04/2019	667
19/09/2019	809
20/09/2019	814
21/09/2019	849

Date	Volume Discharged to Sewer (kL)
22/09/2019	561
23/09/2019	706
24/09/2019	848
25/09/2019	170
26/09/2019	161
27/09/2019	4,919
11/12/2019	2
22/01/2020	170
23/01/2020	376
28/01/2020	58

Based on this information, the average daily discharge volume to Sydney Water's sewer is 36 kL/day (averaged over a 12-month period), well below the average 173 kL/day specified by the Trade Wastewater Agreement.

MUSIC Model

The MUSIC model developed is to validate the existing scenario and provide a baseline for comparison with the Proposal. The model is based on existing water demands scenario provided the site storage system would overflow 7,330 kL/year or an average of 20 kL/day (assuming 365 days per year to facilitate water balance modelling using MUSIC software) into the sewer system.

As mentioned above, the average discharge to the sewer in 2019 was estimated to be 36 kL/day recorded by Sell & Parker. Given the model is necessarily based on assumptions and considers 30 years of rainfall data (while the recorded values were only for a single year) the modelled outcome is comparatively close. This is still below the 173 kL daily average licenced by Sydney Water. This indicates that the current system is sustainable with no overflows expected from the existing detention basin to Breakfast Creek. The existing scenario also reinforces that the reuse supply almost completely meets the production water demands under the current conditions. The potential impacts of the Proposal are discussed in Section 10.3.2.

10.2.5 Contamination

A search on the NSW EPA Contaminated Land database on 21 May 2020, did not identify any records of notice on the Proposal site.

As a part of the Original Approval, a Phase 1 Environmental Site Assessment (ESA) (ERM, 2019) was prepared to assess the suitability of (23-43 and 45 Tattersall Road) for ongoing industrial land use. The investigation found:

- The Kings Park RRF was historically used for farming up until the 1950's. Then after, it developed into a commercial and industrial land use and zoned IN1, General Industrial by the Blacktown Local Environmental Plan 2015
- A number of dangerous goods are stored, above ground, at the existing Proposal site. No dangerous goods are stored in underground tanks
- At least two (2) former underground storage tanks (USTs) were previously located on-site at 45 Tattersall Road

- Three (3) historic USTs were removed from the site in 1995. Testing during removal and indicated that all concentrations of TPH, BTEX and lead were either below detection limits or applicable guideline criteria at the time
- Capped waste cells are be present in the northern portion of the site beneath concrete hardstand.

As described in Section 10.2.3, wastewater treated through the existing WMS undergoes a three (3) stage treatment process prior to discharge or reuse on-site. The reuse of this potentially contaminated site's run-off collected in the Proposal site's retention basin and was assessed by ERM in the Original Approval (2019) as per the consultation with the EPA.

10.3 Potential Impacts

10.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

10.3.2 Operation

Soils

Operation of the Proposal site would not involve disturbance to soils as it is mostly a hardstand area and there would be no impact on-site soils.

During operation, water and suspended sediments would continue to be managed by the existing Stormwater Management System as discussed in Section 10.2.3. Suspended solids are removed including sediments from run-off for on-site water reuse or discharged to the sewer.

Given the presence of acid sulphate soils within the Proposal site is considered to be unlikely, it is considered highly unlikely that the Proposal would disturb any acid sulphate soils.

Proposal water demand

The increase in throughput limit would result in a proportional increase in production water requirements from 47 kL/day (17,155 kL/ year) to 81 kL/day (29,565 kL/year).

The Proposal does not require an increase in the number of employees on the Proposal site. As such, the potable water demand for employees is expected to remain at the current level of 25 kL/day (9,124 kL/year).

Based on this, the total site water demand for the proposal is anticipated to be 106 kL/day (38,689 kL/year). A comparison of the existing and proposed water usage demands for the Proposal site is presented in Table 10-7.

Table 10-7 – Existing and proposed water demand

Water Demand	Existing site	Proposal	Difference
Daily production water demand (kL/day)	47	81	+34
Daily employee water demand (kL/day)	25	25	0
Total daily demand (kL/day)	**72**	**106**	**+34**

Water Demand	Existing site	Proposal	Difference
Yearly production water demand (kL/year)	17,155	29,565	+12,410
Yearly employee water demand (kL/day)	9,124	9,124	0
Total yearly demand (kL/year)	**26,279**	**38,689**	**+12,410**

Water balance modelling

Using the MUSIC model, water demands of the Proposal for the current and proposed scenarios are presented in Table 10-8 below.

Table 10-8 – Existing and proposed MUSIC model results

Scenario	Run-off inflow into storage (kL/year)	Overflow from storage (kL/year)	Reuse demand (kL/year)	% Reuse demand satisfied
Existing	24,710	7,330	17,290	99.9%
Proposed	24,710	1,000	29,450	80%

In the proposed scenario, the Proposal site's production demand is greater in higher reuse demand and eventually less overflow to the sewer (average of 3 kL/day). 80% of the Proposal site's production demand is met through reused water on the site supply. This is about 61% saving of the total water demand of the Proposal site (when considering the 25 kL/day potable water used by the site's employees).The remainder of the total water demand of the Proposal site will be supplied by Sydney Water mains.

An increase in production demand would result in a reduced overflow discharges to the sewer, as a greater volume of captured water would be reused. This would further reduce the extremely low risk of overflow to Breakfast Creek during extreme weather events (e.g. flooding). Note that the Proposal does not propose any discharge from operational areas to Breakfast Creek during normal operations.

Contamination

The Proposal site is capped as permanent hardstand and the risk of exposure to existing contaminants (if present) is considered negligible. The Proposal would not result in changes in the types and quantities of potential contaminants as a result of increasing the operational capacity of the facility.

The existing Proposal site WMS would continue to manage potential contaminants within 'dirty' water treatment. As described above, the system has sufficient capacity to suitably managed increased water usages associated with the Proposal. An assessment of the risks associated with stormwater reuse on the site (as required by conditions of consent for the Original Approval) was prepared by ERM Consulting (2019). The assessment concluded that the risks and health and safety associated with reuse were low and within acceptable limits.

Potential for contamination from spills would be managed through the existing OEMP, PIRMP and Emergency Response Plan (ERP).

Groundwater

As the Proposal site is sealed and no new infrastructure would be required, the Proposal would not result in an impact to groundwater.

10.4 Mitigation Measures

10.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

10.4.2 Operation

The existing WMS would have the capacity to manage the increase in water use associated with the Proposal as demonstrated through the updated site water balance. It is sustainable in the long-term and incorporate measures that minimises potable water use on the Proposal site and achieve significant water savings.

Table 10-9 displays the mitigation measures in relation to soil, water and contamination as previously identified for the Original Approval (SSD-5041) that remain in place for the Proposal. In particular, the soil, water and contamination management strategies in the current OEMP will be implemented to reduce impacts.

Table 10-9 – SSD-5041 Soil, water and contamination mitigation measures

Reference number	Mitigation Measure	Implementation Stage
4A	• All activities on the Proposal site would be undertaken in accordance with the Proposal site Water Management Plan. The Water Management Plan will include the following: – A description of the operation and maintenance of the existing water management system – A procedure for testing the performance of all components of the Water Management System, including the primary, secondary, and tertiary treatment systems – A description of the system used to manage water quality including sampling and comparison against the baseline data. – Procedures for site inspection and proactive management of potential issues • A procedure of sampling of the sediment basin and identification of corrective actions (where applicable).	Operation
4B	• Regular cleaning of the oil/water separators will be carried out to maintain performance	Operation
4C	• The existing network of underground stormwater pipes, inlets and oil/water separators will be cleaned and repaired / replaced as required	Operation
4D	• Chemicals will be stored within impervious bund of more than 110% of the largest container within the bund	Operation

Reference number	Mitigation Measure	Implementation Stage
4E	• Safety Data Sheet (SDS) will be maintained for all chemicals stored on-site and made available to site personnel	Operation
4F	• Refuelling will occur away from drainage points, with spill kits available	Operation
4G	• Receptacles will be provided for the storage and disposal of all wastes generated on-site	Operation
4H	• Collected runoff in the retention basin will continue to be used for operation as long as the water is of a quality such that impacts to Proposal site infrastructure, the surrounding environment and the health and safety of employees is avoided	Operation
4I	• All pollution incidents that threaten or harm the environment shall be reported immediately to relevant authorities in accordance with the *Protection of the Environment Operations Act 1997* (POEO Act)	Operation
4J	• A Hazardous Materials Register and respective Safety Data Sheets (SDSs) shall be kept on-site at all times and be regularly maintained.	Operation

11 FLOODING

This section provides an assessment of the potential flooding impacts associated with the Proposal. A Flooding Impact Assessment has been prepared by Arcadis and is included as Appendix J.

A summary of the relevant SEARs and where they are addressed is provided in Table 11-1. A full SEARs compliance table is presented in Appendix A.

Table 11-1 – Flooding SEARs

SEARs	Where addressed
The EIS must include a detailed flooding assessment	Section 11.3

11.1 Methodology

A detailed flooding assessment has been undertaken by Arcadis (Appendix J). The methodology to assess the flooding impacts of the Proposal comprised the following:

- Review of existing flooding modelling for the Proposal site to identify potential revisions as required
- Revision of the flood modelling utilising updated information to identify the existing flood regime
- Assessment of flood modelling results to identify the potential impacts of the Proposal.

11.1.1 Existing flood modelling

Blacktown City Council Maps Online (BCC, 2019b) indicates the Proposal site is flood prone. Various parts of the Proposal site are currently zoned under low, medium and high flood risk precincts as shown in Figure 11-1.

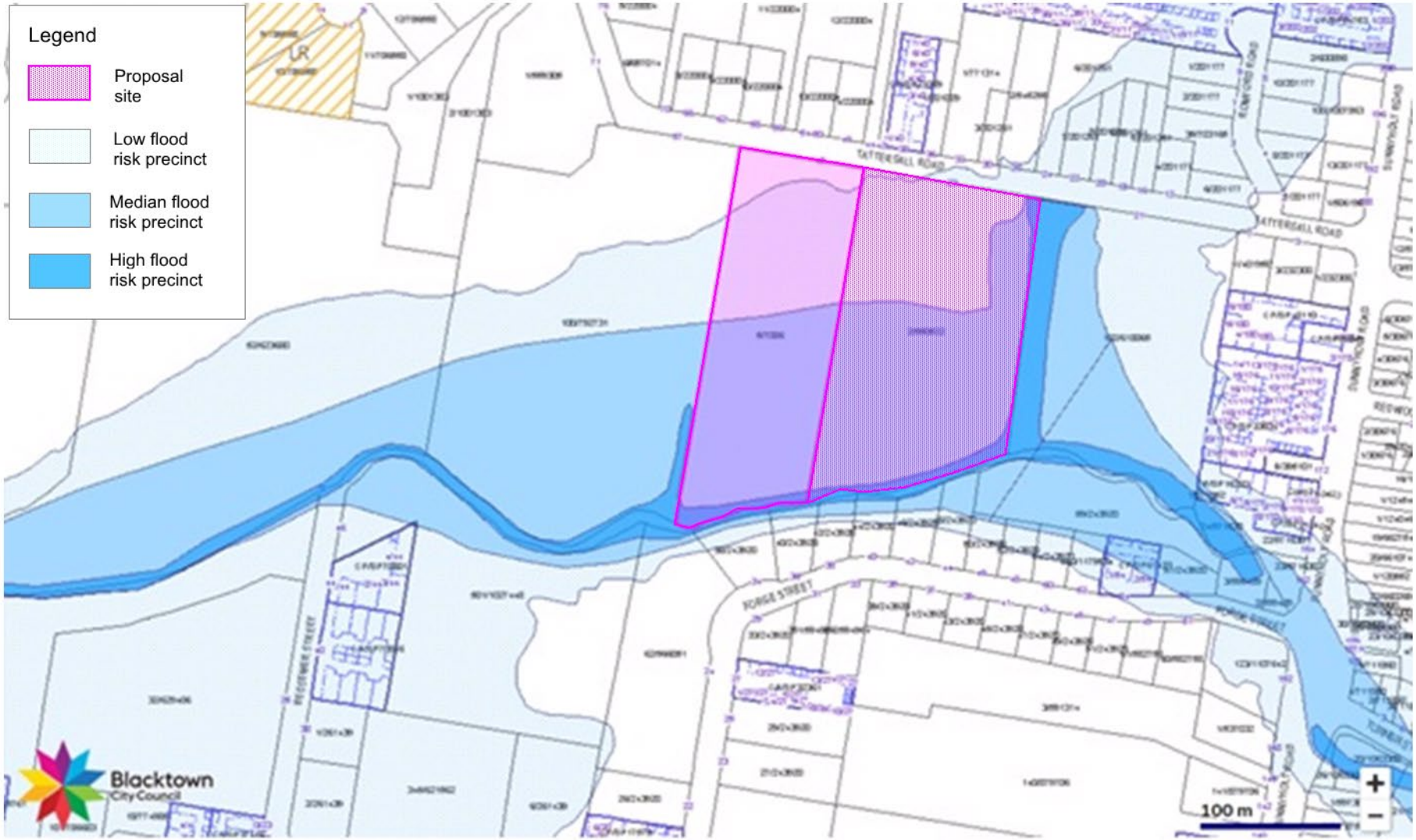

Figure 11-1 – Blacktown City Council Flood Risk Precincts (Source: BCC Maps Online, 2019b)

To establish the basis for the flood zonings and further interrogate the potential for flooding on the existing site, flood modelling data was obtained from Blacktown City Council, specifically the Floodplain Planning Study for Eastern Creek (as the Proposal site is located within the Eastern Creek Catchment) (BCC, 2014). The XP-RAFTS hydrologic model (2013), TUFLOW hydraulic flood model (2014) and supporting hydraulic assessment reports were made available from Council for this flood assessment.

The XP-RAFTS hydrological model provides flow estimates across the Eastern Creek catchment. The TUFLOW hydrologic model helps to determine the flow regime of major waterways and the floodplain. The details of the flood model parameters are provided in Appendix J.

The existing 100-year ARI flood conditions and the associated flood hazard conditions have been extracted from the provided hydraulic assessment reports and are shown in Figure 11-2 and Figure 11-3.

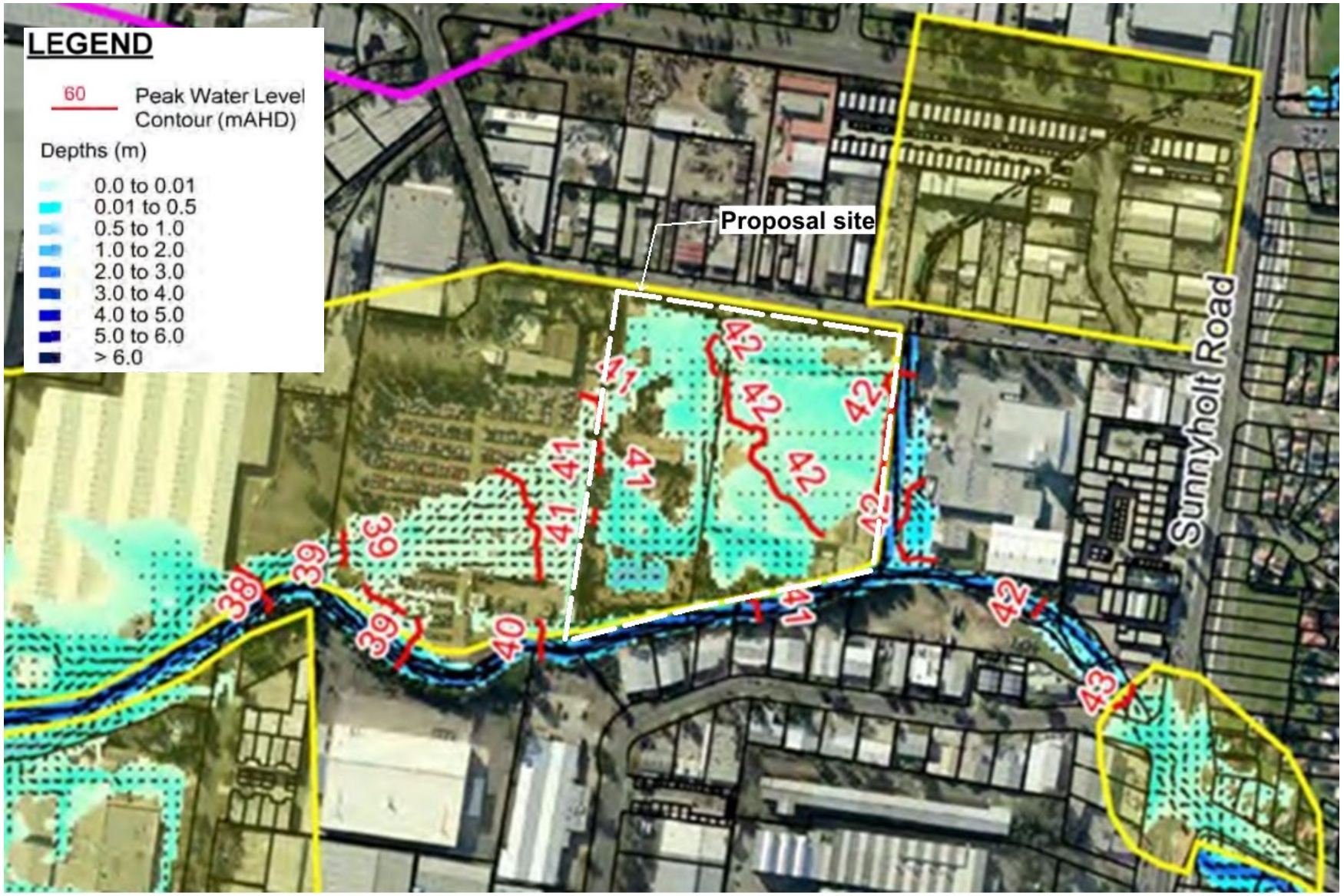

Figure 11-2 - Existing Flood Conditions, 100-year ARI Event (Extracted from BCC, 2019a)

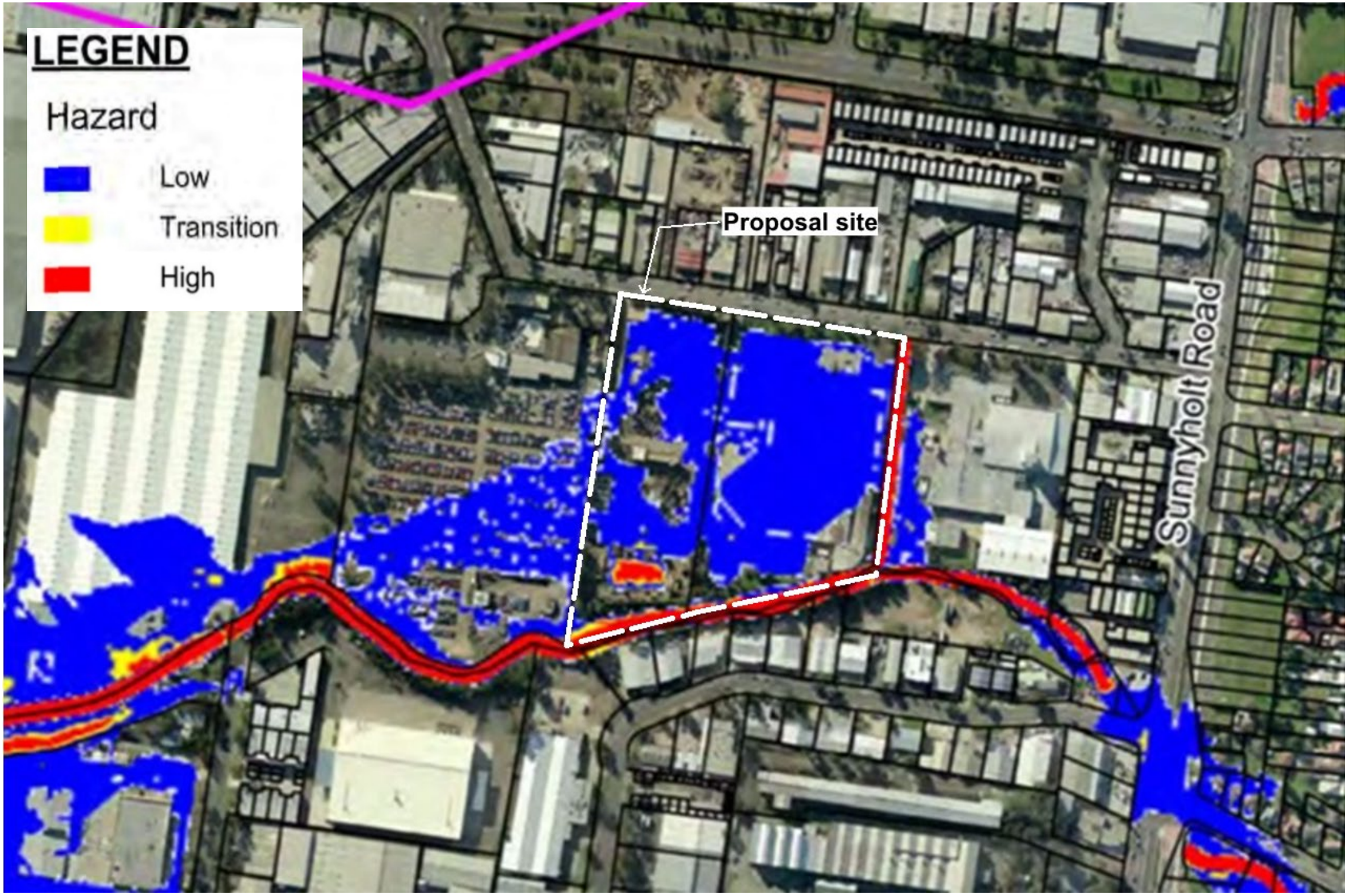

Figure 11-3 - Existing Flood Hazard Conditions, 100-year ARI Event (Extracted from Council Flood Report)

11.1.2 Flood model revision

The Blacktown City Council flood model (BCC, 2019a) provides a prediction of the flood regime on a regional scale and has been based on generic topographic assumptions such as including:

- The use of aerial laser survey (Lidar) for ground level information
- Utilisation of remote sensing generated building footprints
- Adoption of artificial upward adjustment of Lidar ground level by 0.3 m to represent indicative building floor level
- Building footprints represented as areas of high roughness.

These are commonly accepted approaches for regional flood studies to produce a reasonable flood regime prediction on a broadscale. However, the flood regime prediction may not be adequate at a site-specific scale as the local flood regime could be significantly affected by local topographic features which may not be accurately captured by the generic assumptions. As such, the Council flood model has been revised to better represent the existing site conditions and flood regime.

To provide a better model of the flood conditions locally for the Proposal site, site specific information has been gathered and updated within the model, specifically:

- Lidar survey used to establish local topography has been updated from 2010 to 2019
- Building footprints have been updated for the Proposal site and 57 Tattersall Road (Pick 'N' Payless site) based on a topographic survey undertaken by East Coast Surveyors in early 2020 and aerial imagery
- Permanent structures have been assumed to be solid objects and provide full blockage of overland flow. Note this approach will produce a slightly conservative flood level as it does not account for the flood storage effect within the building footprint
- Additional temporary structures (e.g. cranes, shipping containers) have been added to the model
- Inclusion of permanent solid fences and noise walls within the Proposal site which may potentially influence local overland flow paths
- Adjustment to the channel interface with Waller Creek (open channel on the Proposal sites eastern boundary) and Breakfast Creek (along the Proposal sites southern boundary) to ensure the influence of the existing noise walls are considered
- Existing stormwater drainage has not been included in the flood modelling, as it is likely to be blocked during a rainfall event. As a result, the flooding regime is considered to be conservative.

11.1.3 Stockpile considerations

The preparation of stockpiles is a dynamic process with stockpiles varying in size and height throughout the day based upon the rate of receival of scrap metal to the Proposal site and the rate at which received scrap is processed.

The main stockpile areas are located in the north-western corner of the Proposal site and the area east of the Building 'B'. These areas are generally above 100-year flood level and would have little impact on the flood regime. However, the amount of stored material on the stockpile areas near the weighbridges, located adjacent to the main ponding areas, may potentially affect the overall flood storage within the Proposal site and consequently the peak flood levels.

To calculate the potential impact of minor stockpile variations on the flood storage volume the differences in ground level data between the 2019 Lidar survey and the 2020 topographic survey was compared. In comparing the two-survey data sets a statistical analysis of 1,728 data points indicates and average level difference of 0.012 m with the 2020 topographical survey being slightly lower than 2019 Lidar. This has been compared against the 100-year ARI inundated Proposal site to calculate the impact on flood storage volume.

11.1.4 Other design flood events

Despite the additional refinements to the Council flood model, the predicted flood regime for the 100-year ARI design flood event (see Section 11.2) remains consistent with that present in the Council 2014 Council Hydraulic Assessment (BCC, 2014). As such, the flood regime for more frequent smaller flood events, and larger rarer flood events is not expected to vary significantly from that presented in the Council Hydraulic Assessment. Given the Proposal would not require construction of new infrastructure or changes to the nature of operation, further assessment of these events has not been undertaken.

11.2 Existing Environment

11.2.1 Regional Catchment

The Proposal site is located in the northern floodplain of Breakfast Creek. It is a highly modified realigned waterway that flows through the industrial estate from east to west. The Creek is bound by Tattersall Road to the north and is part of an open channel section of Waller Creek to the east and 57 Tattersall Road to the west. The land use surrounding the Creek is characterised by industrial and commercial use. This Creek flows into Eastern Creek and then flows into the Hawkesbury River (BCC, 2014). The Proposal site is located within the Hawkesbury River catchment, an area of approximately 21,600 km^2 within the Sydney Basin (ERM, 2019).

The Council has previously undertaken realignment works on Breakfast Creek and Waller Creek that has the potential to minimise flooding impacts on the surrounding area. The original geomorphic features have been lost within the riparian zone with the works and is only designed to contain low level higher frequency rainfall events.

11.2.2 Existing 100-year ARI Flood Conditions

Existing conditions have been derived by simulating the 100-year ARI flood event using the revised flood model described in Section 11.1.2.

The revised flood model indicates that 2-hour design event is the critical duration for mainstream flooding over the Kings Park area. The flood levels within the Proposal site has a critical duration of 3-hours due to the flood storage effect.

The 100-year ARI flood regime for the existing Proposal site is shown in Figure 11-4. The open channel overflow enters the Proposal site immediately downstream of Tattersall Road. The overland flow fills the low-lying areas first before it would spill across the Proposal site boundary to the west to 57 Tattersall Road.

The revised flood modelling shows there is no significant direct flow exchange between the Proposal site and Breakfast Creek channel to the south. The predicted maximum flood depth is about 1 m located immediately north of the detention basin. The revised model is very similar to the BCC model. This highlights the robustness of the predicted flood regime as it is relatively insensitive to the additional flood model refinements.

Figure 11-4 – Flood depth and level, 100-year ARI event (Arcadis, 2020)

Figure 11-5 presents the flood hazard for the 100-year ARI design event. The majority of the operational part of the site is classified as low hazard apart from some isolated medium / high hazard areas, which are related to significant flood depths with low flow velocities. The current Proposal site has an estimated flood storage of approximately 6,000 m^3.

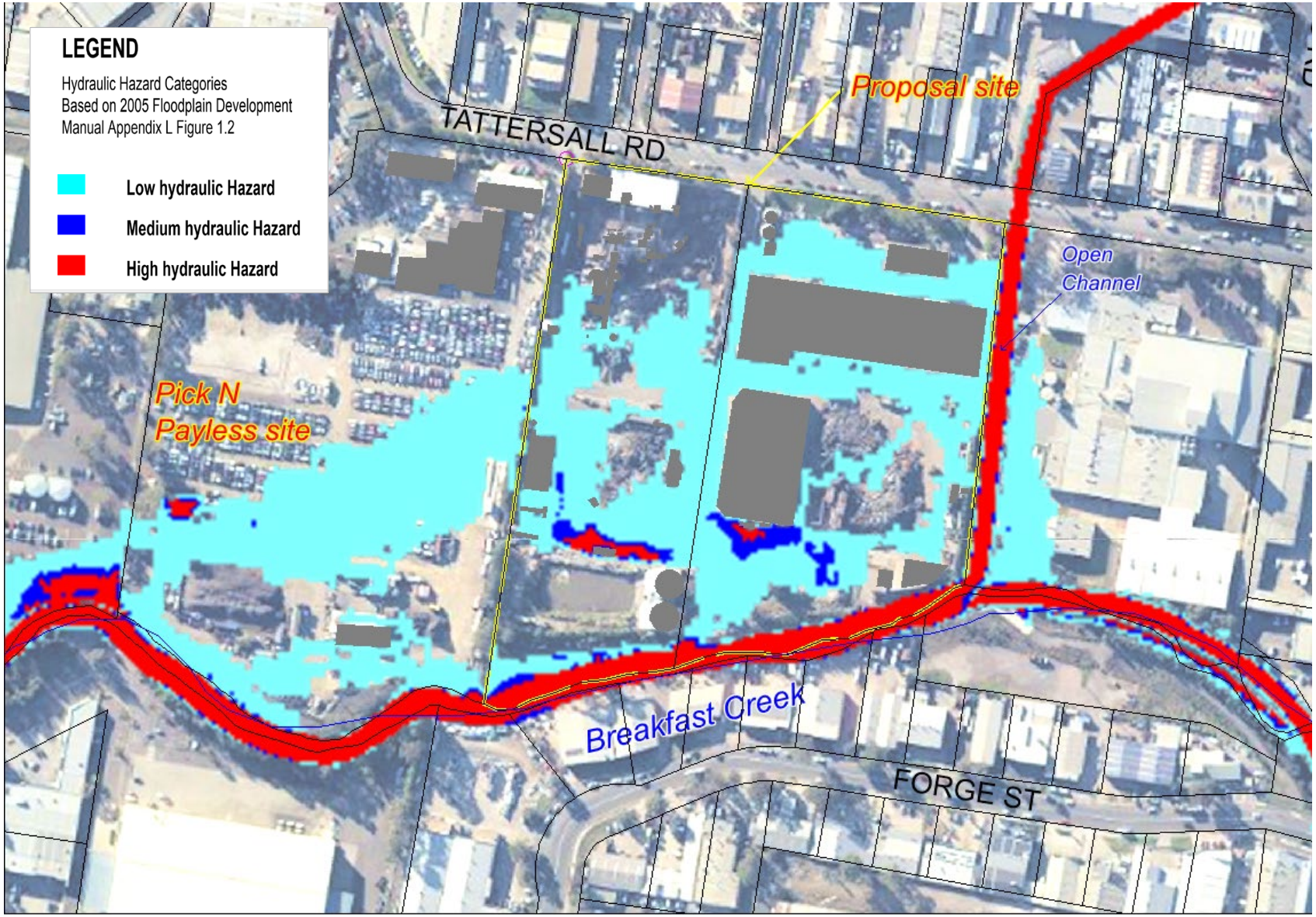

Figure 11-5 – Flood hazard, 100-year ARI event (Arcadis, 2020 based off DIPNR, 2005).

11.2.3 Stockpile flood storage volume impact

When comparing the 2019 Lidar and 2020 topographical survey information the average level difference is 0.012 m, with the topographical surveys slightly lower than Lidar. The existing site flood extent covers a footprint of approximately 21,000 m^2.

The potential difference in flood storage volume is estimated as 21,000 m^2 (Proposal site area capacity for flood storage) x 0.012 m (difference in flood storage), equalling approximately 250 m^3. This volume is representative less than 5% of the overall flood storage within the site for the 100-year ARI flood event. This analysis indicates that the difference between flood storage volumes resulting from minor variations to stockpile volumes at the Proposal site, is minimal and would not result in significant impact on the flood regime.

11.3 Potential Impacts

11.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

11.3.2 Operation

The Proposal is operational only and would utilise existing infrastructure at the Proposal site. Operational changes will not result in changes to the existing ground conditions within the Proposal site given that:

- No new structures are proposed
- No changes to existing land use or surface treatments are proposed
- No alterations to any existing buildings (e.g. extents, floor levels etc) are proposed
- No significant change to stockpile volumes or locations within the Proposal site are proposed
- No alterations to any existing drainage networks within or surrounding the Proposal site are proposed.

As such, there would be no significant change to the existing flood regime on Proposal site (as described in Section 11.2) and no change to flood impacts on the surrounding area are predicted.

11.4 Mitigation Measures

11.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

11.4.2 Operation

The flooding management strategies in the current OEMP will be implemented to reduce flooding impacts. Table 11-2 displays the mitigation measures in relation to potential flood impacts previously identified for the Original Approval (SSD-5041) that would be implemented for the Proposal. In particular, the flood management strategies in the current OEMP will be implemented to reduce impacts.

Table 11-2 – SSD-5041 flooding mitigation measures

Reference number	Mitigation Measure	Implementation Stage
5A	• Flood response on the Proposal site will be undertaken in accordance with the Early Warning Flood Readiness Plan (as part of the Emergency Response Plan).	Operation

12 HAZARDS AND RISK

This section provides an assessment of the potential hazards and risks associated with the Proposal. The Proposal would not result in a change to the types or quantities of dangerous goods stored at the Proposal site and the nature of existing hazards would not change. However, to ensure hazards and risks continue to be appropriately managed, a consolidated assessment has been provided in this section.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 12-1. A full SEARs compliance table is presented in Appendix A.

Table 12-1 – Hazards and risk SEARs

SEAR	Where addressed
The EIS must include a preliminary risk screening completed in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development* and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is "potentially hazardous" a Preliminary Hazard Analysis (PHA) must be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011).	Section 12.2 and 12.3

12.1 Methodology

The methodology for the assessment of hazards related to the Proposal included:

- Identification of existing and potential hazards associated with operational activities and processes to be undertaken within the Proposal site
- A review of the Fire Hydrant Assessment (Appendix K) undertaken in early 2020 by Sparks and Partners to assess the existing fire infrastructure on the Proposal site
- An assessment of the possible hazards associated with the operational activities and processes of the Proposal
- Identification of mitigation and management controls to be implemented at the Proposal site (if required).

12.2 Existing Environment

12.2.1 Management of existing hazards and risk

Existing hazards and risks associated with the operation of the existing RRF are managed through the existing PIRMP and site OEMP. The existing OEMP addresses the following issues relevant to hazards and risks at the Proposal site:

- Environmental policies and management
- Legal and regulatory requirements
- Risk management and workplace health and safety management

- Training and inductions, including staff roles and responsibilities
- Pollution incident response and emergency management
- Proposal site signage and access
- Complaints, inquiries and notification.

Existing fire infrastructure and system

It should be noted, the management of the fire hydrant components of the Proposal site has been described in detail in Section 2.4.6 of this EIS. The current system installed on the Proposal site is AS 2419.1-2005. The fire management infrastructure has been designed in accordance with the Fire and Rescue NSW (2020) *Fire safety guidelines: Fire safety in waste facilities*.

The existing buildings on the Proposal site contain a manual water deluge system and smoke and alarm systems to manage potential fire hazards and risks. Section 2.4.6 describes each of the building's fire hydrant system in detail.

12.2.2 Surrounding receivers

The closest residential receivers are located approximately 300 m from the Proposal site, and the closest industrial receivers are adjacent to the Proposal site. Sensitive receivers within the vicinity of the Proposal site are identified in Section 8.1.1 (air quality) and 9 (noise and vibration).

12.2.3 Potentially hazardous and dangerous goods

Daily operations may require the use of goods that could be classified as potentially hazardous or dangerous. A range of hazardous and dangerous materials that are not accepted by the Proposal site for processing (as per the EPL) have been listed in Section 2.5.2.

All material coming to the Proposal site are inspected on arrival to the Proposal site. Hazardous materials such as batteries and gas cylinders and fuels may arrive on site without the knowledge or approval of Sell & Parker from third parties. This material is temporarily stored in specific area on-site and then taken to a licenced facility for disposal (discussed further in Section 2.5.2).

Potentially hazardous or dangerous goods may also be brough to site as by-products of processing operations. The existing goods used and generated on the Proposal site that could potentially be classified as hazardous or dangerous include the following:

- Daily operations:
  - Fuel: including refuelling of vehicles, equipment and machinery
  - Oils and greases: equipment and machinery
  - LPG (liquefied petroleum gas and oxygen): equipment and machinery.
  - Operational batteries: equipment and machinery.
- By-products of processing:
  - Other waste fuel: removed from end of life vehicles, include petrol, diesel, LPG gas cylinders.

As mentioned above, batteries used for operations are stored on the Proposal site for equipment and machinery usage. This includes the storage of operational batteries such as an AA or D batteries (for small equipment and office use) or larger batteries for use with a machine or equipment e.g. operating a forklift, or car.

ULABs are spent lead acid batteries commonly found in End of Life Vehicles (ELV's). ULABs are generally only received by smaller providers as a single or bulk product and therefore are not mixed in with other scrap metal. ULABs are almost 100% recyclable and the materials have a commercial value. Sell & Parker receive, store and sell ULABs on-site as licenced under the EPL 11555 but do not process ULABs.

A list of types, locations and quantities of potentially hazardous and dangerous goods stored on the existing site are included in Table 12-2.

Table 12-2 – Quantities of dangerous goods assessed against screening thresholds

Potentially hazardous or dangerous good	Use	Maximum quantity stored on-site (estimated)	Dangerous Goods Class	Storage type and area
Daily Operations				
Oxygen	Equipment and machinery	16,000 L 5,864 kg	C 2.2: Non-flammable, non-toxic gases, Sub 5.1: Oxidizing substances	Stored in bulk cylinder Stored in 6 man-packs (15 bottles)
Oils and greases	Equipment and machinery	8,000 L	C 2: Combustible liquids	Stored in twin skin tanks in building A Other oils and greases in building G
Degreaser - Kerosene	Equipment and machinery	100 L	C 3: Flammable liquids	Packaged goods
Petrol – Petroleum	Equipment and machinery	20 L	C 3: Flammable liquids	Stored in 2 x 10 L drums near machinery
Diesel fuel	Equipment and machinery refuelling	1,000 L	C 1: Combustible liquids	Twin skin above ground tanks in building A
Argon, compressed	Equipment and machinery	135 L	C 2.2: Non-flammable, non-toxic gases	Stored in 3 x 45 L cylinders
LPG – LP Gas	Equipment and machinery	540 L	C 2.1: Flammable gas	Stored in 12 x 45 L cylinders
Operational Batteries	Equipment and machinery	500 kg	C 8: Corrosive	Stored in building A
By-product of processing				
Petrol – Petroleum	Waste fuel	3,000 L	C 3: Flammable liquids	Twin skin above ground tanks east of building K (3,000 L)
Diesel fuel	Waste fuel	2,000 L	C 1: Combustible liquids	Twin skin above ground tanks

Potentially hazardous or dangerous good	Use	Maximum quantity stored on-site (estimated)	Dangerous Goods Class	Storage type and area
				One 1,000 L tank west of machinery parallel to the western driveway One 1,000 L tank south of building L
Storage				
Batteries (ULABs)	For sale to third party recycler	30,000 kg	C 8: Corrosive	Stored in non-ferrous shed
Lead	Waste storage	50,000 kg	C 6.1: Toxic substances	Stored in non-ferrous shed
LPG – LP Gas	Waste fuel	500 kg	C 2.1: Flammable gas	Stored in designated area adjacent to sludge bags

12.3 Potential Impacts

12.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

12.3.2 Operation

The potential hazards to the environment and/or public health identified in relation to the operation of the Proposal are discussed in detail below. An increased rate of throughput may increase the rate at which some of the dangerous goods used for operational purposes are utilised. Although, the Proposal would not result in a change in the types of dangerous goods stored at the Proposal site as noted in Section 12.2. All hazardous and dangerous good quantities are within threshold requirements and therefore, applying SEPP 33 is not required (DoP, 2011).

12.3.3 Hazard identification

Operational hazards associated with the Proposal have been undertaken based on a review of the proposed operational activities, and considering the hazards associated with each of the dangerous goods proposed to be stored within the Proposal site (refer to Table 12-2).

Spills and leaks

This includes liquid, gas and solid spills and leaks. Depending on the material and circumstances, spills may result in health impacts or injuries. Spills also have the potential to cause harm if to enter the environment, particularly if liquid spills enter waterways or groundwater and/or contaminate soil.

Fire or explosion

The fire hydrant tanks have has the capacity to supply the fire hydrant system flow demand in accordance with the FRNSW Guidelines for Waste Facilities AS2419.1-2005. Any potential risks may include fire initiated from spontaneous combustion from recyclable stockpiles, trucks entering the Proposal site, or a bushfire initiated on the Proposal site or within the surrounding area. Fire and explosion have the potential to cause human injury and damage to property and equipment.

There are three (3) potential scenarios by which the Proposal site may be impacted by fire or explosion:

- Fire from trucks entering the Proposal site caused by hot material brought in with scrap metal, or possibly through spontaneous combustion of volatile material in the recyclables
- Fire or explosion initiated on the Proposal site including batteries in scrap, fuel in cars or scrap igniting during processing inside machinery, operator error (welding/hot works) and electrical faults with plant
- Fire from adjacent sites, including fires from surrounding industrial uses or bushfires.

The Fire Hydrant Assessment (Appendix K) identified that the existing fire infrastructure on-site would be able to adequately manage fire risks associated with the Proposal without additional alterations.

Health and respiratory impacts

Airborne emissions associated with the Proposal may impact the local environment within and surrounding the Proposal site may raise potential health concerns, such as asthma and allergies, in the local community. Potential emissions from the Proposal include:

- Vehicle exhaust: exhaust fumes consisting of lead, carbon monoxide, hydrocarbons and nitrogen oxide from increased traffic to and from the Proposal site
- Dust: resulting from bulk material handling and equipment/vehicle movements.

Given that no putrescible material would be processed as part of the Proposal, no odour impacts have been considered.

The air quality impacts of the Proposal are presented in Chapter 8. Given the distance from the Proposal to the closest residential receptors, impacts to health associated with the Proposal are considered to be negligible.

Vehicle movements

Heavy vehicles, light vehicles, and pedestrian (staff and public) movements on the Proposal site present potential hazards including:

- Incidents between vehicles
- Incidents between vehicles and pedestrians
- Incidents between vehicles and property.

Incidents involving vehicles may result in injury, loss of life or damage to property. On-site safety and incident response, including vehicle and pedestrian movements would continue to be managed through the sites existing OEMP which would be updated to reflect the Proposal. Measures to manage pedestrian and vehicle safety include clearly marked pedestrian and vehicle paths, provision of traffic controllers and designated stacking spaces.

Non-metallic recyclables

Non-metallic recyclables brought on to the Proposal site via truck during operations may present a hazard, as it may contain contaminated material. Non-metallic recyclables will be managed via the existing Waste Monitoring Management Plan (WMMP). As a result, the hazards and risks associated with non-metallic recyclables are anticipated to be negligible.

12.3.4 Operational risk assessment

Based on a review of the key hazards, described above, Table 12-3 below outlines the potential hazards identified as part of the operational risk assessment. The risk associated with the hazard and the proposed mitigation strategy that would be adopted to address the hazard, along with the relevant standard or guidance document that would be used in the development of the procedure or engineered control.

Hierarchy of controls

In identifying *hazard* mitigation and management measures the following hierarchy of controls (which range from most effective to least effective) were considered:

1. **Eliminate** the hazard altogether
2. **Substitute** the hazard with a safer alternative

3. **Isolate** the hazard from anyone who could be harmed
4. Use **engineering** controls to reduce the risk
5. Use **administrative** controls to reduce the risk
6. Use **personal protective equipment** (PPE).

This hierarchy starts with the most preferable approach to managing hazards.

The hazard scenarios and the mitigation measures and guidelines that would be implemented to minimise risks, along with the type of control that each mitigation measure or guideline represents, is presented in Table 12-3. Note that these hazards and risks identified are consistent with those of existing RRF. Mitigation identified is included in and implemented through the existing site OEMP.

Table 12-3 – Hazard scenarios and consequences associated with the activities and facilities

Potential Hazard	Risk	Potential Impact	Management Standards and Guidelines	Hierarchy of Control	Change in level of risk (Yes/No)
Light and heavy vehicle, and equipment movements surrounding the Proposal site	Vehicle accidents, including: With private vehicles With Proposal-related light and heavy vehicles With pedestrians With structures	Physical harm and property damage	Clear signage and road markings (speed limits, directions, no access areas, marked parking bays)	Administrative	No
			Separation, where practicable, of light and heavy vehicles and equipment	Engineering	No
			Heavy vehicle drivers and equipment operators trained, licenced and competent	Administrative	No
			Operational procedures	Administrative	No
			OEMP, prepared in accordance with AS 3745 - 2010 *Planning for emergencies in facilities*	Administrative	No
Trucks unloading unsecure or unstable loads	Falling objects, loss of control, vehicle accident, impacts on other vehicles, plant or staff	Physical harm and property damage	Operational procedures	Administrative	No
			Drivers and operators licenced and competent	Administrative	No
			OEMP prepared in accordance with AS 3745 - 2010 *Planning for emergencies in facilities*	Administrative	No
Use of plant and equipment to move and sort scrap metal	Falling objects, loss of control, equipment or vehicle accident, impacts on vehicles, plant or staff	Physical harm and property damage	Operational procedure	Administrative	No
			Drivers and operators licenced and competent	Administrative	No
			OEMP, prepared in accordance with AS 3745 - 2010 *Planning for emergencies in facilities*	Administrative	No

Potential Hazard	Risk	Potential Impact	Management Standards and Guidelines	Hierarchy of Control	Change in level of risk (Yes/No)
Fires or explosion	Bushfire, fire initiated on-site or at adjacent sites, fire initiated from spontaneous combustion of scrap metal stockpiles on-site, fire from trucks entering the Proposal site	Physical harm and property damage	Operational procedure	Administrative	No
			AS 1815: Maintenance of Fire Suppression System and Equipment	Engineering	No
			AS 1851-2012 Routine service of fire protection systems and equipment	Engineering	No
			Incident Response Plan and Spill Management Procedure included in OEMP.	Administrative	No
			Emergency Response Plan including a fire response procedure in accordance with *Appendix A, Fire and Smoke Emergencies, of the AS 3745: 2010 standard.*	Administrative	No
Fuel leak or fire due to vehicle collision or faulty storage	Fire or skin contact/inhalation	Physical harm and property damage	Emergency Response Plan including a fire response procedure in accordance with *Appendix A, Fire and Smoke Emergencies, of the AS 3745: 2010 standard.*	Administrative	No
			Storage in a separate bund or within a storage area where no other flammable materials stored.	Engineering	No
			Operational procedure	Administrative	No
			Appropriate PPE supplied and worn	PPE	No
	Release of dangerous goods	Environmental harm	Surface and groundwater contingency plans (in the event of contamination)	Administrative	No

Potential Hazard	Risk	Potential Impact	Management Standards and Guidelines	Hierarchy of Control	Change in level of risk (Yes/No)
Non-metallic materials (e.g. paints, chemicals, asbestos, putrescible material)	Spills, exposure to hazardous substances	Physical harm	Operational procedure	Administrative	No
			Visual inspection of material at the weighbridge by staff	Administrative	No
		Environmental harm	Surface and groundwater contingency plans (in the event of contamination)	Administrative	No
Dust generated from operating equipment, vehicle movements and bulk material handling	Respiratory health impacts, eye and skin irritation	Physical harm	Enclosed areas where practicable, including enclosed working cabins Sealed roads Dust suppression systems Stop work requirement during high background dust levels	Engineering	No
			Covered loads	Administrative	No
			Eye protection and dust masks where required	PPE	No
Vehicle exhaust generated from movement of trucks and equipment	Respiratory health impacts, eye and skin irritation	Physical harm	Vehicle and equipment maintenance to reduce particulate discharge	Administrative	No
			Where practicable, limit vehicle movements within enclosed areas	Administrative	No
Natural hazards (e.g. flooding and lightning)	Personal injury or potential fire	Physical harm and property damage	Buildings designed to appropriate standards Site drainage	Engineering	No
			Operational procedure	Administrative	No

The Proposal would not result in a change to the nature of hazards and risks at the Proposal site from the existing RRF. Hazards and risks to the environment and the community would be minimal and could be appropriately managed through the existing OEMP.

12.4 Mitigation Measures

12.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

12.4.2 Operation

The Proposal does not result in a change to the types or quantities of dangerous goods stored at the Proposal site.

The Proposal does not result in a change to operational hazards and risks at the Proposal site and would continue to be managed through the existing site OEMP. Table 12-4 displays the mitigation measures relating to hazards and risk as previously identified for the Original Approval (SSD-5041) and would be implemented for the Proposal.

Table 12-4 – SSD-5041 hazards and risk mitigation measures

Reference number	Mitigation Measure	Implementation Stage
6A	• All chemicals, fuels and oils used on-site will be stored in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling Liquids: Environmental Protection – Participant's Manual 2007*	Operation
6B	• All incidents and near misses will be documented, recorded and investigated	Operation
6C	• Results of the Proposal site inspections will be recorded and kept on file	Operation
6D	• The floc piles will be maintained to less than 4 m in height	Operation
6E	• Management of environmental emergencies will be undertaken in accordance with the Pollution Incident Response Management Plan	Operation
6F	• The Proposal site will be maintained to ensure run-off on operational areas is captured by the Water Management System	Operation
6G	• Spill kits will be available on-site and be deployed to manage and contain minor spills	Operation
6H	• All pollution incidents that threaten or harm the environment will be reported immediately to relevant authorities in accordance with the POEO Act	Operation
6I	• Fire and incidents on the Proposal site will be managed in accordance the Emergency Response Plan.	Operation

13 ABORIGINAL HERITAGE

This section provides an assessment of the potential Aboriginal heritage impacts associated with the Proposal.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 13-1. A full SEARs compliance table is presented in Appendix A.

Table 13-1 – Aboriginal Heritage SEARs

SEARs	Where addressed
An assessment of Aboriginal cultural heritage values that exist across the development documented in an Aboriginal Cultural Heritage Assessment Report (ACHAR) or an assessment of Aboriginal cultural heritage issues which satisfies the requirement of the *National Parks and Wildlife Act 1974.*	Section 13.3

13.1 Methodology

The methodology for the assessment of potential Aboriginal heritage impacts from the Proposal included:

- A search undertaken on 27 February 2020 of the Office of Environment and Heritage's (OEH, 2019) Aboriginal Heritage Information Management System (AHIMS) database to identify objects or places of Aboriginal significance within the Proposal site and surrounds
- An assessment of Aboriginal cultural heritage issues against the requirements of the *National Parks and Wildlife Act 1974* (NPW Act) and the *National Parks and Wildlife Regulation 2009* (NPW Regulation)
- An assessment of the Proposal against potential impacts to Aboriginal cultural heritage values in accordance with the 'Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW' (DECCW, 2010). The Due Diligence Code provides a process whereby a reasonable determination can be made as to whether or not Aboriginal objects would be impacted by an activity, whether further investigation is warranted and whether the activity requires an AHIP application.

13.2 Existing Environment

A search of the NSW Department of Planning, Industry and Environment, Environment, Energy and Science Group (formerly Office of Environment and Heritage's AHIMS database was undertaken on 27 February 2020 to determine the presence of Aboriginal places or objects of heritage significance occurring within the vicinity of the Proposal site. The AHIMS search did not identify any objects or places of Aboriginal heritage significance within the Proposal site or immediate surrounds.

The Proposal site has been extensively disturbed and is also located within an established industrial area. A review of aerial photography show the Proposal site has a history of disturbance with the site being cleared some time before the 1950's for agricultural purposes, prior to further development for industrial purposes in the 1960's and 1970s'. The Proposal site has been operating as a metal recycling facility since 1997.

Previous developments at the Proposal site have also involved substantial ground disturbance, including excavation for adjusting site levels, footings, hardstand areas and underground storage tanks as well as the stormwater detention pond in the south of the Proposal site. The Proposal site is currently all hardstand with the exception of the detention pond and landscaped areas.

As part of the Original Approval (SSD-5041), an Aboriginal Heritage Assessment was prepared. The assessment concluded that given the existing site was already highly disturbed including extensive excavation and backfilling, it is considered highly unlikely that objects or places of Aboriginal Heritage significance would be present.

13.3 Potential Impacts

13.3.1 Construction

The Proposal does not require construction, excavation or any changes to the structure of the Proposal site. As such the Proposal would not encounter any Aboriginal objects even if present.

Additionally, no known objects or places of Aboriginal heritage significance have been identified within the Proposal site or immediate surrounds. Due to extensive history of disturbance at the Proposal site it is considered highly unlikely that any non-recorded objects or places of Aboriginal Heritage significance exist. Given this, there is no potential for impact to identified or non-recorded Aboriginal Heritage values (i.e. unexpected finds).

13.3.2 Operation

No known objects or places of Aboriginal heritage significance have been identified within the Proposal site or immediate surrounds Additionally, due to extensive history of disturbance at the site it is considered highly unlikely that any non-recorded objects or places of Aboriginal Heritage significance exist. Given this, there is no potential for impact to identified or non-recorded Aboriginal Heritage values (i.e. unexpected finds) due to operation of the Proposal. Ongoing operations would be consistent in nature with the Original Approval and would generally not require ground disturbance.

To further demonstrate that the additional assessment of Aboriginal Heritage is not required, the Proposal has been assessed against the requirements outlined in Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW.

National Parks and Wildlife Act 1974

Clause 87 of the NPW Act provides that a person who exercises due diligence in determining that their actions would not harm Aboriginal objects has a defence against prosecution for the strict liability offence if they later unknowingly harm an object without an Aboriginal Heritage Impact Permit (AHIP) (an AHIP is required under Section 90 of the NPW Act).

The NPW Regulation (under the NPW Act) adopted a generic code of practice to explain the ‘due diligence’ process. This code of practice can be used for all activities across all environments.

Given the Proposal is operational only and does not require construction or ground disturbance it is highly unlikely that objects or places of Aboriginal heritage significance would be impacted by the Proposal.

To ensure the risk to Aboriginal heritage is comprehensively assessed the steps outlined in the due diligence code of practice have been followed. As any heritage findings have occurred or are present on the Proposal site, it is therefore considered that this complies with the Due Diligence Code of Practise. Regardless, an assessment of the Proposal against the criteria in the Due Diligence Code of Practice has been presented in Table 13-2 and Table 13-3 below.

Table 13-2 – Due Diligence Code

Question	Applicable?	Comment
1. Is the activity a Part 3A project declared under s.75B of the EP&A Act?[8]	No	-
2. Is the activity exempt from NPW Act or NPW Regulation?	No	The Proposal must satisfy the requirements under the NPW Act and the NPW Regulation.
3. Will the activity involve harm that is trivial or negligible?	No	The Proposal would not involve harm to any Aboriginal objects (trivial, negligible or otherwise). No construction works are required for the Proposal, and no registered Aboriginal objects or places listed on the AHIMS have been identified within, or in the immediate surrounds of the Proposal site. The Proposal site is considerably disturbed and fully hardstand.
4. Do either or both of these apply: Is the activity in an Aboriginal Place? Have previous investigations that meet the requirements of this code identified Aboriginal objects?	No	The AHIMS search for the Proposal found no known objects or places of Aboriginal heritage significance within the Proposal site or immediate surrounds. As part of the Original Approval (SSD-5041), an Aboriginal Heritage assessment was prepared. This assessment was undertaken in accordance with the Due Diligence Code of Practice. The assessment concluded that given the existing site was already highly disturbed including extensive excavation and backfilling, it is considered highly unlikely that objects or places of Aboriginal Heritage significance exist.
5. Is the activity a low impact one for which there is a defence in the NPW Regulation?	No	The Proposal does not involve a low impact activity for which there is a defence under the NPW Regulation.
6. Do you want to use an industry specific code of practice, adopted by the NPW regulation of other due diligence process?	No	The Proposal is not subject to an industry specific code and therefore, the Generic Due Diligence Process can be followed.
7. Follow the Generic Due Diligence Code of Practice.	Yes	See Table 13-3 following.

Table 13-3 – Generic Due Diligence Process

Issue	Applicable?	Comment
1. Will the activity disturb the ground surface or any culturally modified trees?	No	The Proposal does not require construction and would not result in ground disturbance.
2. Are there any:	No	a) There are no confirmed sites or places recorded AHIMS within or

[8] It is noted that Part 3A has since been repealed.

Issue	Applicable?	Comment
a) relevant confirmed site records or other associated landscape feature information on AHIMS? and/or b) any other sources of information of which a person is already aware? and/or c) landscape features that are likely to indicate presence of Aboriginal objects?		in the immediate vicinity of the Proposal site. b) No. Previous Aboriginal Heritage investigations on the site concluded that it is highly unlikely that objects or places of Aboriginal Heritage significance exist on the Proposal site. c) The creek line to the south of the Proposal site (Breakfast Creek) could be considered a landscape feature. The creek has a significant history of disturbance including substantive realignment, rebuilding and cleaning conducted by the local government, so it is highly unlikely to contain any Aboriginal Objects. In addition, the Proposal does not propose any works in or near the creek line that and as such would not encounter any objects, even if present.
3. Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?	No	No Aboriginal objects listed on AHIMS were found within the Proposal site or immediate surrounds.
4. Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?	No	As noted above, the desktop assessment confirmed that there is a low likelihood of finding Aboriginal objects on Proposal site.
5. Further investigation and impact assessment.	No	In light of the above findings, further investigation and impact assessment are not considered necessary for the Proposal.

13.4 Mitigation Measures

13.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

13.4.2 Operation

It is extremely unlikely that objects or places of Aboriginal significance would be impacted as part of the Proposal. The Aboriginal unexpected finds procedure in the current OEMP will be implemented to reduce any heritage impacts. No additional mitigation measures are required as part of the Proposal.

14 WASTE MANAGEMENT

This section provides an assessment of potential waste management impacts associated with the Proposal.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 14-1 below. A full SEARs compliance table is presented in Appendix A.

Table 14-1 – Waste Management SEARs

SEARs	Where addressed
Details of the waste management strategy for construction and ongoing operational waste generated	Section 14.3
The EIS must include the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021* (EPA, 2014).	Section 14.3 and Section 14.4

A description of material processing at the site including quantities, inputs, outputs, processes, and storage is provided in Sections 2.5 and Section 4.3.

14.1 Methodology

An assessment of potential waste management impacts has been conducted as follows:

- Review of relevant waste strategies and guidelines
- Identification of the predicted recyclable streams and quantities that would be generated during operation of the Proposal
- Determination of the appropriate disposal of generated waste
- Identification of mitigation measures to implement efficient use of resources.

14.2 Existing Environment

Activities at the existing RRF that generate waste include, office functions, plant and maintenance activities that occur on a daily basis. The types of waste streams have been categorised as follows:

- **RRF office workforce waste:**
  - General solid waste (putrescible): such as food scraps
  - General solid waste (non-putrescible): recyclable materials, packaging, discarded consumables, ink cartridges and e-waste, small batteries (e.g. AA)
  - Liquid waste: sewerage.
- **RRF operational plant waste:**
  - Plant and equipment maintenance waste (liquid): oils and lubricants from on-site machinery and maintenance of plant and equipment
  - Waste fuel (hazardous): prior to processing, car bodies are drained of any residual fuel and gas bottles removed (if found)
  - General solid waste (non-putrescible): Floc material including paper, plastics, timber, stone, rubber, glass, fabrics, foam

- Sludge (liquid): Liquid waste produced by the secondary treatment system that may contain suspended solids including clay and metals and potential hydrocarbons.

Wastes generated by the existing RRF is managed in accordance with the current OEMP.

14.3 Potential Impacts

14.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

14.3.2 Operation

Office Workforce

Staff numbers would not change with the Proposal. Volumes of office waste including putrescible and non-putrescible waste generated by staff during daily operation, such as paper, cardboard, glass, plastic, rubber and food scraps would not change as a result of the Proposal.

Operational plant waste

An increase in throughput at the Proposal site would result in a corresponding increase in waste materials (floc) associated with scrap metal processing activities.

The types of operational wastes that would be generated, the estimated volumes generated of each waste, and the disposal method for each waste type, are presented in Table 14-2.

Table 14-2 – Operational waste volumes and disposal methods

Waste generating activity	Waste classification	Waste/resource types	Disposal method	Volume of waste (per year)
Office workforce waste	General solid waste (putrescible)	Putrescible waste, including but not limited to mixed residual waste and general solid putrescible waste such as food scraps	Putrescible waste is collected within clearly labelled putrescible waste bins placed throughout the Proposal site, particularly within the site office, kitchen and lunchroom areas. At regular intervals, an employee compiles putrescible waste into a suitable disposal container. The compiled putrescible waste is collected by a contractor at regular intervals.	1 t (has not changed from the original approval)
	General solid waste (non-putrescible)	Non-putrescible solid waste, including but not limited to recyclable materials, packaging and discarded consumables, ink cartridges as well as e-waste	Non-putrescible waste is collected in clearly labelled waste and recycling bins placed throughout the Proposal site, particularly within the site office, kitchen and lunchroom areas. At regular intervals, an employee compiles non-putrescible waste from these recycling bins into a disposal container. The compiled non-putrescible waste is then collected by a contractor at regular intervals.	20 t (has not changed from the Original Approval)
RRF operational plant waste	Liquid waste	Sewerage	Sewage waste is discharged to Sydney Water sewerage infrastructure in accordance with Sydney Water requirements.	N/A
	Plant equipment and maintenance waste (liquid)	Oils and lubricants as a result of plant equipment and machinery during maintenance	Oils and lubricants are stored in drums in allocated bunded areas until it is collected by a contractor for recycling.	~16,000 L
	Waste fuel, batteries and gas bottles (hazardous)	Waste fuel is drained from incoming vehicles prior to processing of material. Batteries and gas cylinders are extracted prior to disposal.	Waste fuel and the gas cylinders are stored in above ground tanks prior to being transferred to a dedicated recycling facility, where possible. Batteries are stored in the non-ferrous shed prior to being transferred to a dedicated recycling facility, where possible.	~10,000 L Less than 500kg of batteries would be retained or obtained as a result of operational matters. Please note that these differ from ULAB's in that ULABs are purchased, not a biproduct of operations.

Waste generating activity	Waste classification	Waste/resource types	Disposal method	Volume of waste (per year)
	General solid waste (non-putrescible)	Floc material including paper, plastics, timber, stone, rubber, glass, fabrics, foam	Floc material is conveyed into the enclosed building and sorted. It is then collected by the appropriate contractor for further recovery, reuse or where this is not achievable, disposal.	~150,000 t
	Sludge (liquid)	Liquid waste that may contain suspended solids including clay and metals and potential hydrocarbons.	Sludge is taken to an approved landfill facility for disposal.	15 t

14.4 Mitigation Measures

14.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

14.4.2 Operation

The increase in operational waste quantities generated by the Proposal are anticipated to be proportionate to the increased throughput. The OEMP will be updated to reflect changes in quantities of waste generated as described. Mitigation measures relating to waste management previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal and are displayed in Table 14-3.

Table 14-3 – SSD-5041 waste management mitigation measures

Reference number	Mitigation Measure	Implementation Stage
7A	• All waste materials which meet the specification to be reused/recycled will be processed on-site or be taken to an approved facility, capable of accepting those materials. All other waste is to be disposed of in accordance with the classification of the waste at an approved licensed facility	Operation
7B	• During operations waste will be managed in accordance with the Waste Management Plan	Operation
7C	• The designated site manager or appointed responsible delegate should prepare monthly reports clearly documenting the waste that has been received and generated. These should be prepared using waste receipts that have been retained and should include: – Waste classification data to assess compliance with the EPA (2014) Waste Classification Guidelines – A review of licenses held by the facilities where waste has been disposed to access/ensure their ability to accept the waste in accordance with relevant legislation – Include any incident reports relating to waste (i.e. spills) which have occurred over that month. Any corrective actions undertaken should also be included.	Operation
7D	• Tracking and monitoring of scrap metal processed at the Proposal site will be undertaken in accordance with the Waste Monitoring Management Plan	Operation
7E	• The amount of waste received at the Proposal site will be recorded on a daily basis in accordance with the Waste Monitoring Management Plan • The Proposal site will not knowingly cause, permit or allow any materials or waste generated outside the Proposal site to be received at the Proposal site for storage, treatment, processing, reprocessing, or disposal on the Proposal site, except as expressly permitted by the EPL.	Operation

15 GREENHOUSE GAS EMISSIONS

This section provides an assessment the potential greenhouse gas impacts associated with the Proposal. A detailed Greenhouse Gas Assessment has been prepared by Northstar Air Quality Consultants and is included as Appendix G.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 15-1. A full SEARs compliance table is presented in Appendix A.

Table 15-1 – GHG SEARs

SEAR	Where Addressed
A greenhouse gas assessment must be undertaken.	Section 15.3 Appendix L

15.1 Methodology

The methodology for the assessment of GHG emissions for the Proposal has been based on the following guidelines and regulations:

- Australian Government Department of the Environment, Australian National Greenhouse Accounts, National Greenhouse Accounts Factors, August 2019 (NGA Factors) (DISER, 2020)
- The World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) GHG Protocol: A Corporate Accounting and Report Standard (Greenhouse Gas Protocol) (WRI, 2004)
- ISO 14064-1:2006 (Greenhouse Gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of GHG emissions and removal
- ISO 14064-2:2006 (Greenhouse Gases – Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of GHG emission reductions or removal enhancements)
- ISO 14064-3:2006 (Greenhouse Gases – Part 3: Specification with guidance for the validation and verification of GHG assertions) guidelines (internationally accepted best practice).

The NGA Factors defines two (2) types of GHG emissions, direct (e.g. consumption of fuel from Proposal vehicles) and indirect (e.g. consumption of purchase electricity). Under the Greenhouse Gas Protocol, a Proposal's direct and indirect emissions sources can be delineated into three (3) 'scopes' (Scope 1 (direct), Scope 2 (indirect) and Scope 3 (indirect)) for GHG accounting and reporting purposes (WRI, 2004). Consideration of Scope 3 emissions is optional and has not been included in this assessment.

As there will be no construction for the Proposal, ongoing energy efficiency during operation of Proposal's operation is the main focus of this assessment.

Emissions factors used for the assessment have been sourced from the NGA Factors and are identified in Table 15-2.

Table 15-2 – Proposal greenhouse gas emission factors

Emission Scope	Emission Source	Emission Factor
Scope 1	Diesel fuel (plant and machinery)	70.2 kg CO_2-e·GJ^{-1} (at 38.6 GJ·kL^{-1})
	Travel fuel	67.6 kg CO_2-e·GJ^{-1} (at 34.2 GJ·kL^{-1})
Scope 2	Electricity	0.81 kg CO_2-e·kWh^{-1}

15.2 Existing Environment

15.2.1 Greenhouse gas emissions

The existing facility comprises a number of activities/operations that result in emissions of GHG, including:

- Consumption of diesel fuel in mobile plant and equipment at the Proposal site (Scope 1)
- Travel fuel (Scope 1)
- Consumption of purchased electricity (Scope 2)

Emissions of GHG from these sources have been calculated using activity data for the source per annum (e.g. per kilowatt-hour (kWh) of electricity) and the relevant emission factor for each source.

Annual diesel and electricity consumption have been compared to the existing material processing volumes to establish usage rates per tonne. These are shown in Table 15-3.

Table 15-3 – Consumption rate compare to material processing volumes

Activity	Consumption rate per tonne	Existing Annual Rate
Diesel fuel (plant and machinery)	2.64 Lt^{-1}	923.7 $kL \cdot year^{-1}$
Travel fuel	N/A	23.4 $kL \cdot year^{-1}$ – (Based on existing employee numbers)
Electricity	53.99 $kWh \cdot t^{-1}$	18,896,933 kWh $year^{-1}$

Based on the activity data for the existing facility and the established emission factors, annual GHG emissions have been calculated and are shown in Table 15-4.

Table 15-4 – Calculated Proposal GHG emissions

Activity	Annual Proposal consumption	Emission factor	CO2 ($t \cdot yr^{-1}$)
Scope 1			
Plant and Machinery	923.7 kL	70.2 kg CO_2-e$\cdot GJ^{-1}$	2,503
Travel	23.4 kL	67.6 kg CO_2-e$\cdot GJ^{-1}$	54.2
Scope 1 Total			*2,557.2*
Scope 2			
Electricity	18,896,933 kWh $year^{-1}$	0.81 kg CO_2-e$\cdot kWh^{-1}$	15,306.5
Total			**17,863.7**

The total GHG emissions for the existing approved facility are around 30,584.8 t tonnes of CO_2 per year.

15.2.2 Sustainability initiatives

Sell & Parker currently have several sustainability initiatives that are integrated into the operation of the Proposal site. These sustainability initiatives further reduce the overall environmental impact, especially from a greenhouse gas emissions perspective, of the operation of the Proposal site. These sustainability initiatives include the following:

- Energy consumption:
  - Solar panels are located on the roof of Buildings A (Non-ferrous shed) and B (Non-ferrous processing) which generate 450 Kw of power
  - Warehouses provide the opportunity for the use of natural light
  - The majority of light fittings have recently been converted to LEDs
  - Drives (conveyors, pumps, etc) utilise variable speed drives (which fluctuates the speed of the equipment to meet demand to reduce energy consumption)
- Water reuse: considerable amount of collection, treatment and reuse of “dirty water” for operational (machinery and wash-down purposes) across the Proposal site which results in limited use of potable water sources and limited discharge of water to Trade Waste.
- Fuel consumption:
  - Regular and ongoing maintenance of equipment to reduce fuel consumption
  - Recently installed fixed materials handler machinery (feeding the Shredder) is predominately electricity rather diesel powered.

In addition to the above, Sell & Parker periodically review their operations to consider the potential for the integration of further sustainability initiatives.

15.3 Potential Impacts

15.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

15.3.2 Operation

During operation of the Proposal, the activities/operations that will be performed which have the potential to result in emissions of GHG include:

- Consumption of diesel fuel in mobile plant and equipment at the Proposal site (Scope 1)
- Travel fuel (Scope 1)
- Consumption of purchased electricity (Scope 2).

Emissions of GHG from these sources have been calculated using activity data for the source per annum (e.g. per kilowatt-hour (kWh) of electricity) and the relevant emission factor for each source.

Annual diesel and electricity consumption have been compared to material processing volumes to establish usage rates per tonne. These are shown in Table 15-5.

Table 15-5 – Consumption rate compared to material processing volumes

Activity	Consumption rate per tonne	Proposal Annual Rate
Diesel fuel (plant and machinery)	2.64 Lt^{-1}	1,583.5 $kL \cdot year^{-1}$
Travel fuel	N/A	23.4 $kL \cdot year^{-1}$ – (Based on Proposal employee numbers – i.e. no change from existing)
Electricity	53.99 $kWh \cdot t^{-1}$	32,394,642 kWh $year^{-1}$

Based on the activity data for operation of the Proposal and the established emission factors, annual GHG emissions have been calculated and are shown in Table 15-6.

Table 15-6 – Calculated Proposal GHG emissions

Activity	Annual Proposal consumption	Emission factor	CO2 ($t \cdot yr^{-1}$)
Scope 1			
Plant and Machinery	1,583.5 kL	70.2 kg CO_2-e$\cdot GJ^{-1}$	4,290.9
Travel	23.4 kL	67.6 kg CO_2-e$\cdot GJ^{-1}$	54.2
Scope 1 Total			4,345.1
Scope 2			
Electricity	32,394,642 kWh $year^{-1}$	0.81 kg CO_2-e$\cdot kWh^{-1}$	26,239.7
Total			**30,584.8**

It is predicted that total GHG emissions for the Proposal would be around 30,584.8 tonnes of CO_2 per year.

To provide context on the level of impact from the Proposal emissions, a comparison of the calculated Proposal GHG emissions against the reported Australian (DISER, 2020) and NSW (DISER, 2020a) has been undertaken. When compared to total NSW emissions of 131,700,000 t CO_2-e per annum, the Proposal would represent 0.023%. When compared to total Australian emissions of 532,500,000 t CO2-e per annum, the Proposal would represent 0.006%. Compared to NSW and Australian total emissions, emissions from the Proposal are considered to be negligible.

Further, the Proposal includes the recovery, processing and recycling of scrap metal that would otherwise go to landfill. This process is inherently sustainable, recycling rather than creating new metal products that would otherwise need to be sourced from mining and produced through intensive processes, both of which would result in considerable greenhouse gas emissions. The greenhouse gas impacts of the Proposal are therefore considered acceptable in the context of the benefits brought about by recycling this product.

15.4 Mitigation Measures

15.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

15.4.2 Operation

Mitigation measures relating to GHG previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal and are displayed in Table 15-7.

Table 15-7 – SSD-5041 Greenhouse gas emission mitigation measures

Reference number	Mitigation Measure	Implementation Stage
8A	• Where applicable additional equipment purchased will conform to best practice for the management of greenhouse gas	Operation
8B	• Fuel, water and electricity consumptions shall be monitored, and efficiency improvements regularly investigated and implemented where reasonable and feasible.	Operation

16 BIODIVERSITY

This section provides an assessment of the potential biodiversity impacts associated with the Proposal.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 16-1 below. A full SEARs compliance table is presented in Appendix A.

Table 16-1 – Biodiversity SEARs

SEARs	Where addressed
The EIS must include an assessment of the biodiversity impacts in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR) or a waiver for the preparation of a BDAR under the *Biodiversity Conservation Act* 2016.	Section 16.3 and Appendix M

As the Proposal does not involve any physical works on the Proposal site, an impact to mapped biodiversity values is not anticipated and a BDAR has not been considered to be required for the assessment of the Proposal.

A BDAR waiver application was submitted a part of the Scoping Report and a Waiver has been formally approved by the Secretary of the Department of Planning, Industry and Environment on 19th December 2019 and is attached as Appendix M.

However, to ensure a comprehensive assessment of the Proposal has been undertaken to confirm there would be no biodiversity impacts has been undertaken and is presented in this section.

16.1 Methodology

A desktop review conducted on 10 June 2020 to identify existing ecological communities and threatened species located with or nearby the Proposal site including:

- The *NSW Bionet Wildlife Atlas* managed by DPIE (2020c). A search was undertaken to determine the threatened species records listed under the *Threatened Species Conservation Act 1995* (TSC Act) within 10 km of the Proposal site
- The *Protected Matters Search Tool*, managed by the Department of the Agriculture, Water and the Environment (DAWE, 2020). A co-ordinate search was undertaken to determine the threatened species, threatened ecological communities (TECs) and other *Matters of National Environmental Significance* (MNES) within 10 km and 1 km of the Proposal site
- A search of the *NSW DPIE WeedWise tool* (2020) was undertaken within the Blacktown Local Control Authority Area to determine the declared weeds present within 1 km of the Proposal site
- A search on the *NSW Vegetation Information System* (VIS) Classification Database, managed by the DPIE (2020b)
- A review of the register of critical habitats managed by the NSW DPIE (2020).

A review of Ecological Impact Assessments prepared for the Proposal site as part of the Original Approval by ERM (2019).

16.2 Existing Environment

The Proposal site is located in a well-established industrial area and has historically been cleared of all vegetation. It currently contains a number of established exotic species and planted vegetation (Figure 16-1).

As part of the Original Approval, a desktop biodiversity assessment was undertaken for the Proposal site. This assessment concluded species, communities or habitats were unlikely to be impacted due to the industrial nature of the Proposal site (ERM, 2019).

A search undertaken on the *DAWE Protected Matters Search Tool* identified 7 threatened ecological communities, 53 threatened species and 16 migratory species as having the potential to occur within 10 km of the Proposal site (DAWE, 2020). However, given the highly modified nature of the landscape, these species are considered unlikely to occur within or in close proximity to the Proposal site.

LEGEND

- Proposal site boundary
- Vegetation
- Property boundary
- Watercourse

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Figure 16-1: Vegetation species present on Proposal site

16.2.1 Landscape Assessment

The Proposal site is located within the Cumberland sub-region of the Sydney Basin Interim Biogeographic Regionalisation for Australia (IBRA) Bioregion. This sub-region is characterised by low rolling hills and wide valleys, located in a rain shadow of the Blue Mountains.

Vegetation associated with the Cumberland sub-region includes ironbark woodlands and spotted gums on shale hills. Scribbly gums and banksias dominate on alluvial sands areas (Environment NSW, 2020). The geology of the Proposal site is characterised by the Triassic Bringelly Shale of the Wianamatta Group.

The Proposal site has been cleared in past allowing the establishment of invasive species. It is unlikely any ecological communities exist within the Proposal site. Relevant landscape features of the Proposal site are described in Table 16-2.

Table 16-2 – Landscape features of the Proposal site

Landscape feature	Proposal site
Vegetation cover in landscape	There is planted vegetation on the Proposal site (Figure 16-1). Several *Eucalypt, Casuarinas* and *bamboo species* are present within the site boundaries. These have been planted as part of a visual amenity screening and are further described below.
Cleared areas	The Proposal site is predominately clear of vegetation. Planted vegetation line the boundaries.
Rivers and streams	Breakfast Creek is a highly modified stream located south of the Proposal site located in the riparian corridor that runs east to west. The Council have previously worked on altering Breakfast Creek, removing invasive species and establishing an urban waterway. The original geomorphic features of Breakfast Creek have been lost within the riparian zone as a result of these works. Waller Creek, an open channel runs alongside the eastern side of the Proposal site and is also modified.
Wetlands	There are no natural or artificial wetlands within or in close proximity to the Proposal site.
Connectivity features	The vegetation present in the Proposal site surrounds a landscape of extensive industrial use. Vegetation in the locality is generally restricted to planted roadside vegetation and small, isolated areas of exotic and planted native vegetation. The open channel (Waller Creek) east of the Proposal site connects to Breakfast Creek. Breakfast Creek (to the south of the Proposal site), located in the riparian corridor, runs a natural course to Eastern Creek and contains both native and exotic vegetation. The vegetation present does not connect to any wildlife corridors as further described below.
Areas of geological significance and soil features	The Proposal site is level and has been extensively disturbed and cleared for industrial and human activity since the Proposal site was established. The majority of the Proposal site is capped by a hardstand concrete or pavement. Some of the natural soil landscape areas may remain beneath the vegetated and grassed portions of the Proposal site (fronting Tattersall Road and in the southern part of the Proposal site). These are likely to comprise mottled textured clay soils with high plasticity, and expansive subsoils with poor drainage. These areas have been planted with vegetation and grasses.

Landscape feature	Proposal site
Areas of outstanding biodiversity value (AOBVs)	Areas of outstanding biodiversity value (AOBVs) are areas previously declared as critical habitat under the TSC Act. The nearest AOBV is located 360 m away from the Proposal site (Figure 16-2).

16.2.2 Flora

Regional Context

The *DAWE Protected Matters Search Tool* (2020) identified the seven (7) threatened ecological communities (TECs) that may occur within 10 km of the Proposal site:

- Endangered (under TSC Act):
  - *Castlereagh Scribbly Gum and Agnes Banks Woodlands of the Sydney Basin Bioregion*
  - *Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community.*
- Critically endangered (under TSC Act):
  - *Cooks River/Castlereagh Ironback Forest of the Sydney Basin Bioregion*
  - *Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest*
  - *Shale/Sandstone Transition Forest of the Sydney Basin Bioregion*
  - *Turpentine-Ironback Forest of the Sydney Basin Bioregion*
  - *Western Sydney Dry Rainforest and Moist Woodland on Shale.*

Additionally, 26 threatened flora species listed under the TSC Act have been recorded within 10 km of the Proposal site.

Given the extensive clearing and industrial nature of the Proposal site and surrounding area TEC's are highly unlikely to be present within or in close proximity to the Proposal site.

Proposal Site Context

12 threatened flora species listed under the EPBC Act that have been recorded within 1 km of the Proposal site. No native vegetation communities have not been mapped on the Proposal site and it has been historically cleared of all vegetation (refer to Figure 16-1). Flora on the Proposal site comprises of planted landscape species (including *Eucalypt, Casuarina* and *bamboo* species) within the existing RRF landscape areas along the Proposal site boundaries.

A number of flora species are present in the riparian corridor beyond the southern fence line adjoining Breakfast Creek. This Creek has been altered by Council for channel realignment and is dominated by weed species. The composition, structure and function of the vegetation and seed bank has been highly altered and degraded and the vegetation present does not contribute to wildlife corridor connectivity.

Given the extensive clearing and industrial nature of the Proposal site and surrounding area, it is considered unlikely that any threatened flora species are present on the Proposal site.

16.2.3 Fauna

The Proposal site is located in a developed industrial environment with minimal fauna habitat values.

A search of the *DAWE Protected Matters Search* identified 27 threatened fauna species listed under the *EPBC Act* that have been previously recorded within 10 km of the Proposal site, comprising:

- 9 bird species
- 8 mammals
- 1 insect species
- 5 frog species
- 1 reptile species
- 2 fish species
- 1 other species.

The *DAWE Protected Matters Search* identified 16 migratory species listed under the *EPBC Act* that are known, likely or which may occur within 10 km of the Proposal site, comprising:

- 1 marine bird species
- 7 terrestrial species
- 8 wetland species.

It is considered unlikely that any threatened fauna species, or habitat for threatened fauna species, are present within the Proposal site due the significant history of disturbance and the ongoing material processing operations.

16.2.4 Weeds

As the site is predominately hardstand, weed growth is negligible. On those areas where there is flora, Sell & Parker manage these areas through the Landscape and Weed Management Plan (LWMP).

As mentioned previously, Breakfast Creek (managed by BCC) and the Proposal site have been highly altered by historical industrial and farming activities. During this time weeds have established in the surrounding area.

A search was undertaken on *Weedwise Tool* to identify significant weeds that may occur within 1 km of the Proposal site. The search identified 25 listed 'Priority' weeds (DPI, 2020) under the *NSW Biosecurity Act 2015* for the Greater Sydney region (which includes the Blacktown LGA). 21 of these are Weeds of National Significance (WoNS) (Table 16-3).

Table 16-3 – Priority weeds listed under the Biosecurity Act 2015 and WoNS recorded within 1 km of the Proposal site

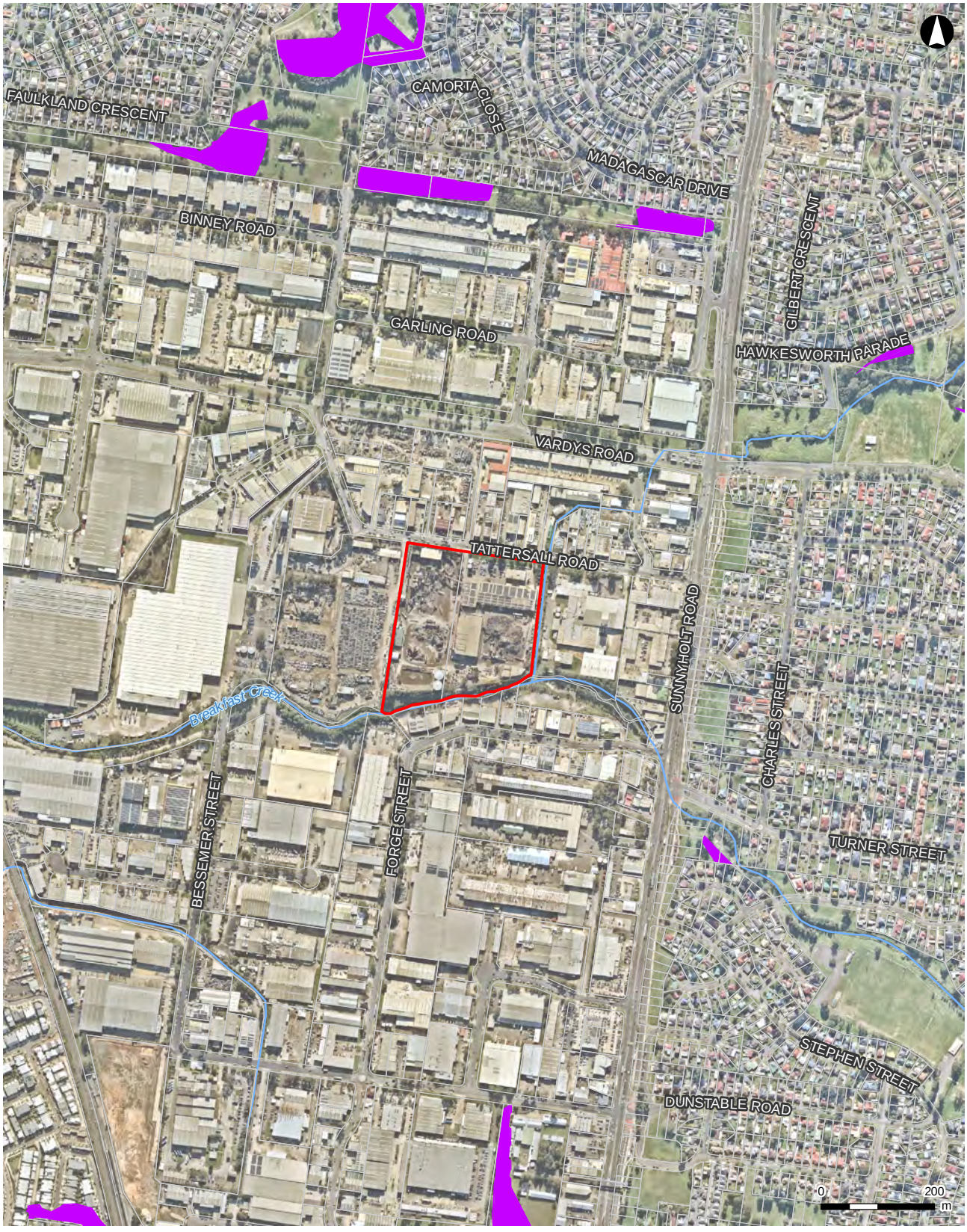
Common name	WoNS status (Yes/No)
African Boxthorn	Yes
Alligator Weed	Yes
Asparagus Fern	Yes
Bitou Bush	Yes
Blackberry complex	Yes
Bridal Creeper	Yes

Common name	WoNS status (Yes/No)
Broom	No
Cabomba	Yes
Cape Broom	Yes
Cat's Claw Creeper	Yes
Chilean Needle Grass	Yes
Climbing Asparagus Fern	Yes
Common Prickly Pear	Yes
Delta Arrowhead	Yes
Fireweed	Yes
Gorse	Yes
Ground asparagus	Yes
Lantana	Yes
Madeira Vine	Yes
Radiata Pine	No
Salvinia	Yes
Scotch Broom	No
Serrated Tussock	Yes
Water Hyacinth	Yes
Willow	No

16.2.5 Biodiversity Values Maps

The Biodiversity Value Map (BV Map) has been produced by DPIE and is used to identify land with high biodiversity value, as defined by the BC Regulation (DPIE, 2019).

As shown in Figure 16-2 no biodiversity values on the BV Map have been mapped within or immediately adjacent to the Proposal site. The nearest mapped area is approximately 360 m south-east of the Proposal site.



LEGEND

- Proposal site boundary
- Biodiversity values map (DPIE, 2019)
- Property boundary
- Watercourse

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Figure 16-2: Biodiversity Value Map within the vicinity of the Proposal site

16.3 Potential Impacts

16.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

16.3.2 Operation

The Proposal would not change the nature of operations at the Proposal site. Therefore, there are no potential impacts as part of the Proposal.

16.4 Mitigation Measures

16.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

16.4.2 Operation

It is extremely unlikely that biodiversity would be impacted as part of the Proposal. The current biodiversity management strategies in the existing OEMP will be implemented to reduce any biodiversity impacts. Mitigation measures relating to Biodiversity previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal and are displayed in Table 16-4.

Table 16-4 – SSD-5041 biodiversity mitigation measures

Reference number	Mitigation Measure	Implementation Stage
9A	• All vehicles are to keep to the existing and proposed access roads on-site at all times	Operation
9B	• Maintenance of landscaped areas should be undertaken in a way to prevent the spread of pests and noxious weeds in accordance with the *Biosecurity Act 2015* and the New South Wales Weed Control Handbook - A guide to weed control in non-crop, aquatic and bushland situation (DPI, 2018).	Operation

17 VISUAL

This chapter provides and assessment of the potential visual impacts of the Proposal.

A summary of the relevant SEARs and where they are addressed in this section is provided in Table 17-1. A full SEARs compliance table is presented in Appendix A.

Table 17-1 - Visual SEARs

SEARs	Where addressed
The EIS must include an assessment of the potential visual impacts of the project on the amenity of the surrounding area.	Section 17.3

17.1 Methodology

The Proposal is operational only and the Proposal does not include a construction phase. Further, the Proposal only includes change to operational throughput / processing and therefore would not require any physical works or change to the nature of operations. As such, a quantitative assessment of the visual impacts of additional infrastructure (e.g. photomontages) is not relevant or required. To address the SEARs, a qualitative assessment of potential visual impacts has been undertaken and is presented in this section.

17.2 Existing Environment

The Proposal site is situated within a gently undulating area of the *Cumberland Plain* within the Breakfast Creek catchment. The local landform rises to the north and the east with the front of the Proposal site located at around 45 m elevation rising to around 49 m at the Sunnyholt Road – Tattersall Road intersection and 53 m at Vardys Road directly north of the site. The local topography is shown in Figure 17-1.

LEGEND

- Proposal site boundary
- Property boundary
- Contour (2m)
- Watercourse

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Figure 17-1: Local topography of the Proposal site

The Proposal site is located within an established industrial area in Kings Park, which includes:

- Automotive wreckers and recycling facilities
- Concrete batching plants
- Automotive spare parts and services
- Industrial Storage facilities
- Light industry
- Manufacturing
- Retail services.

Buildings within the proximity of the site are largely around 10 m in height with isolated structures extending to over 20 m in height (e.g. silos for concrete batching and other manufacturing services).

The visual character of the surrounding Proposal site is strongly influenced by industrial development and large road corridors. The Proposal site is well fenced and residential property site lines are limited and is not visible from places of recreation. Based on the landform surrounding the Proposal site, the key potential areas where the Proposal would be visible from are:

- Viewpoint 1 - Tattersall Road (all industrial properties), adjacent to the site
- Viewpoint 2 - Forge Street from the rear of industrial properties and from the street between industrial and commercial buildings.

A number of visual barriers are located along the boundary of the Proposal site (constructed as part of previous approvals) which screen daily operations from surrounding properties and potential viewpoints, including:

- North - Mature trees, shrubs along Tattersall Road as well as a 13 m high Colourbond fence provided for noise and dust management. The office building and non-ferrous adjacent to the car park also screen on-site activities from Tattersall Road.
- East - Bamboo planting and a high colourbond fence
- South - Thick bamboo screen, fencing as well as mature trees and shrubs along the boundary between the Proposal site and Breakfast Creek
- West - Infill planting of Casuarina trees along the western boundary near the storage work shed to provide some obscured screening from the neighbouring site.

The existing night-time setting is classified as a medium level of brightness due to surrounding brightly lit streets, buildings and traffic. The locations of these barrier screens can be referred to in Figure 2-3 (barriers and fencing) and Figure 16-1 (vegetation).

17.3 Potential Impacts

17.3.1 Construction

The Proposal would utilise existing approved infrastructure. Therefore, no construction activities would be required as part of the Proposal.

17.3.2 Operation

As the Proposal does not require a change to proposed infrastructure, the nature of views to the operational site would not change. No physical consistent change to views or the visual landscape to the Proposal site would be created as part of the Proposal.

17.4 Mitigation Measures

17.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

17.4.2 Operation

As the Proposal does not require a change to proposed infrastructure, the nature of views to the Proposal site would not change. No physical consistent change to views or the visual landscape to the Proposal site would be created as part of the Proposal. Mitigation measures relating to Visual previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal as displayed in Table 17-2.

Table 17-2 – SSD-5041 visual mitigation measures

Reference number	Mitigation Measure	Implementation Stage
10A	• Landscaped areas on-site would be monitored and maintained in accordance with the Landscape Management Plan.	Operation

18 SOCIO-ECONOMIC

Although, there were no SEARs requirements for socio-economic impacts, to ensure a robust assessment of the Proposal and assessment has been included as part of this EIS.

18.1 Methodology

To assess the potential for socio-economic impacts from the Proposal a desktop review has been undertaken on 10 June 2020, including collection of background information relevant to the Proposal included an examination of existing reports, specifically:

- NSW DPIE 2020 population and household projections (DPIE, 2020a)
- Blacktown City Council Social Profile (2020) (BCC, 2020)
- Australian Bureau of Statistics Census Data (ABS, 2018).

18.2 Existing Environment

The demographic profile of the Blacktown LGA has been compiled from the 2016 ABS Census data (ABS, 2018). The data accessed includes information on population, culture, employment, the socio-economic index (SEIFA) and housing within the Council. It should be noted, that with the emergence of COVID-19, statistics represented are subject to change such as employment and industry causing economic impact. A summary of the existing socio-economic environment is provided in Table 18-1.

Table 18-1 – Socio-economic profile of the Blacktown LGA

Aspect	Detail
Population	The current population of Blacktown LGA is 336,962 as recorded by the 2016 ABS Census data (ABS, 2018). It is the largest local government area, by population in New South Wales. This area is one of the largest regions in Sydney and is expected to continue to increase over the next 25 years up to 2.28%. The LGA is well connected by transport including public transport networks and road access, infrastructure in healthcare, education, recreation and culture and employment opportunities.
Culture	Blacktown City Council has the largest Aboriginal and Torres Strait Islander population in NSW with 9,530 making up 4.4% of the NSW population. Other languages that are most spoken are Filipino/Tagalog, Hindi, Punjabi, Arabic and Urdu. 41% of people speak another language other than English at home.
Education	Education of the city includes 47.7% people who hold a tertiary qualification or higher and people who had completed Year 12 schooling was 55.3%.
Industry and employment	The majority of people (62.7%) are employed full-time and 27.8% work part-time in Blacktown. The unemployment rate is quite low (7.3%). Kings Park has a 95% employment rate of the 3,450 people who live there. Professionals, clerical and administrative workers and technicians and trades workers are the highest employed occupations in Blacktown City Council. The highest employed industries are hospitals, retail, manufacturing and construction. Many drive to work (60.7%) as their mode of transport with the second method to get the train (15.7%).

Aspect	Detail
Income	Strong incomes present in Blacktown City Council. The highest (9.7%) of people were earning an income $1,000-$1,249 individually per week compared to the NSW (8.2%) and Australia (8.3%).
Housing	Property in Sydney is generally among the most expensive in Australia and this scenario is reflected by mortgage repayments in Blacktown with households (30.5%) paying over $2,600 per month. This indicates housing stress is high in the region.
Socio-economic index	There are several indices used to assess socio-economic status; one commonly used is the Socio-Economic Indexes for Area's (SEIFA) index[9]. A review of the SEIFA the suburbs of Blacktown City Council revealed that the region has a higher level of socio-economic advantage than the Australian average. The south-west precinct including Marayong, Blacktown and Woodcraft are more disadvantaged compared to the rest of the Council. East of the train line including Kings Park and the north-east are considered highly advantaged.

18.3 Potential Impacts

18.3.1 Construction

The Proposal is operational only and does not have a construction phase. As such, there Proposal would not have any construction socio-economic impacts.

18.3.2 Operation

The Proposal would increase the throughput limit at the existing RRF. The Proposal does not require any changes to the workforce on the Proposal site or relationships with stakeholders. Potential socio-economic impacts of the Proposal include:

- Economic
  - Ensure the ongoing viability of the Proposal site and the future job security of employees
  - Assist in improving the supply of low-cost goods and materials to the community and commercial sector.
  - Increase the availability of metal recycling services utilised by a number of local and regional businesses.
  - Provide ongoing opportunities to businesses servicing the site e.g. for cleaning and maintenance.
- Social
  - Improve environmental sustainability by increasing recovery capacity at the existing RRF and would reducing the use of landfills throughout the local and wider community
  - Changes in public perception of the Proposal
  - Increase to recycling capability assisting in mitigating the recycling crisis and satisfying a society demanding resource recovery industry reform.

[9] SEIFA is a tool developed by the ABS that ranks areas in Australia based on relative socio-economic advantage and disadvantage by taking into account 20 variables.

Environmental impacts from the Proposal have the potential to result in socio-economic impacts if not appropriately managed. The following environmental impacts that may result in socio-economic impacts have been assessed in the EIS:

- Traffic and transport (Section 7)
- Air quality (Section 8)
- Noise and vibration (Section 9)
- Community safety (as part of hazards and risk, Section 12)
- Visual (Section 17)

These assessments identify that the Proposal would not result in significant impacts to these environmental aspects and no related socio-economic impacts are anticipated.

The Proposal would not result in a change to the nature of operations at the existing RRF site and would not result in an increase to socio-economic impacts above those for the existing RRF. The Proposal would support the ongoing operations of the facility (supporting ongoing jobs and services) and allow an increase in the volume of metal recovered from scrap reducing the use of landfills throughout the local and wider community.

18.4 Mitigation Measures

18.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

18.4.2 Operation

Potential impacts from the Proposal would continue to be managed through the current OEMP (consultation or feedback management). The OEMP would be updated to reflect changes of socio-economic impact. Mitigation measures relating to the social and economic environment previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal as displayed in Table 18-2.

Table 18-2 – SSD-5041 socio-economic mitigation measures

Reference number	Mitigation Measure	Implementation Stage
11A	• Where possible, opportunities for offering apprenticeships for new work force and offer additional training for existing workforce would be investigated	Operation
11B	• Complaints will be managed in accordance with the Complaint Response Procedure.	Operation

19 CUMULATIVE

This section provides an assessment of the potential cumulative impacts associated with the Proposal and the surrounding area. A summary of the relevant SEARs and where they are addressed in this section is provided in Table 19-1 below. A full SEARs compliance table is presented in Appendix A.

Table 19-1 – Cumulative impacts SEARs

SEAR	Where addressed
• Detailed assessment of the key issues specified, and any other significant issues identified in this risk assessment, which includes: – An assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statues.	Section 19.2

19.1 Methodology

19.1.1 Impact assessment approach

A desktop review of government planning portals was undertaken in August 2020 within 1 km of the Proposal site and along key transport routes, to identify proposed or approved developments surrounding the Proposal (DPIE, 2020). This desktop review included:

- A search of the Blacktown Development Application (DA) decisions register (BCC, 2020a), which identified one local development application within the vicinity of the Proposal site
- A search of DPIE's Major Projects planning portal (DPIE, 2020), which identified one development within the vicinity of the Proposal site.

On identification of these projects, investigation where information was available, was undertaken into the timing (operational commencement), extent (Proposal description) and potential key impacts in consideration of the Proposal.

In particular, the potential for key impacts considered the potential for an unreasonable (or above criteria) increase in impacts as a result of the Proposal and these proposals. Based on the nature of the Proposal (and these proposals) the key potential cumulative impacts identified are as follows:

- Traffic and transport
- Air quality and odour
- Noise and vibration.

In some instances, as suitable, technical specialists (air, noise and traffic) provided a cumulative impact assessment of the relevant proposals within specialist studies appended to this EIS (refer to Appendix E, Appendix G and Appendix H of this EIS).

Other potential cumulative impacts, such as soils, water and contamination, flooding, hazards and risks, Aboriginal and non-Aboriginal heritage, waste management, greenhouse gas, biodiversity, socio-economic were considered however, upon further analysis were determined, subject to appropriate site management, to be able to

appropriately managed on a site by site basis and therefore are not considered to result in cumulative impacts.

As the Proposal only seeks approval for operational activities, the cumulative impact assessment undertaken considered the Proposal and other proposals operating at full operational capacity.

Environmental impacts have been assessed considering relevant sensitive receivers as identified within Sections 8 and 9 of this EIS. Consideration has also been given to mitigation measures, for the Proposal and these proposals, and whether additional mitigation measures need to be added as a result of the potential impacts identified in this cumulative assessment.

19.1.2 Limitations

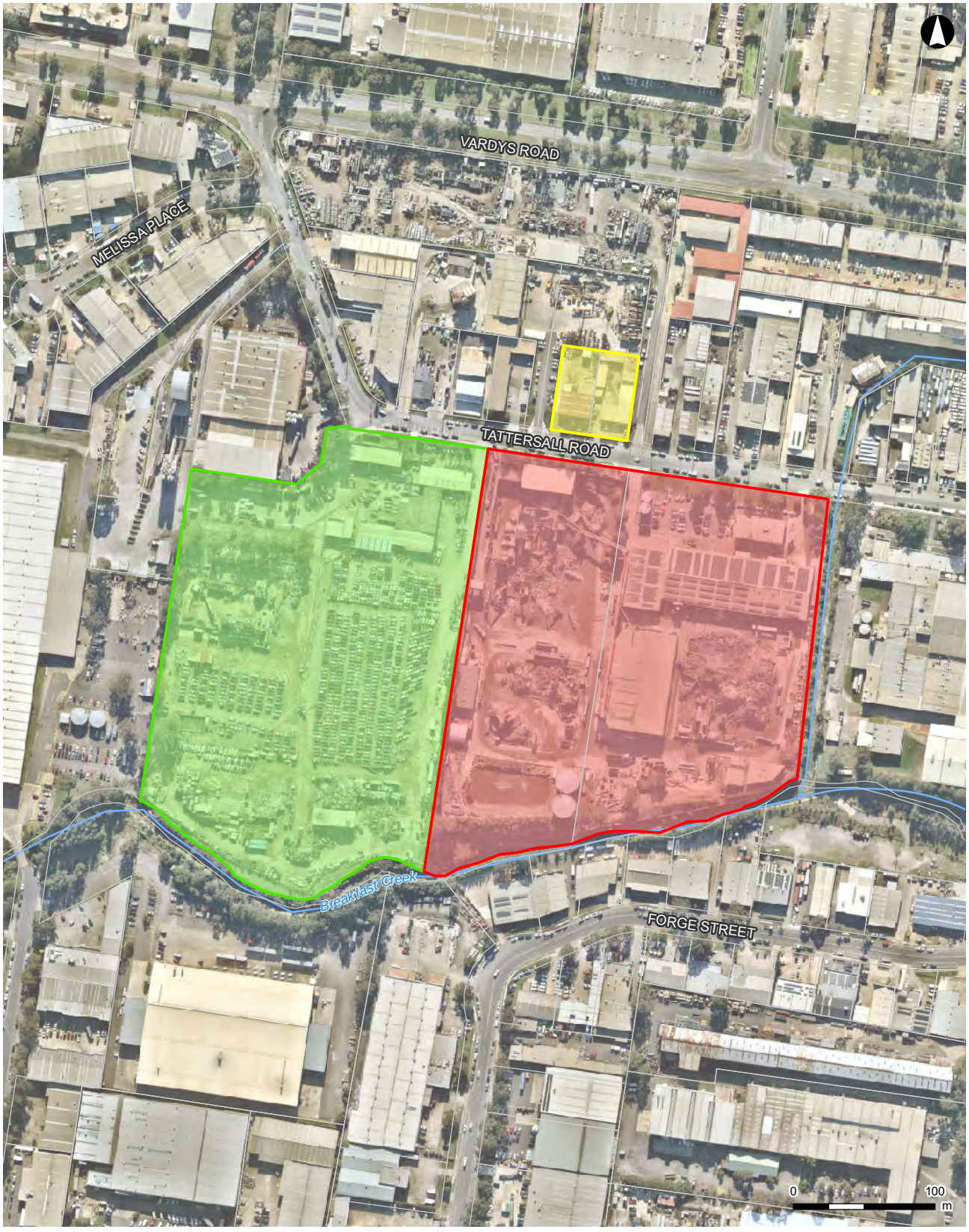
Information for both proposal's was not completely clear (or available) and therefore the best effort has been made to undertake a thorough cumulative assessment. It is also understood that both proposals are currently undertaking design (and therefore impact assessment) updates and therefore this cumulative assessment, albeit consistent with the SEARs and robust, is a representation of the information available at the time of writing.

19.2 Existing Environment

The future and proposed developments in the area surrounding the Proposal site include (Figure 19-1):

- Envirocivil Recycling Facility Expansion (Designated Development DA) (DA SSP-19-00004) (the Envirocivil RRF Expansion Proposal) (BCC 2020a)
- Pick 'N' Payless Metal Recovery and Recycling Facility (SSD Application) (SSD-8375) (the Pick 'N' Payless Expansion Proposal) (DPIE, 2020e).

Further information on each of these proposals is provided below.



LEGEND

- Proposal site boundary
- Envirocivil Recycling Facility Expansion
- Pick 'N' Payless Metal Recovery and Recycling Facility
- Property boundary
- Watercourse

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Figure 19-1: Future and proposed developments surrounding the Proposal site

19.2.1 Envirocivil Recycling Facility Expansion Proposal

Envirocivil Pty Ltd (Envirocivil) is proposing to expand the existing RRF located at 46 & 50 Tattersall Road, Kings Park (BCC, 2020a). 46 and 50 Tattersall Road are owned by Sell & Parker Holdings Pty Ltd, however this proposal is separate (unrelated) and specifically in relation to the operation of this site (i.e. has been prepared by the lessee). The Envirocivil RRF Expansion Proposal is located on Tattersall Road opposite the Proposal site to the north (Figure 19-1 above). The proposed expansion involves increasing the processing capacity from approximately 6,000 to 28,000 tpa of solid and liquid organic waste and green waste.

The Envirocivil RRF Expansion Proposal would require changes to the site layout, including the relocation of the administration building and parking area from 50 Tattersall Road to 46 Tattersall Road. This would allow expanding the storage capacity for the additional quantity of receiving materials. This expansion would involve an increase in daily vehicle movements (from 8 to 36 (+ 25) movements per day). The Envirocivil RRF Expansion Proposal would continue the current operation of the facility at 24 hours, 7 days a week.

Approval for the Envirocivil RRF Expansion Proposal is sought as Designated Development (under Part 4 of the EP&A Act), with SEARs issued on 6 June 2018. A DA (DA SSP-19-00004) for the proposal was lodged with Council on 28 May 2019 (BCC, 2020a). It is understood that the DA is still under assessment by Council.

19.2.2 Pick 'N' Payless Metal Recovery and Recycling Facility

Pick 'N' Payless is proposing to increase the processing capacity from 30,000 tpa to 130,000 tpa of scrap metal at 57-69 Tattersall Road, Kings Park. This site is located immediately adjacent to the west of the Proposal site (DPIE, 2020e). The processing to be undertaken for the Pick 'N' Payless Expansion Proposal including recycling of motor vehicles and heavy and light gauge metals.

The Proposal also includes changes to the site layout, including the location and size of storage areas for vehicle bodies (previously core business) and fragmented metal. The generation of the vehicles (light and heavy) provided for the Pick 'N' Payless Expansion Proposal is unclear and inconsistent. The existing operational hours for the self-serve auto parts business (8am to 5pm Monday to Friday and 9am to 3pm Sunday[10]) would not change. The Pick 'N' Payless Expansion Proposal proposes operating hours of 6am to 6pm Monday to Sunday for the metal recycling activities.

Approval for the Pick 'N' Payless Expansion Proposal is sought under State Significant Development (SSD – Part 4, Division 4.7 of the EP&A Act), with SEARs (SSD-8375) issued on 21 July 2017 and then extended on 1 July 2019. An EIS was lodged with DPIE and finished exhibition on 4 December 2019. It is understood that Pick 'N' Payless are currently preparing a Response to Submission (RtS) for the proposal which would be submitted in the 3rd quarter of 2020. As a result of the comments received during exhibition it is anticipated that the RtS would include a number of changes and clarifications in relation to the proposal description and the impact assessment provided.

[10] No hours for Saturday operations have been provided within the EIS for this proposal.

19.3 Potential impacts

Traffic and Transport

TTPP have undertaken a review of the information submitted for the Pick 'N' Payless Expansion Proposal in relation to traffic and transport (refer to Appendix E). Overall, the EIS and the Traffic Impact Assessment (Barker Ryan Stewart, 2019) lacks critical information required to prepare an adequate cumulative impact assessment, in particular the following:

- Breakdown of light and heavy vehicles, which is a key input into the SIDRA modelling to determine intersection delay, degree of saturation and level of service (as these elements are impacted by the type of vehicle)
- Haulage routes and directional splits for generated (and existing) traffic from this proposal, which is also key to SIDRA modelling allow for a spread of generated traffic across intersection movements.

Further, a discrepancy has been identified within the Traffic Impact Assessment in relation to PM traffic volumes generated by the Pick 'N' Payless Expansion Proposal. Ultimately, the traffic volumes reported in the body of the report do not correlate with the traffic flows shown diagrammatically. As a result, it is unclear what the generated of traffic would be for the Pick 'N' Payless Expansion Proposal.

It is noted that these above deficiencies have been raised by agencies during the exhibition of the Pick 'N' Payless Expansion Proposal. In the absence of relevant and clear traffic data, the traffic generated by the Pick 'N' Payless Expansion Proposal are anticipated to have been considered in the future background traffic scenarios as assessed for the Proposal. Therefore, a cumulative impact assessment (based upon suitable assumptions) has been considered for both the Pick 'N' Payless Expansion Proposal and the Proposal.

The Envirocivil RRF Expansion Proposal EIS (Claron Consulting, 2019) indicates that there would be no change to staff movements during the peak and only one additional heavy vehicle (two (2) movements – in and out of the site) within the PM peak. The addition of this traffic is considered to relatively minor and as a result has been included within the future background scenarios assessed for the Proposal.

As a result of traffic generated for both proposals being included within the future background scenarios it not anticipated that the cumulative impacts would be above those identified for the Proposal (refer to Section 7 of this EIS). Therefore, subject to the update of the OEMP, impacts from traffic generated by the Proposal and these neighbouring proposals can be adequately managed and mitigated.

Air Quality and Odour

Northstar have undertaken a review of the information submitted for the Pick 'N' Payless Expansion Proposal in relation to air quality and odour (Appendix G). It is noted, that co-ordinates of receptor locations were not provided within the Pick 'N' Payless Expansion Proposal however these have been developed based on a desktop mapping exercise. A number of other uncertainties have also been identified for this cumulative assessment.

The impact cumulative impact assessment, in consideration of the air quality impacts of the Proposal and the Pick 'N' Payless Expansion Proposal, concludes the following:

- Air quality – a single exceedance of the 24-hour average $PM_{2.5}$ criterion at R33 is evident, however the background at this location is already exceeded on that day. No other exceedances in 24-hour average $PM_{2.5}$ would be anticipated as a result of the operation of the Proposal and the Pick 'N' Payless Expansion Proposal.

- Odour – there would be no exceedance in the relevant odour criterion as a result of the operation of the Proposal and the Pick ‘N’ Payless Expansion Proposal.

The Envirocivil RRF Expansion Proposal EIS indicates that, like the other assessments undertaken for air quality, this proposal would comply with (be ‘well below’) the relevant air quality criteria, however existing air quality background levels already exceeded the criteria. Further, the odour assessment undertaken for the Envirocivil RRF Expansion Proposal indicates that odour emissions generated by the proposal would comply with relevant criteria. Overall, based on the low scale nature, the distance from receivers and the on-site management activities (for both the Proposal and this proposal) the cumulative impacts of the Proposal and the Envirocivil RRF Expansion Proposal are not considered to adversely impact on surrounding sensitive receivers.

Based on the impact assessment provided, the Proposal and these neighbouring proposals are not anticipated to result in additional adverse impacts (from an odour or air quality perspective) on surrounding receivers. No further mitigation measures for the Proposal are considered necessary.

Noise

Renzo Tonin have undertaken a review of the information submitted for the Pick ‘N’ Payless Expansion Proposal and the Envirocivil RRF Expansion Proposal EIS in relation to noise and vibration (refer to Appendix H).

The assessment undertaken for the Envirocivil RRF Expansion Proposal indicates that the proposal would not introduce any additional noise sources to the local area nor it is expected to reduce the acoustic amenity of the surrounding area. Overall, the noise contribution from the Envirocivil RRF Expansion Proposal is considered to be insignificant in the context of the surrounding industrial operations. As noise emissions were considered to be insignificant, it is anticipated that this proposal would not contribute to the cumulative noise levels of the Proposal and the Pick ‘N’ Payless Expansion Proposal. Therefore, cumulative noise from the Envirocivil RRF Expansion Proposal was not considered further within the impact assessment.

A cumulative impact assessment for the Proposal and the Pick ‘N’ Payless Expansion Proposal was undertaken. R1 and R3 were assessed as these are the closest relevant receivers. It was concluded that the cumulative noise impacts of the Proposal and the Pick ‘N’ Payless Expansion Proposal would comply with the recommended amenity noise levels identified with the NPfI.

Based on the impact assessment provided, the Proposal and these neighbouring proposals are not anticipated to result in additional adverse impacts (from a noise perspective) on surrounding receivers. No further mitigation measures for the Proposal are therefore considered necessary.

19.4 Mitigation Measures

19.4.1 Construction

No construction works are planned as part of this Proposal. Therefore, the Proposal would not require any mitigation measures.

19.4.2 Operation

Across the issues assessed for cumulative impacts, no significant additional impacts or exceedances of criteria have been identified. As such, the mitigation measures identified for the Proposal would effectively mitigate any cumulative impacts identified within this section.

The mitigation measures for each of the key issues assessed are presented in Sections 7 to 18.

20 ENVIRONMENTAL RISK ASSESSMENT

An environmental risk analysis (ERA) has been undertaken to identify the key environmental impacts associated with the Proposal, as identified in Sections 7 and 19. The ERA also assigns a ranking of environmental risk to each issue before and after the application of the mitigation measures identified throughout those sections. The ERA has been undertaken to address the SEARs in relation to environmental risk, which is shown in Table 20-1.

Table 20-1 – SEARs (General)

SEARs	Where Addressed
Risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment	Section 20.2
Provide a detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: • A description of the existing environment, using sufficient baseline data • An assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and • A description of the measures that would be implemented to avoid, minimise, mitigate and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage significant risks to the environment • A consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS.	Section 20.1 and 20.2

20.1 Methodology

This section outlines the environmental risk assessment undertaken for the Proposal for the purposes of:

- Defining key potential environmental issues for assessment
- Ensuring that any residual environmental risks are acceptable, assuming the effective implementation of proposed management measures.

An assessment of the environmental risk associated with the Proposal has been undertaken to identify the residual environmental risks present. This ERA aims to assign a qualitative environmental risk category to each environmental aspect. Considering the Proposal is operational only, mitigation measures are reflective of an increase in throughput material only. Each of the potential environmental aspects was initially ranked based potential impacts for the existing operation of the Proposal site.

The mitigation measures to reduce environmental risk, as identified in the EIS were applied to each aspect and a residual risk ranking was assigned. Risk rankings were determined as a product of the likelihood or an impact occurring and the consequence in the event that it does occur.

The criteria for evaluating likelihood and consequence of risk are identified in Table 20-2 and Table 20-3.

Table 20-2 – 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 20-3 – Criteria for evaluating consequence

Level	Category	Environmental	Community
1	Not Significant	Release to the environment immediately contained.	No community or stakeholder complaints
2	Minor	Release to environment contained with internal assistance.	Several community or stakeholder complaints Complaints rectified within adequate timeframes
3	Moderate	Release to the environment and contained with external assistance.	Multiple and sustained community or stakeholder complaints Complaints addressed after an interval Limited media coverage of issues raised
4	Major	Pollution event with short-term detrimental effect.	Widespread community and stakeholder concern. Sustained failure to address complaints Extensive media coverage
5	Severe	Pollution event with long-term detrimental effect.	Ongoing and widespread community and stakeholder concern, culminating in litigation Inability to address complaints Extensive and sustained negative media coverage.

Table 20-4 provides the risk categories used to guide the identification of an appropriate risk ranking based on the likelihood and consequence levels identified above.

Table 20-4 – 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	Low	Low	Low	Moderate	Moderate
E - Rare	Low	Low	Low	Low	Moderate

Subsequent to the initial risk assessment, this EIS has been prepared and mitigation measures identified to address the environmental risks associated with the Proposal. The effectiveness of mitigants is demonstrated by a residual risk assessment with findings presented in Table 20-5. 'Residual environmental risk' was assessed on the basis of the 'significance of the environmental effects' of the Proposal and the effectiveness of management actions in addressing likelihood and consequence of potential impacts triggered by the Proposal (i.e. the ability to adequately manage those effects to minimise harm to the environment).

The 'significance of effects' is based on the sensitivity of the receiving environment, the level of understanding of the type and extent of impacts, and the level of community concern about those impacts. The 'manageability' of environmental effects is based on the complexity of the mitigation measures, the known level of performance of the safeguards proposed, and the opportunity for 'adaptive management'. Adaptive management is a structured, iterative process of optimal decision making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring. In this context, it refers to the implementation of management actions and plans that include monitoring of impacts and appropriate contingency measures, should identified trigger levels be reached.

As shown in Table 20-5 below, no high residual environmental risks were identified for the Proposal. However, there were a number of level moderate and low residual risks identified. These level moderate and low risks are not considered significant environmental risks on the basis of the robust existing management measures and the additional mitigation measures to be implemented as part of the Proposal.

20.2 Risk assessment

Table 20-5 - Environmental Risk Assessment for the Proposal

Environmental aspect	SEARs / Key Issue	Potential Impacts	Initial risk identified	Risk review and mitigation	Residual risk	EIS Reference
Traffic and transport	Yes	Minor change in the amount of traffic on local and regional roads during operation. Onsite traffic conflict or crossovers resulting in damage to vehicles, equipment or personnel	M	During operations, the Proposal would result in up to approximately 513 vehicles arriving at the Proposal site per day. The assessment determined that there would be no significant impact to the safety and function of the road network surrounding the Proposal site. There would be no significant change to the existing level of service at key intersections surrounding the Proposal. Traffic generated by the Proposal would be able to be accommodated from the available on-site stacking spaces which can comfortably accommodate the traffic generation associated with the Proposal. Traffic and transport at the Proposal site will continue to be managed in accordance with the Operational Environmental Management Plan (OEMP) with the mitigation measures previously identified for the Original Approval (SSD-5041) being implemented for the Proposal.	L	Section 7
Air quality and odour	Yes	Minimal increased air pollution (PM, TSP, NOx, deposited dust and NO2) from the increased traffic movement and the operation of the Proposal resulting in impacts on the environment and community.	M	Operation of the Proposal would result in the generation of particulate matter (PM), total suspended particulates (TSP), deposited dust, nitrogen dioxide (NO2) and odour. The assessment identified exceedances of the established for PM_{10} and $PM_{2.5}$. However, in all cases, the background already exceeds the assessment criteria	L	Section 8

Environmental aspect	SEARs / Key Issue	Potential Impacts	Initial risk identified	Risk review and mitigation	Residual risk	EIS Reference
				without the Proposal. Critically, the assessment does not predict the operation of the Proposal would lead to any additional exceedances of the relevant criterion Mitigation measures in relation to air and odour previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal. In particular, the air quality and odour management strategies in the current OEMP will be implemented to reduce air quality impacts.		
Noise and vibration	Yes	Minor increases in noise and vibration levels on the Proposal site due to processing operations and increased vehicle movements during operational hours.	L	Operation of the Proposal may result in minor noise and vibration impacts from: • Operation of processing equipment • Movement of vehicles within the Proposal site and on the external road network • Scrap metal management activities such as tipping, sorting and loading material. The noise and vibration impact assessment prepared for the Proposal identified that during operation, noise emissions for all receivers comply with relevant noise trigger levels without any additional noise mitigation measures. Mitigation measures in relation to noise and vibration previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal. In particular, the noise and vibration management strategies in the current OEMP will be implemented to reduce impacts.	L	Section 9
Soils, water and contamination	Yes	An increase in throughput limit would result in a proportional increase in production water requirements.	L	The water assessment and updated site water balance prepared for the Proposal identifies that the existing Water Management System (WMS) has the capacity to	L	Section 10

Environmental aspect	SEARs / Key Issue	Potential Impacts	Initial risk identified	Risk review and mitigation	Residual risk	EIS Reference
				manage the increase in water use associated with the Proposal. Around 80% of the Proposal sites production water demands would be met through reused water. This represents a 61% saving of the total water demand of the site.		
		Contamination of the soil or water quality resulting in impacts of Proposal site and/or Breakfast Creek due to spills or large rainfall events.	L	Operation of the Proposal site would not involve disturbance to soils as it is mostly a hardstand area and there would be no impact on-site soils. The Proposal site is capped as permanent hardstand and the risk of exposure to existing contaminants (if present) is considered negligible. The Proposal would not result in changes in the types and quantities of potential contaminants as a result of increasing the operational capacity of the facility. Mitigation measures in relation to soil, water and contamination previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal. In particular, the soil, water and contamination management strategies in the current OEMP will be implemented to reduce impacts.	L	
Flooding	Yes	Changes to the flooding regime from the Proposal	L	The Proposal is operational only and would utilise existing infrastructure at the Proposal site. Operational changes will not result in changes to the existing ground conditions. As such, there would be no significant change to the existing flood regime on Proposal site and no change to flood impacts on the surrounding area are predicted. Mitigation measures in relation to potential flood impacts previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal. In	L	Section 11

Environmental aspect	SEARs / Key Issue	Potential Impacts	Initial risk identified	Risk review and mitigation	Residual risk	EIS Reference
				particular, the flood management strategies in the current OEMP will be implemented to reduce impacts.		
Hazards and risk	Yes	Occurrence of hazards or risks during operation of the Proposal.	M	The Proposal would not result in a change to the types or quantities of dangerous goods stored at the Proposal site. The Proposal would not result in a change to operational hazards and risks at the Proposal site and would continue to be managed through the existing site OEMP. Mitigation measures relating to hazards and risk previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.	M	Section 12
		Occurrence of an accidental fire on the Proposal site.	M	The Proposal would not require alterations to the fire protection equipment or infrastructure. Further, the existing fire equipment is considered suitable and complies with the required fire safety measures as noted in the Fire Infrastructure Assessment (Appendix K).	M	
Aboriginal Heritage	Yes	Unexpected finds of Aboriginal heritage items of significance.	L	The Aboriginal heritage assessment identified that there is no potential for impact to recorded or Aboriginal Heritage values. Impacts to non-recorded items or places of (i.e. unexpected finds) is considered highly unlikely due to the highly disturbed nature of the Proposal site and there being no construction or ground disturbing works required as part of the Proposal. Mitigation measures relating to Aboriginal heritage previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.	L	Section 13
Waste Management	Yes	There would be a corresponding increase in materials (floc) associated with operation	L	Operation of the Proposal would not result in a change to wastes generated by daily operations such as office workforce waste.	L	Section 14

Environmental aspect	SEARs / Key Issue	Potential Impacts	Initial risk identified	Risk review and mitigation	Residual risk	EIS Reference
		and maintenance of plant with the Proposal as a result of increased throughput.		An increase in throughput at the Proposal site would result in a corresponding increase in waste materials (floc) associated with scrap metal processing activities. Notwithstanding this, the waste management practices currently in place on-site (and as updated for the Proposal) would be suitable to ensure that additional floc can be adequately managed. Mitigation measures relating to waste management previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.		
Greenhouse Gases	Yes	Release of greenhouse gas (GHG) emissions associated with the operation of the Proposal (include carbon dioxide (CO2), with smaller contributions from methane (CH4) and nitrous oxide (N2O)).	L	During operation of the Proposal, the activities/operations that will be performed which have the potential to result in emissions of GHG include: • Consumption of diesel fuel in mobile plant and equipment at the Proposal site • Travel fuel • Consumption of purchased electricity. GHG emissions associated with the Proposal are anticipated to represent less than 0.023% of total NSW GHG emissions in 2018 and less than 0.006% of total Australian GHG emissions in 2019. These emissions are considered to be negligible. Mitigation measures relating to GHG previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.	L	Section 15
Biodiversity	No	The Proposal would not change the nature of operation at the Proposal site. Therefore, no potential impacts will occur as part of the Proposal.	L	The Proposal would not change the nature of operations at the Proposal site and would not require impacts to	L	Section 16

Environmental aspect	SEARs / Key Issue	Potential Impacts	Initial risk identified	Risk review and mitigation	Residual risk	EIS Reference
				vegetation Therefore, there are no biodiversity impacts predicted as part of the Proposal. A BDAR waiver application was submitted a part of the Scoping Report and a Waiver has been formally approved by the Secretary of the Department of Planning, Industry and Environment on 19th December 2019 and is attached as Appendix M. Mitigation measures relating to Biodiversity previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.		
Visual	Yes	Change to views or the visual landscape as part of the Proposal.	L	As the Proposal does not require a change to proposed infrastructure, the nature of views to the Proposal site would not change. No physical consistent change to views or the visual landscape to the Proposal site would be created as part of the Proposal. Mitigation measures relating to Visual previously identified for the Original Approval (SSD-5041) would be implemented for the Proposal.	L	Section 17
Socio-economic	No	Changes to public perception. Impacts to jobs and businesses. Environmental impacts affecting nearby receivers	L	The Proposal does not require changes to the number of employees on the Proposal site or relationships with stakeholders. As such, socio-economic impacts from the Proposal are not anticipated. The Proposal would support the ongoing operations of the facility (supporting ongoing jobs and services) and allow an increase in the volume of metal recovered from scrap reducing the use of landfills throughout the local and wider community. Mitigation measures relating to the social and economic environment previously identified for the Original	L	Section 18

Environmental aspect	SEARs / Key Issue	Potential Impacts	Initial risk identified	Risk review and mitigation	Residual risk	EIS Reference
				Approval (SSD-5041) would be implemented for the Proposal.		
Cumulative Impacts	Yes	Cumulative impacts on the environment and community as a result of other Proposal's in the surrounding area.	M	Based on the nature of the Proposal and surrounding proposals at Envirocivil and Pick 'N' Payless, the key potential cumulative impacts identified are traffic and transport, air quality and odour and noise and vibration. Other potential cumulative impacts, such as soils, water and contamination, flooding, hazards and risks, Aboriginal and non-Aboriginal heritage, waste management, greenhouse gas, biodiversity, socio-economic were considered however, upon further analysis were determined, subject to appropriate site management, to be able to appropriately managed on a site by site basis and therefore are not considered to result in cumulative impacts. As the Proposal only seeks approval for operational activities, the cumulative impact assessment undertaken considered the Proposal and other proposals operating at full operational capacity.	L	Section 19

21 COMPLIATION OF MITIGATION MEASURES

The EIS for the Proposal has identified a range of environmental impacts and recommended management and mitigation measures to avoid, to remedy and to mitigate these impacts (refer to Sections 7-19 of this EIS). This compilation of mitigation measures has been provided to satisfy Schedule 2, Part 3 Clause 7 (1)(e) of the EP&A Regs.

This section presents a summary of the measures which would be implemented for the Proposal. Given that the Proposal does not involve any construction works, all mitigation measures are to be implemented prior to the operations.

This EIS assessed the potential environmental impacts associated with the Proposal and identified that no additional mitigation measures (above those proposed in previous approvals) would be required to manage potential impacts. As a result, the mitigation measures listed below have been extracted from previous impact assessments, conditions of consent for existing approvals and the existing operational environmental management plans. The implementation of these mitigation measures further emphasises the activities that would be undertaken to minimise the impact of the Proposal on the surrounding environment.

In addition to this, additional mitigation measures have been included to update OEMP documentation, confirm the relocation of the pre-shredder (as identified as part of SSD-5041 MOD 3) and ensure the air quality emissions control system is in operation to further improve the operational and environmental performance of the Proposal. These additional mitigation measures have been shown in orange.

A summary of the mitigation measures for the Proposal are provided in Table 21-1.

Table 21-1 – Consolidated list of mitigation measures

Environmental Aspect	Ref	Mitigation Measures	Implementation stage
0 General	0A	• The following OEMP documentation would be updated to ensure consistency with the Proposal activities and the mitigation measures identified within this EIS: – Operational Environmental management Plan – Air Quality Management Plan – Emergency Response Plan – Landscape Management Plan – Noise Management Plan – Waste Monitoring Management Plan – Water Management Plan	Operation
	0B	• The pre-shredder will be relocated to the location shown within Appendix C prior to operation of the Proposal being undertaken.	Operation
	0C	• The Proposal site and operations will be subject to an independent environmental audit every 3 years, unless the Secretary directs otherwise.	Operation
1. Traffic and Transport	1A	• Proposal site access, driveways and parking will be maintained in accordance with the latest versions of Australian Standard AS 2890.1 and AS 2890.2	Operation
	1B	• The Proposal site will be maintained to ensure the swept path of the longest vehicle accessing the subject site, as well as manoeuvrability through the site, is in accordance with AUSTROADS Guide to Road Design	Operation
	1C	• On-site stacking would be managed to ensure operation of the Site does not result in any vehicles parking or queuing on the public road network	Operation

Environmental Aspect	Ref	Mitigation Measures	Implementation stage
	1D	• All vehicles will be wholly contained on site before being required to stop	Operation
	1E	• All loading and unloading of heavy vehicles will be carried out on-site	Operation
	1F	• Proposed turning areas in the car park will be kept clear of any obstacles, including parked cars, at all times	Operation
	1G	• All vehicles will enter and leave the site in a forward direction.	Operation
2. Air Quality and Odour	2A	• All activities on site would be undertaken in accordance with the Site Air Quality Management Plan. The Air Quality Management Plan (AQMP) will include the following: – A description of the measures to be employed to minimise air emissions – A description of contingency measures to deployed to minimise impacts should adverse air emissions occur or appear likely to occur – Identification of triggers for the deployment of operational air quality measures – Identification of triggers for ceasing or partially ceasing operations on-site during adverse air quality conditions – A description of the system used to evaluate the performance of the Proposal site – Details of the location, frequency and duration of monitoring activities – A protocol to determine the occurrence of any exceedance of the criteria in the EPL should an exceedance occur – A complaints management procedure including steps to investigate complaints and rectify issues where required.	Operation
	2B	• The air quality emissions control system will be maintained in good working order	Operation
	2C	• A continual weather monitoring station will be maintained on-site	Operation
	2D	• An air quality monitoring system will be maintained on-site to evaluate the performance of the Proposal	Operation
	2E	• All plant is to be inspected daily and ensure it is fit for use	Operation

Environmental Aspect	Ref	Mitigation Measures	Implementation stage
	2F	• Works that have the potential to generate fugitive dust emissions must be planned to take into account weather conditions	Operation
	2G	• Works areas, and where applicable material stockpiles, will be wetted down as required	Operation
	2H	• Work areas will be maintained to allow street sweeper access	Operation
	2I	• Sealed surfaces on-site will be maintained regularly using street sweepers to prevent dust re-entrainment from vehicle movements and other equipment use	Operation
	2J	• All trucks are to have their loads covered	Operation
	2K	• Ferrous vehicles will exit the Proposal site via the wheel wash	Operation
	2L	• Dust screens and walls will be inspected monthly with any identified failures, gaps or holes placed onto a maintenance report for rectification. Rectifications will be done using appropriate materials that do not diminish their dust collection qualities	Operation
	2M	• When monitoring indicates that there is a potential for the 4 hour rolling average to breach air quality criteria, corrective actions will be instigated	Operation
	2N	• Only one oxy-acetylene torch will be operating at a time	Operation
	2O	• Cutting of any metal beam that is up to 100 millimetres thick will be undertaken with the shear where feasible.	Operation
3. Noise and Vibration	3A	• Acoustic fences and walls will be inspected monthly with any identified failures, gaps or holes placed onto a maintenance report for rectification. Rectifications shall be done using appropriate materials that do not diminish their acoustic qualities	Operation
	3B	• If there are activities to be undertaken that could potentially cause excessive noise or vibration issues, mitigation measures are to be assessed prior to the activity taking place	Operation
	3C	• All plant and equipment installed and used on-site will be maintained and operated in a proper and efficient condition	Operation

Environmental Aspect	Ref	Mitigation Measures	Implementation stage
	3D	• If weather conditions are likely to result in an increase of noise transmission, activities will be assessed and where required rescheduled, reduced or stopped. Monitoring shall be done in conjunction with data supplied from the on-site meteorological station	Operation
	3E	• An airblast overpressure measuring device will be maintained on the Proposal site boundary	Operation
	3F	• To manage the potential for noise impacts from explosions the following measures would be implemented: – The use of the pre-shredder to process vehicles – Labelling of bins that we do not accept gas bottles – Signed agreement of the material acceptance form outlining items we don't accept – Inspection of loads – Immediate return of unacceptable items to the truck (where possible) – Deduction of tonnage from the load as a disincentive penalty.	Operation
	3G	• Noise and vibration generating activities on-site would be undertaken in accordance with the Proposal site Noise and Vibration Management Plan. The Noise and Vibration Management Plan will include the following: – Identification of noise and vibration criteria as established within this EIS to which the Proposal site must comply – A procedure for investigation of noise complaints including a methodology for rectifying issues as required – A methodology for minimising noise impacts during adverse weather conditions – A procedure for regular assessment of noise monitoring data including measures to relocate, modify and/or stop operations as required to ensure compliance with the noise criteria. – A procedure for recording and checking data collected by the airblast overpressure monitor.	Operation

Environmental Aspect	Ref	Mitigation Measures	Implementation stage
4. Soil, Water and Contamination	4A	• All activities on the Proposal site would be undertaken in accordance with the Proposal site Water Management Plan. The Water Management Plan will include the following: – A description of the operation and maintenance of the existing water management system – A procedure for testing the performance of all components of the Water Management System, including the primary, secondary, and tertiary treatment systems – A description of the system used to manage water quality including sampling and comparison against the baseline data. – Procedures for site inspection and proactive management of potential issues – A procedure of sampling of the sediment basin and identification of corrective actions (where applicable).	Operation
	4B	• Regular cleaning of the oil/water separators will be carried out to maintain performance	Operation
	4C	• The existing network of underground stormwater pipes, inlets and oil/water separators will be cleaned and repaired / replaced as required	Operation
	4D	• Chemicals will be stored within impervious bund of more than 110% of the largest container within the bund	Operation
	4E	• Material Safety Data Sheet (MSDS) will be maintained for all chemicals stored on-site and made available to Proposal site personnel	Operation
	4F	• Refuelling will occur away from drainage points, with drip trays used and spill kits available	Operation
	4G	• Trade waste receptacles will be provided for the storage and disposal of all wastes generated on-site	Operation
	4H	• Collected runoff in the stormwater basin will continue to be used for operation as long as the water is of a quality such that impacts to Proposal site infrastructure, the surrounding environment and the health and safety of employees is avoided	Operation

Environmental Aspect	Ref	Mitigation Measures	Implementation stage
	4I	• All pollution incidents that threaten or harm the environment shall be reported immediately to relevant authorities in accordance with the *Protection of the Environment Operations Act 1997* (POEO Act)	Operation
	4J	• A Hazardous Materials Register and respective Safety Data Sheets (SDSs) shall be kept on-site at all times and be regularly maintained.	Operation
5. Flooding	5A	– Flood response on the Proposal site will be undertaken in accordance with the Early Warning Flood Readiness Plan (as part of the Emergency Response Plan).	Operation
6. Hazards and Risk	6A	• All chemicals, fuels and oils used on-site will be stored in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling Liquids: Environmental Protection – Participant's Manual 2007*	Operation
	6B	• All incidents and near misses will be documented, recorded and investigated	Operation
	6C	• Results of the Proposal site inspections will be recorded and kept on file	Operation
	6D	• The floc piles will be maintained to less than 4 m in height	Operation
	6E	• Management of environmental emergencies will be undertaken in accordance with the Pollution Incident Response Management Plan	Operation
	6F	• The Proposal site will be maintained to ensure run-off on operational areas is captured by the Water Management System	Operation
	6G	• Spill kits will be available on-site and be deployed to manage and contain minor spills	Operation
	6H	• All pollution incidents that threaten or harm the environment will be reported immediately to relevant authorities in accordance with the POEO Act	Operation
	6I	• Fire and incidents on the Proposal site will be managed in accordance the Emergency Response Plan.	Operation

Environmental Aspect	Ref	Mitigation Measures	Implementation stage
7. Waste Management	7A	• All waste materials which meet the specification to be reused/recycled will be processed on-site or be taken to an approved facility, capable of accepting those materials. All other waste is to be disposed of in accordance with the classification of the waste at an approved licensed facility	Operation
	7B	• During operations waste will be managed in accordance with the Waste Management Plan	Operation
	7C	• The designated site manager or appointed responsible delegate should prepare monthly reports clearly documenting the waste that has been received and generated. These should be prepared using waste receipts that have been retained and should include: – Waste classification data to assess compliance with the EPA (2014) Waste Classification Guidelines – A review of licenses held by the facilities where waste has been disposed to access/ensure their ability to accept the waste in accordance with relevant legislation – Include any incident reports relating to waste (i.e. spills) which have occurred over that month. Any corrective actions undertaken should also be included.	Operation
	7D	• Tracking and monitoring of scrap metal processed at the Proposal site will be undertaken in accordance with the Waste Monitoring Management Plan	Operation
	7E	• The amount of waste received at the Proposal site will be recorded on a daily basis in accordance with the Waste Monitoring Management Plan – The Proposal site will not knowingly cause, permit or allow any materials or waste generated outside the Proposal site to be received at the Proposal site for storage, treatment, processing, reprocessing, or disposal on the Proposal site, except as expressly permitted by the EPL.	Operation
9. Greenhouse Gas Emissions	8A	• Where applicable additional equipment purchased will conform to best practice for the management of greenhouse gas	Operation
	8B	• Fuel, water and electricity consumptions shall be monitored, and efficiency improvements regularly investigated and implemented where reasonable and feasible.	Operation

Environmental Aspect	Ref	Mitigation Measures	Implementation stage
10. Biodiversity	9A	• All vehicles are to keep to the existing and proposed access roads on-site at all times	Operation
	9B	• Maintenance of landscaped areas should be undertaken in a way to prevent the spread of pests and noxious weeds in accordance with the *Biosecurity Act 2015* and the New South Wales Weed Control Handbook - A guide to weed control in non-crop, aquatic and bushland situation (DPI, 2018).	Operation
11. Visual	10A	• Landscaped areas on-site would be monitored and maintained in accordance with the Landscape Management Plan.	Operation
12. Socio-economic	11A	• Where possible, opportunities for offering apprenticeships for new work force and offer additional training for existing workforce would be investigated	Operation
	11B	• Complaints will be managed in accordance with the Complaint Response Procedure.	Operation

22 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The Commonwealth Government refers to Ecologically Sustainable Development (ESD) as 'using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future can be increased' (Commonwealth DOE, 1992).

In NSW, the commitment to the concept of environmental sustainability is expressed in current legislation. It is an object of the EP&A Act (Part 1.3(b)) to encourage ESD through the implementation of the four (4) principles of ESD. The four principles of ESD are defined in clause 7(4) of Schedule 2 of the EP&A Regulation as being:

- **The Precautionary Principle**: namely, that if there are threats of serious or irreversible environmental damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:
  - Careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment
  - An assessment of the risk-weighted consequences of various options
- **Inter-generational equity**: namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations
- **Conservation of biological diversity and ecological integrity**: integrity, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration
- **Improved valuation, pricing and incentive mechanisms**: namely, that environmental factors should be included in the valuation of assets and services, such as:
  - Polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement
  - The users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste
  - Environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

22.1 Precautionary Principle

The precautionary principle deals with certainty in decision making. It provides that if there are risks of serious or irreversible environmental damage associated with a proposed development, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

The precautionary principle approach has been applied throughout the design and development of the Proposal and all technical studies associated with the Proposal, with the intent to minimise any potential environmental impacts. This included identifying opportunities to avoid and minimise potential impacts to the surrounding environment and sensitive residential receivers (refer to Section 3 (Proposal justification, need and alternatives) for more information).

This EIS details the evaluation of environmental impacts associated with the Proposal. The EIS was prepared adopting a conservative approach, which included

assessing the worst-case impacts and scenarios. It has been undertaken using the best available technical information and has adopted best practice environmental standards, goals and measures to minimise environmental risks. The environmental assessment has been undertaken in collaboration with key stakeholders and relevant statutory and agency requirements.

The threat of serious or irreversible environmental damage is the fundamental requirement for implementing the precautionary principle. Potential environmental risks associated with the Proposal were identified during the development of the Proposal, to ensure that an appropriate amount of attention was afforded to minimising potential environmental risk and to ensure sufficient time was available for the preparation of detailed technical specialist reports to support this EIS (refer to Section 20 (environmental risk assessment) for more information). Technical specialist studies that were undertaken to provide accurate information to assist with the evaluation and development of the Proposal, included:

- Traffic and Transport (Section 7 and Appendix E)
- Pavement Assessment (Section 7 and Appendix F)
- Air Quality and Odour (Section 8 and Appendix G)
- Noise and Vibration (Section 9 and Appendix H)
- Soil, Water and Contamination (Section 10 and Appendix I)
- Flooding (Section 11 and Appendix J)
- Fire and Incident (Section 12 and Appendix K)
- Greenhouse Gas Emissions (Section 15 and Appendix L).

The specialist studies identified that through the implementation of mitigation measures, the potential impacts of the Proposal will be appropriately managed. As a result, that the Proposal would not cause serious and irreversible environmental damage. The OEMP and sub-plans will be updated to address any necessary additional mitigation measures (Section 21) required to manage potential environmental impacts associated with the Proposal.

22.2 Inter-generational Equity

Inter-generational equity refers to the premise that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. The Proposal has been considered in terms of intergenerational equity through the management of potential environmental impacts discussed throughout this EIS.

The Proposal provides benefit both existing and future generations through the provision of a resource recovery facility, which through its expanded processing would increase the opportunity for recycling and divert recyclables from landfill. The Proposal would improve significant capacity constraints currently impacting the Sydney region and provide advanced metal recycling processes to build resilience within the current network of recycling facilities. Further, the development would provide a high capacity to manage the long term projected increases in waste generation across the Sydney Greater Metropolitan Area which has been identified in a number of NSW strategic planning and policy documents (Section 3 of this EIS).

The Proposal fulfils these strategic planning goals as a key facility which would increase northwest Sydney's waste processing capacity as well as increasing the quantity of waste diverted from landfill in NSW and addresses the China National Sword Policy for processing waste in Australia as opposed to processing waste offshore.

The Proposal would be operated according to high environmental standards as outlined in the updated OEMP, to avoid or minimize and adverse environmental

impacts. The mitigation measures provided in Section 21 of this EIS, in particular those relating to traffic and transport, noise and vibration and air quality are reflective of the commitment of Sell & Parker (as the Proponent) to minimising environmental impacts of the Proposal on the surrounding environment. Continuous improvement in these plans would be carried out to ensure that best practice methods are being employed wherever possible ensuring that the Proposal does not adversely affect quality of the environment for future generations.

22.3 Conservation of Biological Diversity and Ecological Integrity

This ESD principle stipulates that biological diversity and ecological integrity should be fundamentally considered when assessing the impacts of a Proposal. The Ecological Impact Assessment prepared as part of the EIS for the Original Approval identified that the existing RRF is located within an industrial area with limited ecological values and is unlikely to have a significant impact on biodiversity.

As the Proposal does not involve any physical works, a BDAR Waiver was submitted as part of the Proposal. This has been approved and is provided in Appendix M. Regardless, Section 16 also provides an assessment of the potential impacts of the Proposal on biodiversity. It was concluded that there would be no impact by the Proposal operation. Therefore, this will be managed through the mitigation and management techniques developed in the existing OEMP.

22.4 Improved valuation, pricing and incentive mechanisms

This principle requires that costs to the environment are incorporated or internalised in terms of the overall project costs, ensuring that decision making takes into account the environmental impacts. As a result, this EIS has, where possible, avoided or minimised environmental impacts and identified mitigation measures for areas where adverse environmental impacts may occur as part of this Proposal.

Further, the Proposal supports the diversion of waste from landfill and the processing of scrap metal in Australia as opposed to processing it overseas. This demonstrates that the Proposal supports the NSW Government policy statement on the Circular Economy as the Proposal aligns with improved sustainability and lessens the environmental impact of waste management in Australia.

This EIS has examined the environmental consequences of the Proposal and identifies mitigation measures for areas where adverse environmental impacts may occur. However, the economic valuation of environmental resources for the Proposal includes the improvement of supply of low-cost goods and materials and increased availability of metal services for the community and commercial sector that in turn, stimulates the economy. the implementation of these mitigation measures represents a capital and/or operational cost for the Proposal.

22.5 Conclusion

Each principle has been considered and incorporated with the RRF expansion of the Proposal. With appropriate mitigation measures as identified throughout this EIS, undertaking the Proposal in the manner proposed is justifiable taking into consideration the principles of ESD.

23 JUSTIFICATION AND CONCLUSION

This chapter presents a justification of the Proposal and a conclusion to the EIS. It considers a range of issues, including project benefits, protections of the environment, and the objects of the EP&A Act. The principles of ESD have been previously considered in Section 22.

23.1 Proposal Justification

Sell & Parker Pty Ltd is seeking to extend an existing RRF at 23-43 and 45 Tattersall Road, Kings Park. The Proposal would allow to increase the throughput limit of the RRF from 350,000 to 600,000 tpa of scrap metal. The existing infrastructure at the Proposal site has the capacity to accommodate the increased throughput and therefore, no construction works would be required. The Proposal would assist in achieving the higher recycling contamination standards prescribed by China's National Sword Policy as well as further reducing the volume of scrap metal that goes to landfill.

An environmental impact assessment of the Proposal has been undertaken and is presented within this EIS. The Proposal would receive and recycle up to 600,000 tpa of scrap metal. This would allow for increased levels of resource recovery, and decreased levels of scrap metal taken directly to landfill.

The Proposal has been shown to be consistent with the relevant local and state government planning instruments and waste management strategies. No significant environmental impacts have been identified during the preparation of the EIS. The environmental impacts identified are considered to be able to be mitigated through the implementation of the identified mitigation measures for operation of the Proposal.

Operation of the Proposal would result in relatively minor impacts to the local environment. These impacts would be generally confined to the Proposal site and immediate surrounds. An updated OEMP, including the mitigation measures proposed in this EIS would also be prepared prior to the commencement of operations. Assuming the OEMP is successfully implemented, no significant environmental impacts during the operation are predicted.

Alternative scenarios to achieve the Proposal objectives were considered, and included:

- The 'Do Nothing' scenario
- Construction of a new facility at an alternate site
- Increased capacity.

The Proposal would significantly improve the operational efficiency and capacity of the RRF. This would facilitate improvements to a piece of critical resource recovery infrastructure for meeting demand for scrap metal recycling within Sydney.

23.2 Objects of the Environmental Planning and Assessment Act 1979

The objects of the EP&A Act provide a framework within which the justification of the project can be considered. A summary of this assessment is provided in Table 23-1.

Table 23-1 – Assessment against the objectives of the EP&A Act

Objective of the Act	Comment
To encourage the proper management, development and conservation of natural resources,	Overall, the Proposal would manage, develop and conserve natural and artificial resource appropriately through increased resource recovery

Objective of the Act	Comment
including agricultural land, natural areas, forests, minerals, waters, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment	capacity, and would result in a net social and economic benefit to the wider community. A range of mitigation measures outlined throughout the EIS have been identified to address potential environmental and socioeconomic impacts.
To encourage the promotion and coordination of the orderly and economic use and development of land	The Proposal includes an increase to existing recycling activities on an industrial site. This is considered a suitable economic use for the Proposal site. The Proposal has considered the cumulative impacts of the various projects that are either proposed or currently underway in the surrounding industrial area. These include: • The Envirocivil Recycling Facility Expansion Proposal • Pick 'N' Payless Metal Recovery and Recycling Facility. The cumulative assessment concludes that the Proposals and these proposals are not anticipated to result in unreasonable adverse environmental impacts (in particular traffic and transport, air quality and odour and noise) on the surrounding locality.
To encourage the protection, provision and coordination of communication and utility services	The Proposal is designed to minimise the impacts on communication and utilities services identified on the Proposal site.
To encourage the provision of land for public purposes	The increased throughput capacity provided by the Proposal would lead to less waste being transported directly to landfill and reduce the amount of public land used for landfill purposes. In addition, the Proposal would provide metal resource recovery and waste services to the Greater West and North-West Sydney region.
To encourage the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats	It is considered highly unlikely that the Proposal would impact on the biodiversity of the Proposal site and surrounding area as no construction works will occur. The Proposal site has been developed and is located in an area with a history of industrial development. No vegetation is proposed to be cleared and as a result no impacts to native fauna habitat are anticipated.
To encourage ecologically sustainable development	The principles of ecologically sustainable development have been considered with respect to the development of the proposal. Overall, the Proposal is considered to encourage ecologically sustainable development.
To encourage the provision and maintenance of affordable housing	The Proposal would increase the affordability of construction costs by increasing the capacity for scrap metal recycling and reuse.

Objective of the Act	Comment
To promote the sharing of the responsibility for environmental planning between the different levels of government in the State	The SSD application would be approved by the State Government. Planning considerations from State and Local Government have been taken into consideration in this EIS.
To provide increased opportunity for public involvement and participation in environmental planning and assessment	Community consultation has been undertaken as part of the preparation of this EIS. The EIS will be placed on public exhibition for a period of not less than 28 days in accordance with Schedule 1, clause 9 of the EP&A Act.

23.3 Conclusion

The Proposal, which is classified as SSD in accordance with Clause 23(3) of the State and Regional Development SEPP, has been subject to an EIS in accordance with the EP&A Act, EP&A Regs and the SEARs.

The potential environmental, social and economic impacts, both direct and cumulative, have been identified and thoroughly assessed as part of this EIS. The assessment concluded that no significant environmental impacts have been identified as a result of the Proposal. It is considered that any potential impacts can be satisfactorily mitigated through a range of measures that have been identified within the EIS. In addition, the Proposal has been assessed against – and has been found to be consistent with – the priorities and targets adopted in relevant and draft State plans as well as Government policies and strategies.

The Proposal would assist in achieving the higher recycling contamination standards prescribed by China's National Sword Policy as well as further reducing the volume of scrap metal that goes to landfill. In turn, this would provide significant benefit in terms of providing a sustainable resource recovery facility for Blacktown and Western Sydney. By creating choice and competition for resource recovery sector, the expansion represents a positive contribution to the circular economy for Sydney and Australia. Overall, the EIS concludes that the development proposed is in the public interest and approval is recommended.

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